



## Martin Luther King Remembered

by William Lucy

Monday, January 20th marks the first official observance of Martin Luther King Day by the federal government. Banks, schools and public offices will be closed in more than 40 states, and millions of Americans will enjoy an extra day off. Before then, it's worthwhile to take a minute to reflect on what this new holiday is all about.

On Martin Luther King Day we are honoring an American who rejected violence in all its forms, who fashioned non-violence into a potent weapon in the nation's never-ending struggle for peace and social justice.

Trade unionists, and particularly members of the American Federation of State, County and Municipal Employees, have special cause to honor Dr. King's memory. In 1968 he was in Memphis, Tennessee to put his moral strength on the line for AFSCME sanitation workers who were struggling to achieve dignity as blacks, as workers, and as citizens. In Memphis, non-violence was met with an assassin's bullet, but the spirit of Dr. King's non-violence triumphed.

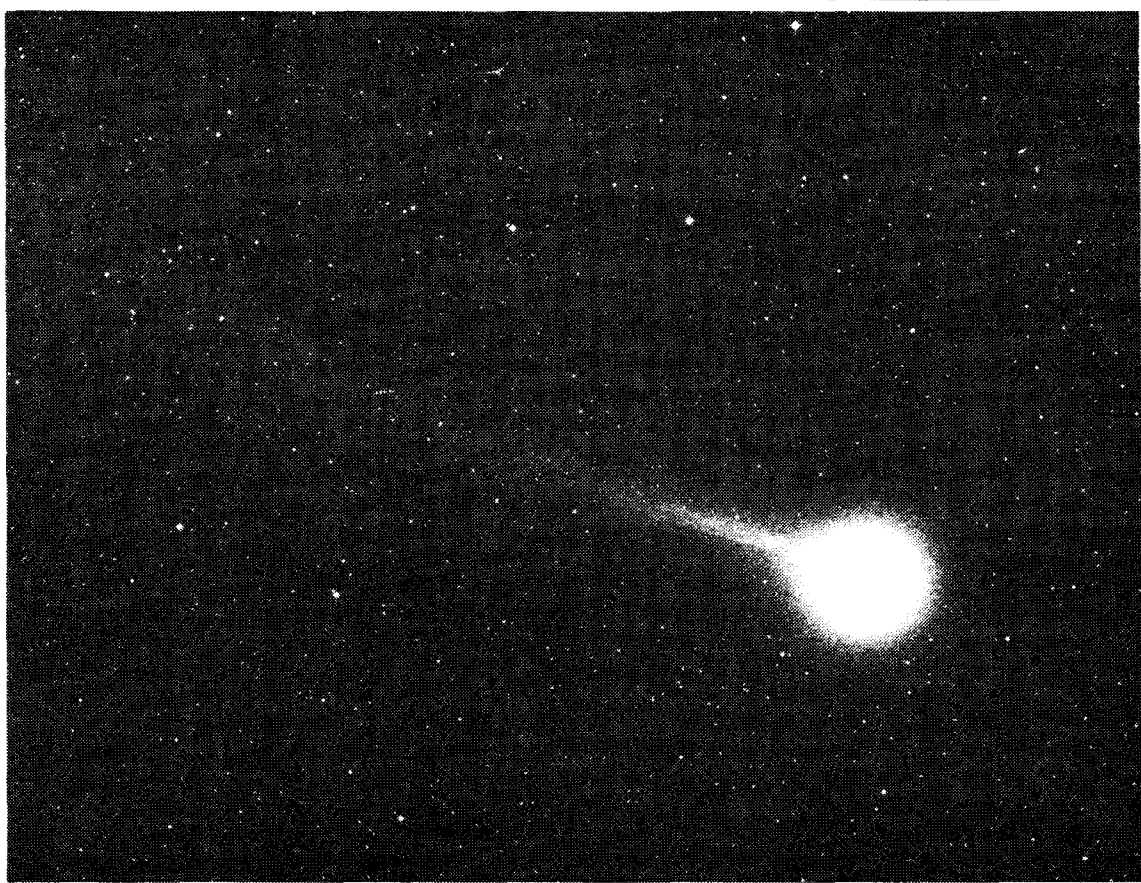
There are some who still see Dr. King as having been the leader of a narrow cause, as having been the spokesman for a single group, but this sadly misreads his life. Dr. King's message wasn't "black." It was resolutely American. He had an unshakeable faith in basic human goodness, and with exceptional courage he preached the spirit of love and reconciliation, preached his dream of racial and economic justice in the belief that injustice or oppression in any form, affecting anyone, is a threat to all.

For a time, Dr. King epitomized the civil rights movement. Under his leadership, the civil rights movement led to greater access to public facilities, housing, employment, and participation at all levels of society for blacks and other minorities. The protests and other events he organized began a trail that led to such landmarks as the Civil Rights Act of 1964, the Voting Rights Act of 1965, the Fair Housing Act of 1968, and the Educational Amendments and the Equal Employment Opportunity Amendments of 1972.

Inspired by these examples, other disenfranchised groups have struggled to secure their own rights. Hispanics, Native Americans, women, the aged, the poor and the handicapped: all have challenged the prejudices and stereotypes that had deprived them of full participation in our society.

Certainly no other American more than Dr. King has so successfully wedded the American political ideal of equality in the eyes of the state with our religious belief of equality.

continued on page 3



## The Best Comet Yet

The most detailed photograph yet of Halley's Comet has been obtained by JPL astronomer Eleanor Helin with the 48-inch Schmidt Telescope at Caltech's Palomar Observatory. The photo shows heretofore unrevealed features of the comet's ion tail, the billowing stream of electrified gases, carbon monoxide, and water vapor pushed out by the solar wind. The comet's other tail, called the dust tail, is pushed out by the force of sunlight on the comet.

According to Ray L. Newburn of JPL's International Halley Watch, the photo taken by Helin at 7:54 Pacific Standard Time on December 13 shows for the first time the full range of features characteristic of a well-developed  $CO^+$  ion tail. These include tail rays, condensations, a kink, a general helical structure (which shows only as a waviness on the print) and perhaps a disconnection event. The print from the original 20-minute exposure shows about 6 degrees of a tail more than 9 degrees in length.

When the photograph was taken, the comet was about 118 million kilometers (74 million miles) from the earth, and about 18 million kilometers of tail showed on the photograph. Another photograph, taken with the 18-inch Schmidt Telescope at Palomar, revealed the full tail to be more than 25 million kilometers long.

## Ingersoll on Venus

by Jim Bell

Every so often, either at 4:00 a.m. or some other similarly ungodly hour, I put down what's left of my homework assignment, stare into my cold cup of chamomile, and wonder what I am doing at this school. In this week's Watson Lecture, "Venus Exploration with the Soviets," Caltech Professor Andrew Ingersoll helped provide me with the answer once again: if you are into Planetary Science, Tech is where it's at.

Dr. Ingersoll recounted to the large audience at Beckman the story of four days last June when scientists from the U.S., USSR, and France collaborated on an exciting mission to probe the atmosphere of Venus. His story, presented in diary format [Dr. Ingersoll actually does keep a fairly extensive diary of his many travels and scientific endeavors], actually began in 1982, after, as he described it, the "roller-coaster ride" of the Voyager and Pioneer missions to Jupiter and Saturn had ended. He and several colleagues convinced NASA officials that the joint US-Soviet-French mission was worthwhile and obtained approval even though relations between the Soviets and Americans

were shaky [recall the KAL airline disaster].

The U.S. role in the mission was originally planned to be minimal. Using America's Deep Space Network of radio antennae worldwide, we would help track two balloons, dropped four days apart from each other, into the upper atmosphere of Venus. We would then supply this "raw bit stream" to the Soviets. They would

then decode the stream and share the data with us and the French.

Previous missions to Venus, mainly by the Russians, involved either monitoring the planet photographically from orbit, or hurtling a projectile-like probe through the atmosphere, hoping that it would survive the intense pressures and temperatures. The idea of using balloons instead of

continued on page 3

## Harlan Ellison to Speak

by Wesley Boudville

The Southern California Skeptics and the Caltech Y are please to present as their January speaker the award-winning author, essayist and lecturer Harlan Ellison, who will discuss "Writing Fantasy to Promote Reality."

Ellison is a noted science-fiction and screenplay writer. His books include *Approaching Oblivion* and *The Beast That Shouted Love at the Heart of the World*. Among his award-winning stories is "A Boy and His Dog," which was made into a (bad) movie. He wrote the script for several Star Trek episodes, including "The City on the Edge of Forever."

Ellison worked for a while as the creative consultant to the new TV series "The Twilight Zone." (He recently quit over censorship problems.) According to one newspaper interview, Ellison is convinced that we are at a "particularly perilous time in our history," when science is under attack by the forces of fear and

superstition. A show such as "The Twilight Zone," he believes, "can be a very powerful weapon" against the "obscurantism and illogic" be-

ing preached by self-styled ministers up and down the cable-TV spectrum. "What you see on

continued on page 5



photo by Peter Cathro

Noted Author Harlan Ellison.

## ASCIT Nominations

Nominations for ASCIT president and treasurer will be opened next Wednesday, January 15, and will close at 5:00 p.m. on Tuesday, January 21. Nominations should be sent to Lisa Cummings care of the

Dean's office (102-31). Anyone who would like to know more about the positions of president or treasurer should contact Joy Watanabe (Ri 32) or Dave Bruning (Pa115).





The Caltech Y once again supplied the campus with food, drink and entertainment for the weekend commencing finals week. Here, Wesley Boudville dispenses the goods. photo by Kent Noble

# King

from page 1

He shared that dream in a remarkable speech of August 28, 1963 at a massive rally in Washington, D.C. for peace and freedom. He told us he dreamed that one day in Georgia, and elsewhere, the children of slaves and slave-holders would "sit down together at the table of brotherhood," that the State of Mississippi would be "transformed into an oasis of freedom and justice," that one day in Alabama, white children and black children would join hands and "walk together as sisters and brothers."



South Chester and 1170 East Del Mar).

