

photo by Chris Meisl

Al Hibbs charts new directions for JPL.

Hibbs on JPL

by Bibi Jentoft-Nilsen

Al Hibbs from JPL spoke on the subject of "JPL and the Space Program" Wednesday at the Y for the first Noon Update of the year. Hibbs began his talk, to an audience of about 40, by explaining that JPL's current projects and goals deal primarily with unmanned spacecraft, though occasional work is also done on some manned spacecraft.

For the purposes of the talk, Hibbs divided JPL's work into three basic subject categories: the Earth, the solar system, and the cosmos. With regard to the Earth, JPL presently has satellites for both

land and sea observation. One of the future projects in this area will be the Earth Observatory System. The EOS will be a satellite containing some of the same Earth observation equipment as the shuttles have carried. This project, however, is still in the planning stages and may not be realized for five or ten years.

With respect to the solar system, JPL is currently involved in many projects with others in the planning stages. The Voyager, for example, will pass by Uranus in January. This craft was only expected to continue functioning as far as Saturn, so, as Hibbs put it, it's "long past its warranty" and each added day it remains functioning is an added bonus.

Two upcoming launches are those of the Galileo and Ulysses spacecraft in May. The Galileo will go on a mission to Jupiter where it will drop a probe into the atmosphere. The probe is expected to reach a depth of 100 kilometers before being burned up or crushed by the pressure. In addition, the main craft will begin to orbit Jupiter using the moons to adjust its course. Being launched in May, Galileo will first reach Jupiter sometime in 1989.

The Ulysses, also to be launched in May, will also head toward Jupiter; upon reaching Jupiter,

however, it will use the gravitational field to boost it on a polar route around the sun. No previous satellites have taken this route, so this is an unmapped area of solar exploration, and sure to yield much interesting data.

Another possible mission for the future would be a lunar orbiter. Interest in the moon has dwindled considerably in the last few years due to the rising interest in other planets, but there are still definitely many things to learn. The poles, for example, have never really been analyzed carefully, and there is a possibility that they could contain deposits of frozen water, methane, and other substances. If this were found to be true, the moon could be used as a fueling station; it would be much more efficient for shuttles and other spacecraft to use this fuel rather than carry their fuel up through the earth's atmosphere.

A few other projects for the far future are an orbiting craft around Jupiter and the sun, a flyby of an asteroid, an orbiting craft around a comet, and testing of a solar sail.

In the area of the cosmos, JPL has a craft in space getting information from infrared rays. In fact, a lab is apparently being built at Caltech to analyze the information obtained from this craft. In addition on page 6

Alzheimer's Comes of Age

by Doug Gray

There are several diseases which have attracted much attention only in recent years. One of these was the topic of this week's Watson Lecture, given by Dr. Elias Lazarides: "Alzheimer's Disease: An Aging Disease Comes of Age."

Dr. Lazarides described the nature of the disease and the ongoing research into finding a way to deal with it. He noted that ten university research centers had been set up to study this particular problem.

The reason that Alzheimer's has cropped up only recently is that the average life span has jumped up in the last few decades, and the disease appears very late in life. It is a degenerative nervous disorder which causes loss of memory and cognition, senile dementia in later stages. It affects about one percent of the population of this country and fully half of the people over the age of 70. Roughly 100,000 Alzheimer patients in the U.S. die per year.

Other nervous disorders occur in a certain age group and, after a peak age, the probability of getting these diseases drops sharply. Occurrences of schizophrenia peak at about age 25, Huntington's disease, at about 35, and Parkinson's, at about 60. Alzheimer's disease, however, seems to have no age limit; past the age of 60, the probability of occurrence increases steadily.

Apart from the devastating personal consequences of the disease, it poses a real financial problem. In 1978, care of Alzheimer patients in nursing homes cost a total of \$12 billion. It is projected that the figure in 2050 will be \$30 billion.

There is no cure for Alzheimer's disease, and it seems unlikely that there will soon be one

because the disease is so little understood. Current research involves early detection and identification of the causes of the disease.

Investigation of the effects on the brain tissue generally must be done post mortem. The effects include massive loss of neurons in regions associated with memory, cognition, and thought processes; accumulations of twisted fibers in nerve axons, which normally contain an orderly array of fibers, low levels of the neurotransmitter acetylcholine in certain regions, and hemorrhaged tissue.

Dr. Lazarides listed six proposed models for the cause of Alzheimer's disease: the genetic, abnormal protein, infectious agent, toxin, blood flow, and acetylcholine models. There is evidence for more than one of these models, and it is thought that Alzheimer's is not a single disease,

with a single cause, so much as a symptom.

Genetics seems to have some connection with Alzheimer's disease. For example, 95 percent of people with Down's syndrome get the disease by the fourth decade of their lives.

In the abnormal protein model, abnormal structures in neurons slow down the transmission of signals, rendering the neurons ineffective.

The infectious agent model suggests that, like some other diseases which produce dementia, Alzheimer's is caused by a slow virus. There is no real evidence that such a transmissible agent exists, though.

Foreign substances, such as aluminum, calcium, and silicates, are cited as the cause in the toxin model. There is some evidence for this; patients on kidney dialysis

Social Commentary

My Beerball with Harvey

by David Hull

The editor (the guy with the steely glint) has joined the growing legions who think I'm funnier in print than in person. (If you've caught the live act, you know that that's not necessarily saying much about my writing.) In fact, he seemed to like it well enough to ask for more.

Now, editors in general seem to be creatures of pure reflex. Confront them with the prospect of blank space on a page, and they grow pale with fright and apprehension. Offer them a means of filling that space, and they fairly drool at the chance.

I, for my part, am also largely driven by reflex (if by anything at all). An offer of the exquisitely cheap ego boost of *My Name In Print* will get my attention almost as quickly as offers of beer, money or sex (all of which, gentle readers, are quite welcome. Order now and beat the Christmas rush).

In short, it's a match made in heaven.

He said "Do it." I said "Oh, alright," and at that moment I knew there was no choice but to hop on the bus to some godawful place in beyond the 210, get completely trashed pretending to play softball, and cover the story.

Being a responsible journalist, I knew to prepare in advance, in

order to assure in depth coverage. So I caught the tail end of *And the Ship Sails On* (maybe it made sense if you saw the beginning), and headed over to an off-campus house for a nightcap of television. We watched *Miami Vice* and (horrors!) *MTV* (Saw the Sun City video—I always get chills when I see Martin Luther King, and so what if that has nothing to do with beerball) while I helped try to put a dent in an obscenely large supply of Long Island iced tea.

Somehow I managed to find my way back to campus to babble incoherently at people and crash—I'm amazed I hit the bed.

The big day arrives. The bus—a converted Banana Express with speakers and radio jammed in—is late. The driver is cool, even slows down a bit so a couple of Rudds can moon a carload of Oxy people.

We arrive in Claremont or wherever, and drive right past the playing field. The bus makes a scenic tour of the campus, lets us out somewhere in the area, goes and parks within 50 yards of the field. As we are making the tour, carsickness introduces itself to my hangover. They get along just fine, and my thoughts turn to the Porcelain Bus.

Fortunately, the bus stops before my stomach gives out. We

Sternberg Honored

by Peter Ashcroft

Dr. Eli Sternberg, a Caltech professor, has been awarded the Timoshenko Medal of the American Society of Mechanical Engineers. This award is considered to be the most prestigious in the field of applied mechanics. It is awarded for a lifetime of contributions to the field rather than for a single achievement.

