

A little rain and unusually clear skies resulted in another week of record grass growth at Caltech.

Whitney elected 1993-94 Alumni Association President

by Caltech Public Relations

William M. Whitney has been chosen as the 1993-94 president of the Alumni Association. A 1951 physics graduate of Caltech, he is currently Technologist for the Observational Systems Division at the Jet Propulsion Laboratory (JPL). He has been at JPL since 1963.

Whitney, who has been a member of the Alumni Association board of directors since 1985, succeeded the retiring Association president, Le Val Lund, in July. He lives with his wife, Joyce, in Pasadena.

"Bill Whitney will provide outstanding leadership for the Alumni

Association," said Tom Anderson, vice president for Institute relations at Caltech. "The alumni are critical to Caltech's excellence. Bill will help ensure that the Association continues its invaluable work."

"During my tenure as president," says Whitney, "I would like to have the Caltech community understand what the Alumni Association does for the Institute, its students, and its alumni. It's important for people to know, for example, that members of the Association help the Caltech admissions office recruit applicants. We also provide students with summer job opportunities, and, in conjunction with Caltech's development office, so-

licit financial support from alumni. If I can make our contributions more visible, I will feel that I have made a positive contribution to the Association."

Caltech has more than 17,600 living alumni, and its Alumni Association includes 14 active chapters nationwide. The Association contributes to the educational and cultural environment at Caltech, strengthens ties between the Institute and the alumni, encourages fellowship among Association members, and supports student activities by fostering student-alumni contact.

The Ombuds Office

by Helen Hasenfeld

Did you know that Caltech has an Ombuds Office? This office was created seven years ago to provide the entire Caltech community with confidential, informal assistance in resolving intra-campus conflicts, disputes and grievances, and in promoting fair and equitable treatment for everyone within the Institute. The office is at 6 Dabney Hall, the phone extension is 6990.

As Ombudsperson, I'm available to discuss unusual and/or sensitive

problems, investigate complaints, assist with problems that have not been resolved by other offices, and mediate between individuals or groups in a problem or dispute situation. Sometimes I'm the first stop in trying to get something resolved, other times I'm the last stop after trying the "usual" routes.

The office is strictly confidential. No discussion outside of the office takes place without a release of information signed by you. Information received by the Caltech administration about the office is

strictly statistical, e.g., numbers of men/women visiting the office, etc.

The office itself is located in the basement of Dabney Hall, an out-of-the-way spot on campus chosen because of its low traffic pattern. You will find information about the Ombuds Office in the Houses. In addition, your R.A. can fill you in about the service. My hope is to visit each of the houses over the next few months so that we can meet and get to know one another.

New Announcements Policy

Those submitting announcements to the *Tech* are asked to use our new announcements form. The form is designed to make processing your announcement more efficient and accurate. Forms can be picked up outside SAC 40, or sent to you through campus mail. Submitters are asked to photocopy the form as needed.

Starting next week, there will be an official agenda for ASCIT BOD meetings. The intent is that the BOD will more effectively handle issues and topics if they are brought to its attention sometime before the meeting. If anyone has anything to bring up, please contact Karen Shih, ASCIT secretary, before the Monday immediately preceding the meeting by 5 P.M. either by e-mail (shishi@iago) or through the ASCIT mail box in the SAC. If there are any relevant materials to be reviewed by members of the BOD, i.e., budgets, proposals, reports, invoices, etc., please supply her with nine copies by the same time. Any upcoming ASCIT events will remain on the agenda for weekly updates until the date of the event. Any issue not on the agenda will risk being tabled until the next meeting.

Women's Center settles in

by Zackary Dov Berger

About twenty people attended an open house on Tuesday given by the new Women's Center, according to the Center's director, Kathleen Bartle-Schulweis.

Many of these visitors, said Bartle-Schulweis, were undergraduates, and asked that the Center be aware of and attend to issues which concern Caltech undergraduate women, including glomming, street harassment, and rape. Bartle-Schulweis also said she and the undergraduates discussed "empowerment," which she reluctantly defined as "not being afraid to ask for what you need . . . while not being afraid of what other people think," and being confident of one's right to privacy.

The open house marks the settling-in of the new Women's Center into its renovated and refurbished offices on the second-floor of Winnett Student Center. Bartle-Schulweis, who was appointed director this summer, has been on campus for a little more than two months supervising the Center's establishment. Nearly sixty people attended an event similar to Tuesday's held nearly a month ago.

Bartle-Schulweis admitted no strong opinions of Caltech after only two months on the campus. She and her assistant Beverly Kenworthy, however, attended this year's Frosh Camp, held during late September on Catalina Island. Frosh Camp, said Schulweis, was "fun" and "educational." The Cen-

see WOMEN'S CENTER, page 4

Chara Economou 1966-1993

by Michael Benedetti

Chara Economou, a graduate student in Chemical Engineering, died of cancer last Saturday. She was 27.

Chara came to Caltech in 1989 with her husband, Michael Tsipatis. The two had previously been undergraduates at the University of Patras, in Greece. While at Caltech, Chara worked in protein engineering with Dr. Frances Arnold. She co-authored several papers, and was first author of a piece in *Bio-technology and Bioengineering*.

Chara's friends remember her as a cheerful, loving person who loved to garden and dance. The accompanying poem was written



Chara Economou

by a friend of Chara about their friendship.

A memorial service for Chara Economou was held on Tuesday. Her funeral will be in Greece.

see ECONOMOU, page 8

New Earthquake Info Line

by Caltech Public Relations

395-6977.

Caltech's Seismological Laboratory, the earthquake information center for Southern California, and the USGS have established a new Caltech/USGS Earthquake Information Hot Line. The recorded message, which provides basic information for the public about recent Southern California seismic activity, can be reached at (818)

The new information line, which has been in operation since early August, makes use of Caltech's new voice mail system, which is able to handle dozens of calls at once. The message is updated twice on weekdays during seismologically quiet times, around 8 A.M. and 5 P.M., and at least daily on weekends. When earthquakes are felt in Southern

see EARTHQUAKE, page 4

The California Tech

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letters to the editor

NAFTA opposed

I find it the ultimate in ironies that I as a socialist should be agreeing with a capitalist billionaire about an issue relating to the welfare of workers. However, Ross Perot is absolutely correct in his opposition to NAFTA.

There is a saying that those who do not learn from history are doomed to repeat it. There is in history another free trade agreement—the Open Door Policy in China. The British East India Company imported opium into China, converting many Chinese into opium addicts. The foreign capitalists who built factories there paid no attention to the environment or the health and safety of the workers in those factories. Little children worked sixteen hours a day in factories where they were often locked in at night. In match factories they often got phosphorus burns all over their bodies, and

when they died, they were simply thrown on the trash heap for the dogs to eat. They were considered nothing more than an expendable input into a product.

Supporters of NAFTA say a similar situation couldn't occur today because child labor laws exist, and environmental organizations have power. Well, judging from the maquiladora factories, I think they are being overly optimistic. Pollution near these factories is so bad that children are being born without brains or with numerous other terrible birth defects.

NAFTA, in my opinion, is nothing but a smokescreen for exploitation. American workers will lose because high-paying manufacturing jobs will relocate to Mexico and be replaced by service sector jobs paying five or six dollars an hour. Mexican workers will lose because of pollution, low pay, bad working conditions, and no benefits. It is a lose-lose proposition for everyone

except the American capitalists who take advantage of NAFTA to increase their profits.

