Volume XCII, Number 9

Pasadena, California

November 30, 1990

photo by Michelle Tseng

Is Coming!

by Golda Bernstein

"It's just like a bicycle...except vertical" says Dr. Antonssen. The class nods and looks wise. The next day we go down to the shop and discover that vertical bicycles are non-trivial to actually build.

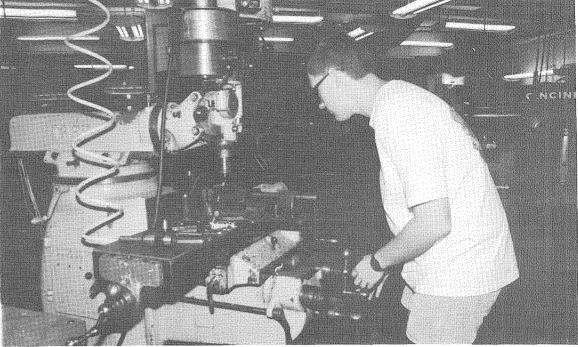
The task is simple: Go to a rope and climb 11 feet high before your opponent does, or, if you both fail to reach the top within 30 seconds, be higher than he is. After seven weeks of continuous design, building, testing, re-design, re-building, and re-testing, some devices are in fact climbing to the top. Others are going to the rope. Still others have style...and one lyttle device shoots out and stops it's competitor from even reaching the rope...

Limits on size, weight, power and materials help make the contest more challenging. Power comes from two sources: motors

and rubber bands. Four of the combatants are attempting to use projectiles fired by rubber bands in order to get to the top first. However, the rubber bands apply so much force that the 'gun' often breaks in the testing.

Another approach is the elegant 'Lazy Tongs' model; yet another is the "I measured it to within 1/100,000 of a centimeter" Swanson Inchworm, which will win on style as it crawls up the rope. Lastly, there is always the "Kill 'em and Stand Tall" method of last resort, similar to the lyttle method... unfortunately, these particular devices have met with unfortunate accidents within the past few

So if you don't see some of your classmates for the next week, just check out the shop in the subbasement of Spalding...and come to the final CONTEST on THURS-DAY, DEC. 6 at 2PM in Ramo Auditorium.



Scott Harris is busy working on his ME 72 project. The competition is next Thursday at 2 p.m.

Hampden Kuhns photo by

A scene from the first annual Caltech/Club Homeboy biathlon. There were twenty entries in the race. Craig Reynolds, the Caltech assistant athletic trainer, and one of his training friends, Al Bates won the race.

by Chris Campo

John Pham sported an ear-toear smile as he deftly applied his razor ot the head of a sullen figure slumped on a chair in defeat. "All I gotta say is John better look out next time!" exclaimed Ned Bowden as John continued shaving his head.

Ned's new 'do is the result of his having lost a bet to John Pham over the First Annual Caltech/Homeboy Biathlon at the Rose Bowl on Sunday, November 19, 1990. The pair of bold biathletes swore that whichever of them had the better time in the race would have the pleasure of shaving the loser's head in any manner the winner chose.

The biathlon was a smashing success. There were twenty-one competitors, including seven Caltech undergrads, five Caltech grad students, and three JPLers. Also competing were Caltech athletic trainer Craig Reynolds and three of his training buddies.

continued on page 8

CALTECH BIATHLON RESULTS ROSE BOWL, SUNDAY, NOVEMBER 19, 1990 ONE LAP RUN-SIX LAPS BIKE-ONE LAP RUN (Each lap approximately 3.05 miles)

OTAL 18:45 18:45 20:24 24:02 27:03
18:45 20:24 24:02
20:24 24:02
24:02
27.03
£1.03
28:50
30:06
33:20
34:34
38:54
40:26
41:56
45:15
46:30
47:58
48:16
52:24
52:57
55:33
58:45

28 30 33 34 38 40 41 45 46 47 48 52 52 55

CRIME AND INCIDENT BEAT

Crime tip: At night, an on-campus escort service is available for getting an escort to the residence halls or the parking lots. The number for this service 356-4701.

11/16 The alleged corner of San Pasqual and California, which the Tech reported was the scene of a mugging last week, has disappeared. It seems that the perpetrators have not only stolen the victims' money, but have also made off with the scene of the crime. If this corner is found, please call security at extension 5000 so they may recover it and pass it on to the proper authorities.

11/18 During a party at Dabney Hall, an argument broke out, and an intoxicated guest broke a glass pane in the south door of the building. The hostess agreed to pay for the damage.

11/18 In an event of uncommon valor, Ruddock House members extinguished a fire that had started in the kitchen. The fire department arrived to find only someone's burnt supper.

11/18 Two persons were observed inside the fenced area of the Physical Plant service yard, apparently attempting to remove one of the Dahaitsu carts. When the observer approached, the two climbed over the fence and fled.

11/18 A security officer returned to his car that was parked at 367 Holliston, and found that a gray book bag containing several books and two radios was missing.

11/19 A bicycle belonging to a member of Ruddock House was stolen. The bike was stored in the south lobby of Ruddock, and was unlocked.

11/21 A student resident of the Catalina III apartments at 450 South Catalina found that her bike had been stolen from the bike rack, to which it had been locked.

11/22 The vending machine located on the 1st floor of Thomas lab was damaged in an attempt to pry it open. Apparently nothing was taken.

11/23 A visitor parked his vehicle between Keck and Baxter for a few minutes. During this time, someone pried open the driver's side window and removed a CD player that was on the front seat.

11/25 A faculty member left his office over Thanksgiving and neglected to lock his door upon leaving. He noticed a silver letter opener and possibly carbons from his credit cards

11/25 In another bicycle theft, a student had locked his bicycle to a large pipe near 150 South Chester, but the bike had apparently been stolen overnight.

5 Security officers found someone tending a small fire on the vacant lot south of 1170 Del Mar. The person stated he was burning the last of the wood from a structure that had been razed there. Security officers advised the person that he was trespassing and would be arrested if found on the property again.

11/25 Security officers responded to a suspicious persons report in Fleming House. The suspect stated he had entered Fleming to get out of the rain. After a house member bought the suspect some Spud Nuggets from the coffeehouse, the suspect was advised that he was trespassing on private property, and was escorted off campus.

11/25 A staff member found papers scattered on the floor and smelled alcohol in room 308A of Dabney Hall. It appears that persons from the parties that have been held in the lounge on weekends are responsible for the vandalisms.

Total value stolen or missing: \$600

News and Current IHC Minutes page 2

Basketball Wins Hi-Tech Tournament

Jim's Journal pages 2 and 4

The IHC Minutes November 28, 1990.

Present: The Presidents, Louie, Cathy Hafer, Mark, Jack and me.

There's only two weeks left to watch Cop Rock before it's taken off the air forever. The question in everyone's mind, what will Randy do with his time now?

1. Cathy came by to give a little more information about the projects for the Women in Science Month, next March. One project will be a time line which will be put in front of the houses. Through anecdotes the time line will depict the last twenty years and how Caltech has changed with the admission of women. There will be a meeting next Tuesday in the Y lounge at noon, to start the planning for this and other projects. Anyone interested is welcome to attend.

Jack tried to compete with Chris and Mark's finery by being congenial. It almost worked, until Cathy explained the reasoning behind it.

2. Jack, Pete, and John got together to discuss the pet policy (again). To allow cats back on campus, the houses must choose someone from their Excomm to be responsible for the house pets. This means making sure all the regulations are followed. The house will be charge for any damages occurring outside rooms. It will then be up to the house to find out whose pet is responsible.

3. (Because Jack didn't skate away in time) Remember to write the letters to Gary Lorden and Tom Everhart telling them what you think of the food. (Gary is positive, Tom is negetive.)

4. Discobolus. Fleming tied with Lloyd. this Sunday Fleming plays Page in tennis at 2. The next challenger is Ruddock.

5. Interhouse. OK, we can't have Interhouse exactly the way it's been in the past. However, the IHC has not given up. Last week, Dave, Jack and I got together to discuss alternative. We came up with this-to have a party in Blacker, dabney, the SAC, and Filipino courtyard. The entire South Complex would be locked and people stationed at various entrances to control any crowds. Now, even though it will be held in a smaller location, all houses are invited to help decorate, build, and plan the party. The lounges and dining rooms could be used for dance floor, leaving the courtyards for building things. The SAC has rooms which could be used by different houses to set up whatever they wanted, and Filipino could be uses for anything from having a band to putting on the house skits. [Will ventilation be good enough down in the SAC?-ed.]

Louie and Kim have said this is possible to do. Last night Louie said we could probably have it on a Saturday night if things are planned well enough. So now, it's basically up to the students. It's going to take a fair amount of organizing to get all the houses working together, but that's a very important aspect of this idea.

Although it can't be held in every house, we want every house to feel that it's welcome to participate and contribute. There's room for each house to express itself and hopefully this will encourage people from different houses to get to know each other better. Jack, Dave and I will continue to work on the logistics. What we need from you is support. This could turn out to be a really fun event if people give it a chance and work a little. Continuing to complain that it's not the real Interhouse, not first term, etc isn't going to help anything at this point. If this works out well, we can work on returning Interhouse to first term next year.

Interhouse will be as good as we make it, regardless of any changes. For this to work, we need to forget about what's happened this term and concentrate on the future. We need to stop bing pessimistic and apathetic. We need the support of all the houses. Look at what we can do and tell your president that you'll support this idea. Otherwise, it's going to be even more difficult to try anything next year. Let's make this work!

