

The funk of  
forty thousand  
years

# The California Tech

VINCENT  
PRICE  
1911-1993

Volume XCV, Number 6

Pasadena, California

Friday, October 29, 1993



A line of brush fires continues burning a path through the foothills of Altadena early Thursday morning. This photo was taken from the intersection of Fair Oaks and Loma Alta shortly before a large explosion on the ridge above.

## Brush fires ravage Altadena

by Laurent Stadler

Sixteen fires broke out around the L.A. basin this Wednesday. Of these fifteen fires, 12 are believed to be natural, 3 are attributed to arson and 1 is believed to be accidental. Governor Wilson has declared a state of emergency. The high winds and sheer quantity of fires are severely taxing the resources of the region's fire departments. The closest of the fires is in the San Gabriel mountains just north of Altadena.

Altadena area residents said that the fire became noticeable at around 4:00 A.M. Wednesday. The fire grew rapidly and spread outward across the Eaton canyon area due to the Santa Ana winds which reached speeds of up to 50 m.p.h. By 10:00 A.M., an estimated 1,000 acres of land and several houses had caught fire. While the high winds helped to spread the fire, fire officials said that the large amount of dry brush on the San Gabriels made it all the more intense.

A sizeable amount of information about the fire was gathered first-hand, taking *Tech* reporting in a bold, new direction. After staying up all night, Rich Zitola and I went out for some breakfast. While eating, we overheard a conversation about a large fire. We immediately went outside and noticed a huge black cloud of smoke over much of the surrounding area. We got on our bikes and started to ride up Allen. As we passed the 210, we began to notice a large amount of debris on the road and accompanying high winds. Once we got to where we could see flames, the smoke in the air became too thick for us to ride any further. Rich wanted to take pictures, and we both wanted a closer look, preferably in an enclosed vehicle, so we turned around and rode back to Tech.

After a few more people joined us, we set off in the ASCIT van, and rode up Allen again. Near the top of Allen, residents had formed a road block. We drove up to it and

someone wearing a JPL badge told us to turn around. We told him that we were press, but he didn't believe us, so we left. Not to be deterred, we drove down and over one street, parked the van and walked. Arriving at the corner of Altadena Drive and Roosevelt, there were many police officers directing traffic and keeping people away from a burnt section of the hillside. We talked to a few residents, telling them we were from the *Tech*, and found that none of their homes were hurt, only the surrounding hillside. One person repeated a rumor to us that the police believed that the fire was started by a transient's cooking fire which had gotten out of hand. Later on, the Sheriff's Department confirmed that they had arrested a transient, Andres Z. Huang, at 6:45 a.m. Wednesday morning. Just as we were about to leave, we witnessed a fire plane performing a water drop nearby.

After driving to Washington and Del Rey, we went to St. Luke's Medical Center, which was being evacuated. An eyewitness reported seeing spot fires on the roof of the center in the morning. Rich talked his way past some firemen and went to take some pictures. I approached a reporter from the Pasadena *Star News* and asked her if I could tag along in order to get some real interviews. She agreed, and I went off with her to talk with the hospital administrator. He reported that police, National Guardsmen, and Marines were just finishing up evacuating the 60 patients that were in the clinic that day. He knew of no damage to the clinic and it was not currently on fire. All of the patients were doing well and no one was in the midst of a critical procedure when the evacuation took place. Earlier that day, 25 people were evacuated from the Marlina nursing home.

The reporter and I went over to meet some more people from the *Star*. They called in their stories, and then the four of us drove up to an area where some homes had

see FIRE, page 10

## Thomas Manning new Housing Director

by Toby Bartels

Two weeks ago, Thomas Manning became Caltech's new Housing Director. Previously, he had worked in the Residence Life Office at George Washington University in Washington, D.C. At Caltech, Manning wants to help the Housing Office to work better with students and with other Caltech offices, he said.

According to Manning, the Housing Office is the operational side of undergraduate housing. Midway between the Office of Residence Life, which deals more directly with students, and the Physical Plant, which is concerned with the buildings themselves, the Housing Office is responsible for working to incorporate the needs of students into the overall housing situation. For graduate and off-campus housing, the office per-

forms all three functions, said Manning. In addition, the Housing Office has been busy lately finding temporary housing for the family of at least one Caltech employee whose house burned down in Altadena.

Manning sees his job as an opportunity to help the Housing Office improve its relationship with other elements of the Caltech community. He wants to work more closely with other offices, such as Residence Life. More importantly, he wants to work closely with the students. He wants to make the office less a place for mechanical processing of forms and more a place where students can come to find solutions to their housing problems. By doing so, he said, he also hopes to boost the office's image on campus.

Manning worked for several years at the Residence Life Office

at George Washington University before coming to Caltech. According to Manning, the Residence Life Office and Physical Plant at GW had very little connection with each other. As an employee of Residence Life, said Manning, he works closely with Physical Plant, helping to improve the offices' relationship. Now the two offices work well together, Manning thinks, which ultimately benefits the students.

Eventually, Manning decided he had no more opportunity to grow professionally at GW. When he arrived at Caltech for an interview, he was impressed by its environment and the nature of the students he would work with. Even though the consulting firm for which he worked while looking for a new job offered him a permanent position, Manningsaid, he decided to come to Caltech instead.

## Reid to speak on E.T. Bell

by Margaret Belska

Constance Reid, the author of several biographies of mathematicians, will be in Sloan, Room 151, on Wednesday, Nov. 3, 1993 at 4:15 P.M. to speak on her recently published book, *The Search for E.T. Bell*. Bell was a former Caltech

professor as well as popularizer of mathematics and a science fiction writer.

Eric Temple Bell (1883-1960) was best known as a mathematician. As Professor of Mathematics at Caltech from 1926 to 1953, he was also an outstanding popularizer of mathematics, inspiring many young people to join the field. His book, *Men of Mathematics* (1937), which presented mathematics and mathematicians in a way that had never been done before, is still in print after almost sixty years.

## Beckman ball returned!

by Zackary Dov Berger

Over the weekend of October 16th, Beckman Auditorium's hanging golden ball was returned by persons unknown, reports a relieved Ramanuj Basu. Basu, the Audience Services Coordinator for the Office of Public Events, described the find: "It just—whoop!—came back." However, because the ball was now "held by a slip knot," said a bemused Basu, it was not seen at that weekend's events. OPE has

see BALL, page 11

little *Ts* are again available in the Deans' Office. Each ASCIT member is entitled to one copy—please take copies for others only if you have been specifically asked to.

"You Can't Take It With You," a comedy by Moss Hart and George Kaufman, opens November 12 at 8:00 P.M. in Winnett Lounge. This tale of anarchism on a family scale is presented by Theater Arts at CIT, and is directed by Dan Dilling.

Sign-ups are open for the office of Publications Darkroom Chairman. The Chairman, appointed by ASCIT, is responsible for general control and maintenance of all photography equipment in the Darkroom in the SAC. The term of office will terminate third term when the next Board of Directors appoint a new Chairman for next year. Those who are interested or have previous experience with photo-development are encouraged to sign up. Interviews will be conducted.

## The California Tech

In this issue . . .

|                         |    |
|-------------------------|----|
| Letters to the Editor   | 2  |
| Ernest Explains         | 2  |
| Y News                  | 2  |
| Crime & Incident Beat   | 2  |
| World News              | 3  |
| Comics                  | 4  |
| Entertainment           | 5  |
| Adam Villani: Media Guy | 5  |
| Games & Puzzles         | 5  |
| ASCIT Minutes           | 7  |
| More fire photos        | 8  |
| Bridge Without Sam      | 8  |
| Sports                  | 10 |
| Events & Notices        | 12 |



## letters to the editor

### Vargas article incorrect

The article you ran in last week's *Tech* (October 22, 1993) about Assistant Dean Frank Vargas (entitled "Vargas Discusses Minority Student Issues at Tech") did us, as an under-represented community, a great disservice. Although the article contained good points, and I do commend Mr. Berger on some of his statements, I believe that several important ideas were confused.

It is a well-known fact that Caltech does not lower academic standards to let in traditionally under-represented students, nor does the Institute use the term "quotas." In fact, women have higher SAT scores on average, while African-American, Hispanic, and Native American students have higher grades as well. While in high school, these under-represented students feel they are not good enough to be accepted to attend places like Caltech, so usually only the best of the best apply.

Under-represented students do not have more academic problems than the typical Caltech student; they have more social problems. It is true that all students must adjust

to the relentless academic atmosphere at Caltech, but only international students can truly understand the drastic change in lifestyles that many under-represented students face. When Dr. Lee F. Browne entered Caltech in 1968 as Director of Secondary School Relations, he realized that under-represented students dropped out of Caltech because that had to adjust to a completely different culture. He created the Student Support Program, now known as the Bridge Program, to help them make the twofold transition from High School to College, then from Person of Color to Mainstream American.

Actually, under-represented students help other students with their academic problems. Many of us tutor other Caltech students through the Dean's Tutoring program. Others are private tutors in the local community. The tutoring that took place at the Assistant Dean's office last year was for students outside Caltech. The under-represented students had an opportunity to showcase their academic achievements by helping others understand the material, rather than being on the receiving end. The article neglected to clarify these important facts.

We, as under-represented students, designed Cultural House wishing to create a more ambient atmosphere in which to have all Caltech students express their various cultures. We realize that college life is much more of a wonderful experience when everyone comes from different backgrounds and wishes to share them with others.

It is my wish that we, as a Caltech community, can show more concern for ourselves, and the diversity we have. The under-represented students here are only minorities in number, and hopefully not in spirit.

Edray Goins  
President of the National  
Society of Black Engineers,  
Caltech Chapter

Please send letters to the editor to *The California Tech*, Caltech 40-58, Pasadena, CA 91125, or by e-mail to [editors@tech.caltech.edu](mailto:editors@tech.caltech.edu).

*The Tech* reserves the right to edit all letters for brevity or otherwise, and to refuse to print any letter for any reason.



Ernest Tomlinson

## Ernest Explains

Dear Ernest,

Why is it that the only water conservation that takes place on campus is due to the "lo-flo" shower heads in the student houses?  
—Not-as-wet-as-I'd-like-to-be

Dear Mr. Schneider,

The strange distribution of water pressures over the southern half of the Caltech campus is mainly due to the limitations of the old plumbing.

The water supply for the Athenaeum, the South Houses, and many of the older labs to the south was designed in the early 1920's by Elwyn Seymour, a native Los Angeles architect and engineer. Seymour was an ardent follower of the famous occultist and author Aleister Crowley, and incorporated many of Crowley's bizarre ideas into his plumbing scheme, most notably the alignment of the main cold water pipes to "ley lines," imaginary arcs of energy running over the earth's surface along great circles.

Seymour also designed features of the South Houses' plumbing whose purpose cannot be determined, such as several large, zinc-lined tanks hidden in the walls which are connected directly to natural springs beneath the Houses and kept at a constant high pressure by one-way valves. When municipal water pressure was increased by 50% in the late 1940's, Physical Plant discovered that a delicate balance of pressure (such as the limited shower pressure you complain about) was necessary to keep the tanks from leaking or bursting, as many of the potable water feeds are connected directly through them. Improvements to the plumbing have never been practical, as most of the pipes are actually encased in the concrete of the walls. In addition, Seymour collected and burned all of the plans shortly before his 1938 suicide.