Gary Sudborough
13824 Fidler Ave.
Bellflower, CA

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. *The Tech* reserves the right to edit all letters for brevity or otherwise, and to refuse to print any letter for any reason. We are prepared to accept letters written in English, Chinese, French, German, Japanese, Russian, Spanish, and Yiddish. If you are planning to submit in some other language, please contact us beforehand.

ASCIT BOD minutes, October 12th

by Karen Shih

Present: BOD, Rich Zitola, Eric Hackman, Mike Coward, Trylaen, Mike, Gavin, Dave Derkits, Jennifer Trittschuh, Alison, T'Nghia Vuong.

- **ASCIT Movies:** The team presents its third term report. It was a banner term, with such blockbusters as *A Few Good Men* and *Aladdin*. It has been the policy since two summers ago that the Team would return whatever left-over money to the BOD at the end of the term before getting a constant check for the next term. The Team now wants to change that to a yearly procedure so that in the event of an unusually successful term, the Team can use that money to increase the movie quality for the next term proportionately. All in favor of bringing good entertainment to Caltech, the BOD gives the go-ahead.

- **Women's Glee Club:** Due to a lapse in communications, the Club failed to send a representative to the budget meeting last term; consequently, the BOD budgeted no money for the Club. Alison presents a budget to the BOD and requests funding for the fiscal year. To avoid setting a precedent for missed budget meetings, the BOD is reluctant to give the Club the requested amount. Motion to sup-

port the Club with \$200 for now, passes (8-0).

- **Men's Glee Club:** Same deal as the Women's Glee Club—didn't show up to the budget meeting. The BOD decides to table discussion until a projected budget is presented.

- **ASCIT P.A. system:** The maximum repair cost is \$90, not \$300 as projected last week. Since about half of the Jam Room members are graduate students, ASCIT will go to the GSC for some suggestions.

- **little t:** The BOD urges anyone who has not received a *little t* and wants one to hunt down Mike Radford and Heidi Sutton and make them sign the remaining 425 copies. Hint: Mike lives in Dabney #15. There are bills to pay—we'd like to see them paid ASAP and receive final word on the financial status of the book.

- **Halloween Party:** So far everything looks promising. Five Houses have agreed to help with the drinks, and all the social teams have met with the Director of Social Affairs. She will be keeping the BOD posted on the progress each week.

- **Vice President:** The Faculty Board Budget Meeting was "enthraling."
• Caltech will be observing Dr. Martin Luther King, Jr. Day on

January 17th, 1994; all classes will be suspended for the day.

- **Core curriculum revisions** are underway; there are four separate committees set up, each headed by a member of the faculty.

- **Some personal thoughts:** Student government at Caltech is uniquely refreshing; however, the way that ASCIT conducts meetings and interacts with the administration needs some revamping so as to lend more weight and leverage to what we are trying to accomplish. Several counts are against us in the sense that to achieve the kind of meeting room professionalism that is done at a Faculty Board Meeting requires more than what student leaders has traditionally given at Caltech. Most of us are students first, and ASCIT officer second; there are none of the perks that are usually associated with student government on other college campuses. [Tell me about it—eds.] When it comes to spreading ourselves out, the decision made is one between a 5+ year Caltech stay or a lackluster term of office. No, the BOD is not griping about the lack of official compensation, only that it is one of the reasons student government has remained only part of the undercurrent—we are first and foremost students. Second, the lack of continuity from year to year renders it hard to instill any meaningful form of structural integrity to the BOD, as well



Ernest Tomlinson

Ernest Explains

Dear Ernest,

Just who is this Tom Lechner whose cartoons are published weekly in the *Tech*?

—Just Curious

Dear Dr. LaBelle,

Mr. Lechner is an alumnus of Caltech, class of '85. He graduated from the Institute in three years with a BS/MS in physics, and went on to Cornell University to pursue a Ph.D. He dropped out after one year for unknown reasons. Tom is currently living in New York City, where he drives a taxi to supplement his cartooning income.

Dear Ernest,

Why are marshmallows called marshmallows?

—Cocoa Lover in Ruddock

Dear Asif,

Before the modern jet-puff process was invented in 1934, the fluffy confections we know as marshmallows were generally known as Mars's Marrows or March Marrows. The name is believed to have originated in the seventeenth century, when similar candies, dyed red, were a staple of the French *fête de mars*, which Louis XIV revived from an earlier tradition in hopes of turning public opinion in favor of his foreign wars. The marrows, which represented the spongy bone marrow of the Roman god of war, were an equal mixture of cane sugar and an extract from the common weed *tryphacenia vulgaris*, and were risen and baked somewhat like bread. In 1908, the Mars Candy Company seized upon the name coincidence and started producing "Mars Marrows," which were popular for many years. When their rival, West Coast Confectionery, invented jet-puffed "March Marrow," Mars sued them for trademark infringement and won, forcing Wesconco to invent the name "Marsh-Mallow." The less expensive jet-puffed candies won in the end, and when Wesconco folded in the early fifties, the now-generic "marshmallow" effectively entered the public domain.

as the IHC.

- **Note:** Starting next week, I will be setting up an official agenda for BOD meetings. If anyone has anything to bring up, please contact me before the Monday immediately preceding the meeting by 5 P.M. either by e-mail (shishi@iago) or through the ASCIT mail box in the SAC. If there are any relevant materials to be reviewed by members of the BOD, i.e., budgets, proposals, reports, invoices, etc., please supply me with nine copies by the same time. Any upcoming ASCIT events will remain on the agenda for weekly updates until the date of the event. Any issue not on the agenda will risk being tabled until the next meeting.

- **The Executive Committee:** will be meeting at the end of the week. Topics to be discussed are my intent to stay on as ASCIT Secretary through a term of leave, and procedures for the BOC to fill an unexpected vacancy on the Board.

- **Next week,** the BOD will meet here again at 10:30 P.M. on Tuesday, October 19th.

The California Tech
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TONIGHT'S ASCIT MOVIE

scent of a woman

STARRING AL PACINO

Friday, October 15
Baxter Lecture Hall
7:30 & 10:00 P.M.

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

NEXT WEEK: Dave!

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Germany

The Federal Constitutional Court ruled that the EC economic and political union did not violate the German constitution. Shortly after the ruling the German President signed the Maastricht treaty for a single European currency and limited political union by the year 2000.

Germany was the last of the twelve members of the EC to sign the treaty.

Greece

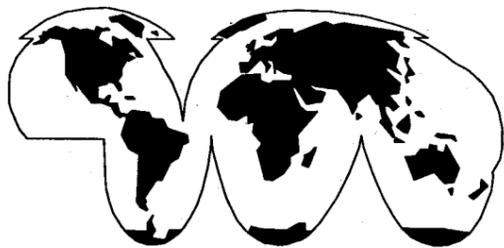
Andreas Papandreu of the Panhellenic Socialist Movement was elected president with 46.8% of the vote. His party took 170 of 300 seats in Greece's unicameral Parliament. He defeated conservative Constantine Mitsotakis, who got 39.3% of the vote, and whose New Democracy party got 111 seats in the Parliament. The right-wing Political Spring got 4.8% and 10 seats, while the Communist Party got 4.5% and 9 seats. Papandreu has been president before, but he lost presidential elections in 1989. He was once a UC Berkeley economics professor.

Haiti

An anti-Aristide armed mob prevented the American Harlan County from docking at Port-Au-Prince. The Harlan County carried U.S. engineers and trainers assigned to support the U.N.-sponsored agreement to restore Jean-Bertrand Aristide as president. The military and police forces oppose Aristide's return, and the mobs were apparently armed by the military.

