

I deny the
allegations

THE CALIFORNIA TECH

and I have only
contempt for
the alligators

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Photo by Alan Loh

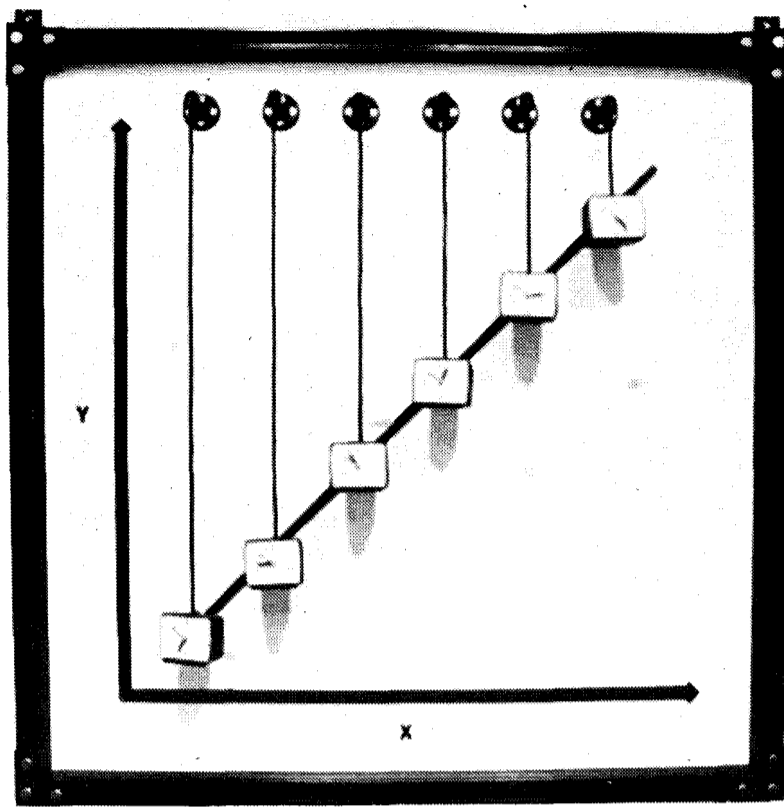
Timeless Art Shown at Baxter

by Pat Frantz

In an effort to promote the understanding of art and encourage Caltech students to visit, the Baxter Art Gallery is sponsoring a special student reception on Wednesday, February 21. The reception will be from 4:00 pm to 6:00 pm and is in honor of the exhibit "Bryan Rogers: Timepieces" currently running through February 25th.

Mr. Rogers will be on hand for the reception to discuss his work. He will also be showing some of his films later that night in Beckman labs (8:00 start for that one, and it's also free). Rogers has a PhD in chemical engineering as well as an MA in art from Berkeley; he currently lives and works in Berkeley, and teaches at San Francisco State. His art combines beauty with technology to form an aesthetic view of modern life.

There will be beer and refreshments available at the reception; in addition, some art students from a local private school may attend, thus presenting the opportunity of



A new Phys 1b demonstration?
A Timex supermart showcase?
Only the artist knows for sure.

meeting new people in an informal cultural atmosphere. The exhibit itself is well worth seeing, being both amusing and inventive. The show deals, of course, with time and the ways modern society thinks of time. Admittedly there are a few unimpressive pieces, but the artist's wry statements on birth and death, zen and space-time physics are generally very good. Particularly good are the

"Cartesian Clock", "Linear Space-Time" sculpture and the "Time of Your Life" clock.

For Michael Smith and Wendy Brodhead, the Director and Assistant Director of Baxter Art Gallery, this reception is an attempt to encourage student participation in and utilization of the gallery. When asked if this reception marked the beginning of a new approach, Ms Brodhead replied no, not really; in the past there have been films and a noon series of talks on Wednesdays.

However, she said, they did want to have a function especially for students, one that would introduce them to the gallery. "This exhibit seemed perfect for that," she said. "It combines art and technology," and thus should appeal to the Caltech student.

Cinematech!

by Jon Zingman

This Saturday, Cinematech will return after a two term absence. Our first program will feature two Alfred Hitchcock films, *Frenzy* and *Notorious*. In *Frenzy*, beautiful women in the prime of life fall victim of London's "Necktie Murders". Hitchcock creates a suspense-filled thriller, set in the London locations of Bow Street, Old Bailey Court and Newgate Prison. Ingrid Bergman and Cary Grant star in *Notorious*, as two federal agents who must stop a group of ex-Nazis in Brazil. The Nazis have a supply of uranium, and must be stopped. The movie contains some classic Hitchcock touches, such as the long craning views the camera takes of Claude Rains' home and the closeup of Bergman's hand as she passes a winecellar key to Grant so that he can search for clues. Next week, Cinematech will feature a science fiction night. The original *Invasion of the Body Snatchers* leads off the program. Mysterious changes come over people in a small town, leaving them devoid of emotion. Only one man is left unchanged, and he must fight all of the rest of the townspeople, as well as people elsewhere, who think he is crazy. Also on Feb. 24 will be *Colossus—The Forbin Project*. The United States turns over all of its defense to a supercomputer which

immediately takes things over for itself. On March 3, we will feature Bette Davis and Joanne Woodward. Bette Davis is the insane "baby" Jane in *Whatever Happened to Baby Jane?* the story of two sisters who were once child stars. Davis gives an astounding performance as Baby Jane, tormenting her now crippled sister, played by Joan Crawford. In the end, the question "Whatever happened to Baby Jane?" is answered, but it's a surprise. Joanne Woodward stars in *The Three Faces of Eve*, the true story of a woman with three separate and conflicting personalities. Woodward won an Academy Award for her portrayal of the troubled woman.

Cinematech needs your support to keep going. The donation at the door is only \$2.00 for the public, \$1.00 for ASCIT and GSC members and \$0.75 for children under 14. Your support also means we want your ideas for movies. Tentatively scheduled for next term are a night of Satyajit Ray films, a night of Eisenstein films and a Bogart night as well as a few other ideas. If you have any suggestions give them to Bill Schmidke in Blacker or Jon Zingman in Lloyd. Better yet, come to the movies on Saturday nights, and remember, Cinematech is brought to you by the Caltech Y.

Investment Fund to be Student Run

by Ray Beausoleil

A few months ago, alumnus Stan Johnson donated \$50,000 to the students of Caltech as an investment endowment. As of last Wednesday, 14 undergraduates have applied for membership on the fund's Board of Directors, with two weeks remaining before the final application date.

The trustees and administration of Caltech will maintain ultimate control of the fund, but they would not interfere with its operation as long as it is being run responsibly and is serving a useful purpose. Students themselves will do the

day-to-day investing, and, to keep student interest high, some of the returns (provided that there are returns) would probably go towards all-campus social events. The remainder would be added to the endowment to help compensate for inflation.