## ynews

by Sam Webb

After a short break, the Y News is back once again. Coming up this weekend is the first outing of the Trailbuilders. This volunteer group works with the fine people at JPL to go out into the San Gabriels and help build and maintain hiking trails. Trips are organized each month. If you're interested in participating in next month's trip, contact the Caltech Y. Also, remember that the Caltech Y has all kinds of volunteer opportunities, even for work study. Coming up is the Caltech Undergraduate Leadership Institute on November 5th and 6th. If you're interested in going, you can get an application from Chris at the Y. And as always, back by popular demand, for the thirteenth time in Caltech history... yes, it's Boffo Bonecrusher Broomball XIII! The date is still being determined, but look for all the joys and excitement in mid-November. That's the scoop for this week. Keep tuned to the Y news for all your exciting weekly Y events! Good luck on midterms! Until next week...

### ASCIT Halloween Party

by Anandi Raman

Hello again. Just wanted to remind you that the Halloween Party is on Saturday (tomorrow) at 9 P.M. in Dabney Lounge/Gardens, not 9 A.M. like the erroneous flyer said. Go yell at — House about that. (Have you been reading your little ASCIT minutes, boys and

girls?) Anyway, be at the party, come in costume, and win cool prizes from KROQ and Tower. The judges for the costume contest are me, Shruti Bajaj, Alan "Pinky" Blaine, and Miyabi Ota. Please make sure we see you at the party if you want to win a prize for your costume. Anyway, be there. 'Nuff said.



by Gypsy Achong

Crime Tip: Do not fall asleep without first securing your valuables somewhere, perhaps a friend's room.

10/15 6:00 P.M. to 10/16 9:00 A.M. A bike was stolen from a Fleming stairwell. The bike was locked with a kryptonite lock just under the adjustable and removable seat. The U-lock was not taken.

10/22 7:00 A.M.—2:00 P.M. A student's vehicle, parked at San Pasqual between Holliston and Hill, was broken into. A stereo system and 30 tapes were stolen. The keywells were damaged and dented suggesting that the lock was forced. \$350

10/22 3:00 P.M. A student was robbed at gunpoint outside of his apartment at 180 S. Catalina (Non-Caltech housing). The thief was described as a male hispanic in his mid twenties, 5'6" and approximately 160 lbs.

10/25 3:00—8:30 A.M. A backpack was stolen from a couch in Dabney House Lounge where its owner was sleeping. The backpack was later found but a calculator and \$40 were missing. \$140

N.B. The last backpack that was stolen like this from Ricketts House was found with nothing missing.

*The California Tech*  
Volume XCV • Number 6  
October 29, 1993

#### EDITORS

Michael "Mr. Dynamite" Benedetti  
Chris "Bum" DuPuis  
Michael "Mawaheb" Radford

ANNOUNCEMENTS EDITOR  
Jeff Denniston

CRIME BEAT EDITOR  
Gypsy Achong

SPORTS EDITOR  
Damian Martinez

WORLD NEWS EDITOR  
Momo Jeng

WRITERS  
Tobias Bartels  
Margaret Belska  
Zackary Berger  
Wei-Hwa Huang  
Michael Kantner  
Laurent "Presumed Dead" Stadler  
Adam Villani  
John White

PHOTOGRAPHER  
Rich Zitola

BUSINESS MANAGER  
Chris "X" Echols

CIRCULATION  
Heidi Sutton  
Wei Lin

*The California Tech*  
Caltech 40-58 SAC  
1201 East California Boulevard  
Pasadena, California 91125  
(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.

Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editors reserve the right to abridge and edit all submissions for literacy, expediency, etc.

Turn in copy (preferably on Macintosh 3.5 inch disk) to the *Tech* mailbox outside SAC room 40. E-mail may be sent to [editors@tech.caltech.edu](mailto:editors@tech.caltech.edu). The deadline for copy is Wednesday at 5 P.M.; for announcements, Tuesday at 5 P.M.

*The California Tech* is distributed free. Issues will be mailed off-campus upon receipt of \$10 per year to cover third-class postage and preparation costs.

Printed by News-Type Service, Glendale.

ISSN 0008-1582

Pasadena's Biggest & Best Used Bookstore

**Cliff's Books** RECORDS & COMICS

630 E. Colorado Bl. Pasadena

"Just around the corner from the Pasadena Playhouse"

818-449-9541

**ALWAYS OPEN UNTIL MIDNIGHT**

- ☐ Over 1/4 million Books, Records & Comics
- ☐ Largest selection of paperbacks in L.A.
- ☐ Biggest Science / Technical stock in USA
- ☐ Fine & Rare Book Room ~ 1st Editions

20% Discount  
with CalTech ID



## LAEMMLE THEATRES

**ESQUIRE**

2670 E. Colorado Blvd.  
(818) 793-6149

"Sensuous and alluring"  
—Los Angeles Times

**Like Water  
for Chocolate**

Daily 5:00, 7:30, 10:00 p.m.  
Sat-Sun Bargain Matinee 2:30 p.m.

**COLORADO**

2588 E. Colorado Blvd.  
(818) 796-9704

Robert Altman's

**SHORT  
CUTS**

Daily 4:20, 8:10 p.m.  
Sat-Sun Bargain Matinee 12:30 p.m.

**Angola**

The U.N. announced that Angolan government and UNITA rebels would meet to discuss ending the civil war in Angola. The UNITA rebels said that they will accept election results from last year that they had initially rejected as rigged.

**Bosnia-Herzegovina**

Rebel Muslim Fikret Abdic, who recently declared the Bihac area in northwest Bosnia to be an Autonomous Province, signed a peace agreement with Bosnian Serbs. The agreement is not expected to have much effect.

**Burundi**

Former President Jean Baptiste Bagaza led military hard-liners in a coup against President Ndaye, raising concerns about democracy and ethnic fighting. After loyal and rebel troops fought at the national palace, communications to Burundi were cut, so there is little confirmed information. There have been unconfirmed reports that President Ndaye has been killed. Burundi's minister of information reported that he and other government officials were in hiding in the capital.

The coup, led by hard-liners, stops Burundi's progress toward democracy. The U.S. and other Western countries immediately suspended aid to Burundi. The coup also raised concerns about ethnic fighting. The coup was largely led by minority Tutsis, while Ndaye is a Hutu. Historically, the minority Tutsis have ruled over the Hutus, who make up about 85% of the population of Burundi. Since Burundi became independent in 1962 tens of thousands of Hutus and Tutsis have been killed in ethnic fighting. The army, reported to largely support the coup, is largely led by Tutsis.

**Canada**

The Liberal Party won a majority of 178 out of 295 seats in the House of Commons, making Jean Chretien the new Prime Minister. He replaces Kim Campbell, whose Progressive Conservative party only kept two of their 153 seats. Two seats is not even enough to maintain official party status in Canada. The Bloc Quebecois did well in Quebec, getting 54 seats, and the Reform Party got votes in Alberta, getting 52 seats. The liberal New Democratic Party received 8 seats.

**El Salvador**

Velis, a senior official in the leftist Farabundo Marti National Liberation Front (FMLN), was killed by two gunmen. U.N. peacekeepers are reporting a rise in death-

squad-style killings, but it is not clear whether the killings were by police, FMLN, or vigilantes.

**France**

A Pasteur Institute team said that they have found that a receptor molecule, named CD26, is used by all strains of the AIDS virus to enter red blood cells. They expressed hopes that this discovery could lead to an AIDS vaccine.

**Georgia**

The Georgian government retook the key transport city of Poti, possibly with Russian help. The city was recently taken over by rebels led by ex-President Zviad Gamsakhurdia, and is an important transport point between the capital of Tbilisi and the Black Sea. There is evidence that Russian troops provided the Georgian government with weapons and men.

**Haiti**

Opponents of Aristide proposed an 11 point plan for his return. He could return as president if he would include some political opponents in his government and not punish those who led the coup that deposed him. Clinton said that the proposal was a good sign.

Deposed President Jean-Bertrand Aristide hinted that he might return to Haiti on the October 30th date set a U.N.-mediated agreement, even if the Haitian military continues to resist his return. U.S. officials voiced concerns that his return could set off violent fighting between the military and the masses who support Aristide.

A two-year-old CIA report, used for briefings in Congress, characterized Aristide as mentally unstable and said that he had encouraged violence against his political opponents when President. White House officials disputed the reports, saying that Aristide has been "rational and responsible." Aristide denied the report's claim that he was in a mental hospital in Canada in 1980, and diagnosed as manic depressive.

**India**

Paramilitary police fired upon civilians supporting militants in Srinagar, killing 37 and wounding 100. Some witnesses said that the

police fired without warning. The militants in Srinagar seized the Hazratbal shrine on October 15th, causing a week-long standoff with Indian authorities. The shrine is believed to have a hair of the prophet Mohammed.

**Iraq**

There were unconfirmed reports from Iraqi opposition that chemical weapons were used on Shiite dissidents, killing hundreds. A British official said that it was unlikely that chemical weapons were used, but that white phosphorous, which is not considered a chemical weapon, might have been used.

**Israel**

The Israeli government released

Some sources say that the uprisings are the result of discontent over the economic affects of one and a half years of sanctions. The Libyan government denied that there had been an attempted coup, while other reported hundred of arrests and injuries. International sanctions blocking all air travel to Libya have been in place since April, 1992, since Kadafi refused to extradite two agents suspected of engineering the 1988 Lockerbie bombing.

**Russia**

After protests from the Japan and the U.S., Russian Environment Minister Viktor Danilov-Danilyan announced that Russia would stop dumping liquid nuclear waste in

the Sea of Japan. He warned that Russia does not have the facilities to hold the waste produced by Russian nuclear submarines and that it would have to continue the practice unless other countries would help pay the costs of contain-

ment. Japan agreed to a meeting to discuss helping pay for waste disposal.

Yeltsin ordered new legislative election in 68 of 88 territories, and limited the size of the new legislatures to 50. Many territorial legislatures are aligned with Communists, and supported Parliament in its recent fight with Yeltsin.

**Somalia**

After U.S. officials announced that the U.S. would not attempt to disarm the rival clans in Somalia or capture Aidid, clan leader Ali Mahdi Mohammed warned that these policies would lead to a new civil war. There has been evidence that the rival clans in Somalia are rearming.

**Ukraine**

Ukraine's Parliament voted 221 to 38 to keep the Chernobyl nuclear power plant running, and restart their atomic energy program. After the Ukraine left the Soviet Union the Parliament voted to have Chernobyl closed down at the end of 1993. Energy Minister Vilen Semeniuk argued for keeping Chernobyl open, saying that the plant could provide much needed energy, while Environment Minister Yuri Kostenko said that the plant should be closed.

Ukrainian President Leonid Kravchuk announced that he wanted to get rid of the 1,800 nuclear weapons that were left there after the fall of the Soviet Union. He also said that he was not sure he could get the Parliament to go along, and asked for billions of dollars of aid to defend against Russia. U.S. Secretary of State Warren Christopher announced \$330 million in new U.S. aid shortly after Kravchuk's announcement.

**United Kingdom**

The Irish Republican Army set off a bomb in a building in Belfast, claiming that the building was being used for a meeting of the Protestant paramilitary Ulster Freedom fighters. Nine were killed and 50 were injured. The Ulster Freedom fighters threatened retaliations. Both of the groups are outlawed.

Garry Kasparov beat challenger Nigel Short, keeping his reputation as the world's best chess player. Kasparov won 6 games, lost one, and drew 13, winning \$1.5 million.

