

Artist's depiction of what solar eclipse might of looked like had he gotten up in time to photograph it.

by Christopher R. Juten

## "The most magnificent sight I've ever seen in nature"

is the way Jerry Roth, a Lloyd House frosh, described Monday's total eclipse. Jerry was one of many Techers who traveled 2500 or more miles to Washington, Oregon, Montana, or even Canada to view the last total eclipse in the U.S. until 2017. Most houses had at least one carload, and Dabney sent an entire busload of people. Some students purchased seats on specially chartered flights which followed the eclipse for a brief time. Other Techers were content to view the 77.8% partial eclipse that was visible on campus. Despite occasional clouds, the eclipse was quite spectacular whether viewed through aluminized mylar, polarizing filters, or on the screen projected from the CIT telescope.

Those who were not fortunate enough to go north to see the eclipse might enjoy the following saga of three Lloyd House frosh's experience seeking the mysteries

of totality. . .

Physics lab was finished, and three adventurous frosh were eager and ready for a pilgrimage of uncertain promise. Bob Shore provided a '78 Pinto for transportation, and Ernie Cohen and Jerry Roth provided prayers of thanks for the pass-fail system.

Eight hours of Friday-night driving under clear skies and spectacular stars found the three at Stanford U. They spent the night at a fraternity house thanks to the arrangements made by a Techer who is taking a leave at Stanford. Although somewhat miffed that they had not been accommodated in a coed dorm, they were cheered in the morning by the brightly painted city of San Francisco. They enjoyed a lunch of fresh crab, and then set out for Walla Walla, Washington. A couple of hours later Ernie discovered he had left his winter jacket at the

restaurant. This minor loss did not worry the group for long, though; they were busy enjoying the rolling green hills and explaining their 70 mph pace to a traffic policeman.

They drove all night and arrived at Whitman College (which has a 3:2 program with Caltech) at noon on Sunday. They had become somewhat apprehensive about the weather because the night's drive had been through fog and light snow in the mountains around the Columbia River Valley. So they began a regular inquiry after the weather situation.

During the afternoon they saw a special lecture about the eclipse, held by Whitman College. They also met more Lloydies, some Rudds, and the Darbs who were also staying at Whitman.

About midnight the final race began. The initial problem was finding gas--Walla Walla closes down (like Pasadena!) early on Sunday evenings. They were forced to go to the Tri-Cities after wasting half a tank of gas. The weather reports were variable and ominous. The chances of clear skies at Walla Walla had fallen from 80% to 60%, so they decided to try for Yakalimma, Washington. [Yakalimma??]

They were halfway to this hamlet when they were refused permission to cross some NRC land. They soon found themselves lost on country dirt roads after they were unable to find U.S. 221. They raced frantically along the winding roads at 85 mph, despite the pegged speedometer and the car's shaking. They narrowly escaped a collision with a farm truck, and then they saw a break in the clouds far off. They made the open skies with under ten minutes left until totality!

They had just enough time to disembark and set up cameras and telescopes before the air cooled and the sky darkened. Suddenly--totality! The horizon was hued like a sunset in all directions while the sky turned strongly dark--unlike both a moonlit night and an overcast day; it was unique. The corona encircled the moon for 3-4 degrees with a pearly white, iridescent glow. Six to eight rose-pink color prominences arched out from the corona. A farm dog barked wildly throughout the two minutes of totality while the three awed Techers snapped pictures and traded turns at the telescope. Finally, the sun re-emerged, without revealing Bailey's beads (spots of light seen through lunar valleys) but treating all to a second dawn. The two brief minutes concluded, and the adventurers returned home. Was the trip worth five days with little sleep and \$80? I knew from the sparkle in Jerry's eyes what his response would be: "Are you kidding?! Of course!"

## ASCIT of Gentle Ray

# Beausoleil & Excomm Want YOU!!

by Ray Beausoleil

Hi, it's me again. Before the results of the first BOD meeting are announced, I'd like to apologize to the Placement Office for inadvertently slamming them last week. I claimed, among other things, that seniors can't go anywhere for information on corporations, which is obviously not true; that's exactly what the Placement Office does. Sorry, I blew it.

The Institute as a whole, though, is still lacking in providing for the future of its students. To be accepted by

first-rate graduate schools (and, in many cases, to get the best jobs), even Caltech students need (a) high GPA's and/or (b) superior recommendations. Too many times, a student can exist at Caltech for four years and not get great grades or work for a famous professor, and, as a result, begins grasping for straws; he often ends up in a field that isn't really his favorite or even his best. This points out two flaws: first of all, students seldom have any idea of what is expected of them in a particular field until they start looking

their senior year. And your senior year is *not* a good time to find out that your 3.0 average with no recommendations will not get you into a good graduate school; it also is a poor time to consider transferring.

The Caltech Y has the right idea with its career counseling programs, but we need something more permanent. That's what I want the ASCIT Excomm to look at, in addition to completing the leave of absence stuff. I'd also like to get them to help Dr. Huntley rewrite the "Facts About Caltech" (yes, it's

being done). Anyway, if you want to get in on the act, tell Flora Boyer in Winnett Center.

Sue Fuhs wants some ideas for the ESC to work on; she has already proposed the following: Bringing Caltech students to parties on other campuses;

All-campus mixers;

Two- and three-house parties;

A "sports day", where students challenge the faculty in various feats of athletic endeavor, following the format of the Frosh Camp softball game.

If you'd like to see something else happen, tell her, or me.

# Hockey Clinches First!

by Grant T. Yokum

## (1) The Game

The die is cast, the chickens are hatched and counted, and the story ending is told. Barring an act of providence tantamount to the leveling of Mount Everest, the Caltech Pucksters will finish the regular season in first place. That's right, **FIRST PLACE**. A 5-3 victory by the Beavers over Pierce last Sunday assures them of the first place position, assuming that they defeat the league's last place team, Irvine, next Sunday, March 4, 8:45 at the Pasadena Ice Capades Chalet (bring your Sunday picnic lunch, it should be a piece of cake).

