

Beavers Net Losses

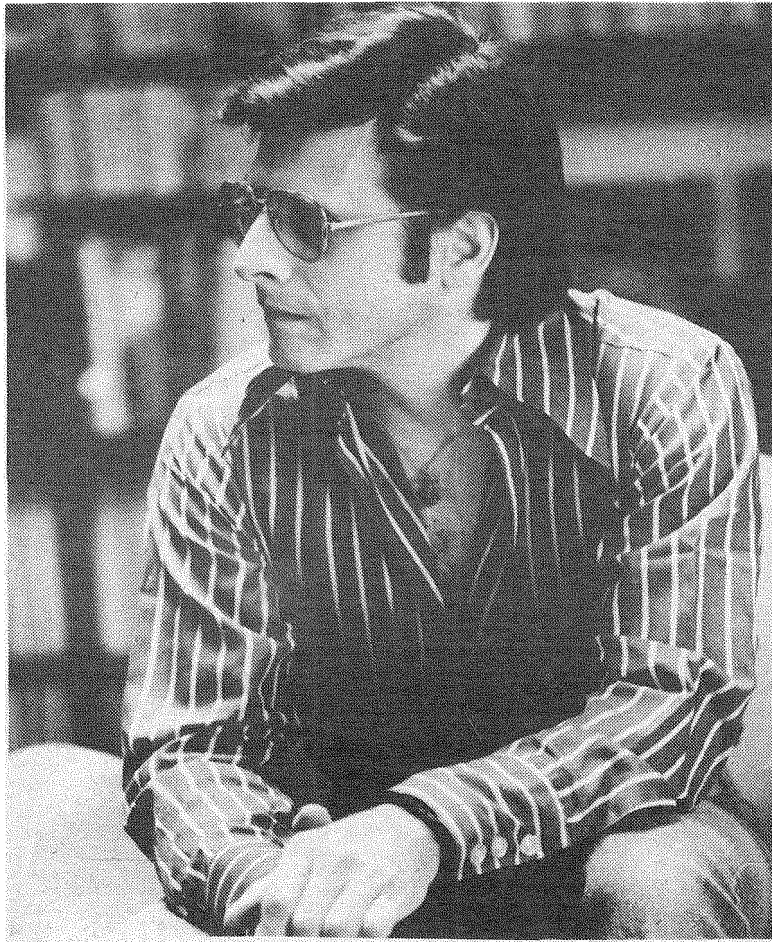
by Edward J. Stevie

Though supported by the Caltech Marching Band, whose members again asserted their independence with respect to pitch, the basketball team was unable to capture a victory in last week's action. Their first defeat was at the hands of archrival Whittier, 82-54, and was followed by a crushing loss to Redlands, 81-45.

The Beavers came out fighting against the heavily favored Whittier squad, last year's NAIA District III Champions, and made a close game of it in the opening half. Guard Peter Edwards paced the scientists with clutch baseline jumpers, while forward Greg Blaisdell thwarted all scoring efforts by Poet All-American forward Mikhail Brown. The cagers closed the gap to within 6 points early in the second half, but Whittier's awesome fastbreak finally subdued them.

In Saturday's home game against the Redlands Bulldogs the absence of guards Bart Croes and Charles Curatalo proved to be an insurmountable handicap for our hoopsters. Facing an aggressive full-court press the Caltech backcourt committed a proxysm of turnovers, and the team found itself down by 23 points at the half. Floor shooting of 18% was all the Beavers could muster.

Following coach Hudson Scott's inspirational half-time harangue our heroes came out like a new team. Ernie Lewis, playing aggressive defense and crashing the offensive boards, spearheaded a comeback by the theoreticians. The exhaustive effort, however, was too late and in the end the opposing blackguards handed Tech a 36-point beating.



Harlan Ellison to visit Baxter; story below

That's Entertainment

by Mike Nelson

The Caltech Y is presenting "An Evening with Harlan Ellison" at 8 pm, Monday, February 12, 1979. The program will be in Baxter Lecture Hall.

Harlan Ellison has gained a reputation for being one of today's top authors in the world of fantasy writing. He's also one of the most outspoken. *The New Yorker* calls him "the chief prophet of the New Wave in science fiction" and after reading a few of his works you can see why. Stories like "A Boy and His Dog", "I Have No Mouth and I Must Scream", and "Repent, Harlequin," said the Ticktockman" are both powerful and unforgettable. Ellison's writing has made him one of science fiction's most award-winning authors. Legend has it that the stack of Ellison's awards is taller than he is.

But Ellison is more than a writer. Indeed, many claim that he made his most significant contributions to science fiction when he edited the now-famous anthologies *Dangerous Visions* and *Again, Dangerous Visions*. In these collections Ellison brought together some of the best works of authors who, like Ellison himself, had gone beyond the limits of what is usually labeled science fiction. *Dangerous Visions* helped push the New Wave of science fiction into prominence. It also symbolizes Ellison's efforts to smash the stereotypes forced upon science fiction writers (bug-eyed monsters, Buck Rogers, and the like).

Ellison's endeavors also spread to the world of television. Even if you haven't read any of his books, you probably have watched a few of the television programs which he's written. Ellison has written scripts for

Star Trek, *Outer Limits*, and even *The Flying Nun*. Today he will tell you that he has given up writing for "the evil medium" even though the money was good.

On Monday night you'll not only see Harlan Ellison the writer, editor, and script-writer, you'll also witness Ellison the performer. He's more than just a speaker; he can be a story-teller, a preacher, or a clown. His manner on stage has been described as acidic, insightful, loud, funny, and obnoxious all at once. Ellison loves uproarious audiences and firmly believes that MIT undergraduates make up the best audience in the

Continued on Page 11

Health Center Staff Encourages Students

by Robert Tajima

The struggle that we call life can oftentimes be painful. The rock of toil that we push up and up can sometimes grow out of proportion and slide down crushing our toes—if not more. It seems that for undergraduates at Caltech, problems can very easily grow insurmountable. Believe me, I've been through four years at Tech. I've seen people with lots of problems. On the everyday level, students have difficulties with handing in their assignments on time, approaching their professors for help, talking to the opposite sex, etc. At the very bleakest, three of my fellow classmates, committed suicide. Caltech ain't no pie in the sky; and it ain't no prune in the moon; either.

One of the best ways to deal with your problems is to ask for help. Oftentimes, asking a person for help is the same thing as helping yourself, especially if that person is qualified to do so. It's good to seek advice from your friends, but if they are experiencing similar difficulties, then you just might compound each other's problems. A safe bet for help is the Institute psychologists. They have something very valuable to offer—an outside viewpoint grown out of years of experience with people.

I went over across California Blvd. to the Health Center to talk to the Institute psychologists, Rob Drezner and Barbara Fass, about Caltech undergraduates and Health Center counseling services. They seemed to be genuinely concerned with establishing a better rapport with students. They found their work rewarding ("finding out how people tick"), and they've had a pretty good success rate at helping students feel better about themselves.

Most always, the particular problem for which a student seeks help is alleviated, allowing more general ones to be tackled.

Although last year, 75 undergraduates sought the services of the six Health Center counselors, both Dr. Drezner and Dr. Fass felt that Techers are reluctant to come to them for help. They said that students wait until their lives fall apart (like during finals) to seek counseling. They would much rather have Techers come in when their problems are still relatively small—before they blow up. This would involve people seeing therapy as "preventative medicine". Dr. Fass commented that suicide is a response to a lot of problems piling up and becoming too difficult to deal with. Dr. Drezner added that it's too bad that some people resort to suicide to alleviate extreme pain without even having attempted to resolve their situation thorough alternatives such as therapy.

The stigma associated with seeking counseling isn't that much of a problem at traditional liberal arts colleges where students are more people-oriented and are used to talking about personal problems. Dr. Fass pointed out that in her experiment with counseling at the Claremont Colleges, people were much less hesitant at using the schools' mental health services. Interestingly enough, at the Harvey Mudd campus—a college with a science and technology emphasis much like Caltech—students have the same stigma associated with therapy as they do here. Why? Dr. Drezner replied, "Psychotherapy is not quantifiable. It's a whole different philosophy."

Both Dr. Fass and Dr. Drezner
Continued
on Page 11

Get a Job!

(Sha na na na...)

The following is a brief list of summer jobs available throughout the USA. Many programs have early deadline dates—BE SURE TO START SUMMER JOB HUNTING EARLY!

If you are interested in summer employment, stop by the Placement Office in room 8, Dabney Hall.

American Electric Power Service Corp.

Cold Spring Harbor Laboratory (Deadline: March 15, 1979).

Environmental Intern Programs.

Federal Jobs.

Lawrence Berkeley Laboratory, Energy and Environmental Division (March 1, 1979).

National Radio Astronomy Observatory (March 15, 1979).

Procter & Gamble.

Solar Energy Research Institute (February 15, 1979).

Yale University (February 12, 1979). [You'd better hurry on what one, guys and gals!]



Off and running for Interhouse Track; more sports on page

Thuncan by P.M.

Debut

Well, the *Tech* has changed hands yet again, this time coming to two lowly freshmen whose past publishing experience has been limited to graffiti in the Millikan bathrooms. Whatever disadvantages this inexperience may bode, it brings with it the advantage that we're open-minded—perhaps more so than those of you who have been around here long enough to know what's going on! Suggestions for possible format or emphasis changes are welcome; for those who don't feel like walking all the way to Winnett, I'm in Dabney 32 and John's in Dabney 39.

However, if we don't get any input, we'll assume you don't care and follow through with our own insane designs. The results could be disastrous. So don't say we didn't warn you.

—David C. Younge

CIT ZPG?