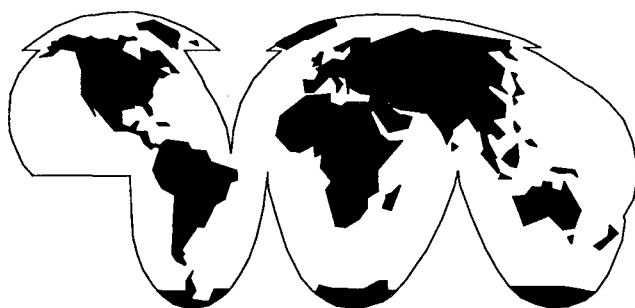
**United States**

The Senate voted for legislation which provides for 600 more Border Patrol agents and \$171 million for federal immigration services.

After lengthy debate over Clinton foreign policy, the Senate rejected, 81 to 19, a bill forbidding Clinton from sending troops to Haiti. The Senate then passed, 98 to 2, a bill requesting that Clinton consult with the Senate before deciding to intervene in foreign countries.

There were fires in Southern California.

# World News



by Momo Jeng

700 Palestinian prisoners under the terms of a recent peace agreement with the PLO.

Asad Saftawi, Palestinian politician and friend of Yasser Arafat, was killed. He is the third PLO activist to be killed since Israel and the PLO agreed on terms for Palestinian self-rule. The Arab Palestinian Organization claimed responsibility, saying that Saftawi had "treacherous contact" with Israeli intelligence.

Members of the Palestinian militant Islamic Resistance Movement, also known as Hamas, killed two Israeli guards in the Gaza Strip, defying the recent Israel-PLO peace agreement, and vowing to continue the intifada.

The Palestinian pro-Iranian Party of God attacked an Israeli patrol in southern Lebanon, injuring two.

**Japan**

Japanese Empress Michiko collapsed on Thursday. Neurological tests showed no abnormalities.

**Libya**

Opposition leaders and diplomatic sources said that there Moammar Kadafi has recently put down violent uprisings in Libya.

## TONIGHT'S ASCIT MOVIE

# HOT SHOTS!

## PART DEUX

Friday, October 29  
Baxter Lecture Hall  
Midnight (one show only)

\$1.50 for ASCIT members  
\$2.00 for all others

**NEXT WEEK: THE MALTESE FALCON**

### ACADEMY BARBER SHOP

27 N. Catalina Ave., Pasadena  
Open Tues.-Sat., 7:30 A.M.-4:00 P.M.  
(818) 449-1681

### SPEEDY RESEARCH

Reports: \$5.00 per page  
Over 50,000 topics and clippings.  
Materials for research assistance use only!  
6546 Hollywood Blvd., 2nd Floor, Room 209  
Los Angeles, CA 90028  
Mon-Fri 10:30-6:00 • Sat 11:00-4:00  
Custom Research Available  
AmEx • VISA • MasterCard • Fax  
Call Today! (800) 356-9001

## GRAND OPENING!

HONG KONG STYLE CUISINE

**SAM HO BAR B.Q.**  
三合燒腊麵家



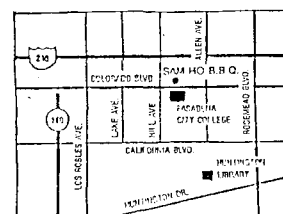
CHINESE  
FOOD

\*TAKE OUT WELCOME  
\*SPECIAL LUNCH COMBINATIONS  
\*PARTY CATERING

BUSINESS HOURS

OPEN SEVEN DAYS

MON-FRI: 10:30 AM- 9:00 PM  
SAT-SUN: 10:30 AM- 9:00 PM



**TEL: (818) 304-9645**

1543 E. COLORADO BLVD.  
PASADENA, CA 91106  
OPPOSITE OF PASADENA CITY COLLEGE





Bill Amend (rhymes with "Raymond"), cartoonist

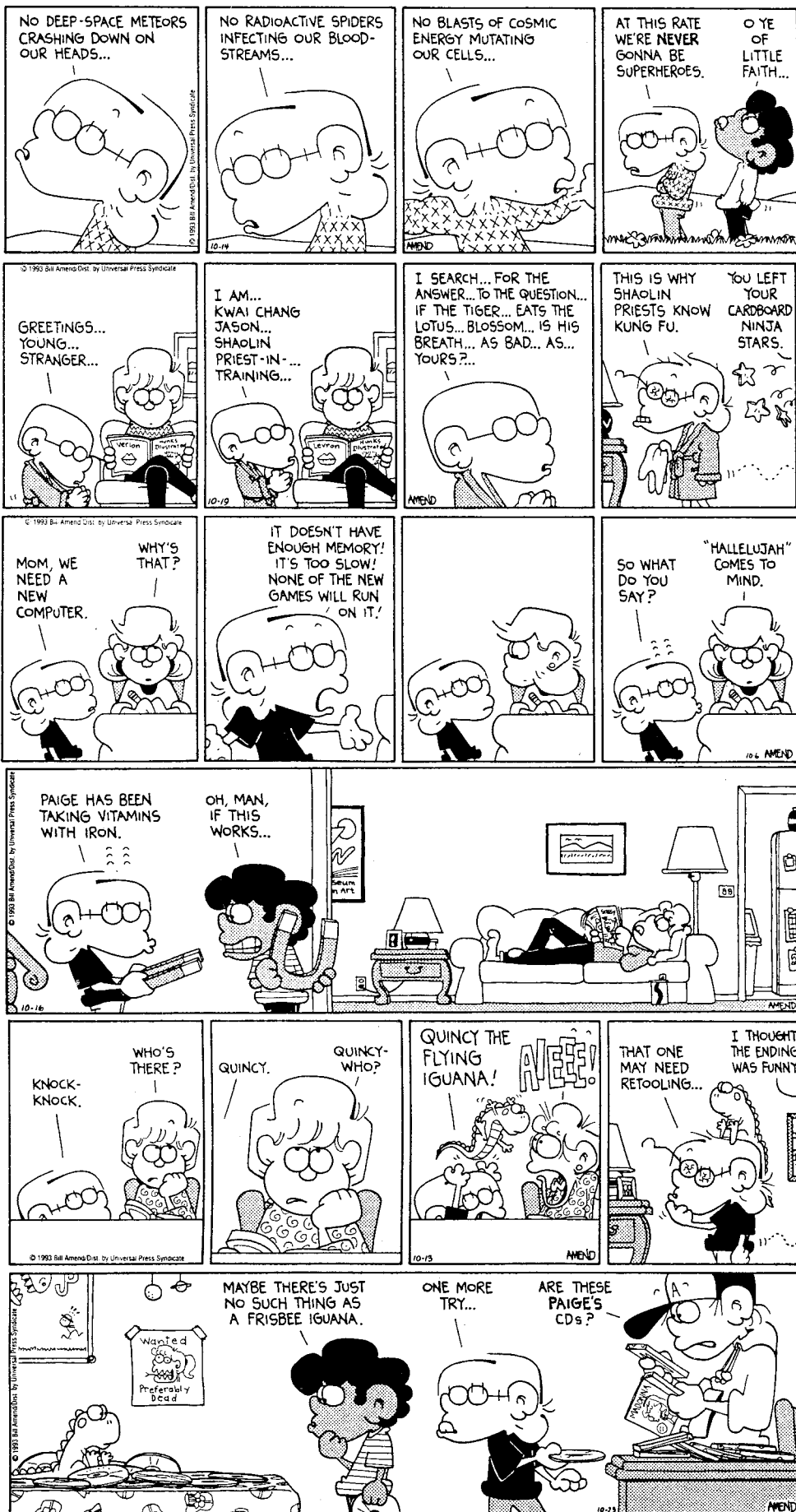
MR. METAL AND HIS DOG SHINY by Tom Lehner



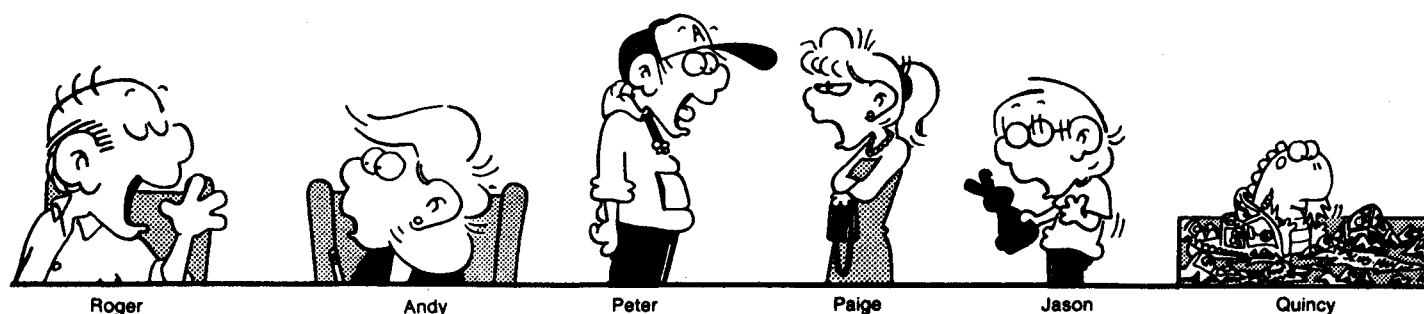
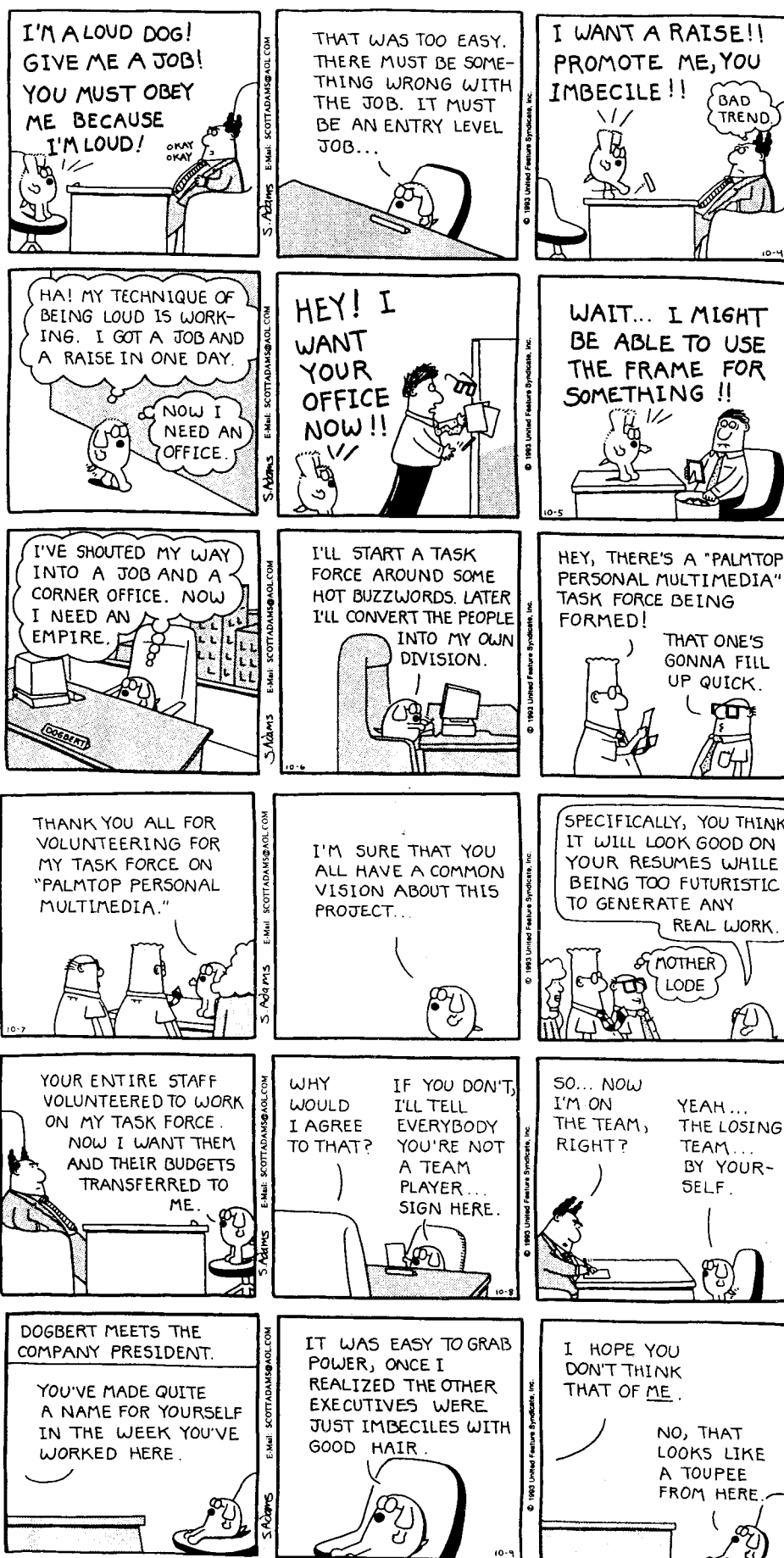
Never fear! **Jim's Journal** will return next week!