If you reside in an On-Campus Undergraduate House (North and South Complex and Annex), you should now call Physical Plant directly (Service Desk, extension 4717) with your maintenance concerns. Students who are reporting a maintenance problem in a student room are expected to provide Physical Plant with access to their room.

If you live in an Off-Campus Undergraduate House, Undergraduate Apartment Complex, or Marks House you should continue to report maintenance concerns to the Housing Office (x6175).

If you have any questions concerning these new procedures, feel free to call Housing Director Nancy Carlton (x6174) or Dick Barker in Physical Plant (x 4767).

He did not limit his dream to any particular group or place, for he urged that we let freedom ring "... from every village and every hamlet, from every state and every city."

Now, 57 years after his birth, 22 years after the "I have a dream" speech, and 17 years after his death, the struggle goes on. Economic and social misfortune stifles the hopes of millions of Americans; human rights remain in jeopardy here and abroad, and the threat of war and conflict shadows the world.

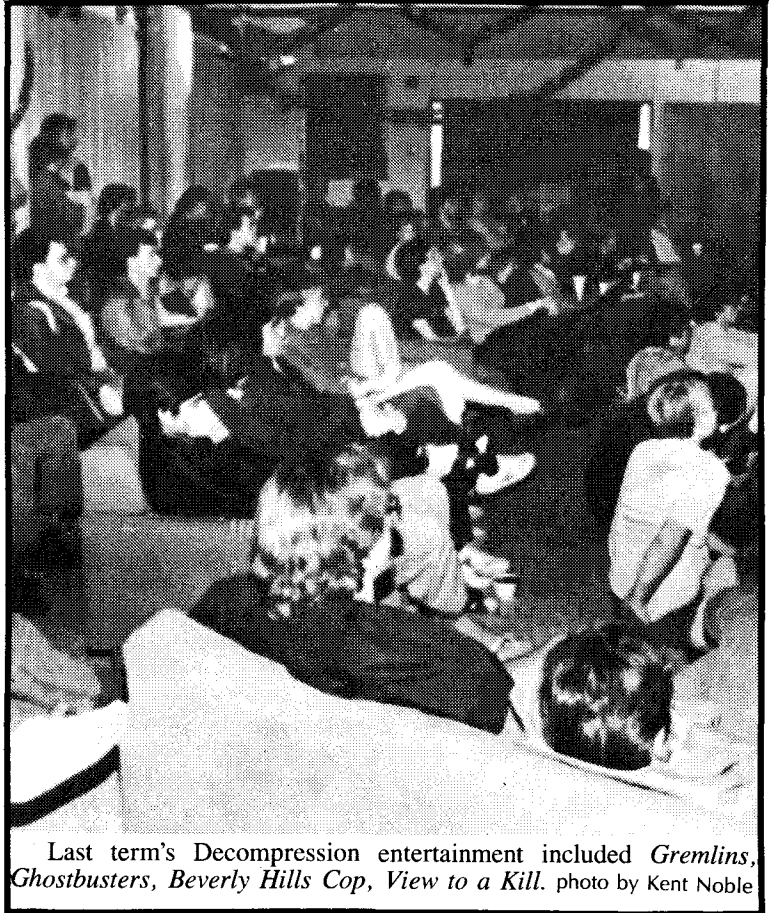
But at least one day of the nation's calendar is now set aside to honor the belief that non-violent struggle, on behalf of all people—whatever their race or creed or station—is a noble American cause.

[Mr. Lucy is an officer of the AFSCME, and was a close associate of Dr. King and worked with him during the 1968 Memphis strike. Our thanks to The National Forum for allowing us to reprint this commentary.]

## Housing Office Denies Responsibility

In order to streamline operations and provide better maintenance service to the Caltech community, the following reallocation of maintenance resources is effective immediately. Physical Plant will now be directly responsible for the maintenance of all On-Campus Undergraduate housing facilities (North and South Complex Houses

and Annex). The Housing Maintenance Department will continue to handle maintenance of the On-Campus Graduate Houses (including Marks House), the Catalina Graduate Apartment Complex, the Off-Campus Undergraduate Houses, all lease properties and the two Undergraduate Apartments (150



Last term's Decompression entertainment included *Gremlins*, *Ghostbusters*, *Beverly Hills Cop*, *View to a Kill*. photo by Kent Noble

## Ingersoll

from page 1

projectiles was the brainchild of Professor Jacques Blamont of the University of Paris. The balloons, weighing about 20 kg, were added at the last moment to the much larger Soviet VEGA mission to the surface of Venus and on to Halley's Comet. The advantages of using balloons are obvious: first, they are trackable from earth, thus leading to some understanding of horizontal wind fields. Secondly, since they float at about 54 km from the surface, the amount of "bobbing" by the balloon leads to direct inferences about the vertical wind fields. Thus, all three components of the winds on Venus can be fairly accurately determined for the areas the balloons fly over. Since Venus' winds rotate some 50 times faster than the planet below them, understanding the complete wind field will hopefully shed some light on the role of eddies and other associated atmospheric phenomena

in maintaining this superrotation. For example, there must be some mechanism which continuously pumps momentum into the atmosphere to account for the lack of significant frictional losses to surface features. Knowing the complexities of the wind field might reveal this mechanism.

Another aspect of the balloon mission was to learn more about the thermal profile of Venus' atmosphere. Accurate temperature and pressure profiles were obtained, and it was learned that Venus' carbon dioxide atmosphere and sulphuric acid clouds may act, oddly enough, as a "refrigerator" of sorts, extracting heat from the colder regions and somehow adding that heat to the warmer regions. Once again, this would require an extra energy mechanism similar to that alluded to above.

In the beginning of the mission, Dr. Ingersoll admitted that several other members of the American team, headed by Bob Preston of JPL, had doubts about whether the Soviets would indeed share the coded information with the U.S. However, these fears proved to be totally unfounded. Indeed, by the time the mission was underway, American scientists were being treated as near "full partners" in the project (even though NASA only contributed about 1 per cent of the the money for the mission). Initial transmitter tuning and radio tracking software problems were cleared up and the mission proceeded successfully. Data analysis is still being carried out, but one interesting fact has emerged immediately: both the Americans and the Russians came away with respect for each other's capabilities, and a renewed spirit of "building bridges" between the two countries— but political and cultural as well.

It makes it just a little more worthwhile to reheat that cup of chamomile and trudge on...

BUY YOUR  
CALTECH CARD AND SAVE

# CALTECH'S BURGER CONTINENTAL

- GOOD FOOD
- REFILLS ON SOFT DRINKS AND SALAD BAR
- UNDERGRADUATES PLEASE ASK FOR YOUR SPECIAL MEAL RATES
- YOUR HOST FOR ALL YOUR NEEDS

FOR THE ENTIRE MONTH OF JANUARY

A FREE ROOT BEER FLOAT TO ALL JUNIORS, SENIORS, AND GRAD STUDENTS

FACULTY, GRAD STUDENTS, ATTEND!

MONDAYS AND TUESDAYS ARE BEER DAYS. HALF PRICE ON BEER.

B.C.: ON LAKE AVENUE

1/2 BLOCK NORTH OF CALIFORNIA

# TARANTINO'S \$2 OFF ANY LARGE PIZZA — with 1 item or more.

Present Caltech ID and get 20% off all other items.

784 E. Green Street, Pasadena  
(818) 796-7836

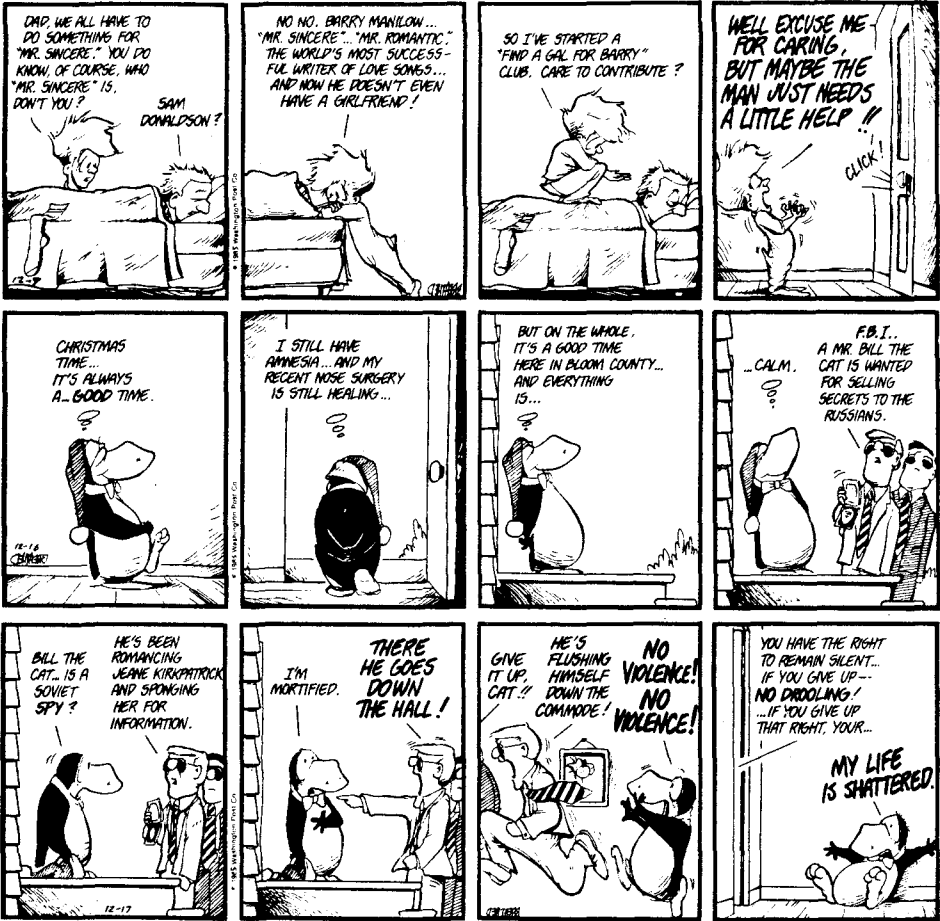




ENTERTAINMENT

BLOOM COUNTY

by Berke Breathed



Movie Review

# Everything You Wanted To Know About Sting

by Doug Gray  
*Bring on the Night*  
Beverly Cineplex

On the back of the jacket for his *The Dream of the Blue Turtles* album, Sting writes, "The contribution and commitment of all those involved made it far less an indulgent and personal statement than a statement about how well people can work together without diluting or compromising ideals. We also had a lot of fun." That is the essence of the recent film, *Bring on the Night*, directed by Michael Apter. I hesitate to call it a documentary because they are so often such ho-hum affairs. This is not just a film about music; it is a very musical film. And it's a lot of fun.