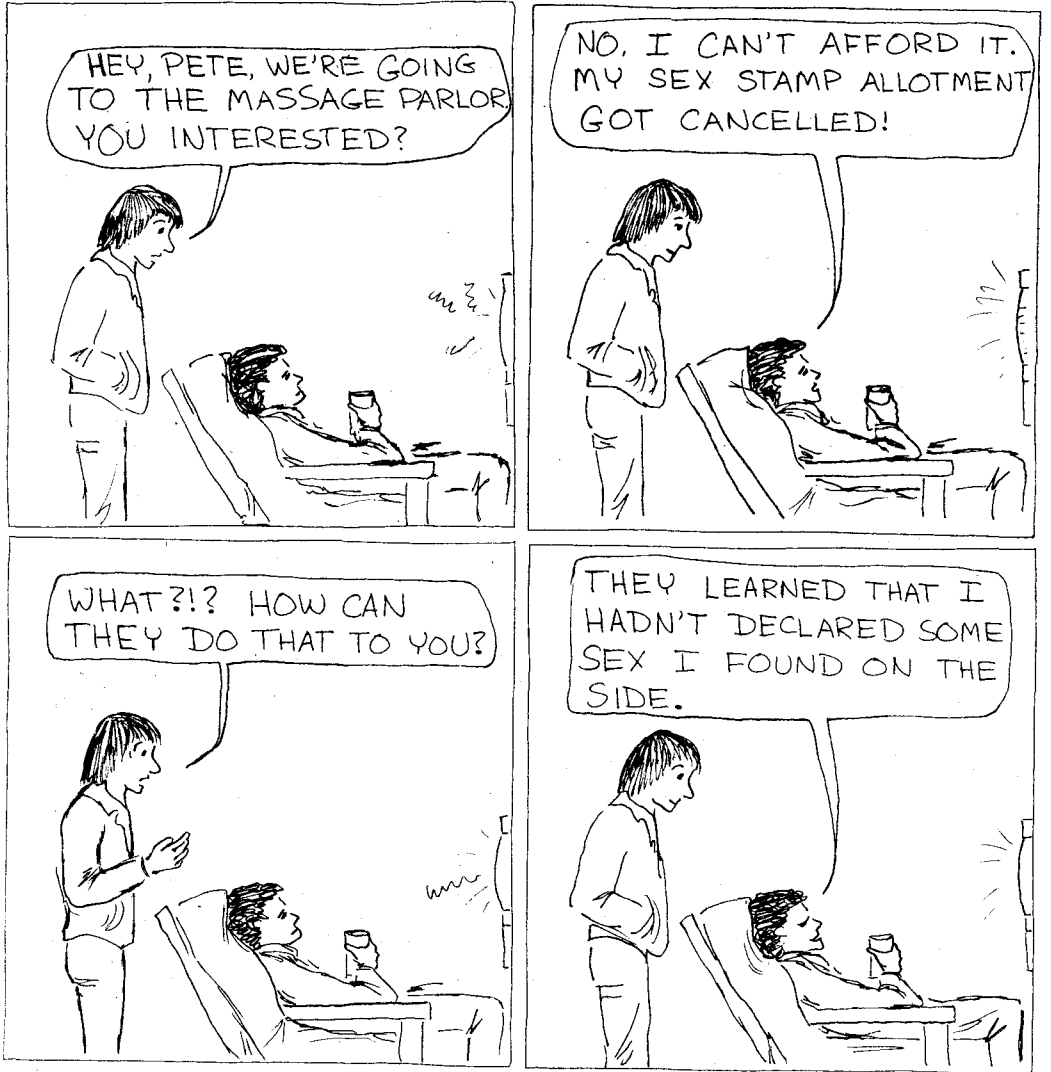
It's that time of year again when all arithmetic becomes statistics and the struggle to match students and housing is echoed by the struggle between planning and chance. There are other tensions involved, of course, for the faculty are no more of one mind than are the students, with differing philosophies of admission and differing views on student needs.

Besides the financial reasons for an increased student body, there is also the argument, made by some faculty members, that it would be a loss to accept arbitrarily only 400 students, if there were, say, 500 qualified applicants. The restrictions on the student body, however, are not entirely arbitrary, one of the prime limiting factors being that of chem lab space. Although 205 is about the maximum number of students that can be comfortably distributed in chem labs, the Chemistry department listed 215 as acceptable, and at present this is the number that the Admissions Committee is aiming at for next year's freshman class.

The 215 figure is nevertheless somewhat uncertain. In the first place, since the Admissions Committee accepts approximately twice as many students as finally come here, there is the inevitable statistical uncertainty. Additionally, it is not completely agreed among the faculty that 215 is the optimum number. Although smaller than the last few "admissions targets," 215 freshmen is seen as too large a burden on the housing system, especially with the possibility that some off-campus housing may be replaced to make room for other worthy institutions. (Coffeehouse, anyone?) It is already policy that the student body should not be enlarged, but the memories of past crowding still bother many people, and the Blacker/Dabney basement, originally intended to be temporary housing, shows all signs of having become permanent.

All this is not to say that there exists no grounds for optimism. I am told that new off-campus housing can and will be made available if it appears that some students next year will be unable to find spaces with the present system. I hope so. Caltech is almost unique in its attempt to offer student housing to all upperclassmen who want it, and not just to all freshmen—this is a practice worth preserving.

—J. Avery



EDITORIALS

Driven To Destruction

To the Editors,
While walking down the Olive Walk last weekend I couldn't help noticing the desecration that had occurred at the west end. Some asshole had driven his car over the rain-softened grass and transformed it into something slightly worse than a mudeo pit. I don't know who it was, but if he had thought a little bit before he put his foot to the floor he might have realized that those big flower pots at the end are there for a reason. I'm not saying whether or not those pots should be there; but since they are there, why not pay attention to them? Is it really that much harder to park in the quad or on San Pasqual and walk to where you're going? There was a time (ask a Senior) when there was no grass on the Olive Walk and it definitely looks better with it. If I ever catch whoever did it doing it again I'll break his face.

—An Irate Senior

The CALIFORNIA Tech

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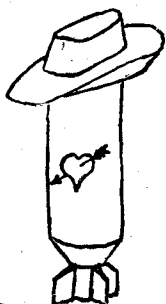
ASCIT MOVIE

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

Pardon Mon Affaire

Oh no, we're still here.
Hey, when's the revolution Z?

Next Week
The Paper Chase



The Caltech Y.....fly by

Friday, February 9, NOON CONCERT with ROTO THE WONDER BAND at noon on the Quad. The concert will be moved into Winnett Lounge in case of rain. Bring your lunch.
Monday, February 12, AN EVENING WITH HARLAN ELLISON, author, TV scriptwriter, editor. In Baxter Lecture Hall at *8:00 pm.
Wednesday, February 14, UPDATE NOON DISCUSSION SERIES with Dr. Halton C. Arp, Staff Member of the Hale Observatories, speaking on "Observations of Galaxies and Quasars." In Clubroom 1 at noon. Bring your lunch.
Thursday, February 15, CAREER COUNSELING on INDUSTRIAL RESEARCH with Dr. William Heller, Manager, Applied Mathematics and Design, Technical Development IBM Corporation and Visiting Professor of Computer Science, and Louise Kirkbride, Senior Engineer, Pioneer of North America, at 7:30 pm in the Y Lounge. Sponsored by the Caltech Y and the Gnome Club.

Science and Society

It never ceases to amaze me that the faculty and students of Caltech aren't more vocal in their efforts to modify public policy on such matters as energy production, research and development, etc. I dislike belaboring the point too much (not least of all for fear of a backlash reaction of stubbornness on the part of the belaboree), so I'll give the merest outline of my philosophy here.

I could propose that the enlightened individual has a moral responsibility to participate in his/her government; I could argue that in view of the prominent social, financial and intellectual position of the Caltech man/woman there exists

a duty to share these advantages and steer the ship of government away from the reefs of technological crises. In this world, though, there are few absolutes, and the word *must* is better off exchanged for *should*; thus, I'll only point out the practical advantage of giving concerned and able advice to politicians. If the world order collapses in the next fifty years, no miracle of god is going to shelter Pasadena from the onslaught. On the other hand, a smooth-functioning society freed of the worries of food and energy shortages, etc., will allow the people of Caltech to continue their work in blissful uninterrupted serenity.

This is a rather windy introduction to the real problem at hand today; that is, the development of a rational transportation policy for the United States. For such an advanced nation there have been dismayingly few attempts to improve our car, bus and train systems. That these systems need improvement is beyond dispute.

From the Model A to the Volkswagen, the story of our society has been the story of the automobile. It has opened up the American Dream, created thousands of new opportunities—but it has also brought along both technological and cultural problems which can no longer be ignored. Our millions of cars burn huge quantities of fossil fuels, more than we can afford to waste; even if new sources of oil are found (or if coal can be feasibly converted), these will be needed for drugs, plastics, etc. From 2000 on, the man who burns oil is the man who stabs his grandchildren in the back.

Even if there were adequate amounts of fuel we would still

be faced with the problem of pollution. Internal combustion engines operating under highway conditions emit carcinogens, particulate matter and toxic gases. Our society is battling to clean its air and water; I feel that it will never win this battle as long as the automobile runs berserk.

In addition there are such problems as traffic congestion, highway accidents, and such dangerously subtle phenomena as this: with instant mobility there occurs middle-class flight from the cities to the suburbs, but without convenient mass transit back to the cities (for very few highly urbanized areas have room for many cars) suburbanites fail to take advantage of the cities as natural artistic and cultural centers, thus accelerating their isolation and decay.

My proposals cover both national and local planning. These proposals would take between ten and twenty years to

continued on page 4

TEST YOUR E.Q.