Dr. Sternberg was born in Vienna, Austria. He attended the Technische Hochschule in Vienna where he studied architecture. At that time he did not have a great interest in mechanical engineering. With the rise of Hitler in 1938, Dr. Sternberg left Austria for London. There he studied at the University of London. This time, however, he studied civil engineering rather than architecture. Because his training had been so different from this, it was necessary for him to

start again as a freshman. In 1939, he emigrated to the United States. It was while he was crossing the Atlantic that he received word of the start of the Second World War. Once in America, he continued his education, first at the University of North Carolina, and later at the Illinois Institute of Technology. It was there that he made the transition from civil engineering to mechanics. Since that time, he has received many awards: among them, the Fulbright Award (twice), the Guggenheim Award, and inclusion in the National Academy of Sciences and National Academy of Engineering. He has taught at universities around the world. The list includes the Netherlands, Japan, Scotland, Chile, and Berkeley. Dr. Sternberg has been at Caltech since 1964. During that time, he has taught AM113, AM135, and AM136.

Interhouse

by Peter Ashcroft

Tomorrow, the student houses will explode in the biggest event of the year. This year's interhouse promises such exciting themes as Valhalla Viking Funeral, Copshow Chaos: Dabney Vice, an Old West Mine Ride, Al Fansome's Bar and Mill, Dr. Who Time Warp Dance Extravaganza, and much, much more. The evening will begin at 7:00, and is an excellent opportunity for faculty, and graduate students to get a flavor for undergrad life, or at least revelry.

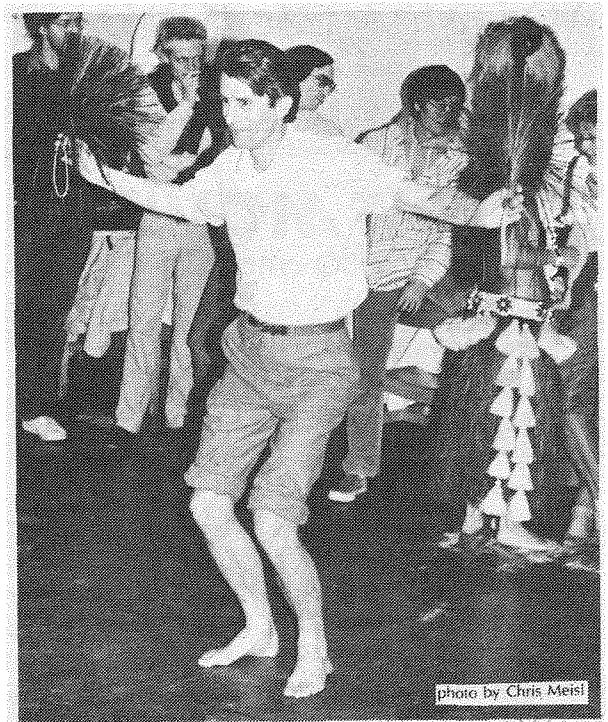


photo by Chris Meisl

The ugly side of campus politics.

OPINION

The Editors' Desk

The student newspaper of a university can be one of its most important institutions. A good newspaper can keep the students informed of those decisions and policies that have bearing on their lives. At Caltech, where student attention tends to be focused in a very narrow range anyway, the paper is even more essential. In addition to reporting news of the area, the paper can supply reviews of books, movies, and plays. As a forum for expression of opinions, the paper gives students the ability to address the community at large with their most persuasive arguments; readers in turn through exposure to new vistas of thought can refine their own attitudes.

Despite the tremendous role that it could play, the *Tech* is often neglected. Many students who could contribute, balk at the prospect of becoming involved because they fear for their academic welfare. This fear is borne out to some degree by a history of editors who find it impossible to single-handedly produce a quality paper while maintaining a full academic load.

To improve this situation, several innovations have been suggested. One of these, that of requiring editors to have had experience with the typesetter or with PA 15 would be a mistake. Although it is true that experience is very useful, it is not essential. A restriction such

as that proposed would choke off an already small pool of interested students.

The situation dictates that more students be involved, not fewer. One way to do this is through increasing the number of units associated with writing or editing. Better than simply giving more units, would be to make the units more useful by giving them "Humanities" status. This would attract more students, and improve the quality of the paper as the load per person would be decreased to a more manageable level. In the past, the Humanities department has scoffed at this suggestion on the grounds that the course is really more of an activity than a class.

The responsibility for that, though, must rest squarely with them. A good journalism course would benefit the entire campus as well as those working directly for the paper.

—Paul Gillespie
Peter Ashcroft

Nov. 8 Solution

EMIR	VISOR	SAME
CAPE	ORIBI	TREI
HISTR	IONIC	RILE
ONO	ACNE	KNEADS
	JOEY	ASEA
DECIUS	ALHAMBRA	
ATOLL	FRIAR	LIE
RANT	MACAW	DENY
EPI	DOMES	KINGS
SECLUDED	RANDOM	
	APED	RAZE
PAUPER	POCO	SEB
ASPS	AMELIORATE	
SHOE	TIRES	IGOR
TEND	EXIST	MANC

LETTERS

CLAGS

To the Editors:

I personally agree with Phil Albert & Glady Myers (Letters, 11/1) that male genitals were designed to interlock with female genitals and vice versa. I, however, take my cue from John Stuart Mill: those of us who care about truth have nothing to fear from an environment of free expression (even the most eccentric kinds). Rather, in such an environment, truth has the best chance of proving itself. Moreover, as a Christian I could never espouse their approach. Instead, "we have renounced disgraceful and underhanded ways; we refuse to practice cunning or to tamper with God's word, but by the open statement of the truth we would commend ourselves to every man's conscience in the sight of God." (2 Cor. 4:2) If it takes the former to keep a certain reputation from getting besmirched, then the reputation can go to the devil.

—Kirk Kanzelberger

To the Editors:

If somebody is a gay, then it is a defect and as such should be cured not promoted. Nobody can make me believe that this is not common sense but "blind prejudice and bigotry". God created Adam and Eve, not Adam and Steve. However, there are plenty of ex-

amples in history where a strong dedicated minority imposed its view on the rest of the community. I feel it is time to speak of before distinction of normality and abnormality are blurred or even reversed.

—Tom Svitek, Grad Student
(married—with female)

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Friday, November 22.

Sign up at the Caltech Career Development Center.

Life's little Necessities

Blood Wedding: One of Federico Garcia Lorca's trilogy of rural tragedies, this highly acclaimed play stars Carmen Zapata. Beckman Auditorium Friday, Nov. 15 (English), 8:00 pm, \$17-\$15-\$12.50. Saturday, Nov. 16 (Spanish) 3:30 p.m. \$15-\$13-\$11.

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Next Week—The Spy Who Loved Me
in Baxter Lecture Hall
\$1 ASCIT members \$1.50 all others

The Caltech Y Fly-by

Friday... November 15

Noon Concert—The New Marines—and while you listen to them, read the "Delhi Declaration," a call for the end of the nuclear threat which was drafted and signed by several world leaders.

Saturday... November 16

Have fun at Interhouse!