The main purpose of the fund is not parties, however. It is designed to provide Caltech's undergraduate and graduate students with a different kind of learning experience. The main objectives:

To increase student interest in the techniques of wise investing.

To develop an interest in improved understanding of investment, general economic forces (including government policies and inflation), the importance of managerial competence, and the impact of technological, industrial, and market trends on the value of securities.

To establish contacts between students and the world of finance, including brokers, advisors, market services, financial officers of corporations, and the markets themselves.

To provide a practical and challenging learning opportunity in the field of business economics and management.

To provide a flow of revenue, generated by wise investment decisions of students, that may be used to fund projects

continued
on page 9

Hockey Puts Northridge on Ice

Puck saga

by "The Belles of the
Ball Massage Parlor"

While the NHL All-Stars were dropping a 6-0 decision to the communists last Sunday, the Caltech Beavers racked one up for democracy and freedom, defeating the Cal State Northridge Pinkos 7-0. This was Tech's third victory in a row and an excellent capitalization of a unique schedule which had them face C.S.U.N. three times in two and half weeks.

The victories marked the return of Tech to its pre-Christmas form and ran their season record to 10-2-1. The Beavers had been a little slow in previous games owing to the absence of several key players. With the team at full strength slick passing and explosive bursts from the defensive to offensive zones were provided by the abundance of solid players.

Northridge had a fine skating team but was unable to put together a consistent attack. They seemed bothered by the persistent forechecking of the Beavers and had trouble breaking out of their own zone most of the night. They eventually resorted to hitting to intimidate Tech but several hard though slightly illegal retaliations from Tech players convinced them this wasn't wise. As one of their players remarked after the game, it was the first time anyone had tried to spray acetone in his face during a hockey game.

The Tech attack was spurred on by the passing of defensemen Yates, Fryzuk, Rothnie, Rogers, and the Friedman brothers to the forward lines. The Gellman, Christenson, Bobroff line is the hottest in the league now having amassed 10 of the team's last 14 goals including a spectacular four goal night by Christenson during

the second Northridge game. Equally important, the line hasn't been scored on in the last three games and has only had two goals scored on them all season. The Bardet, Minahan, Culick combination has also been sharp, accounting for key goals all season. Center Joe Minahan is the team's fastest skater and seems headed for a big night soon. Pleasantly surprising has been the coming into form of the remaining line of Macfurlane, Braisted, Chobotov, and Ortez. Mike Chobotov notched two personal hockey firsts during last Sunday's game. He scored his first goal and didn't fall down once after being hit.

The Beavers are in the thick of the race for first place and have an important game against Oxy this Sunday at 8:45 pm at the Pasadena Ice Capades Chalet. Admission is free so come out and root for the home team.

A Few Gripes

I saw a petition in Lloyd House the other day which said something about Caltech students which is not always understood by faculty: that most of us are interested in more than just science courses. Specifically, the petition was concerned with adding art classes to the Caltech curriculum. True, the Institute *does* have *some* art classes, but the selection is limited so that people have been taking art courses at other colleges—and having trouble getting credit for them. A friend of mine has been able to get non-specific Institute credit for his off-campus course but not Humanities credit, because in his course he's actually *painting*, not studying art history or philosophy . . . or something.

Best of luck to that petition. It will have some credibility problems, since the idea has been tried before and apparently too many people were glad of the opportunity but felt too busy to "waste their time on non-essential courses." I hope that this time it's understood that we're serious about wanting these kinds of courses.

That Caltech students are serious about music is beyond dispute. There are more students involved in music now than in any year in Caltech's history. With the Orchestra, the Wind and Jazz Ensembles, and the Men's and Women's Glee Clubs, there are an average of 200 students a year actively engaged in performing groups. These students regularly take time from their studies to devote to what could be called Caltech's most under-united "courses." The Glee Clubs probably enjoy more regular attendance than most united courses, which implies not only interest but a certain amount of didedication.

There are other hassles for Caltech's unofficial Music Department, one of them being that it is, indeed, unofficial. Although the five groups mentioned above are all directed by professionals in the music field, most of whom hold faculty positions in other universities, not one of them is officially on the faculty and, hence, their influence on Caltech's total educational program remains extracurricular.

Like art in general, music seems to take, if not last place, then certainly nowhere near first place, in Caltech planning. Orchestra members practicing at Oxy must practice next to Oxy students who are getting credit for doing the same thing.

Now, credit is not the most important thing about these courses. Indeed, one of the most encouraging aspects of the petition I saw was the large proportion of signers who indicated that they would be willing to take a non-united art course. Nevertheless, the second-class nature of art in Caltech's curriculum is emphasized by its lack of academic standing in any but its most rarefied and analytical forms.

Perhaps it is feared that art courses will lower the academic standards by being easy-A's. The "basket-weaving" stereotype, however, is just that, a stereotype. There is no natural law decreeing that an art

class has to be a joke; a quality course requires work on the part of both student and instructor. A few good art courses would be both enjoyable and beneficial, for the men and women who graduate from this place will graduate not only as engineers and scientist, but as human beings.

—John Avery

A Few More Gripes

I'm sure that you've all heard stirring lectures from Erik Sirri & Co. on the various far-reaching benefits of the honor system; I'm also sure that you've run into a few of the disadvantages by now. One of the biggest disadvantages is that being able to trust every one of 800 people on the campus makes it very easy to become lax with respect to off-campus people.

Surely, not all—or even a sizeable percentage—of the off-campus visitors have come to Tech to relieve you of your money or property, but as last month's Security report shows, about ten of them did. Most of these thefts, though, were of bicycles, which is really a shame because bicycle thefts are actually very easy to prevent, especially in the house situation. In an alley of six people, the chances are that if the thief is spotted, the bicycle he's carrying will be recognized as not being his. Thus, when the thief enters a room, he is working on a definite time limit and anything which impedes his speedy operation will help prevent him from trying for your bike.

Basically, this is a lengthy way of telling you to lock your bikes up. Several of these thefts have been out of students' rooms, and at least two were out of locked rooms, so just bringing it in out of the hallway isn't enough. Lock it; not just through the wheels, but to a post or bed. Living in the spirit of the honor system is really nice, and a great convenience, but just consider how bad it will feel that one afternoon when you come home and find that the rip-off has happened, not to "somebody else" this time, but to you.

—David C. Younge

Editorials (and other such lies)

For Practical Idealists

To the Editors:
I'm writing this letter in response to Pat Frantz's article on Science and Sanity in the Feb. 9 *Tech*. In that article Frantz (he? she? well, whatever) discussed the need for good mass transportation systems in the good ol' U.S. and made some "proposals" as to what might be done to remedy the current sad state of transportation in this country.

The spirit of the article, that of idealistic youth seeing what is wrong and wanting to make it right, is admirable. However, it is well and fine to sit at a desk in a Caltech dorm and dream up proposals to make life better for everyone, but dreams remain dreams when reality is ignored. How does Frantz suggest we phase out the automobile? Does Frantz have any idea of what sort of struggle is now taking place between highway, rail, and bus interests all vying for federal money? Of course not. No one teaches that at Caltech.