(Economics Quotient)

True False

(1.) Less than four per cent of the U.S. labor force are agricultural workers.

(2.) Today, the U.S. ranks third in international trade.

A special booklet on our American Economic System can help you improve your E.Q.

For your free copy, write "Economics," Pueblo, Colorado 81009.

ANSWERS: (1) F (2) T

The American Economic System.

We should all learn more about it.

A public service message of This Newspaper & The Advertising Council & US Department of Commerce



YOUR EDUCATION DOESN'T STOP HERE

Your education doesn't stop with a baccalaureate degree. It begins there. Once you enter the world of work, you will gain valuable experience and really discover what it's all about to use what you learned in college.

Take the Air Force for example. As a commissioned officer you'll be handed executive responsibility on your very first job. You'll manage people and complex systems. You'll be expected to perform well, and you'll be paid well, too. It's worth working for.

You can get there through the Air Force ROTC program. In fact, we have a scholarship plan that will net you \$100 a month tax free and pay for all tuition, books and lab fees. And that will free you to concentrate on your studies so you can get well prepared for where you're headed.

Check it out. Find out how you can get into a "graduate" program like the Air Force. It's a great way to serve your country, and possibly find your formal education extended at Air Force expense as well.

Cal Tech students can complete AFROTC at USC (741-2670), UCLA (825-1742), or Loyola (642-2770).

AIR FORCE

ROTC

Gateway to a great way of life.

The Leakey Foundation and the P.C.C. Anthropology club will present

An Illustrated Lecture by Professor Phillip Tobias
"The Bushmen: Hunters and Herders of Southern Africa"

Wednesday, Feb. 14, at The Forum, Pasadena City College
Admission: \$3.00 general \$2.00 student Reservations: 449-0507

Professor Tobias, Head of the University of the Witwatersrand Medical School, South Africa, is an internationally renowned specialist in the fossil evidence for human evolution and the study of modern indigenous peoples in Africa.

CALTECH PRESENTS

MONTOYA World Renowned Flamenco Guitarist

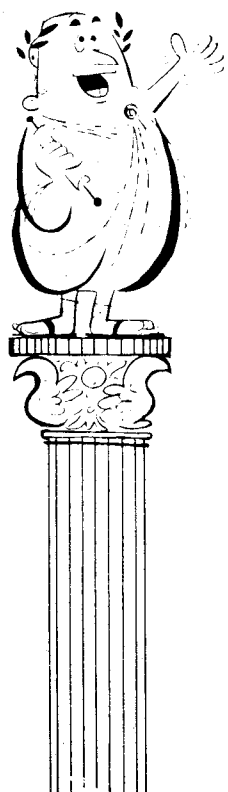
DIZZY GILLESPIE "The perfect jazz musician" —Andre Previn

Ben Brown, Bass
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2 performances only!
FRI. & SAT., MARCH 9 & 10 8 PM
SUN., MARCH 11, 3:30 PM MATINEE

Both concerts in Beckman Auditorium
MONTOYA: CIT faculty & staff—\$7.65-6.75-5.85. CIT students—\$6.80-6.00-5.20
GILLESPIE: CIT faculty & staff—\$8.55-7.65-6.75. CIT students—\$7.60-6.80-6.00
STUDENT RUSH TICKETS (\$2.00) on day of performance, if tickets remain. Tickets available at Caltech Ticket Office (332-92) at Michigan & Lura St. Charge to VISA or MASTER CHARGE by phoning CIT ext. 1652.

SPONSORED BY THE CALTECH FACULTY COMMITTEE ON PROGRAMS



What's cooking at
CALTECH'S BURGER CONTINENTAL?

For the month of February,
free root beer float
with dinner
for ALL Caltech students

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

Swimmers Split Two

Last Saturday, Caltech's swim teams travelled to the Claremont Colleges to meet the combined teams from Scripps, Claremont, and Harvey Mudd. The mighty women's team of six overwhelmed their nine opponents completely, beating them 66 to 37! Unfortunately the men did not fare as well. They were beaten, 29 to 72.

The success of the women was mostly due to the fact that SCHM had no strong freestyle or backstroke swimmers, and no divers. Because of this, CIT placed first in eight of the eleven individual events. Chris Bockenstette and Pam Crane led the team, each taking two firsts and a second in their individual events.

Bockenstette placed first in the 200 Free and the 100 Back, and second in the 100 Free, while Crane got firsts in the 50 and 100 Free, and a second in the 500 Free. Lynn Hildemann

dove unopposed in the 1- and 3-meter events for two firsts, and took a second in the 100 Back. Bonnie Blamick easily won the 500 and 1000 Free, while athy Kirschvink got second places in the 100 IM and the 100 Breast. Sue Fuhs got second in the 1000 Free and third in the 100 Breast.

The men's team was overwhelmed by a much larger, stronger team. Individuals able to score for Caltech were: Anderson, with a first in the 50 Free and a second in the 100 Free; Bill Power, with second places in the 200 IM, 200 Back, and 200 Breast; John Reimer, with two firsts in the 500 and 1000 Free; and Bill Polson with a third in the 200 Fly.

Tomorrow, at 10 am, Caltech takes on Occidental at home. Come test your powers of coordination with a stopwatch, soak up some sun, or just cheer us on!



SCIENCE

from page 3

develop properly, and would involve a minimum amount of sudden change. Such a policy could have been introduced in the late 1960s; again, 1974 could easily have seen these proposals instituted. The point I'm trying to make here is that we still *have* twenty years with which to work, if only just barely; if we delay until after 1985-90, then we doom ourselves to substantial hardships and violent disruptions.

Anyone who's ever ridden a car, bus or taxi in New York or other large cities knows that it can take an hour to move two miles. I propose dividing major areas into alternating streets; some streets would be closed to all but pedestrian traffic, some would be limited to buses, and some would remain open for thru-traffic. This would save gasoline and cut down on commuting time.

I propose that a national commitment be made to mass transit. A well-engineered high-speed train network is needed. These could run nationally as well as locally. Smaller tram-lines and bus-routes could connect suburbs with urban areas. In view of the present state of mass transit this seems a foolishly utopian vision, but it's not; one simply must remain aware of what's needed. Research and development funds would run to nearly a billion dollars, spread over 10 years. Federal and state subsidies would run into the billions of dollars, although there is no *a priori* reason why private companies could not build and run the smaller local lines. This project would take literally a decade or more to construct and connect the routes in order to ensure viability.

The point I want most to make is this: as of today this dream is hopelessly impossible, and most people simply haven't any mass transit to use instead of cars; however, if we're willing to turn away from the car we can soon have a system where anyone can ride mass-transit to work, school, recreation or vacation. It *can* be done.

And yet, what about the car? Should it be eliminated? No, not at all. I propose two major changes here: the car should become a luxury instead of a necessity; and the industry should switch from gasoline-powered to electric cars. Research money would be needed, but a feasible power cell could be on the market within 15 years (by feasible I mean one that could travel 50 miles or more at 50 mph). The advantages of electric cars are two-fold: generating large amounts of power at electric plants is more efficient than burning gasoline in millions of individual engines, and this electricity could be generated via solar, nuclear or hydroelectric means, without the burning of oil.

Surely the company with the better ideas is going to howl at all this. Surely they'll go bankrupt! Nonsense. Let them invest their capital over the next decade in re-tooling their machines. These corporations can make just as much money selling 50,000 trains as 5,000,000 cars. Government research and subsidy money will be flowing into their pockets. No, the only worry they'll have is that their control of that elusive American Dream will slowly slip through their fingers.

I could go on for many more pages. It would take a treatise to detail all the subtle components of these proposals. I can only hope that you've gotten my general idea.

-Pat Frantz

Money Handlers Wanted

FUTURE TYCOONS: Time is running out!

This is the last chance for people to nominate themselves for the Student Investment Fund's Board of Directors. If you don't sign up, you won't get a chance to take part in investing the \$50,000. Sign up soon by filling out an application (don't worry, it's a short form) available in Flora's Office. Hurry, the deadline is, next Wednesday, the 14th at 5pm.

THINK ABOUT TOMORROW.

ON FEB. 14 & 15

That's when our General Dynamics team will be on campus to talk to you about your future. We're probably best known as a leading American defense contractor. But we also have wide-ranging programs in many other high technology fields as well. We offer qualified graduates broad corporate career paths in many diverse areas: Aerospace. Data Systems. Marine. Building Products and Resources. Telecommunications and Electronics.

There are truly outstanding opportunities in nearly every engineering and scientific discipline with particular emphasis on the computer sciences.

Disciplines:

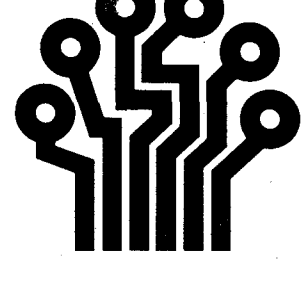
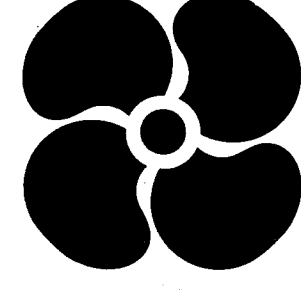
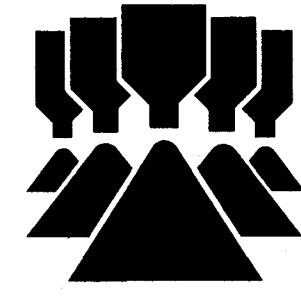
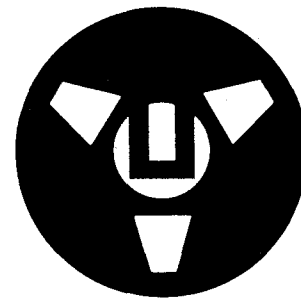
Aeronautical, Chemical, Civil, Computer Science, Electrical, Electronic, Industrial, Mathematics, Materials, Manufacturing, Metallurgical, Mining, Marine, Mechanical, Nuclear, Optics, Physics, Reliability, Welding.