## FoxTrot

by Bill Amend



Dilbert® by Scott Adams



Roger

Andy

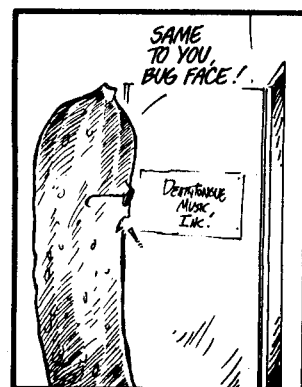
Peter

Paige

Jason

Quincy

BLOOM COUNTY



by Berke Breathed



ADAM VILLANI:  
MEDIA GUY

by Adam Villani

The Police

“Message in a Box: The Complete Recordings”

What can I say? Listening to this actually made doing my Ph 106 enjoyable. I was really into the Police back in about fifth grade, and this new compilation just made it clearer why the Police were such a great band: Stewart Copeland was an incredible drummer, Andy Summers was an awesome guitarist (much better than any of those “guitar hero” wankers like Joe Satriani), and Sting was a great songwriter.

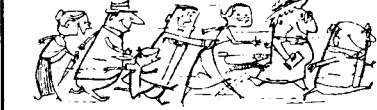
This 4-disc set has everything the Police ever released, including all of their albums, B-sides, and songs that turned up on compilations. The sequence of the original albums remains intact, and the packaging and booklet are pretty cool. The only fault I can think of about this release is that it includes their extra-lame 1986 remake of “Don’t Stand So Close to Me.”

The Decline of Western News Media Part II: Time Magazine

The two most recent cover stories of Time Magazine seem to be saying, “We’re giving up. We’re not really serious about news. Go read the New York Times.” Last week’s Pearl Jam cover story seemed like something Rolling Stone would write if they weren’t as good as they are. The worst part was the little box showing different bands fitting into different sub-genres of rock throughout the decades. They ended up putting the B-52’s in the same category as the Black Crowes. If you can’t think of decent pigeonholes to stick artists into, don’t print an idiotic attempt like this. This week’s cover features Howard Stern and Rush Limbaugh spewing fire into a microphone. Gag.

If all of your friends jumped off a bridge . . .

Disney released new prints of “The Program” last week with a scene cut out featuring a football player lying down in the middle of a highway to prove how tough he is. This is in response to media hype surrounding the death of a Pennsylvania youth (followed by other incidents) trying the same stunt after watching the movie. Of course it’s tragic that a kid died, but I refuse to believe someone would do this without being a grade-A moron. Sometimes people do risky things, but sometimes people do things tantamount to suicide. Furthermore, this comes at a time when it seems like the media is being blamed for everything from riots to bad breath. Atty. General Janet Reno has threatened to virtually suspend the First Amendment, while the mainstream media claims that they innocently reflect trends in society. Both of these views are dangerous, as our freedom must be preserved, but the media must admit how powerful a tool it is and take responsibility.



entertainment

Games & Puzzles: Hit or Miss

by Wei-Hwa Huang

I found a game called Hit or Miss in one of those giant card Solitaire compendiums. The basic idea is simple: take a shuffled deck, and deal out the cards face-up one at a time, calling out “Ace,” “Two,” “Three,” . . . “King,” “Ace,” and so on. If you match the card at any point, you “hit,” and you get the reward of removing the card. If you remove all the cards, you win. Some versions of the game add stipulations, like: If you go through the deck three times without a removal, you lose; If you hit twice in a row, you lose; etc. Certain multi-player games, such as Heart Attack, work on a similar principle. One my friends, Jim Quallen, tells me that he knows of people who give odds of 10 to 1 that you’ll get a hit the first time you go through the deck. He wanted to know if this was close to fair.

Well, Euler once solved the “envelope problem,” which is: say you

put  $n$  letters into  $n$  corresponding envelopes at random. How many ways can you place them so that no letter is in its correct envelope? He solved this by an extremely elegant recursive formula, and was able to get the answer in summation form. When you divide his answer by the number of ways to place letters in the envelopes in *any* order, the series looks suspiciously like a Taylor series. It turns out that this series converges to  $1/e$ , where  $e$  is Euler’s famous calculus constant, equal to approximately 2.718. In other words, I’ve got a 1 in  $e$  chance of *not* getting a match at all. The odds of 10 to 1 assumes that the probability is around 1/11, or 1/4e, which seems to make sense because you’re not calling the suit *and* number, just the number, so you should divide the probability by four. This isn’t a very convincing argument, however. Anybody else have any ideas?

Speaking of betting on these games, here’s another game: This

person gives me 13 cards in one suit, a nice corrugated card tray with 13 slots (each marked with a different denomination), and \$10. Sounds like a good deal so far. I pay \$1 to shuffle the cards and deal them into the slots, face down. I then remove all cards that don’t match, and then pay another dollar to deal into the empty slots. This continues until I get all the cards into the correct slots. I get to keep the cards, but I have to return the tray.

Question: Who has the advantage (assume that 13 cards cost \$1 nowadays)? Answer next issue.

Solution to Last week’s Open Poker:

First player (non-dealer) has the win. You can do this by picking up, say, four tens and a three. This effectively stops dealer from ever getting a straight flush higher than a nine, which you will get next turn no matter what dealer does. Some other combinations also work on

see GAMES, page 11

Pearl Jam’s ‘Vs.’ kicks

by John White

animal

It seems like yesterday, not two and a half years ago, that I was hearing Pearl Jam for the first time on “Saturday Night Live.” Since then, their debut release, “Ten,” went multi-platinum, the group was nominated for several Grammys, and the video for their single “Jeremy” swept the MTV Music Video Awards.

Last Tuesday, Pearl Jam offered their sophomore effort for public consumption. I think that it is too early to make predictions about whether it will do as well as “Ten,” but living up to a wildly successful album is very difficult to do (as Nirvana have found out.) However, I think that Pearl Jam has delivered an album of songs ranging from solid to spectacular.

Without any further delay, here are my song-by-song impressions of the album.

go

As my roommate said, “Is this the new Helmet single?” No, it isn’t. “Go” combines Jeff Ament’s driving bass line, reminiscent of the Red Hot Chili Peppers, with Stone Gossard’s quick, complex guitar and Eddie Vedder’s powerful voice to form one of my favorite tracks on the album.

Though it struck me as very stilted when I first heard it, the more I listened to this track, the more I appreciated the mixture of the slower, powerful phrases with the quick and subtle ones. This is definitely a high-energy song with a hard edge that might take some getting used to. It’s definitely worth the listen, though.

daughter

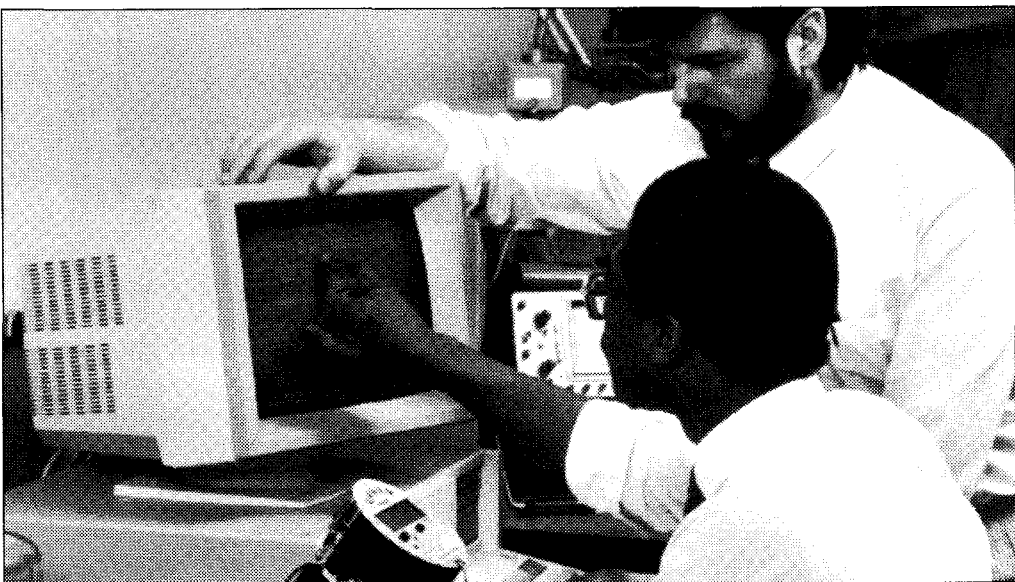
A great blend of acoustic guitar and Eddie’s voice. The easier sound is a change of pace from the “frantic” sound that dominates the first two tracks. As is typical of Pearl Jam, the bass line is fairly prominent, adding to the catchy melody. If there is a track that will be overplayed, this is the one.

glorified g

The choppy lead guitar! That unique beat! “Holy Spin Doctors, Batman!” No, I’m not the biggest Spin Doctors fan, and this track doesn’t wash that well with me, either. I’m sure that someone a bit more open-minded will enjoy this track a bit more than I.

dissident

Wailing guitar and wailing vocals mix to communicate a vast see PEARL JAM, page 8



(shlŭm’ • bŭr • zhā)

n. 1. a 6 billion dollar culturally diverse international enterprise noted for recruiting the brightest engineering and scientific minds from all over the world. 2. 51,000 self-motivated, enterprising achievers in 75 countries, totally committed to excellence. 3. A place for self-starters in virtually every scientific and engineering discipline to launch exceptional careers.

ENGINEERING  
COMPUTER SCIENCES  
GEOSCIENCES  
APPLIED SCIENCES

PLEASE NOTE: Open to all interested students. Your attendance at the Information Meeting is a prerequisite to our interviewing process. Please attend. Refreshments provided! Casual attire.

INFORMATION MEETING:

Date: November 22, 1993

Check with Placement Center for time and place.