Sunday... November 17

UCLA—The College of Fine Arts is having their 25th anniversary open house. See demos, rehearsals, tours, special performances, and UCLA'ers. Noon to 5 PM. The Y-car leaves Winnett at 1 PM. More info in the Y.

Wednesday... November 20

Noon Update—Professor Ned Munger will speak about "South Africa—Approaching a Just Society." In Clubroom #1, bring a friend and some lunch.

Friday... November 22

The beginning of another amazing Y ski trip! Three days at Mammoth. Approximate cost \$50. Sign up before Monday. Food, transportation, and lodging will be provided.

Also,

If you're a student looking for a good Thanksgiving dinner, sign up in the Y. If you're somebody (faculty, staff, or anyone else) looking for a student to invite for dinner, call the Y. We'll try to match people so that interested Techers aren't stuck here on Thanksgiving.

Any comments, questions, or burning desires?
Stop into the Y or call us at 356-6163.

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IHC Highlights

by John Beck
The plans for Rehabilitation of the South Houses are being finalized. It is hoped that the plans can be completed by the end of the term. The goal of fixing up two houses next summer is expected to be realized. The administration needs input from the student, however. They want to know what we want to happen to the basements, among other things. If you have any ideas, tell your house president so he can pass it on. Much of the junk lying around in the south basement area (i.e. steam tunnel entrance, etc.; not the

trunk rooms) is going to be cleaned out over Christmas break. So if you have any junk lying around that you do not wish to be thrown away, clean it up!

Concern has been voiced over the possibility of removing the orange trees from the orange walk. Many of the students are upset about the situation, and hope that this will not take place.

Steve Gomez has suggested that women be allowed to compete in Interhouse Track on a more equal basis with men. There are currently four non-scoring women's races. There seems to be a fair amount of support for the idea. It is still under consideration; house presidents need to know what their people think.

Delhi Declaration

by Huston Horn

In January 1985, the heads of state of Argentina, Sweden, Tanzania, Mexico, India and Greece issued the "Delhi Declaration," requesting the end to the nuclear threat. The "Five Continent Peace Initiative" which was proposed by these six leaders has been awarded the 1985 Beyond War Award.

The Award will be presented to these world leaders in a historic teleconference of the 1985 Beyond War Award Ceremony. A "global spacebridge" is planned. Five continents - North America, South America, Europe, Africa, and Asia - will be linked together for the first time by live satellite. Beyond War will present one million signatures of people from all over the world as an expression of personal continued on page 6

The Inside World

Blacker: In the beginning there was apathy. But soon, that, too dissipated. Then there was movie night. Too much fun they said? Oh, sure. What about an IHC hula contest? Ohhh nooo... no way. The key lies in this Interhouse thing. Vikings, boats, icebergs, large hammers, Green Brad. Come see the play at 10 and midnight. Build frosh, interhouse.
-By someone who's not from Snaaaaaaaaaker House.

Page: Finally, we have a comprehensible Inside World. Sunday's all-day adventure of Survival in Riverside County entertained everyone who attended. Only a few people caught more pellets than they fired... and more than a few have welts to show for their fun. Bowers actually got shot fewer times than Mr. Rambo himself. Will it be a weekly event?

Going backwards a day, the house got an incredible sugar fix with a couple of hours at Farrell's Ice Cream Shoppe. Then a weirdo fix at the Rialto's Rocky Horror.

Right now the Interhouse ride is iffy. Can corners be negotiated in the next twenty-four hours? Sure they can. (Can't they?)

Welcome to everyone who's come for Interhouse! -Buck Troll
Dabney: "Okay everyone, just stand back." "Stop! Stop!" "Move aside, ma'am." "You can't put that here! It won't fit!" "Just let us worry about that, ma'am. It's our job. We're cops." "But! You can't put a car in our courtyard! And stop calling me ma'am!" Sorry, ma'am. I just follow my orders. Dano! Kill the doorhandles!" "Hey!" "Just move aside, ma'am. Alright, people! Stand back! The situation is under control! There's no reason to panic!" (The Peace and Secerity of round-the-clock police protection comes to Dabney Courtyard; reminds us of the noew-defunct World of Weenies.) "Alright- you with the notepad! No journalists here!" "But-"
-j

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Beerball

from page 1
make it to the field and I check out the scene, my iron will to cover the story barely edging out my iron will to curl up somewhere and die. As I look around the diamond, the sun breaks through the clouds, directly into my eyes. "Turn that damned thing off!" comes the cry from somewhere behind my eyeballs. Now I know how vampires feel.

One guy from Mudd seems to be playing host. He explains the rules of beerball, to wit:

(1) There are half-full cups of beer at first and third. You can't run farther than the beer - you have to drink before going on to second or home.

(2) There are no umpires, so in case of a disputed call, there will be a drink-off between the parties in question (runner and fielder, for example). Whoever can chug a full cup first wins.

With a lusty cry of "Chicken-Ha!" we get ready for action.

To get things started, there is a drink-off to see who gets to bat last. The Mudder (what do you call these people?) manages to teleport a full cup of beer directly to his stomach without it passing through any point in between. We plead spillage - our guy Dan Harrison did chug neatly. They look at us funny. "Oh well," I think, "there's more to life than just winning. The hell with silly school pride, this is journalism!"

We decide the batting order and field positions. I volunteer for late

in the order and left field, respectively, somehow thinking that left field requires the least skill. If I'd thought, I would have remembered that Reggie Jackson plays right field.

In the bottom of the second or so, with maybe two out and Mudd at bat, there was a tag at the plate. The guy was out by a mile, but Mudd called for a drink-off. The Man From Mudd finished drinking first, but left a couple of ounces in the cup, and a few more on his shirt. Being good sports, they admit he's out.

At the top of the next inning, we decide to get them back. The batter, Rich Doherty, takes strike one and runs for first. With shouts of "What is this?" and "You can't steal first!", they tag him out. Immediately, we converge around first yelling "Safe!! Safe!!" and insist on a drink-off. They're not buying it. They don't buy it on strike two, either, so he hits a grounder to short. The first baseman, a good sport among many, holds off tagging the base until the instant Rich's foot hits.

In the resultant drink-off, Rich swiftly dumps the beer onto his face and claims victory. Three "penalty drinks" later, he's on base.

All in all, it was a fine scene. Wandering around (in search of a better place than second base), I discovered that their dorms look about like dorms. As I walked through the halls of one dorm, I heard music blasting out of a doorway. I poked my head in the door, and the speaker, which had been set up facing outward on the balcony across the room, promptly fell over. That kind of day.

There was a barbecue after the games (there was not only volleyball but another beerball game). I failed to get completely trashed (we journalists have a reputation to uphold, and I apologize for besmirching it), but did manage to anesthetize my hangover and kill any chance of meaningful conversation. (Somewhere, between being too hung over to relate, and being too drunk, I may have been bloody well charming. If so, that phase must have lasted about fifteen seconds.)

There is much more to tell, some of it maybe even interesting, but I may as well stop here. I had fun, and could have had more. I would even go so far as to suggest maybe we try it again. If it does happen again, you can bet I'll be practicing - volleyball.

ENTERTAINMENT

BUCKAROO REVIEWS
A HIGHLY IRREGULAR COLUMN BY MATT ROWE

Death is a Lonely Business
Ray Bradbury
Knopf, \$15.95 (hardcover)

"It was raining hard now as the big red trolley bucketed across a midnight stretch of meadow-grass and the rain banged the windows, drenching away the sight of open fields. We sailed through Culver City without seeing the film studio and ran on, the great car heaving, the floorboard whining underfoot, the empty seats creaking, the train whistle screaming.

