

Why no
Inside World
this week?

The California Tech

It would be
a Rotation
violation!

Volume XCVI, Number 2

Pasadena, California

Friday, September 30, 1994

Frosh Camp 1994: A Wrap-Up

by Stephen Van Hooser

As the *Tech* went to press last Friday, freshmen and transfer students returned from the annual New Student Orientation session at Catalina Island.

The event began on Wednesday morning with a light breakfast of Granola bars and juice. After EMTs Lisa Ross and Mark Stapf distributed sedating motion sickness pills, the new Techers were whisked away on buses to Long Beach harbor. There, they boarded boats for Catalina.

Picturesque Camp Fox, nestled between the base of stunning mountains and clear ocean, invigorated the drowsy campers upon arrival. Freshman Alex Dunn "found the scenic beauty to be utterly ravishing."

Each student then found his or her way to a cabin. The gentlemen stayed in considerably modest pavilions, as freshman Ronak Bhatt noted: "We were exposed to the beauty of simple architecture, unencumbered by walls."

After a quick lunch, students listened to representatives from most academic departments on campus. Professors covered the freshman class

options in depth and recommended course sequences for interested Techers.

Next, students had free time to hike with Professor Joann Stock on the Geology Field Trip or play with baby sharks and other interesting marine animals with Julie Westgarth from Saddleback College.

Some chose to participate in the military transport design contest created by Jason Trevor and Brian Brewington. Techers designed a boat to transport five plastic soldiers across ten feet of water. According to Jason, the contest replaced "name games" with something that was fun, "practical, and [easily done] on a limited budget and in a short amount of time." Emerging victorious after four grueling races was the C.I.T.S. Toucan, built by Brian D'Urso and the rest of group 13. Brian said, "The trick to the Toucan's success was its simplicity. This allowed it to perform consistently in a wide range of conditions."

Throughout the affair, students rotated through three exhibits intended to help them at Caltech and throughout life in general.

During Challenges and Choices, Kevin Austin and the Counseling



PHOTO BY SAMANTHA FOSTER

Although not the Dean, the new frosh still managed to get someone in the ocean this year.

Center offered advice through skits and discussion groups. According to Dean Rod Kiewiet, "Caltech is hard enough [when everything else is going right]," and students need to be

aware of problems common to Techers. But freshmen and transfers were not the only ones benefiting positively from the experience. Professor David Wales noted that "Challenges and Choices gives the faculty a chance to see what it's like to be a student at Caltech."

Closely related to Challenges and Choices was the seminar on AIDS. Caltech Y Director Sue Bunker and All Saints AIDS Center Senior Health Educator Katrina Hammonds presented frank descriptions of important concepts and demonstrated the use of contraceptives. Dean Kiewiet said "If we run the program for five years and it [results in one less lost life] then it was a highly successful program."

Perhaps the most important part of camp was the Honor Code talk by Chris Bryant and Zack Berger. After an introduction by Chris and Zack, students split up into small groups and discussed com-

prehensive violation scenarios. As the Honor Code permeates all aspects of life at Caltech, the freshman and transfers couldn't start doing any work without this talk.

Thursday evening saw the traditional talent show, with new Techers and representatives from the seven fine undergraduate houses displaying their vocal, instrumental, and magical sides. Myfanwy Callahan, who performed "One Tin Soldier" on guitar, enjoyed her experience and encourages more students to participate: "I think it was a success, and it gave the freshmen their first opportunity to see what the houses were like. I think more freshmen should perform next year."

Finally, on Friday morning, the young Techers cleaned up Camp Fox and boarded boats to return to Caltech. After three days of observation, Dean Kiewiet noted "I think we've got a really talented, high energy type of class coming in." The Class of 1998 now stands ready to prove or disprove (probably by induction) Dean Kiewiet's impression.

We think it should be by predicate calculus. — eds.

King Speaks During Caltech Diversity Week

from the Caltech Y

The eldest child of Dr. Martin Luther King, Jr. and Coretta Scott King, Yolanda King will speak here on October 5, 1994.

Ms. King has participated in numerous civil- and human-rights demonstrations and has spoken before countless religious, educational, business, civic and human-rights groups. Committed to using her talents in service to humanity, she has combined her active involvement in social change with her artistic pursuits. As she explains, "While it is imperative to actively challenge the forces that deny human beings their right to a decent life... one must also stimulate and alter the hearts and minds of both the privileged as well as those who have been too long denied. Within the arts lies this power." In addition to her work with a number of human-rights organizations and causes, Ms. King is also an actress, producer, and director. Currently, she is co-producing and starring in a multi-media theatrical production celebrating the life and philosophy of her father. Entitled

"TRACKS," it is presently touring the country. Ms. King serves on the Board of Directors of the Martin Luther King, Jr. Center for Nonviolent Social Change, Inc. and is Founding Director of the King Center's Cultural Affairs Program. That program produces a variety of artistic events designed to celebrate the common humanity that all people share.

Ms. King's main lecture is open to the community at no charge. It will be held in Beckman Institute Auditorium at 7:00 P.M. A reception will follow her lecture, location to be announced.

This is part of a series of events on diversity. This event is co-sponsored by the Multicultural Task Force, the Caltech Y, and Race, Politics, and Religion. Partial support for this program is provided by a fund through the James Irvine Foundation. For more information on Yolanda King and other Multicultural Task Force Events, please contact Athena Castro at the Caltech Y (818) 395-6163.

HIRING — EDITORS NEEDED

from the Tech Office

This paper is in dire need of people who can help with the editing duties. Many people seem to think that they need to "write well" to help with the *Tech*. This is not true. The following jobs are open:

The **assignments editor** would be in charge of finding important news items and giving these assignments to the writers at the weekly Friday meeting. Additionally, there should be a follow-up to check that these articles are done. This job can

be handled by more than one person, if possible.

The **E&N editor** will handle the gathering of the announcements on the last page.

The **sports editor** will gather regional sporting results and articles.

Other people we could use would be **copy editors** and **artists**. **Writers** are always welcome.

If you're interested in any of the aforementioned jobs, come to the weekly Friday meeting in the SAC Coffeehouse at 12 noon and enjoy the free food. You get 3 units, too!

Undergraduates! Nominations are now open for the office of ASCIT President. The sign-up sheet is posted on the east side window of Winnett Student Center and will be up until 5 P.M. on Tuesday, October 4. The election will take place on Monday, October 10.

Nominees must be ASCIT members; the office is not open to freshmen. The president is the official head of ASCIT; he represents the undergraduate student body on several faculty committees and works closely with the administration. He presides at meetings of the Board of Directors, but does not vote unless a tie occurs.

There will also be a vote on a proposed bylaws amendment that would allow all undergraduates, not just ASCIT members, to vote on amendments to BOC-related bylaws.

Any questions should be addressed to Cedric Hobbs, the Election Chairman, at cedricit@ugcs, (818) 568-0001, or mailbox MSC 260.

Schedule of Events for Diversity Week Oct. 3-7

- Monday, Oct. 3:**
NOON CONCERT — African Drum Group, Winnett Quad
- Tuesday, Oct. 4:**
FILM — *The Joy Luck Club*, Y Lounge, 8 P.M. to 10 P.M.
- Wednesday, Oct. 5:**
Yolanda King, Beckman Institute Auditorium, 7 P.M.
- Thursday, Oct. 6:**
FILM — *Malcolm X*, Y Lounge, 8 P.M. to 11 P.M.
- Friday, Oct. 7:**
NOON PERFORMANCE — Native American Dancers, Winnett Quad

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Editorial

Athenæum Music Makes Big Racket On Campus

Festivities and parties on the Athenæum lawn have been taking place for years, and have for the most part been welcomed to the Tech campus. For the most part, these parties are of little or no concern to the on-campus undergraduate population; the only real way the Athenæum parties affect the undergraduates is through the music that can be heard throughout many dorm rooms in both north and south houses. To those students who are forced to listen to the music by virtue of trying to work in their room, the Athenæum



FILE PHOTO

music has rapidly become infamous and extremely annoying. The fact that it is played loudly on a semi-regular basis only adds to the annoyance, and often it actually becomes a hindrance to a large part of the on-campus population.

The most distinct (and annoying) example to date in this editor's personal recollection came during last year's finals week. Perhaps due to procrastination, but largely due to personal preference, many undergraduates in Ruddock, Ricketts, and Blacker houses (the houses facing the Athenæum) decided to take their exams during the evening. Unfortunately, and quite coincidentally, the Athenæum was holding parties several evenings during finals week, and the music from these parties could be heard all to well through the aforementioned undergraduate houses. Needless to say, this posed quite a distraction to any student who found him or herself half way through a final when loud (and by nature, annoying) music began blaring through the house.

There is no doubt that the issue of loud music on campus is a touchy one, and it is widely acknowledged that the playing of loud music is a privilege enjoyed by many on-cam-

pus social events and other house events. In addition, many of the undergraduates fail to see that the parties held at the Athenæum are often largely beneficial to the campus as a whole. However, it could also be argued that the campus social events and house parties which take place throughout the year are an integral part of the student life and Caltech would be a drastically different place without them. In any case, before the initial concept is lost in the debate, it may be wise to try and find some partial solution.

In order for the undergraduates to be able to take their exams in relative silence, there would appear to be at least two realistic options: 1) the Athenæum could make it a policy not to play loud music on the lawn during midterms and finals week of each term; or 2) the Athenæum could make it a policy to notify all undergraduates of dates and exact times when the music will be played. A primary argument for the second solution is the example of house parties coordinated with the Interhouse Council. At the least, all house presidents have knowledge of dates and times of large campus-wide parties and social events, namely the ones which will involve loud music. A primary argument for the first solution is the example that houses and other on-campus organizations take care to plan large and loud social events around exam periods such as midterms and finals weeks. In either case, it is clear that something needs to be done before exams roll around this term.

Tom Grundy

Tom Grundy
Managing Editor

Proposed Changes to the ASCIT Bylaws

Some more proposed changes have been presented for consideration by the student body. These will all be voted on within a few weeks, and deal with various elements of the bylaws. Most of the proposals deal only with rewording of the current bylaws; the full text of the proposals is printed below:

1. In Article VI, Section 2, change:

The Executive Committee shall have the power to interpret the bylaws. It shall also have the sole power to consider the validity of protests and reschedule invalidated elections.

to read:

The Executive Committee shall have the power to interpret the bylaws. It shall also have the sole power to consider the validity of protests, including protests over whether a petition or amendment concerns the Board of Control. It shall also have the sole power to reschedule invalidated elections.