Having declared that racism had killed popular music, Sting decided to try to break down the barriers set up by rigid classifications such as "rock," "jazz," and so forth. He assembled a group of black jazz musicians (drummer

Omar Hakim, saxophonist Branford Marsalis, bassist Darryl Jones, keyboardist Kenny Kirkland, and backing vocalists Janice Pendarvis and Dolette McDonald) as the band on his "solo" project, with the idea that it would be a real band, run democratically.

The film is set in Paris, where the band is staying in a 17th-century mansion as they iron out their parts for the first concert on their tour. There's lots of music and pretty scenery, amusing comments from everyone involved, and yes, even a rendition of the *Flintstones* theme.

There are two things in the film I cannot call pleasant; one is manager Miles Copeland and the other is the segment showing the birth of Sting's son Jake. The audience is spared little of the gruesome reality, and don't say I didn't tell you so. I'm sure Sting thought it was beautiful and "profound," as he called it (surely they

wouldn't do this to change the film's rating), but I don't think most people are prepared to view childbirth and not be taken somewhat aback. Otherwise, the film is a pure pleasure to see and hear.

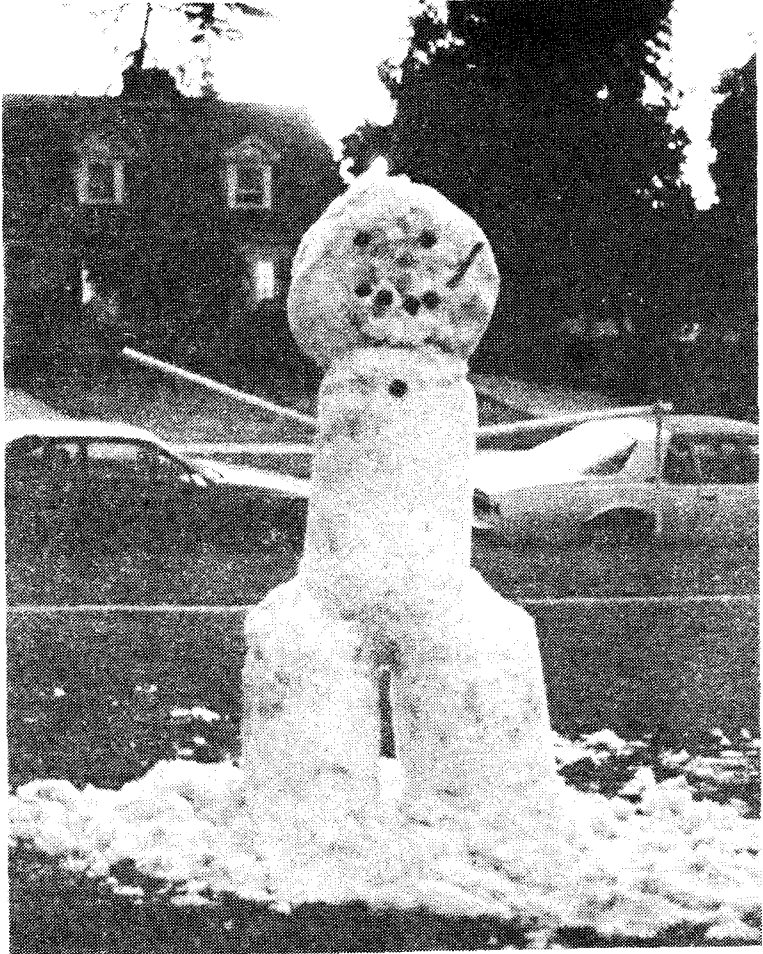
Although all the band members are highlighted, this is still mostly a film about Sting. After all, he is perhaps the most charismatic figure in pop culture. He knows it, too, and if his ego bothers you, then you will probably hate his guts by the time the film is over, even though he does have a few moments of near-modesty. On the other hand, if you like his music at all, I'm sure you'll like it better afterwards.

There is a lot of talk about jazz surrounding this project, but Sting claims, "What we have made... has nothing to do with jazz." True, there is more to the project than that, but this strikes me as a very strange thing for him to say. He is a jazz musician himself. Whatever one cares to call it, though, I happen to think the music in *Bring on the Night* is great. As one of the backing singers put it, the music works because it is "both cerebral and visceral" (Sting is not the only former English teacher in the band).

After seeing *Bring on the Night*, I'm really kicking myself for having missed Sting at the Greek. If you missed out too, then do not miss this film. It's energetic; it's entertaining; the idealistic spirit runs high; the musicians are all talented, and the music is sublime. In short, I loved it.



"Same snow, later."




"A bunch of Lloydies were bored during finals week, went up to the mountains, got some snow, and put it on the Master's lawn."

photo by Rod Van Meter

photo by Kent Noble

Pasadena Scientific & Technical Books

SPECIALIZING IN ALL SCHOLARLY & PROFESSIONAL BOOKS & SPECIAL ORDERS



FEYNMAN LECTURES  
3 VOLS. (PAPERBACK)  
25% OFF

1388 E. WASHINGTON BLVD  
PASADENA, CA 91104  
NEAR HILL & WASHINGTON  
(818) 794-4499

VISA  
&  
MC

Edwards  
Typing Service  
(213) 660-4949  
\$1.50 per page  
Overnight Service  
Discounts to Caltech  
Community

Sam Custom Tailor  
P M SAMSON  
49 NORTH ALTADENA DRIVE  
PASADENA CA 91107  
818-793-2582

ALTERATIONS  
RESTYLING  
TAILORING  
INVISIBLE REWEAVING

Special rates for Caltech/JPL community.

 GOLDEN GLOBE  
PARIAN TRAVEL  
Caltech Officially Approved


Most courteous, economical and efficient service for your **official** and **personal** travel needs. Free service to you.

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

**(818) 577-8200**  
468 S. Sierra Madre Boulevard, Pasadena

THE HAIR CUTTERS

HIS AND HERS  
OPEN EVENINGS

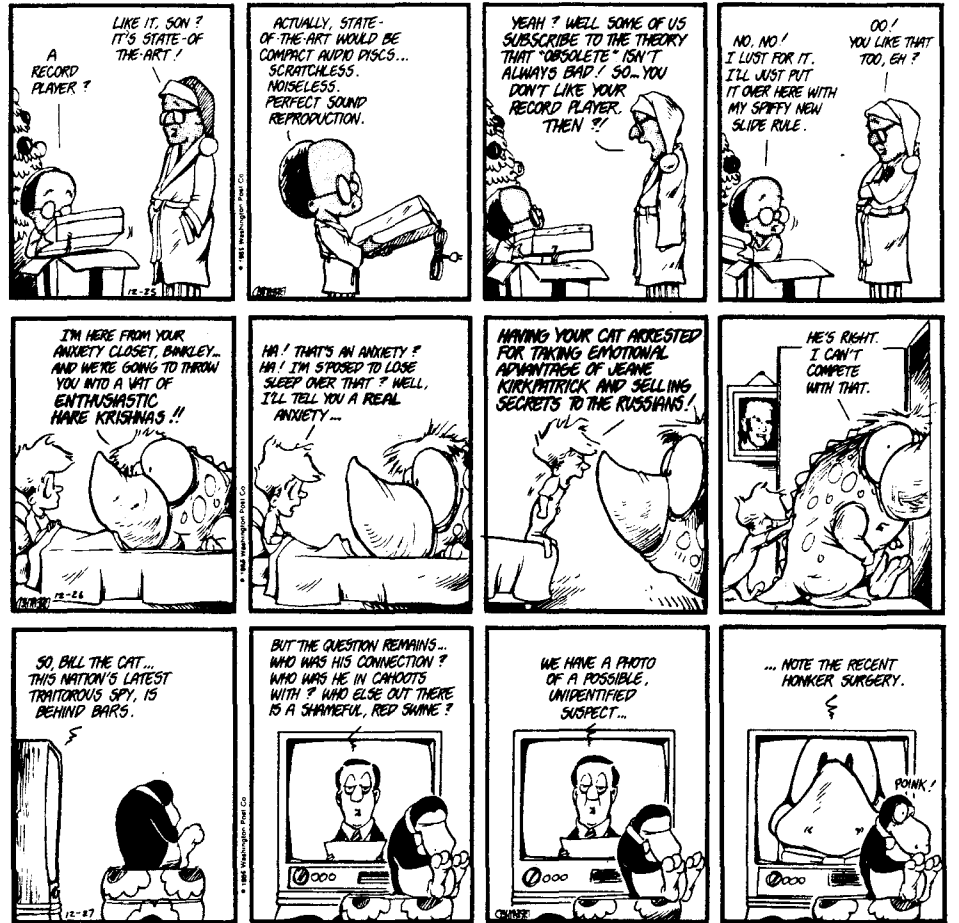


449-6967 449-1022

\$3.00 Discount for Caltech students with this ad

**1009 E. COLORADO PASADENA**  
PARKING IN REAR

ENTERTAINMENT



A member of the Pasadena City Council told a member of the Caltech Amateur Radio Club that "it sure would be nice if some Caltech students made this [hideous rose at left] disappear. I'd even write a note saying it was OK." Just in case you were wondering...

Vacation

from page 5

simple somethings, but it sure ain't pleasure.

It didn't help that it was actually the Cotton Bowl, though it explained why I hadn't recognized any of the buildings. I didn't really recognize much when the Rose Bowl Parade did come on, for that matter, but then, I didn't really care.