As the Pierce game commenced, the ice rink echoed with, "One. Two. Three. Four. Who you going to root for? CALTECH! CALTECH! CALTECH!" This marked the first time that the Caltech fans have not only outnumbered their own players but have also outnumbered the opponents and their fans. The results, of course, were rewarding.

On the ice the game was a real battle, with the two teams accumulating a total of 39 penalty minutes, 9 of which went to the Caltech goalie, Jim Carscadden. "Hey man. I don't take no shit from nobody." was Jim's only post-game comment. In addition, Pierce had two members ejected from the game. The first player was thrown out twice by the refs, and the other ejection occurred after the game ended when their assistant coach was expelled, for verbal dabachment of the referee.

continued  
on page 7

# New Humanities Offered

by Eve Bennett

New humanities courses in the fields of history, literature, anthropology, economics, and psychology are being offered next term.

*The History of Women in the United States* (H16b) will be taught by Professor Karen Blair. The course will stress the experience of the average woman from colonial days to the present. The social history includes the ideology of the lady, women's work at home, women's entrance into the wage-earning field, and feminist movements. Along with required texts, the course will use primary sources such as diaries, letters, and speeches; and local Pasadena sources such as the works of Charlotte Perkins Gilman.

*Special Topics in Literature: Seminar on James Joyce* (Lit 180) will be taught by Professor Randy Splitter. It will study *The Dubliners*, *A Portrait of the Artist as a Young Man*, *Ulysses*,

and the challenging *Finnegan's Wake*.

*Neo-Marxist Approaches to Latin America* (An 101c) will be offered by Professor Appleby. It is a survey of the underdevelopment of Spanish Highland America from pre-conquest days to the present. It will particularly emphasize "free-market" imperialism in the past two centuries. The course is designed to give a student a knowledge of Latin American history as it pertains to the roots of present problems there.

*Economics of Energy Policy* (Ec 140) will be taught by Professors Koch and Terasawa. It will be held on Mondays and Wednesdays, 2:30-4:00 pm. Dr. Barbara Fass will teach *Psychology of Creativity* (Psy 101). Readings will include the writings of the famous creative and research studies. Also, encouragement will be given for students to explore their own creativity.

### Editorial

In times of bleak boredom, communication from afar can be one of the best remedies for the CIT blues. Since I've been here, I've really come to appreciate getting mail from home and friends, and the presence or absence of a letter in the box can sometimes make or break a day for me. The mail system here at Caltech, which delivers twice a day, is very helpful and greatly appreciated. But I think that the absence of mail service on Saturdays is a fault which should be corrected.

The most obvious argument against six-day postal service is that it would raise costs 20% from five-day service. But there are two freshmen (funny how we keep volunteering for things!) in Ruddock who have said they'd be glad to deliver the mail if they could get it from the post office. While this may seem like a trivial subject (not surprising, since it is one), the little things count, too, and I definitely support Saturday mail delivery for the houses.

—David C. Younge

### Guest Editorial

*Each man must look to himself to teach him the meaning of life. It is not something discovered: it is something moulded. These prison walls that this age of trade has built up around us, we can break down. We can still run free, call to our comrades, and marvel to hear once more, in response to our call, the pathetic chant of the human voice.*

—Antoine de Saint Exupery

An undergraduate education at Caltech is a combination of failure, strife, frustration and accomplishment spawned by a highly competitive and pressured curriculum in a socially artificial atmosphere. It is intended to develop the finest scientists and engineers, and strives to do so with admirable success. Yet there are flaws in the process which, if altered properly, would create an atmosphere more oriented toward an appreciation of science and for each other. The workload here is oriented toward the solving of problems and is so heavy that in order to complete all of the required work one must exclude consideration of the unifications and interrelationships which exist within a given discipline and the relationship between the student and his work. We must forge ahead without being able to sort out for ourselves what we have before us. It makes science seem fragmented, whereas part of our education should be an appreciation of its fundamental unity. It is our experience that a true understanding and appreciation for the features (the limitations, inaccuracies, and beauty) of a discipline are arrived at by the individual in contemplation on his own. And it is our conviction that such an understanding is an essential element in the development of the inquisitive mind. Despite the lack of time or formal structure for this facet of education some students are fortunate enough to cope with the workload in such a way as to develop their education more fully. Most, however, are barely able to keep up with their work and lose sight of enquiring into what they are doing and why

they are doing it. Their dissatisfaction manifests itself in the Tech-Syndrome: whatever you do, do not discuss science in a public place—do not discuss it with your friends; it goes under the banner of anti-intellectualism. And yet one would think that some of the everyday interaction of the undergraduates would naturally include enthusiasm for science. It does not, because students protest that they have time only to develop some understanding of the material, and, thereby, do not have opportunity through their education to develop an understanding of their mind. In the years an undergraduate spends at Caltech he gropes for an expression of the feelings he develops in reaction to its educational system. We have come across this short exposition by Albert Einstein which we feel is particularly descriptive of our feelings and hopes.

*It is not enough to teach man a specialty. Through it he may become a kind of useful machine but not a harmoniously developed personality. It is essential that the student acquire an understanding of and a lively feeling for values. He must acquire a vivid sense of the beautiful and of the morally good. Otherwise he—with his specialized knowledge—more closely resembles a well-trained dog than a harmoniously developed person. He must learn to understand the motives of human beings, their illusions, and their sufferings in order to acquire a proper relationship to individual fellowmen and to the community.*

*These precious things are conveyed to the younger generation through personal contact with those who teach, not—or at least not in the main—through textbooks. It is this that primarily constitutes and preserves culture. This is what I have in mind when I recommend the "humanities" as important, not just dry specialized knowledge in the fields of history and philosophy.*

*Overemphasis on the competitive system and premature specialization on the ground of immediate usefulness kill the spirit on which all cultural life depends, specialized knowledge included.*

*It is also vital to a valuable education that independent critical thinking be developed in the young human being, a development that is greatly jeopardized by overburdening him with too much and with too varied subjects (point system). Overburdening necessarily leads to superficiality. Teaching should be such that what is offered is perceived as a valuable gift and not as a hard duty.*

—Albert Einstein

From the New York Times

October 5, 1952.