2. In Article VIII, Section 12, change:

Upon presentation to the Board of Directors, by any member of the Corporation, of a petition bearing the signatures of twenty percent (20%) of those eligible to vote for an office in which there was a vacancy because "NO" was the winner of an election...

to read:

Upon presentation to the Board of Directors of a petition bearing the signatures of twenty percent (20%) of those eligible to vote for an office in which there was a vacancy because "NO" was the winner of an election, by any eligible voter in said election...

3. In Article IX, Section 1, add the following at the end of the section:

If the requested legislation concerns the Board of Control, the signatures of twenty percent (20%) of the registered undergraduates shall suffice to bring the matter before the Board of Directors, who must bring it to a secret ballot, open to all registered undergraduates.

4. In Article IX, Section 2, add the following to the end of the section:

If such legislation concerns the Board of Control, the vote shall be open to all registered undergraduates.

5. In Article IX, Section 3, add the following at the end of the section:

A vote restricted to the members of the Corporation may not amend or strike down any legislation concerning the Board of Control.

6. In Article XI, add Section 2:

No Bylaw amendment concerning the Board of Control shall be made by any vote restricted to Corporation members.

Such amendments may be proposed by official action of the Board of Directors, or by submission to the Board of Directors of the proposed amendment signed by twenty percent (20%) of the registered undergraduate students. The President shall then put the amendment to a vote open to all registered undergraduates within fifteen (15) days after the submission of the amendment. Notice of the election and a complete statement of the amendment shall be posted and published at least seven (7) days prior to the election. Two-thirds (2/3) of the votes cast shall be necessary for adoption.



Frosh Camp 1994.

Editors' Corner

From your Friendly Tech Editors

To start off, we would like to give a belated thankyou to Samantha Foster and Ken Apperson, the Blacker House RA, as well as Mac Color Lab, for the effort put forth to get us a set of pictures from frosh camp before it was over. Thanks to everyone involved!

Hopefully you have noticed our little announcement on the front page. Work is still getting done, thanks to several individuals who have been willing to chip in a little time, but we are still heavily overworked and are feeling the conflict between classes and the paper. Anybody who is interested in getting more involved with the publication of The Tech is strongly encouraged to get in touch with us by e-mail (editors@cco.caltech.edu) or call us in the office (x6153).

Despite the shuffling of our jobs, the deadlines and contacts for the editors are still the same:

Deadlines for Submission to The Tech

- Letters to the Editor — 5 p.m. Monday
- Events and Notices — 5 p.m. Tuesday
- Unsolicited Articles — 5 p.m. Tuesday
- Regular/Seni-Regular Columns — 5 p.m. Wednesday
- Articles, News Submissions — 5 p.m. Wednesday
- Art/Photo Submissions — 5 p.m. Thursday

Please send submissions for letters to the editor to The California Tech, Caltech 40-58, Pasadena, CA 91125, or by electronic mail to editors@tech.caltech.edu. Deadline for submissions is Monday at 5pm on the week of publication.

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

And Above All, Remember...

Work for The Tech!

THE WATSON FELLOWSHIPS

REMINDER TO INTERESTED SENIORS

A one- to three-page project proposal draft for the Watson Fellowships is due in the Dean of Students office, 102 Parsons-Gates, on **Monday, October 10, 1994.**

Keep in mind that successful proposals generally have a single topic of study or investigation that reflects a student's long-standing interest in that area.

The Watson Foundation provides fellowships of \$15,000 for a year of independent study and travel after graduation. They are designed to encourage an informal break in the normal sequence of undergraduate-postgraduate education and are a marvelous opportunity to travel outside of North America. Caltech nominates two seniors each year for this fellowship.

The California Tech

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Campus News

SPORTS

Physics 11 Wants You!

by Samson Timoner and Sebastian Maurer

There are a number of really cool classes at Tech: one of them is Physics 11. Open only to a limited number of freshmen (8 people this year), Ph 11 tries to take the most creative of the incoming class and develop their problem-solving capabilities. You do not need to be a physics major to take the course. The students are selected on their work on two "hurdles" that are handed out first term in Ph 10 (if you aren't taking Ph 10, you can get the hurdles from Professor Tombrello in Sloan Annex 201). The hurdles are problems designed to select students not on their background, but on their approach and creativity. The first hurdle has already been handed out. We aren't going to make life too easy for you by telling you what it is, but we will say that it is an interesting problem and that your solution is due by Oct. 24.

During the first two terms of Ph 11 (it starts 2nd term and continues through first term sophomore year), you will get to try out a few more hurdle-like problems. They will be a little bit more difficult, and will force you to learn some techniques that normally aren't taught in freshman classes. For example, we spent a good amount of time last year trying to explain why almost all meandering rivers have about the same wavelength-to-width ratio. No one knows the answer and although we came up with a few interesting ideas last year, we still don't have a satisfactory explanation.

Technically, Ph 11 is one of the most under-united classes on campus—but people who take it don't care: the work is too much fun. It feels great to be challenged by problems that no one has ever solved before! Some weeks you do almost no work. But other weeks you end up spending 20 to 30 hours and more on just one problem. It is also fairly likely that in the end, you might find out that your approach just won't lead you to a satisfactory solution. Welcome to the world of research!

Before the summer starts, you will get a paid project to work on for the summer. You will get to do original research: this summer, one student was (and still is) working on superconductivity, and another on the motion of sand dunes. You will get an office in Sloan Annex, and will be paid the same amount as for a SURF. Your work may also lead to a publication in a journal like Science or Nature. There is no midterm and no final, and it's okay to fail (that is, if you fail on your project, you still pass the class—it's the effort that counts). All in all, you will learn a lot: not just some physics and math, but also more efficient ways to bang your head against a wall, and may be what physics is all about. In that sense, Ph 11 may well be one of the most important classes you could ever take.

Biology Labs Get Much Needed Upgrades

by Zackary Berger

Undergraduate biology laboratories, long overcrowded and ill-equipped, are soon to be improved through a major injection of Institute and outside funds. More than a million dollars, provided by Caltech and the Howard Hughes Medical Institute, will go towards the renovation of 102 Kerckoff (where Bi 11 and Bi 123 labs are held); 317 Kerckoff (the home of Bi 8 and Bi 10); and the upgrading of undergrad neurobiology labs. The undergraduate Mead Laboratories for Chemistry will also be affected.

According to Professor Charles Brokaw of the Division of Biology, "the proposal submitted to Hughes emphasized the current limited capacity of Caltech's undergrad labs. 'There are often more students than equipment in Bi 8 and Bi 10,'" said Brokaw, referring to introductory molecular biology labs. Recently, growing interest in biology courses among entering freshmen has caused yearly overflows in enrollment for these classes.

Hughes approved the proposal, and will contribute \$1.2 million towards new equipment over the next four years. Upon receiving word of Hughes' approval, said Brokaw, "we pressured Caltech to contribute its share. We told them [the Division of Biology] that they wouldn't get the money from Hughes if they didn't give some themselves." With unprecedented largesse, the Division of Biology agreed to set aside \$300,000 towards renovation of the labs; renovation of 317 Kerckoff, said Brokaw, should be completed by the end of this term.

The crush of students and lack of equipment in recent years have not been helped by the lackluster instruction in Bi 8 and Bi 10, where organization has often been kept to a minimum. Ray Deshaies, a new faculty member in biology, has been entrusted with the retooling of Bi 10.

"This is very unusual," Brokaw said of the grant. "The Division has its list of priorities for rehabilitation," he said, "and undergraduate labs are below other things," including necessarily massive refurbishings of professorial labs.

Pass, Set, Crush!: Caltech Volleyball Starts New Season

by Rich Chin

That's right, the Caltech Men's Volleyball Club is holding tryouts for the 1994-95 team. As there is no men's varsity volleyball team, the club provides the only opportunity for intercollegiate, local, and USVBA-sanctioned competition.

Last year, under the leadership of EE grad student Mike Burl, the team qualified to play in USVBA (U. S. Volleyball Association) AA-rated competitions. This is the highest rating the team has achieved in recent years, only one level below the highest "elite" rating. Facing rigorous competition, the team was able to win about a third of its matches.

Last year also saw the start of an intercollegiate schedule for the club, playing varsity and club teams from nearby colleges and universities. The team struggled early in the season against the volleyball powerhouses like USC's club team, but showed significant improvement by the end of the season. This year, it hopes to build on that improvement and establish a winning record in an expanded intercollegiate schedule which begins this winter.

The club kept a fairly large roster, which helped to maintain some stability in the face of the injuries experienced during the season. To develop the skills of the less experienced players, the club also participated in a local volleyball league, where they placed third overall.

This year, the team will be coached by JPLer Aaron Kiely. Practices are held Tuesdays and Thursdays from 8 to 10 p.m. in Braun Gym. Tryouts will begin Tuesday, October 4, at 8 p.m. in Braun. For more information, interested players should contact Kiely at 818-304-0676 or by e-mail at aaron@shannon.jpl.nasa.gov.

LaVerne Swipes College Title at Caltech Invitational

by Tom Dmukauskas

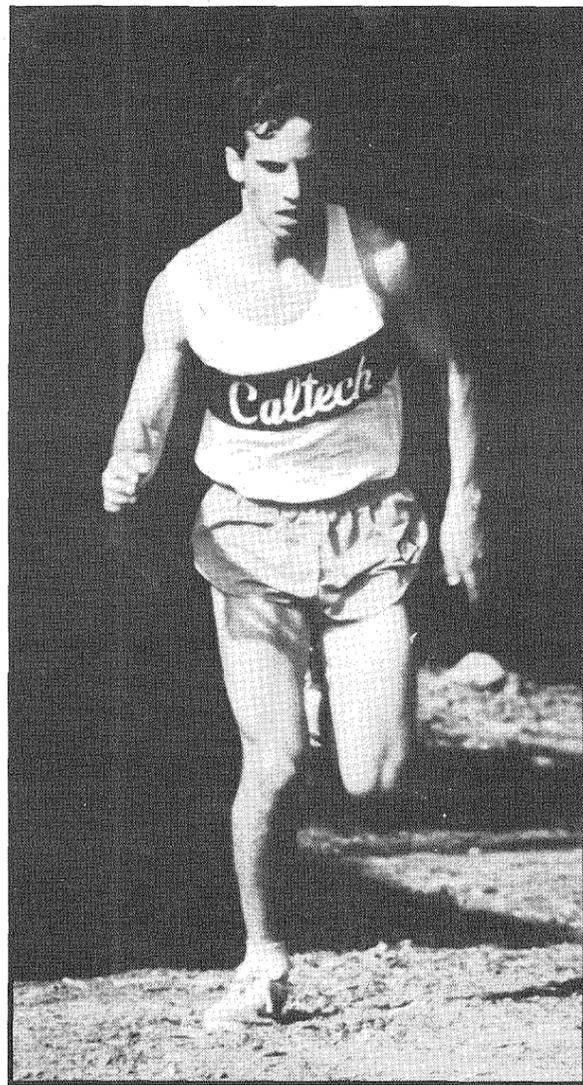
After having lost to the Leopards at the first race of the year, the Whittier Invitational, the men's cross country team was hoping to even the score at their home invite. Because of construction on the old course at Lower Arroyo Park which made it unraceable, Coach Jim O'Brien was forced to devise a new course only a couple

of days before raceday. On Saturday morning, when the visiting teams showed up, they were not terribly pleased to hear about the course change so soon before the race. Certainly, Caltech could use this to their advantage.