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CALTECH PRESENTS
THE CALTECH MUSICAL
 MEREDITH WILLSON'S
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 SAT., FEB. 24, 2PM & 8PM (8 PM SOLD OUT)
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Next Week
Phantom of the Paradise

The Caltech Y.....fly by

Saturday, February 17, CINEMATECH with Alfred Hitchcock films, FRENZY and NOTORIOUS at 7:30 pm in Baxter Lecture Hall. Donation—\$2.00, Caltech students—\$1.00, children under 14—\$.75

Tuesday, February 20, OBSERVING THE SOLAR ECLIPSE with Dr. Harold Ziron, Professor of Astronomy. In Clubroom 1 at noon. Bring your lunch.

Wednesday, February 21, UPDATE NOON DISCUSSION SERIES with Dr. Robert Sharp, Professor of Geology, speaking on the "Sand Dunes of the Imperial Valley." At noon in Clubroom 1. Bring your lunch.

last page

ou won't be spoon-fed... you won't know how the decisions made that affect everything... Caltech grant money to water bill to how much is okay for you to breathe, must make the effort to... And although a foolish horniness on the part of California voters may prevent from voting if they are... 21, there is no reason for... undergrads not to learn... the government and... participate in its undertakings... of all, the future that is... in Washington and... mento belongs to all of us, second, if an undergrad... to write a representative, one will know/s/he is under 21... doesn't say so.

o: a suggestion. Three... organizations which publish... letters in addition to... for consumers (the... and the environment (the... two) are:

Common Cause
P.O. Box 220
Washington, D.C. 20044

Environmental Action
Suite 731
1346 Connecticut Ave., N.W.
Washington, D.C. 20036

National Resources Defense
Council
22 E. 42nd Street
New York, N.Y. 10017

ues to all three are \$15 a... I belong to all three and... vouch for the quality of... work and of their... ications. Current issues are... ssed and reviewed, and... en members are asked, h... the publications, to... te representatives in... ington or their home state... aps some enterprising,... ily conscious undergrads... t subscribe to one or more... ese and leave the literature

the organization(s) send in their dorm lobby when they are done with it. Occasionally, s/he might even write to somebody in the government. Sometimes, that appears to do some good. And there are, of course, other organizations that do good work for other causes which a person might find out about (ask some social science prof about it).

But if you prefer to sit in your room and discuss things in an idealistic manner without doing anything (and more may be done than writing letters), that is your right. And if you don't care to learn who's gutting our land and sea, and who's allotting how much money for scientific research, and what decisions are being made right now which will influence your life—that is your right, too.

—Randy Morse
grad student

To the Editors:

In regards to "An Irate Senior's" letter, the first to commit the massive destruction and unholy desecration of the west end of the Olive Walk was a heavy service company truck which was commissioned by Caltech; not a lazy Techer as was assumed.

As for the supposed good looks of the Olive Walk, I have heard many say that the Walk looked better in the good old days (ask a Senior). The deep green, low-cropped carpet that lies there now looks as out of place as all the stupid telephone-pole palm trees around here.

The biggest problem with the Olive Walk is that it was

redecorated at a big expense so that the faculty and their important guests would have a more sightly stroll down to the Ath. It certainly was not redone for the benefit of students who are inconvenienced in their movement of heavy possessions. (Students don't move things just in the first and last two weeks of a term.) For some people, it is difficult to respect and protect something that was put down as a demonstration of faculty and administration power over students.

—'Forgot to Sign'

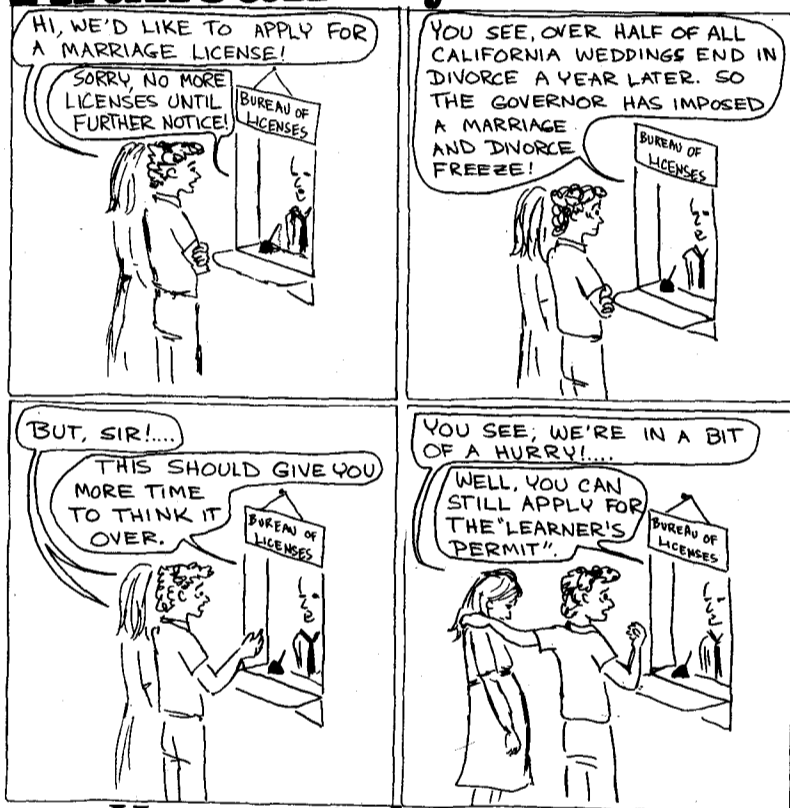
[Palm trees out of place? In sunny Southern California? C'mon!—eds]

THE EDITORS-IN-CHIEF
OF THE CALIFORNIA
Tech WISH TO ANNOUNCE
NOW, PUBLICLY AND FOR
THE RECORD, THAT WE
DO NOT NOW GIGGLE,
NOR HAVE WE EVER
GIGGLED, LIKE GIRLS
IN THE John F. Avery
ANNEX!! David C. Young

High Lunch

The Caltech Women's Luncheon will be held on Sunday, Feb. 25, from 11 am to 2 pm in the penthouse of Keith Spaulding (the building). All women connected in any way with Caltech are invited to come.

Thuncan by P.M.



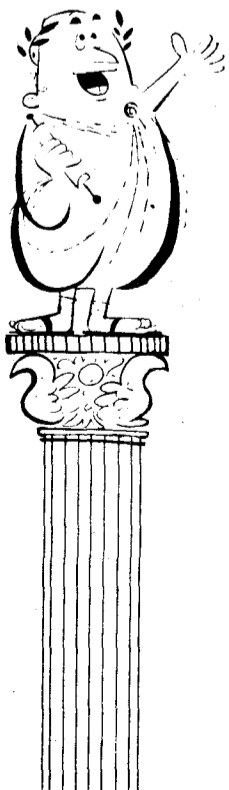
Happy Birthday, Janee!