Eternally optimistic, Andrea Mejia IHC Secretary

News News

Flibbity Floo! When I was a freshman in college, we didn't have DECOMPRESSION. We just had a little bycicle tire, and we let out the air. And we liked it! We LOVED it!!! None of this Decompression, Shmicompression. All you youngins out there who can sign up to help don' even know what it's all about. WE didn't have free shirts for working two hours! If we were lucky we'd have gotten a post-it note. And we LOVED it

And what about this Tye-Dye Extravaganza??? We had to dye shirts with our own blood. And they weren't even shirts, they were rags because we couldn't afford shirts! Look at you: Dabney Court Yard, 4-6pm on a Wednesday afternoon, spending time flicking instead of studying. We couldn't flick even if we wanted to because anything we wanted to do we had to walk to. Uphill, both ways in the snow. And we liked it that way and I wouldn't have it any other way.

You can go to a Toy Bowl and see a Football game. We didn't even know what a football was! We didn't even have a field we could go to even if we knew what one was. You can go on December 1st at noon and see your team and the beaver jump around.

Flibbity Floo - You youngins don't know anything. Go do some-

Some of the

kind of funny

thing useful and lend a hand to the needy!! Help set up the Bad Weather Shelter in Pasadena. Sign up to help at the Y and they will give you all the details you need. Flibbity Flibbidy Floo!!! You...You...ACK..GRRRRR-...BAH...Forget it!!! *******************

Another Design Competition

P.S. If you are interested in design but not masochistic enough to take ME72, be a sadist instead. Help prepare a design competition for high school students...it's planned for early March, and we expect about 100 high school physics students to compete. It's exciting, fun, and puts stress on them, not on us. Call Golda at the Y x6163 if you're interested, or look for flyers for the first Physics Club meeting of the year sometime during finals week (After the ME72 design competition). If enough people want to do it, credit may even be possible to arrange.

Volunteer Party

Hey all you volunteers and potential volunteers out there! To celebrate a successful first term, with fourteen active volunteers and more signing up every day, you are all invited to a party at my house, 290 S. Holliston, next Friday evening! The purpose (other than to have fun) is to meet each other and recruit new people, so everyone who is even slightly interested in volunteering is invited. Hear about others' experiences, find out what it's really like! Free

Volume XCI • Number 29 June 1, 1990

> **EDITORS** Scott Kister Emily Wen Lindee Goh

CRIME BEAT EDITOR Brian Kurkoski

WRITERS Lanny Boswell Golda Bernstein Chris Campo Barbara Chang Sam Dinkin

PHOTO EDITOR Michelle Tseng

PRODUCTION Nick Smith

BUSINESS MANAGER Sonny Arcilla

ADVERTISING MANAGER Asim Mughal

> OFFICE MANAGER Gavin Claypool

> > CIRCULATION Peyjen Wu Ayman Awad

THE CALIFORNIA TECH 40-58 SAC California Institute of Technology Pasadena, California 91125

(818) 356-6154

Published weekly except during examination and vacation periods by Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors.

Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editors reserve the right to abridge and edit letters for literacy, expediency, or else.

Turn in copy (preferably in WordStar format on an IBM-compatible floppy disk) to the Tech mailbox outside SAC room 40 or through the Netemail to TECH work Iago.Caltech.edu or TECH CITiago. The deadline for copy is Wednesday at noon: for announcements. Tuesday at 5 P.M.

Subscription requests should be directed to the office manager. Subscriptions are \$3.50 per term, \$9 for one year, \$17 for two years, \$24 for three years, and \$30 for four years. Life subscriptions are available for \$125.

Printed by News-Type Service, Glendale.

ISSN 0008-1582

Jim's Journal Today I went



Today I called

something.

steve to see if

he wanted to do

I was cold at first, but got warmer after walking awhile.

He came over and

we just sat

ground



His tennisshoes were stark white



by Jim







Jim's Journal

toy Tim

Jim's Journal



I looked at

gretting cards

today.

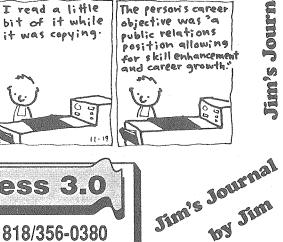














NIGHT ASCIT FRIDAY MOVIE

SEAN

With: 8 Ball Bunny

\$2.00 for others

Tolal

Recal

7:30 & 10:30 p.m. Fri 2:00 & 8:00 p.m. Sat \$1.50 ASCIT members

Baxter Lecture Hall

Next Week:

PASADENA SGE

We Stock Scholarly & Professional Books in:

ENGINEERING - HANDOOOKS - SCIENCES - MATH AEROSPACE - COMPUTERS - BUSINESS - CODES NURSING - PSYCHOLOGY - ARCHITECTURE - DESIGN

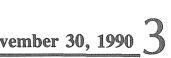
— We Specialize in:

FAST DELIVERY • SPECIAL ORDERS PHONE ORDERS

Mon-Fri 9:30 a.m.-5:30 p.m. Saturday 10 a.m.-5 p.m.

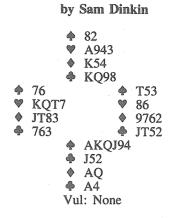


1388 E. WASHINGTON BL - PASADENA



pare scores with their opponents A warm jovial atmosphere makes the game more fun for all those in-

volved and fun is the reason to play



Bridge Wit

East South West Pass 4NT Pass 5NT Pass Pass Pass All Pass Opening lead: K V

This hand occurred at the Fall National at the San Francisco Marriott last Saturday. The National Bridge Championships take place three times each year and run ten days. Over the course of the tournament, there are several events which usually last one or two days each. In addition to the national events that attract the best bridge players in the country and the world, there are novice events and limited master point events. I played this hand in the finals of the non-life master pairs.

The first thing that we do when a new pair sits down at our table is we introduce ourselves. This breaks the ice surrounding the cold competition at the table. Peter Pinder, the late world champion who donated the Pinder Cup to the qualifiers for the World Junior Team, and was a promoter of junior bridge in this country until his death this year, stressed that this was the most important part of the game.

If you are friendly to the pairs that come to your table, and they leave your table feeling good, they will have a better game and improve your score, since you com-

Health Center Spouse Costs

In response to student demand, the Health Center and Counseling Service will

make their 1990-91 Spouse Programs avail-

able to all students' spouses regardless of

their insurance coverage. The fee will be \$50 each term-charged to the student's

account-for each program, Medical or Counseling. Therefore, if your spouse enrolls in both programs, it will be \$100 each term. Registration forms for these programs

will be available at the Health Center. You

may call for details at x6393

The Caltech schedule of classes, as published by the Registrar's office, has been added to the online INFO system, accessible

Service League Offers Money

The Caltech Service League now has a

Combined Glee Clubs poses in front of the Athaneum in concert regalia.

Glee Club Holiday Concert

by Barbara Chang

For those who wish to unwind before finals week, the Caltech Glee Clubs present A Holiday Concert, their annual Christmas performance, at Dabney Hall Lounge on December 6, 7 and 8 at 8:00 pm. The musical repertoire consists of traditional carols, Hanukkah songs, Renaissance motets by Hsasler and Sweelinck,

Report of the Food Committee November 29, 1990

Present: Emily Wen (Chair), Dan Frumin (Bl), Jon Lange (Da. Secretary), Jessica Barnett (Fl), Chris Myers (Ll), Wayne Davis (Pa), Matt Baker (Ru).

Good things:

The new chili is much appreciated. We'd like it to be continued. People are enjoying lunchtime waffles. Wish list:

We had moldy tortillas again. Can we PLEASE have non-moldy tortillas? We'd like the gravy and mashed potatoes served separately so the vegetarians can eat the potatoes. The mayonnaise should be kept on ice, not left to sit out in the sun. The ice cream machine on the North side needs to be fixed. People would like larger chicken patties in the chicken sandwiches. Agin, we'd like one (or maybe even both) of two things during finals week. Since the same amount of money is being paid for board during finals week as during the rest of the term, we should either have both kitchens open, or not have leftovers (preferably the latter). Other things:

The Food Committee meetings are being changed from Thursdays at 12:15 to Mondays at 12:15 in the MOSH's office.

CYCLCYCLCYCLS

ACADEMY BARBER SHOP

27 N. Catalina Ave., Pasadena Open Tues, -Sat., 8 A.M.-5 P.M. 449-1681

Sam Gustom Tailor
3519 E. COLORADO BLVD
PASADENA
(818) 793-2582
Hours: 9:00 a.m. - 6:30 p.m.
Special rates for Cattech/JPL community

and "Salvator Mundi" by Walter Matthias.

The Glee Clubs are composed of members from the Caltech community, including undergraduates, graduates, faculty, or staff. They have several concerts during the schoolyear. The next large combined performance is the special Centennial concert with the Occidental/Caltech orchestra on May

Christmas concert tickets are still available for the Friday, December 7, and the Saturday, December 8 performances. Tickets are available at the Caltech Ticket Office at 332 S. Michigan Ave. General admission is \$7. Students may buy discount advance tickets from glee club members for \$5.