The gun went off, and soon afterwards, Dan "Mommy" Kleiman surged into the overall lead. He stayed there for two miles before slipping to 3rd place behind two runners from club teams. He finished ahead of all of LaVerne's runners — extremely important because of the dual meet scoring system used in the invitational. Only one LaVerne runner was able to wedge himself between Kleiman and the next Tech runner, Mike "Marathon Man" Davies who finished 7th among the 56 runners. Three more LaVerne runners came in before the next pack of Beavers. Ron "The Human Rubber Band" Stieger, Francisco "Golden Ankle" Gutierrez and Tom "Oscar" Meyer were nestled within 7 seconds of each other and completed the

scoring for Caltech. LaVerne's last scorer came 13 seconds before the next Tech runner, which allowed them to defeat Caltech by the narrow margin of 27-28. The Beavers did finish the race with a 6-2 dual meet record, good enough for third place overall, second among colleges, but not in the least satisfactory.

On Monday, the team was rocked by Jesse Shue's announcement that he will be transferring to Oregon State in the coming weeks. I think that I speak for the entire team when I wish Jesse the best of luck in his future pursuits. We'll miss you.



Dan "Mommy" Kleiman struts his stuff at the Caltech Invitational. Kleiman finished third among the fifty-six runners.

PHOTO FROM CALTECH ATHLETIC DEPARTMENT

ASCIT MOVIES PRESENTS
THE ROMANTIC COMEDY AMERICA IS FALLING IN LOVE WITH!



"TWO THUMBS UP!"

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AN OUTRAGEOUSLY FUNNY AFFAIR

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25 yrs ago... Oct 2, 1969

Munger, Davidson
present African
Studies Program

A course on African history is being featured as part of the curriculum this year. The class meets Mondays from 4 to 6 p.m. and will include lectures by Dr. Edwin Munger, Dr. Thayer Scudder, Dr. Bates, and Dr. Davidson.

The course is also expected to include talks by visiting African or black American lecturers, or by lecturers from other colleges in the area. It is hoped that Dr. Sklar of UCLA or Dr. Card of UC Riverside will find time to talk to the class.

Topics to be covered include an extensive background to West African history, black African culture the slave trade and its effect on West Africa, and present day African politics.

Tech Goes Offset
New System Hopeful

The California Tech is now being printed in a completely new way. Switching from the old letterpress printing using lead type and half-tone cut metal plates for pictures, the paper will now be printed by a high speed offset process using a photographically based method.

The new technique should increase the versatility and diversity of the newspaper's coverage by enabling a variety of artwork and high quality photographs to be printed. The resolution of the offset process is limited practically only by the quality of paper involved.

Magnetic Tape

Starting with typewritten copy, final printed copy will be produced by the IBM "Magnetic Tape/Selectric Composer" computerized typesetter which works from a master magnetic tape. The new equipment will be kept on the Caltech campus.

A second advantage of the process is its economy. While in past years the size of the newspaper was limited severely by the number of advertisements this process may be sufficiently less expensive to enable a minimum paper length of eight pages with virtually no restrictions on the number of photographs.

Camera Ready Copy

The final copy is typed on a special high quality white paper by the typesetting unit. The copy is then "pasted up" on a large sheet of white paper furnishing "Camera Ready" copy for the printer. Spaces are left for photographs which are photographed separately to form a negative copy from which the final plates are made.

The printer, News-Type Service of Maryland Avenue, Glendale, also prints the L.A. State College and

Color Possible

Should four color printing be desired, a single sheet is threaded through all four presses—each loaded with a different color image. A flaming system dries one color before the next is applied.

The new California Tech format will be characterized by the new nameplate and new artwork for the various departments. Also, the cartoon strip "Odd Bodkins" will be carried regularly.

Occidental College papers as well as seventeen others. The giant presses print an; fold the paper in one operation at 20,000 copies per hour. The press is actually four separate units, each threaded with a roll of paper brought over a system of rollers and harnesses—hence the name by which it is usually called—a "Web."

The Lewd One

Even Peanut Butter Now Illegal

by Dave Lewin

In their search for kicks, the teenagers of today are constantly trying new materials as a source of 'highs'. First it was marijuana, then bananas, then LSD, and now—peanut butter! According to a medical authority quoted by the Philadelphia Evening Bulletin last month, cases of students "shooting up"—injecting with a hypodermic needle—peanut butter have been reported.

This new craze has stripped the stores of peanuts in any form. Go to any food store and see for yourself the rows of empty shelves which once held pints of "Skippy" peanut butter and cans of roasted, salted peanuts. Now peanut butter is only available from 'pushers', who often mix in jelly to dilute it and give them a higher margin of profit. These unscrupulous characters sell this mixture in various sizes known as 'jars'. Sometimes an unsuspecting peanut addict will buy a 'jar' of uncut peanut butter, and use the same amount of this stronger stuff. This often causes a 'bad trip' or 'upset stomach'.

Crunch Style Is A Bummer,

The injection technique is difficult, as getting the peanut butter through the needle is not easy, nor is loading the hypodermic in the first place. Because of this, addicts can be identified by their dilated pupils, the

needle marks on their arms, and their overdeveloped finger muscles. Recently the Federal government has stepped in to stem the traffic in this dangerous substance. Operation Interlope, conducted by the Justice Department, has helped nip this illegal traffic in the bud through the use of bloodhounds trained to sniff out peanut butter and thorough searches at the Mexican border. The Mexican government is cooperating with our own by burning the fields of unscrupulous farmers who are raising illegal crops of peanuts.

The effects of peanut butter are not to be laughed at. It is highly addictive, and has captured the minds of millions of our youth. Use of peanut butter causes one to experience a feeling of fullness, causing users to lose interest in everything including eating. This leads to vitamin deficiency among addicts and can also leave sticky lumps on the roof of the user's mouth. Some medical researchers have evidence that peanut butter can cause chromosome damage when injected into rat fetuses, especially in the presence of ionizing radiation.

Remember: If a stranger tries to sell you a "jar" of peanut butter, report him immediately to your local police. You may save many young lives from ruin.

—*—

Jonathan Post

POSTSCRIPTS

While we all mourn the passing away of Temporary Caltech Structure Number Four, or T-4 to its friends, July 1969, we regret the loss of opportunity to understand the place in toto. One question of great significance to the student body is the origin and meaning of the enigmatic nickname "T-4". The solution may now be disclosed. T-4, the building is named after T-4, the bacteriophage of the T-even type. Parallels are immediately obvious:

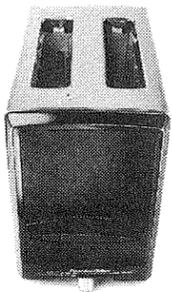
T-4 is small, as phages go. T-4 multiplies rapidly (though Booth is faster)—just look at all the new physics buildings there are! T-4 can exclude other types of phages (ever see an English major voluntarily in the late T-4?). T-4 has an extremely high resistance to radioactivity, crucial for occupancy by physicists. T-4 is quite self-sufficient, due to cannibalization of existing materials. T-4 does some things (like UV lesion photoinactivation) more slowly in the dark; Techers all go to sleep immediately after dinner, right? Additionally, T-4 depends on nuclear morphological integrity, analogous to the honor system. Why then was T-4 finally demolished? Well, viral multiplication leads to eventual destruction of the host. It was us or it. The reason I profess to understand such erudite obscurities as T-4 and Richtetia is simple: I have an Edifice Complex.

Postiche: Jokes of the weak

- d.t.s — what alcoholic calculus students get
- screw — twisted wedge
- showering — a tradition for drips who have to come clean or are all washed up. While some think it all wet for dampening their spirits, it simply whets the appetite of others. There's something fishy here, sea? Some frosh don't lade it, but others become virtual shower heads; thus, the tradition is rather fluid. Moist of us can't wet for a showering; the rest usually aqueous.
- wheels — often spoken of, they're round.
- battery—an electrifying charge. If you conduct yourself negatively, you'll be put in a dry cell. Try to develop a capacity for inductive reasoning, and don't generate resistance. Wire you reading this? It's shocking, I'm positive.
- grass — To make a hash of this definition, when it all goes up in smoke, your lungs go to pot. I've blown it; weed burn this key stuff, but in this joint if you pipe down, they clamp a lid on you.
- laser — To shed light on this coherently, don't get excited, or you'll make wave.
- organ — Stop! Note this: when keyed up, tone down. See sharp, or you'll be flat, which is natural.

opener became popular. Before that, people improvised, using knives, bayonets or a chisel and hammer.

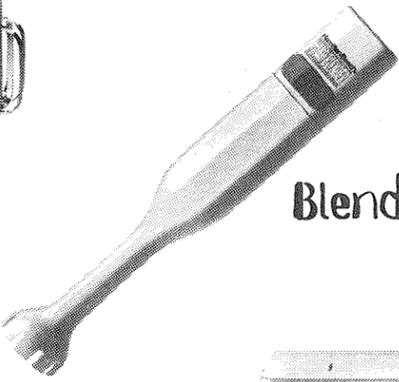
Opening lines. The first electric can opener was introduced in 1931. Although the can was developed in 1810, it wasn't until the American Civil War that the first patented manual can



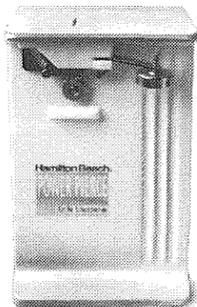
Toast a bagel.