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Stuttering and Biofeedback:

A doctoral candidate at Fuller Graduate School of Psychology is conducting a research program which is exploring the use of biofeedback as a treatment for stuttering. All individuals accepted into the program will receive biofeedback training at no cost to them. If you are a moderate to severe stutterer, or know of such an individual who may be interested in this program, please call Don Bosch at 795-5144.

Grad Meeting

The Graduate Student Council will be holding a special hearing to discuss the problem of graduate housing. This meeting will take place on Tuesday, February 27th at 8:00 pm in the Y Lounge of Winnett. Faculty and staff are welcome, but this is intended primarily as a graduate student discussion.

The GSC is investigating the problems involved in obtaining on-campus and off-campus housing. It needs facts and figures about this problem, and also ideas on how to improve the situation. The Council hopes eventually to present several possible alternatives to the graduate student body.

All graduate students with opinions on the matter are urged to attend. If you can't be there, give your ideas to your GSC representative, or contact Ann Kramer at x1434, mail code 138-78.

Hillel(s)

The Caltech and PCC Hillels will get together once again on Friday, Feb. 23 at 7 pm. They will have a Shabbat service and a potluck dairy meal in the Y lounge. Please RSVP to Dorraine at 447-5800, or Len at 792-9264.

Any Wednesday

Next (any) Wednesday, the Baxter Art Gallery will feature three distinct programs. The first, on Feb. 21, at noon in the Gallery, is Bryan Rogers discussing his work. Then, from 4-6 pm, there will be a special "student get-together" in the gallery, with free beer and snacks. Finally, at 8 pm, there will be free films by Bryan Rogers in Beckman Labs, Room 24, lecture hall. He will also discuss his previous work.

Swimmers Keep on Stroking

Despite the warm, sunny weather of last Saturday, both the men's and women's swim team were unable to overcome the Occidental swimmers. Our six men were defeated 29 to 80, overwhelmed by the herd of 17 males Oxy had. The women fared somewhat

better, trailing by between five and ten points through most of their events. They lost the meet in the last relay, when a first place to Oxy (for seven points) made the final score 47 to 59. Many individuals on the

Caltech team made strong showings in the meet, spurred on by Coach Spencer. Reimer took first in the 1000 Free and second in the 500 Free, while McIntyre placed first in the 200 IM and second in the 200 Breast. Ohlsen got a third place in the 200 Free, Anderson got a second in the 50 Free, and Olson took third in the 200 Back.

The mighty women's team of six once again did remarkably well considering that they were badly outnumbered by ten Oxy women. Besides the loud "encouragement" of their beloved coach, they had sleek new racing suits to help speed them up. Bonnie Blamick led the way, taking firsts in the 1000

Free and 500 Free, along with second in the 100 Free. L. Hildemann won both the 100 events, and took a third in the 100 Back. Chris Bockenstette about three seconds off her backstroke time (down 1:14.2) to take a second place and also placed second in the 200 Free. Cathy Kirsch frightened away all competition to take commanding first in the 1000. She also placed second in the 100 Breast and third in the IM, while Sue Fuhs took third in the 1000 Free and 100 Breast. Tomorrow, February 17, Caltech's last home swim meet against Pomona-Pitzer. So get a tan, check out the girls' new swimsuits, and CHEER ON!!

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If you're a junior or senior majoring in sciences like math, physics or engineering, the Navy has a program you should know about.


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Who's on First?

by Perry Walker

This year's baseball team is one of the better Caltech teams of the decade. Caltech boasts sound defensive play at most positions, strong hitting, and a pitching staff that needs just one more starting pitcher.

Heading the squad is all-district outfielder, Steve Eckman. The Ricketts speedster is the starting centerfielder, and led the team in almost every batting category last year. Rounding out the outfield are Bill Newman in left field and another speed demon, Mike Reach in right. Sluggers Jim Jacobs and Fred Crimi play third base and shortstop respectively. Terry Thomason is the second baseman, and freshman Bobby Buck is the starter at first base. This very solid infield was dealt a major blow last Saturday when Fred Crimi broke his thumb via a line drive. John Zacharias and Perry Walker hope to fill this void.

The pitching staff consists of Jamie Abbot, Alphonse Sterling, Kevin Miller and Eckman. This unit is hardpressed to pitch in three games a week including doubleheaders every Saturday. Steve Toner and Mark Fortunato complete the battery as the two catchers.

Rounding out the squad are Stuart Stevens, Eric Klumpe, Paul Thomas and Carrie Cummings (statistician). Coach Ed Preisler says that with one more pitcher, his squad could easily surpass last year's 6-20 record.

Arp Speaks on Quasars

by Donald R. Benton

On Wednesday, February 14, Dr. Halton C. Arp, staff member of the Hale Observatories, descended from the legendary heights to impart some of his knowledge to an interested audience assembled under the

patronage of the Caltech Y. The main topic of the lecture was the observed relation (actual or imaginary) between certain peculiar galaxies and quasars. Numerous slides were presented to support the opinion that the redshifts of many quasars have nothing to do with their

velocities relative to the Earth. In each example given, a jet emanating from a peculiar galaxy points in the general direction of one or more quasars in the vicinity. These quasars often have similar redshifts. Dr. Arp believes that these quasars have been somehow ejected from the galaxy. If this sounds different from what you have heard on the subject, it probably is. Dr. Arp himself describes his viewpoints as being "heretical". The majority of those in the know are of the opinion that

these quasars are redshifted by their velocities and actually lie millions of parsecs farther away. However, the good doctor says that the probability is too low for such alignments to be only random. He then concludes that these redshifts are not caused by velocity and, by other reasoning, are not caused by gravitational fields. Dr. Arp offered no explanation for the large redshifts of these quasars. The lecture was part of the Update series sponsored by the Caltech Y.



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Project-oriented
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Manufacturing Supervision
Assembly Methods
Fab Methods
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Interviewing on Campus
February 22-23

If unable to interview at this time, send resume to: Ruth Lodowski/Texas Instruments/P. O. Box 226015, M.S. 222/Dallas, Texas 75266.