Mountain

The Graduate Record Examthat accurses, painful experience which will be endured by many a senior come Saturday, December 8, doesn't have to claim everyone at Caltech as a victim. Escape is possible: instead of doing the GRE, travel to JPL and participate in the Mountain Bike Duathlon (a new term for 'biathlon', adopted because of confusion with the skiing and shooting event of the same name).

For all those individuals who were griping at the Caltech Rose Bowl Biathlon because they had a mountain bike instead of a road bike, here's an awesome chance to put that fat-tired, low-geared monster to some use!

The race starts at 9:00 am sharp, and consists of a 5K run folloed by a 7.5K bike hillclimb. Starting from the South Gate of the Jet Propulsion Laboratory, the run course winds through scenic Oak Grove County Park, up to Oak Grove Drive, and back on Oak Grove Drive to the transition area at the south gate.

The bike course starts from the transition area and skirts the south edge of the lab to the Arroyo Seco Trail and up the Arroyo through the Angeles National Forest to the top of Brown Mountain.

To enter the race, call Sugi Sorenson at (818) 354-1013 or Bill Read at (818) 354-6773. The race is open to all JPL employees and contractors, Caltech students, staff and faculty, and family members. All participants must pre-register by phone. Course maps and updated race info will be mailed out after you call and register. Helmets are required for the bike portion. Please bring your own water.

It is common knowledge that many Techers have ownership of a mountain bike, and so if none of you come to the race you should be ashamed of yourselves. Also, help is wanted and all volunteers are welcome. Call Bill or Sugi for more info.

Many Caltech people have never heard of the JPL Bicycle Club and don't realize they can be members. Membership entitles you to a 10% discount at many of the bike shops aroudn town as well as lots of club perks (access to bike club tools and library holdings, club rides, monthly newsletter). And all for only 2 dollars a year!! Please direct club membership inquiries to David Goldsborough (JPL Mail Stop 190-112, or phone 354-2356), or to Sugi Sorenson (JPL Mail Stop 301-275, phone 354-1013).

LAEMMLE THEATRES

ESQUIRE

2670 E. Colorado Blvd. (818) 793-6149

> Philip Kaufman's erotic drama

Henry and June

Daily 4:45, 7:30, 10:00 p.m. Sat-Sun matinees 2:00 p.m.

COLORADO

2588 E. Colorado Blvd. (818) 796-9704

A serious comedy about women and food.

> Henry Jaglom's Eating

Daily 5:40, 8:00, 10:15 p.m. Sat-Sun matinees 1:00, 3:20 p.m.

LORENZO'S BARBER SHOP

Unisex Hairstyling

9 a.m.-6 p.m., Monday-Saturday

14 N. Mentor Avenue, Pasadena

Regular Cut (men) \$ 900

Regular Cut (women) \$ 900

Style Cut \$1200

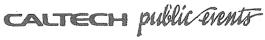
Permanent Wave \$4000

Ask for Your Caltech Student Discount! \$1 off

> \$1 off \$2 off

(818) 795-5443 No Appointment Needed

KALEIDOSCOPE





Z

m

D

Z

Z

MR. JACK DANIEL'S ORIGINAL SILVER CORNET BAND

"Hometown Christmas"

Friday, November 30 at 8 p.m. Beckman Auditorium

TECHTIX & CIT STUDENT RUSH TICKETS GO ON SALE FRIDAY, NOVEMBER 30 CIT Faculty & Staff: 12.50 - 11.25 - 10.00 CIT Students: \$7.50

Call campus extension 4652 for information

To digress, after the above auction, South can count six spade tricks, three club tricks, a diamond, a heart, and a red king. South should definitely go on because North could have king third

in diamonds; king, queen, jack, and another club; or the heart king and queen. If any of those are the case, a spade break will give thirteen tricks. At worst, the slam will depend on a club break or the dia-

mond finesse.

At our table, however, the auction was more concise and fun. If we cannot give our opponents a good score, at least we can give them a good story. While I was sorting my hand, and trying to figure out whether to open a strong two clubs, my partner opened one club. While I was figuring out what to do after making a strong jump shift to two spades, my left-hand opponent put her cards on the table upside down with the top card, the diamond three, exposed.

The director was called and since everyone at the table had seen it, it became a minor penalty card. This meant that she had to play it at her next legal opportunity. Specifically, if she became the opening leader, she would have to lead the three of diamonds.

My partner needed at least two quick tricks to open, where an ace counts for one, a king-queen combination for one, an ace-queen combination for one and a half and a king for one half. With the three of diamonds as an opening lead, partner does not need the ace of hearts to make the slam. So I bid seven no trump directly over one club. The director said, "I think I will stay around - this should be interesting." I played a round of spades after the opening diamond lead and claimed all the tricks.

Online Schedule of Classes

via CITnet. A write-up on using the INFO system is available from the CCO Consulting Office, 162 Jorgensen.

fund request form. All campus organizations requesting financial aid from the Service League must use this form. The forms are available at the MOSH's office and at Lydia Matthew's office in Parsons-Gates, x6315.

All Inside Worlds must include the at e. Inside worlds can only be written by cur-

rent undergraduates. The editors reserve to edit any or all parts of an Inside World.

or to not print it at all. No libelous mat e accepted. It is the author's responsibility

to check material written about a perso they consider it libelous.

The Inside World

Dabney Inside world. I've been thinking about a lot of things over this past week and I'd like to share some of those thoughts with you. But first, let's all take a moment to reflect on the recent holiday weekend and remember: That Which Dabney House is Thankful for 1. The Simpsons 2. Very little cleanup after Thanksgiving dinner 3. The inside world 4. benzene 5. Tempest 6. The fact that Al Peterson has mellowed out.

I often remark to myself that the inside world should consist of more artful devices that the condescending prose with which we have become so familiar. So I think it would be nice if we would print poetic submissions from various darbs, anonymous, of course. This weeks contributor, who we will call Mr. Foo in honor of those computer psuedonims, shows a definite emotion in his writing, I think you'll enjoy it.

To Mary, My love for you runs deep and true, I look to the day when we'll be one, not two. I'd brave any danger to win your heart, Like beating up that young rascal Art. I'd kick him, punch him, make him bleed, All to get the lovin' I need. Will doing him great bodily harm, Make you come running into my arms? C'mon sweet Mary, tell me quick, Cause karate lessons are making me sick. Anonymous

Wasn't that refreshing? Be looking for future contributions by other poets within Dabney in the near future. Another thing I noticed this week showed up in the news. It turns out that McDonalds is sponsoring a big anti-marijuana campaign. Now it's not that I don't think this is a worthy thing it's just that I can't take these marketing wizards seriously. Personally, I think that if marijuana were legalized tomorrow we could take a trip over to Mickey D's and get us an order McBuds to go.

Well, back to the business of what's going on here in the great green gathering place. Everyone get ready because it's time for the Tahn crew contest. Yes, we love that drink so much we're going to see who can chug down the most of it, competing with the best that scurvedom has to offer. Go Dabney. See ya'll

297 S. Holliston

Top 10 reasons why I like the Holly: 10. Serenaded to sleep by the Indigo Boys, Robin and Cris.

9. (Almost) everyone has a car! 8. Watching Ki swing the 6 iron. 7. Dylan bitching about school.

6. The big mess on the living room table after lunch. 5. Dylan bitching about not getting any.

4. We got HBO and Cinemax. Dylan bitching about anything The 8 foot rim in the backyard.

Top 10 reasons why I don't like the Holly: 10. Mark might come back to reclaim his car and stay another 3 weeks. 9. We got no grass anywhere to play football on.

8. That big piece of junk in our backyard. 7. When we have 50+ channels and nothing good to watch. 6. Irresponsible people making holes in the wall.5. BIG piles of mail belonging to nobody in the house.

4. Sometimes, there's just not enough !#\$%&&&&&&& parking space. 3. B&G, 9a.m., Tuesday morning. 2. ANTS

1. I don't have the triple upstairs as a single. Highlights of the week:

Dylan having a cow after discovering HBO got canceled. Dave/Ki - Brian/Dan dart board challenge. Lucky shot Ki. Tamaki rescuing his damsel in distress from Chem hell. What Adam wrote about Brian.

Shooting -1 at Inverness and -3 at Augusta. Thanksgiving weekend. Next Week: Stickball on Del Mar during rush hour.

The Inside World

Well, well, it seems that we meet again gentle reader. Welcome to the The room erupted into panic as the bottles of beer carried by everyone simultaneously shattered. Men and women ran screaming out the door, oblivious to everything except escape. As it was, the people in that room would forever speak of that night, strange as it was, with terror.

As I headed back to my hotel, Kalishnakov disassembled at my side, I reveled in my success. A few more incidents like that one, and DAPAC would be firmly entrenched at this place. Watching the targets scurry in panic around the room through the Starlight scope brought a thrill like no other. The closest I'd ever come before was with that dwarf hooker in Cairo . . .; but that's another story Back at my room, I quickly checked my tale-tells for any sign of intrusion. As I expected, there was none. Either I was being followed by someone who knew everything I did, or I was safe. This job was almost too easy. Perhaps tomorrow would be different. There was some sort of party in their gymnasium, a so-called "Interhouse". There was to be no drinking, but I knew I was here for a reason. As dusk fell, I walked toward the campus. As I neared the place, a sight ahead caught my eye. A most wonderful sight. Two shapely forms, in Lycra,

walking together, chatting. Perhaps tonight need not be all business after all. I caught up with them quickly. "Excuse me ladies," I said. They stopped and turned. As the fading light caught their profiles, I caught my breath. My luck, indeed, had turned. I recognized the ladies from my dossier as two very nice, highly respected members of the

Caltech Community. Very nice, indeed. "I was wondering, maybe later tonight, after the party, you babes and I could get together and do the wild thing. I have it on good authority that no babe has ever been unsatisfied with me." I said, confident that their reply, like so many of the others, would be of overwhelm-

There was a very short moment of silence. Very short. Then...