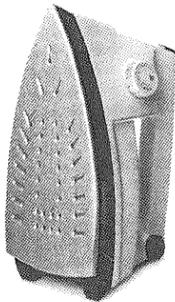
Mix a pie filling.



Blend a drink.



Open a can.



Cook a grilled cheese sandwich.

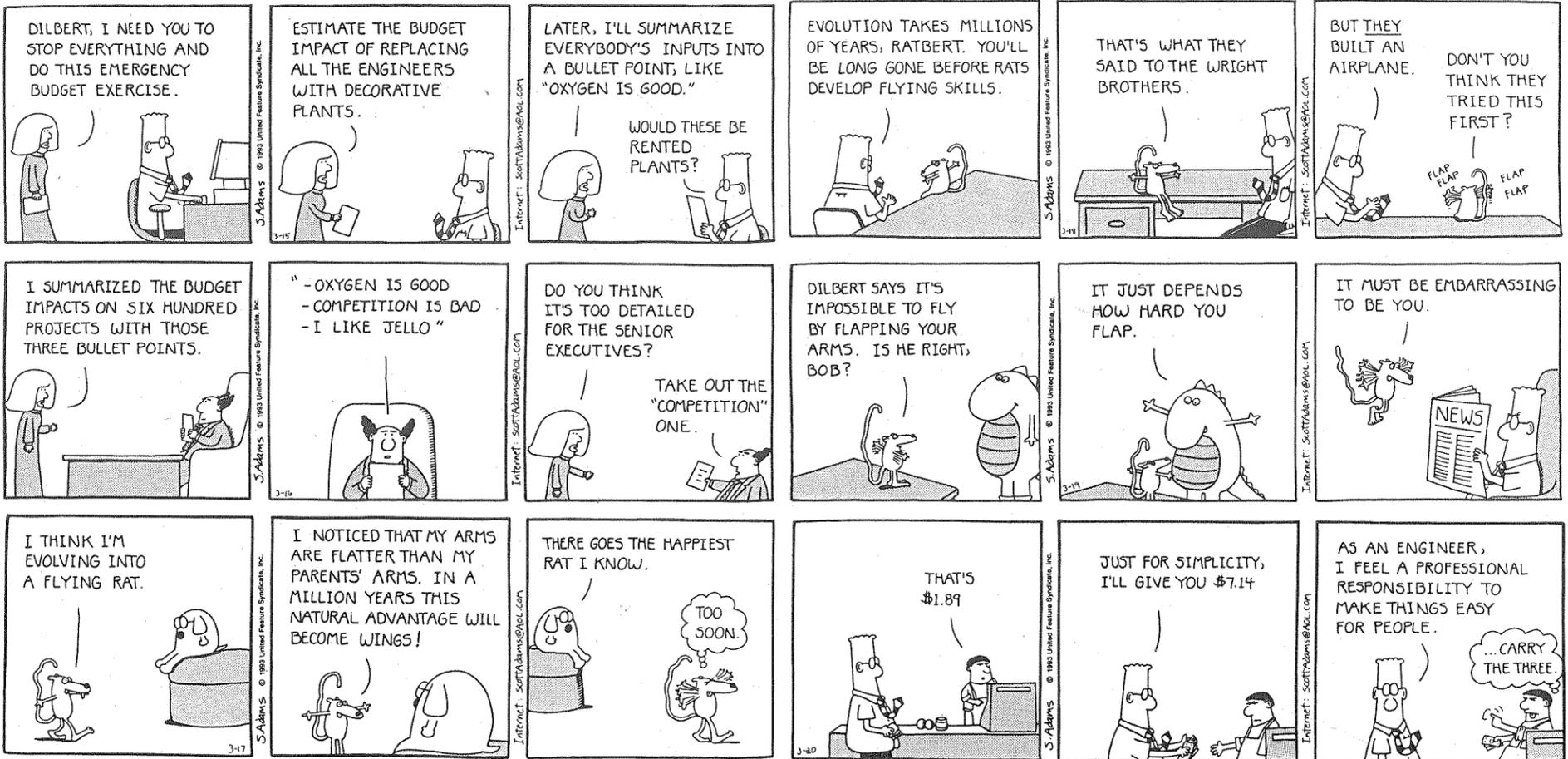
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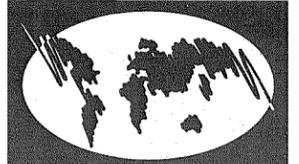
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Under the new bill which is being considered by Governor Reagan, stating that Topless - Semi Nudity - Community Nudity entertainment will be left up to the adult people of the community. The HI LIFE (1758 E. Colorado) is now conducting a poll to find out what the adult people of Pasadena want to see as entertain-

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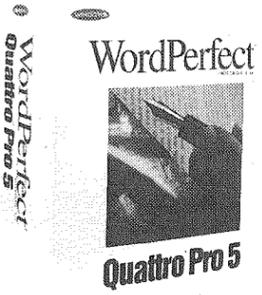
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YNEWS

by Topher Hunter

Well, everyone, Rotation is almost over, and that means life is about to settle down into some sort of normalcy once again. But your friends at the Y are working hard for the coming week. That's because it's Diversity Week, and the campus has a whole lot of diversity information to offer up.

First on the list of events is the Diversity Week Noon Concert at (yup, you guessed it) 12:00 on Monday in front of Winnett Center. There will be movies offered both Tuesday and Thursday evenings, and Wednesday, Yolanda King will deliver a lecture entitled "The Dream is Still a Dream: A Dream Deferred" at 7 P.M. in BI Auditorium. Friday is the Noon Celebration consisting of Native American Dancers, again in front of Winnett Center. To cap off the week, there will be a FOCUS Party for all International Students on Saturday, starting at 4:30, in Winnett Lounge.

For those of you out there who are Mountain Bikers, the Y has a trip every Tuesday afternoon. Drop by and talk to Chris Sundberg if you'd like info.

As always, you are all welcome to drop by the Y for additional information. Our student ExComm meets Tuesdays at noon in the Y lounge drop by and see what we're about!

Until next time....what's your name? What's your major? Why bother? AAAAGGHHH!!!!

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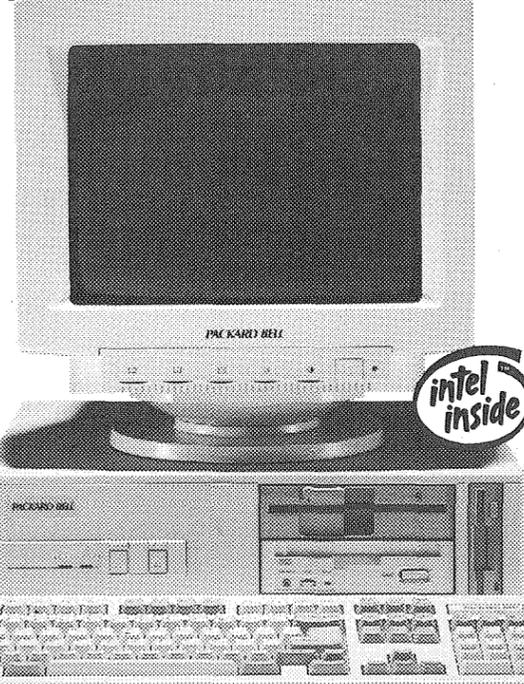
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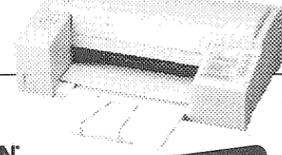
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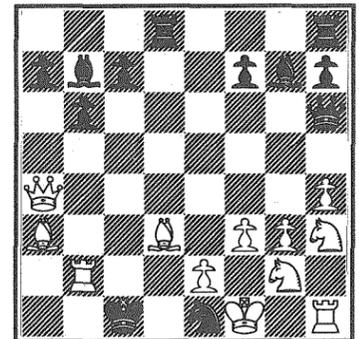
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Chess

■ edited by Wei-Hwa Huang



White to play and mate
Black in two moves

This marks the beginning of a new chess problem section. I'll feature all sorts of problems, from the serious puzzles to the ridiculous, from the endgame positions to retrograde analysis. Today's problem is standard. If the abundance of pieces confuses you, let me say that this problem is from the last century, when it was considered fashionable to add extra pieces on the board. As usual, e-mail any opinions, problems, or preferences to gp@tech.