"And a blast of terrible air from behind me as the unseen man cried, 'Death!'"

"The train whistle cut across his voice so he had to start over.

"Death—"

"Another whistle.

"'Death,' said the voice behind me, 'is a lonely business.'"

Not your everyday novel. Ray Bradbury is not your everyday author.

But *Death is a Lonely Business* is not your everyday Bradbury, either.

For his first novel in over twenty years, Ray Bradbury has made in ways a departure, in ways a return. Gone are the monsters and Martians—but not the murders. Gone are the devils and dandelions—but not the detectives. Bradbury has taken a cue from Dashiell Hammett and Raymond Chandler and produced a book that is at once a tribute to those greats, a return to the genre of Bradbury's first stories, and a new adventure for Bradbury as well.

The protagonist is Bradbury himself. The year is 1949. The place is Venice.

California.

They're getting rid of the pier. Their getting rid of the roller-coaster. And they're getting rid of our hero's life, or might as well be.

Because someone is getting rid of all his friends.

Our point of view has been entrusted to a writer, twenty-seven, who sells a story a month to pulp magazines, who knows all the Venice regulars, (who all know him as "The Crazy"), who pines for his girl Peg in Mexico City, and who is about as naive as they come. Who gets off the trolley one rainy night and discovers a body.

Now, he knows whose it is. And he knows it was murder. What he doesn't know is how to convince police detective Elmo Crumley that he's right.

But someone, he knows, is getting rid of all the lonelies. And he's beginning to feel a little lonely himself.

But mainly scared.

Now, *Death is a Lonely Business* is a mystery. So, so much for the plot. But calling it a mystery is like calling *Romeo and Juliet* the story of a family feud.

Venice in 1949 was full, it seems, of the most interesting people. There's our hero and Crumley, for starters. There's Fannie Florianna, once a great diva—now, 380 pounds of love and charm. And she still sings. There's Mr. Shapshade, owner of the cinema on the pier, who is as black-and-white and two-dimensional as the characters in his movies. There's blind Henry, who can tell where he's going better than sighted people, and who can smell the murderer from a block away.

There's Cal the barber, who once knew Scott Joplin, who gives the worst haircuts you've ever seen. But they're cheap. And there's A. L. Shrank, psychologist, tarot-reader, hypnotist, handwriting analyst, and candy-wrapper collector, to finish. And that's just half.

Cast of thousands. Cast of crazies.

Cast of Ray Bradbury.

Then there's the writing. The house of Elmo Crumley:

"... The Venice police jurisdiction ends as does the fog at about Lincoln Avenue.

"There, at the very rim of official and bad weather territory, was a garden I had seen only once

or twice.

"If there was a house in the garden it was not visible. It was so surrounded by bushes, trees, tropical shrubs, palm fronds, bulrushes, and papyrus that you had to cut your way in with a reaper. There was no sidewalk, only a beaten path. A bungalow was in there, all right, sinking into a chin-high field of uncut grass, but so far away from the street it looked like an elephant foundering in a tar pit, soon to be gone forever. There was no mailbox out front. The mailman must have just tossed the mail in and beat it before something sprang out of the jungle to get him...."

Then there's everything else about the book. And I mean everything, from the cover outside to the typeface inside. But mostly the story. And the characters. And the writing. And...

Death is a Lonely Business is chock full of every reason




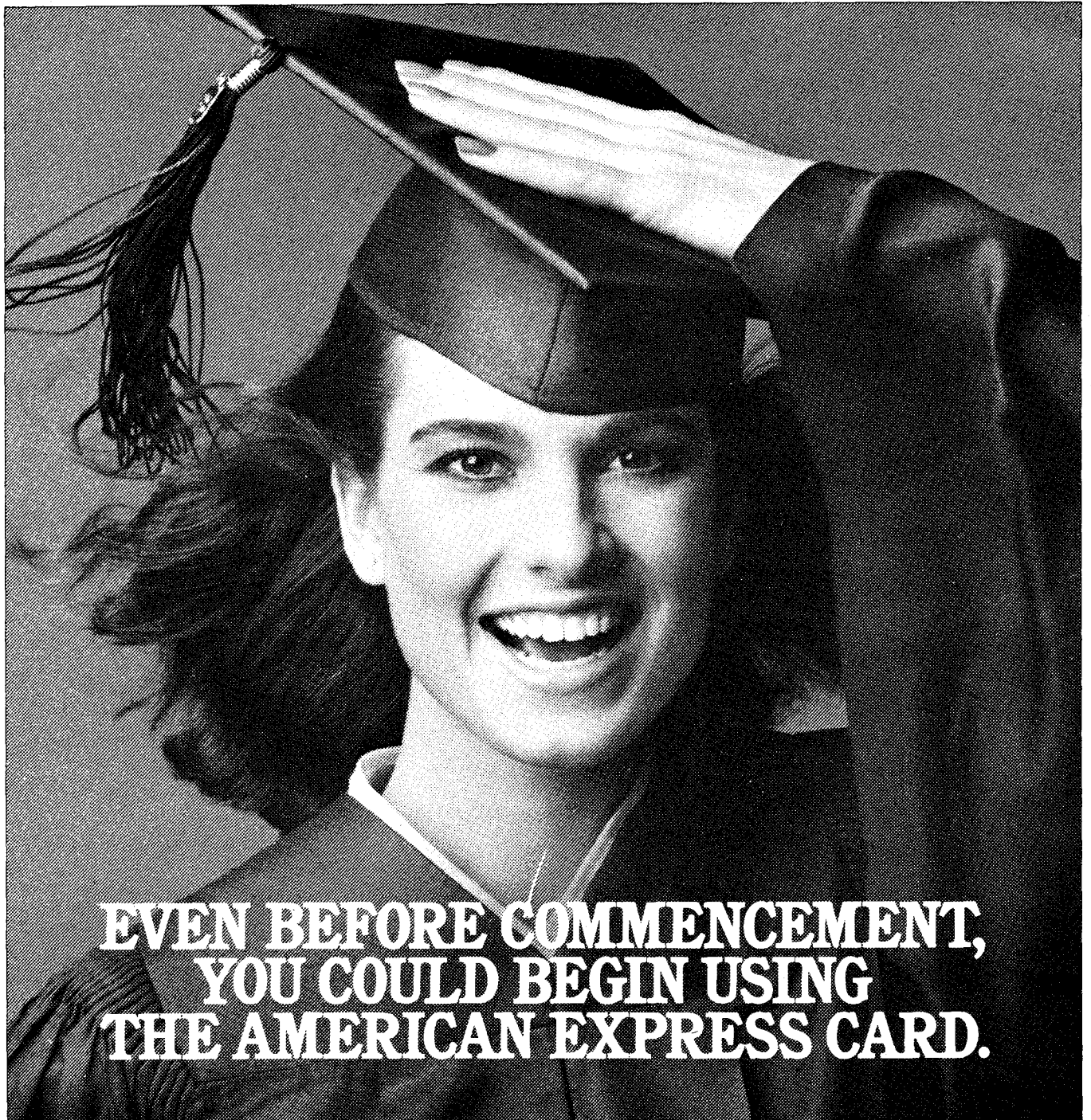
Ray Bradbury autographs his latest book for Peter Alfke.

there has ever been to read a Ray Bradbury novel. And it adds several reasons of its own. And it would be impossible to do justice to them without quoting the book even more extensively.