"What in the hell do you think you are?" one began. "That is the most blatently sexist and particularly offensive comment I have ever heard!" 'You have no right to treat us as the objects of your fantasies." the other joined in. "Do you think either of us enjoys this kind of attention? We have never done anything to warrant this type of disrespect. We, and all of the women of this community deserve a great deal more respect than your comment implies." "We are human beings, not objects for your pleasure. We will not be treated as toys for your perusal, and we will not be debased like this. You, sir, are a

cad." the first finished finished. My thoughts swirled in my head. I was confused, hurt, angry. How could they..., what must they..., don't they know... I had never been denied like this before. I didn't think of them as objects, they were instruments of pleasure. How could they possibly be insulted? I just wanted to offer them the chance to enjoy, well, hmmmm. By the time my head had cleared, they were gone.

I entered the relatively empty gym and quickly scanned the room for possi-

ble threats and violations. The first thing to catch my eye was the balloons and

crepe paper decorations. Maybe this was the wrong place. A high school dance

Obviously, work was all I had in store for me tonight.

perhaps. The next thing to catch my eye was a rangy looking guy with long hair and a tye-dye shirt emptying a bottle of clear liquid into the punchbowl. I moved quickly towards him, my hand in my pocket. As I came up behind him, brought my pen up in my hand. After making sure it was not the MX missile pen, I brought the point out and stuck the fellow with it. According to J, I had about one minute until he quietly passed out. "It's the best thing," were his exact words, I recall. As the bearded man went into violent convulsions with my pen still in his arse, I knew something had gone terribly wrong. I quickly stepped outside. Immediately I was confronted by a person carring a large black weapon and wearing a funny hat. I ducked quickly and lashed out with my foot at his gun. "Dude, my Lazer Fag gun!" he cried. Unfortunately, those were his last words as my hand closed on his windpipe, crushing the pitiful life out of his frail body. I looked left, then right. A field, with parking lot beside. I headed quickly for the safety of the cars. Suddenly, I was caught in a blinding glare. Three men with flashlights, arranged in a circle around me. By their uniforms and pot bellies, I quickly deduced they were campus security. No problem to a man trained in the ancient arts of a Thousand Deaths. I went into the stance and moved toward

a heavy object crashed into the back of my skull, ending my attempt at resistance. As consciousness faded, my only thought was back to W, and his treason at (No previews this week, since I got in so much trouble last time.)

the closest man. The lights went out, and the three men quickly crouched into

stances of their own. I recognized it as the Dragon Stance of the Northern Shaoulin

style. As they drew identical steel blades from concealed sheaths, I knew that

I might be in a bit of a sticky situation. With the swiftness of a striking cobra,

The In World The Inside World

This Week's Inside World was writte 297: Dan Pang Blacker: From 1951 Big T Dabney: Robert Hanna Lloyd: Jeff Hagen

Ruddock: Chris Martin

Inside World Policy:

10001531112 Blacker Dabney 0 3 0 3 0 1 2 0 2 11 Fleming 0 2 0 0 0 3 4 4 0 13 00205655326 Lloyd $0\; 5\; 0\; 2\; 3\; 0\; 7\; 0\; 5\; 22$ Page Ruddock 0 4 1 1 2 4 6 2 6 26 Ricketts 0 1 0 4 4 2 1 3 0 15

Have you ever noticed that Inside V a MAJOR chunk of the material presented in the Tech every week. If you throw out Ivertisements by sorry computer companies (aren't they all?), all you have left are the rlds and the Crime Beat (how can we forget that wonderful column that brings us the lasturbation offenses?). So, what would the editors do if there were no Inside Worlds uld the readers do? Would civilization cease

to exist as we know it? Not. Well, on to the more important aspe Inside World! I know you've been waiting

for it, so here it is...the weekly top 1
THE TOP 10 WAYS TO AVOID (MONO IN PAGE HOUSE:

10. Learn how to talk to girls from de. 9. Just say 'NO!' to retrieving glass. 8. Don't come out of the closet.

7. Spend nights in the coffeehouse '0 get served. 6. Play naked twister in room 217.

5. Expose self in front of Eileen (y. ri!) 4. Join CLAGS. 3. Just say 'no' to goodnight kisses.

2. Don't go to Fleming parties. Write ANONYMOUS love letter ALley challenges are raging once age House. Volleyball-Fag alley narrowly squeaked past Sorry-Ali alley in the late te-Women's Net Volleyball. More importantly, though, the house has found a nev its creativity—Mark Schmidt bashing. Soon to be released is the Page House public Best of Mark Schmidt Insults, 1987-91. It's sure to be a best seller. If not, it co good Inside World filler. It's a very simple editing technique, actually. Reduce size o 1 advertisements, insert more creative material. Who knows, maybe the Tech could lave pictures of students other than Flems! Maybe even Dan "Parties of the hip and ould write an article that isn't biased toward

And now it's time for another 'not' Page House skit! Live, from room 238, it's...WAYNE'S WORLD! "Wayne's World! Wayne's World. I'm Wayne, your host. And

this is Jason, my room-mate. Too bad lere! Not!" So Wayne, tell me what egregious ave on the show tonight."

Well, Garth, I mean Jason, we are pi have none other than Fist Full of Yen, that Page rock band that we've all grown to the for their music then for their t-shirts!"

"Way! And here they are, Fistful of Lead singer, Cris; guitarist, Robin; yd; keyboardist, Brian; and drummer, Dylan, stumble onto the set decked out in a string according to the sudiance. From the

of recent DAPAC violations. An explo ering comes from the audience. From the frequency of the cheering, though, it sou bunch of New Kids on the Block Fans! Cris

"Thanks for letting us on your show We never thought we could get this far!"
No, Jason and I must thank you for r show with your most excellent presence! So what has FFY got in store for its far ar future? A debut album? A real concert? An MTV breakthrough?"

Cris answers, "Well, no. Actually, "re here to plug our latest line of designer t-shirts and action figures. We hope to h buse/FFY shirts printed so more Page Boys can score with drunk high school girls!" I again roars in approval. "We're really trying to get away from the musical aspec and and dwell on merchandising!"

Dylan breaks in, "Yeah, but we have way from music altogether. We just signed a deal to do the soundtrack for Rocky? Moment of Wheelchair Truth! We're really

"No way!" quips Wayne. "Way!" replies FFY in unison. "Unfortunately, we are all out of tir e my audience will be looking forward to all the latest from the premiere sell-out be hern California, Fist Full of Yen! Stay tunes next week when Eric Stout from the Y e to explain why there have been no Noon

31

Last Wednesday, me n' Andy, Matt, Delwyn, John, and Amy loaded up the Red Rhino Party Van and headed up to San Fransisco to have some turkey and get real far away from everyone else at Caltech. But you'll never guess who we found there. No, not fags. I know what ya hear about San Fran being full of swishy artist-types and you can't drink a few beers and then wander off behind a bush to take a leak without stumbling over a couple of young men making the sign of the four-eared jackrabbit. But it ain't true. We wandered through a heck of a lot of trees, albeit without the beers, and didn't see a single person who was obviously of the poop-pirate persuasion. In fact the only gay person I saw the whole trip was the guy with the eyeshadow who served me my Arby's Super in Buttwillow. And I felt kinda sorry for him, cause it must difficult to be the only gay person in a hick town like Buttwillow. I'll bet that, after the Dairy Queen closes, all the good ole boys in Buttwillow drive their trucks over to Arby's and wait for Mr. Mabeline to come out the back. And every night they toss him into the trash dumpster, kinda like what happened to Nik last year, and he has to go home all sticky and smelling like Horsey Sauce. Anyhow, we didn't see any fags in the city and I attribute this mostly to two facts:

Numero Two-O: Delwyn knew all the sections where they hung out, like the section of Market Street with the store called Leather, Latex, Lubricants, and Other Male Necessities.

Numero Uno: We weren't looking for any.

But what we did see in San Francisco was Scurves and Darbs! We go north for 400 miles, and its just like going south of the Olive Walk. First we were at Haight and Ashbury, the place where all the Hippies gathered in the Summer of Group Sex. We're eating lunch in this shop on Haight where they serve these monster burritos for \$2.99, and there's this 2 year old kid sitting by me who starts bawling. And I'm thinking, maybe he's teething or something, when his Mom says, "Oh, dear, I think the jalepenos are too hot for him." The dad asks," Do you want a glass of water?" But the kid can't answer him cause his mouth's on fire and his tear ducts are trying to put it out. So I'm about to stand up and say, "Hey you dumb greasy hippie! What have you been smoking all these years? I'm from Texas, and we don't give jalepeno burritos to our kids til they're at least three. And then you have to train him putting salsa in his baby bottle and dipping his pacifier in tobasco sauce." But I didn't. Cause some other long haired local stuck his head in the door and said, "Hey, can anybody tell me where Haight Street is?" Then he grinned like he thought this was a rather clever joke. I, myself, thought this was second in stupidity only to the Scurves who stick their heads through the doors in Ruddock House and say, "Buttock! Buttock!" just like a long-haired greasy looking barefoot bullfrog.