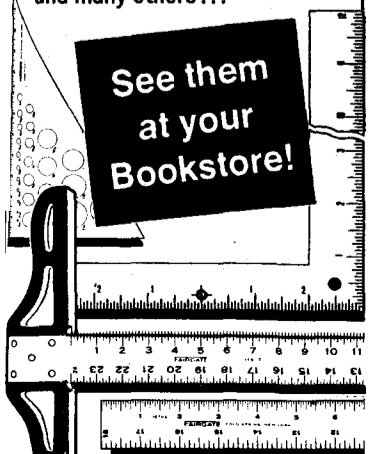
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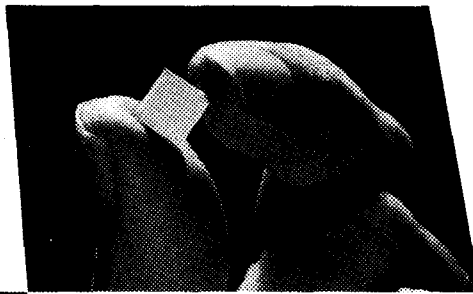
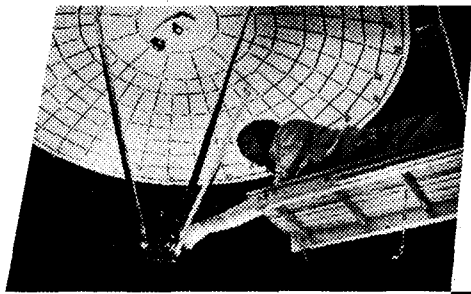
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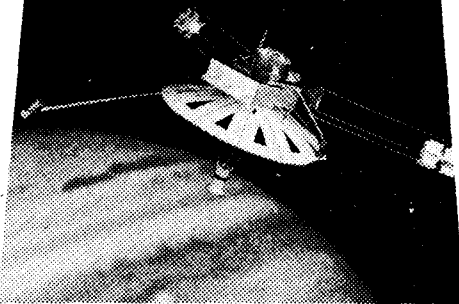
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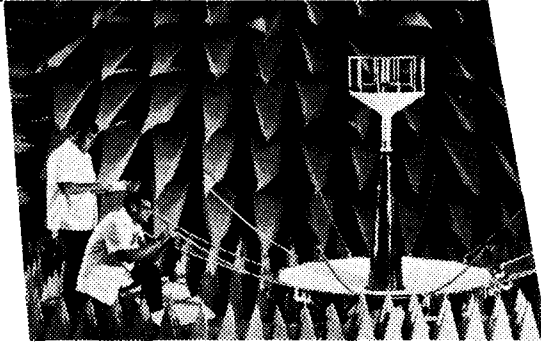
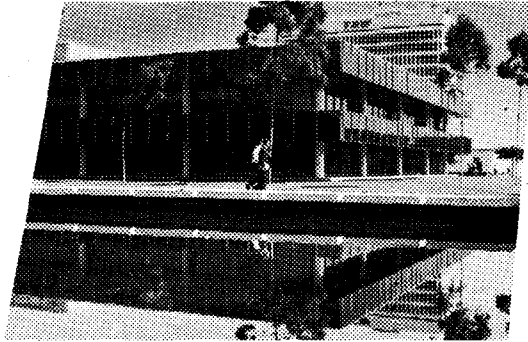




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February 21 & 22

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Random Numbers

Well, I did promise the new editors some copy for this week. &\$†@*!!!, my typewriter ribbon is dying. I wonder if the *Tech* can spring for another one. [Typist's note: if it means my not having to read this column typed in pink ink on white paper any more, the *Tech* had better spring for another ribbon!] If they'd just find the two articles that are lost somewhere in the *Tech* office, I wouldn't have this problem. At least I could get some sleep tonight.

I don't know about the rest of you, but it's getting to be so long between letters that I'm thinking of having the spiderwebs in the mailbox bronzed. It's been lonely since the spider left. Speaking of letters, our new fearless leaders want me to start a "Dear Abby" column. Seems to me I suggested that a long time ago but I never got any letters. I guess that nobody out there needs any advice or that you all doubt my ability to give it. Not even one problem with members of the opposite sex. I could say something about your all being pretty cocksure but it might be in pretty bad taste.

Of course no one has any problems with the opposite sex. There just aren't too many members of that particular society around unless, of course, you are one, in which case there are too many of them around. I don't know about you, but I understand what I just wrote. But anyway, Dave told me to make up some letters. [I said nothing of the sort!—dcy] Somehow that seems unethical to me. To be able to set myself up would be too good to be true and I'd probably blow the opportunity. So Dave is supposed to make 'em up for me. You will notice that we have no "Dear Abby" column this week. [Your editor is not a crook.—dcy]

Would you believe that they also want me to write serious stuff? That's somewhat like handing a kid a stick of dynamite and a hammer and telling him to go and play in the living room. Personally, I wouldn't care, but I don't think that the *Tech* carries enough libel insurance. Not that I'd be anything less than a gentleman but some people might feel that being interviewed or reviewed by

yours truly was like being welcomed to a new town by a Welcome Wagon driven by the village idiot. Besides, I like what I'm doing. This column doesn't pretend to be any more than unreal and you can't tell the mistakes from the garbage. If I started writing real stuff I must have to start worrying about them.

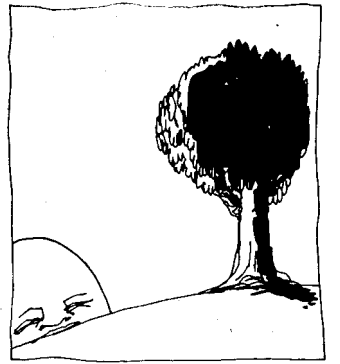
But anyway, (where have I seen that before?) I suppose I have to do a little work, so... I was at the Harlan Ellison lecture tonight. I know that quite a few of you weren't. That's too bad. He was excellent and I'm sorry to say that we were a rather wimpy audience. Granted, MIT has a larger talent pool to draw upon, but I still think that we could have come up with a better audience. We surely could have come up with a larger one as Baxter was only about 70-80% full. But regardless of all that, he is certainly worth having again. That is, if we can con him into coming back. Maybe if he gets poor and needs the money again...

As for his performance, what can I say about a guy whose first statement is about how his pants got wet? It was one of the most interesting talks that I've attended in a long time.

One more thing and I'll quit for this week. Belated congrats

and wishes of luck to all our newly elected officers. Now that you've all recovered from sogginess, I suggest that you sit back and take it easy until something hits the fan. Ah, how little Ye surmised of what Ye were in for. Of course, we never said that it would be easy; we just said that the pay was lousy. Enough.

—Duncan G. Mahoney



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Engineering is *the* most promising career path for women, according to one recent employer survey. Opportunities are a result of projected overall employment growth in the field, plus a shortage of women qualified for the jobs available.

Women in undergraduate or graduate engineering studies can get financial assistance from the Business and Professional Women's Foundation through a special loan fund expected to total more than \$80,000 this year. Available to either full- or part-time students, loans are made for tuition, fees and for related expenses such as child care or transportation.

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Completed applications for the fall 1979 semester are due by May 15, 1979. For applications and/or further information, write to Loan Fund for Women in Engineering Studies, BPW Foundation, 2012 Massachusetts Avenue N.W., Washington, D.C. 20036.