Clinton ordered the Harlan to withdraw to Guatanomo Bay after Haitian army chief Cedra refused to assure their safety. Clinton said that Haiti's military was violating an agreement made earlier this year to give up power and allow Aristide to return as president, and that he would attempt to reinstate U.N. sanctions against Haiti. The sanctions were lifted earlier this

World News



by Momo Jeng

has recently publicly signaled that they would stop attempting to capture Aidid and open talks with him, if we would accept a cease-fire.

South Korea

A ferry carrying 200 to 250 people capsized in rough weather off the west coast of South Korea. Korean police said that 44

year when Haitian military leaders agreed to allow Aristide to return. Clinton said that the U.S. would not join international efforts to retrain Haiti's military and police and to rebuild Haiti's economy while international troops are threatened.

Israel

Israel announced that it would allow 5,000 exiled Palestinians to return each year to be reunited with families in the occupied territories.

An Israeli Defense official confirmed CIA reports that Israel has been selling weapons to China.

Japan

Yeltsin showed up in Japan for negotiations and upset Japanese negotiators by announcing that the talks should not cover a dispute over the Kurile islands that has existed between Japan and Russia since the end of World War II. The dispute has stopped the countries from signing a treaty ending World War II, and has prevented Japanese aid and investment in Russia.

Somalia

Somali warlord Mohammed Farah Aidid offered/accepted a cease-fire with U.N. forces. Aidid said that he "accepted" Clinton's proposals for a cease-fire and negotiations. Clinton welcomed the cease-fire, but explained that he had not actually made any negotiations or offers with Aidid. The U.S.

bodies had been found, and 100 were still missing. Reports on the number of survivors varied from 67 to 94.

Sweden

The Swedish Nobel Assembly awarded the 1993 Nobel Prize in medicine to Phillip Sharp of MIT, and Richard J. Roberts of New England Biolabs. In 1977 they independently discovered that most genes have long stretches of DNA that have no apparent function.

United States

Jurors 373 and 152 in the Denny beating case were removed and replaced with alternates, and juror deliberations started over. Juror 373 was removed after complaints from the other eleven jurors that they couldn't work with her. The judge explained that all other eleven jurors had complained about Juror 373, and that their reasons were not based on Juror 373's position on issues or personality. Juror 152 was removed for reasons of personal hardship. Judges are allowed to remove jurors who are unable to perform their duties. Three jurors had already been removed—two for illness and one for alleged misconduct. The juror removed for misconduct allegedly talked about the case with his neighbors, and said that he would vote for conviction without having heard all of the defense's arguments.

A federal appeals panel upheld



by Gypsy Achong

Crime Tips:

• Please do not walk alone in the night. The Security office offers a 24-hour escort service, so take advantage of it. All you have to do is call.

• Drive carefully in the Wilson Parking Structure, because there are others who are not doing so, putting everybody at risk.

9/26 9:00 A.M. An unknown student borrowed a heavy duty hand truck which has not been returned. There is no description of the student. Please contact John Brocato at x6161 if item is seen on campus.

10/6 4:00-5:00 P.M. A coupon book was stolen from the DRL's office. It was in a paper tray on one of the desks. \$40

10/6 8:30 P.M. An anonymous caller reported that a man, naked from the waist down, was in the bushes near the Synchrotron masturbating. The man left after the informant saw him.

10/7 5:00 P.M.-10/8 6:45 A.M. Four pallets were removed from the secured area south east of the C.E.S. Shipping building #35. Other pallets were also removed from the dock but these are left there to be used by anyone who needs them.

10/8 12:00-12:20 P.M. An alum's car was broken into while parked on California Blvd. near the Synchrotron. A teddy bear and suede hat were stolen. \$200

10/8 On California Blvd. between Hill and Arden, there was an attempted theft of a Honda Prelude. This incident was reported to the Pasadena Police Department.

10/11 10:05 P.M. A small red station wagon entered the parking structure at 341 S. Wilson at a reckless speed. The car almost hit the dispatch office and then continued to the higher levels of the structure in the same inconsiderate fashion.

enforcement of U.S. District Judge Terry Hatter's ruling. Judge Hatter ruled last month that the government's ban on gays and lesbians in the military was unconstitutional, and threatened to fine the government if it did not comply with his ruling. His ruling has caused the Defense Department to put trials against gays in the military and Clinton's new "don't

ask, don't tell" policy on hold. This case and others like it are currently heading for the Supreme Court.

The IRS agreed to give tax-free status to the Church of Scientology and 153 of its corporate extensions, ruling them to be charitable, religious organizations. The ruling is expected to be worth millions of dollars to the Church of Scientology.

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continued from page 1

Women's Center

ter staff spoke informally to the freshmen in concert with other women's organizations at Caltech, including the Undergraduate-Graduate Connection, the Big Sister/Little Sister program, and the Organization for Women at Caltech.

On Wednesday, November 10th, the Center will be hosting a brown-bag lunch with featured speaker

Clara Kaplan, a staff member at the University of Virginia. Kaplan will discuss the difficulties the University has encountered as a result of its new regulations concerning consensual sexual relationships.

The Women's Center is encouraging and accepting donations to the Center's library; books purchased with the help of donations will carry benefactors' names.

continued from page 1

Earthquake!

California, the message will be updated more often.

The recording will report the date and time of the message, and will give the time, location, and magnitude of any significant regional earthquake activity, loosely defined as anything felt in Southern California, during the preceding 24 hours. In the event there have been no significant earthquakes in the region, that will be reported also.



ADAM VILLANI: MEDIA GUY

by Adam Villani

PULSE! vs. Rolling Stone

I was reading the latest issue of *PULSE!* magazine, and I was struck with the realization that even though *PULSE!* exists mainly to sell albums for Tower Records, it has more integrity than the supposedly independent *Rolling Stone*. It covers a wider variety of music, and in its reviews actually inform the reader instead of inundating the reader with self-aggrandizing blatherings. Whereas *PULSE!* is honest in its casual style, *Rolling Stone* is hypocritical and tries to shove its opinions down one's throat.

Psychic TV "Kondole"

This is a really weird album. If you know me, you know that if I call an album weird, then it's got to be *really* bizarre. The three 23-minute tracks each have a different repeated form that sounds like a cross between early Steve Reich, whale song, tribal drumming, and modern techno-pop. I can't really say that the album is good, and I can't really say that it's bad, because it really transcends good and bad. It is interesting, though. And after being jarring for the first few minutes of listening, it actually becomes soothing. Everybody needs some funky, unique music to break the tedium and freak people out, and this should fill the order nicely.

The Collapse of Western News Media

So, in one week we get both Beavis and Butthead on the cover of *Newsweek* and the weirdest issue of the *L.A. Times* in recent memory. I think there's a CIA conspiracy to make everyone stupid by mentioning Beavis and Butthead at least once in each issue of every popular news publication. Thursday's *L.A. Times* includes articles about the weird surfer from La Jolla who won the Nobel Prize in Chemistry and a study that shows that listening to Mozart boosts your I.Q. for 15 minutes on the *front page*. On the "fluff" page, A3, there's a story about a centenarian bungee-jumper. Arrgh.