Anyway, next we went over to Berkeley and we were hanging around checking out all the street lunatics, when Amy goes, "Look, that guy goes to Caltech. He's in Ricketts." And I said, "Oh, yeah?" But I couldn't tell who she was talking about, cause everybody in Berkeley looks like they're in Ricketts. But there s one way to tell 'em apart. Go up to a scurve and say, "Ya know, some people have different colored skin than other people." And he'll say, "Yeah, but that don't make them any different." Go up to a Berkeley person and say that and they'll scream, "Not True! Racist Pig!" And then they'll beat you senseless with a protest sign and hold a hunger strike in your driveway until you repent your sins. Ya see, the difference between the Scurves and the Berkeley students is the Scurves have brains bigger than walnuts. But ya can't always tell by looking

Speaking of other houses, some other houses may be coming by Ruddock this weekend to have a party. Social team ain't sure, though. But if this does happen, let's see if we can't restore to the Alley 4 lounge the former glory it once held. For all the freshmen who don't know how to do this, you gotta puke

Anyhoo, we probly had a house meeting last night on what to do with our extra money. And if I'm any judge of Ruddock House, I know how the meeting went. It followed the "would you like fries with that principle." That is, if you make a suggestion to people, and they're brain dead enough, they'll probably go for it. So I probably said, "How about a hot tub?" and everyone went, "Yeah. And then I said, "Well we ain't gettin' a hot tub. How about a T.V. room?" and everyone went, "Yeah" (cause by now they'd forgotten that they really wanted a hot tub). And then I go, "How about flooding the courtyard with egg nog for Christmas." And everyone said, "Yeah, that would be neat."

What I'm getting at is that we don't have too many strong opinions. Which means that we might do something stupid that we'll all regret later. And some of the house's strongect opinions aren't always functioning. Like John Krowas, who disappeared below the event horizon of Nina's social gravity well about a month ago. So really THINK, as in 'for yourself', about what we want to do with the money, or I'm gonna spend it on Lysol for the computer room.

The year 1950-51 has left its mark on Blacker House. There are new waterspots in the Tunnel, new names in any number of little black books and a large

family size bottle of Hadacol in Stan Groner's medicine Cabinet. Casting only the most casual eye around Blacker it would be impossible to overlook the Tunnel. Indeed, the usual case is that its fame, or perhaps notoriety is a better word, has preceded it. It has been reported that dates of Dabney men have surreptitiously whispered to their escirts, "The hell with the television set, I want to see the Tunnel!" Noted not only for the "Tunnel Rainmaking Society," the "Southeast Rocket Testing Grounds," and the "Saturday Evening Bowling and Hockey Club" the Tunnel claims as its native son Leo Baggerly, Treasurer of the Caltech Y and Chairman of the Southwest Region Student YMCA.

Just a stone's throw and around the corner we happen on to the Annex and the home of the one and only Art Cuse, a fine First Rep for ASCIT. As Blacker Pope he has brought peace to all through his inspiring spiritual guidance. Also making his abode here is Ray Gruetert. As Co-Athletic Manager, Ray and his fellow Co, Don Tautz have led Blacker through a fine season of Interhouse sports. Starting off with a tie for second in baseball, a second place in cross-country, continuing with a rousing first in tennis, and a Throop-Blacker tie for first in softball, the Blacker teams have pulled in enough points to put the House in second place for the Interhouse Trophy. With strong hopes for first rank swimming, football, and volleyball teams Blacker will not be at all adverse to making

room on its mantle for another trophy if the need should arise. On our left we have the icebox, but going to our right and up the stairs we approach that exclusive club, Whispering Cans. One night spent in the alley would explain the name; every morning at some ungodly hour the milkman clatters into the delivery-way immediately below. Whispering Cans is noted for its fine old custom of serving coffee and cake every evening. Frank Bumb and John Fee went so far as to get engaged to insure a steady supply of homemade cakes. The aforementioned Fee not only possesses the only electronic, perpetually flashing hat in the Student Houses but he is also Senior Class Prexy. His roommate, Hiroshi Kamei, has been eminently successful as House Treasurer, due no doubt to the fact that the open toed sandles he often wearsmake his toes, as well as his fingers, available for counting.

Down the stairs again and we give a passing glance to the Hole where House Librarian Bill Pilkington and Co-Athletic Manager Don Tautz are reputed to

Into the courtyard and up again we go for a peek at Upper and Lower Frosh alleys. UCCs Chas. Bates and Don Schmid, of gridiron fame, rule with an iron hand, but there [sic.] despotism is a benevolent one-coffee every evening. A man of note here is Frank Joyce, recently voted by unanimous acclamation the "Freshman most likely to." The individual shouting "Good God, I'm ruined. My stocks just fell another quarter point," is that Wall Street financier Thorne Butler, also known as a terror on the basketball court.

We next make our way to that traditional home of the great, Upper and Lower Presidential alleys. First citizen of Lower Presidential is, of course, Earl Hefner. Whatever natural tendencies he may have towards graft and corruption have been concealed quite successfully during the past year and he can look back on

a year of solid achievement for Blacker. In Upper Presidential Sam Middlebrook, one of the Co-Chairmen of the notorious Blacker Social Committee, takes his ease. It is supected that this graftridden group of wilful individuals take off on an opium jag before brewing up their nefarious plans. The amazing thing is that Ed Pyatt, the other half of the "Despicable Duo," has never lost an assessment; the troops come back again

and again to take part in a social program that is punishing to even the individualof strongest constitution. The Blacker man finds himself overwhelmed with a Mountain Party at Camp Ivy, Square Dances, a Halloween Masquerade, Exchanges, Theater Parties,

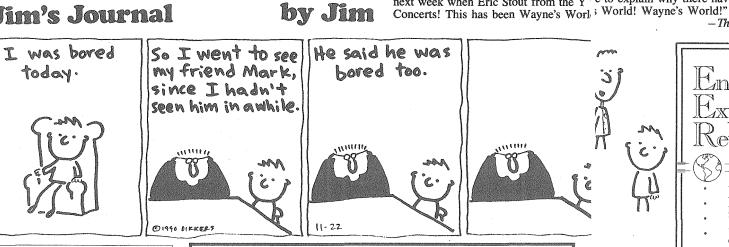
Record Dances, Barn Dances, a weekend Snow Party at Arrowhead, the notorious affair held at the Buwalda residence, Beach parties, a Valentine Dinner Dance, a Spring Formal, and a bewildering number of after-game Open Houses. And as final proof that this group of incompetents is completely berserk there was the fantastic spectacle of a 25-foot mushroom towering over Blacker Courtyard, monstrous spiders and webs, gigantic ladybugs and ants, and oversized vegitation when Blacker presented "Microcosm" as their Interhouse Dance theme. Sam's roommates, both crazy too, are Bob Parnes, the noted Big T Photographic Editor and track and football letterman, and Phil Orville, Y Secretary and ASCIT Assembly Chairman. The well known politician and ASCIT Secretary, Stan Groner, rooms hereabouts with his roommate John Boppart, Vice-President of the Y and Co-Big T Editor. Just down the hall is Kyle Catterlin, House Vice-President, and the man in charge of Blacker's very active Associate program. Last, but not least, we journey to Upper and Lower Doc's alleys. Passing

through Lower Doc's we wave a greeting to john P. (for Patrick) McCourt, Caltech's own smiling Irishman, and continue upward to where a "People are no damn good" sign on the door tells us that Pete Mason, UCC, TBPi, ASCIT Treasurer, lives here. Neil Stefanides also makes this alley his home and serves the House as Secretary. And glorious to behold, at the end of the alley shines an RA's Sign. Carel (Mother) Otte is his name and for the second straight year he thinks he is keeping one jump ahead of the troops.

We now leave the Blacker of the past and present and look forward to another year, bigger and better than the last-draft or no draft!

HAPPY HOUR at the dentist? See Dr. Richard S. Phillips, D.D.S. 1302 North Altadena Drive Pasadena • 797-6778 New Patient HAPPY HOUR SPECIAL (Tues. & Thurs., 2-6 p.m.) Cleaning/Exam \$18.00 (reg. \$70.00)

Jim's Journal



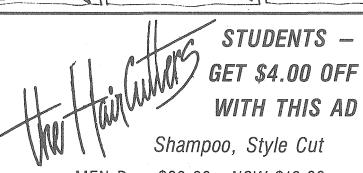
Gateway Travel

3452 E. Foothill Blvd., Ste. 428 (818) 577-2730

Caltech Approved

Professional Staff, lowest available fares, free service.

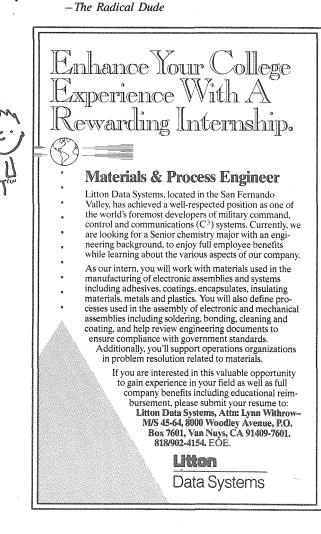
Tickets Delivered Free to You on Campus



MEN Reg. \$20.00 NOW \$16.00 WOMEN Reg. \$25.00 NOW \$21.00 449-6967

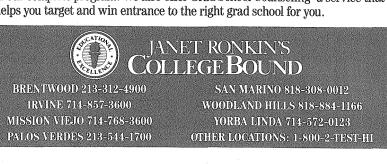
excited about it!"