Things got better. Scott came by and removed the empty beer cans from my sight (these were from before the party). The Sehon family mom came and fixed breakfast and dispensed aspirin. Scott was even nice enough to cover up his "Stroh's Weighlifting Team (12 oz. curls)" T-shirt.

We saw a float memorializing Famous Aircraft of Texas History (whewee!), a diet pill commercial with subtitles (and I thought I was being clever turning down the

sound), and, of all things, the Topeka High School marching band (of course, Lawrence's is better, but none of you care anyway, do you?).

Then the Tom and Jerry cartoons came on, and life was beautiful again.

But I have digressed. Other things happened. I put my ice skating course (1st term P.E.) to good use by going skating with an old friend. In the line of work, I was introduced to one of the newer, friendlier personal computer, one that tries to make you enjoy being ignored, abused, and thwarted at every turn. Two other guys from work and I captured the high score on a *Trivia Whiz* vidgame at a local bar, category of sex. There was other drinking, carousing, hell-raising and generally stupid behavior, and then there was Christmas.

Christmas was quite nice for

continued on page 9

photo by Kent Noble

## Comic COLLECTIBLES

**CLIP & SEND W ORDER**

1. PENGUIN LUST T-SHIRT	S M L XL \$9.95	1
2. PENGUIN LUST JERSEY	S M L XL 11.95	2
3. BLOOM COUNTY T-SHIRT	S M L XL 9.95	3
4. BLOOM COUNTY JERSEY	S M L XL 11.95	4
5. LOOSE TAILS BOOK	6.95	5
6. TOONS FOR OUR TIMES, BOOK	6.95	6
7. SMALL STUFFED OPUS DOLL, 7"	10.00	7
8. LARGE STUFFED OPUS DOLL, 11"	18.00	8
9. BILL THE CAT T-SHIRT	S M L XL 9.95	9
10. SITTING OPUS T-SHIRT	S M L XL 9.95	10
11. DON'T BLAME ME T-SHIRT	S M L XL 9.95	11

**CLIP & SEND W ORDER**

12. COMPUTER KID T-SHIRT	S M L XL 9.95	12
13. PENGUIN DREAMS, BOOK	6.95	13
14. YUPPIE STUFFED OPUS, 11"	20.00	14
15. GIANT STUFFED OPUS, 18"	45.00	15
16. STEVE DALLAS T-SHIRT	S M L XL 9.95	16
17. ACK (BILL THE CAT) T-SHIRT	S M L XL 9.95	17
18. IN PENGUIN LUST NIGHTSHIRT	1 SIZE FITS ALL 12.95	18
19. PENGUIN LUST SWEATSHIRT	S M L XL 19.95	19

**PLUS \$1.50 PER ITEM**  
—postage & handling  
**GRAND TOTAL** \_\_\_\_\_

**More**

**Comic COLLECTIBLES**  
from ...

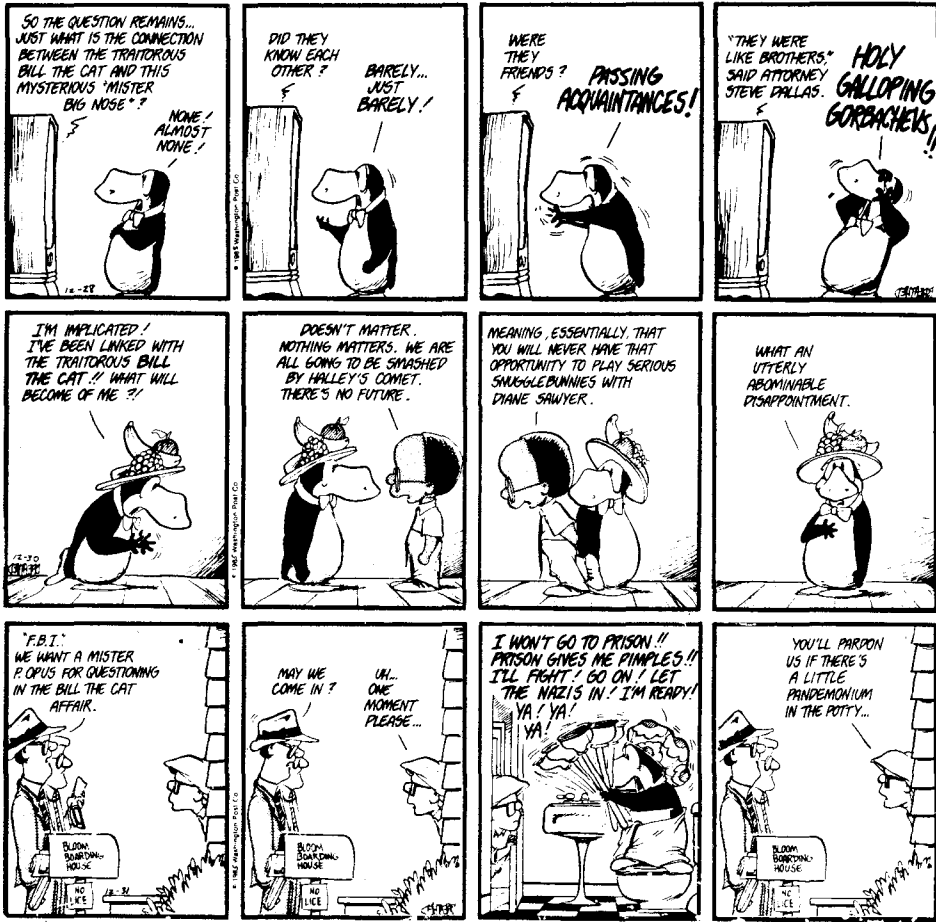
**LIN-TEX/CAL**  
5446 Hwy. 290W, #301  
Austin, Texas 78735  
PHONE ORDERS WELCOME  
(512) 892-4870  
PLEASE ALLOW 4-6 WEEKS FOR DELIVERY.

U.S. Department of Health & Human Services

# TEST YOUR STRENGTH.

**QUITTING. IT COULD BE THE TEST OF YOUR LIFE.**

# ENTERTAINMENT



## Review

# Barbara Allen

by Mike Pettersen

Students who were lucky enough to have returned early from winter vacation might have had a hard time finding seats at the performance of Barbara Allen in Dabney Lounge on January 5. A crowd of over 200, predominantly blue-haired, spilled over the balcony, ransacked classrooms for chairs, and finally sat on the steps outside the hall.

Who induced so many people to sit swinging their legs, precariously balanced atop the stack of platforms at the back of the hall? Ms. Allen, a native Pasadenan, has taught on the faculty of Stanford and UC Santa Cruz, and is currently a Resident Tutor at Harvard. A finalist in the 1983 Artistic Ambassador Piano Competition, she also spent a year in Munich on a piano fellowship.

Ms. Allen's program began with the *Italian Concerto* of J. S. Bach. Is it possible that since the appalling act of wanton destruction last summer the tone of the Dabney piano has become muddy? Ms. Allen valiantly played with great brilliance, but I missed the perfect clarity this piece has on a harpsichord.

The second selection was Beethoven's *Waldstein Sonata*. Ms. Allen's presentation of the first movement brought applause from the audience, but in the third movement she gave her best expression of Beethoven's power.

The climax of the program was Modest Moussorgsky's *Pictures at an Exhibition*. Here Ms. Allen truly demonstrated her expressive abilities, painting Victor Hartmann's pictures and Moussorgsky's love and grief with her tone colors. Even the little old lady from Pasadena had to smile at the Ballet of the Chicks. I saw her. The Great Gate of Kiev brought the audience to its feet, and Ms. Allen played a Schubert waltz for an encore.

The Dabney Chamber Music series regularly brings a wide variety of talented performers to campus. The Lounge is only a few steps from home (or lab); don't miss this opportunity to enjoy a Sunday afternoon. But come early.

# MAKE THINGS HAPPEN

Engineers and scientists at Northrop Corporation know how to make things happen with advanced technology. Applying their own curiosity and the most sophisticated systems and equipment available, our technical professionals are given the creative freedom to challenge conventional assumptions. To find new techniques and systems to integrate diverse technologies. To shape the future development of new and emerging technologies.

Northrop is a world leader in aerospace and electronics. Many of our recent college graduates are involved with some of the most critical technologies: artificial intelligence; avionics; guidance and navigation; sensors and signal processing; remotely piloted aircraft; data processing; integrated flight control and propulsion. And hundreds of other advanced programs and products.

As our business grows, we're finding more places for young professionals who want to make things happen. If your background is engineering, computer science, physics or math, we'd like to learn about you. Find out when our representative will be on your campus by visiting the placement office. Or write us directly.

Northrop Corporation, College Relations, Dept. CN S-86, 1840 Century Park East, Los Angeles, CA 90067.