Ben Smith

"Three Eggs and a Blue Tire"

O.K., so this is Ben's old Land Rover sitting in the Blacker Courtyard, and presenting it as art is just a big joke. But it's really frightening that a lot of avant-garde art is really no better than this, and yet when it's presented seriously by somebody who went to art school, it's taken seriously. I like a lot of avant-garde stuff, but it's jokes like this that point out that there's a lot out there that gives cutting-edge art a bad name.

The YESOTERIC Tapes

This is a series of sixteen tapes of rarities from or associated with the progressive rock group Yes. Distribution is organized through the Internet among subscribers to Notes From the Edge, the Yes mailing list. This compilation is definitely a must-have for any Yes fan, as it has *everything*. Included are recording from the groups members were in before joining Yes, BBC sessions, rare live recordings (including Tales from Topographic Oceans), studio outtakes, B-sides, and remixes. The total time is over 24 hours, and the only costs are the blank tapes and postage. Contact your regional duplicator, Edward Ju, at edju@chaph.usc.edu.

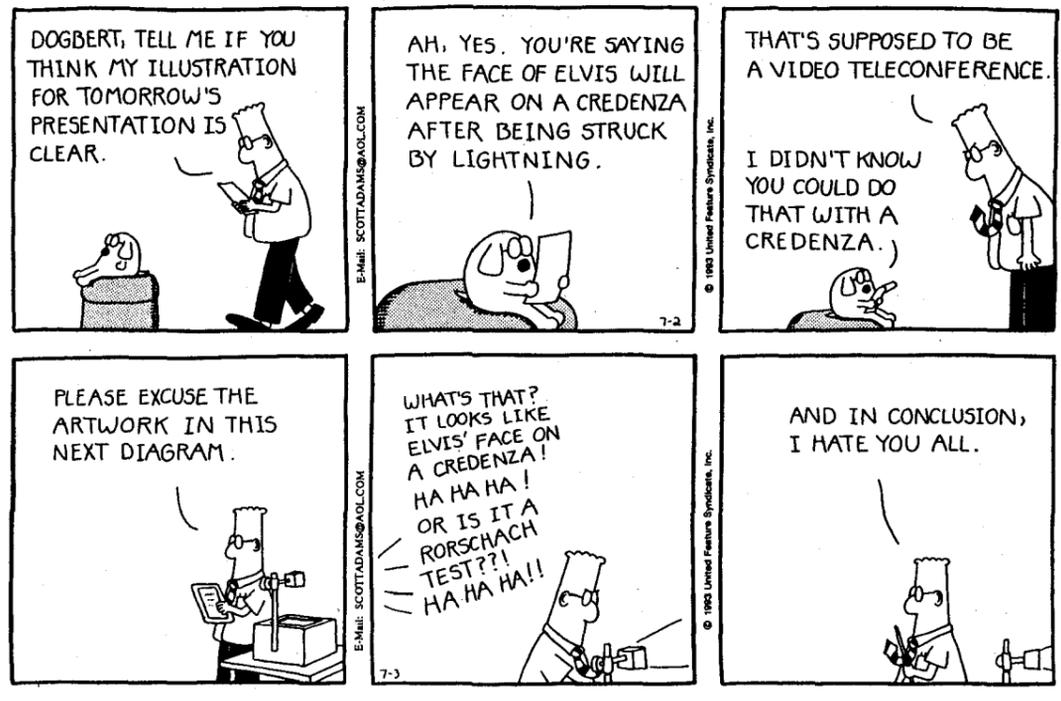
The Inside World... not just another inside joke



Hey kids! The *Inside World*, the irregularly appearing sub-publication of the *California Tech*, is once again begging for submissions. Be the first in your house to see your very own house events, unfounded rumors, vicious slander, and transparent allegories appear in print! Concerned about quality? Don't worry! We'll take just about *anything!*

To submit your article: email to iw@tech.caltech.edu or leave a 3.5" Mac disk at the Tech office.

A Very Dilbert® SURF Day by Scott Adams



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Bridge Without Sam

by Jeff Goldsmith

A Phantom

Playing in a cash prize matchpoint tournament, we are fighting for first place when we reach the table of an ex-world-champion, who is sitting West and playing with a strong partner. They are hoping to win \$2500, but it doesn't look good for them at this point.

They bid game and we sacrifice white vs. red, so I am trying to hold down the damage.

♠1086
♥A6
♦K754
♣A984



♠7
♥KJQ8532
♦10963
♣10

WEST	PARTNER	EAST	ME
1♦	Pass	1♠	4♥
Pass	Pass	Double	Pass
4♣	5♥	Pass	Pass
Double	Pass	Pass	Pass

West leads the trump Ten. I have no play for the contract. Against 4♣, most will lead hearts. If hearts are 2-2, many will be beating 4♣, because the club ruff is easy to find at trick three. 5♥ doubled is a good save, though, if hearts are 3-1 and diamonds 4-1. Since a diamond ruff is very likely, I win the first trick in dummy and draw trumps ending in hand. Too bad; hearts are 2-2, so our save is phantom. I suspect I shall still get a few matchpoints for holding this to down one, but -300 is likely to be terrible. What can I do?

The opponents are playing a natural system. That means diamonds are certainly 4-1 or 5-0 since West had two hearts. He doesn't know anything about the hand yet, though. If I can convince him to take his ♦A on the first round of the suit and an honor drops, I'll win a trick by force. My 109 may be a threat for a single suit endplay-squeeze, too. It must be right to try to get the ♦A out. In order to encourage this, I play the ♦6 at trick three. Joy! West hops with his Ace, but it drops only the deuce. He shifts to the ♠3. East wins with the Ace and continues the suit and I ruff.

What is West's shape? East probably does not have ♠AQxxx, so it appears that West is 4-2-4-3. I have him. I run off all the hearts save one and watch his discards. He discards the King and Jack of spades first, so now I am certain about the end position. Before I cash my second to last trump, these are the cards around the table:

♠1086
♥A6
♦K754
♣A984

♠—
♥—
♦QJ8
♣???



♠—
♥Immaterial
♦
♣

♠—
♥53
♦1093
♣10

When I cash my penultimate trump, West discards a club and I pitch the spade from dummy. I cross to the ♠A and ruff out West's last club. The ♦10 is covered and allowed to hold and I claim down one.

If West had kept a spade in the position above, I would have discarded a club, ruffed out his last spade and endplayed him.

The Tech Survey

To relieve the tedium of first term, we've decided to revive an old *California Tech* tradition—the *Tech* Survey. We will be accepting votes in all of the following categories until sometime late in the term, when we will compile and publish the results.

Food—the best and worst:

- Caffeinated beverage
- Chinese
- Coffeehouse shake
- Coffeehouse waiter
- Hamburger
- Italian
- Mexican
- Pizza
- Sandwiches
- Thai

- Radio station
- Romantic composer
- Superhero
- Tech feature
- T.V. show

Caltech

- Professor most likely to cop the Nobel action
- Best and worst class
- Best and worst classroom
- Best college to recruit new Caltech administrators from
- Nicest on-campus building (architecture)
- Best and worst toilet

Shopping—the best:

- Grocery store
- Music store

Entertainment—the best and worst:

- Doctor
- Local band
- Movie Theater

Other

- Best pickup line
- Best and worst font

Send your opinions to us by e-mail to editors@tech.caltech.edu or by mail to 40-58 SAC. Please vote only once in each category.