It is hoped that this letter will provide a seed for students and faculty alike to further reflect on the undergraduate educational process at Caltech, to evaluate their roles and consider how they can change so as to better educate the whole individual. We feel such contemplation can only serve to produce better engineers and scientists and finer human beings.

—Bruce Gurney

Ernie Lewis

Jeff Hicks

## The Caltech Y.....fly by

Saturday, March 3, CINEMATECH presents Great Actresses films: *What ever Happened to Baby Jane?* and *The Three Faces of Eve* at 7:30 pm in Baxter Lecture Hall, Donation \$2.00 adults, \$1.00 Caltech students, \$.75 children under 14.

# EDITORIALS

### The California Tech

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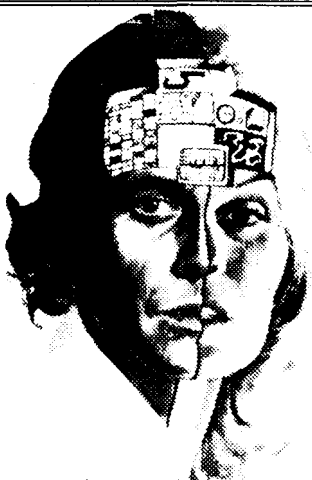
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## ASCIT MOVIE

Friday Night ASCIT Members 50¢  
Baxter Lecture Hall Others \$1.00  
7:30 & 10:00

**LAST DAYS OF MAN ON EARTH**  
**THE FUTURE IS CANCELLED!**  
Then drop phys!



Next Week  
**TOMMY**

# VOTE

As a former Caltech student concerned about my community, I have taken great interest in the coming Pasadena School Board election on Tuesday, March 6. Voting for two of the five seats are incumbent John Hardy and Elbie Hickambottam for seat 4 and incumbent Jerome Meier and Kathryn Nack for seat 2.

Integration has been one of the most controversial school board issues in Pasadena ever since the advent of busing in 1970. Opposition to the Pasadena Plan has been spearheaded by reactionaries who now hold a four to one majority on the school board. (The school board majority consists of Hardy, Meier, Dr. Richard Vetterli, and Dr. Henry Myers.) For the past six years they have been trying to appeal Federal court Judge Manuel Real's decision to integrate.

The challengers, Hickambottam and Nack, believe that the Pasadena Plan has worked very well and that the court appeals have been a waste of time and money (\$281,450.82 was spent on legal fees from Sept. 1973 to June 1978). They feel that board members should concentrate their efforts on educational matters and in bringing community involvement into the decision making process.

Hardy and Meier claim that busing costs—totaling \$1.89 million in 1977-78—are much more excessive than court costs. However, they don't explain that the cost of busing to Pasadena taxpayers for the purpose of integration is in the vicinity of only \$340,000 to \$400,000. What people don't know is that the school district received \$1.08 million in state subsidies for busing and that about \$400,000 to \$460,000 was spent on busing for purposes other than integration. The expense of "forced busing" amounts to less than 1% of the district's budget.

Relative to other school

districts, the busing costs in Pasadena are low mainly because of its small size, which is only six miles at its widest. Bus rides aren't all that long here. The longest bus ride for a student in Pasadena is typical for a student living in the country.

In place of the Pasadena Plan, Hardy and Meier advocate a system of "volunteer schools" which involve giving students an option of attending a "neighborhood school" or "magnet schools". However, there is no assurance that a system of volunteer schools would achieve a racial balance. John Hardy admitted in a public forum that it would be okay with him to have an all-white school in Pasadena under a volunteer school plan. The cry for the return to neighborhood schools is obviously an attempt to revert back to a system of de facto segregation. Even if a volunteer school plan were to achieve a racial balance, it would probably require more busing than the current Pasadena Plan which utilizes mandatory assignments.

I strongly believe that the benefits of integration far outweigh the inconvenience of "forced busing". I went to school in Pasadena and I greatly value the integrated experience that I had. It has helped to open my eyes to the reality of human diversity. I feel that it was perhaps one of the most positive aspects of my public school education.

Other controversial policies enacted by the incumbent board include: the formation of "fundamental schools" that emphasize traditional educational methods (e.g. rote learning) and respect for the authority; the closing of the district's junior high schools; and the reorganization of the district administration. More information can be found by reading the local publications—the *Chronicle*, *New Pasadena Magazine*, or the *Star News*.

I encourage all people at Caltech to vote on March 6. After all, Pasadena is your community too. —Robert Tajima

# When it says Libya, Libya, Libya...

by Spencer Klein

Remember the Libyan trade delegation that was scheduled to visit the Caltech campus about two weeks ago? You don't? Well, this is not surprising, because, although the scheduled visit attracted a lot of national publicity, it was kept quiet on campus, except for a few rumors among the faculty.

The incident started last November, when the U.S.—Arab Chamber of Commerce called Jim Black, Director of Public Relations, to arrange a campus visit for a Libyan delegation which was to come to America to promote Libya's political and economic interests. Jim Black recalled that he agreed to the visit, provided that there was no publicity. In the succeeding months, two corporations, Lockheed Aircraft and Occidental Petroleum, also contacted Jim Black about details of the visit. According to one source, the two corporations urged a Caltech professor to invite the Libyans here, and he was one of the groups extending the invitation.

The visit, as scheduled, was to consist of a visit to a laboratory, a campus tour, and lunch at the Athenaeum. Because both Lockheed and Occidental are members of the Caltech Industrial Associates, one or two of their employees are Athenaeum members.

