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THE CALIFORNIA TECH

A
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VOLUME LXXXVIII NUMBER 13

PASADENA, CALIFORNIA

FRIDAY 16 JANUARY 1987



Photo by Shubber Ali

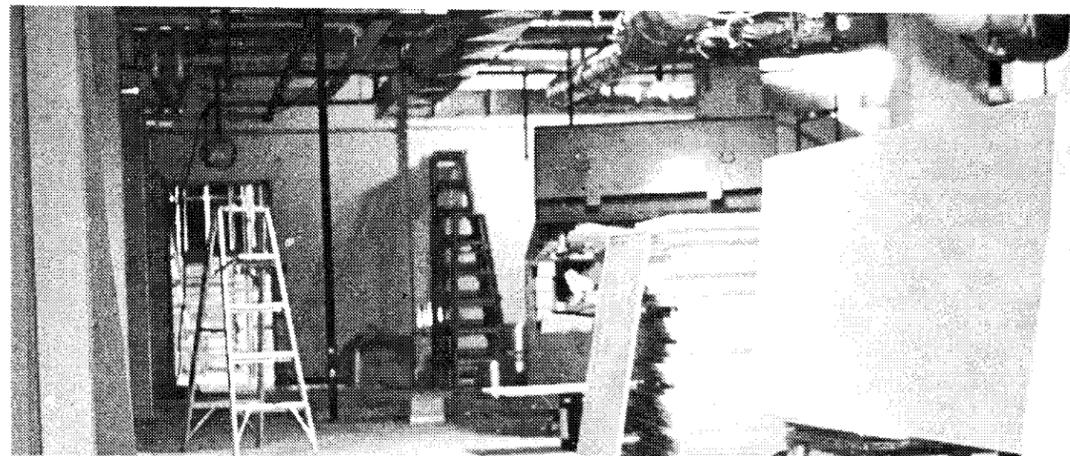


Photo by Shubber Ali

Parts of the dishevelled basement that should become fully renovated by the end of the school year.

Work In Progress In South House Basement

by Shubber Ali

Have you been woken up at 7AM by construction noises? Do you hear mysteriously loud drilling while you take your shower? Have you found that it's difficult to make three point turns in the Dabney-Blacker garbage court? It's been rather hard to miss; the south house's basement is being renovated at the expense of student sanity. But according to Stan Borodinski of Student Affairs and head of the renovation project, the new basement will rival Winnett as a student meeting and work place.

The major features of the new basement complex center around the inner courtyard, which is located between the Blacker and Dabney lounges. The most apparent new addition will be the coffee house, which will probably be run by both the students and administration. Directly adjacent to the coffee house will be a T.V. and possibly stereo room, and the ASCIT office. Also centered around the courtyard will be the student activities office, two study halls, one of which may be converted to a game room, and the already existing laundry room. The dark room will be enlarged to approximately twice its present size, and another will be added in the basement under Dabney house.

There are three other major sections planned for the basement. First, a completely redesigned music and art section is being constructed underneath Fleming house. It will include three rehearsal rooms, two libraries— one for the glee club and one for music— an instrument storage room, five practice rooms, and two offices for the Glee Clubs. Also in that section will be rooms for studio arts and four rooms whose final purpose has not been decided as of yet.

In addition to the new dark room, the complex under Dabney will include offices for the *California Tech*, the *Big T*, and the *little t*. A new production area for the *Tech* is being constructed, and should replace Winnett as the home of the newspaper. A bicycle shop and adjoining storage room are planned, and three more study halls and a library, as well as another undedicated room are being added. A new bathroom is being built next to the existing one, which is being rehabilitated. Another feature being renovated is the staircase entranceway located on the Orange Walk between Fleming and Dabney.

The last section being reconstructed is the east side of the basement, which currently houses the furniture pool and the trunk room, but which will soon include more Housing Office storage, as well as individual storage rooms for all seven houses. In addition, a copy room and another bathroom are being constructed between the storage areas and the inner courtyard.

One problem occurred about two weeks ago when asbestos, a substance which when inhaled can cause cancer, leaked into the basement. What apparently happened was that the insulation on the hot water and steam pipes, which— because the basement is so old— consists mainly of asbestos wrapped in asphalt or tar paper, cracked open when workers were drilling around the pipes. However, almost all of the spilled asbestos has been removed by a special company which handles these kind of problems. As for the asbestos still being used as insulation, it will probably be hardened by injecting some sort of solidifier into it.

According to the MOSH, the entire project should be completed before the beginning of the summer, in time for the start of the renovation of the other two south houses.