NEW

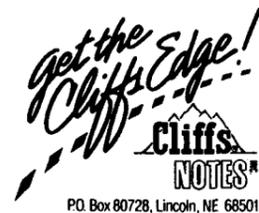
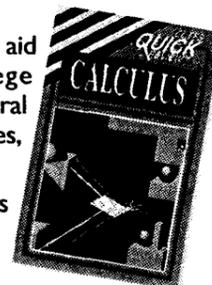
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IF YOU DON'T GOT IT,
GET IT.SM



"Hamlet" will be presented by the California Shakespeare Company on Saturday, October 16 at 8 P.M. in Beckman Auditorium. Robert Sicular, formerly of the Oregon Shakespeare Festival, plays the avenging Hamlet, with Susan Patterson as his forsaken lover, Ophelia. The production features original music by Steve Adams. Tickets are \$25.00, \$22.50, and \$20.00. Students (with I.D.) can get Rush Tickets for \$7.50 (subject to availability). For ticket information, call x4652.

WRITE FOR THE TECH.

The weekly *California Tech* staff meeting will be held today at 12:15 P.M. in the Coffeehouse. Free pizza and sodas will be served. Everyone is invited—come find out how you can help decrease the amount of filler we need to run.

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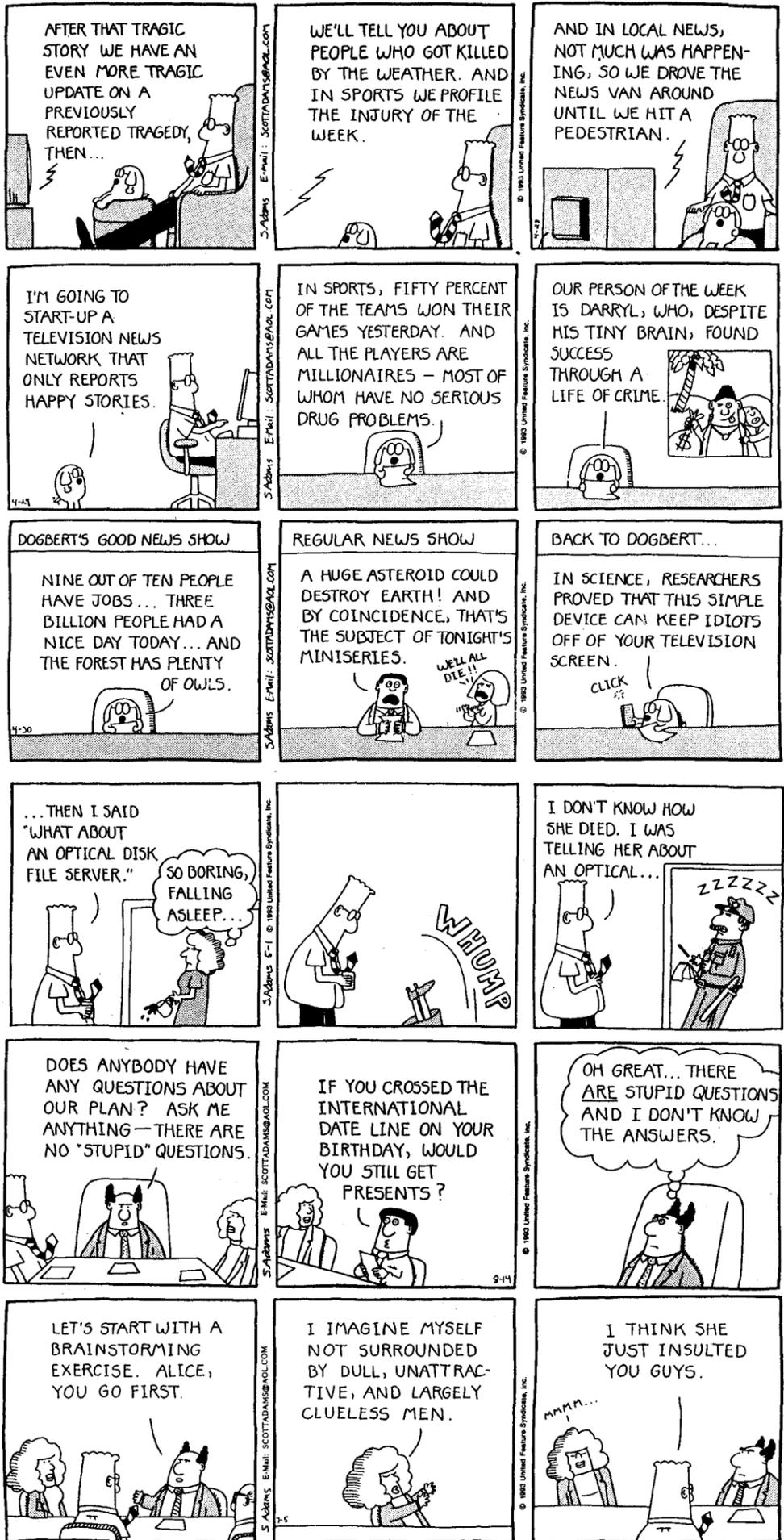


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This term in Caltech Public Events . . .

by Gavin Claypool

Three major talents will appear in Beckman Auditorium this month to launch this year's Caltech Public Events Performing Arts series.

The California Shakespeare Festival brings their nightmarish contemporary production of *Hamlet* to campus Saturday night. Robert Sicular, formerly of the Oregon Shakespeare Festival, plays the avenging Hamlet, with Susan Patterson as his forsaken lover, Ophelia. The 8 P.M. performance will be preceded at 4 P.M. by an Elizabethan fair, featuring weaving, spinning, juggling, as well as a staged combat demonstration by

Sicular.

Jugglers *par excellence*, The Flying Karamazov Brothers return to Caltech on Friday, October 22, with their current production, "Juggle and Hyde." From intermission shows at SF convention costume competitions in their early days to a silver-screen appearance in *The Jewel of the Nile*, the Brothers have earned a worldwide following. The audience is invited to bring "impossible" objects for the troupe's champion, Ivan, to juggle, as long as the objects are heavier than one ounce, lighter than ten pounds, and no bigger than a bread box.

Also returning to Caltech this

year is Mark Russell, political satirist in song and music, on Friday, October 29. Currently seen several times a year on PBS in "The Mark Russell Comedy Specials," his live show demonstrates there are no sacred cows in politics, just a lot of bull.

The 1993-94 Paco A. Lagerstrom Chamber Music Concerts opened their season last Sunday with The Chamber Orchestra at St. Matthew's. Formerly known as the Dabney Lounge Chamber Music Concerts, the series was renamed for the former professor of applied mathematics who was a long-time supporter of musical performances on campus. The next

concert in this free series will be held Sunday, October 24, at 3:30 P.M., featuring pianist Jacquelyn Helin. The locale continues to be Dabney Lounge.

Tickets are available at the Caltech Ticket Office, 332 S. Michigan Ave. For *Hamlet*, Caltech students can purchase half-price tickets in advance and, beginning today if available, rush tickets for \$7.50. Caltech faculty and staff can purchase half-price tickets beginning today (if available). Regular prices for *Hamlet* are \$25.00-22.50-20.00.



Comedian Mark Russell brings his brand of political nonsense to Caltech on October 29.

continued from page 1

Economou

One of Chara's friends wrote her a poem about their friendship. This poem describes how many people close to Chara felt about her.

The Anatomy of a Friend

A friend has eyes that behold your true image, to see you for who you are, and accept you without hesitation or doubt . . .

A friend has ears to listen attentively to your thoughts, to your beliefs, to your dreams . . .

A friend has lips to share with you their feelings and ideas; to express words of encouragement, consolation, advice, and joy . . .