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on campus interviews
Monday
February 26

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Ellison Speaks . . .

by Eve Bennett

Harlan Ellison's presence was felt at a Y-sponsored event this past week. Opening with an explanation of a little wet spot on the front of his trousers, he demonstrated his willingness to discuss any subject—almost. He did not want to delve into a discourse upon religions and bored himself with a parody of a professor lecturing on the only topic—the universe. Ill-will arose when the talk turned to an evil subject—television. He held steadfast in his blanket criticism of TV and did not want to hear opposing arguments. He became furious when he could not sway a certain lady to his point of view and tried to terminate the argument by shouting "TV is bad for you."

What he was willing to talk about was how he had spent the past year. He worked on a screenplay of Asimov's *I, Robot*. He said that he was brought in on the project as a last-ditch effort to get it off the ground since no one had accomplished that in the past 15 years while the studio had the book under contract. He modestly reported that he had written a very good script that studio executives described as a work of "genius", but they also wanted to change a few things. These "few things" were major things in his view, so he refused to change it. The studio now has the author of *The Thorn Birds* screenplay on it and Ellison is but \$13,000 richer

for his year of toil. He lamented it always happens that he does the hardest work on a screenplay, the initial draft from the book, and is then released early so that he never sees the big money. His rationale for this is that executives cannot trust a known lunatic such as he and must bring in others as "insurance" that the project does not go wrong. As part of getting over this bad experience, he has not written any during the past two months, but he has been giving talks, for which he is usually paid \$3000 a night (but not that much by the Caltech Y).

In the course of the evening, Ellison gave his opinion of several movies. His criticism of TV does not extend to this medium since in order to view a film, one selects from a listing and travels to a place specifically designed for viewing; also, they do not have commercials. His highest praise was of *The Deer Hunter*, which, he said, "will completely burn out your brain." He suggested going to see it during the day, alone; and if you do not cry afterwards, then . . . well, you are insensitive. The as-yet unreleased *Hardcore* with George C. Scott was deserving of one of his favorite adjectives, despicable. Of *Star Wars* he does not wish to hear anymore—that bore is the cause of TV's "Battlestar Ponderosa". The mention of *Close Encounters*

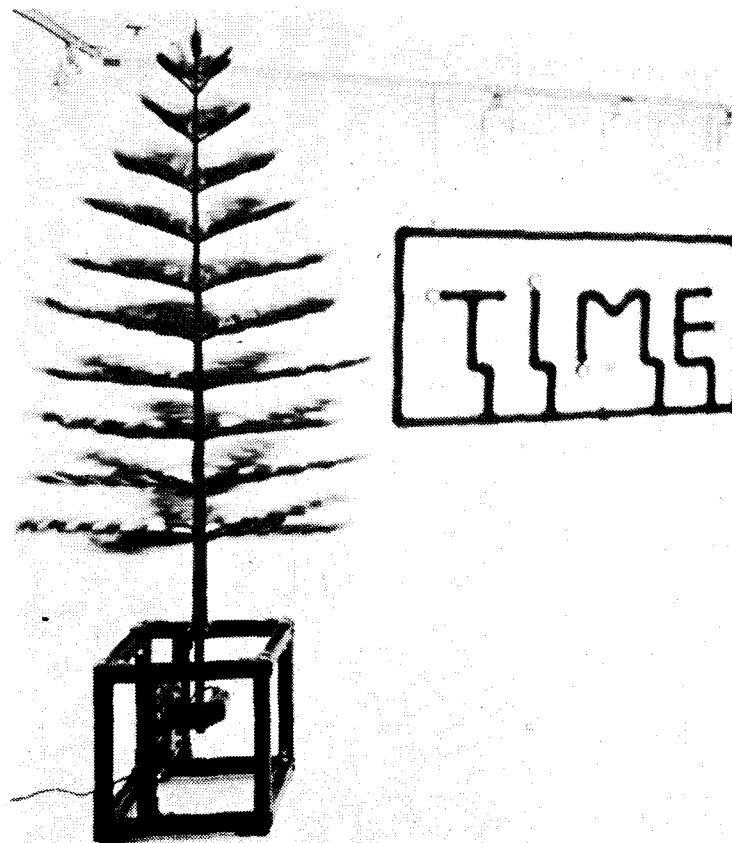
nearly made him gag; it is a "God-awful piece of crap." He gave the impression that those who admire the special effects of the latter two films are morons.

His opinion of writers was also revealed. The first thing to get straight is that he is a fantasy writer and not an SF writer. Secondly, he is serious about his profession and feels there is less place for hacks in this field than any other. When asked who his fantasy writer competitors were, he replied that there were none—if he is compared, he wished that it be aside the likes of Conrad, Joyce, Twain or Hemingway. He did admit to liking some "marvellous" trash—particularly the Doc Savage series. Although he had spent a year converting Asimov's book into screenplay, he was not praiseful. He noted that it was written when the author was much younger—even he himself wrote some rough stuff when he was starting.

His advice to would-be writers? One has to write continually—that is the best way to learn. Perhaps one should also have oneself analysed. He believes that the flaws in one's writing directly correspond to the flaws in the character. He said there are certain types of writers and readers for every type of book. For example, writers of dragon and cape stories are women with heavy thighs, readers of Conan stories are thin, pale males with large Adam's apples. Which type reads his stuff? Those slither into a bookstore on their stomachs.

He gave a sample of his stuff in the form of a reading of an unpublished short story titled "The Fourth Year of the War." Simply put, it is about a man's internal struggle with "another being" who dredges up painful memories of his childhood and forces him to murder all those who caused him pain. One person dared to criticize the way Ellison described a person's voice and he did not take it well. He said that was the way he wrote it and that was the way it should be. Other criticism that he was sometimes contradictory drew the response that it was

accountable to the fact that he is a multi-faceted personality. All in all, Ellison was disappointed with Caltech. Dinner at Lloyd House did nothing to improve his mood—he said it was like Delta House. Members of the audience tended to shout "Fuck God" and "Let's shower him" rather than the witty barbs that, he claims, an MIT audience produces. The frequent breakdown of his microphone system did nothing to endear him to Caltech engineering. A last opinion? Speaking of the human race: "As an outsider, I find you all amusing."



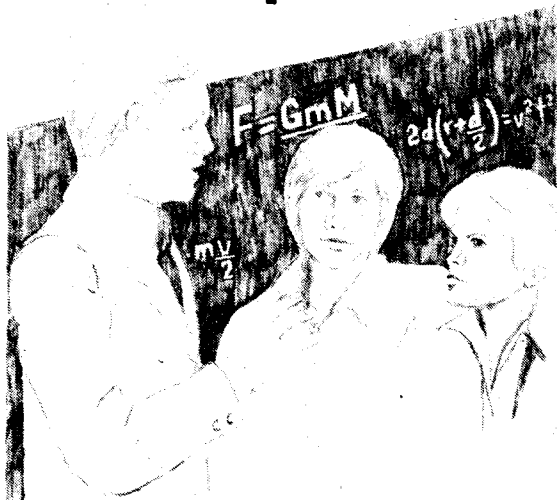
Two timepieces from the Baxter Art Gallery's Bryan Rogers exhibit.