1009 E. COLORADO • PASADENA Offer valid only Monday-Friday, expires June 30, 1991





When you walk in to take your graduate level exam, you want to be armed and dangerous. Let College Bound give you all the ammo you need. Our preparation classes can raise your score as much as 30% or more. And that's just one part of our complete program. We also offer Grad School Counseling-a service that helps you target and win entrance to the right grad school for you.



November 30, 1990 The California Tech

For the first time in its history, the Caltech Soccer Club participated in the National Championship of the National Collegiate Club Soccer Association. The tournament took place in Austin, Texas, on November 16-18, 1990.

Twelve of the best college club teams were competing for the national title. The winner of this tournament would participate in the Collegiate Soccer World Championship held in Las Cruces, New Mexico, against teams such as the 1990 NCAA Division 1 Champion, 1990 NAIA Champion, and various college teams from Europe and South America.

In the initial round-robin phase of the tournament, the twelve teams were grouped as follows: Group A - U. Texas El Paso, U. Minnesota, U. Colorado Group B - U. Kansas, Caltech, Mankato St. (Minnesota) Group C - Weber St., Rice U., S.W. Louisiana U. Group D - U. Texas Austin, U. Illinois Urbana Champaign, U. Wisconsin Every team arrived well equipped and well coached (for example, U. Texas El Paso was coached by a

1974 World Cup Brazilian soccer player), contrary to the Beavers who, led by manager-coachplayer-captain Flavio Noca, had only a brand new set of uniforms to be proud of!

On the first day, Caltech had to face U. Kansas. As the game got underway, the initially nervous Beavers soon realized that they had nothing to fear. The defense, marshalled by John Josephson and Michael Keating in the middle, and by Philippe Geubelle and Scott Josephson on the outside, stifled many of Kansas attacks. Halfway through the first half, Caltech started dominating the field. This domination resulted in a huge opportunity to score as midfielder Flavio Noca was hacked in the box to earn a penalty kick. Unfortunately, the goal keeper saved the ensuing kick. The Techers then lived a long moment of confusion, and, late in the first half, Kansas took advantage of this state of chaos to score (0-1).

In the second half, the Caltech team worked beaverishly to create more chances. The midfield orchestrated by Said Boumsellek, Flavio Noca, Mark Drinkwater, and "Sammy", had full command of the game. However, the offense with Art Del Castillo, Salil Patel, and James Ibbetson was unlucky in finding the way to the goal. Eventually, with a few minutes left in the game, Caltech persistence was rewarded as a Kansas defender, in a moment of panic, controlled the ball with his hand in the penalty box. Said Boumsellek was succesful in converting the penalty kick to tie the score (1-1). Tournament rules followed a World Cup format which required the game to be decided by a twenty minute overtime followed by a penalty shoot out if necessary. The end of overtime found the teams tied thanks to some crucial saves made by Caltech goalie Petros Koumoutsakos. In the ensuing shoot-out Kansas won as another penalty was missed by the unlucky Beavers.

This was a major psychological blow, which was exacerbated when Mankato and Kansas played out a 5-5 tie (which Mankato won in yet another shoot-out), for this meant that Caltech had to win by two clear goals against Mankato.

Initially, the game versus Mankato was evenly matched, both sides missing early chances. As the half progressed, Caltech again took full command of the game, but missed one opportunity after another. Hence, the intermission found the teams tied (0-0). In the second half, with the entrance of Todd Small, Eric West, Pahdraic Smythe, and Christian Noiroux, the Beavers established themselves on the Mankato half, bombarding the opposite goal posts. However, on a breakaway and a goalie's mistake, Mankato scored (0-1). Once again, the Beavers battled back. After five minutes, the Mankato goalie failed to trap a dynamite kick by Flavio Noca, and Mike Keating scored on the rebound (1-1). The Beavers launched a final assault which saw the Mankato woodwork rattle four times. This, with the numerous goalmouth scrambles and fine saves from the Mankato keeper, was enough to send the game to extra time and the dreaded shoot-out. This time the Beaver

goalie blocked a penalty shot that enabled Caltech to win the game. But the victory was to no avail: the Beavers were eliminated having scored fewer goals than Kansas and

The Caltech team, however, gained the unanimous praise of the opposing players and coaches, and defender John Josephson was even elected to the All-Star Team for his brilliant performance.

The tournament was won by the home team, U. Texas Austin, who defeated U. Illinois in, you have guessed it, a penalty kick shoot-out.

The coachless Caltech team learned many lessons from this tournament, the most important being that they have the raw talent to take on the best club teams in the country. The team hopes to obtain a coach and to win its conference again next year, and why not the National Championship!

Mexico Trip: Rancho Milagro

Wanna go to Mexico for Spring Break? We can have fun, go to the beach, stop at Tijuana...and something else. We can help a Mexican orphanage have clean water. Also spend time playing with the kids, bring them comic books and chocolates, learn to say muy bueno and bueno por sero.... If you are interested, call the Y today, at x6163. We will have our first meeting before the break, so look out for banners & flyers.

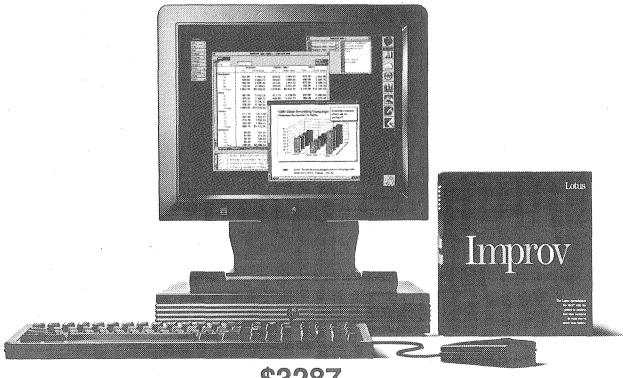
In the NeXTstation™computer, we've managed to squeeze the most possible computer into the least possible space. We've also squeezed the most possible computer into the least possible price.

One low price includes not only the keyboard and monitor, but a full eight megabytes of memory, a built-in 2.88-megabyte floppy disk drive and Ethernet. The NeXT station is also equipped with a 105-megabyte hard disk, onto which we have taken the liberty of installing a rather formidable package of software, including WriteNow, *Mathematica, *NeXTmail™ and Digital Webster.™So all you have to do is plug it in and you're ready to

go to work. You even get a free trial subscription to NeXTWORLD™magazine, to keep you up to date.

And to make our case even more compelling, we'll send a free copy of the extraordinary spreadsheet program, Lotus Improv (a \$695 value), to everyone who purchases and registers a NeXTstation or NeXTcube computer, or an 040 upgrade board before December 31, 1990.*

We couldn't even guess where you could make a comparable purchase. But we can tell you exactly where to make this one. Check the space below to find the location of your campus reseller.



\$3287

Campus Computing Organization 158-79 Jorgensen x4612

*Lotus Improv will be delivered when available. © 1990 NeXT Computer, Inc. All rights reserved. The NeXT logo is a registered trademark, NeXT, NeXT station, NeXT cube, NeXT mail and Digital Webster are trademarks of NeXT Computer, Inc. WriteNow is a registered trademark of T/Maker Co. Mathematica is a registered trademark of Wolfram Research, Inc. All other trademarks mentioned belong to their respective owners.

STUDENT & YOUTH AIRFARES

THE STUDENT TICKET

ROUNDTRIP LONDON FROM \$ 430 **PARIS** FROM \$ 660 **ATHENS** FROM \$ 850 FRANKFURT FROM \$ 670 **COSTA RICA** FROM \$ 370 **CARACAS** FROM \$ 370 **MEXICO CITY** FROM \$ 250 SYDNEY FROM **\$1020 AUCKLAND** FROM \$ 920 NYC/BOS/D.C. FROM **\$298** CHICAGO/KANSAS FROM \$278

MULTI-STOP LAX-BALI-HONG KONG-TOKYO-LAX from \$1099

- LOW COST ONE WAYS
 FLY INTO ONE CITY & RETURN FROM ANOTHER
- EURAIL PASSES / I.D. CARDS
 CALL OR WRITE FOR FREE INFORMATION

THE STUDENT TRAVEL NETWO

MELROSE 7202 MELROSE AVE.

WESTWOOD 934-8722 824-1574

Worldwide 51/ STA TRAVEL

CLASSIFIED ADS

HELP WANTED-

TEACHING ASSISTANTS NEEDED to tutor students by phone. Teaching Assistants needed in Computer Science and Computer Engineering and Electrical and Mechanical Engineering. Tutor students by phone at your convenience to supplement your income. Send resume & transcripts to Carena del Uno, Kennedy-Western University, 28310 Roadside Dr., Agoura, CA 91301, 1-818-889-8443.

RECEIVE \$20 FOR PARTICIPATING in a study on work and marriage. Dual-earner couples wanted in which at least 1 spouse is a graduate student. (213) 326-6869.