INTERVIEWING:

Date: November 23, 1993

An Equal Opportunity Employer



# The History of the Citibank Classic Visa card and the Age of Credit Card Security.

In the 67th year of the 20th Century A.D., Citibank introduced a credit card aptly titled the Citibank Classic Visa® card. Established on the premise that a credit card should offer—**24 hours a day**—warm, personal service, the Citibank Classic Visa card marked the end of the Ice Age. And it ushered in a new era. ¶ With the introduction of the first **Photocard**, the credit card



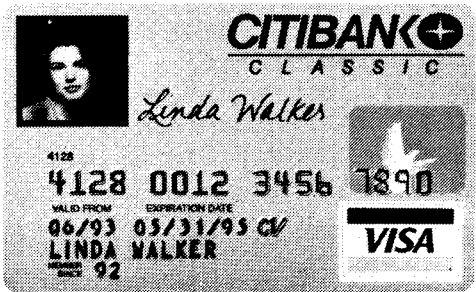
*This tablet, dated 1358 B.C., was the first known attempt to put one's photo on a credit card—but not without drawbacks. Photography had not yet been invented. It weighed over 50 pounds. And, it did not fit easily into a wallet.*

bearing one's own photo and signature on the front, it soon became evident that Man was entering the Post Paleolithic Period. First, Man was no longer looking like a Neanderthal, as one often does on more primitive cards such as the Student ID. He or she could now choose his or her own photo. Second, by deterring other anthropoids from using the card, Man was helping to prevent fraud. Surely this was a sign of advanced intelligence. ¶ The subsequent rise of services was nothing less than an American Revolution. So as you might expect, Citibank would be there for you, even if your card was stolen, or perhaps lost. **The Lost Wallet™ Service** could have a new card in your hands usually within 24 hours. (You can almost hear Paul Revere crying, “The card is coming! The card is coming!”) ¶ When the Great Student Depression came along, Citibank introduced New Deals—special student **discounts and savings**. Hence, today's student can enjoy a \$20 Airfare Discount for domestic flights<sup>1</sup> (ushering in the Jet Age); savings on mail order purchases, sports equipment, magazines and music; a low variable interest rate of 15.4%<sup>2</sup>; and, no annual fee. ¶ Finally, comes the day you enter the Classical Age (i.e. when you charge your purchases on the Citibank *Classic* card). You receive **Citibank Price Protection** to assure you of the best prices. Just see the same item advertised in print for less, within 60 days, and Citibank will refund the difference up to \$150<sup>3</sup>. You receive **Buyers Security™**, to cover



*Had Napoleon carried a Citibank Classic Visa card with its Lost Wallet Service, he would not have been compelled to hold on so obsessively to the wallet inside his jacket.*

those purchases against accidental damage, fire or theft, for 90 days from the date of purchase<sup>3</sup>. And **Citibank Lifetime Warranty™**, to extend the expected service life of eligible products up to 12 years<sup>4</sup>. Together they give you complete coverage; and with everything else...the Age of Credit Card Security. ¶ It's credit history in the making. With the help of Citibank's services and savings, you earn some of the credentials needed later on to purchase a car or even a house. ¶ So call to apply. Students don't need a job or a cosigner. Call, also, if you'd like your photo added to your regular Citibank Classic Visa card. The number is **1-800-CITIBANK** (1-800-248-4226), extension 19. ¶ If after reading this chapter describing the prosperous conditions set forth by a Citibank Classic Visa card, one feels that he or she has left forever the Dark Ages and has entered upon a new age, the Age of Enlightenment, then your time, as they say, has come. Destiny is calling. And so should you.



Not just Visa. Citibank Visa.

## Monarch Notes® Version:

With the Citibank Classic Visa card, you can build a credit history before you reach your middle ages. And, receive special student discounts. Call today **1-800-CITIBANK** (1-800-248-4226), extension 19.

<sup>1</sup>Offer expires 6/30/94. Minimum ticket purchase price is \$100. Rebates are for Citibank student cardmembers on tickets issued by ISE. Flights only. <sup>2</sup>The Annual Percentage Rate for purchases is 15.4% as of 8/93 and may vary quarterly. The Annual Percentage Rate for cash advances is 19.8%. If a finance charge is imposed, the minimum is 50 cents. There is an additional finance charge for each cash advance transaction equal to 2% of the amount of each cash advance transaction; however, it will not be less than \$2.00 or greater than \$10.00. <sup>3</sup>Certain conditions and exclusions apply. Please refer to your Summary of Additional Program Information. Buyers Security is underwritten by The Zurich International UK Limited. <sup>4</sup>Certain restrictions and limitations apply. Underwritten by the New Hampshire Insurance Company. Service life expectancy varies by product and is at least the minimum based on retail industry data. Details of coverage are available in your Summary of Additional Program Information. Monarch® Notes are published by Monarch Press, a division of Simon & Schuster, a Paramount Communications Company. Used by permission of the publisher. Citibank credit cards are issued by Citibank (South Dakota), N.A. ©1993 Citibank (South Dakota), N.A. Member FDIC.

# ASCIT BOD Minutes, October 26th

by Karen Shih

Present: BOD, Alan "Pinky" Blaine, Eric Hackman, John Barrera, Steven Young, Finny Chavanikamannil, Jennifer Trittschuh, Vicki Brown, Frances Chance, Anna Mulhern, Christy Esau, Jim Murdoch, Rich Zitola, T'Nghia Vuong, Ryan Naone, Mike Ng, Eddie Murakami, and Tommy Chen.

## New Business

- Salaries for issues 1-5 of *The California Tech* are approved (7-0-0; Angie came in late).
- **Big T:** Final report for this year is in. Salaries for the editors and a 10% commission of ad sales are approved (8-0-0).
- **ASCIT Movies:** This Friday's movie is shown at midnight only. The Movies Chairman has an extension at x1009.
- **Blacker, Dabney, and Page** pick up first term non-alcoholic social subsidies.
- **CCF:** The Pre-Catalina BBQ came in under budget; fun and food were had by all.
- **BOC:** Several bylaw changes are proposed to provide a means for a BOC representative to re-

main on the Board despite academic ineligibility. Discussion centers around the ability of the officer to carry out the duties of the office and the rigidity of the by-laws. Some concern is expressed regarding the specific qualities sought after in the selection of BOC representatives and whether those qualities might be compromised if certain members cease to be students. Further discussion is tabled until next week.

- **Pumpkin Drop:** The annual ritual will be taking place on Sunday at Midnight. Dabney is organizing the event; a projected \$250 cost should be picked up somehow by on-campus organizations. The BOD decides to fund \$75 of the cost. Those in charge are *encouraged* to go to the Houses as well as other organizations for further funding.
- **little t:** Copies of the book are available now in the Dean's Office; hurry while supplies last. A final report should be ready by next week.
- **Deutch Club:** four ASCIT members are planning to attend Oktoberfest in Torrence this coming weekend; motion not to fund the event passes (7-1-0).

- **CCSA, Tang Soo Do Club, and Furusato No Aji (Japanese Club)** pick up monies for first term.
- **Sign-ups for Publications Dark-room Chairman** are going up.

**Treasurer's report:** Everything looks good; we're in the black.

**Halloween Party:** Some of the posted flyers are in error; the party is this *Saturday, from 9 P.M. to 2 A.M.* in Dabney Gardens. KROQ will be here with free CD's, T-shirts, and lots of entertainment.

## Student-Faculty Conference

- Those who wish to research through BOD files in the ASCIT Office for the upcoming Conference are encouraged to do so; however, the BOD feels uncomfortable with issuing keys to the general ASCIT membership. If anyone would like to get into the office, please find a Director near you; a roster of the BOD is on the window of the MOSH's Office.
- Sub-committees are: Honor System, Quality of Teaching, and Improving Communications. The Chairs of the sub-committees are:

Vicki Brown, Ben McCall, and Jill Bush, respectively. The Core Curriculum Committee was disbanded and its focus will be picked up by the Academic Policies Committee.

## Upperclass Director-at-Large

- **ASCIT copier:** The quality of the copies will be improving shortly.
- **ASCIT vans:** Please take only the van that you have reserved; the other van might be reserved for another organization. The old van ran into (excuse the pun) some trouble last week; apparently a woman opened a car door into the oncoming van on Chester. The van was not harmed, but the other car was slightly damaged.

**IHC Chair:** For now, IHC meetings are tentatively scheduled for Wednesdays at midnight.

## BOC Chair

- Apparently, college campuses all over America are grappling with academic dishonesty in the classrooms. A recent article from the University of Arizona quoted Mike on our unique system and its effect on undergraduate academic life.

- Sign-ups for BOC Representative-at-Large are coming down on Friday.
- BOC picks up first term money.

## President

• Moeen is making a valiant effort to make sure that undergraduate spots are reserved in the new parking structure that is set to open in December. In days gone by, those who lived on campus with cars could park in the lot that was next to Mosher-Jorgensen; the BOD would like to see those spots (and more) back in the hands of undergraduates.

• The security of our off-campus membership is threatened since security will not provide escort service north of Del Mar; Moeen and Stanley Grant are looking into possibilities of perhaps a student-managed escort service. Discussion centers around the legal liabilities of such an operation and the duty of our present Security Staff to ensure safety of the Caltech Community. Another safety issue is the lack of lighting around Guggenheim, Thomas, and Throop Pond; should we be afraid to go to Millikan Library at night because it's too dark?

# Juggle and Hyde

by Michael Kantner

In their fourth appearance at Caltech, the Flying Karamazov Brothers performed "Juggle and Hyde" to a packed Beckman Auditorium. Their unique blend of musical comedy, offbeat humor, poetry, and juggling prowess entertained and amazed the crowd.

Following a humorous introduction, the show opened with glow-in-the-dark balls being juggled on a dark stage. When the stage lights arose, the four Karamazovs appeared in front of a tower of cardboard boxes. While providing a backdrop, several of the boxes played an instrumental role in the first musical piece. Eight boxes of various sizes were used as drums in a percussion piece.

After reciting a haiku, the brothers began juggling clubs. Logically deducing that when attempting the impossible, the only way to fail is to succeed, they began passing clubs while juggling. For one of the impossible tricks, each stood on the corner of a large square and passed a club diagonally across the square. This resulted in four clubs simultaneously passing through the middle. They failed by succeeding.

After another musical number came "The Gamble." In "The Gamble," the champ juggles three items provided and selected by the audience. The ground rules state the items must be "heavier than an ounce, lighter than ten pounds, and no bigger than a bread box." In addition, the champ may alter each item in any method he desires. If successful, the champ receives a standing ovation. If not, he gets the greatest of Vaudeville insults, a pie in the face.

Since "The Gamble" is a regular feature of their shows and it was announced in press releases, the audience came prepared a wide variety of items including a shoe, a purse, a rotten banana, a sweater, and a burrito. After voting on each,

the audience selected a dead mackerel, a wet bar of soap, and half of a pumpkin covered in Vaseline. On the champ's first attempt, he completed five of the required ten counts. After the second attempt, a total failure, the champ "modified" the pumpkin. With two stomps, the greasy pumpkin was transformed into a manageable slab of orange gunk. The champ then succeeded, and avoided a pie in the face.

After risking life and limb juggling various implements of death and destruction, the brothers sang a short piece announcing the intermission. During the respite, the stage crew cleaned the mess created during "The Gamble."