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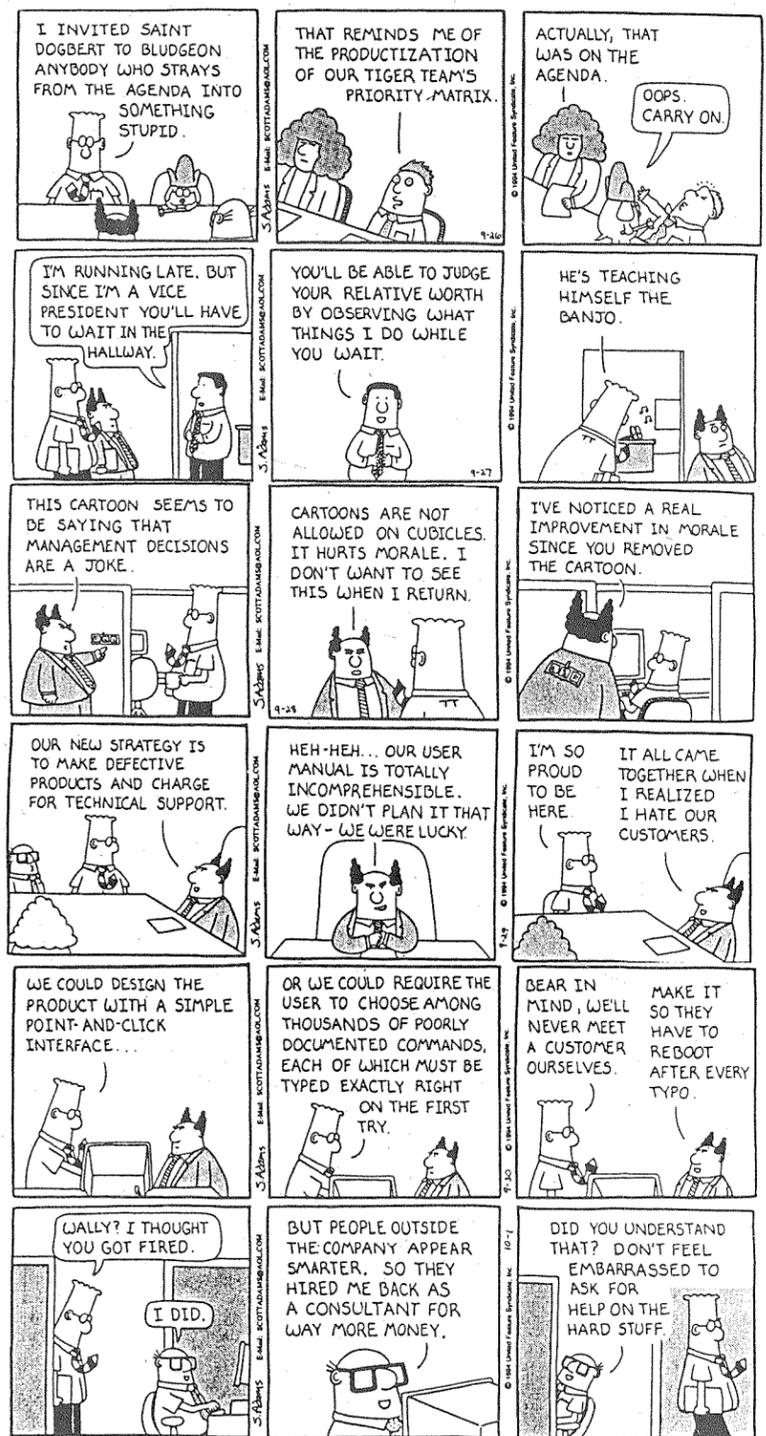
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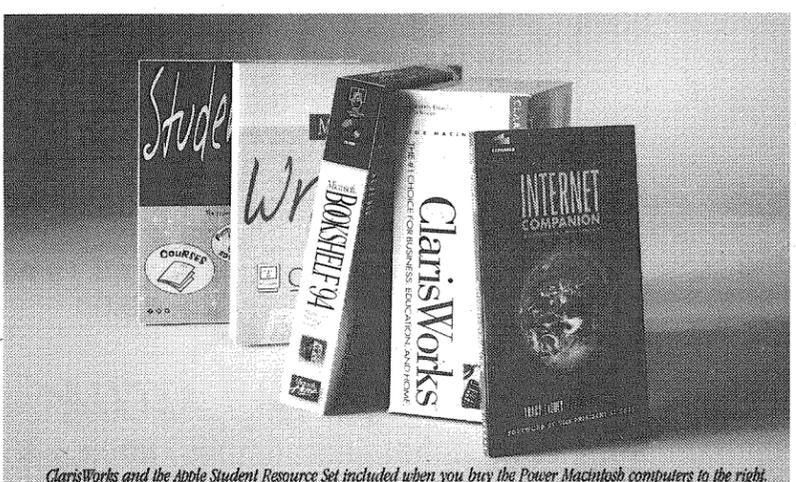
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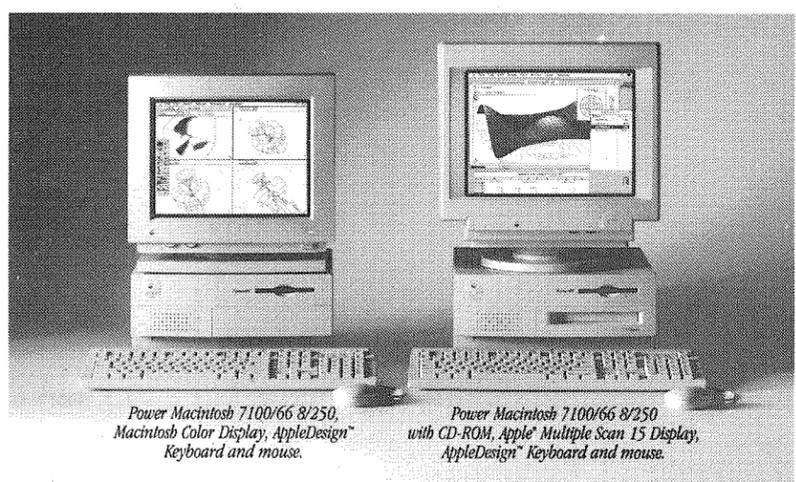


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Crime and Incident Beat

John Hubenschmidt



9/1 A MYSTERIOUS MAN WHO WAS NOT WEARING A SHIRT WANDERED THROUGH LLOYD, STOPPING TO USE THE SHOWERS THERE.

9/1 11 P.M. AN UNLOCKED BIKE WAS REMOVED FROM RUDDOCK HOUSE (\$100).

9/2 A SEVERED CAT'S HEAD WAS DISCOVERED IN THE BUSHES NEAR AN ALUMNI HOUSE.

9/4 11 P.M. SOME WOMEN'S CLOTHING WAS REMOVED FROM DABNEY HALL (\$100).

9/5 5 P.M. TWO MEN WERE OBSERVED REMOVING ITEMS FROM PHYSICAL PLANT. UNFORTUNATELY, SECURITY WAS UNABLE TO APPREHEND THESE MEN AS THEY DROVE AWAY (\$445).

9/12 3 P.M. A STUDENT IN FLEMING HOUSE LEFT THE DOOR TO HIS ROOM OPEN. WHEN HE RETURNED LATER, RUNNING SHOES, A PORTABLE CD PLAYER, AND OTHER ITEMS HAD VANISHED (\$325).

9/14 8:30 P.M. A WALLET WAS STOLEN FROM AN UNLOCKED LOCKER IN BRAUN GYM (\$100).

9/16 A CAR IN THE WEST WILSON LOT WAS BROKEN INTO, AND A STEREO AND JACKET WERE REMOVED (\$630 + DAMAGE TO THE CAR).

9/16 A CD PLAYER WAS TAKEN FROM AN UNLOCKED CAR (\$300).

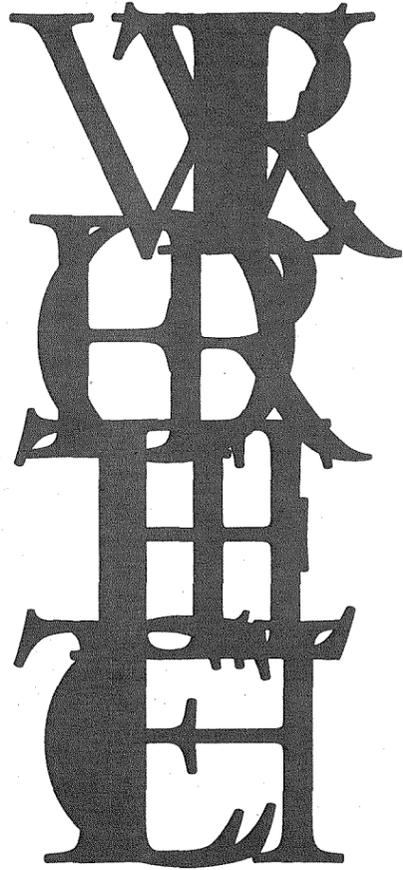
9/16 A LOCKED BIKE AT 346 S. CATALINA WAS STOLEN (\$280).

9/25 COMPUTER EQUIPMENT WAS REMOVED FROM THE MAC LAB IN JORGENSEN (\$1,505).

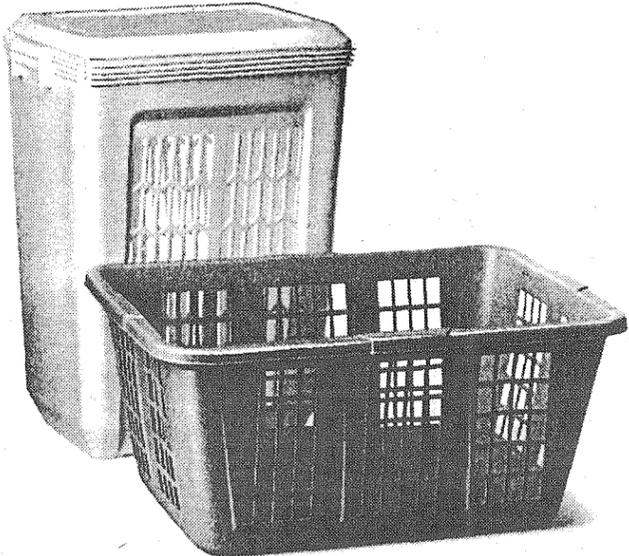
9/26 10:30 A.M. A BACKPACK LEFT UNATTENDED ON A BENCH NEAR MILLIKAN POND DISAPPEARED (\$188).

SEPT. 26 COMPUTER EQUIPMENT WAS STOLEN FROM A LAB IN KECK (\$1,500).

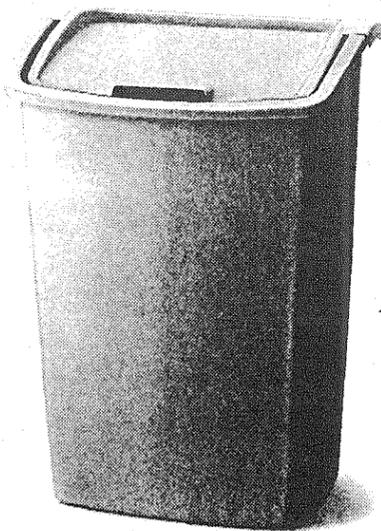
THIS MONTH'S TOTAL: \$5,473
TIP OF THE MONTH: DON'T TAKE A SHOWER IN LLOYD.