Yudelman Optimistic About Food Supply World Has Surplus Despite Poverty and Unequal Distribution

by Kevin Nelson

In his talk at Caltech on Tuesday, Dr. Montague Yudelman, a former director of the World Bank, presented a relatively optimistic picture of the world food supply situation. Though he acknowledged that serious problems still remain, he said that, due mainly to improvements in the technology and agricultural practices, we have successfully avoided the situation of worsening scarcity feared in the 1970's and have achieved an adequate global food surplus. As he sees it, the adequacy of the overall world food supply should no longer be our major concern; rather, our

focus must now be shifted to such problems as distribution and poverty.

Forty years ago, when the countries of the Third World were beginning to gain their independence, the sufficiency of agricultural production was not generally considered a major concern, said Dr. Yudelman. It was then thought that there was so much land and so many workers in the tropics that production there would be enough even for much larger populations. Instead, the main emphasis was on industrial development. Unfortunately, partly because of this attitude, the

agricultural economies of the less developed countries of the world, in general, stagnated, while their populations expanded rapidly. As a result, it became clear in the 1960's and 1970's that the world was facing a severe food shortage.

With increased awareness of the great importance of securing adequate food production, substantial resources were devoted to improving agricultural yields. There was much research in such areas as improved crop varieties, cheaper methods of making fertilizer, and irrigation. Also, there were both local and international efforts to induce the farmers of the Third World to adopt the new modern techniques over their less efficient traditional practices. According to Dr. Yudelman, the result has been a "historic" increase in crop yields to unprecedented levels. Also, though total population continues to increase, its rate of growth has

declined substantially, and per capita food output has become larger today than it was ten years ago.

While recognizing this success, Dr. Yudelman also cautioned against over-optimism. In sub-Saharan Africa in particular, agricultural productivity has not increased as much as it has elsewhere in the tropics, especially in Asia. Furthermore, in many places poverty is so extreme as to cause widespread malnutrition even though the total food supply is adequate. There is still cause for concern about excessive population growth and the social and economic disruptions it could cause, and environmental degradation also remains an important issue. Despite such long-term problems, though, the outlook for world food sufficiency seems brighter now than it has for well over a decade.

Booth Ferris Donates Funds for Research

[CNB]—Caltech has received a \$100,000 grant from the Booth Ferris Foundation of New York City. The gift will be used to create the Booth Ferris Discretionary Fund for Research and Education at Caltech. It will support innovative scientific and engineering projects that are in the early stages of development.

"The gift to support new and original research ventures at Caltech reaffirms the support the Booth family and the Foundation have extended to Caltech for the past generation," said Caltech's president, Dr. Marvin L. Goldberger. "The discretionary award creates new opportunities for Caltech to support exciting and forward-looking research during the crucial early stages that are essential to a project's future success."

The donation to Caltech is the

fourth from the Booth Ferris Foundation, whose previous gifts to the Institute include a \$350,000 grant in 1962 and a \$500,000 grant in 1968 to establish and outfit the Willis H. Booth Computing Center, and a \$200,000 contribution in 1976 to help support construction of the Thomas J. Watson, Sr. Laboratories of Applied Physics.

The Booth Ferris Foundation was established as the Booth Foundation in 1957 with a trust from the estate of Mr. Willis H. Booth and a trust instituted by Mrs. Chancie Ferris Booth. Mr. Booth, who died in 1958, was a director of IBM and a member of The Caltech Associates. The combined trusts created the Booth Ferris Foundation in 1964. The Foundation supports programs in higher education, social and public service, and cultural affairs.

\$1 Million From Irvine Foundation Caltech Equipment Ready for Renewal

[CNB]—The James Irvine Foundation of San Francisco has awarded Caltech a grant of \$1,000,000 to support the Irvine Fund for the Renewal of Scientific Equipment at Caltech. The gift will be used to purchase equipment to carry out advanced research and training in science and engineering. The award is the second equipment grant from the Foundation, which established the Irvine Fund at Caltech with a \$1,000,000 contribution in 1984.

"Once again, Caltech is the beneficiary of the remarkable vision and support of the Irvine Foundation," said Caltech Presi-

dent Marvin L. Goldberger. "The renewed grant will help Caltech to sustain the environment and facilities that have produced some of this century's finest science and engineering achievements."

Since its establishment in September 1984, the Irvine Fund for the Renewal of Scientific Equipment has been applied to the support of a broad spectrum of new equipment. Caltech research projects that have benefited from it range from siesmology engineering to radio astronomy. The new grant will be used to purchase equipment for pioneering studies in a variety of fields, including projects aimed

at the development of a new approach to computers that function more like biological neural systems.

The James Irvine Foundation was created in 1937 by the late James Irvine, an Orange County rancher and philanthropist, to provide financial assistance to not-for-profit concerns and private institutions of higher education in California. The Foundation concentrates its support in the areas of higher education, medicine and health care, youth programs, community service, and cultural activities.

The Outside World

China: End of Liberalization

by Maneesh Jain

The Chinese Communist party on Tuesday effectively halted its experiment with political liberalization and reform.