So I'm just going to cop out and

say that, if you're still not sure you want to read this book, you should go look at a copy in the Caltech bookstore.

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ENTERTAINMENT

Chinese Tomb

by John Fourkas

Long, long ago, in a place far, far away, there lived an emperor named Qin Shi Huang Ti. Qin Shi was a pretty amazing kind of guy; not only did he unify all of China, but he also built a Great Wall to protect his people. Qin Shi was so amazing, in fact, that after he had conquered six kingdoms, the rest of them submitted to him. Let's face it: Qin Shi was quite a guy. He totally altered the Chinese political and social structure. He standardized Chinese weights and measures, not to mention the language. He built roads, standardized parts (long before Henry Ford), built canals, and introduced new irrigation systems.

Qin Shi had one great weakness—a fear of death. Because of this, he had a huge tomb built for himself. It had two great walls,

four and six kilometers in circumference, and it was 47 meters tall. This tomb has been under excavation for years, because many sub-tombs are filled with Imperial treasure. In 1974, some 1.5 kilometers from the tomb, farmers digging wells discovered an army of life-size terra-cotta soldiers buried in the ground. It turns out that Qin Shi had thousands of soldiers and horses made to stand guard over his tomb.

Until December 1, there will be an exhibit of some of the artifacts at Ambassador College. The exhibit is free, and can be found inside the Hall of Administration. I highly recommend this exhibit; it is well worth a half hour of your time. It includes a twelve-minute video presentation and many large color photos of the site. Best of all, there is a full horse and one of the

soldiers. These figures are truly incredible. Some smaller pieces include a broadsword (still sharp enough to split a hair), some arrowheads, an inscribed weight (one of only two known to exist), coins, bricks, crossbows, and a spear. The exhibit can be comfortably taken in in the space of 30 to 45 minutes, and Ambassador College is only five minutes away by car. Go see it if you can; you won't regret it.



Feynman tutors aspiring physics student.

photo by Chris Meisi

Dining

by Jemima

Siam Gourmet
2486 E. Colorado Blvd.
578-9098.

Food service here at Caltech is fine most of the time, but for the weekends and those weeknights when you suddenly feel you simply have to have a change of scenery, an experienced word of advice on where to go for the best food, best atmosphere and best prices can be very helpful. With that in mind the position of the roving restaurant reporter was created, and I am pleased to announce that the first report is in.

This week **Siam Gourmet** was the establishment chosen for review. Located conveniently close to campus on East Colorado Blvd., Siam Gourmet is a comfortable little restaurant serving Thai cuisine at very reasonable prices.

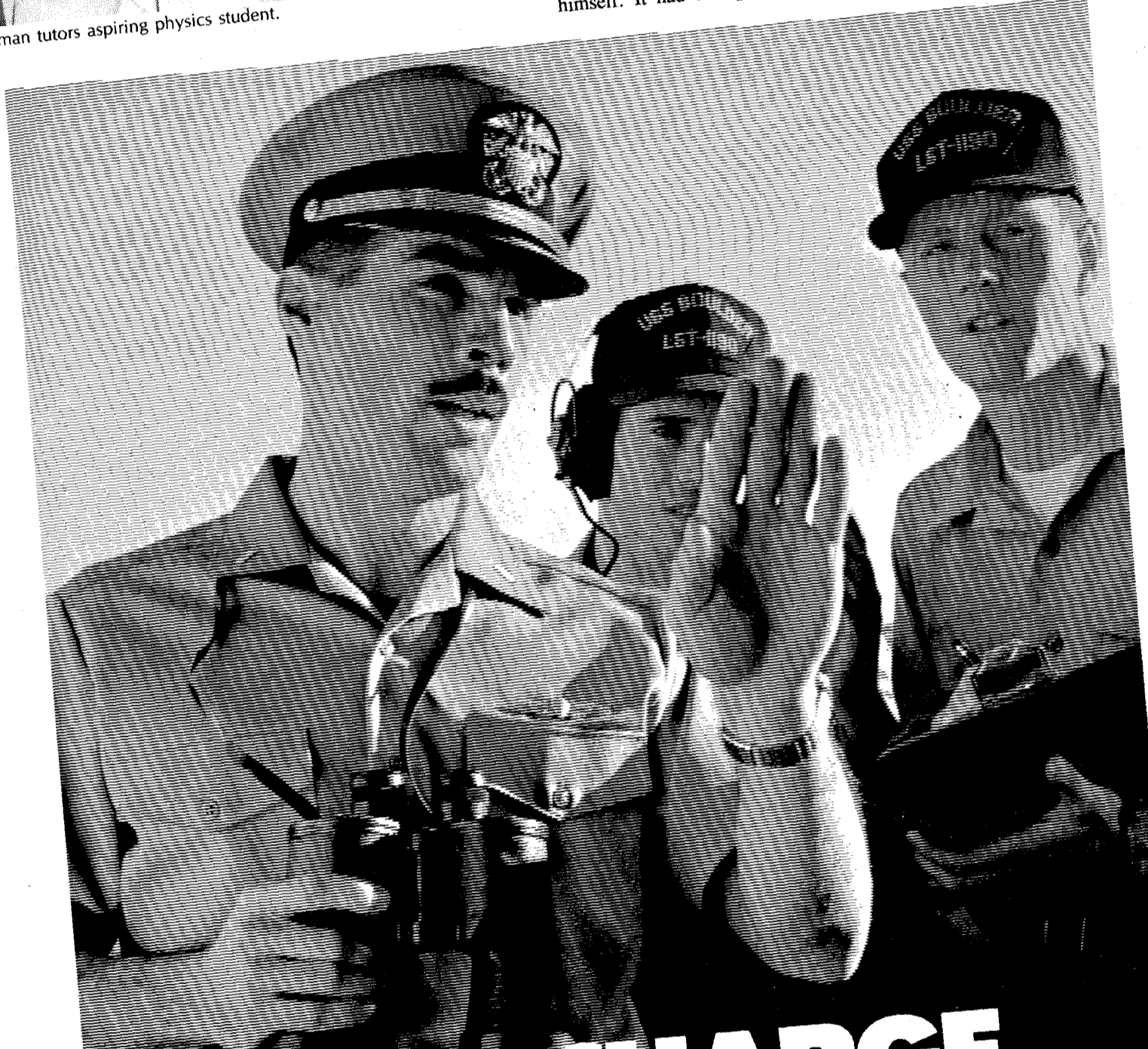
The menu sports a wide range of interesting appetizers, soups and main dishes, falling, for the most part between three and four dollars. The appetizer the DG (distinguished gentleman) and I chose was Pork Satay—barbecued pork with peanut sauce and cucumber salad. The combination of pork and peanut sauce sounded a bit questionable at first, but it turned out to be very tasty, and the cucumber salad added that little extra nuance to round out the flavor.

Tom Yum Gai, a spicy sour chicken soup, was the next course. In the menu Tom Yum Gai had been marked with an asterisk, defined at the bottom of the page as "spicy hot for the adventurous," and I was a bit leery as to what was meant by that. However, the cooks apparently have a sense of moderation, and though we needed several refills of water, our taste buds survived the experience quite well.