A friend has hands to pat you on the back for a job well done, to guide you into new experiences that nurture your growth, but most of all, to catch you when you fall . . .

A friend has a heart that aches with pain when yours does, or glows when it is filled with joy for you.

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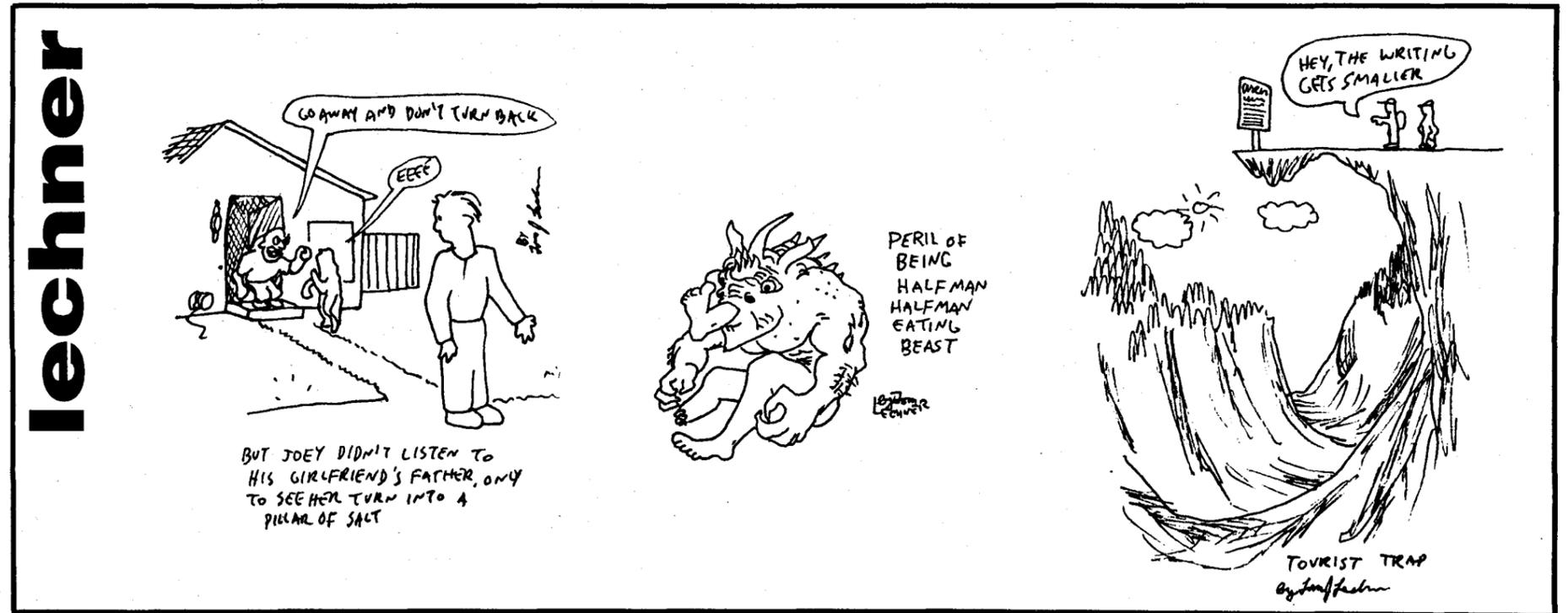
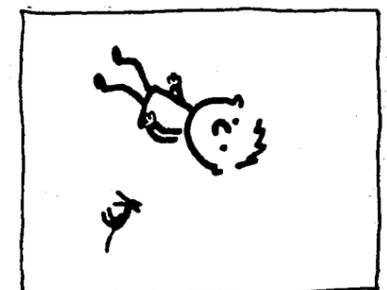
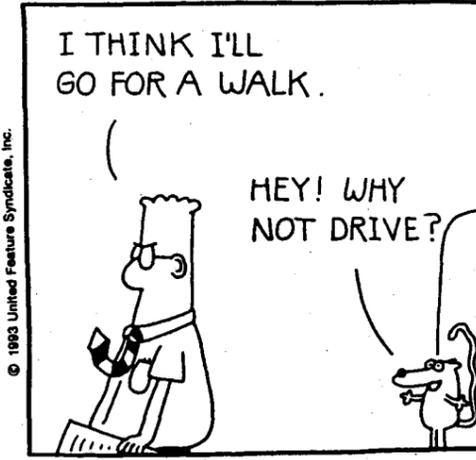
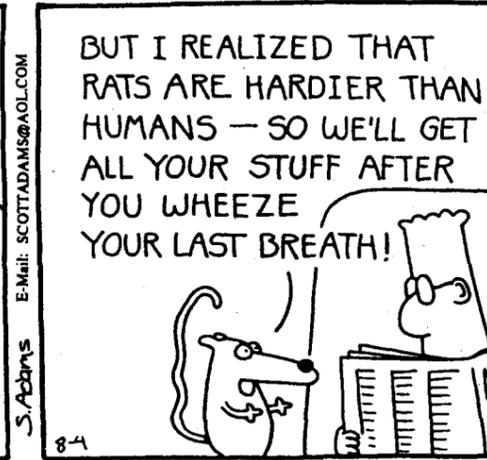
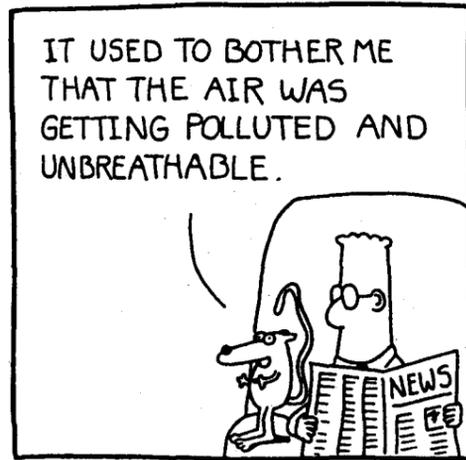
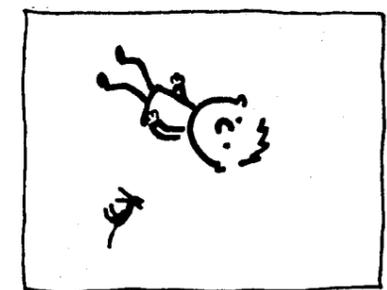
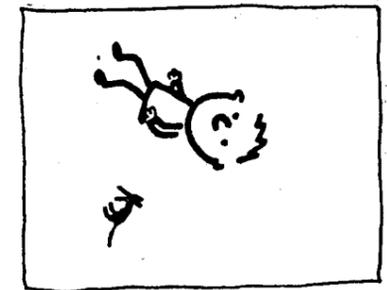
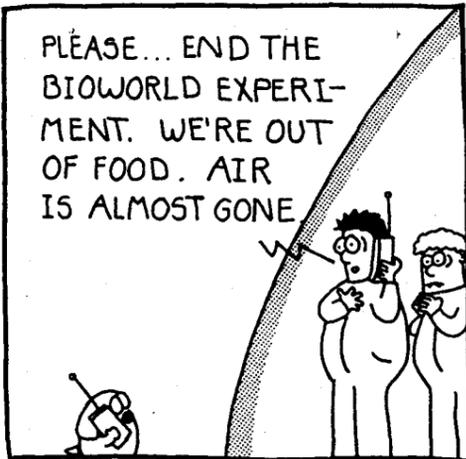
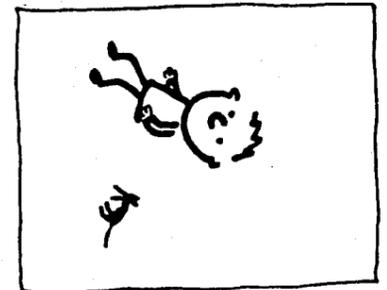
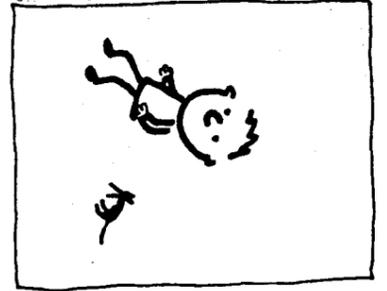
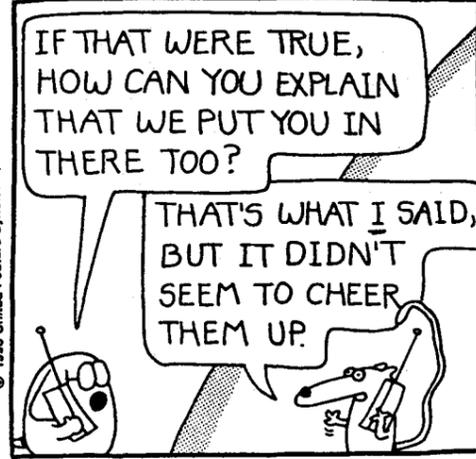
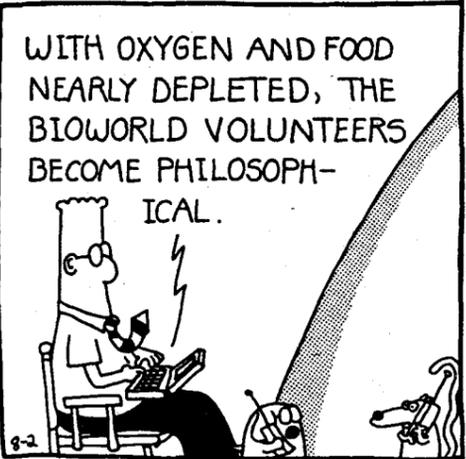
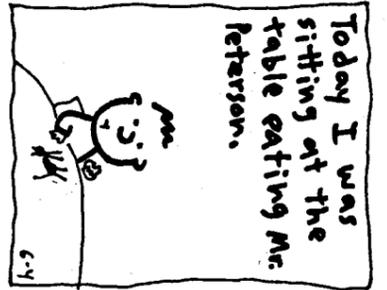
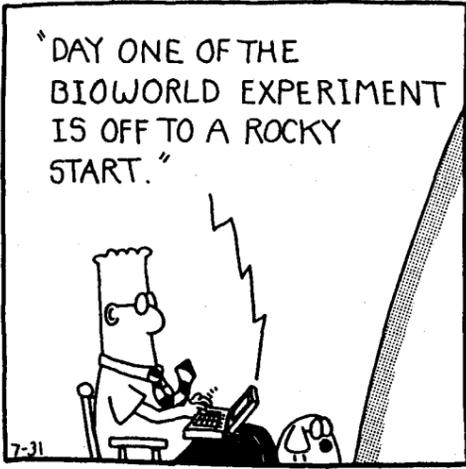
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sports