Photos by Alan Loh

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... But Lloyd Doesn't Listen

by Christopher Juten

Last Monday, Lloyd house was treated to a most interesting house guest—Harlan Ellison. Ellison arrived slightly late, but he offered no apologies. He was accompanied by Linda—his “assistant”. Initially he was quite willing to discuss any subject anyone was willing to bring to his attention.

Unfortunately, the publicity and rumors which preceded Ellison were quite negative. In fact, Ellison was quite definitely presumed to be a class “A”, number one asshole.

So the audience immediately began provoking Ellison. Ellison was quite adept at exchanging insults and derisive comments.

Finally dinner was announced, and everyone entered the dining room. Ellison was motioned to his seat—a high chair with a baby bottle of grape juice! He laughed and sat in an adjacent seat. Neither he nor his assistant ate very much of our famous Saga gourmet ham and pot pie, but he was in a position to talk

seriously about his life and views.

Ellison has been writing all his life, and he only paused for a year and a half at the U. of Ohio before resuming full time writing. He also had other experiences, such as joining a street gang, but he nevertheless always wrote. He said in fact, that he would rather write than do anything else.

Ellison does not view his books as science fiction. He does not greatly admire science fiction either. He prefers “good books”. His examples were *Huckleberry Finn* and *Moby Dick*. If he were to try to write a true classic, he would consider Joseph Conrad and William Golding his competition, not Poul Anderson or Isaac Asimov. When asked to classify his work, he suggested that his books approached fantasy.

After dinner, Ellison met with much of the same heckling. He bantered for almost an hour. Several people tried to ask serious questions like “How to deal with repetitiveness of

plots? Ellison answered briefly, but the flow of the questioning molded his responses back into the asshole vein. Finally Ellison commented that he would much rather be pleasant than be an asshole, teach rather than exchange insults. However, he said he would act however we wanted since we were paying him to be there.

Unfortunately, the time for his lecture was drawing near, and he had to leave. Lloyd house had ruined its opportunity to glean much knowledge from Ellison's store of experience. He truly did have some interesting and thought-provoking opinions on television, art, the future of mankind, the use of money, and the state of the media industry. These concepts are explained in Eve Bennett's article on Ellison's lecture.

Perhaps we have learned to be a little more receptive to house guests, I hope that we will not have such preconceptions the next time a house guest visits.

The Wells-Fargo Wagon is a'coming

Music Man

by J. Copeland

The tenth not-quite-annual Caltech Musical opens Friday, February 23rd, a week from today. This year's production is Meredith Willson's *The Music Man*, set in the town of River City, Iowa in July 1912.

The story is of a con-man named Harold Hill who sells musical instruments and band uniforms to the town for a kids' band, and then ducks out before teaching the kids how to play. Of course, something goes wrong; in this case, Marian Paroo, the town librarian.

The production stars Barry Hohnson as Harold Hill, Jean Goodenburger as Marian, Bruce Baskir as River City's Mayor Shinn, and Greta Davidson as Mrs. Shinn. Other Caltech students in the cast include Ray Beausoleil, president of the Associated Students, Larry

Friedrich, Chairman of the Interhouse Committee, Young-il Choo, star of last year's play *Fiorello*, and Stan Cohn, star of *Guys and Dolls* two years ago. The opening crowd sequence, in the center of River City features Dr. & Mrs. Murph Goldberger. It also has a mechanical chicken designed by Tom Howell.

There is still time to be involved in the Musical. To help build sets, contact Pat Walp in Lloyd House. (The house putting in the most man-hours of set work gets a half-keg.)

Tickets are still available at the Ticket Office: \$2.50 for Caltech students, \$4 for staff, faculty, and non-Caltech students, \$5 general admission. Performances are at 8 pm, Friday the 23rd; 2 pm and 8 pm Saturday, and 2 pm and 7 pm Sunday. Meredith Willson will be attending the Saturday matinee.

Investment from page 1

identified by students and serving an Institute purpose.

By these means, to increase the understanding of as large a number of students as possible of the free enterprise system as it functions in the American economy today.

The BEM courses offered at Caltech would be extremely helpful in realizing these objectives. Not only could a student gain valuable experience in class before or while serving on the Board of Directors, but the antics of the Board would serve as an interesting practical example in the classes themselves.

The actual rules of operation

for the fund will be determined by the first elected student board, but Mr. Johnson provided many guidelines as a beginning. The student board would be composed of from nine to eleven members, up to three of whom may be graduate students.

The undergraduate directors will soon be nominated by the IHC and then elected by the student body at large. The nominees will be selected from the applicants who have already expressed, in writing, their reasons for applying and their qualifications. The term of office for a director will be one year, and are always eligible for re-election. In the event that fewer than five students apply in

continued on page 12

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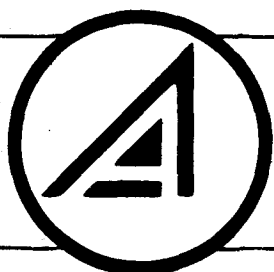
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More Randomness

Writing a newspaper article is a bit like giving a lecture blindfolded. From where I sit I can't tell if you're falling asleep, or what's more likely; crumpling my "column". So I continue blundering onwards.

I tend to complain... a lot. There are worse faults I suppose, but I try to tone it down when I can. So it wasn't until a "true teacher", a friend of mine who's been one of this institute's biggest boosters, admitted to some pretty strong criticisms that I felt inspired to write this article. What he said I agree with, and to keep this article as short as possible I'm confining my monologue to what we spoke of; teaching problems at the institute.

But first... a disclaimer. Because I haven't applied for a leave just yet. I'm writing this because I, and a lot of people whose judgment I respect, think there's a problem. I'm fully responsible for what I write, (so long as this is not edited or otherwise altered) but if I make a mistake please understand that this is not a personal vendetta.

I'm trying to help the students, and since the students are a part of this place, I'm trying to help the Institute. And who knows, maybe some professors wouldn't mind some help.

The sad fact is, Caltech has some of the worst teachers I've ever a) encountered and/or b) heard of. In his inauguration speech President Goldberger said Caltech had the second best undergraduate program in the nation. If we're second best with the teaching quality we enjoy that says one of two things; either the whole university system is in big trouble, or the students here are pretty capable to begin with. I'd say it's probably a bit of both, and more of the latter.

I'm not condemning everyone who teaches at Tech. Before I realized what little time I truly had I used to attend Dr. Feynman's Phys-X lectures. They were both entertaining and informative. Harry Gray is a legend in his own time; he's only one of many great and good teachers. But all too many professors seem to consider their teaching "chores" to be a distraction from their primary purpose, research. In other cases

a genuine desire to help exists, but the experience or talent is lacking. For these people a short teaching seminar might work wonders.