Now things begin to become unclear. The Libyans arrived in the U.S. to a chorus of snubs and a barrage of publicity. According to Jim Black, some of this publicity concerned their visit to Caltech. The Jewish Anti-Defamation League (ADL) sent a telegram to Institute President Marvin Goldberger, asking him to cancel the visit, because the delegation represents a country which sponsors and finances terrorist groups all over the world, including the Palestinian Liberation Army, the

Japanese Red Army, and others.

Dr. Goldberger cancelled the visit. In an interview, he gave the following statement: "When the matter of the Libyans was brought to my attention, I decided that it was not in the best interests of Caltech or the United States to have them here, and so I said that they couldn't come."

He then refused to answer most of my questions. He did say that the matter had been brought to his attention through "normal channels," but he wouldn't say what normal channels are. However, according to David Legrer of the ADL, the telegram they received from Dr. Goldberger said that the ADL telegram was the first mention of the visit that he had had. Foldberger also said that there had been no pressure on him to cancel. But Jim Black said that the visit had been cancelled because of the publicity.

Although the Libyans have gone back home, several

questions remain. Why were the Libyans invited to campus at all? Who really invited them? Why was the visit kept so quiet, especially considering how avidly Caltech normally seeks publicity? And, why was the visit kept so quiet on campus?

[So tell us already; don't keep us in suspense. Tell us.—the eds.]

### Hotline Hunts Help

Students who can give a six-month commitment four hours a week to volunteer on the toll-free Cancer Information Service Hotline are needed by the Los Angeles County—University Southern California Comprehensive Cancer Center. A four-day intensive training program will begin April 2, 1979. Please contact Joanne Lockfield, Program Coordinator, by March 16, 1979 at (213) 226-2371.

Bilingual volunteers are also needed to work as information assistants and translators.

## Wind Ensemble Concert

William Bing — Director

March 8 at 8.15 pm

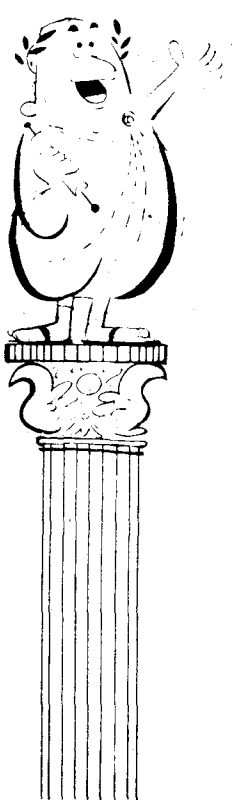
Dabney Lounge

featuring works for

Piano,

French Horn,

and Solo Tuba.



What's cooking at

# CALTECH'S BURGER CONTINENTAL?

## HELLO

RUDDOCK

DABNEY

RICKETTS

PAGE

FLEMING

LLOYD

due to popular demand

BC will offer a

free root beer float

with dinner

for ALL Caltech students

(Remember: get a 20% discount by buying Caltech cards.)

# Thuncan by P.M.



# Ya Won't be Hungry an Hour Later

by John J. Barton

You readers might be interested in a new Szechuan restaurant in Pasadena, the Mee Jin Inn. This restaurant at 2849 East Colorado Blvd. is under the new management and operation of a very friendly family that really knows how to cook Chinese food. But a word of warning to those who think Chinese food is all chop suey and chow mein. Szechuan food is often very spicy and some is very, very spicy! If you haven't tried it you are in for a pleasant surprise.

First time around I would suggest Moon Show Pork (pronounced moo-shoo), a tasty Chines burrito (not spicy)[ed.

note—but look out for the brown plum sauce!], Mongolian Beef, ginger and green pepper flavor (not very spicy), or Kung Po chicken, peanuts and red peppers (spicy and wonderful—don't eat the peppers!). Next time you can warm up with some Hot and Sour Soup (you would have to try it) or try Twice Cooked Pork, traditional style (spicy). If you are really bold try Bean Curd a la Szechuan (deadly with a thirty-second fuse).

The Mee Jin Inn luncheon special is a steal at \$1.95. Go with three or more to dinner so you each can order a dish. With soup, rice, tax, and tip, dinner is usually five dollars or less.

# VARIAN TURNS TALENT INTO TECHNOLOGY

Varian Instrument Group/Walnut Creek Division is involved in the manufacture of analytical instruments for research chemistry. Our gas and liquid chromatographs are used in environmental and medical research to improve the quality of life. We are a rapidly growing division of Varian Associates, an established Fortune 500 company headquartered on the San Francisco peninsula.

The Walnut creek Division is located in the East Bay Foothills, within easy reach of San Francisco. Our representatives will be on campus March eighth to interview candidates for a Bachelor's degree in engineering.

If you are interested in applying your talent to the enhancement of the quality of life, schedule an appointment with our on-campus interviewer through your placement office or mail your resume to:

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# New Bach Rep.

(repertoire, that is)

by J. Copeland

Music soothes the savage breast. Bach somehow soothes even humans. With the Music Man playing in Ramo, there was no rest—opening night jitters lasted all weekend. Fortunately, I didn't have to be on stage and could enjoy being nervous in Beckman, rather than at the other end of the Court of Man.

But once Miss Tureck stepped on stage, all troubles were forgotten. The music was familiar, but executed almost uniformly with a flair unmatched by anyone save Perhaps Wanda Laudowoka. The C major, C minor, C-sharp major and D Preludes and Fugues, the Italian Concerto, the B minor and F minor Sinfonias and the English Suite No. 3 were all executed with dedication and precision. The encore of Goldberg Variations excerpts was a joy.

There is something about the music itself, some basic quality of the sounds Bach put together that forbids any fear, any enmity, any upset, any nervousness in the mind and heart of the listeners. His music—particularly his solo music—is an utter joy and capable of relieving the worst of tensions and worries. The 48 Preludes and Fugues of the *Well-Tempered Clavier* are one of better natural tranquilizers available. (Can you imagine going to your neighborhood drug dealer and getting 50 capsules of Bach?)