Dabney Wins Softball Game

by Chris Echols

bottom of the inning.

Dabney house enjoyed its first interhouse victory in two years on Thursday, defeating Blacker 10-7 in a closely matched softball game.

Dabney got on the board first with three runs in the top of the first. Blacker kept pace, taking the game into the top of the fourth with a 6-6 tie. Dabney was retired in short order with three quick outs, allowing Blacker to edge ahead with a solitary run in the

David Zito led off fifth inning for Dabney with a single. Michael Herrera brought in the tying run with a double, followed by an RBI double by Chris Echols. Travis Maron topped it all off with a two run homer to center field. In the bottom of the inning, Dabney pitcher Fred Caldwell scored his fourth and fifth strikeouts of the game. A final pop-up ended the game for an ecstatic Dabney House.

Cross Country Team Weathers the Storm in Southern Cal Invitational

by Tom Dmukauskas

This past Saturday, the team, or more accurately some of the team, traveled to Back Bay, Newport Beach for the Southern Cal College Invitational. Both the women's and men's teams were decimated from various factors such as GREs, injuries, food poisoning and missed rides. However, those who did come were rewarded with great conditions for fast times.

Cailin Henderson began the day by smashing the 21 minute barrier to finish 9th (of 50) in 20:50. Ginger Garcia (16th) and Gretchen Larson (19th) also posted season bests of 21:35 and 21:53 respectively. Despite suffering from food poisoning from Friday's dinner,

Tessa Miller completed the course in 23:14 for 31st. Rounding out the top five to give the women a 5th place finish among the 7 teams was the ever-steady Radhika Reddy in 34th with a 24:04. Next week, with the return of Betsy Barton, the women will look to improve on last year's 6th place finish in the SCIAAC.

The men were handicapped severely by the fact that only two of last week's top seven were present and healthy. Ned Bowden was taking the GRE, Schuyler Cullen and Andy Zug were missing, and Chris "Rip Van Winkle" Cary and Tom Dmukauskas were slowed by injury. Nonetheless, total embarrassment was avoided as Jesse Shue (11th of 46 in 28:48) led the men to 5th place of the 9 teams. Ron

Steiger (20th in 30:24), Alex Spadini (22nd in 30:26) and Tom Meyer (25th in 31:09) all ran their 8K cross country PRs. Dmukauskas completed the scoring by hobbling to a 32:29 in 30th. Hopefully, the men will have everyone ready for a great race at the SCIAAC 8-way dual meet tomorrow at La Mirada Park.

Sports Results

Cross Country	Saturday, 10/9	So Cal Coll Invitational	Men's 5th place
Soccer	Saturday, 10/9	vs. Claremont-Mudd	Women's 5th place
Water Polo	Wednesday, 10/13	vs. Redlands	lost, 0-5
	Saturday, 10/9	vs. Alumni	lost, 0-3
	Wednesday, 10/13	vs. Chapman	won, 11-8
			lost, 11-22



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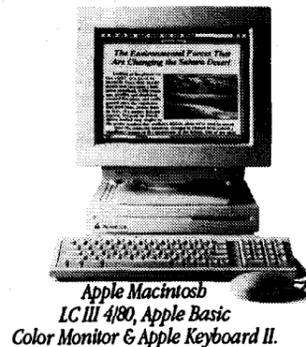
That penny jar on your dresser



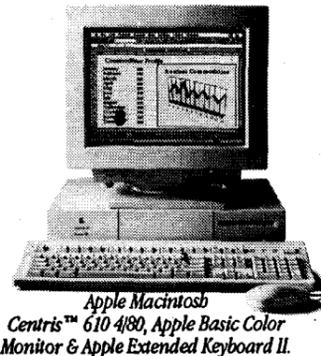
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- Colorado DJ-20 250MB \$195
- Colorado 120MB (Ext.) \$315
- Colorado 250MB (Ext.) \$385

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 indicate new announcements.

Notices

Poetry Sought for Book—General poetry is being accepted for the Western Poetry Association's 1994 poetry book entitled "Poetry: An American Heritage." Poets are invited to send one or two original poems of 24 lines or less on any subject. Poems with a point of view or statement are preferred. Mail submissions to: Western Poetry Association, P.O. Box 49445, Colorado Springs, CO 80940-9445. There is no reading fee.