RATES.....\$4.00 for first 30 words; ...10¢ for each additional word. Send written ad with payment to 40-58. Deadline is 6 p.m., Monday before issue. No charge for on-campus lost & found.

what goes on

Submit announcements for What Goes On on forms available outside the Tech office (SAC room 40A) and in the copy/mail room (SAC room 37), or use a plain piece of paper. Send announcements to 40–58, or put them in the IN box outside the *Tech* office. Indicate the date(s) the announcement must run. Announcements for the current issue must be received by 5 pm Tuesday and should be shorter than 75 words. Announcements will be published as space becomes available and will be chosen according to size and interest to the Caltech community. Announcements for commerical events unrelated to Caltech will not be published.

Float Decoration Scheduled

There will be plenty of opportunities in December to participate in the decoration of the Caltech float in the 1991 Rose Parade. If you are interested in working on the float, please contact Lenore Freise on campus at extension 2188.

The final flowering of the float in the large tent south of the Rose Bowl is scheduled on December 26-30. There will be two shifts each day: 8 am - 4 pm and 4 pm - 11 pm. On December 31, decorating will begin early and last until the float is complete in the afternoon.

In addition, there will be "dry days" for cutting and separating base materials, such as leaves and seeds, on December 1, 8, and 15, from 8 am to 4 pm. This activity will occur at the Rosemont Pavilion, on the corner of Seco and Rosemont, south of the Rose

Summer Undergrad Research

Opportunities in Chemistry and Materials Science, Physics, Environmental Research, Biomedicine, Engineering, Tech-nical Information, Computer Science and Earth Sciences available at Lawrence Livermore National Laboratory.

If interested, please stop by the SURF office, Dabney Rm. 3 for more information. Deadline for applications is December 31. U.S. Citizenship required.

Master's Tea

Hear ye! Hear ye! On December 5th at 3:30 pm, the Master's office will be indulging the undergrads in an array of gooey, rich and delicious cakes. Please come for tea, cake, and a relaxed (but refined) social atmosphere just before the start of finals. (In front of the Master's Office.)

Free Wind Ensemble Concert

This Saturday, December 1, there will be a performance by the fifty members of the Caltech-Occidental Wind Ensemble, directed by William Bing. There will be two guest conductors, Gary Mines and Beth Irikura. Gary is a graduate student at Caltech and Beth is married to graduate student Karl Irikura. There will be music by Leonard Bernstein (Overture to "Candide") and Richard Rodgers (music from the hit musical Oklahoma). There will also be music by Handel and Kabalevsky, as well as music featuring the clarinet, percussion, and trumpet sections.

This free concert will take place in Ramo Auditorium, this Saturday at 8:00 pm. You are encouraged to attend and support your fellow classmates in their musical en-deavors. There will be a reception following the concert.

Rag Time on Green

RESALE CLOTHING WOMEN 1136 E. Green St. • Pasadena (818) 796-9924

Wed 10-6 • Mon-Tue-Thu-Fri 10-5 • Sat 10-3

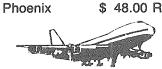
LOWEST AIR FARES

Atlanta Chicago New York

Tokyo

\$298.00 RT \$258.00 RT \$330.00 RT \$ 48.00 RT

\$635.00 RT



Bangkok \$796.00 RT \$1146.00 RT Bangladesh \$1165.00 RT India \$488.00 RT London Paris \$668.00 RT

More lowest fares are available. Prices are subject to change.

Call (818) 794-0210

FREE WORLD TRAVEL

New Course in Aero

During spring term, engineers from Boeing Vertol company will give seminars on the V-22 Osprey Tiltrotor aircraft. The organizational meeting will be held in 269 Lauritsen on Monday, January 7 at 4 pm. Please note that undergraduate students can register for units (graduate status is not a requisite-the Caltech catalog is wrong again). For information, call Patrick, x4789.

GSC Noon Talk

The GSC is sponsoring a noon talk on Friday, November 30 about graduate student unions and the legal status of graduate students. Karen Licavoli, an officer of the Berkeley Student Union, will outline the history and current status of graduate student unions at Berkelev and elsewhere. An informal question and answer dialog will be held afterwards. The talk will be held in Dabney Gardens.

Flip Your Way To Roses

Come check out the Pinball Contest this week in the SAC Gameroom. Winner takes home 2 tickets to the Rose Parade (a \$50

Gay/Lesbian/Bisexual Discussion

This discussion group meets the 1st and 3rd Tuesdays of each month from 7:30-9:30 pm in the Health Center. This confidential meeting is open to all members of the Caltech community. The first hour is open to discussion of a specific topic, and the remaining hour is open for general conversa-tion and socializing. Refreshments are served. For information please call 356-8331. Note: there will be a meeting on 12/4, but not on 12/18 or 1/1/91.

Caltech's Own Bowl Game

This Saturday, December 1, 1990, your Caltech Beavers football team will play the Pasadena Police Association in the 6th Annual Toy Bowl at Fox Stanton Stadium. Kickoff is 12 noon and suggested admission is one unwrapped toy. Come cheer for your

Decompression is Coming!!!

Saturday and Sunday, December 8-9, 8:00 pm to midnight. Saturday, enjoy movies and Gerry Hart, magician/comedian. Sunday will be the return of "The Dating Game" and more movies. The Caltech Y is looking for students to volunteer for twohour time slots either or both nights. (A free t-shirt will be given to those who sign up for at least two hours.) Sign up today!

Bad Weather Shelter

The Caltech Y is once again organizing a team of motivated volunteers (4-5 persons) to be on call at a local Bad Weather Shelter, on Lake Ave., every other Saturday night from 9:30 pm to 11:00 pm, with at least two persons remaining overnight until 7:00 am. You will be called on to serve only if the temperature is expected to be below 40 degrees Fahrenheit or if there is a forecast for rain. Stop by the Caltech Y for more information and to sign up today!!

Soviet Scientific Freedom

On Wednesday, Dec. 5 at 4 pm in the Judy Library in Baxter, there will be a talk by Professor Aleksej B. Kozhevnikov of the USSR Academy of Sciences on "Scientific Freedom and the Soviet State: The Case of Piotr Kapitza." This talk is part of the series on Science, Ethics and Public Policy. Refreshments will be served.

scholarships

Scholarship Listings
The Financial Aid Office has applications and/or information on the following scholarships. All qualified students are encouraged to apply. Our office is located at 515 S. Wilson, second floor.

The National Space Club will award a \$7,500 scholarship for the academic year 1991-92. The scholarshipo is in memory of Dr. Robert H. Goddard, America's rocket pioneer. Applicants must be U.S. citizens in at least their junior year and have the intention of pursuing undergraduate or graduate studies in science or engineering. The deadline to apply is January 4, 1991.

The Josephine de Karman Fellowship Trust has announced the availability of ten fellowships of \$6,000 each for 1991-92. The fellowships are available to students entering their senior undergraduate year and graduate students entering the terminal year of graduate school in the fall of 1991. The deadline to apply is January 31, 1991.

Truman Scholarship

The Harry S. Truman Scholarship Foundation awards scholarships to juniors who have outstanding leadership potential and intend to pursue careers in public service.

If interested please stop by the Dean of Students Office, 102 Parsons-Gates, for more information. Deadline is December 1,

Attention Aero Students!

Applications for the AIAA/Industry Scholarship program are now available. These are \$1000 renewable scholarships. Last year odds for getting a scholarship were 1 in 2! Check the AIAA table or call 792-1513.

Adversity Scholarship

The Financial Aid Office announces the establishment of a new scholarship that recognizes students who have overcome severe personal adversity/misfortune. Interested students should submit a 1-2 page autobiographical statement describing their individual circumstances. In addition, two corroborative letters from persons familiar with the student and the circumstances involved are requested. The scholarship is open to sophomores, juniors and seniors who are U.S. citizens or permanent residents and who will apply for or have received financial aid for the 1990-91 academic year. If the student is a recipient of financial aid, this scholarship will reduce the loan and/or work-study portion(s) of his/her 1990-91 financial aid award. The deadline to submit the autobiographical statement and letters of recommendation to the Financial Aid Office is 5:00 pm, Friday, November 30.

Geology \$\$\$

Undergraduates in the Division of Geological and Planetary Sciences are encouraged to apply for the Fritz B. Burns Prize in Geology. The award(s) will be made for amounts up to \$2,500 for the best proposals for undergraduate research in the fields represented by the Division.

If you are interested in this opportunity, please write a short statement (less than one page) describing the research you would like to do. Selections will be made in February, 1991. The proposed research can be loosely or closely tied to that of a Division faculty member. Deadline: January 15, 1991. Send proposals to Professor Kerry Sieh, Divisional Academic Officer, Division of Geological and Planetary Sciences, Mail Stop 252–21.

McKinsey & Company, Inc. Cambridge Systems Center

cordially invites candidates for degrees in

Computer Science and Electrical Engineering

and those who have experience building complex computer systems

to attend a presentation and discussion of

SYSTEMS CONSULTING OPPORTUNITIES

Monday, December 3, 1990

4 pm

Student Activity Center

Room 26

McKinsey & Company is an international consulting firm which specializes in problem solving for a broad range of prestigious corporations and, to a much lesser extent, non-military government institutions. Founded in 1926, McKinsey & Company now has 48 offices in 23 countries.

The Cambridge Systems Center was founded in 1984 to provide McKinsey offices around the world with the resources required to address complex technological issues. Our work covers a broad spectrum of activities, from hands-on prototyping to creating conceptual solutions to abstract problems in systems and networking technology.