Miss Tureck came to prominence after performing the complete *Well-Tempered Clavier* and the *Goldberg Variations* over six concerts at Town Hall in New York in 1937. However, it wasn't until her trip to London to give three recitals in 1953, that she gained the world-wide acclaim clearly due her. Her training was

at Juilliard, under Olga Samaroff. She has played at the Coleman Concerts in 1949, 1958, 1960, and 1963.

The next Coleman Concert will be April 17th. The Beaux Arts Trio will play works by Mozart, Ravel and Schubert. There are always student tickets available to these concerts, and some seats go empty—don't blow it this time, folks!

## NEWS BRIEFS

### Pierce Wins Fellowship

Dr. John R. Pierce, professor of engineering at Caltech, has been awarded the Fifth Marconi International Fellowship. He is being honored for outstanding advances in satellite and space technologies relevant to improving world communications. Pierce, 68, who received his B.S., M.S., and Ph.D. degrees from Caltech, returned to the Institute in 1971 from Bell Laboratories, where he was Executive Director of Research for the Communications Sciences Division. He holds more than 80 patents for his inventions in electron tubes and communications circuits. He is also a member of the National Academy of Sciences and the National Academy of Engineering, and is a foreign member of the Royal Academy of Science of Sweden.

Dr. Pierce will be presented the award in May by Mr. Sandro Petrini, President of the Republic of Italy, in Rome.

### What's A Kiwani?

The Circle K Club of Pasadena City College is presenting a concert of traditional and contemporary songs from the Elizabethan Age to the present, performed by Bruce Williams (an L.A.-based singer/songwriter) guitar and vocals; and Clark Branson (traditional singer) concertina and vocals. The concert will be at Harbeson Hall, on the PCC campus (across from Carl Jr.'s) on March 9th at 8 pm. Admission is \$2.50. For ticket information, call 578-7384.

### Pollini Piano

The brilliant Italian pianist, Maurizio Pollini, will return to Ambassador Auditorium in Pasadena on Wednesday evening, March 14 at 8:30 pm in a program devoted entirely to works by Beethoven and Schumann. Mr. Pollini, who is generally regarded as one of the most remarkable keyboard virtuosos of our time, last appeared at Ambassador Auditorium during its 1975-76 inaugural season. He will perform the Beethoven Sonata in F Major, Op. 54, Beethoven Sonata in F minor, Op. 57 (appassionata) and Schumann's 12 Symphonische Etuden, Op. 13.

Ticket prices are \$10.50, \$9.50, and \$8.50. The box office and PHONE CHARGE (213) 577-5511 are open Sunday through Friday. For theatre parties, benefits or group rates, call 577-5515; tickets are also available through CHARGE LINE, 520-8010 in the evenings.

### Have We Got A Deal For You!

Systems Control, Inc., is presently conducting tests of exhaust emissions on 1969 through 1978 model autos. The company is inviting the public to participate in this program, and is rewarding those who volunteer to take part with a \$50.00 U.S. Savings Bond. In addition, the participants receive a late-model car to drive while their car is being tested under laboratory-controlled conditions. After the test is completed, their car is filled with gas before it is returned to them, and they are presented with a certificate from Systems Control stating "I Helped To Control Smog".

Systems Control will fully insure all autos used during this test. Public participation can help make our area a better place to live and breathe. To take part, local residents are invited to call Systems Control at (213) 295-7791 now.

**AMA 95 Students Unite!**  
But don't drop phys.

# New Caltech Sex Study

by John Faughan

Soon a new title will be cluttering the attics of your minds. In it are two words, Health (i.e., opposite of sickness) and advocate. (Like Ralph Nader). Abbreviated H.A. sounds a lot like T.A. and R.A., hopefully they'll be just as helpful as the second, and more so than the first!

Health Advocates (Henceforth to be known as H.A.'s, pronounced *aitch-eh-z!*) are students like yourself, (assuming you're a student) only a lot better looking. But seriously...., the H.A. (pronounced *HA!* as in the response to a bad joke: "HA, HA, HA!") is a Caltech student who will work with the gentle folks at the Health Center to improve your generally crummy shape. Right now there are two people on campus who've completed the USC course in Health Advocacy: Warren Lai

(grad turkey at Marks House, 449-9924) and Richard Willson (39 Ricketts, 578-9171). Taking courses in H. A. and girl-watching at USC are Les Niles (5 Ricketts, 578-9346), Shevaun Gilley (who watches the "men" and lives in the Annex; room 62, x2188), and yours truly, John Faughan (Lloyd 128, 578-9344).

Health Advocates have been on the campus scene for a while (except at Caltech, of course; we're just starting here), giving advanced First Aid in health emergencies, lending an ear when need be, teaching preventive health care, and acting as a referral and follow-up service for Health Centers. They're trained to differentiate between TB and VD (Big Deal!) and can tell you when to stop studying and sleep or when to call an ambulance and start praying.