The last two items we partook of, baby corn sauteed in oyster sauce and cashew nut chicken, served with steamed rice, were the delectable conclusion of our meal. For this last course we got into the spirit of things and asked for chopsticks, which they only seem to hand out upon request. Al so, they don't serve any alcoholic beverages; however, during the course of dinner we saw several couples brownbagging wine and the management evidently doesn't mind.

Siam Gourmet also serves regular breakfast and lunch dishes, along with the current lunch special. The current special consists of a choice of either BBQ chicken, chicken curry, sweet and sour pork or broccoli beef, along with steamed rice and soup, for only \$2.95. In addition, when you go be sure to check out the big aquarium with fish and turtles (whose feeding time is incidentally rumored to be between 9:30 and 10:00 pm.)

In conclusion, I found Siam Gourmet to be a comfortable restaurant with good service, excellent food and reasonable prices. In the words of the roving restaurant reporter, "Try it!"



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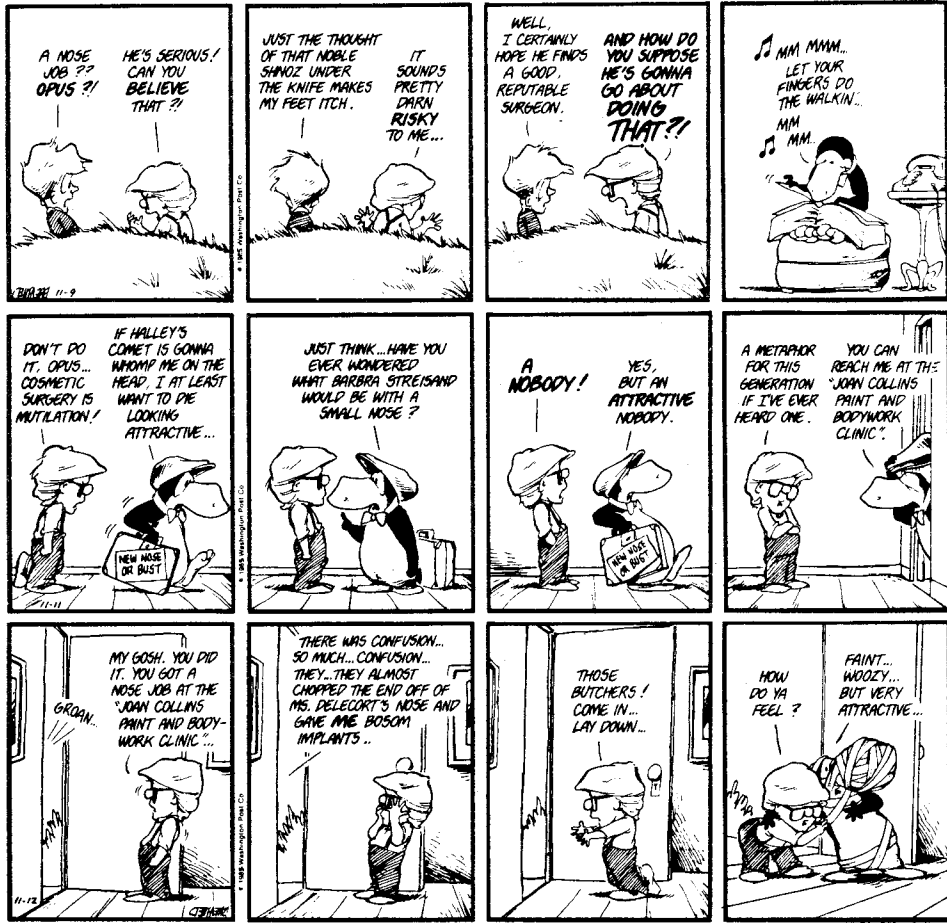
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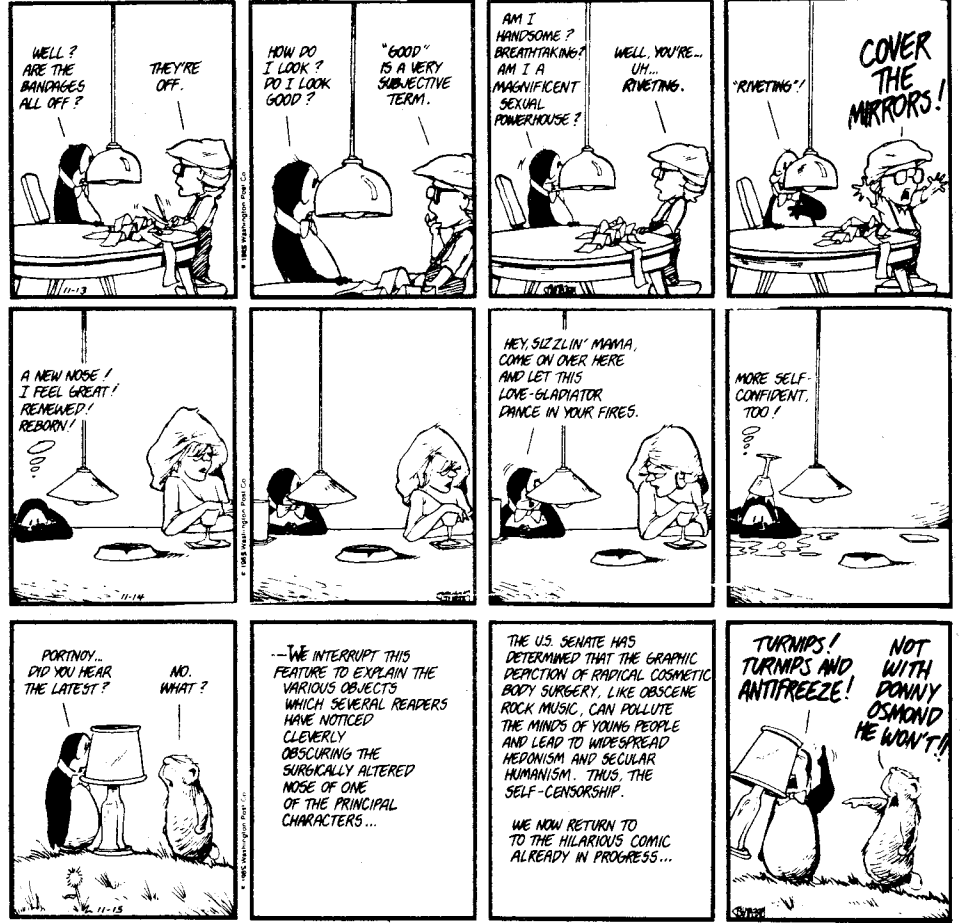
NAVY OFFICERS GET RESPONSIBILITY FAST.