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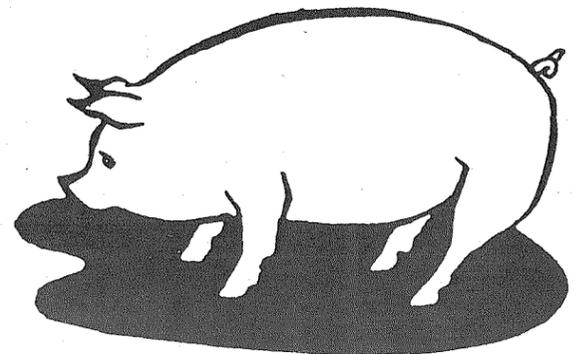
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think how many socks have been lost in 60 years. The first laundromat opened in Fort Worth, Texas, in April 1934. The Washateria

Games & Puzzles

“In the beginning...”

by Wei-Hwa Huang

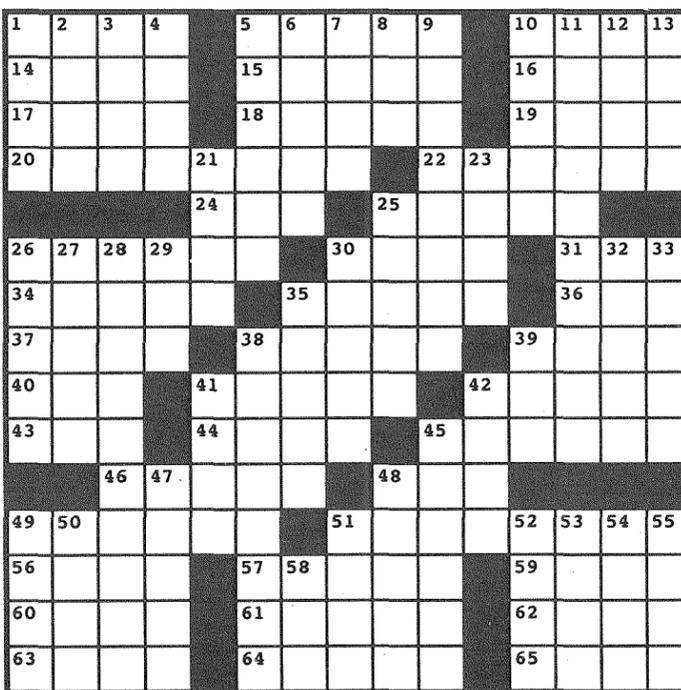
Today's title is from the first line of the most widely distributed book in the world — the Bible (King James version). Here's a smattering of first lines from other well known literary works in the English language. How many can you figure out?

1. Ours is essentially a tragic age, so we refuse to take it tragically.
2. It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife.
3. “Where's Papa going with that ax?” said Fern to her mother as they were setting the table for breakfast.
4. I shall soon be quite dead at last in spite of all.
5. He awoke, opened his eyes.
6. It was love at first sight.
7. It was Wang Lung's marriage day.
8. It was a pleasure to burn.
9. Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin.
10. I have never begun a novel with more misgiving.
11. Call me, Ishmael.
12. To the red country and part of the gray country of Oklahoma, the last rains came gently, and they did not cut the scarred earth.
13. It was a bright cold day in April, and the clocks were striking thirteen.
14. The bench on which Dobbs was sitting was not so good.
15. Ships at a distance have every man's wish on board.
16. I had this story from one who had no business to tell it to me, or to any other.
17. In a hole in the ground there lived a hobbit.
18. *You better not never tell nobody but God.*
19. What can you say about a twenty-five year-old girl who died?
20. ‘What's it going to be then, eh?’

If you're part of the Caltech/JPL community, why not send in your answers by e-mail to gp@tech? The person who identifies the most titles wins \$10. Remember to include your phone number and mailing address. Ties will be broken by choosing the person who identifies the most authors correctly; after that, the most copyright years identified. Further ties will be broken by random draw. Good luck!

Crossword

edited by Wei-Hwa Huang



ACROSS

1. Place to find bulls
5. Give a once-over
10. The Cosby mysteries
14. “Kiss me ____”
15. Town near Toronto
16. Actress Lear
17. Pressing metal?
18. Ulan ____
19. Moslem ruler
20. Caltech non-Asians?
22. Heartless dudes
24. Spanish one
25. Heard
26. Charlie and Martin
30. Monstrous

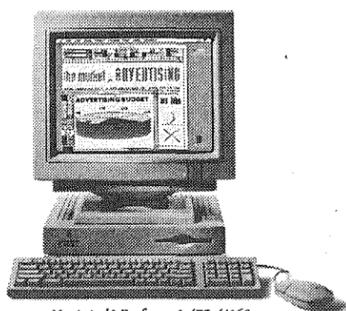
31. Execute
34. *Mad* soft drink
35. Adriatic winds
36. Prefix for rough or rite
37. Rom. and Pers.
38. Part of a split personality
39. Pickle type
40. Scottish bit
41. Red Pig
42. “____ the eyes”
43. Leb. neighbor
44. Murray and Landers
45. French thief Lupin

46. Floor
48. Utah tribe
49. Literally, “Pot growing”
51. Hogan and Roberts, for example
56. Famous baseball player
57. Egg albumen
59. Hara-____
60. JPL's boss
61. A bigot, perhaps?
62. Nabisco treat
63. Hmwk.
64. Duke or Master
65. Backtalk

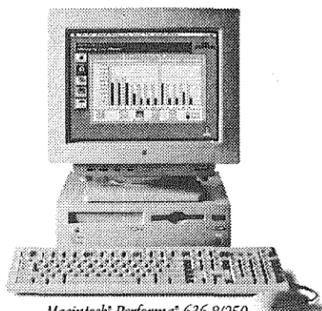
DOWN

1. Hands on hips
2. Water prefix
3. School in England
4. Paradoxical man
5. Dick, Jason, and Tim
6. Muse of sexual songs
7. Cavity
8. Not a yes
9. “Formosa”'s country
10. The Ayatollah, for example
11. It's over when school starts
12. Ballet movement
13. Story
21. Tolkien inscriptions
23. Middle-month
25. Golden
26. Little ducks
27. He don't play that
28. Good ability
29. Two of them come before O
30. Tramps
32. Polish lancer
33. Nick of “The Prince of Tides”
35. Creator of “The Sensational She-Hulk”
38. Our daily photon bombardment
39. Put down, in slang
41. “Yaba-____-Doo!”
42. Mars
45. From Earth
47. Lion with the Witch and the Wardrobe
48. Steve of films
49. ____ fide
50. Mouths
51. Joule per second
52. Some boxing wins
53. Spanish money
54. Once once were these
55. Grande and de Janiero
58. Songwriter Francis of “Love Story”

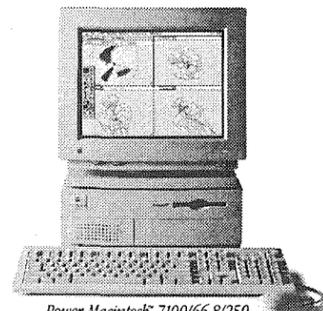
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ASCIT NEWS

30 September 1994

David R. Derkits

MEETINGS

- The first general meeting of the Board of Directors will be held at 7:30 PM on Monday 3 October in SAC 64, the ASCIT Office. Meetings are open to the Caltech community. Funding requests and new business are handled at the beginning of the meeting.

ELECTION

- See the related article in the *Tech* for an update on the ASCIT Presidential Election. Nominations for the office close Tuesday 4 October at 5:00 PM. Campaign statements are due to the *Tech* by 5:00 PM Wednesday 5 October.
 - One Bylaws Amendment is up for vote in the election. It resulted from a petition circulated at the end of third term. See the text of the amendment in the *Tech*.
 - Election Day is Monday 10 October.

WWW

- ASCIT now has a home page on the World Wide Web. The URL is:
<http://www.cco.caltech.edu/~ascit/>
 Updated versions of the documents (Bylaws, Resolutions, etc.), current lists of Directors and Officers, and other useful information may be found on this site.

PUBLICATIONS

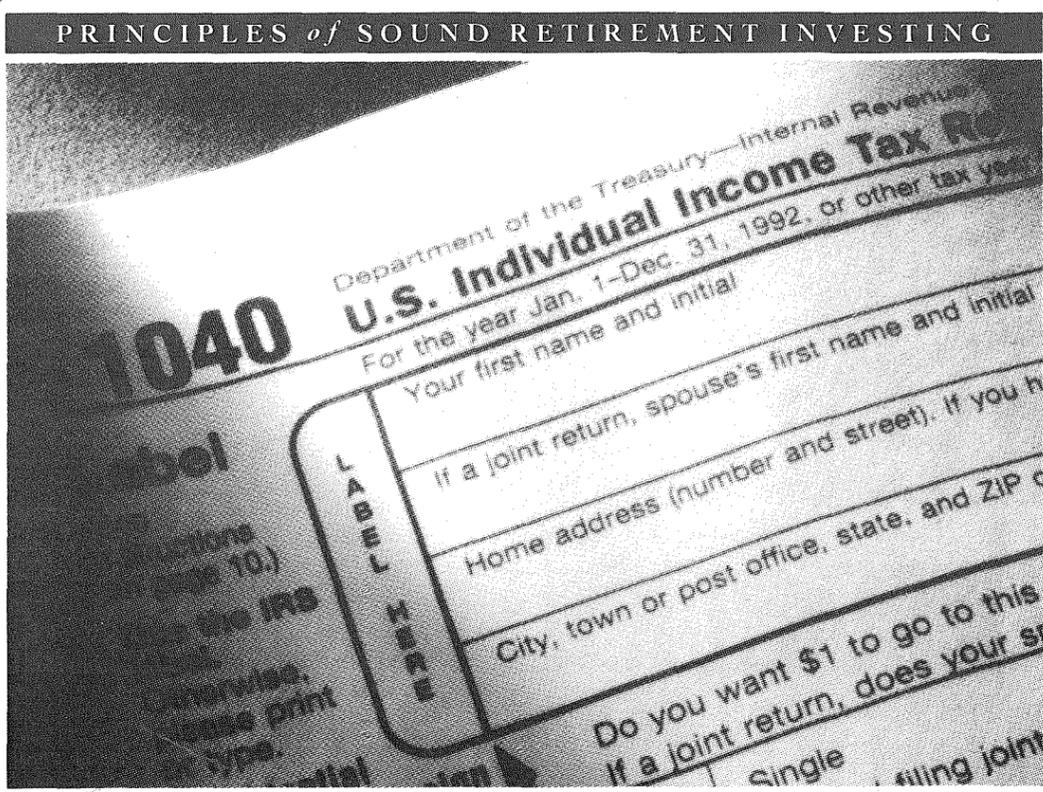
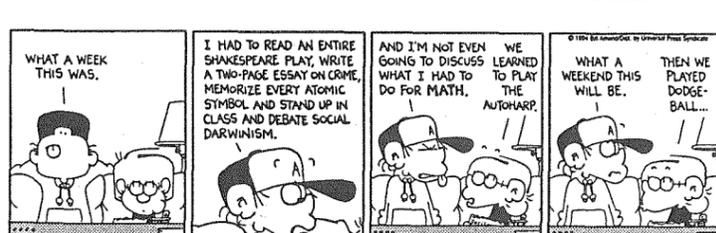
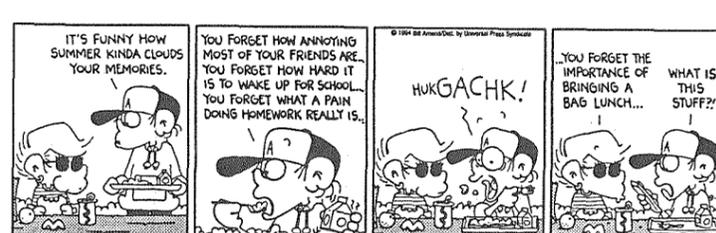
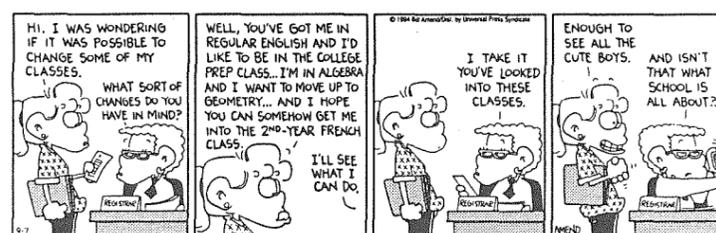
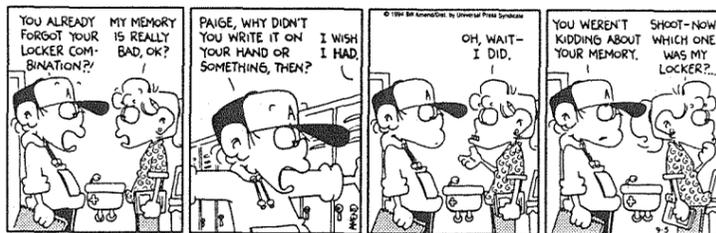
- The *little t* (the undergraduate handbook) is being distributed. Undergraduates, if you have not received a copy, please watch for information from the *little t* Editors.
 - The *CLUE* (Review of Courses) is also being distributed at this time. Students are encouraged to use the on-line (WWW) version, which will be activated within the next two weeks and accessible from the ASCIT WWW Page. Undergraduates who need a hard copy can pick one up at the Deans' Office.
 - The *Big T* (yearbook) should be available for upperclassmen in the coming week. Please watch for information from the *Big T* Editors.
 - If you are not an undergraduate and are interested in obtaining one of the publications, please contact the appropriate Editor.