We're all enjoying our

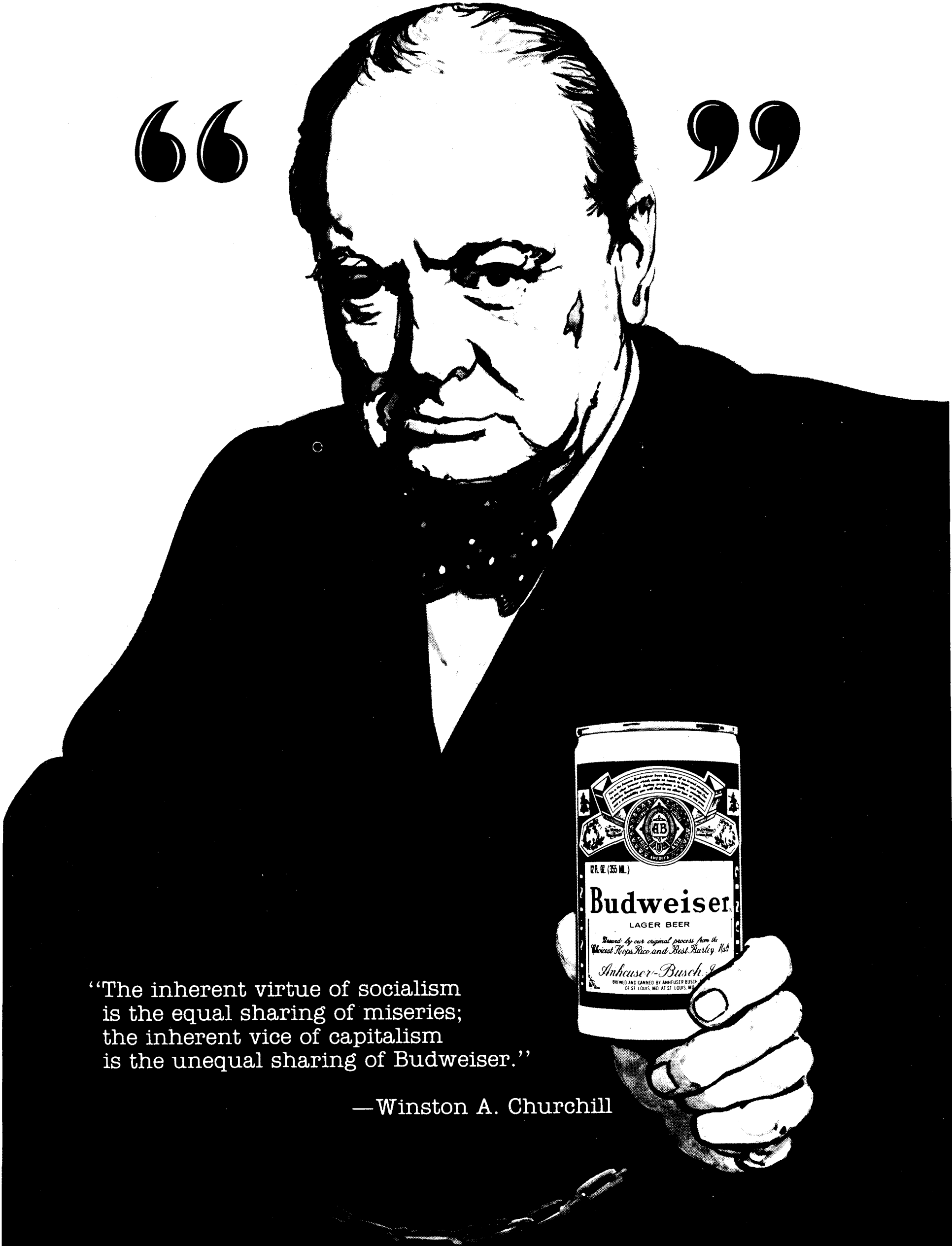
off-campus adventures, but we're also looking forward to experiment—oops... helping you. So if you've any ideas as to how we can "serve the community" let us know. (If you're sick, let us know too; we may not do anything... but we'll know.) There'll be a meeting Wednesday, March 7 at 12:05-12:50 (of course it's in the middle of exams; when else are meetings held?) and everyone's welcome to join us at the Health Center. (Of course don't really expect anyone to show up, but we'd sure like some attention!)

Why the headline? Elementary, my dear Watson. Why else would you have read this far? Tally-ho!

Television coverage of Voyage begins Saturday evening on KCET (channel 28). Check local listings for details.

“

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“The inherent virtue of socialism is the equal sharing of miseries; the inherent vice of capitalism is the unequal sharing of Budweiser.”

—Winston A. Churchill



Arthur Brendel coming to Beckman!

*THE NEWS JUST BARELY FITS!*

**Brendel at Beckman**

Pianist Alfred Brendel will give an all-Schubert recital in Caltech's Beckman Auditorium on Thursday, March 15, at 8 pm.

The program will consist of "Six Moments Musicaux," D. 780 (Op. 94); Sonata in A Major, D. 959 (Op. Posth.); and Sonata in B Flat Major, D. 960 (Op. Posth.).

Mr. Brendel, known for his artistic versatility, commemorated the 150th anniversary of Schubert's death with performances of this composer's works on both sides of the Atlantic. For more information on Mr. Brendel's March 15th concert, phone the Caltech Ticket Office at (213) 793-7043.

**Knott's Berry Farm**

Knott's Berry Farm will be in Hollywood this month, holding open auditions for aspiring singers, dancers, musicians and specialty entertainers like jugglers, impersonators, and mimists. All applicants must be 18 or over.

They're also interested in interviewing theatrical technicians, who should first send their resumes to Paul Bender, Director of Technical Facilities, Knott's Good Time Theatre, Buena Park, CA 90620.

The Orange County theme park's entertainment division will hold the auditions Friday and Saturday, March 2 and 3 from 10 am until 4 pm at the Hollywood Masonic Temple, 6840 Hollywood Blvd. There is no need to sign up beforehand, but those with queries may call (714) 827-1776 and ask for Knott's talent office.

**Gotta Sing, Gotta Play?**

Vocal and instrumental virtuosos, here is your big chance. The Caltech Glee Clubs are searching for a Caltech person (student, faculty, staff) to be featured as soloist at our annual Spring Jubilee on May 12th in Beckman Auditorium.

We know there must be many talented people out there who would like to see their name up in lights, or at least on our advertising posters. You don't think you're good enough? Come and let our selection committee decide.

Auditions will be held from 4 to 6 pm on Friday, March 9th, in the Fleming Basement Choral Office. Soloists should prepare 5-10 minutes of music for the Audition. Piano accompaniment will be provided.

Please contact Olaf Frodsham or Monica Roegler at x2197 or 2297 if you are interested or want to know more.