Upon returning to the stage, the Karamazovs performed a mix of ballet and hip-hop attributed to Mussolini. This was followed by another haiku:

*Box flies like a box*

*Time flies like an arrow but*

*Fruit flies like a grape*

The next skit was the largest musical number of the night. Three of the four brothers each wore four electronic drum pads. While juggling clubs, they bounced the clubs off the drum pads and played a cadence that many marching bands could only dream about. The fourth brother then entered the stage. Wearing a body suit with many small touch pads, he proceeded to add his own melody by bouncing juggling balls off various parts of his anatomy. It was an extremely creative approach to performing percussion.

The Flying Karamazov Brothers demonstrated creativity in juggling. The show emphasized quality over quantity. Only one routine involved more than three clubs per brother, and that one had a total of fourteen clubs. The poetry and humor showed influences from Monty Python, and the musical pieces were beyond description. In short, "Juggle and Hyde" was delightful entertainment.

# When You're Considering a Career in Information Technology Consider One More Thing.

Consider the investment banking firm with opportunities in information technology throughout the Asia-Pacific region. Where individuals with an interest in working in Tokyo, Hong Kong, Osaka, Seoul, Singapore, or Taipei, and who are fluent in the local language, have the chance to join a department central to the growth and success of nearly every facet of the international firm. Where the skills to develop and maintain state-of-the-art global computer systems are provided through a series of technical and industry-oriented training sessions. And consider the firm where those individuals who choose to accept the challenges set before them are given the opportunity to grow both professionally and personally.

## In short, consider the Goldman Sachs' Asia-Pacific Offices

See us at Southern California International Career Consortium SCICC  
Thursday, November 4, 1993  
UCLA - Ackerman Union - Grand Ballroom  
11:00 AM - 3:00 PM

For more information, please contact Melissa Romano,  
Information Technology Administration, Goldman, Sachs & Co.,  
85 Broad Street, New York, NY 10004.

Candidates should have a concentration in Computer Science, MIS, Engineering or have taken computer related courses and have a strong knowledge of "C" language, PC Workstations and LAN.

Goldman Sachs, an equal opportunity employer, does not discriminate in employment on any basis that is prohibited by federal, state or local law.

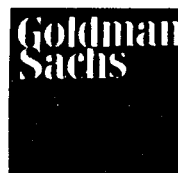






photo by Rich Zitola

Fire breaks out on the foothills below Mount Wilson early Wednesday morning.



photo by Shep Zitola

Policemen stand guard while firefighters attempt to keep a brush fire back from the road.

continued from page 5

## Pearl Jam

amount of emotional energy. This song kicks.

*w.m.a.*

A very strong baseline adds to the tribal feel of this track. Interesting feel, very mellow, despite some powerful lyrics.

*blood*

Back to songs with a hard edge, though this one has a bit of a twist: copious use of the wah-wah pedal. Maybe a lot of listening will give this track some more character, but at this point, it sounds a bit too straightforward.

*rearviewmirror*

At first, I wasn't too impressed with how the music itself was written, but Eddie Vedder's enthusiasm makes up for a lot. The more the energy of the song rose, the more I enjoyed it.

*rats*

It starts out with a funky baseline, but gets harder. I have a feeling that I'm missing some kind of metaphor—I'm sure that it isn't actually about rats.

*elderly woman behind the counter in a small town*

Another song dominated by acoustic guitar and Eddie's vocals. The acoustic sound seems to force a bit more subtle emotion from all

the instruments, which I enjoy a lot. A great track.

*leash*

Not just another hard track. Catchy, high energy, and terrific lyrics. "Get out of my lucky face!"

*indifference*

This track is totally different from any other—soft, filled with soul, heartfelt, and touching. This is Eddie at his most emotional, the way I love to hear him. A complete change of pace, and a wonderful closing track.

All in all, I thoroughly enjoyed the album. I was afraid I would have to listen to a bunch of songs that sounded very similar to the songs from "Ten," and for the most part, this didn't happen. The Pearl Jam sound has definitely changed over the past few years. Buy this album.

## DE LUXE SHOE REPAIR

946 Huntington Drive, San Marino  
(just east of Oak Knoll Avenue)

FREE PICK-UP AND DELIVERY WITH  
\$20 MINIMUM ORDER — TO CALTECH  
OR WITHIN 2-MILE RADIUS OF CAMPUS

- EXPERT SHOE REPAIRING
- ALL TYPES LEATHER REPAIR
- RESTYLING • DYEING • COLOR MATCHING
- ZIPPER REPLACEMENT
- ORTHOPEDIC SPECIALISTS
- HANDBAG REPAIRS • LUGGAGE REPAIRS
- CUSTOM-MADE BELTS
- BIRKENSTOCKS RESOLED & RECORKED

Vibram  
sole  
Authorized  
Factory Dealer



ALL WORK GUARANTEED TO YOUR SATISFACTION

(818) 282-9875

MON-FRI 8 am-5 pm  
SAT 9 am-2 pm

## Book Now For The Holidays

|               |        |
|---------------|--------|
| Orlando       | \$179* |
| New York      | \$179* |
| Boston        | \$179* |
| Washington DC | \$179* |
| Paris         | \$199* |
| London        | \$215* |

\* Fares from Los Angeles and are each way based on a roundtrip purchase. Restrictions apply and taxes not included. Student status may be required.

**Council Travel**

14515 Ventura Blvd. #250  
Sherman Oaks, CA. 91403

1-818-905-5777

## Bridge Without Sam

by Jeff Goldsmith

*Stepping Lightly*

I enjoy playing 1NT. Early in the play, the defenders are usually very much in the dark about the hand. Lots of pretty deceptions and end positions eventuate from early missteps by the bad guys.

Playing in a large matchpoint event with a mixed field, I sit down against a pair I've never seen before. LHO opens 1♣, partner overcalls 1♦, RHO bids 1♠, and I end the auction with 1NT.

I buy a surprisingly good dummy. With partner's hand, I would have raised to 2NT, but since my 1NT call was a bit of an overbid, I am glad we are safely in one.

♠ KJ4  
♥ J6  
♦ AK874  
♣ K76

|   |  |   |
|---|--|---|
| N |  | E |
| W |  | S |

♠ Q865  
♥ A1093  
♦ 92  
♣ J98

| WEST | NORTH | EAST | SOUTH |
|------|-------|------|-------|
| 1♣   | 1♦    | 1♠   | 1NT   |
| Pass | Pass  | Pass | —     |

Perhaps partner is used to my competitive 1NT bids and knew not to continue. Maybe he was just sleepy. All is well, though, and I am graced with the ♥2 opening lead. This has the unfortunate effect of knocking out my only sure hand entry early. I'll have to rely on the ♠Q later. I play low from dummy and East contributes the Queen. I win and fire back a heart. West hops up with the King and continues the suit. While this has helped me with entries, I don't feel comfortable about discarding from the dummy so soon. I obviously cannot afford a black card, so I toss a diamond. Hopefully, they won't break and I will be ahead of everyone. I don't want to squeeze dummy any further, so I continue with a spade to the King, which holds. I exit with a low diamond to my Nine and West's Jack. It looks as if he has both diamond cards and the spade Ace. That means the he has the club Queen and his partner the Ace, unless she has responded on total cheese. It's still possible, though. After a little thought, the presumed 12-count continues with another heart. I don't need the third club from dummy anymore, so I win and pitch a club from dummy. On the second spade, up pops the Ace as expected. Since neither the 9 or 10 was doubleton, I can't afford to unblock. Still unwilling to continue clubs, he continues with the ♦Q and I win.

Diamonds turn out to be 3-3 when I cash the other high diamond, so on the fourth diamond, East is squeezed in an interesting way.

♠ J  
♥ —  
♦ 7  
♣ K7

|   |  |   |
|---|--|---|
| N |  | E |
| W |  | S |

♠ 109  
♥ —  
♦ —  
♣ Px

♠ Q8  
♥ —  
♦ —  
♣ J9

I am going to pitch the small club anyway, but East has a problem. She obviously can't pitch a club honor or a spade, so she stiffes her club honor. If her club is the Ace, then I can cash the ♠J and continue with a club, stepping-stoning my way to the ♠Q. But I really hope that her club is the Queen, because then her partner will be in a dilemma. He can either let the club hold, letting my stepping stone work anyway, or he can overtake, winking a trick for the ♠K. To my dismay, she had the Ace and diamonds were 3-3 all the time, so I got myself an average for +150.

## Spring Garden Chinese Restaurant

Mandarin & Szechwan Cuisine—Best in Town!

### LUNCH & DINNER



Lunch Special  
Monday-Friday, 11:30-2:30 P.M.

5% discount with Caltech ID  
CATERING & FOOD TO GO  
Beer • Wine • Banquets

AMPLE FREE PARKING

187 N. Sierra Madre Blvd.,  
Pasadena, CA 91107

(818) 796-2531




# WHAT TO TAKE FOR YOUR NEXT ALL- NIGHTER.

NO ANNUAL FEE,  
A \$1,000 CREDIT LINE,  
AND NATIONWIDE ACCEPTANCE.  
HOW'S THAT FOR AN EYE-OPENER?



IF YOU DON'T GOT IT,  
GET IT.<sup>SM</sup>

MEMBER  NETWORK ©1993 GREENWOOD TRUST COMPANY, MEMBER FDIC

## Water Polo battles Chapman, Claremont

by Hans Hornstein

Wednesday, October 13th, marked the final chapter in the Caltech-Chapman 1993 trilogy of games. The mean, lean Chapman squad had defeated the Battling Beavers at their home pool at Orange High School and in the Pomona tournament. Needless to say, the Beavers were eager to avenge those losses in their home pool.

The game started well for the home team, with Sonny Arcilla scoring on a man-up opportunity to tie the game at 1-1, followed by a two point goal from Jason Hong

and a hole shot by Chris Buchner to give Tech a 4-1 lead halfway through the first quarter. However, Chapman answered with a two-pointer and goal of their own to end the first period at 4-4.

Sonny opened the second quarter with another score to put Tech ahead 5-4, but Chapman came back to tie the game on another man-up goal. They then went on a four goal streak to open up their first lead to 9-5. Another Jason Hong two-pointer and man-up goal brought Tech to within one, but that was as close as they were to get the rest of the game. A shot partially deflected by Tech goalie

Jamie Sherman closed out the half's scoring at 10-8.

The lone highlights of the third quarter were a sweet Buchner goal and a rare block of a 4-meter penalty shot by Tech goalie Hans Hornstein, his second in two games. The Beavers had many man-up opportunities, but could not get the ball in the cage. The fourth quarter showed a tiring Beaver squad getting out-swum and out-benched. Despite this, Buchner put another shot in, and Mikey Ng pushed in a rebound to help the beavers tie their best offensive output of the season. A final two-point shot from Chapman with 22

seconds left sealed the game's final score at Chapman 23, Tech 11.

The next Wednesday, after an inspirational visit to the Cal-UCLA game that weekend, the Beavers opened their conference season at home against formerly nationally-ranked Claremont, who were looking for their 111th consecutive conference win. Again, things looked promising in the first quarter, as halfway through, the score was tied at two. Despite excellent pressure on Claremont's hole men resulting in numerous turnovers, Claremont's offense managed to pull away to an 8-4 lead at the half. A third quarter slump in defense and

execution allowed Claremont to increase the lead to 16-8 after three. The Tech defense tightened up in the final stanza, but so did the Claremont D, finishing the game at a 22-8 final. The Tech goalie finished with 10 blocks, and the Tech defense did not allow a single two-point goal for the first time all season.