MISC

- Clubs which plan to seek ASCIT funding for their general budgets should watch for information on this process in the coming week.
 - Copies of ASCIT Board Minutes are available by mail or e-mail free of charge on request to students, faculty, and administrators. Requests should be sent to Secretary, ASCIT 64-58 or dderkits@cco. The Minutes are also available on caltech.ascit.announce.

FoxTrot

by Bill Amend



UNFORTUNATELY, THIS IS WHERE PEOPLE ARE PUTTING TOO MANY RETIREMENT DOLLARS.

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money you don't send to Washington works even harder for you. Down the road, that can make a dramatic difference in your quality of life. What else makes SRAs so special? A range of allocation choices—from the guaranteed security of TIAA to the diversified investment accounts of CREF's variable annuity—all backed by the nation's number one retirement system. Why write off the chance for a more rewarding retirement? Call today and learn more about how TIAA-CREF SRAs can help you enjoy many happy returns.

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Howard Hughes Medical Institute Predoctoral Fellowships in Biological Sciences

1995 Competition
 80 fellowships will be awarded for full-time study toward the Ph.D or Sc.D. degree in cell biology and regulation, genetics, immunology, neuroscience, structural biology, biostatistics, epidemiology, or mathematical biology.

Fellowship Terms
 ■ Three-year initial awards, with two-year extension possible
 ■ \$14,500 annual stipend
 ■ \$14,000 annual cost-of-education allowance

Eligibility
 ■ Less than one year of post-baccalaureate graduate study in biology; college seniors; first year graduate students; M.S., D.O., D.D.S., D.V.M., students or professionals
 ■ If an M.D./Ph.D. student: not in a funded program
 ■ No citizenship requirements: U.S. citizens may study abroad; others must study in the United States

Schedule
 ■ Application deadline: November 4, 1994
 ■ Awards announced: early April 1995
 ■ Fellowships start: June 1995–January 1996

For Program Announcements, Eligibility Guidelines, and Applications
 Hughes Predoctoral Fellowships
 National Research Council Fellowship Office
 2101 Constitution Avenue
 Washington, DC 20418
 Telephone (202)334-2872
 Fax (202)334-3419
 E-mail <infofell@nas.edu>

The Howard Hughes Medical Institute welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

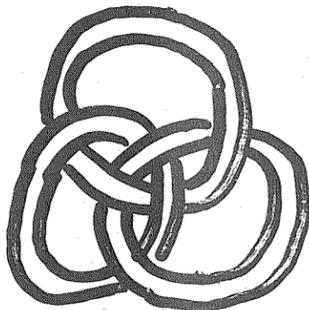
Guide to Student Life at Caltech

by Su Do Nym

ASCIT is the student government here at Caltech, but it's not just a student government, it's a corporation. ASCIT has had a busy year with several officers resigning, several proposed amendments to the bylaws, and greatly increased student involvement and attendance at Board of Directors (BOD) meetings. This year has the potential for dynamic change in the organization of ASCIT. Be sure to scan the minutes from the Committee on Student Government (COSG) and if you have questions or concerns to talk to one of the committees members, and/or house and ASCIT officers. The committee chairman is Tom Maccarone.

Advice on those running for ASCIT office: green petition forms of the type used when petitioning for reinstatement are available in the Office of the Dean of Students.

The *little t* is a student handbook. You should hunt down Michael Radford, Steven Skovran, Laurent Stadler, and Jennie Yoder and ask them to sign and distribute the books as soon as possible. These four did a really good job this year and should be congratulated once the books are distributed for people to see for themselves.



your bicycles, and make sure the doors to the computer rooms close all the way. Report "suspicious persons" to security.

Something for the brave: get a copy of "Ride of the Valkyries" from Wagner's Ring Cycle. Play it loud and often. (Wait till after rotation, though.)

Ditch Day: a special event taking place tomorrow. Look for the white sheets.

About rotation: The upperclassmen are tired too. Just be glad you don't have to go to a meeting on Saturday that can take up to 12 hours. But don't be sad — you'll be there in a year too.

Some things to ask super-seniors about if you can find one: MOSH Wilde, life before DAPAC, Gwoho. Something to ask seniors about: Gary. Burger Continental is a popular food location among se-

niors. Be sure to suggest going there when with seniors. They'll be ecstatic.

And, don't forget a fine tradition here at Caltech: when a group dines at a restaurant, and one bill comes for the entire party, it is the responsibility of the youngest non-math major to figure the bill. (Math majors can't add; they're too busy trying to prove that 1+1=2.)

(End of babbling.)

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- VESA LB accelerated SVGA w/1MB exp. 2MB
- 101 Enhanced Keyboard, 3 Button Mouse
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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.

Notices

✓Junk Mail—The California Tech receives a lot of junk mail. Stop by or ask an editor if you want some of it.

1994-95 H&SS Course Schedules—Schedules of courses expected to be taught in the Humanities and Social Sciences during the 1994-95 academic year are available in 228 Baxter.

✓Caltech Women's Glee Club Auditions—From its initial membership of 8 singers in 1972 to its present forty participants, the Caltech Women's Glee Club continues a twenty year tradition of presenting the finest choral literature. It's not too late for students and other members of the Caltech/JPL community to sign up for membership in the Women's Glee Club. Auditions will be held in Room 1 of the Student Activities Center from 4-5 p.m. on Monday, October 3. Previous choral experience is a "plus" but not a requirement. Advanced vocalists have opportunities for solo and small ensemble singing, and voice lessons are available free of charge for all student members of the Glee Club. Regular rehearsals are held on Mondays from 7:30 to 9:30 p.m. and Wednesdays 5:00 to 6:00 p.m. Info: Monica Hubbard, Director at 356-6260 or 797-5912.

✓The Pasadena Foothill-Valley YWCA Rape Crisis Center offers self defense classes for women, survivor support groups and short-term therapy. Call 793-5171 for information.

✓There is a Weight Watchers at Work Program starting Thursday, Oct. 6 from Noon to 1 PM. Cost is \$120 for 11 sessions or \$108 if you have Cigna or Calif. Care insurance. For Registration forms and information call Toni Itano at the Staff & Faculty Consultation Center, 8360, before Oct. 4.

Dances and music of many nations is the *what*. Every Friday evening from 7:45 p.m. to 11 p.m. is the *when*. Throop Unitarian Church at 300 Los Robles at Del Mar is the *where*. You and all your friends that are interested in an atmosphere of friendship, relaxation and yet a challenge to your mind and feet is the *who* and *why* offered by the Pasadena Folkdance Co-op. The Co-op, a fifty year old club that has offered folks the opportunity to enjoy International Folkdancing, will continue that tradition throughout the month of October. To protect the wooden dance floor all are asked to use soft soled shoes. A \$1.50 contribution is requested from all participants. October 28-30 many Co-op members will participate in Folkdance Camp Hess Kramer. For more info on this camp call 310-478-6600.

CIT Guitar Classes for the winter term will meet on Tuesdays starting October 4 in SAC 1. Beginning classes will meet from 4:30 p.m. to 5:30 p.m.; intermediate classes meet 3:00 p.m. to 4:00 p.m.; advanced classes meet 5:30 p.m. to 6:30 p.m. Classical and Flamenco repertoires are explored but techniques transfer to other styles of guitar. Classes are free to Caltech students and other members of the Caltech community (space permitting). Undergraduates can receive 3 units of credit if they choose. The instructor, Darryl Denning, can be reached at 213-465-0881.

Coming Events

✓Caltech's Rideshare Fair '94 will be held on the East Patio of Keith Spalding Administration Building on Friday, September 30, 1994 from 11:30 a.m. to 1:30 p.m. Pledges will be taken to carpool, bike, walk, take the bus or van pool. Read the Commuter Services Newsletter for information on winning prizes. Call Caltech Commuter Services at x3203 for rideshare assistance.

Events and Notices

The 4th Annual Free Information Fair and LDWalkathon, a joint project of the Los Angeles Chapter of the Learning Disabilities Association of California and the Los Angeles Branch of the Orton Dyslexia Society will be held on Sunday, October 2, 1994 at Los Angeles Pierce College in Woodland Hills. Many exhibitors knowledgeable about Learning Disabilities, Dyslexia and Attention Deficit Hyperactivity Disorder will be available to share their expertise with those seeking information. Registration begins at 8:00 AM, The Free Information Fair opens at 9:00 AM. To receive a LDWalkathon brochure or request additional information please call 818-407-4111.