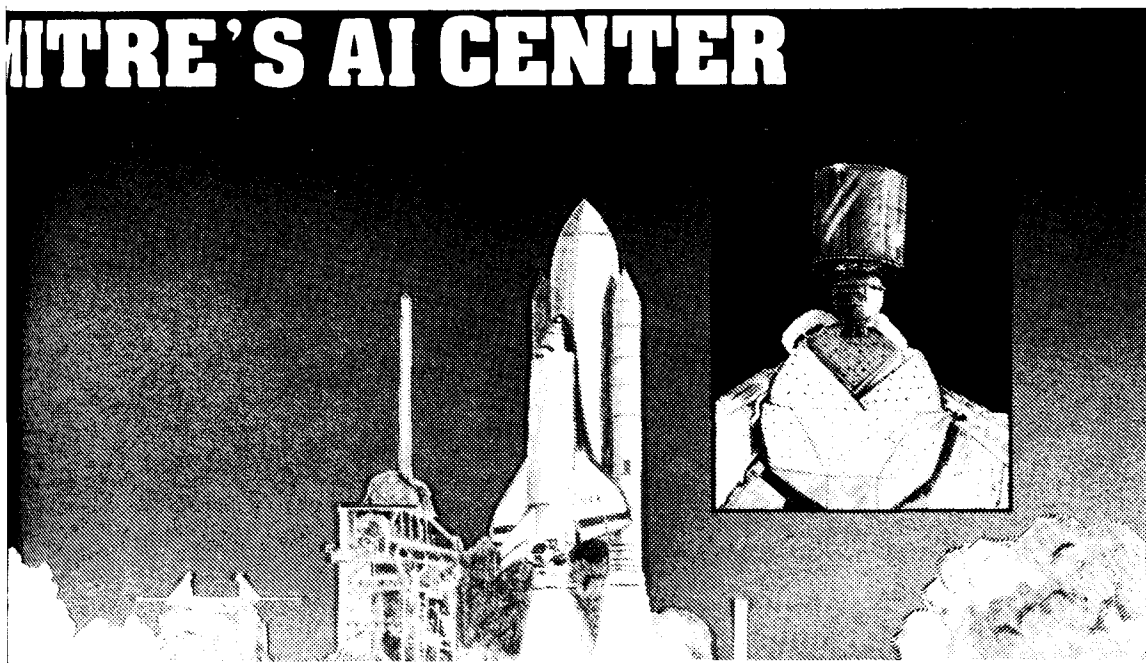
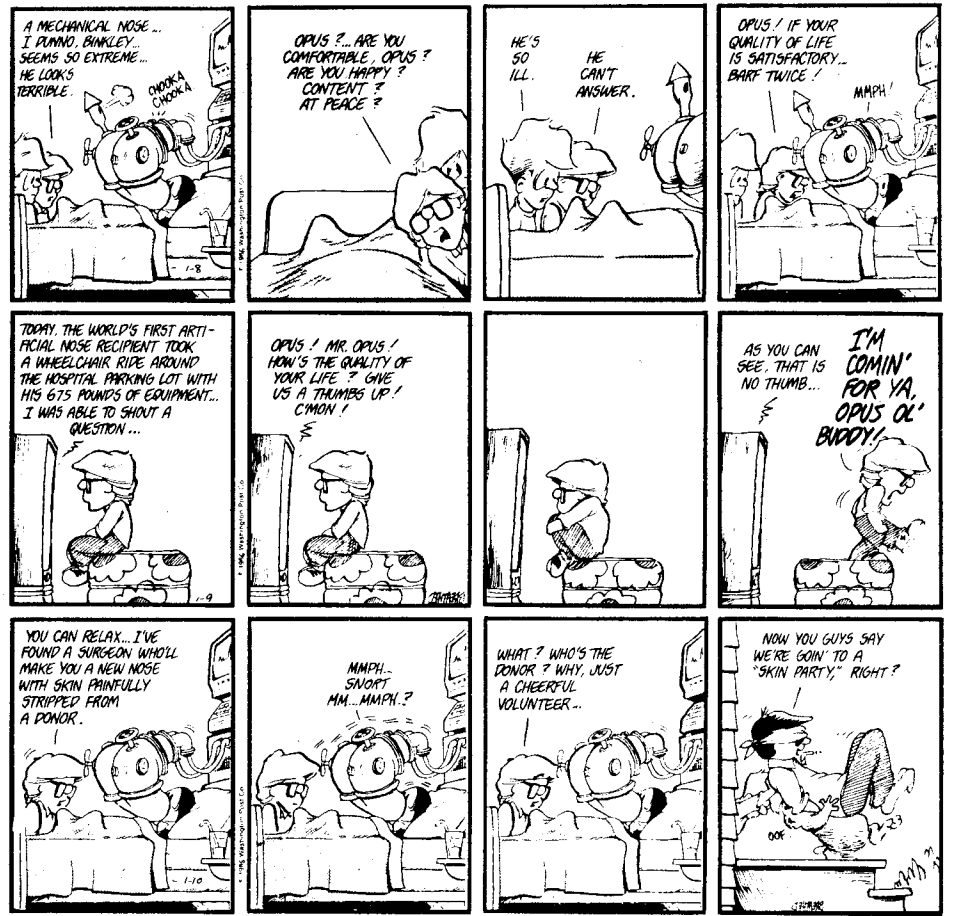
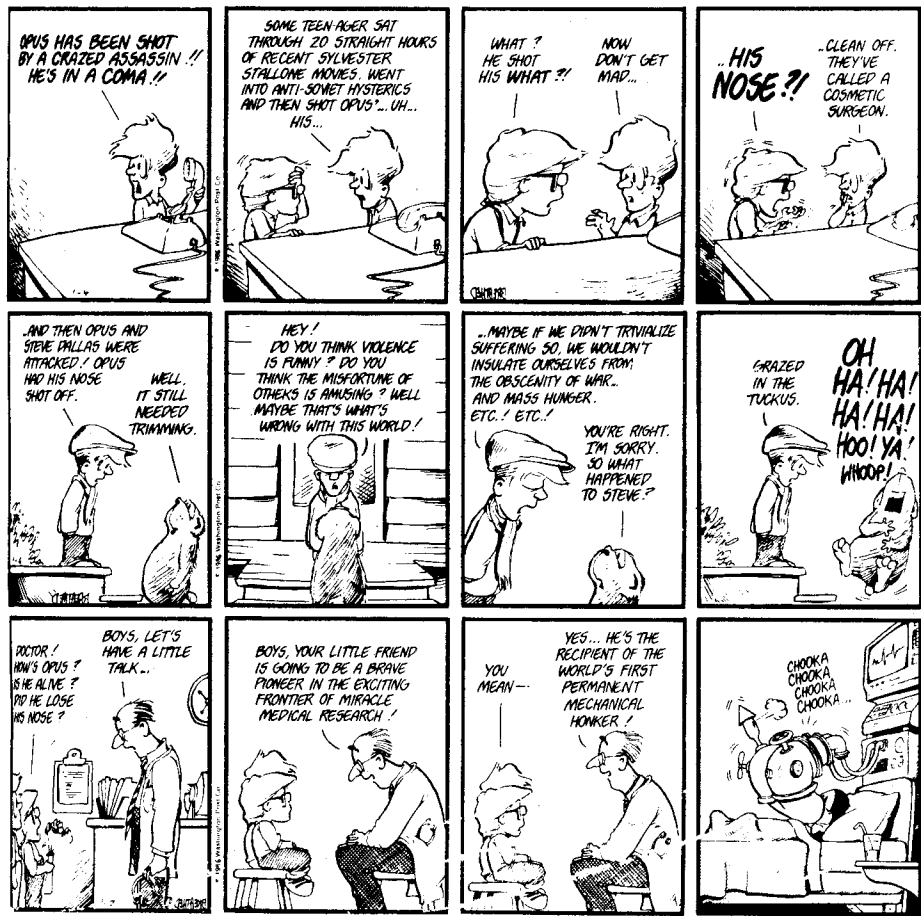
**PROOF OF U.S. CITIZENSHIP REQUIRED.** Northrop is an Equal Opportunity Employer M/F/H/V.



**NORTHROP**  
Making advanced technology work



ENTERTAINMENT



The MITRE Corporation has established an Artificial Intelligence Technical Skills Center to serve as the corporation's central AI research, development and technical consulting resource. MITRE engineers and scientists were pioneers in automatic symbol manipulation 20 years ago and today we are recognized as one of the nation's leading AI organizations with a staff of over two dozen experts utilizing multi-million dollar resources featuring 15 Symbolics LISP machines networked to four VAX 780s.

MITRE serves as C/I Systems Engineer for the U.S. Air Forces' Electronic Systems Division and other government clients. Our AI programs range from primary research such as developing tool sets to automatic programming, automatic repair and redundancy and to expert systems. Expert systems MITRE has developed include NASA space shuttle fuel loading and scheduling systems for crew activities and payload preparation; a naval maneuvering system for the Navy; and aircraft mission organization for the Air Force. Other expert systems under development involve intelligence analysis, situation monitoring and fault detection and diagnosis for applications such as target planning and scheduling, new weapons, mid-air fueling and troop allocations.

Career Opportunities

MITRE is seeking to substantially expand its AI Center with highly motivated AI experts who would enjoy working with an interdisciplinary staff in a highly interactive, enthusiastic organization that offers the best of academic, research and contractor environments. Candidates should possess a related BS/MS degree, formal training or experience in AI programs, and the initiative to determine the direction of our AI work as well as be involved in programs development. Opportunities exist in the following areas:

- Expert Systems
- Planning Systems
- Knowledge Representation
- Intelligent User Interfaces
- Automatic Programming
- Natural Language Understanding

If interested and qualified, please reply in strictest confidence to: Harold I. Matzkin, The MITRE Corporation, 2107 Middlesex Turnpike, Bedford, MA 01730. U.S. Citizenship is required for all positions.

Other C/I and civil-systems engineering positions are also available at MITRE's Washington D.C. facility. If interested please forward a resume to Ms. M.X. Mason, The MITRE Corporation, 1820 Dolley Madison Blvd., McLean, VA 22102.

Real World Solutions  
To Real World Problems

MITRE

An equal opportunity employer.

Vacation

from page 7

me, but most of it makes pretty boring copy. Perhaps the highlight was receiving the Gillette "Brush Plush Shaving System." Not only is this one of the more bogusounding merchandising ideas of the year (a "shaving system" with no razor?), it has fun instructions. At one point, one is instructed to (I paraphrase, having misplaced the original) squeeze the tube with the fingers to work the cream loose. Yes indeed.

Through a series of contortions reminiscent of Charlie Chaplin or

Buster Keaton, I was finally able to make the damned thing work, and immediately began to cultivate the Don Johnson look.

But even this was hopeless. Don, it turns out, has resolved to carry a razor with him at all times so people will stop giving him grief. This is from *USA Today's* weekly newspaper insert which devoted at least two whole pages to celebrity New Year's resolutions. It turns out that Cybil Shepard resolves to "wear less underwear more often" (she makes decisions better that way).