Saturday, the 23rd, the Beavers travel to Claremont and their new 30 meter pool for the Claremont tournament, where they will face top-twenty-ranked Division I teams their first two games. They face the Air Force Academy in the morning, followed by Vilanova in the afternoon. All members of the community are welcome and encouraged to come to Tech home (and away) games, held Wednesdays and Saturdays until Mid-November.

continued from page 1

## Fire

been burned. What struck me immediately was that homes did not seem to burn down in contiguous blocks. Instead, houses which were burnt to the ground were scattered among undamaged homes. When we interviewed the neighbors of a family whose house burned down, I found out that there had not been much ground fire in this area, but many embers had rained down. Most residents had climbed onto their roofs and started hosing their houses down, and were highly successful in preventing the destruction of many homes. Unfortunately, some residents had already left for work or slept through the fire and were thus unable to protect their property. This resulted in a number of houses burning down, but luckily, no one was injured. After talking to the residents, we went over to the Nature Center, which used to be a park and natural awareness center, but was burned down completely by the fires. Many residents expressed dismay over the loss of the center, but were glad that their homes were safe. The *Star* reporter went to call in again and was told to come back to the office, so I rode with him back to Tech.

The Tech staff would like to thank Dr. Hajir, Dirk Runge, and Gilian from the *Star-News* for their help.

# Free for life.

(Offer expires only when you do.)



Get an AT&T Universal MasterCard and you'll be eternally grateful. Because it's more than just a credit card that's free of annual fees forever. It's also an AT&T Calling Card that currently gives you a 10% discount on already competitive AT&T Calling Card rates. It's all part of **The i Plan.**<sup>SM</sup>



Special student offer. To apply, come by our booth on campus or call 1 800 438-8627.



© 1993 AT&T

SERVING CALTECH  
SINCE 1945

Authorized Agents for Airlines,  
Hotels and Steamships

The  
Finest in  
Professional Travel  
Services

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

CAMPUS EXTENSION  
5091

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

continued from page 5

Games

the same principle, although the logic is more complicated: three tens and the two cards in the fourth suit being A9, K9, K8, Q9, Q8, Q7, etc. I've lost my tabulation of all possible winning hands—is anybody out there crazy enough to make one for me?

Anything you'd like to see in this column? Send your suggestions, comments, ideas to Wei-Hwa Huang, MSC 542. Or, call x1540 and leave a message.

continued from page 1

Ball

reattached the ball with aircraft cable. According to Basu, "you'll need bolt cutters if you're going to take it this time."

The ball (in reality a light metal sphere painted flat gold) was taken from the Beckman inner dome this past summer.

Rag Time  
on Green

RESALE CLOTHING  
for  
WOMEN

1136 E. Green St. • Pasadena  
(818) 796-9924

Wed 10-6 • Mon-Tue-Thu-Fri 10-5 • Sat 10-3

CLASSIFIED ADS

FUNDRAISING—

GREEKS & CLUBS

Raise up to \$1,000 in just one week! For your fraternity, sorority, and club. Plus \$1,000 for yourself! And a free T-shirt just for calling. (800) 932-0528, ext. 75.

HELP WANTED—

CAN YOU MAKE

a car vanish from police radar in a manner consistent with FCC regulations? If so, we need to talk. Outstanding opportunity! Mike McKown, President, Jammers, Inc., Douglas, Wyoming. (307) 358-1000.

REAL ESTATE—

QUIET RETREAT / EAST PASADENA CONDO

\$99,000. Best top floor end corner unit in this great East Pasadena location. 1 large suite-size master bedroom with tons of closet space. 1½ baths, fireplace, bar, bright & light with many skylights. Nice big patio with two beautiful views located in a treehouse park-like setting. 125 N. Allen Ave. #321. Creative financing available. Broker (818) 356-7459.

CALTECH PROFESSOR'S DREAM HOME!

Reduced! English style, 2-story, 4-bedroom, 3-bathroom, with study. 100x150 lot. Quiet rose garden, many fruit trees. 1535 Oakdale St., Pasadena. Call Daniel at (818) 288-1396 for appointment. Hurry! Won't last.

ROOM FOR RENT—

OWN ROOM

in 2-bedroom/1-bath house. Very nice area, close to campus. Use of all amenities. \$575/month+share utilities. Pet okay! Call Nicole (818) 683-9913.

SERVICES—

SCHOLARSHIPS AVAILABLE

from private sources. Take action to secure your future schooling now. Minimum six sources guaranteed. Call (818) 353-3317 (ask for Therese).

RATES

.....\$4.00 for first 30 words;  
.....10¢ for each additional word.  
Send written ad with payment to 40-58.  
Deadline is 6 p.m., Monday before issue.  
No charge for on-campus lost & found.

| Sports Results  |                                   |                         |                     |
|-----------------|-----------------------------------|-------------------------|---------------------|
| Football Soccer | Saturday, 10/23                   | vs. San Clemente Sharks | forfeit (our favor) |
|                 | Saturday, 10/23                   | vs. Occidental          | tied, 3-3           |
|                 | Thursday, 10/28                   | vs. Cal Lutheran        | lost, 0-8           |
| Volleyball      | Friday, 10/22 & Saturday, 10/23   | Cal Maritime Tournament | lost, 0-3           |
|                 | Monday, 10/25                     | vs. Simpson College     | lost, 0-3           |
|                 | Tuesday, 10/26                    | vs. La Sierra           | lost, 1-3           |
| Water Polo      | Saturday, 10/23 and Sunday, 10/24 | Claremont Tournament    | lost, 0 games to 4  |
|                 | Wednesday, 10/27                  | vs. Whittier            | lost, 9-16          |



PASADENA COMPUTER

1756 E. Colorado Bl., Pasadena, CA. 91106 T: (818) 568-1088 F: (818) 568-9132

Since 1988

Canon

486 VESA LB

- Pentium overdrive ready
- 2 VESA & 4 ISA slots open
- 4MB ram up to 68MB
- 170MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- Canon 14" SVGA monitor (.28)
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- 9600 fax/2400 modem
- Canon 101 keyboard
- Logitech mouse, Canon mouse pad
- Energy star compliant (EPA)
- Free software pre-installed (w/manuals)
- Microsoft DOS 6.0 (Value \$55)
- Microsoft Windows V3.1 (Value \$75)
- Microsoft Works for Windows (Value \$115)
- MicroFax by Phoenix (Value \$95)

One Year On-Site Warranty

486DX-33MHz \$1575

486DX2-66MHz \$1825

C:M

486 VESA LB

- Pentium overdrive ready (P24)
- 256K cache
- 3 VESA local bus slots
- 4MB ram up to 32MB
- 212MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- 14" SVGA full screen (.28) NI
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- VESA dual IDE FD/HD controller
- 101 keyboard
- 3 button mouse

One Year Parts & Labor Warranty

486DX-33MHz \$1275

486DX-50MHz \$1450

486DX2-66MHz \$1525

C:M

Super power 486 EISA VESA LB

- Pentium overdrive ready (P24)
- 256K cache
- 100% bus mastering
- Eight 32 bit slots
- 4MB ram up to 32MB
- 340MB IDE hard disk
- 3 1/2" & 5 1/4" floppy drive
- 14" SVGA full screen (.28) NI
- VESA accelerator SVGA W/1MB
- 2 serial, 1 parallel
- VESA dual IDE FD/HD controller
- 101 keyboard
- 3 button mouse

One Year Parts & Labor Warranty

486DX-33MHz \$1575

486DX-50MHz \$1750

486DX2-66MHz \$1825

All the computers & notebooks, printers are cash discount only

Canon

INNOVA 486NX

- New Intel enhanced 486SX-25MHz
- 4MB ram up to 12MB
- VGA accelerator video card (3.8 Winmarks)
- 120MB IDE hard disk
- 1.44MB Floppy drive
- 9600 Fax/2400 modem
- Built-in trackball (Middle)
- Battery hours: 2.5 to 5 hours
- 110-240 automatic
- 5.9 lbs
- Microsoft DOS 6.0
- Microsoft Windows 3.1
- Microsoft Works V2.0
- MicroFax by Phoenix

One Year Road-Side Warranty

\$1595

Canon

NoteJet 486

- 486SX-25MHz
- 4MB ram up to 12MB
- PCMCIA II slot
- 80MB IDE hard disk (135MB, 185MB option)
- 1.44MB Floppy drive
- Built-in Bubblejet printer
- 360 dpi
- Canon hand held trackball
- Microsoft DOS 6.0
- Microsoft Windows 3.1

One Year Road-Side Warranty

80MB HD \$2195

135MB HD \$2395

185MB HD \$2595

EPSON

ActionNote. 4SLC/33

- 486SX-33MHz
- 4MB ram up to 8MB
- 120MB IDE hard disk
- 1.44MB Floppy drive
- 9600 Fax/2400 modem
- Carrying case
- Logitech trackball
- Microsoft DOS 6.0
- Microsoft Windows 3.1
- Win fax lite

One Year On-Site Warranty

\$1650

MITAC

- 486SX-25MHz (Intel inside)
- 4MB ram up to 18MB
- Removable 120MB IDE hard disk
- 1.44MB Floppy drive
- Built-in trackball mouse
- System Preloaded
- Microsoft DOS 6.0
- Microsoft Windows 3.1

One Year On-Site Warranty

\$1350

School PO# Welcome

90 days same as cash leasing program available

This week special

- Sound card & CD-Rom
- Sony 31A W/SCSI card \$189
  - Mitsumi, 350ms W/SCSI card \$180
  - NEC 84JD1, 280ms W/SCSI card \$395
  - Toshiba 3401B, 200ms W/SCSI card \$495
  - Sound Blaster Pro \$105
  - Media Vision Pro Audio Spectrum \$180
  - MITAC Multi-Media W/Sound Galaxy Pro & 5 CD, Mitsumi CD ROM, Speaker \$395
  - Media Vision fusion CD 16, Sony CD \$495
- Fax/Modem
- 14,400 Fax/14,400 Modem (AT&T) \$175
  - 14,400 Fax/14,400 Modem (Rockwell) \$158
  - 9600 Fax/2400 Modem (Int.) \$59

- Tape Backup
- Coner 250MB W/3M tape \$195
  - Coner 4320RT 2GB (Int.) \$965
  - Coner 4320RT 2GB (Ext.) \$1195
  - Colorado DJI-10 120MB \$155
  - Colorado DJ-20 250MB \$195
  - Colorado 120MB (Ext.) \$315
  - Colorado 250MB (Ext.) \$385
- Monitor
- 14" SVGA 1024 (.28) \$245
  - 14" SVGA (.28) Non-interlace \$275
  - 14" VESA SVGA (.28) 72Hz NI \$295
  - 15" SVGA (.28) NI, Low radiation \$465
  - 17" SVGA 1024 (.26) NI \$795



\* Note: asterisks denote new announcements.

## Notices

\* **The German Film Series** continues with *Die Standarte* (1977), screening in Baxter Lecture Hall on Thursday, November 4, 1993 at 7:30 P.M. The film features English subtitles and is shown free of charge. For further information, contact the Humanities office at 395-3610.

\* **Wellness Week/Health Fair Committee**—Students interested in health and wellness issues who want to participate in this year's Wellness Week/Health Fair activities, are welcome to attend the next planning meeting on Tuesday, November 9, 1993 12 P.M.–1 P.M. in the Conference Room in the Student Health Center. Please bring your lunch. For further information call Dinah Lee Schaller at x8331.

Mark Russell will present *"The Laughter and Song of Politics"* on Friday, October 29 at 8 P.M. in Caltech's Beckman Auditorium, Michigan Avenue south of Del Mar Blvd.