1993 JPL Arts & Crafts Fair—The Child Educational Center (CEC) at JPL is having a Fair on October 15-17 on the JPL Campus. There will be entertainment, food, children's activities, and free admission and parking. Proceeds will benefit the CEC.

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 LD Walkathon** on Sunday, November 14, 1993 at Los Angeles Pierce College in Woodland Hills. Registration for the LD Walkathon 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.

The Flying Karamazov Brothers will present their production **"Juggle and Hyde"** on Friday, October 22, at 8:00 P.M. in Beckman Auditorium. Tickets are priced at \$27.50, \$25.00, and \$22.50. Caltech students (with I.D.) can purchase half-price tickets in advance and Rush Tickets for \$7.50 beginning Friday, October 22 (subject to availability). Caltech faculty and staff can also receive discounts on tickets bought in advance or on Friday, October 22. Tickets can be purchased at the Caltech Ticket Office, located just north of the Beckman Auditorium parking lot. Call x4652 for information. Individuals with a disability should call Deborah White, x4688 (Voice) or x3700 (TDD) Monday-Friday for information and assistance.

Elizabethan Events—Caltech Public Events' 1993-94 season opens on Saturday, October 16 with an Elizabethan fair at 4:00 P.M., followed by the California Shakespeare Festival's contemporary production of *Hamlet* at 8:00 P.M. in Beckman Auditorium. Tickets can be purchased at the Caltech Ticket Office.

The Emerson String Quartet will give a Coleman Chamber Music Concert on Sunday, October 17 at 3:30 P.M. in Beckman Auditorium. Fifty free tickets to this concert are available to Caltech Students with I.D. (limit two free tickets per I.D.). Tickets available at the Caltech Ticket Office beginning Tuesday, October 12.

* **Giant Pumpkin Raffle at the Caltech Bookstore**—Get your raffle ticket free with any minimum purchase of \$2.00 or more. The drawing will be held on Wednesday October 27 at 4:00 in front of the bookstore. You need not be present to win.

* **Caltech SEDS (Students for the Exploration and Development of Space)** will be holding its first meeting of the academic year on Wednesday October 13th, 8:00 P.M., in Winnett Lounge. We will elect some new officers, discuss our plans for the coming terms, and enjoy refreshments. All members of the Caltech community are invited! Contact Ben McCall x. 2902 for more info.

* **Caltech Lesbian Union**—There will be a CLU meeting Tuesday, October 12, 7:30 P.M. in

Events and Notices

SAC room 33. We will be discussing National Coming Out Week and upcoming plans for the month. For more info, drop a note to Mail Code 104-58 or contact any member. New members welcome!

* **Caltech Velo**—The Caltech Bicycle Club will hold its first meeting of the year on Wednesday, October 13 at noon in Winnett Lounge. The club organizes all types of rides. 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, 7:30 A.M., about 20 hard hilly road miles. 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. Contact: Michael Kantner at x4882 or e-mail to kantner@hot.caltech.edu.

* **Want to work in Administration?** The Vice President for Student Affairs Office is hiring a part-time student office assistant. You'll be answering phones, filing, doing light word processing on a Mac, running errands and working on special projects. We need a work-study student who is available for 6-10 hours each week. Great pay, plus all the free soda you can drink, for a reliable student! Please see Jerri in 108 Parsons-Gates for details.

* **The Caltech Student Branch of the Institute for Electrical and Electronic Engineers (IEEE)** will be meeting October 20, 7:30 P.M. in 102 Steele. Membership and future events will be discussed. Refreshments will be served. Current members of the IEEE, all undergraduates, and graduate students are welcome. Membership is open to students in EE, CS, APH, and other technical majors. Applications will be available for anyone who wishes to join. For more information, contact Brett Warneke at (818) 795-4469.

Events & Services

Adult Children of Alcoholics, a 12-step group meets on campus every Tuesday from 12 noon to 1:00 P.M., in Spalding Lab room 114. This group is open to any student, staff, or member of the faculty who grew up with family alcoholism and other problems. For more information call Dinah Lee Schaller at x2961 or x8331.

* **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 hazzman@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.

Pasadena YWCA Rape Crisis Center—Survivor Support Groups Forming (Adult Survivor, Adolescent Survivor, and Adult Survivor of Child Sexual Assault). The goals of the groups are: to reduce feelings of isolation, empower women, expose myths about sexual assault, and enable members to build support systems. These are peer-support groups, and do not profess to be

"therapy groups," but therapy and healing do occur. Cost is free; nominal donations are accepted but not demanded. Contact the YWCA Rape Crisis Center at (818) 793-5171.

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. Saturdays from 12:00-4:00 P.M. September 25, October 16, 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 cosponsor 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 Cathy 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 356-4886.

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

Redefining Femininity: The Checkered Career of Mme. Du Châtelet—Mary Terrall, a visiting scholar at UCLA, will speak on Wednesday, 20 October 1993 in the Judy Library at 4:00 P.M. There will be refreshments.

* **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.

* **Communication Faux Pas in Relationships**—This seminar is part of the FYI Luncheon Learning Series and will be led by Dr. Bonni Wirth, a licensed psychologist practicing here in the Pasadena community. She will address the following topics: Common relationship myths that lead us astray; What do you mean you can't read my mind? Why should I have to say "I love you," you should already know it. Cosponsored by OWC.

Scholarships, Internships, & Competitions

For information on the following scholarships, please contact the individuals listed at the end of each scholarship.

* **Student Employment Exchange Programs**—"We salute those adventurers who refused to believe that the world was flat . . ." International on the job training in 64 countries awaits students of engineering, computer science, mathematics, natural and physical sciences. International Association for the Exchange of Students for Technical Experience links American students with progressive employers in the industry, research institutes and universities, consulting firms, labs and other work environments around the world. Most placements are for 8 to 12 weeks during the summer. Most countries require English as a primary language. Applications are available at International Student Programs, Olive Walk, x6330. Student must complete sophomore year prior to participation. Application Deadline is December 10, 1993.

66 Fellowships will be awarded by the Howard Hughes Medical Institute for full-time study toward a Ph.D. or Sc.D. degree in the biological sciences. Awards are for three years, with extension possible for two additional years of full support. Fellowship awards provide an annual stipend of \$14,000 and a \$12,700 annual cost-of-education allowance. For more information or for copies of the Program Announcement or Application, call (202) 334-2872 or write to the Hughes Fellowship Program, The Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington D.C. 20418.

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-

dustrial 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 BS 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 Northrop Corporation is offering two \$3,000 scholarships at Caltech for the 1993-94 academic year. The scholarship is available to students enrolled full time as freshmen through seniors in Electrical Engineering, Mechanical Engineering, Aerospace Engineering, Computer Science/Engineering or Manufacturing Engineering. Students must show evidence of a strong academic record and a career interest in the aerospace/defense industry. The applicant must be a U.S. citizen and may be a concurrent recipient of another company's scholarship. Resumes and academic transcripts must be received by the Financial Aid Office at 515 S. Wilson by 5:00 pm, Friday, October 22th, 1993.

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.

The American Society of Mechanical Engineers (ASME) Loan Program has begun for full-time students enrolled in the 1993-94 academic year. Applications must be post-marked no later than October 20, 1993. All applicants will be notified in mid December 1993 whether or not they have been selected to receive a loan for the 1994 Spring term.

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