Garrison Keillor resolves to lavish affection on his new wife. *A continued on page 10*

Movie Review

Ghandi It's Not

by Nick Smith

A Chorus Line

Director Richard Attenborough

I will freely admit that I am one of the 47 people in Los Angeles and New York (combined) who never tried to see *A Chorus Line* on stage. At the time, the idea of a musical about people auditioning for a musical seemed a bit too circular, and besides, the tickets were expensive. However, a film of a musical about people auditioning for a musical somehow seemed more interesting. After all, look what Bob Fosse did with *All That Jazz*, and that was just rehearsals. Well, not just rehearsals, but that's another movie.

*A Chorus Line* was done by a strange combination of people, and seems to have suffered for it. Michael Douglas is an excellent actor, and he carries through very well as the director who is running the audition. The individual dancers are very good, portraying different facets of life in the big city, among those crazy enough to compete for the very few jobs on Broadway. The problem seems to be Richard Attenborough himself. He likes directing impressive, powerful films (*Gandhi* was one of his), and I don't think he saw the basic material of *A Chorus Line* as being quite worthy of him. Therefore, he did something different. He tried to make it a powerful emotional drama about the successes and failures of the characters. He focused on the characters to such an extent that he failed to focus on their singing and

dancing, which made up the bulk of the film. The choreography and execution that he bothered to show were done marvelously. It's just that he didn't show enough. The wrong characters were played up. The ones who were supposed to be great were never shown to be great. The ones that were losers were shown to be losers, but that didn't help. The one "hit" song from the musical, "What I Did For Love," was given a strangely clumsy rendition. The only thing that came through really well was "the thrill of victory and the agony of defeat" in each round of the selection process. The winners and losers of the audition made the audience feel along with them. The only emotional moment that failed was when one dancer was injured. For some reason, that scene lacked the impact that it deserved.

The music and dancing that are permitted to wade through Attenborough's style are very good, and those who like the musical genre will probably enjoy them. The finale is flashy enough to make any old musical fan drool. There are a few very good moments, both dramatically and musically. I just wish that there had been more of them.

Overall, *A Chorus Line* is worth seeing if you are interested in the theater or musicals, but may not be worth your money as a drama, and is only so-so as a showcase of dance. Let the ticket-buyer beware.

## ENTERTAINMENT

# CLAGS Sponsors Romanovsky and Phillips

by Josh Susser

Tonight, at 8:00 in Dabney Hall, The Caltech Lesbian and Gay Society will welcome the singing-song writing team of Romanovsky and Phillips. Ron Romanovsky and Paul Phillips are something new both for the Caltech community, and for the entertainment world. They defy convention by being both openly gay, and successful performers. They have been performing since January 1982, and in early 1985 released their first

album, *I Thought You'd Be Taller!* on their own lable, Fresh Fruit Records.

Romanovsky and Phillips' musical talent and witty humor have garnered them rave reviews throughout the United States and Canada. They sing of experiences common to us all, as well as of the joys and frustrations of being gay. Their creativity and enthusiasm transform what could otherwise be just funny folksongs into funny folksongs with real meaning.

While Romanovsky and Phillips' main following is in the gay community, their music is certainly enjoyable to straight audiences as well. They have achieved such popularity simply by singing about their lives openly, honestly, and with humor. This uncompromising quality combined with their diverse musical backgrounds makes their performance an inspiring and entertaining experience for all audiences.



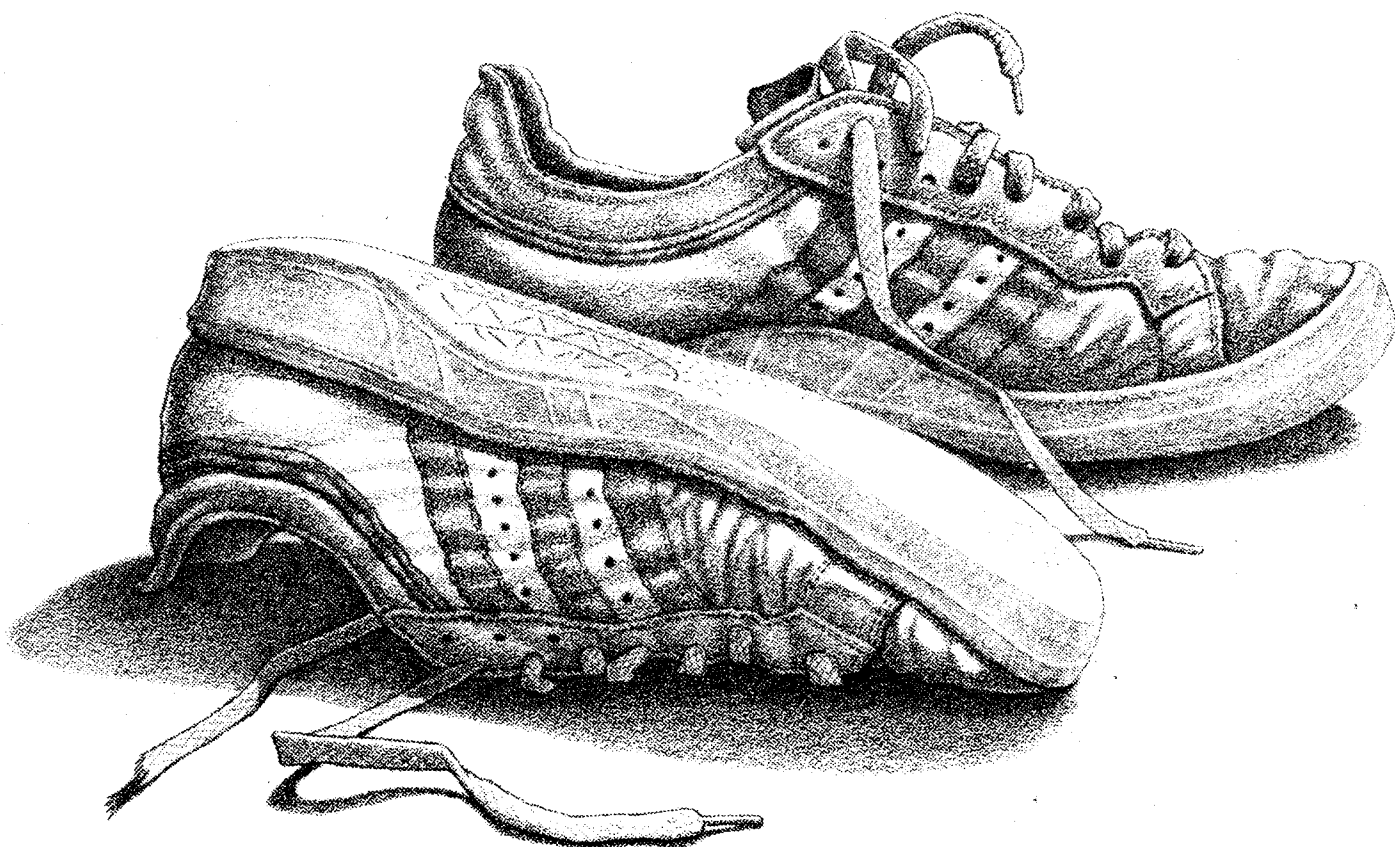
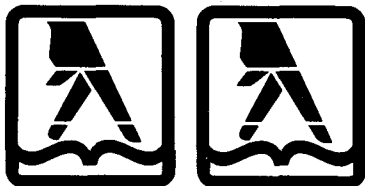
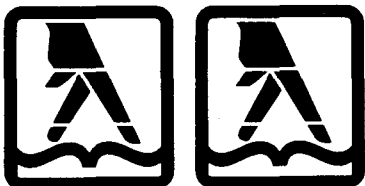
Romanovsky and Phillips will play tonight in Dabney Hall.

## Vacation

from page 9

*Prairie Home Companion*, for those of you who've never heard it, used to be a fine show. Then Garrison went and fell in love, and there went the neighborhood. Still, he has a nice sign-off line, which my mother paraphrased thus in our Christmas letter:

That's the news from Camp Overdrawn, where the women are strong, the men are good-looking, and all the children are above average.



## You can tell a lot about engineers by the way they dress.

As an engineer working at Apple Computer, you hit the ground running. You take a project and define it. There are no rules, just problems and solutions. Your solutions.

We enjoy the constant change involved in staying ahead of the volatile personal computer market. In fact, the only ones complaining about the pace at Apple — are our competitors.

Far from running in circles, we have a very definite long-range goal. Apple Computer is going to

change the way the world thinks.

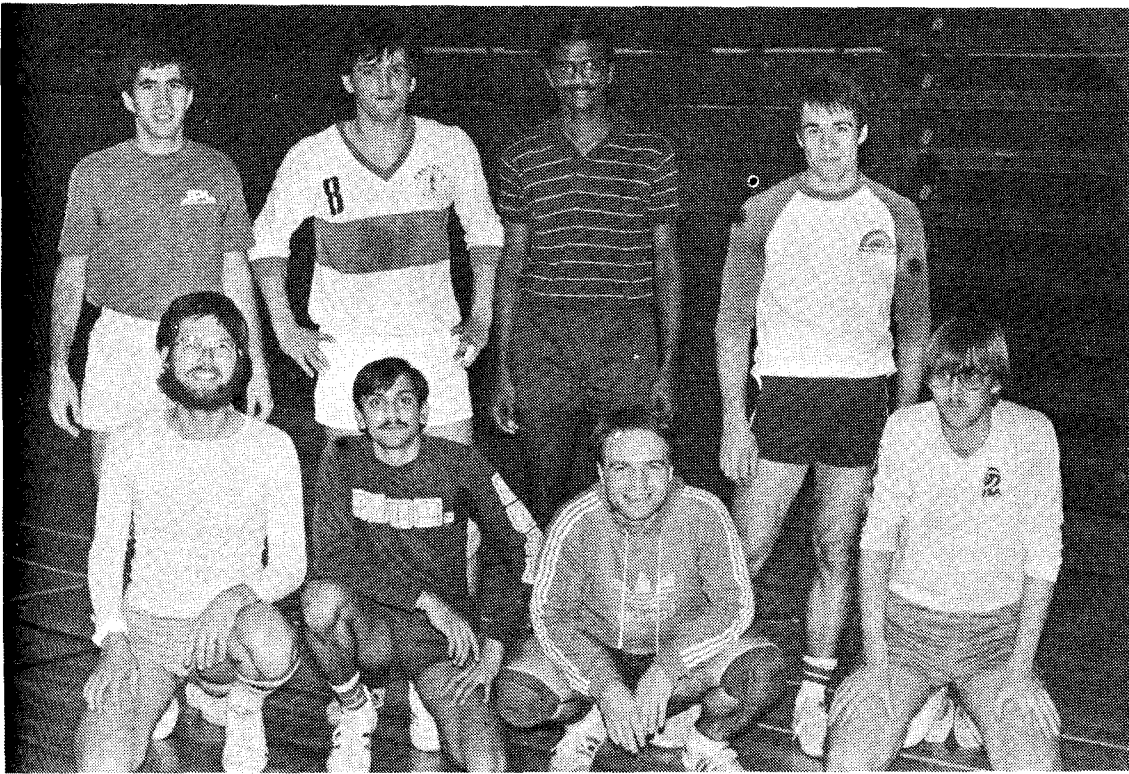
To succeed, we've got some very big shoes to fill. Check with your Career Development Center to learn more about our opportunities for engineers. We'd like to see you and your résumé when we're on campus recruiting: Friday, January 24th. If you're unable to see us while we're on campus, send your résumé to: Apple Computer, Inc., College Relations, Dept. CIT/86, 20525 Mariani Avenue, MS9-C, Cupertino, CA 95014.