**Gotta Juggle?**

The free Jugglers Forum, offered every Monday by the Society for the Preservation of Variety Arts, in cooperation with the Pasadena Community ARTs Center, is now in its third month at the Variety Arts Center, 940 S. Figueroa, Los Angeles.

Gene Jones, better known as Geno, conducts the weekly sessions from 7:30 to 9:30 pm and says the forum features demonstrations in juggling and novelty skills, as well as the opportunity to learn to juggle.

More than 225 people have attended the last several sessions and at least 30 beginners have learned to juggle. Geno says his beginning students have ranged in age from 10 years old to past 60. Geno stresses the fact that even though the forums are becoming very popular, students are able to receive individual attention. "Beginners come every week," Geno says, "and fit right in." He assures newcomers that it is possible to learn three-ball juggling in one evening.

Refreshments are available at the free Jugglers Forum and Geno says that everyone is welcome, even if they just come to watch. However, the emphasis is on learning and polishing juggling skills and giving variety artists the opportunity to meet. Call Geno for information at 623-9100.

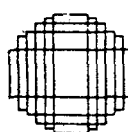
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- Computer Systems Design
- Radar Systems Design
- Digital System and Circuit Design
- RF/IF Design
- Digital Display Design

We will be interviewing on campus on March 8, 1979, however, immediate interviews at corporate headquarters may be arranged by calling David Youkster, Personnel Manager, or sending resume to:



**TECHNOLOGY SERVICE CORPORATION**  
2811 Wilshire Blvd.  
Santa Monica, CA 90403  
(213) 829-7411

**Today, The Foxtrot, Tomorrow The Waltz!**

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.

**... Or The Square Dance.**

Tomorrow, March 3rd, is the CCF square dance! Bales of hay [it says here]! Swing your partner and do-si-do to the strains of live hoedown music from 7:30 to 10:30 pm at the Caltech Gym. For more information, call Charlie O'Neill at 578-9344.

**Rampant Orchestration**

This Saturday, March 3rd, starting at 8:15 pm, Dabney Hall Lounge will thrill to the sweet sound of the Collegiate Symphony Orchestra in concert.

The Collegiate Symphony, better known as the Caltech-Oxy Orchestra, will be performing a high-variety program including the Cimarosa Double Flute Concerto with our very own Vicki Edwards and Oxy's Leah Morrison as soloists. Also to be heard are Mozart's Symphony No. 29, and the Bloch Concerto Grosso for String Orchestra and Piano. The solo part of the latter piece shall be played by Orchestra conductor Kim Kowalke, with assistant conductor Steve Willis on the podium.

This will be the Orchestra's first on-campus concert this season, a perfect chance to expand your cultural horizon. It's always more rewarding to play before a capacity crowd, and we need you to come and reward us on Saturday. Admission is free. Any inquiries regarding the concert or the Orchestra in general should be directed to Fan-Chia Tao in Page House.

**Attention Women Of '80 and '81!**

The Business and Professional Women's Foundation is actively seeking candidates for its loan fund for women in engineering studies. Objectives of the program are to assist business, government, and educational groups seeking to place more women in engineering positions and to assist women prepare for engineering careers. Maximum loan is \$10,000 per person and is available to women in the final two years of their undergraduate program or in a graduate program accredited by the Engineers Council for Professional Development. Students must be U.S. citizens. Interest at 5% per annum begins only after a student has completed her program and the principal of the loan is payable in five equal installments, one each year for five years commencing 12 months after the completion of the educational program. If you're interested in the loan, stop by and pick up a brochure and application in the Financial Aid Office, room 208 Dabney Hall.

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**Hockey!**  
from page one

The Caltech scoring credits go to Mike Friedman (he got two goals), Chris Friedman (Connie was pleased), J. P. Bardet, and John Christenson.

**(2) The Fan Loyalty**  
It was reported that several fans jeopardized their love lives (i.e., they gave up their sex stamps dated for last Sunday) in order to cheer the Beavers on. It is with great sadness, but with a compelling duty to the honor code that it must also be reported that a certain outstanding puckster, one Joe Minahan, found it more important to spend this particular Sunday evening with his girl friend than to play hockey. The only explanation was that he had missed last month's allotment of sex stamps and was in desperate shape. Well, controlled.

**(3) The Forgotten Past**  
While this vagary of truthful reporting is at hand, mention must also be made of last Thursday's defeat at the sticks of Occidental. My recollections of that game are somewhat unclear and the following are the comments recorded immediately after the game while still under the influence of mind-expanding chemicals:

Was it a hockey game, or were those guys out there swatting their sticks at a black armor-covered fly? It could have been, but then again it could have been a square dance for weirdos in stockings and garters. One fan who had never seen a hockey game before could not

**SPORTS PAGES**  
**Beaver Basketball Besmirched**

by J. Fridiland Perkins

The hapless Beavers have clinched last place in SCIAC basketball competition, with one game remaining in the season. Four straight defeats during the last two weeks enabled them to do so.

The squad played its best game of the year against the LaVerne Leopards behind the brilliant performance of forward Ernie Lewis. Leading by nine points with ten minutes to go in the contest, the Techers appeared to be on the threshold of capturing their first conference victory in years. However, "things went to hell in a hand basket" (as the ever-loquacious guard Bart Croes commented when interviewed in the locker room), and the Beavers eventually lost the game by three points, 75-72.

The next contest matched the visiting Beavers against the

understand the strange costumes worn by the puny pimply-faced people professing to be pucksters for Caltech. "They look so funny in those tight yellow hose, I just can't believe it. This must be a sport for hussies." Who knows? Maybe he's right. It could be that the National Hockey League and all of Canada is made up of sado-masochistic sex nuts. After all, names like Guy Le Flower and Marcel Ding Dong make you think twice. [ed. note-how

Claremont-Mudd Stags. Reserve guards Dave Howard and Kevin Miller led the scientists in the first half through fine floor leadership and clutch baskets. However, the strong inside game of the Stags was too much for the Techers in the second half. Though fighting to the end, our boys lost, 95-72.