> McKinsey & Company, Inc. is an Equal Opportunity Employer

Hi-Tech Basketball

by Lanny Boswell

Last weekend the battl'n Beaver basketball team blazed it's way to victory in the first annual Hi-Tech Tournament with wins over Holy Names and Arizona College of the

Friday night's action began with a 75 to 73 win for Arizona College of the Bible over California Maritime, starting a streak of close games (Three of the four games were won by less that a four point margin.) In the second game, the Beavers edged by Holy Names with a score of 59-58.

The game's leading scorers were Big Bad Bill Swanson with twenty points, and both Larry Ahle and Dan Flees with eleven points. Bill was also the leading rebounder with twelve, followed by John Philapakkos with eight and Larry Ahle with seven (isn't he a guard?)

Holy Names bounced back from a defeat on Friday to beat Cal Maritime for third place, in the first game Saturday. The Championship game followed with the Beavers facing Arizona College of the Bible. In a stirring 74-71 victory the Beaver's claimed first place in the tournament.

Larry Ahle came alive with twenty-one points (including five three-pointers), seven rebounds (are you sure he's a guard?) and six

assists. Big Bill led the scoring with twenty-five points and eleven boards. Freshman John Parks showed his ability with fourteen points, while late arrival Dan Flees scored nine points with seven boards.

Following the championship game the all-tournament team was announced and included senior guard Larry Ahle. Bill Swanson was chosen Most Valueable Player for the tournament. Bill had fourty-five points and twenty-three rebounds over the weekend, leading the team in both categories.

Larry Ahle had thirty-two points, eleven assists, and forteen rebounds (he is a guard!) Other impressive stats include John Parks with twenty-two points, nine rebounds; Dan Flees with twenty points, twelve rebounds; John Philapakkos with eleven boards; and Dan Kollmorgan with 100% of his shots blocked. (He wanted you to know.)

This weekend the Beavers travel to Santa Cruiz for a weekend tournament and will return for home games the following weekend. Come and support the home team next weekend and until then remember: When you leave the gym go through the door, not the wall. It's much less painful.



Craig Reynolds (left) and Al Bates fight each other off at the finish of the biathlon. The judge declared the race a dead heat.

Biathlon

from page 1

Craig and his training partner Al Bates dominated the race and were side-by-side through the whole event. The pair eased through the first 3.05-mile run in a time of 16:06, easily ahead of the rest of the field. Next in off the first run was another one of Craig's pals, Mike Cramer. Although Craig and his friends would sweep the top four spots for final placings,

techer Chris Campo managed to come in with the fourth fastest time off the first run (16:57). Just behind Chris was the fourth member of the Craig Reynolds Masochist Squad, Troy Gielish.

One minute back from the first five runners, a pack made up of undergrad Mark Lyttle, JPLer Mark Vincent, and undergrad John Pham rumbled into the transition area at around 18 minutes.

As the first two waves of competitors began making their way through the 18.3-mile bike course, a third wave came in off the run. Assistant Caltech Professor John Doyle, undergrad Tim Wachholz, JPL's Roy Kakuda and undergrad Ned "hairdo on the line" Bowden. and JPL's Steve Matousek entered the transition area around 19 minutes.

While runners continued to trickle in, the bike race was well under way. Craig Reynolds and Al Bates motored along at 24.5 miles/hour in the lead but were chased by Masochist Troy Gielish. Losing ground to the trio of cyclehammerers but well ahead of the rest of the field was the fourth Masochist, Mike Cramer.

But behind Craig and his stud-ly buddies, a heated battle was going on among the Techers and the JPLers in the race. John Pham, determined to shave Ned Bowden's head, shot through the bike course, averaging 22.2 miles/hour. Pham and Vincent blew past Chris "slow man on the bike" Campo and pedalled toward the finish.

First off the bike, though, were Craig and Al. Their buddy, Troy Gielish, had blazed through the bike segment in an attempt to catch the duo with the fastest bike split of the day (24.8 miles/hour). "I'm area. AL, however, didn't have less" than that of Al and Craig, and liest athletic house at Caltech. so while the pair finished together Where were they???

first (in 1:18:45), Troy came in two minutes behind them. Maybe next time, Troy.

Mike Cramer rounded out the Masochists, coming in off the second run at 1:24:02.

The first non-Masochist of the day was John "hairdresser" Pham. Pham had a fantastic bike split as well as a respectable second run, and finished in 1:27:03. Chris Campo, battling his way past Mark Vincent on the second run, was still unable to come anywhere near Pham. Campo finished sixth, two minutes behind "The Hairdresser."

Behind Campo came the block of JPL competitors: Mark Vincent, Steve Matousek and Roy Kakuda. The JPLers thus took 7th, 8th and 9th places.

In tenth place, seven minutes behind John Pham, came Ned "hairdo" Bowden. Bowden didn't have a pleasant time on the bike, and commented afterward, "Let's get rid of the biking part of it. My ass hurt so much after the bike, I was in horrible pain."

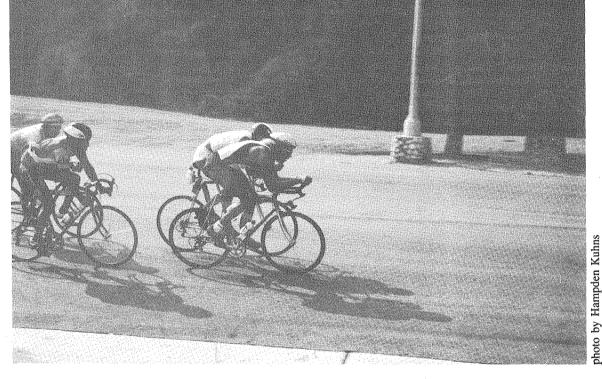
Two minutes back from the hapless Bowden, the only relay team of the day finished. Undergrad Amy Hansen ran and her fellow Ruddock House member John Krowas cycled. Amy had the tenth fastest split for the second run and Krowas blazed on the bike for the sixth fastest cycling split. Grad student Dan Jones, from Coach O'Brien's triathlon class, finished behind Amy and John.

Coming in at the 12th and 13th spots were John Doyle and Tim Wachholz, respectively. Remarkably, Tim had made a water stop on every 3.05-mile lap of the bike course and had still managed to out-cycle Doyle. Just as amazingly, Doyle spent nearly four minutes in the transition area after the biking portion and still managed to pass Wachholz on the second run. Doyle's feat is all the more startling when one considers that Wachholz spent hardly anytime at all in the transition area before heading out on the second run.

Mark Lyttle, unfortunately, had a flat tire on the first lap of the bike course and did not finish. Lyttle, who also dropped out of last spring's Caltech Sports Day Triathlon, said "Let's have another race next weekend. I wanna finish one of these!"

A large number of spectators came to cheer on the competitors, and free sandwiches, coke, bananas and cookies were available for everyone. There will probably be another Caltech/Homeboy evnet next term with FREE FOOD, so please come next time if you didn't this time. Everyone (even Ned) had a good time.

For the record, Fleming House wins the "most in attendance" coming for you, Al!" Gielish bel- award at the biathlon with 4 Flems lowed upon entering the transition competing and at least 5 Flems watching the event. In the Page much to worry about. Gielish's House Inside World recently, it has running ability was "somewhat been asserted that Page is the stud-



Craig Reynolds (number 2) and Al Bates (to Craig's left) easily won the first annual Caltech Biathlon.

WEEKLY SPORTS RESULTS

CARACTER STREET		valor/SININga autoromy blogger and state to	MATERIA DE PROPERTO DE LA COMPTION D	
Day	Date	Sport	Opponent	Results
Sat.	11-17	Football	Southern California Storm	25-29
Fri.	11-23	Basketball	Holy Names	59-58
Sat.	11-24	Basketball	Ariz. College of the Bible	71-74 (Championship game Hi-Tech Tournament)

WEEKLY SPORTS CALENDAR

	A STATE OF THE PARTY OF THE PAR		00000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Day	Date	Time	Sport	Opponent	Location
Fri.	11-30	TBA	Basketball (V)	Santa Cruz Invitational	Santa Cruz
Sat.	12-1	TBA	Basketball (V)	Santa Cruz Invitational	Santa Cruz
Sat.	12-1	12:00 noon	Football	Pasadena Police "Toy Bowl"	Caltech
Sun.	12-2	11:30 am	Ice Hockey	San Diego State	Pasadena
Fri.	12-7	7:30 pm	Basketball (V)	L.I.F.E. College	Caltech
Sat.	12-8	7:30 pm	Basketball (V)	Latin American Bible Institute	Caltech



PARIAN TRAVEL

Caltech Officially Approved

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

> Airlines, Cruises, Tours, Hotels, Car Rentals. Individual, Commercial, Groups.

> > (818) 577-8200

468 S. Sierra Madre Boulevard, Pasadena

SPEEDY RESEARCH Reports: \$5.00 per page Over 50,000 topics and clippings. Materials for research assistance use only!! 6546 Hollywood Blvd., 2nd Floor, Room 209 Los Angeles, CA 90028 Mon-Fri 10:00-5:00 • Sat 11:00-4:00

Custom Research Available AmEx • VISA • MasterCard Call Today! (213) 463-1257

THE CALIFORNIA TECH 40-58 SAC Pasadena, California 91125