An equal opportunity employer

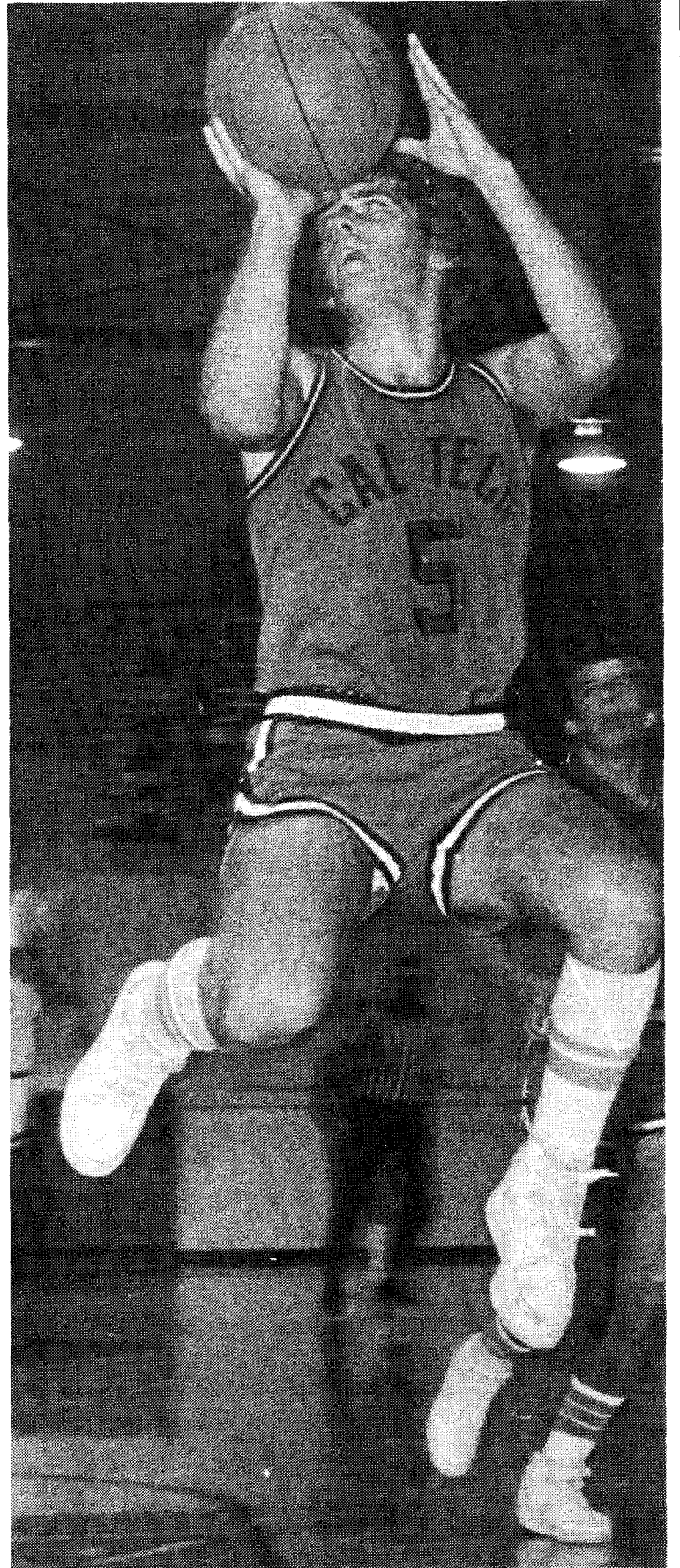
©1986 Apple Computer, Inc. Apple and the Apple logo are registered trademarks of Apple Computer, Inc.

**SPORTS**



**Volleying Champs**—Pictured here are members of the Upsetters volleyball squad, winners of the Caltech Volleyball Tournament. The Upsetters defeated the Jetsetters 15-7, 15-0 in the tournament final, which was played prior to the holiday break.

photo by Olivier Cojot-Goldberg



**Basketball**—Caltech's Brad Scott lays up two points in a basketball game versus Redlands University on Wednesday night. Tech's Beavers lost a 67-49 decision.

photo by Rod Van Meter

**WEEKLY SPORTS CALENDAR**

Day	Date	Time	Sport	Opponent	Location
Fri.	1-10	4:00 pm	Swimming (W)	Mills College	Caltech
Sat.	1-11	10:00 am	Wrestling	Eagle Tournament	Biola
Sat.	1-11	7:30 pm	Basketball	Pomona-Pitzer JV	Caltech
Sat.	1-11	TBA	Swimming (M/W)	U.C. Irvine Invitational	U.C. Irvine
Sun.	1-12	TBA	Swimming (M/W)	U.C. Irvine Invitational	U.C. Irvine
Wed.	1-15	7:30 pm	Basketball	Occidental JV	Caltech
Wed.	1-15	7:30 pm	Wrestling	La Verne	La Verne
Thu.	1-16	11:00 pm	Hockey Club	UCLA	Culver Ice Rink
Sat.	1-18	10:00 am	Wrestling	Pomona-Pitzer	Pomona-Pitzer
Sat.	1-18	10:00 am	Swimming (M/W)	Occidental & Whittier	Caltech
Sat.	1-18	7:30 pm	Basketball	Claremont-Mudd JV	Caltech

**MONK'S PIZZA**

TAKE-OUT &

**FREE DELIVERY**

26 N. Los Robles, Pasadena  
(Just No. of Colorado Blvd.)



Limited Delivery Area

**MENU**

	12 INCH	16 INCH
Cheese	4.99	7.12
1 Item	5.89	8.45
2 Items	6.79	9.78
3 Items	7.69	11.08
4 Items	8.59	12.38
5 Items	9.49	13.68
Monk's Special	8.59	12.38

(Pepperoni, Mushrooms, Green Peppers, Onions, & Sausage)

**Slices served in store only \$1.00**

Pepperoni, Sausage, Mushrooms, Onions, Green Peppers, Ham, Pineapple, Beef, Olives, Jalapeños, Anchovies, Extra Cheese, Thick Crust.

All Pizzas Made to Order with Only the Freshest Ingredients;

100% Pure Dairy Mozzarella Cheese, and Our Own Private Sauce Recipe.

All Prices Include Sales Tax. No Surprises.

**CALL 304-9234**

**HOURS**

Sun.-Thurs. 11:00-1:00 AM  
Fri.-Sat. 11:00-2:00 AM

**\$200 OFF ANY MONK'S SPECIAL**

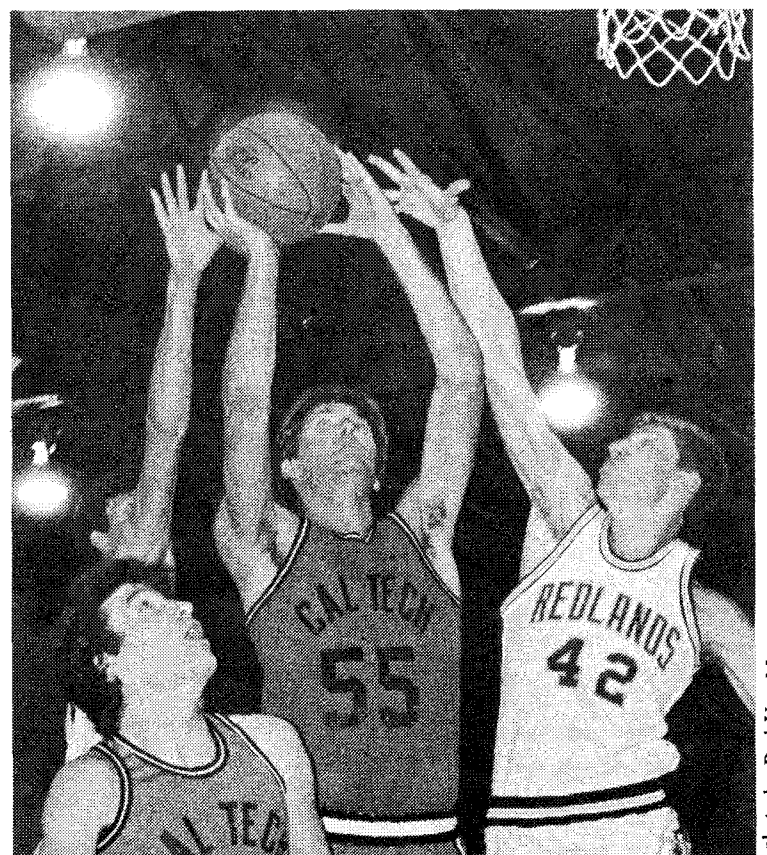
(Limited Delivery Area)  
(1 COUPON PER PIZZA)

**\$100 OFF ANY MONK'S PIZZA**

(Limited Delivery Area)  
(1 COUPON PER PIZZA)

**\$200 OFF ANY LG. 16" PIZZA 2 ITEMS OR MORE**

(Limited Delivery Area)  
(1 COUPON PER PIZZA)



Brett Bush goes up against Redlands opponent while Adam Slovik watches in awe.

photo by Rod Van Meter

## WHAT GOES ON

## Faculty Photos

Time is running short for faculty members to submit their favorite photos of themselves to the *Big T* (107-51). Photos should be black and white (any size) preferably on glossy paper. Please include your name and department. Remember: if you don't find a photo, we will!