BLOOM COUNTY

by Berke Breathed



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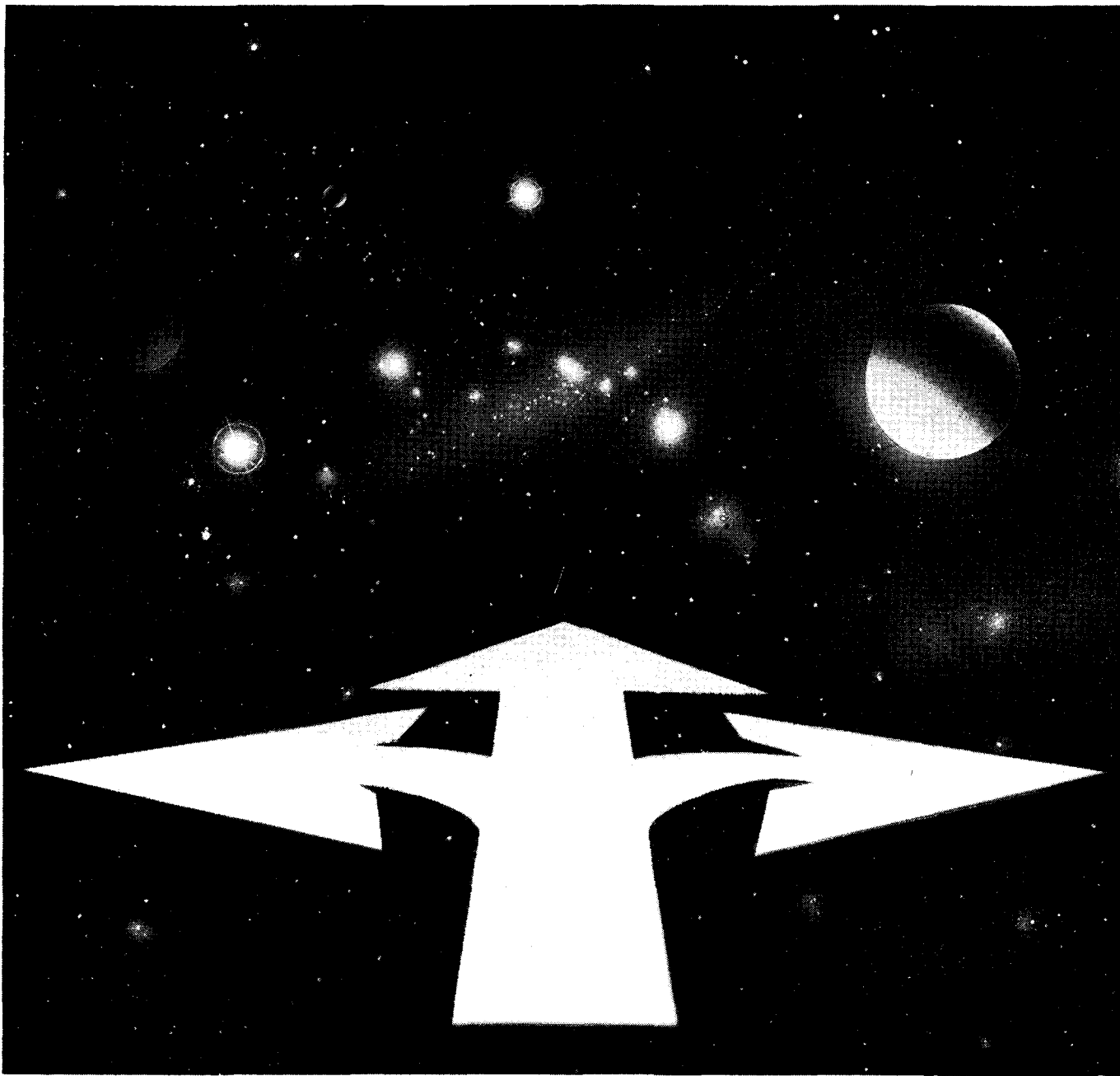
from page 3
 response in support of the principles of the Delhi Declaration.
 This Friday, Nov. 15, from noon to 1 p.m., in the quad, Caltech students are invited to read the Principles of the Delhi Declaration and lend support by signing the statement of personal response with name, state, and country.
 For more information contact the Caltech Y, x6163

JPL

from page 1
 tion, for 1988 a similar craft will be sent out to analyze ultraviolet rays. Hibbs believes that this craft could bring in very valuable information about ther solar systems and planets, possibly even down to the sensing of certain elements and atmospheric traits of the planets.
 JPL has a very exciting program right now with many current projects, and many more in the planning stages. Hearing Hibbs' talk on these projects was both very interesting and very informative. The future of JPL's space program seems to be very bright, and should continue producing a vast enough quantity of data and information to, as Hibbs put it, "keep graduate students going for a long time."

Alzheimer's

from page 1
 machines have a high incidence of Alzheimer's, which may be due to aluminum absorbed in that process. It is not clear, however, that consumption of products containing these substances, such as soda, processed cheese, and antiperspirants, poses a danger.
 In the blood flow model, narrowed blood vessels decrease glucose consumption in portions of the brain and cause loss of neurons.
 Finally, it is thought by some that the root of the problem is inhibited production of acetylcholine. This could conceivably be treated, but it would be difficult, given the process by which the compound is produced.
 In a society in which the elderly make up a growing proportion of the population, Alzheimer's disease is a very significant problem. A great deal of work is going into the search for a better understanding of it, but so far there is no known cure or way of bypassing the disease.



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SPORTS

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Fri.	11-15	7:30 pm	Basketball	LIFE College	LIFE College
Sat.	11-16	TBA	Cross Country (M/W)	NCAA III Championships	TBA
Sat.	11-16	8:30 am	Water Polo	SCIAC Championships	Caltech
Sat.	11-16	11:00 am	Club Soccer	Aston-Villa	Caltech
Sat.	11-16	1:00 pm	Fencing	Oxy & Cal Poly Pomona	Cal Poly Pomona
Sat.	11-16	2:00 pm	Football	Cal Poly	Caltech
Sat.	11-16	5:00 pm	Basketball	Marymount College	Marymount College
Sun.	11-17	12 noon	Water Polo	SCIAC Championships	Caltech
Tue.	11-19	9:30 pm	Ice Hockey	Cal State Fullerton	Caltech
Fri.	11-22	6:00 pm	Basketball	Christ College Invitational	Christ College
Sat.	11-23	11:00 am	Club Soccer	Corinthians	Caltech
Sat.	11-23	1:00 pm	Fencing	UCSB & Cal State Long Beach	Cal State Long Beach
Sat.	11-23	1:30 pm	Football	El Sereno Rebels	Caltech
Sat.	11-23	6:00 pm	Basketball	Christ College Invitational	Christ College



Photo by Tech Staff

Derek Ney towers head and shoulders over his Redlands opponent.

WEEKLY SPORTS RESULTS **Cross Country**

Football	Caltech 39	Mexicali Rojos 14
Hockey	Caltech 3	UC Irvine 2
	UCLA 9	Caltech 0
	CSU Northridge 4	Caltech 0
Volleyball (W)	Christ College 3	Caltech 0
Soccer	Redlands 1	Caltech 0
Water Polo	Whittier 15	Caltech 10
	Occidental 17	Caltech 6
Fencing (M)	SDST 2	Caltech 1
	UCLA 3	Caltech 0
Fencing (W)	SDST 1	Caltech 0
	UCLA 1	Caltech 0

by Dolph Inn

Five cross country runners will be competing in the NCAA Division III Regionals at Cal State Stanislaus this Saturday at 10:00 am. These five quality runners are: John Gehring, John Beck, Charlie Lee, Clea Bures, and Pam DeMoor. News of their NCAA exploits will appear in next week's *Tech*.