These problems are all the more serious in required courses, when students can't "vote with their feet". The freshman Chemistry, Applied Math, freshman Calculus, and Physics programs, among others, all have at least one instructor of a required course who is, to say the least, infamous. Incredibly many of the "guilty parties" are unaware that their students are suffering; Tech students mutter in the background, but are reluctant to come forward. Sometimes speaking out is totally unproductive, and may even harm the student, but results, albeit minor, have been reported. If you want results, speak out! Go alone if you must, but a group is better. Give constructive criticism; some teachers don't even know enough to stand clear of the board, and why should they? No one's told them. These measures can help, but more is needed to correct a serious problem. Professors should be required to take a three week seminar course on teaching, no matter how senior they are. (The three week length is purely arbitrary.) In some cases professors should be removed to optional courses, where they will

do less harm.

In the end nobody's going to hold our hands any more. If we want to learn more, maybe to live more, we'll have to help ourselves. It starts with believing you can do something.

-John G. Faughnan

For Women

Explore career options! Investigate new opportunities in your field! Discover non-traditional career options!... at the 6th Annual Women's Employment Options Conference presented by Career Planning Center, Inc., to be held on Saturday, March 31, Long Beach Convention Center.

Further information and registration forms may be obtained in the Placement Office, Room 8, Dabney Hall.

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The Ballroom Dance Club meets every Friday evening at 8 pm in Winnett Lounge. Beginning steps in standard social dances (such as Waltz, Foxtrot, Cha Cha, and Swing) are taught during the first hour. The second hour is spent on more advanced steps and other dances. New dancers, as well as more experienced dancers, are invited to join us each Friday night.

Lynn,
I'm sorry
Mike

A jug of wine... A loaf of bread... And Thou.

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**Friday,
March 2, 1979**

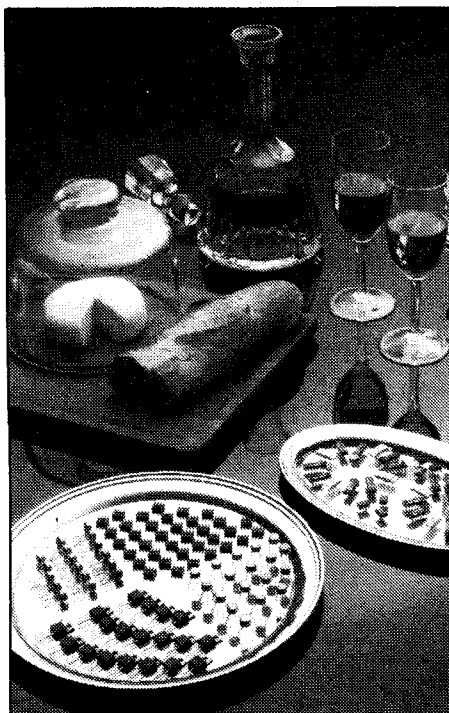
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Spirited Sailing

by Jill Ibers

Was it an overpowering sense of school spirit, or simply a love for sailing which roused the Caltech sailing team at 7:30 last Saturday morning? Whatever the motivating force, the majority of the active sailing team headed for Newport to compete in the First

Southern Series Sailing Regatta, while the rest of the student body of Caltech slept soundly.

Despite all of the spirit and high hopes for success, the weather was not with the valiant team. The light winds only accentuated the faults of the

team's mighty Flying Junior, *Kobold*, and the cold temperatures and incessant fog dampened the enthusiasm of half of the team, despite multiple cups of coffee.

The Vanguard Flying Juniors of schools such as UCSD, UCLA, UCSB, OCC, and UCI unfortunately outclassed *Kobold* in the light air. However, owing to superior sailing ability, the Caltech team managed to beat three competitors in each of four of the five races; against a fleet of thirteen Vanguards, that's no small feat. Shivering all of the way, David Shenton and Jill Ibers proved worthy crew to Greg Hoffman and Dave Carlan.

The second half of the regatta was held on Sunday and the courageous team returned to

Newport with Mark McHenry and David Kamins replacing Saturday's crew. The weather was no better on Sunday except for a short visitation from the sun, and the sailing failed to improve. Owing to a variety of mishaps, such as a car which wouldn't start, not only was the crew freezing, but even the mighty captain of the team, Greg Hoffman, admitted to being cold.

Although Caltech did not place as well as might be expected with more cooperative weather, the team showed a lot of spirit and a lot of talent. Next year, with the purchase of a Vanguard Flying Junior, Caltech can only markedly improve.

Besides, winning is only part of the sport; sailing is simply one heck of a lot of fun!

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any given year, then for the year the fund will be under the direction of the Institute treasurer.

The duties of the student BOD should include:

Developing and adopting appropriate bylaws.

Electing officers and defining their duties.

Holding regular meetings and special meetings as required.

Conducting the necessary studies.

Making investment decisions and conveying these decisions to the Institute in writing.

Making regular written reports of the conduct and progress of the fund.

Making provisions for handling the fund when school is out.

Acquainting new members of the board with the objectives and guidelines of the Student Investment Fund.

While members of the board are expected to be considerate and use common sense, they won't be liable if they screw up. On the other hand, if they do a wonderful job, and double the capital in two years, they will have the satisfaction of having done a good job.

Meetings will be open to anyone, and for the first couple of sessions attempts will be made to . . . uh . . . entice people to attend. This should help avoid feelings of cliquishness or secrecy.

An advisory council to the fund board shall provide needed help, although all investment decisions will be made by the students. The council will be made up of three advisors selected from members or former members of the Institute faculty, staff, or administration, or outsiders interested and knowledgeable in the investment field. Two of the advisors are to be selected by the student board and the third by Dean Owen.

In addition, there will be a student/faculty review board of six members, three appointed by the BOD of the investment fund and three by the administration. The fund will be reviewed every couple of years, and the level of student interest and success of the fund with respect to its initial objectives will be considered. Any changes suggested by the Joint Board must be approved by the Board of Trustees.

It should be emphasized that the money acquired by this fund is far from the main objective. While the Institute will benefit, there will be no significant financial impact on, say, the ASCIT budget. The performance of the fund is important, but aggressive actions designed to make major market killings are outside the aims of the donor, Mr. Johnson. Besides, techniques such as buying on margin, selling short, or dealing in options might be inappropriate in the hands of unseasoned investors. Mr. Johnson hopes that many Caltech students take advantage of the fund and prepare themselves for the "outside world." You've got two weeks so move your ass.

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If you could talk with some of the engineers who have joined us recently, you'd hear some good reasons for working at IBM. Our people are given responsibility for projects as soon as they can handle it and they have the freedom to carry their projects through to completion. There's a lot of room for personal growth and outstanding opportunity for advancement because we make a practice of promoting from within. If you'd like to know more about a career in engineering, sign up for an interview at the Placement Office, or write: H.A. Thronson, Corporate College Relations Manager, IBM Corporation, 3424 Wilshire Boulevard, Los Angeles, CA 90010.

We will be interviewing at Caltech, Tuesday and Wednesday, February 27 and 28.



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