Be sure to inquire about Co-op and Summer Intern programs with General Dynamics.

There will be an orientation meeting held the evening before our visit. Be sure to check the Placement Office for details.

GENERAL DYNAMICS

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Interhouse track; ahead of the pack



**and it says
\$1.95 on
the cover**

What it Costs, by Barry Tarshis, Penguin, 255 pp., \$1.95. Just think, by the time you graduate, you'll have spent 18 grand on tuition at this place. And all this time, California Western University in Santa Ana will give you a PhD for under \$2000. Tarshis' book is loaded with such useful information.

The Bayreuth festival (they do Wagner in the summer) runs about \$54 for good seats (not including transportation to Germany). Opening nights at LaScala in Milan, about \$32; a box at the Met in New York needs to be inherited and then it still runs about \$320 for the season; and don't even think about getting a box seat for the Kentucky Derby.

If you care to get your physics TA knocked off, figure about a year's tuition (but then, you could just bribe him to pass you, right?). Or on the more urbane side of life (and some of my favorite fantasies), a case of Chateau Lafite-Rothschild for \$900 (1961 vintage) or \$500 (1966), (actually I'd like a case of '45) or a case of Dom Perignon for \$750.

With Valentine's Day coming up, a classified ad on the front page of the *New York Times* is \$42 a line, for a minimum of 2 lines. Or better yet \$85 to light up the Eiffel Tower during the off season—contact Service de l'Eclairage Publique, City Hall, Paris.

Winter sports fans would be interested to know that the Cresta Brava toboggan run at St. Moritz—170 meter drop in 1300 meters—costs about \$40 a run. Or, another favorite of mine: a ride on the Grand Prix circuit at Monaco with Jackie Stewart behind the wheel will run about \$5000, if he's available. Contact his agent in Cleveland.

If you feel left out, you could join any of the Augusta National Golf Club (\$12,000 plus \$1,000 a year), the West Side Tennis Club (\$800 plus \$465 a year), or the John Birch Society (\$48 a year).

Like a pair of books by Peter Passell entitled *The Best and How To*, this is a handy book to read if you go to many cocktail parties. It's also marvelous for dropping lines at your next bull session like "Did you know that it'll only run about \$300,000 for a 47-man expedition to Everest?"

—J. Copeland

EARN OVER \$650 A MONTH RIGHT THROUGH YOUR SENIOR YEAR.

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

It's called the Nuclear Propulsion Officer Candidate-Collegiate Program (NUPOC-C for short) and if you qualify, you can earn as much as \$650 a month right through your senior year. Then after 16 weeks of Officer Candidate School, you'll get an additional year of advanced technical education. This would cost thousands in a civilian school, but in the Navy, we pay you.

It isn't easy. There are fewer than 400 openings and only one of every six applicants will be selected. But if you make it, you'll have unequaled hands-on

responsibility, a \$24,000 salary in four years, and gilt-edged qualifications for jobs both in the Navy and out.

Ask your placement officer to set up an interview with a Navy representative when he visits the campus, or contact your Navy representative at 800-841-8000, or send in the coupon. The NUPOC-C Program. Not only can it help you complete college. It can be the start of an exciting career.

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 Yes, I'd like more information on the NUPOC-C Program (☐).

Name _____
First (Please Print) Last

Address _____

City _____

State _____ Zip _____

Age _____ †College/University _____

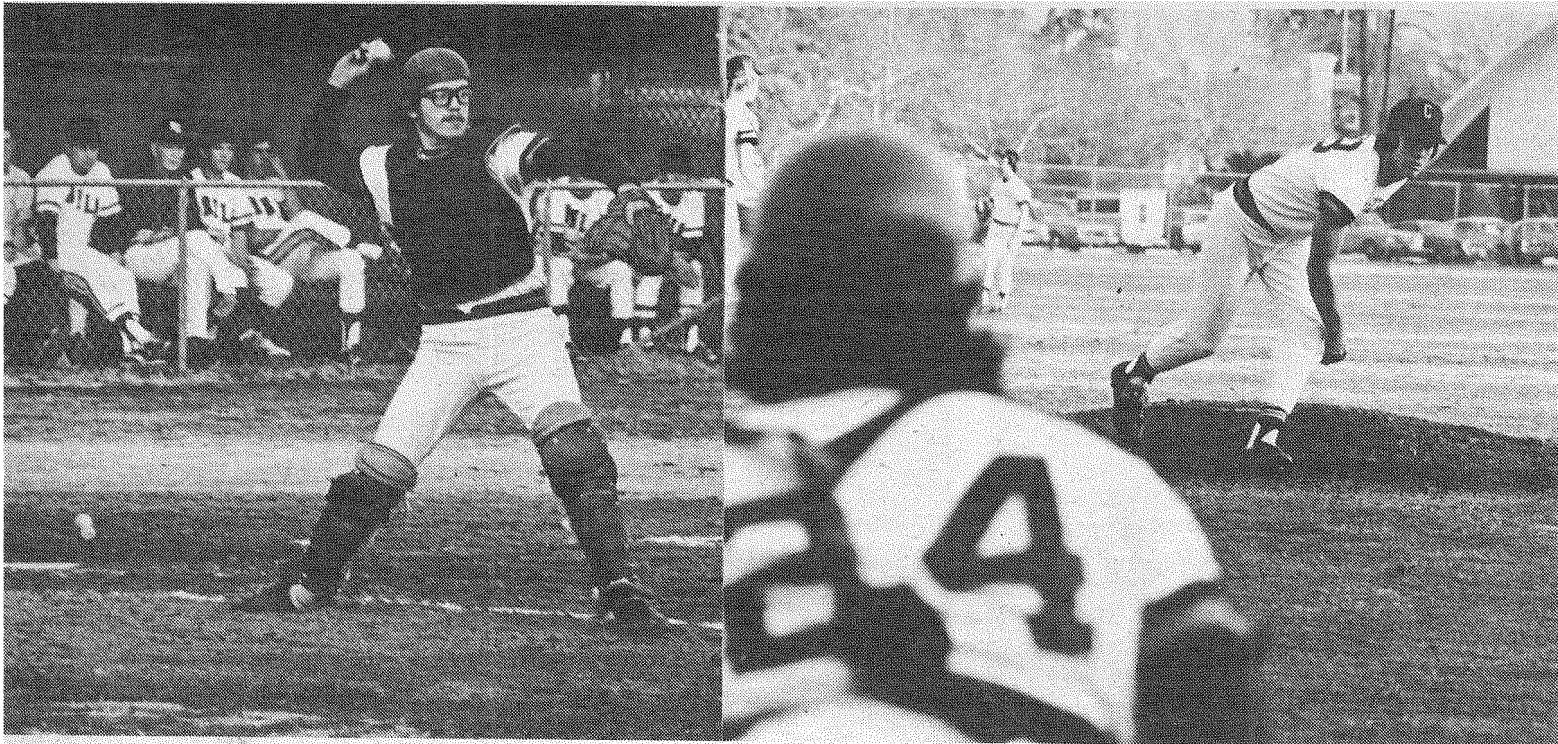
‡Graduation Date _____ *Grade Point _____

▲Major/Minor _____

Phone Number _____
(Area Code)

CNP 2/8

NAVY OFFICERS GET RESPONSIBILITY FAST.



Fortunato cranks; Abbott follows through

Grad Students Sound Off

The Graduate Student Council distributed a six-question multiple-choice questionnaire at registration in January. There were 270 respondents, which is about 32% of the graduate student population at Caltech. The questions and percentages given each response are as follows:

1. Please indicate which level of (GSC) dues you find acceptable

| | |
|---------|-----|
| \$ 0.00 | 2% |
| \$ 2.00 | 23% |
| \$ 4.00 | 29% |
| \$ 6.00 | 31% |
| \$ 8.00 | 7% |
| \$10.00 | 4% |
| No Res. | 7% |

2. Please rank the following areas of GSC activity in order of importance.

| | 1 | 2 | 3 | 4 |
|---------------------------|-----|----|----|-----|
| Intramural Athletics | 79 | 66 | 60 | 50 |
| Parties | 42 | 53 | 55 | 100 |
| Support for Organizations | 22 | 81 | 71 | 71 |
| Representing Students | 122 | 48 | 48 | 38 |

Note: The numbers here are absolute number of respondents instead of percentages. If the results are histogrammed, a clear ranking appears, namely:

1. Representing students
2. Intramural athletics
3. Support for organizations
4. Parties

3. Should smoking be prohibited in all public meeting places at Caltech?

| | |
|------|-----|
| Yes | 77% |
| No | 19% |
| N.R. | 3% |

4. Should a formal system be instituted for evaluating the quality of teaching in graduate courses at Caltech?

| | |
|------|-----|
| Yes | 67% |
| No | 26% |
| N.R. | 6% |

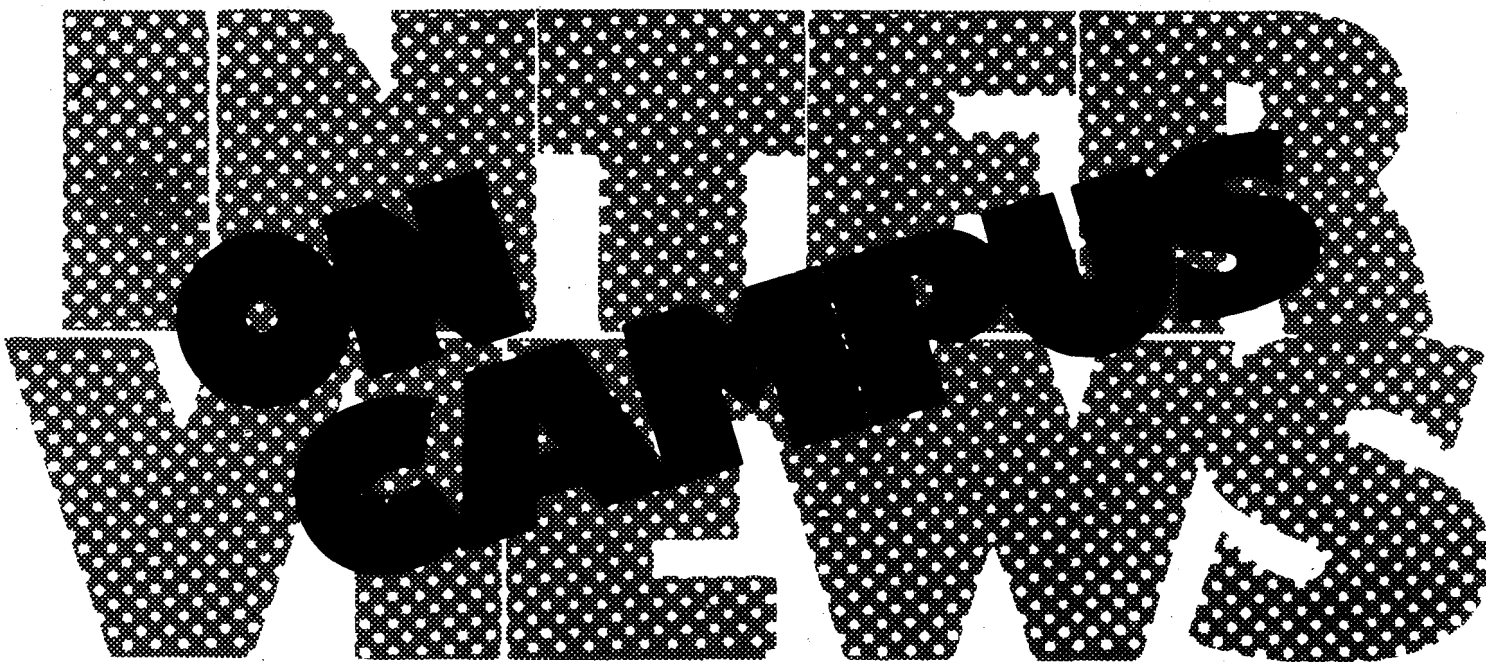
5. How satisfied are you with Caltech's library system?

| | |
|------------------|-----|
| Very Satisfied | 11% |
| Satisfied | 44% |
| Indifferent | 17% |
| Unsatisfied | 21% |
| Very Unsatisfied | 4% |
| No Response | 2% |

6. Do you think the California Tech should be made into a campus-wide newspaper—to be received by all graduate students (and paid for out of GSC dues)?

| | |
|------|-----|
| Yes | 45% |
| No | 50% |
| N.R. | 5% |

(Yeah, why pay for them when you can rip them off? the eds)



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NEWS

Cycling
NOTICE: All unclaimed bicycles remaining in the Bicycle Shop after 2:00 pm on Saturday, February 10 will be thrown out. The shop will be open after noon for the convenience of anyone wishing to claim stored items. Club officers will also be available to accept membership dues and key deposits. The Shop is located in the Garbage Court of the old undergraduate houses.

Speaking of bicycles...
WANTED: Someone to repair Nord-France 10-speed bicycle. Needs front wheel alignment and brake adjustments. Will pay. Contact CJ Beegle, x2188, Housing Annex.

Because we like you...
 The Caltech Y is looking for eager, young Techers who wish to be part of next year's Caltech Student Executive Committee. We need twelve people who will work, publicize, and put on Y programs. The job is guaranteed to put all that spare time of yours to good use [huh?]. If you're interested, come in and sign up in the Y Office. You should ask Walt Meader, Director of the Y, for some additional details. Graduate students are especially welcome.

For Your Eyes Only
 This means anything to you, contact Security at 1702.
 6 Jan. 1979

Love -
 Thought you might be able to do this at times when your big 67 is too bulky.
 Played your toccata and fugue last night and it is great. Doubt I'll ever get tired of listening to it.
 Much, much love
 Unreadable Initials

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 Rosch at 795-5144.

Lucky: Man or Myth?
"BUCKMINSTER FULLER: THE MAN, HIS IDEAS AND INVENTIONS" will be the topic of a lecture-discussion by Dr. Petronio Rios at 8 pm, Friday, February 16, at the Community Room of Glendale Federal Savings, 722 East Colorado Blvd., Pasadena. Dr. Petronio Rios, a former professor of Economic Development at CSULA, has been, for many years, concerned with making Dr. Fuller's views more easily understood. Dr. Rios' talk is being sponsored by the Society: Today and Tomorrow," a Mensa SIG, and the public is invited to attend, without charge. For information on this and future programs: 99-5555.

Ashley Roachclip Returns!
 Barton C. Gilbert will appear on campus tonight, February 9, to speak on his initiative to legalize the possession, sale, and use of marijuana. Petitions will be available for those wishing to aid him in the ballot drive. The meeting will be at 8 pm in the Y lounge, second floor of Winnett, and is sponsored by the Caltech Libertarian Alliance.

Be Tuted!
 The list of Biology tutorials (Bi 23) to be offered next term is now available outside the Biology Office, 156 Church, and outside Rm. 12, Beckman Labs. The tutorials are staffed by Biology faculty, postdocs and grad students. They provide an opportunity for learning through personal contact in a small group situation and cover a broad range of subjects. Bi 23 may be taken for up to 6 units; grading is pass/fail. For details, see Ron Konopka, Rm. 12, Beckman Labs.

Last Chance
 If you have not taken BEM 110 from Professor Robert Gray, the coming third term of 1978-1979 is the last time you can take this course from him. Because of age and health (too much age and not enough health) he is scheduled to be promoted to Professor Emeritus. The course has helped many Caltech students prepare for the shock of working for money instead of grades.

It is not clear as to whether or not the course will be continued after Gray's retirement. His other courses, BEM 132 and BEM 106, were not offered this year. A few years ago when Professor Huttenback was chairman of H&SS, the Division recommended that BEM courses not be given credit towards the H&SS requirement. The faculty rejected this recommendation. The Division wins the war, however. If the courses are not given, no one can take them for any type of credit.
 -Robert Gray

THE TECH NEEDS HELP SO WE DON'T HAVE TO FILL SPACE IN THIS FASTER FASHION. BESIDES, WE CAN'T SPELL (WELL, SOME OF US), AND I'M HUNGRY AND EVERYTHING IS LOUSY AND OUR BIGGEST PEOPLE ARE GOING TO CHASE YOU INTO A DARK ALLEY AND FORCE TO DO UNNATURAL(SP) TO YOUR GPA AND BOY, WON'T YOUR MOTHER BE SURPRISED?

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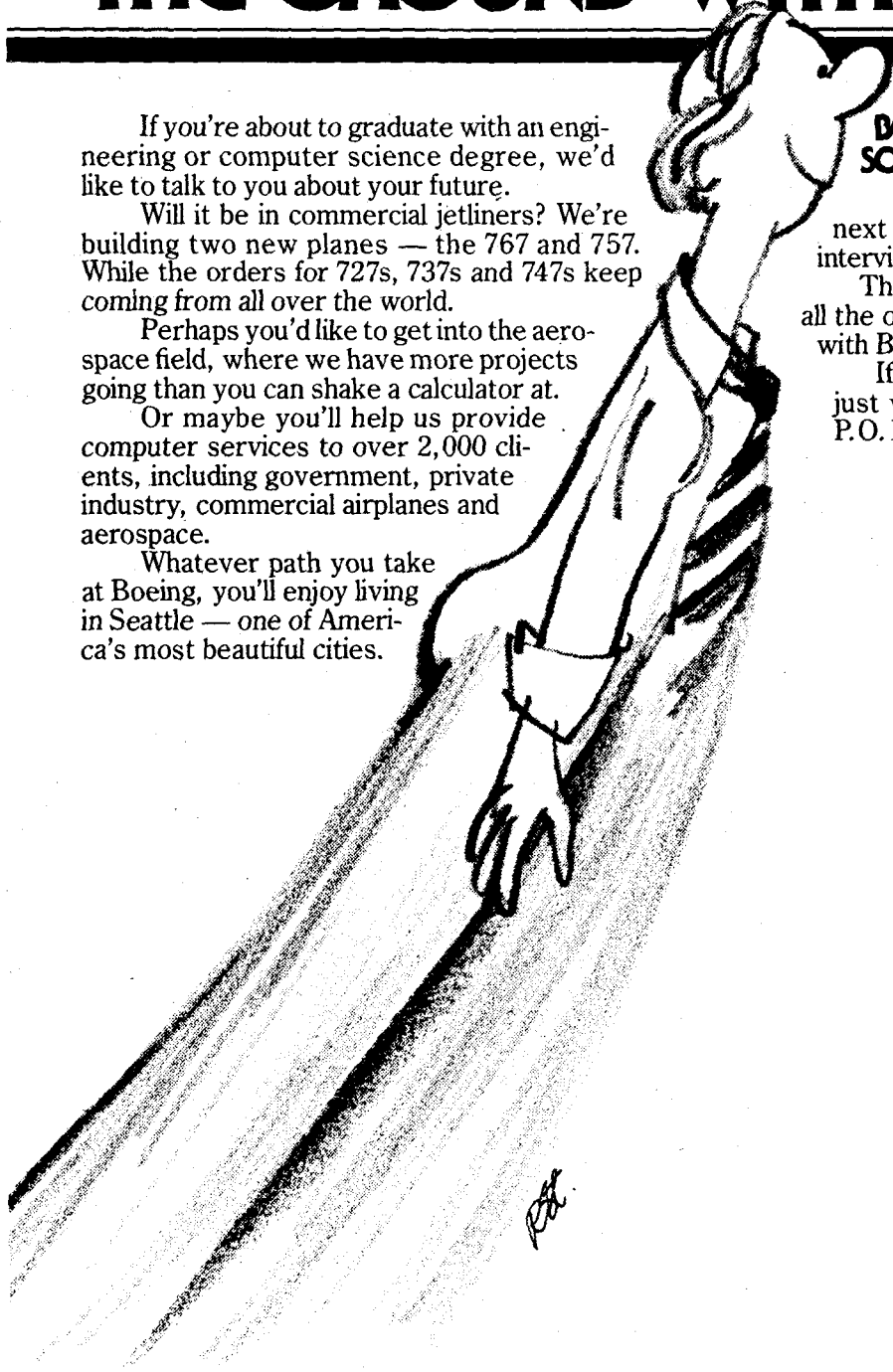
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OUT OF CONTROL