There will be a meeting for all those interested in participating in intercollegiate track and field. The meeting is Tuesday, November 19 at 4:00 at the Athletic Building. See Coach Jim O'Brien for more details.

Wanted: Circulation manager for the California Tech. Duties include Friday morning pickup and on-campus distribution. Excellent pay and benefits. For details, contact Jed Lengyel, x6154.

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WHAT GOES ON

Senior Photos

It may seem a bit early, but this is the first call for senior photos. They should be black and white, any size. Turn them in to the Publications Office, or mail to *The Big T*, 107-51. Pictures must be in no later than Feb. 7. If you need a photographer, simply send us a note (preferably well in advance).

Student Housing Jobs

The Housing Office hires students on a part-time basis to do various clerical jobs in the office. The hours are flexible and usually do not exceed 10 hours per week during the school year and can become full time during the summer and holidays. If you are interested, please see Elsa Goudsmid for details.

Manage an Apartment

The Housing Office will soon have an opening for an Apartment Manager at 1170 E. Del Mar. This position will involve approximately 20 hours of work per week, with more hours possible during the summer months. The job should be available sometime in December, and interested applicants should fill out an application in the Housing Office and see Elsa Goudsmid with questions.

Sexuality and Judaism

Guest speaker Rabbi Gary Schoenberg will speak and lead a discussion on "Personal Sexuality: Judaism Views Interpersonal Relationships" on Tuesday, November 19 from 4:30-6:00 pm in the Y Lounge. Everyone welcome. Refreshments will be served.

Chess Club

The Caltech Chess Club will hold its first meeting of the year on Wednesday, November 20 at 7:30 pm in Clubroom 1 in Winnett. Everyone is welcome. Please show up if you want us to actually do something this year.

Engineering Money

Engineering scholarships are being offered by the National Society of Professional Engineers (NSPE). Sophomores, juniors and seniors may apply. Scholarships range from \$1,000 for one year to \$20,000 for full tuition, four-year scholarships.

Applicants are judged from national standard test scores, essays, transcripts and extracurricular activities.

For more information and applications, contact the NSPE Information Center, 1420 King Street, Alexandria, VA 22314.

Deadline for application requests: November 22, 1985. Application deadline: December 6, 1985.

Concrete Awards

The American Concrete Institute is making three \$2,000 awards for graduate study in the field of concrete for the 1986-87 academic year. Applicants must possess a bachelors degree by the summer of 1986 and be accepted for graduate study in an engineering program in the area of concrete. For details, contact the Financial Aid Office. Application Deadline: January 15, 1986.

De Karman Fellowship

The Josephine de Karman Fellowship is being offered to students entering their senior undergraduate year and graduate students entering their third year (or after) in the fall of 1986. Special consideration will be given to applications in the humanities. However, all applicants will be considered who have manifested exceptional ability and serious purpose in any discipline. For details, please contact the Financial Aid Office. Application Deadline: January 15, 1986.

Caltech Bridge Club

The Bridge Club meets Mondays at 7:00 pm, in the Red Door Cafe. We play duplicate. Everyone welcome. Earn Master Points! (We are ACBL sanctioned.) Call Jeffrey (x4543) for more details.

Extra t's

What? You haven't picked up a deluxe 62nd-edition *little t* and there aren't any extras left in your house? "No problem!" say your devoted *little t* editors, who have extra copies secreted in their rooms, and will bestow one upon you, should you but ask. Said editors are located in Room 11 Ricketts (Peter Alfke) and 109 Marks (Matt Rowe). If you're too embarrassed to actually meet these people, Chris "MOSH" Brennen also has a secret stash. Don't miss out!

Bridge Tournament

The tournament is *this* Sunday, the 17th of November. Don't miss it! Everybody is welcome! Bring teams-of-four or pairs or come as an individual. BIG PRIZES! Earn Master Points (we are ACBL sanctioned). Play starts at 1:00 pm in Winnett Lounge. Call Jeffrey (x4543), Jennifer (x4476) or Jeff (x6627) for more details. Sponsored by the Caltech Bridge Club and the Office of Student Affairs.)

Caltech Musical

Auditions for this year's musical, *Kismet*, will be held on November 23 and 24 from 10 am to 6 pm in rooms 19 and 25 Baxter. Scripts, scores and recordings are available from Elaine Gese at x4925, room 326a Kerckhoff. Call first to let her know you're coming. We need more student participation, so we encourage anybody and everybody who wants to act and/or dance and/or sing to audition. Those interested in orchestra should also come and leave their names. Performances are Feb. 21, 22, 23, 28, Mar. 1, 2.

ArtsTech '85

From November 18 through November 23, CalArts will be hosting a joint CalArts-Caltech Computer Art Show, *ArtsTech '85*. The show will consist of a gallery exhibit of hanging art, stereoscopic 3-dimensional work, and animation. During the evening of November 19, there will be two performances of live computer music and interactive computer animation and video in the CalArts Color TV Studio. The performances will include music by Morton Subotnick, Barry Shrader, and Peter Otto of CalArts, with dance by Larry Attaway and others from the CalArts Dance School. Computer animation will be prepared by CalArts and Caltech artists, including Ed Emshwiller, Eric Martin, Vibeke Sorensen, Jules Engel, Alan Barr, James Kajiya, Brian Von Herzen, John Platt, Jon Leech and others from the CalArts Computer Graphics Group and the Caltech Computer Science Graphics Group. Artists and scientists working creatively with computer graphics will be participating from the Caltech, JPL, and CalArts communities. Fairlight Music Instruments will be providing a CVI, Computer Video Instrument, for the live performance. The performances on Tuesday, November 19 will take place at 8 and 9:30 pm and will coincide with a reception in the Gallery. For information call the CalArts Ticket Office at (805) 255-1050.

CESASC Scholarship

CESASC (Chinese-American Engineers and Scientists Association of Southern California) is offering 10 scholarships to undergraduate students to encourage them to achieve in the field of science and technology (other non-science majors will also be considered). Qualifications: GPA 3.5 or higher, graduation date after May, 1986. Criteria for Selection: GPA, Financial need, Extracurricular activities. Deadline for applications: November 30, 1985. For additional information please contact the Financial Aid Office.

Coins and Medals

During the past two decades the Caltech-JPL Numismatic Society has sponsored a series of nine medals commemorating outstanding achievements in the space exploration program. The events depicted span discovery projects from Surveyor to Voyager. Individual medals are available for purchase in silver (\$23.00) and bronze (\$1.75). Orders may be taken at the November 20 club meeting, through Henry Tanner in the Treasurer's office, or at JPL's Employee Recreation Club. Also available that evening will be the 1986 price guide to United States coins (known as the "Redbook"). It will be sold at \$3.00, half of the normal price.

All members of the Caltech-JPL community and their families are most cordially invited to attend meetings which are held the third Wednesday of each month, 7:30 pm in room 168 Church Laboratory on campus.

Food and Swordplay

Huzzah! The Caltech Medieval-Renaissance Society held its first potluck last Sunday, November 10. During the meeting we elected new officers, discussed a myriad of plans for the new academic year, and most importantly, we had a great feast. Our next meeting will also be a potluck, to be held November 24, Sunday, at 3:00 pm in Winnett Lounge. There will be a class in period dancing, a discussion about designs for a club emblem and a pavilion, and, of course, another glorious feast.

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