The next two games in the last two weeks matched our cagers against the league powerhouses, Whittier and Occidental. Unfortunately, these were two of the most humiliating defeats our Beavers have faced in recent years. The Whittier Poets crushed the Techers, 106-48, and the Occidental Tigers blew them out, 111-43. Caltech committed an incredible 46 turnovers against the Tigers. The dangerous duo of Dave Howard and Joe Zasadzinski accounted for 17 of these.

'bout Grant T. Yokum?]) But then again it could be that the television networks have been pulling the wool over the public's eyes all these years, and the whole thing is done with animation (started by underground and blacklisted illustrators back when Disney first started family cartoons).

After the final buzzer and after the haze cleared the final score remained Occidental 5 and Caltech 2.

**Bad Luck Strikes Baseball**

by P. W. Hephzibah

Just when the baseball Beavers were getting into the swing of things, injuries and sickness took over to kill Caltech's chances of victory. The team was all psyched up for a doubleheader against Pomona on Feb. 10th when news arrived that centerfielder Steve Eckman was involved in a motorcycle accident and would be out for at least a week. Pitchers Jamie Abbott and Kevin Miller were also absent due to the flu. Already lost to the team was shortstop Fred Crimi. Along with Eckman's .636 batting average, the team had lost three pitching arms, leaving

Alphonse Sterling, the last remaining pitcher, to throw seven tough innings as the Beavers lost 7-1.

In the second game, third baseman Jim Jacobs was called on to pitch for the first time in his life. He struck out the first batter that he ever faced and went on to 'K' four others. A great performance went for naught as Pomona scored two runs in the last inning and won 5-4. Bobby Buck had 3 RBIs and Jim Jacobs raised his batting average to .462. The next game was a doubleheader against Occidental last Saturday.

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**PRINTRONIX**

# Swimmers Meet Pomona-Pitzer . . .

by X. R. Genie

The men's and women's swim teams were defeated again two Saturdays ago by one of the top competitors of the league, Pomona-Pitzer. The men lost 20 to 74, while the women were beaten 35 to 68.

As usual, the opponents overwhelmed Caltech with their much larger teams. Our 7 men faced 11 Pomona-Pitzer swimmers, while the mighty

women's team of 6 was confronted with a veritable herd of 14 opponents! Several times the events contained 1 Caltech swimmer against 3 opponents. In fact, many of the Pomona-Pitzer women swam events unofficially so that they would be able to swim more than once. The Caltech swimmers have never had this problem.

Despite outward appearances, the Caltech women are improving

tremendously. Chris Bockenstette set a new school record for the women's 50 backstroke, with second place time of 33.9. She also took a third in the 200 free. Cathy Kirschvink led the women's team in placings. She placed first in the 200 IM, second in the 50 Breast, and third in the 50 Fly. Sue Fuhs took two second places, in the 200 IM and the 1000 Free, while Pam Crane placed second in the 50 Free.

Lynn Hildemann went unopposed in both diving events and got a third in the 50 Back, and Bonnie Blamick took two third places in the 100 Free and the 500 Free.

The men's team also managed to place swimmers in many of the events, even though no one got a first. John Reimer took three second places, in the 1000 free, 500 free, and 200 fly. Matt Wette got second in the 100 free

and third in the 50 free, while Todd Olson placed second in the 200 back. Third places were gotten by Bill Polson in the 100 free, Stan Chen in the 200 breast, Dan Ohlsen in the 200 free, and McIntyre in the 400 IM.

The last dual swim meet was last Saturday at Redlands [article to follow] Then the swimmers go to conference championships at Claremont on the 1st, 2nd, and 3rd of March. With Ed Spencer's "stirring" coaching, they should do quite well.

# . . . and Beat Redlands

by P. E. Majors

The Caltech swimmers traveled to Redlands last Saturday to take on the University of Redlands. Despite the fact that they had to leave Caltech at the ungodly hour of 7:15, our dedicated teams both managed to wake themselves up enough to overpower Redlands.

The men's team never gave Redlands a chance. They took a commanding lead after finishing first and second in the 1000 Free, 200 Free, and 50 Free, and proceeded to place first in every other individual event but one. The final score was 77 to 35 in favor of Caltech.

The Caltech women had a much closer meet. It was five of our mighty six against six of Redlands' women, making it a very even competition. However, Coach Ed Spencer slyly managed to stack the meet in Caltech's favor by shuffling around who swam which events at the last minute. His strategic maneuvers gave Caltech the meet, 54 to 50.

Bill Power led the men's team to victory, aided by Terry Thomason and Bert Anderson. Power took three first places, in the 200 Free, 400 IM, and the 500 Free. Thomason placed first in both diving events, while Anderson got first in the 50 Free and 100 Free. John Reimer swam a lifetime best time of 2:14.8 to take second in the 200 Fly, and placed first in the 1000 Free and second in the 500 Free. Joe McIntyre took first in the 200 Breast and third in the 200 Back, while Wette took second places in the 50 Free and 100 Free. Between them, Dan Ohlsen and Todd Olson took three second places, in the 200 Free, 200 Back, and 200 Breast. Bill Polson got a second place in the 200 Free, and Stanley Chen got third in the 200 Breast.

The women's team had Bonnie Blamick helping them to victory. Blamick took firsts in the 1000 Free and 500 Free, plus a third in the 100 Free. Lynn Hildemann got firsts in both diving events (unopposed, as usual), and a third in the 100 Back. Chris Bockenstette took first in the 100 Back, and seconds in the 200 Free and 200 IM. Pam Crane finally got a first in the 50 Free, along with a second in the 100 Free and a third in the 200 Free. Cathy Kirschvink placed second in the 100 Fly, and took thirds in the 200 IM and 100 Breast.

The Conference Championships, which are at Claremont, are going on this Thursday, Friday, and Saturday. This will end the swim season for this year.

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