Please mark your calendars for October 15, 1994 and join the women and friends of the Pasadena Rape Crisis Center to Take Back the Night! This march is for and about women. Women will join together on the streets of Pasadena and Take Back the Night in a stand to end violence against women. The march starts at 6:00 p.m. The Crisis Center also offers monthly self defense classes, survivor support groups, and short-term therapy. For more information, please call 818-793-5171.

Amnesty International Group 22, Pasadena/Caltech announces its Annual "Rummage for Rights" Sale Sunday, October 2, 1994 at 1043 E. Del Mar Blvd. from 9:00 a.m. to 4:30 p.m. Proceeds from the rummage sale will be used to support Amnesty International's human rights activities. Donations of items to the sale will gladly be accepted, and are tax-deductible. Contact group coordinators Jim Smith (818-799-6810) or Martha Termaat (818-281-4039) to donate items for the sale or to obtain more information about the event.

The Child Educational Center presents the 1994 JPL Arts & Crafts Fair. There will be over 80 booths of hand-crafted goods, entertainment, food, and children's activities. THE JPL Space Museum will also be open during the Fair hours. Parking and admission are free. The fair will be open on Friday, October 14 from 3 p.m. to dusk and Saturday and Sunday the 15th and 16th from 9 a.m. to 5 p.m.. For more information, call 818-354-8720.

Club Announcements

✓The Caltech Environmental Task Force will meet on Monday, October 3 in Winnett clubroom #1 at noon. Join us in helping the Caltech community become more environmentally conscious, and encourage the administration to adopt policies that enhance the local and global environments. For further information, call Debbie Bradbury at 395-3630.

✓Caltech Swedish Club—The Caltech Swedish Club will meet at 3 p.m., on Sunday October 9, at 266 S. Michigan Ave. Anyone interested in Scandinavian culture or in speaking Swedish is welcome. For more information, contact Rustan or India Leino at (818) 584-7162, email rustan@cs.

✓Free Film Program—The Pasadena Public Library shows films every Wednesday afternoon at 1:30 p.m. in the auditorium of the Central Library, 285 E. Walnut St. The program for October is: Oct. 5—Where the Heart Is (89m); Oct. 12—White Fang (107m); Oct. 19—The Zoo Gang (96m); Oct. 26—Baby Boom (103m). For more information, call the Adult Services staff at (818) 405-4037.

✓Everyone is welcome to The Entrepreneur Club's first meeting of the year this Tuesday, October 4 at 7:30 p.m. in Winnett Clubroom #1. Refreshments will be served as we plan for this term's upcoming events such as the Barbecue on Saturday, 10/8 from 3 p.m. to 7 p.m. in the Braun North Field where there will be plenty of free food and games. For more info contact Jessica at X1028.

The Caltech Y has volunteered to participate in United Way's Community Care Day. We want to provide volunteer opportunities for staff, faculty, and students. We will be providing volunteers for special projects to help United Way agencies in your community. We will let you know where we will be holding our Event Kick-off Rally where there will be plenty of food, friends, and fun! The activities will take place on Saturday, October 8, 1994 from 8 a.m. to 4 p.m. Stop by the Caltech Y or call Athena at x6163 to sign up by Friday, September 30.

Fellowships and Scholarships

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

The Northrop Grumman Corporation is offering at least three \$3000 scholarships at Caltech for the 1994-95 academic year. Scholarships are available to all students (including freshman) enrolled full-time and majoring in electrical engineering, mechanical engineering, aerospace engineering, computer science/engineering, or manufacturing engineering. A GPA of at least 3.0 is required. Students must show evidence of a strong academic record and a career interest in the aerospace/defense industry. Applicants must be U.S. Citizens 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 21, 1994.

✓The Organization of Chinese Americans—Greater Los Angeles Chapter (OCA-GLA) is offering scholarships of up to \$1000 to students who have become involved in the Chinese American community. Scholarships will be awarded primarily on the basis of community or leadership activities in the community and on academic achievement. To be eligible to apply, students must: be of Asian-American heritage; be a resident of Los Angeles County; be a U.S. Citizen or Permanent Resident; and be currently enrolled in a college or university. (graduate students are also eligible) Applications are available in the Financial Aid Office and must be received at OCA-GLA no later than October 31, 1994.

The Los Angeles Chapter of the Data Processing Management Association (DPMA) is offering at least one scholarship for \$1000, provided by the Bert A. Monaghan Scholarship Fund. Eligible students must be majoring in Computer Science, must have filed a FAFSA application and have demonstrated financial need. Application forms and guidelines for additional requirements are available at the Financial Aid Office. Completed applications must be received at the Financial Aid Office at 515 S. Wilson no later than 5:00 p.m., Wednesday November 23, 1994.

The American Concrete Institute (ACI) is offering several awards. The Peter D. Courtois Concrete Construction Scholarships are two \$1000 awards for undergraduate study in concrete construction for the 1995-96 academic year. Eligible students must be enrolled at least half-time and must be seniors in 1995-96. The application, available at the Financial Aid Office, with all required supporting documents is due January 10, 1995. ACI Committee is also offering one ACI-James Instruments Student Award in the amount of \$800, for original student research on nondestructive testing of concrete. Applicants must submit a technical paper describing the research. The award is open to undergraduates or graduates, and the research work must have been completed within two years of the submission date. Completed technical papers must be received by ACI Committee no later than November 30, 1994 at the following address: c/o Dr. Allen Davis, STS Consultants Ltd., 431 South 300 East, Salt Lake City, UT 84111. ACI is also sponsoring three different competitions: the Concrete Cube Competition, the Concrete Egg Protection Device Competition, and the Concrete Projects Competition. For complete rules, call the ACI Education Department, at (313) 532-2600.

✓The Association of Former Intelligence Officers San Diego Chapter 1 announces the establishment and offering of the Annual Lieutenant General Eugene F. Tighe, Jr., USAF, Memorial Scholarship. The scholarship is in the amount of \$1000. It will be awarded based on the judged quality and suitability of a 1,000-1,500 word essay on the topic of: What role should the United States Government's Intelligence Community play in supporting American business interests worldwide? Completed applications/essays must be postmarked no later than December 15, 1994.

✓Glamour Magazine announces its 1995 Top Ten College Women Competition. Scholarships are in the amount of \$1000. Winners also receive national recognition in Glamour's October 1995 issue, and the opportunity to meet with top professionals in their fields. Women who are full-time juniors for the 1994-95 academic year are eligible to apply. Applications are due January 31, 1994.

Milton Bradley's Pass the Pigs, the game that uses pigs as dice, is sponsoring a national search for the biggest "pigsty" on college campuses. The contest is open to college students across the country; entrants must be nominated by their RA's. The grand prize winner will receive \$1,000, a professional room cleaning, an on-campus party for 100 of his/her closest friends and a Milton Bradley prize pack. The nominator of the grand prize winner will receive \$1,000. To participate, contestants must send a 4x6 photo and a brief paragraph describing why they're proud of their "pigsty." Entries must be postmarked by October 10 to Pass the Pigs' Pigsty c/o Fleishman-Hillard, Inc. 1330 Avenue of the Americas NY, NY 10019. Don't forget to have the RA sign the nomination.

The Howard Hughes Medical Institute will be awarding 80 fellowships for full-time study towards a Ph.D. or Sc.D. degree in various biological sciences. Fellowships provide an annual stipend of \$14,500 and a \$14,000 annual cost-of-education allowance. The fellowships are intended for students who have completed less than one year of graduate study toward M.S., Ph.D., or Sc.D. degrees in biological sciences. The application

deadline is November 4, 1994. For copies of the application or more details, write Hughes Fellowship Program, The Fellowship Office, National Research Council, 2101 Constitution Avenue Washington D.C. 20418 USA; fax 202-334-3419; email infofell@nas.edu; phone 202-334-2872.

The Nuclear Regulatory Commission Fellowship Program provides funds for students interested in pursuing master's degrees in areas such as health physics, nuclear engineering, and specialty engineering disciplines with emphasis in instrumentation and control systems, materials science, materials engineering, or metallurgy. Fellows must work at the NRC for a minimum of nine months prior to beginning graduate school, and must agree to work for the NRC for four years following satisfactory completion of a two-year master's program. The fellowship provides full payment of tuition, fees, and books, as well as a monthly stipend of \$1,800. A \$5,000/year cost-of-education allowance is paid to the academic program in which the fellow is enrolled. For applications, contact Rosa Etta Cox at 615-576-9279 or Tom Richmond at 615-576-2194. Applications are being taken through January 23, 1995 and awards will be announced in April 1995.

Applications are now being accepted for three postdoctoral fellowships sponsored by the U.S. Department of Energy's (DOE) Office of Health and Environmental Research. The Global Change Distinguished Postdoctoral Fellowships offer research opportunities related to the U.S. Global Change Research Program, which addresses the following strategic priorities: observation and data management, process research (including physical, chemical, geological, biological, economic and social), integrated modeling and prediction, and assessment. Up to seven new awards will be made with first-year stipends of \$35,000. The application deadline is December 15, 1994. Applicants must have received a doctoral degree or equivalent in an appropriate discipline after March 31, 1992. The Alexander Hollaender Distinguished Postdoctoral Fellowship Program offers fellowships in the energy-related life, biomedical, and environmental sciences as well as other scientific disciplines. Up to 10 new fellowships will be awarded with first-year stipends of \$37,500. The deadline for the fellowship program is January 15, 1995. Applicants must have received a doctoral degree or equivalent in an appropriate discipline after April 30, 1993. The Human Genome Distinguished Postdoctoral Fellowships offer up to five new awards with first-year stipends of \$37,500 in disciplines of biology, chemistry, physics, engineering, mathematics, and information science. The deadline for the applications is February 1, 1995. Applicants must have received a doctoral degree or equivalent in an appropriate discipline after April 30, 1992. All awards will be made by May 1995. For applications, write to Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, Tenn. 37831-0117, or call 615-576-9975.

The DOE is also offering undergraduate students the chance to spend ten weeks next summer collaborating with federal scientists on the cutting edge of research and development, through its Summer Research Participation Program (SRP). The program is managed by the Oak Ridge Institute for Science and Education and is for sophomores, juniors, and seniors majoring in engineering, physical and life sciences, mathematics, computer science, or social sciences. The deadline is January 17, 1995. Certain travel expenses and a stipend will be paid. For applications or information, contact Pat Pressley at (615) 576-1083 or the Student Research Participation Program, Science/Engineering Education Division, Oak Ridge Institute for Science and Education, P.O. Box 117, Oak Ridge, TN 37831-0117.

✓ denotes a new announcement.

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