by Tim Brazzy

This story has its roots way back in first term. We were listening to the radio one day when a commercial came on announcing the Dating Game was looking for a few "sexy guys and gals" for their show. A few raised eyebrows. "Why not?" I said. I picked up the phone and dialed. "Hello, Dating Game? My name is Alan Kamei..." Click. Alan had just hung up for me. Apparently, he didn't want to have the honor. "Why don't you do it?" asked Mark. "OK, what the hell." I called and the appointment was all set for sometime during finals week. Perfect,

except I didn't have a ride. How would I get to Hollywood? Answer: Dale Ota.

Finally, he agreed, and we both had an interview for finals week. But our initial enthusiasm wore off quickly. "Why am I doing this?" cried Dale. "I don't know," came the reply.

So we began trolling the Dating Game, to get some idea of the questions asked. Reluctance gave way to enthusiasm and excitement when we watched our first show. Miss April, who had been poured into her shirt for the occasion, was the first

contestant. We were ready. But still we were getting cold feet. Actually, we were chickening out. I talked to my parents on the phone: Dad: Go for it! Mom: Oh no!!! Not only that, but Wern, Kurt, and the rest of our buddies would have given us a lot of shit if we had not gone.

We continued to troll the show. One night I had gotten back from the library at 10:57, just in time to watch the show. "Come on Dale, let's go watch," I said. "No, I have too much work to do." "Come on." "OK." We sat down just as the show started. They introduced the three bachelors and the girl walked on stage. All of a sudden Dale went wild. "I know that girl, I know that girl!!" he cried. "What?" we all said. We all assumed Dale was just going out of control, something we all took for granted. But Dale kept insisting that he actually knew this beautiful girl.

"That's Diane Kimball, that's Diane Kimball." Then we heard "...and here she is now, Diane Kimball!" What the hell was going on? Well, it turned out that Dale knew this girl from his high school. Ah, an omen! We were ready once again. After changing our appointment to the eighth of January, the day finally came.

What the hell. The worst thing that could happen was that we could get terribly rejected, right? Anyway, after a bottle of wine and some beer, we left the house at 4:00. We laughed all the way to Hollywood, making jokes and imagining what it would be like if one of us got on the show. We weren't even nervous (not until we found the building, that is). Fortunately, we were 45 minutes early, so we immediately went into the bar to "relax." Pretty well

"relaxxxxed," we went to the Dating Game offices. After standing out in the hall for five minutes, trying to get up the courage that we had left in the bar downstairs, we finally made it.

"Hi there, you must be Dale and Tim," said the man behind the desk. "Just take these forms in the other room, fill them out, get your picture taken, and wait in room A." We sat down in the corner and Dale started to go quietly out of control. He filled one form out incorrectly, and laughed all the while he filled in his description of his "ideal mate." Everyone else in the room was trying to concentrate on the forms, being very serious about the whole affair. We finally finished the forms, and were instructed to go into a room to wait with some other guys.

An hour passed, and then Dale and I had our chance. All I can say is that Dale came through in the clutch, just like a thoroughbred horse winning by a nose. He was so cool and collected, an air of confidence was definitely noticeable. I was truly amazed.

Q: Bachelor No. 1, if you were my houseplant, how would I have to treat you to make you feel good?

A: Uh, well, uh, uh, you'd have to rub my leaves, and, uh, water me every day, and talk to me every day, and, uh, dance with me every day....

Dale was laughing now, and everyone was entranced. The girl asked the second question.

Q: Bachelor No. 1, what do you think of marriage?

A: Well, marriage isn't for me right now. It's not something you should rush into like a first date.

MANY PEOPLE THINK VERY HIGHLY OF US.

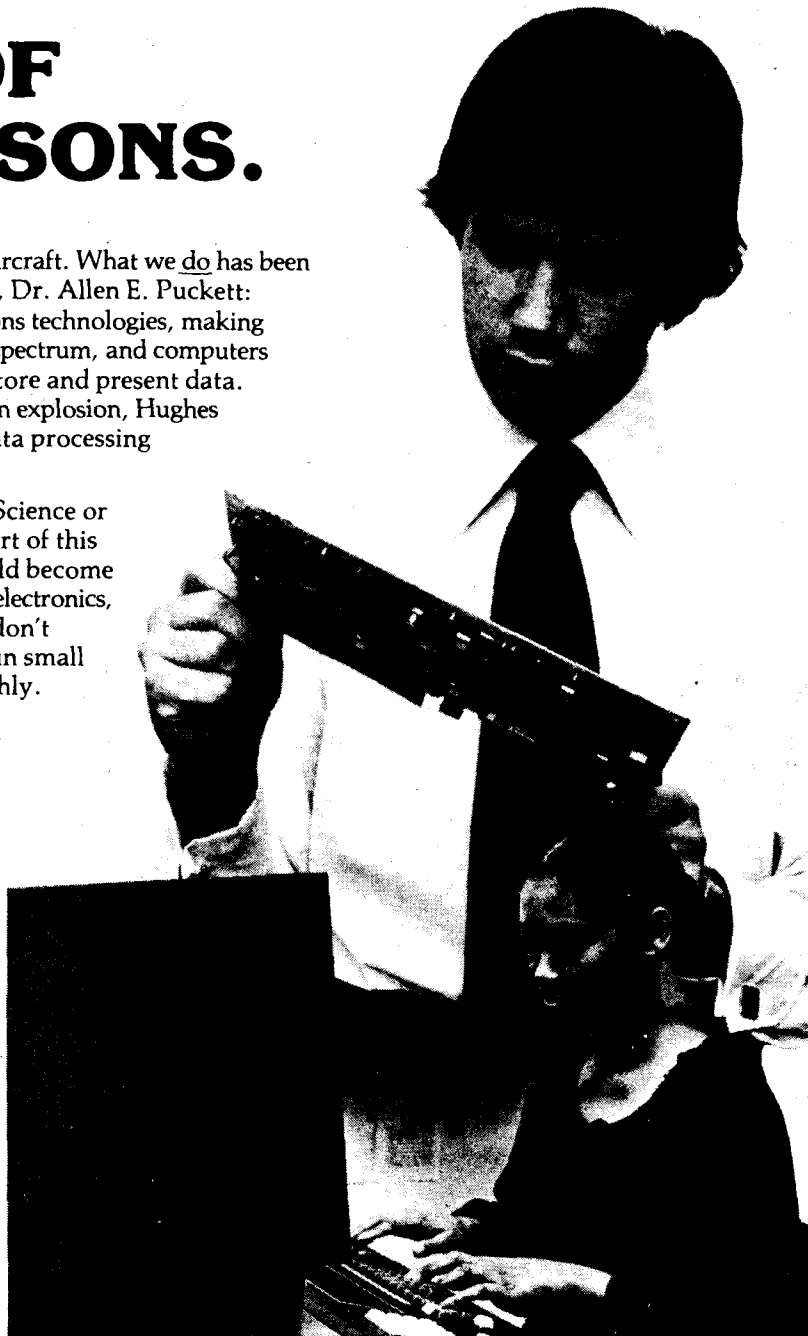
FOR A LOT OF WRONG REASONS.

It might surprise you, but Hughes doesn't make aircraft. What we do has been expressed nicely by our Chairman of the Board, Dr. Allen E. Puckett: "We're involved in a wide range of communications technologies, making sensors that operate on all parts of the electronic spectrum, and computers and signal processors that issue commands or store and present data. In the midst of the dramatic electronic information explosion, Hughes is putting data sensing, communications and data processing advances to work for people like you and me."

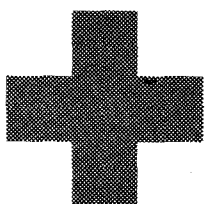
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Bob Hope says:
"Red Cross can teach you first aid. And first aid can be a life saver."