The Los Angeles Branch of the Orton Dyslexia Society and the Los Angeles Chapter of the Learning Disabilities Association of California are holding their 3rd Annual Free Information Fair and LDWalkathon on Sunday, November 14, 1993 at Los Angeles Pierce College in Woodland Hills. Registration for the LDWalkathon begins at 8:00 A.M., the Free Information Fair opens at 9:00 A.M. For a free brochure and information call (818) 725-3777.

**Work Abroad Meeting:** Tuesday, November 9 from 12 noon until 1 P.M. in Winnett Lounge. Summer and academic year work opportunities abroad will be discussed. A yummy pizza lunch will be served. Call Lauren Stolper at x2150 by noon on November 8 if you plan to come. You may leave a message on the answering machine at any time. Please give your name, your favorite pizza toppings and how many slices you usually consume. This will help us to estimate the number of pizzas we need and the most favored toppings.

## Events & Services

\* **The Caltech IEEE Student Branch** (Institute for Electrical and Electronic Engineers) will be meeting Wednesday, November 3 at 7:30 P.M. Location TBA. We will hold a forum to discuss various majors such as EE, CS, and APH. The Caltech curricula, graduate school, and career opportunities in these majors will be discussed. Alumni from industry will speak. Freshman are particularly encouraged to attend. All are welcome.

\* **Amnesty International Group 22 Pasadena/Caltech** will be holding their Coffee and Letter-Writing Hour on Thursday November 4 at 7:30 P.M. in the Y Lounge. Amnesty International is an independent nonprofit organization which campaigns worldwide for human rights. Join us for an evening of learning, conversation, and action. For more information, contact Jim Smith (jsmith@romeo.caltech.edu) at (818) 799-6810 or Jennifer Linden (linden@cns.caltech.edu) at (818) 449-1063.

\* **The Killing Fields** will be shown on Friday, November 5 at 7:30 P.M. and 10:00 P.M. in Baxter Lecture Hall. Sponsored by Amnesty International.

\* **You Can't Take It With You**—Come see Teachers in TACIT's production of this immortal comedy. The show runs evenings in Winnett Lounge, Nov. 12, 13, 19 and 20 with matinees on Nov. 14 and 21. Tickets available at the door or through the Caltech Ticket Office (x4652) for \$6.00 or only \$4.00 for Caltech students.

# Events and Notices

**Racquetball Club Tournament** on November 13 and 14 to be held at the Braun Athletic Center during the normal hours of the gym. The entry fee includes racquetballs for the tournament with a tournament T-shirt. ASCIT, GSC, and OWC members will receive reduced entry fees courtesy of their organizations. Entry forms will be available at the Braun center or will be mailed to people by request. Please contact Larry at hazman@cco.caltech.edu or x6727

**Caltech Alpine Club "Sit and Chat"**—Bring a sack lunch to the patio outside the north end of Keck Laboratory on Wednesdays from 12 to 1. Talk about mountains, the weather, and outings, past and future.

**Caltech Velo**—The Caltech Bicycle Club organizes all types of rides, both road and off-road rides, for all skill levels, from novice to advanced, including collegiate racing. All cyclists are welcome. We lead the following weekly rides, all meet in front of Winnett Lounge:

- Monday, 5:00 P.M.: 15 easy paced miles
- Tuesday, 5:30 P.M.: women only road ride
- Wednesday, afternoon: off-road ride, times vary
- Saturday, 10:00 A.M.: off-road ride

Rides leave at the time listed, so please arrive a few minutes early. In addition, we are trying to organize a weekly off-road ride, and other recreational rides. In November, we will be going to the Dominguez Hills Velodrome for track bicycle riding. For more information, contact Michael Kantner at x4882 or send e-mail to kantner@hot.caltech.edu.

The **Caltech Gay/Lesbian/Bisexual Support Group** meets the first and third Tuesdays of each month in the Health Center Lounge. This confidential meeting is open to all Caltech community members looking for a supportive context in which to address questions and concerns about sexual orientation including coming out, being out, self-discovery, coping with families... We begin with a focus topic but move to whatever is feeling most relevant to the group that night. Refreshments are served. For information, call 356-8331.

**Pasadena YWCA Rape Crisis Center**—Self Defense for Women. Classes held monthly. Saturday from 12:00–4:00 P.M. November 6. \$25 per session (Sliding Scale, no woman turned away for lack of funds). Contact: (818) 793-5171.

**Caltech Y ExComm Meeting**—The Y invites anyone who wishes to co-sponsor an event to attend on the first or third Monday of each month.

**Caltech Hillel/Jewish Community Weekly Meeting**—An informal gathering, every Thursday at noon in the Y lounge. For information call Caty Konigsberg at (213) 259-2959.

**Friday Prayer**—Prayers organized by Caltech Muslim Students are held in the Caltech Y lounge at 12:30 P.M. every Friday.

**Mass**—Thursday at 8:15 A.M. in the Y lounge and Sunday at 10 A.M. in Winnett lounge. Sacrament of Reconciliation (confession) is given 20 minutes before masses. Refreshments are served after mass.

**Bible Study and Discussion**—Every Wednesday at noon in the Y lounge. Bring your own lunch. For more information call Mike Gerfen at x4886.

**OpenLine**—A group made up of students, staff, and faculty from many different departments on campus, and from a variety of ethnic and cultural backgrounds. We are both an action group and a discussion group. Our agenda is very flexible and is solely determined by what people in the group suggest. Drop by any meeting and say hello! We meet from noon to 1 P.M. on Tuesdays in the Y Lounge (2nd floor Winnett, feel free to bring your lunch!). Remember, we *always* welcome new people, at any time of the year. Hope to see sometime! For more information contact Gary Mines at x6542 (gam@xhmeia.caltech.edu).

**Baby Furniture Pool**—The Caltech Service League loans out baby furniture to students and postdocs on Wednesday at 324 S. Chester from 10 to 11 A.M. For more information call 952-1631.

**Israeli Folk Dancing**—Sundays in Winnett lounge, Beginning instruction starts at 7:30 P.M., intermediate at 8:00 and open dancing goes on from 8:30 to 10:30. For information call Nancy Macmillan at 795-3655. Admission is \$2.00.

**Scottish Country Dancing**—On Wednesdays in Dabney Lounge from 8 until 10 P.M. Beginners are welcome and no partners are needed. For more information call David Hills at 354-8741.

**Music with James Boyk**—Pianist James Boyk gives a performance each Wednesday from 4:30 to 6 P.M. in Dabney Lounge. The performance is open to the public and free of charge. Feel free to come late or leave early. For more information call x6353.

## Lectures & Seminars

**The Battle for Reproductive Freedom: Margaret Sanger and Her Legacy**—Dr. Ellen Chesler, who is the author of *Woman of Valor: Margaret Sanger and the Birth Control Movement in America*, and a fellow of The Twentieth Century Fund, will lecture on Thursday, November 4 at 4:00 P.M.

## Scholarships, Internships, & Competitions

**National Science Foundation Fellowship** forms will be available in Career Development after October 27. This should still allow ample time to meet the November 5 postmark deadline.

\* **Rotary Scholarship Meeting**—Friday, November 12 at 12 noon in the Winnett Lounge. Lunch provided. The Rotary Scholarship usually allows for one year of graduate or undergraduate study in any country in the world that has a Rotary Club. (This means most free nations.) There are also scholarship options for 3 or 6 months of language study, as well as a "multi-year scholarship" that provides two or three years of study for those who wish to earn a degree abroad. The one year award will be worth up to \$21,500 for 1994 recipients. Those who are a child, spouse, grandchild or sibling of a living Rotary member cannot apply for this scholarship. Employees or Rotary members are also ineligible.

If you would like to attend this information meeting, call Lauren Stolper, Fellowship Advisor for further information. Give your name, favorite pizza toppings and the typical number of pieces you can politely consume at lunch. Please call by noon on Tuesday, November 11.

**United States Department of Energy: Integrated Manufacturing Pre-doctoral Fellowships**—The United States DOE is offering twelve three-year fellowships for study toward the Ph.D. degree. Eligibility is limited to citizens, nationals, and permanent resident aliens of the United States, who will have received a master's degree by the fall of 1994, but evidence of equivalent post-baccalaureate professional industrial experience may be offered by the applicant in lieu of the master's degree. There is a stipend of \$20,000 per year, and up to \$15,000 per year will be provided toward tuition and fees. Selection is merit based. Contact: Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington, D.C. 20418, or call (202) 334-2872. Initial application date is November 5, 1993.

The Financial Aid Office has applications and/or information on the following scholarships. All qualified students are encouraged to apply. Our office is located at 515 S. Wilson, second floor.

**The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.** is announcing its Grant-in-Aid program. To be eligible for the program an applicant must be a full-time engineering student in the final two years of undergraduate study and have a cumulative grade point average of 3.25 or above. The Grant is intended to encourage the student to prepare for service in the HVAC&R industry, and to stimulate his/her interest in research. Applications must be received at ASHRAE Headquarters by December 15, 1993, to be considered. Applicants will be notified of the results by April 1, 1994.

**The National Academy for Nuclear Training** is beginning its competition for scholarships for the 1994–95 academic year. Scholarships are available to U.S. citizens who are pursuing a Bachelor's degree in nuclear engineering, power generation health physics, or mechanical, chemical, or electrical engineering with a nuclear or power option. A student's eligibility begins in his/her sophomore year. Preference will be shown to students considering careers in the nuclear power industry. Applicants must be enrolled full-time and a minimum GPA of 3.0 is required. The completed application and all other required documents must be submitted no later than January 21, 1994.

**The Society for the Advancement of Material and Process Engineering (SAMPE)** has begun its 1994 Undergraduate Award Program for students pursuing a B.S. in engineering. The awards are for recognition of past and present college scholastic and technical achievement and future potential. Applicants must have at least one semester of grades in that program by February 1, 1994, must be recommended by his or her department head, and have a 3.30 minimum cumulative grade point average. Completed application packages must be post marked no later than February 1, 1994. Awards will be presented in July of 1994.

**The Data Processing Management Association** is offering two scholarships for \$1,000 each provided by the Bert A. Monaghan Scholarship Fund. Applicants must have financial need and have made Computer Science their major career goal. The Scholarship Committee must receive the application by November 19, 1993.



## PARIAN TRAVEL

Caltech Officially Approved

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

Free service to you. We deliver.

Airlines, Cruises, Tours, Hotels, Car Rentals.  
Individual, Commercial, Groups.

**(818) 577-8200**

468 S. Sierra Madre Blvd., Pasadena

## The California Tech

Caltech 40–58 SAC  
Pasadena, California 91125

Save up to 35%

# BURGER CONTINENTAL

Save up to 35%

TO ALL CALTECH STUDENTS, FACULTY AND STAFF:

All the time.  
Seven days  
a week.

**HEAR THE  
WEDNESDAY NIGHT  
JAZZ BAND**

**BREAKFAST BUFFET Mon-Sat \$3.95**

**LUNCH with soft drink \$4.95**

**DINNER with soft drink \$6.25**

*Breast of chicken, seafood, lamb, or the day's special*

## SPECIALTIES

Shish kebab Shaorma Souvlaki steak  
Fresh fish and lamb Baklava  
Homemade pizza Gourmet hamburgers

We cater for all occasions

535 S. Lake Ave.  
(818) 792-6634

Mondays – Half price margaritas.

Tuesdays – Beer half price.

Wednesdays, Thursdays 3-7 P.M.