## Free Money for Seniors

This is it, seniors—time to turn in your senior photo to the *Big T* office (first floor, Winnett). Photos are due no later than Feb. 7. They should be black and white (any size), preferably on glossy paper. Please include your name, option, and hometown. Call us at x6154 if you need a photographer.

## Yearbook Class

The Yearbook Class (PA 15) will meet in Baxter 127 on Tuesdays at noon. Please come if you are interested in any aspect of the *Big T*. Feel free to bring your lunch. The class is worth 3 P/F units.

## Cal Grant Deadline

February 11, 1986 is the postmark deadline for both new and renewal Cal Grant applicants. Current Cal Grant recipients should have already received a SAAC and renewal supplement from the California Student Aid Commission. New applicants (and students who applied in previous years but were ineligible) can pick up the Cal Grant Supplement at the Financial Aid Office.

## Korean-American \$\$

Scholarships are being offered to full-time students with Korean heritage. Students may be undergraduate or graduate students. Application forms are available from The Korean American Scholarship Foundation, Western Region, 20281 Running Springs Lane, Huntington Beach, CA 92646.

Application deadline: January 31, 1986.

## Indian Fellowships

The United States Department of Education offers Indian (Native American) Fellowships. If you are interested in receiving a fellowship, please obtain the application and brochure from the Financial Aid Office, Room 10, Parsons-Gates. Application deadline: January 15, 1986.

## Grad Furniture

The Housing Office is in the process of reviewing furniture options for the new Catalina Graduate Apartment Complex. Any Graduate Students interested in becoming involved in the selection of furnishings are encouraged to contact Linda Chappell in the Housing Office at 356-6178 immediately.

## Guitar Classes

The Beginning Guitar Class (no experience necessary) has been reformulated to include not only classical repertoire but a new jazz and folk chord system as well. This will give the student a strong classical technique and enable him to branch into other forms of guitar if he desires. For further studies in classical and flamenco, Intermediate and Advanced Guitar Classes are also offered. Classes are free to Caltech students (and other members of the CIT community, space permitting). Undergraduates can receive 2 units of credit if they choose. Classes will be on Tuesdays starting January 14 in Fleming Music Room as follows:

Beginning, 4:30-5:30 p.m.

Intermediate, 3:30-4:30 p.m.

Advanced, 5:30-6:30 p.m.

Private instruction can also be arranged on any level with instructor Darryl Denning, who has an international background in recording and performance. For further information call Mr. Denning at (213) 465-0881.

## New Literature Course

Lawrence Rainey will be offering a Literature 180 course—Intellectual Texts of the Continental Renaissance on TTh 10:30-12:00 in Baxter 210. The course will survey the intellectual life and history of ideas in the Renaissance. Authors will include Petrarch, Thomas More, and Erasmus.

## Amateur Radio Exams

This Saturday, January 11, 1986, from 10 a.m. to 3 p.m., the Caltech Amateur Radio Club will administer the FCC Amateur Radio Exams for Novice, Technician, General, Advanced and Extra Licenses. The examinations will be given in Clubroom 1 of Winnett Student Center. Everyone who is prepared to take the exams is welcome. For those who are not prepared, but would like to become licensed, classes are available.

Regular club meetings are scheduled the 1st and 3rd Tuesdays of each month at 8 p.m. and are held in the Y Lounge. Code and theory classes and help sessions are held on all other Tuesdays at 8 p.m. in the shack or nearby. People who cannot make the meetings should call the club secretary to schedule classes at their convenience. Further information about the club may be obtained from Dave Hodge, the club president, at x6825 or from Dave Ritchie, the club secretary, at 449-7371. Membership is open to all members of the Caltech community including undergraduates, graduate students, staff, faculty, alumni, jpl-ers, and hangers-on. Anyone interested is encouraged to get in touch with Dave Ritchie—demonstrations and tours can be arranged at any time.

## 1986-87 Aid Forms

1986-87 Financial Aid application packets are available at the Financial Aid Office. If you have not picked up a packet, please stop by and get yours now! In order to receive priority standing you must complete the proper forms and meet the deadlines.

## DEADLINES

Feb. 11—Cal Grant (new & renew)

Feb. 11—Student Aid Application for California

Feb. 11—Business/Farm Supplement

April 15—Foreign Student's Financial Aid Application

April 15—Parents' & Student's signed tax returns

April 15—Draft Registration Compliance Statement

April 15—CIT Supplement Upon Receipt—Student Aid Reports for Pell Grant—All Pages

If you have any questions please call or drop by the Financial Aid Office, Room 10 Parsons-Gates, 356-6280.

## Varsity Jackets

Varsity athletes who want to order award jackets should contact Michael Keating (Rm. 104, Page; x3774) before 2:00 p.m. Friday, January 17 (that's next week!). The price is about \$75. Eligible athletes receive an ASCIT subsidy of one half the price. See the *Little t* for eligibility requirements.

## Grad Housing Probs?

The Graduate Student Council is interested in problems graduate students have experienced with Caltech-owned properties or with the Housing Office itself. We are especially interested in maintenance and repair problems because it has been suggested that Physical Plant should perform maintenance and repairs of graduate properties now done by the Housing Office. Comments on waiting lists, Housing Office policies, custodial services, or other matters would be a help in analyzing and alleviating problems. Positive comments are also welcome. Please provide the information as completely as you can and include your name, address, and phone number. Replies will be kept confidential if you ask for it. Send replies to Tony Stirk 1-87.

## Money For Women

The brochure *A Partial List of Resources for Women* is available for your use in the Financial Aid Office. The brochure gives helpful hints to women applying for aid. It also has a selected list of scholarship, grant and loan programs. It also has a list of financial aid resources.

## Philosophy Course

Philosophy 1: T 2-4, Th 3-4; 205 Dabney; James Woodward, professor. See Secretary in 211 Dabney to sign up.

## Caltech Bridge Club

It's back! Duplicate games at 7:00 p.m. on Monday nights, Red Door Cafe. Everybody welcome. ACBL sanctioned. And watch for the upcoming Charity Game (Prizes! Prizes! Prizes!). For information call Jeffrey Pugh (x4543), Jeff Stern (x6627) or Jennifer Stern (x4476).

## Scholarship\$\$\$

The American Society of Naval Engineers is awarding scholarships of \$1,750 for the 1986-87 academic year. The renewable scholarships are for junior and senior undergraduates. There are also 1-year, non-renewable scholarships for graduate students. Applicants must be U.S. citizens. Financial need is not a requirement but may be taken into consideration. For additional information contact the Financial Aid Office. Application Deadline: February 15, 1986.

## More New Courses

Hal Fairchild, a visiting professor from UCLA, will be offering Psy 10—Introduction to Psychological Development, on MW 10:30-12:00.

Jeff Strnad will be offering a course (SS 216—Interdisciplinary Studies in Law and Social Policy—Advanced Stochastic Methods). The course will focus on advanced stochastic methods that find significant applications in economics and finance. For a more detailed course description see the Economics Department.

## KISMET

The annual Caltech Musical needs basses, baritones, tenors, and, of course, hands willing to build, sew, and paint. Call Deena, x2158.

The *Tech* welcomes all those who would like to contribute articles, reviews, photos, or artwork. "An excellent opportunity to break out of the *Tech* nerd mold."

## CLASSIFIED

## HELP WANTED—

**RESEARCH TECHNICIAN** with experience in molecular biology. To study DNA and RNA tumor virus transcription. College degree in chemistry or biology and at least 3 years experience. Competitive salary and benefits. Send resume to: Dr. Richard Gaynor, UCLA School of Medicine, 11-242 Factor Building, Los Angeles CA 90024.

**FEDERAL, STATE AND CIVIL SERVICE** jobs now available in your area. For info. call (602) 837-3401 Dept. 1373.

**COMPUTER ENGINEERS.** Full time contract and permanent positions at JPL and other Valley locations. BSEE or Computer Science or equivalent experience. Execuserve Personnel Service. 1756 Manhattan Beach Blvd., Manhattan Beach, CA 90266 (213) 376-8733.

## REALTY—

**2 BEDROOM/1 BATH CONDO** with fireplace and built-ins. Pool, spa, and recreation room. Security parking. Near Caltech. Agent (818) 357-0057 \$79,500.

## GENERAL—

**INSURANCE WAR!** Will beat any price, or don't want your business! Sports cars, multitickets, good driver discount. Request "Caltech Plan." Call (818) 880-4407/4361.

**FEYNMAN AT HALF-PRICE!** Feynman lectures—Vol. III—Quantum Mechanics, hardcover edition at 1/2 price. Supplies limited, hardcover is now out of print. CALTECH BOOKSTORE.

**RATES:** \$2.50 for first 30 words; Each additional word, 10 cents. Payment must accompany ad.

**HONDA**  
Present Student I.D. For  
**SPECIAL DISCOUNTS!**

Join the Elite™  
**ELITE™**

Arrive in Style  
**AERO™**

Go on a Spree™  
**SPREE™**

BILL ROBERTSON & SONS, INC.  
**HONDA OF HOLLYWOOD**  
6525 SANTA MONICA BLVD.  
PHONE (213) 466-7191

**Tina & Michael**  
**HAIR DESIGN**

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

## CALTECH

PASADENA, CA 91125

The California Tech is published weekly except during examination and vacation periods by Associated Students of the California Institute of Technology, Inc.