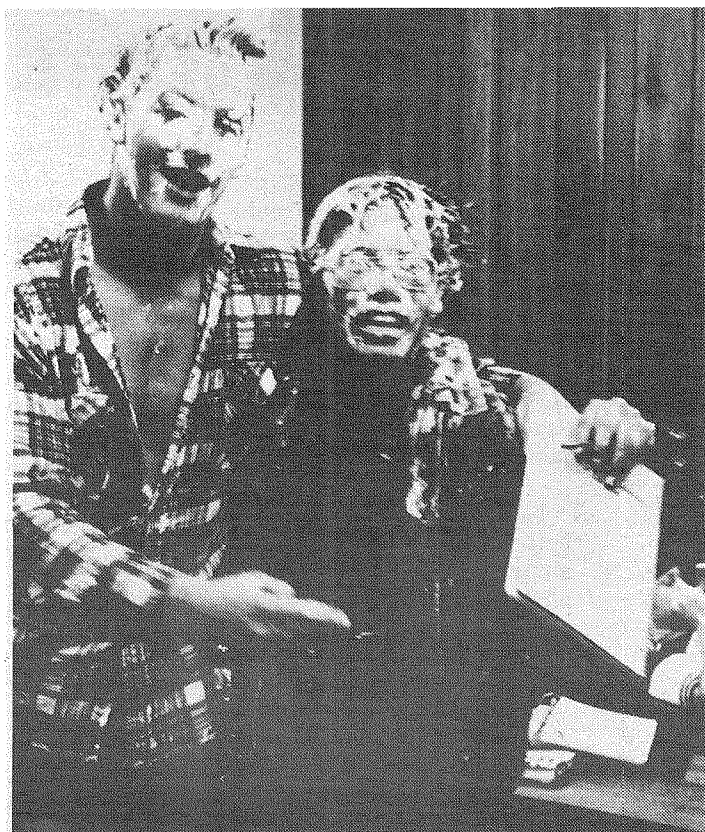


A Public Service of The Newspaper & The Advertiser's Council

The interview was over, and Dale and I laughed all the way home. They would call within a month if we had made it. We thought it was over. But was it?

A week had gone by when the phonecall came in. Dale had made the Dating Game! Not only that, but he had been chosen to *ask* the questions!! Unbelievable, for a man who is totally out of control. An example:

They say a picture is worth a thousand words. Look at the picture.



Question: Is this man incontrol?

The Dating Game has its hands full to say the least.

[Oddly enough, another Techer was on the dating game recently. His name is Joel Balbien, a second-year graduate student in Social Science. Tune in to the Dating Game next Thursday night and watch him win.]



Laurie's havin' such a good time!

C.I.A.

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- Information Science
- Computer Science
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- Economics
- Physics

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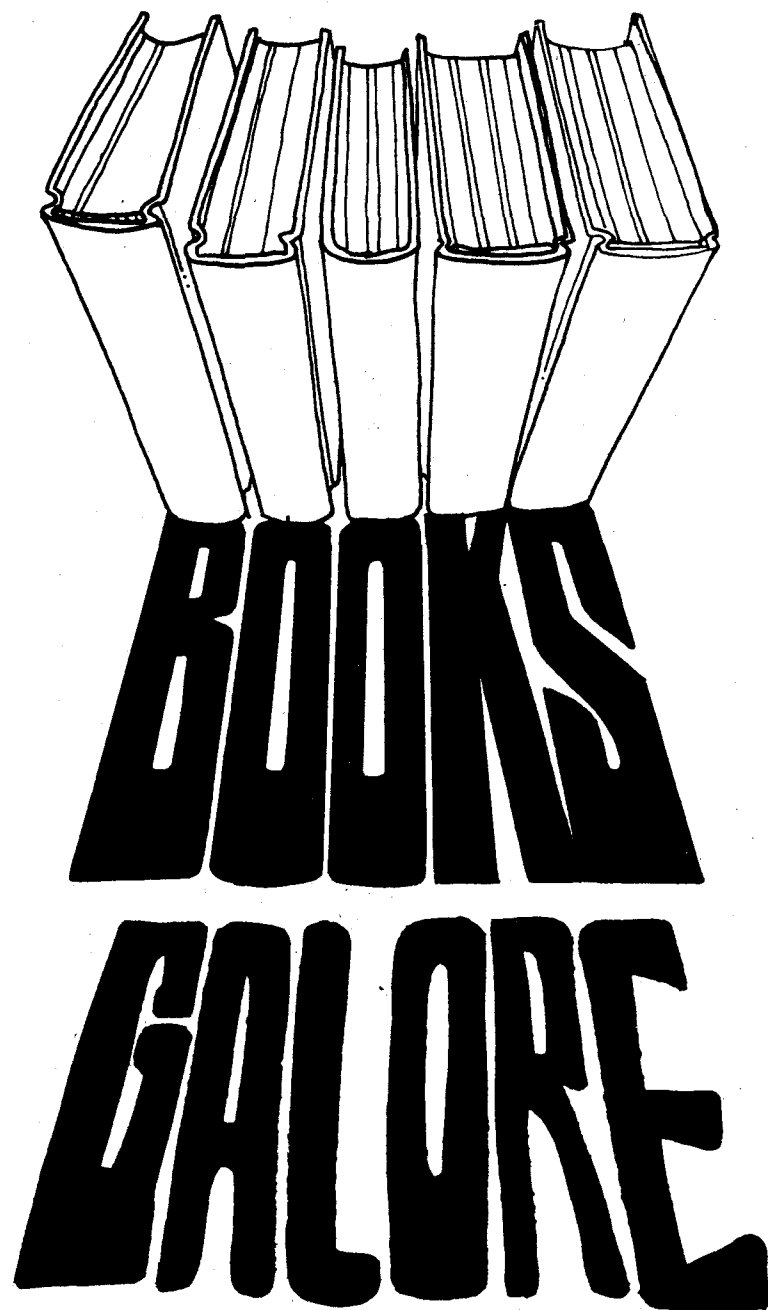
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At the entrance to the Caltech Bookstore

Ski Touring: A Different Kind of Ski Experience

There are two kinds of skiing—alpine and nordic.

How do they differ? In a nut-shell, alpine skiing concerns downhill skiing while nordic deals with skiing on level ground. Nordic is often referred to as cross-country skiing or ski touring.

Nordic skiing is considered "the quiet sport" because of its more relaxed, back-to-nature approach to skiing. You're not whizzing down a slope or trail; instead, ski tourers glide along the ground through old logging trails or specially cut XC trails through the woods, or over golf courses and hill-sides.

Basically, nordic skiing is simply straight forward walking and sliding on skis. The nordic ski is more narrow than alpine models and the binding allows the heel of the boot to rise in a natural walking movement; alpine bindings secure the boot to the ski.

In addition to the more inexpensive nature of nordic skiing, one of its primary attractions is its compatibility with Mother Nature and undisturbed ecology. No lifts. No motors. Small, narrow trails. Away from the crowds, cross-country skiers are usually by themselves as they glide over the countryside.

A ski tourer easily breaks into a glide with each step, using ski poles to sustain the momentum. With only a minimum of concentration, the average non-skier can quickly catch the rhythm of ski touring.

An experienced ski tourer can cover terrain about twice as fast as hiking the same ground.

Nordic skiers often pack a light meal before starting their trek and then stop along the trail for an impromptu picnic, much like spring skiing at alpine areas.

Two reasons for the recent growth of nordic skiing are the expense and the conditions. Trail fees are often as low as a dollar or two and XC skiing needs a bare minimum of snow cover—just enough to cover the ground. Because the traffic is not as heavy nor as tough as on alpine terrain, nordic trails can get by with an inch or two of snow.

Many alpine areas and lodges have instituted ski touring centers with instruction and equipment (to buy or rent) to help provide a gentle alternative to downhill skiing. But the winning combination is the same—skis and snow.

Quintet Quintet Quintet Quintet Quintet

Imagine a world frozen into a nearly solid sphere and frozen into a time when and where only the death of humankind is left to occur. The sight of dogs devouring the dead outside your door is not a cause of alarm. A glimpse of a goose in migration is an awesome wonder. You have nowhere to go. You will be overpowered by man's last passion for victory and revenge. You have no friends. You must play the game; you must win at Quintet.

The players of this intriguing diversion—created by Robert Altman—come from a multinational cast including Paul Newman as Essex, Bibi Andersson as Ambrosia, Fernando Rey as Grigor, and Vittorio Gassman as St. Christopher. Their world is a reality as a result of Director/Producer Altman's imagination and his crew's inspired set design.

To create the illusion of a frozen world the filming was done around Montreal, Canada and at Frobisher Bay during the winter. No other feature film has been done under these extreme conditions. All the sets, even those for the interior scenes, were outdoors where the temperature was always below freezing. About the sets, production designer Leon Erickson said: "All we could control was fifty percent of it. We'd build a supporting structure, and then snow and ice would cover it creating a completely different effect."

The cold proved to be a challenge for the crew. A six-story grid-work building was built along the St. Lawrence River's Ile St. Helene. Sets were welded onto the structure to prevent the gales off the St. Lawrence Seaway from blowing them away. Ten times the usual amount of electrical equipment were required to service the filming gear. Warming elements had to be mounted on all cameras and lenses to keep them from freezing. Some cables became frozen and could not be removed until the spring thaw. On some days, snow drifts forced the company to snowplow its way to the location; on others, they had to snowplow out.

Despite the use of tons of salt and sand, walking was always hazardous on the slick ice. The

continued
on page 11

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Health Center Psychologists Lack Patients

Ellison

Continued
From Page 1

strongly believe that it would be good for Techers to try to diversify their lives. Dr. Drezner felt that Caltech is too homogeneous. He stated, "There's more to the world than technology." Dr. Fass added, "I feel it is in the interest of more functional people to broaden their experiences." Dr. Drezner commented that occasionally seniors are afraid of leaving Tech and going out to the "real world". They don't know what to do next.

As for the role student houses play in the undergraduate's social life, Dr. Fass felt that they had both positive and negative aspects. Student houses have a built-in socialization process

which allows people to get to know each other better. However, sometimes house rivalry cuts undergrads off from potential friends in other houses. Dr. Drezner said that some freshmen complain of having no one with whom to study because their house members aren't in their classes. Another problem with student house society is that an individual who gets a bad reputation initially oftentimes carries it for the rest of his stay at Caltech. These people become very isolated. Other house members label them and don't see them as being able to change. Dr. Fass and Dr. Drezner believe it would be good to have more interhouse activities. Students should be able to have social outlets beyond their own

particular house.

Dr. Drezner stressed that a student should not feel as if he or she is making a major commitment by visiting a psychologist. He or she can see the therapist for as long as desired. If the student wants to stop coming—fine. Both long and short term problems are dealt with. All conversations are strictly confidential. Dr. Drezner encouraged people to come talk about even insignificant matters. For example, the counselors can help the student improve his or her study skills. Dr. Drezner observed that many undergraduates were so smart in high school that they never learned how to study efficiently. He said they could help students

organize their time more efficiently.

To be more accessible to the undergraduates, the Health Center has instituted a program of peer counseling. So far, there have been 16 undergraduates trained to listen to their peers about problems. However, as of yet, not all the houses are represented. Also, a drop-in center has been created in the Fleming-Dabney basement for which no appointments are necessary. The times are Wednesday: 9:30-10:45 am, Thursday: 1:00-2:30 pm, and Friday: 1:00-2:00 pm. So far, not many students have taken advantage of the facility. They would like it to be of greater service.

Continued
From Page 1

world, simply because they shout as loudly at him as he does at the audience. For instance, on a tape entitled "Harlan Ellison Alive and Very Annoying at MIT" the first voice you hear is that of a member of the audience yelling "Focus!" Typically, Ellison then erupts in an assault on the audience. For some reason audiences love it. Monday night at 8:00 Ellison will discover what a Caltech audience is like. Be there.



QUINTET from page 10

actors' talents were tested by their having to look nonchalant while negotiating on the ice. The river scenes were particularly difficult. During them, the temperature was forty below zero. One crewmember slipped into the water and was rushed away for emergency medical treatment.

The actors wore multiple layers of thermal underwear and outer clothing made of thick, heavy materials. To manufacture the two hundred costumes needed, a clothing factory was set up in a deserted building near the sets. The garments were worn in combination so as to capture insulating air layers and were very successful in keeping the actors warm.

The dogs which ominously appear in *Quintet* are of a breed called Kottweilers. They are descendants of Roman war dogs which were sent ahead of the troops to weaken the enemy. This particular pack was obtained in Southern California and driven to Canada to acclimate them to the cold.

Unlike many Robert Altman movies (*M*A*S*H*, *A Wedding*) which are collages of related scenes, this film has a plot which is better left for the viewer to experience himself. It can be said that the action is not non-stop, but that the events move in a cold, calculating way which allow the viewer time to reflect upon their meaning and time to acclimate to this situation removed in time and space.

Quintet is a Twentieth Century-Fox release which opens today, February 9.

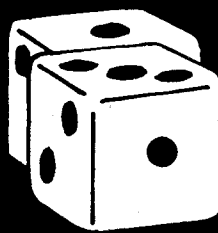
-Eve Bennett

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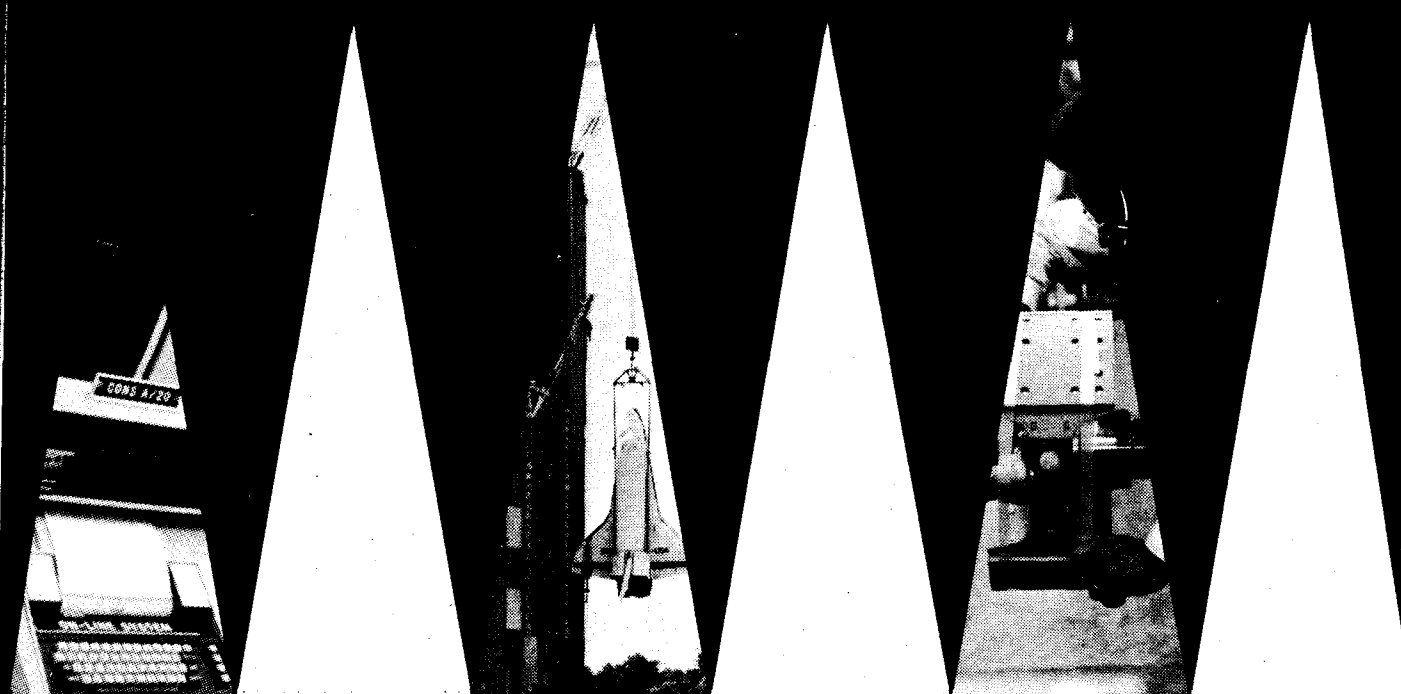
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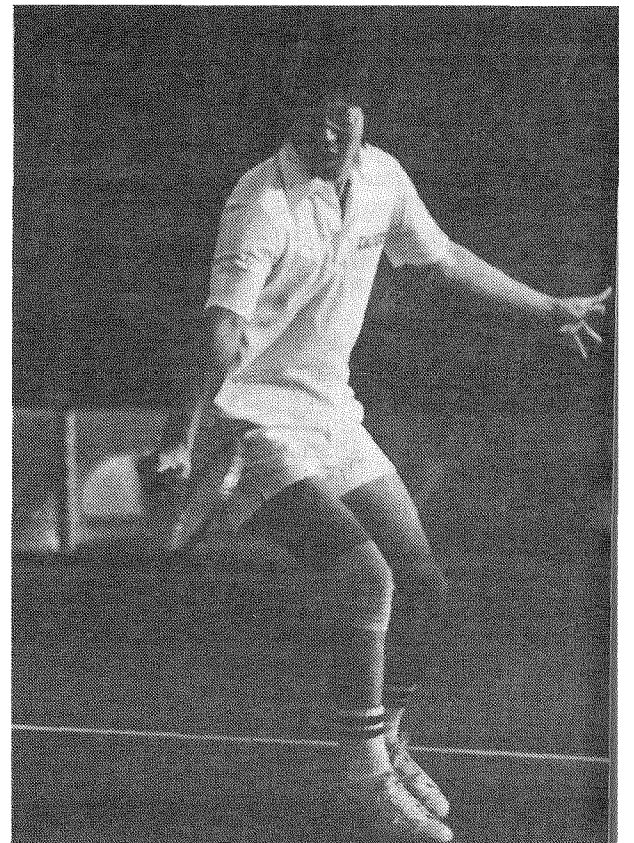
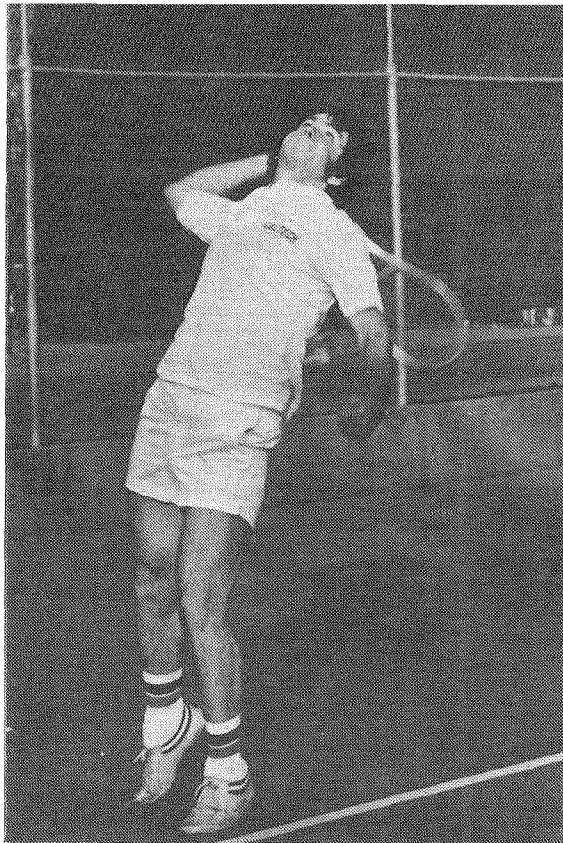
THE HAIR CUTTERS

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THAT GIGGLE LIKE GIRLS IN THE
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Glassmoyer and Yamaguchi strut it

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Harley Thronson

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