A month ago, in a speech before the National People's Congress (NPC), committee chairman Peng Zhen had criticized the reformists, who he said had denigrated the Communist ideal. He defended the superiority of socialist democracy, scoffing at monopolistic capitalism and bourgeois democracy. His speech contrasted sharply with speeches and articles on political reform by academics and younger party leaders. His criticism of the pace and extent of the recent reforms were clearly directed at elder statesman Deng Xiaoping and Premier Zhao Zhiyang, though he carefully avoided any position that could be construed as factional opposition within the party.

Last week the situation came to a head with widespread student unrest and protests, despite an official ban on them. Over 2000

angry students and teachers marched across an icy Tiananmen Square shouting for democracy, chanting slogans like — "You cannot arrest us," and "The time to be afraid is past."

With such unprecedented defiance and boldness, the students have perhaps unwittingly contributed to the end of China's liberalization. Deng, not wanting to be associated with the students' increasing recklessness and perhaps under pressure by a handful of powerful party conservatives, who have expressed alarm at the speed of his reforms, had no choice but to halt his reforms and give new importance to "bourgeois liberalization." His action is reminiscent of that in 1956, under Mao's leadership, when Mao initiated a "hundred flowers" campaign (to encourage free speech) but within a few months, stung by the outpouring of dissent, not only reversed the campaign but incarcerated certain academics who had spoken out. While the regime still intends to proceed with

economic reforms and its policy of opening to the outside world, intellectuals have been notified to desist from exploring emancipated political ideas or questioning the tenets of the Communist party. Deng himself continues to ignore completely the discussion of democracy, the right to dissent or any checks upon the power of the Communist party.

However, last weeks rallies and Peking's unprecedented tolerance coupled with the students' exceeding boldness, which they would display only if they perceived sympathy at higher levels, may reflect a turning point in Chinese politics.

News In Brief

by Hasok Chang

* The Soviet Union declared that it would end its unilateral moratorium on nuclear tests if the U.S. conducts another. The U.S. Department of Energy has scheduled the next test for Feb. 5 at a site in Nevada.

* Israeli nuclear technician Mordechai Vanunu, under trial for selling information about the Israeli nuclear weapons project, has begun a hunger strike, according to his brother Asher. He is reportedly protesting his conditions in prison, where he has to spend 23 hours a day in solitary confinement.

* The Salvadoran military announced on Jan. 6 that they had repelled a guerrilla raid on a military outpost in the Northeastern part of the country. This was the latest in a series of raids on isolated military positions that began at the end of last November. The rebels have recently announced the start of a new offensive in their seven-year old civil war.

Disinformation

To the Editors:

Regarding "Soviet Invasion of Afghanistan" (9th January 1987), the only part that I found to be not smacking of DISINFORMATION, but useful, was the map showing the countries bordering on Afghanistan to be not the U.S., but rather Pakistan, Iran, the Soviet Union, and a bit of China.

Some random thoughts, not in chronological order, follow.

The *L.A. Times* of July 2, 1986 had an article by William Eaton about Afghan Women "emerging from behind the folds of the traditional *chador* and joining their Western sisters in the working world."... "The Afghan government is striving to overcome a legacy of poverty and illiteracy." Since 1978 "women have been freed from the feudal conditions that kept them subjugated and unable to acquire an education or work outside the home." Before the revolution only 2% of the women could read and write. Only 10% of the total population was literate.

The *National Geographic*, in 1980, had an article describing how Cao's "freedom fighters" murdered women for attending school!

Ralph McGehee, a former CIA agent, spoke at a public meeting in L.A. in 1984, revealing that the CIA had operating a full-scale covert war in Afghanistan long before the Soviets entered that country in December of 1979. John Stockwell, a former head of CIA covert operations in Angola confirmed this privately after a talk in L.A. in 1984 on another subject.

The *L.A. Weekly*, in a major coverage of the events of December 1979 quoted Shirley Temple Black and a former ambassador to the Soviet Union who called the move on the part of the Soviet Union a *defensive* one (considering the U.S. covert war).

Private discussions with Iranians living in the U.S. indicated

that with Khomeini's coming to power in Iran, the U.S. lost and looked for a new border along the Soviet Union for its listening posts into the Soviet Union, namely Afghanistan.

Also, with the new regime, the U.S. lost its supply of drugs from Afghanistan. Has anyone not yet heard of the CIA's major drug connection in the Middle East, the Far East, and Latin America?

The "yellow rain" referred to in Cao's article was long ago revealed to be nothing more than bee droppings.

I yearn for articles searching for truth and justice, seeking peaceful alternatives to a Nuclear Winter, articles worthy of a student publication at the prestigious Caltech.

—Margaret Katz
Staff

THE CALIFORNIA TECH

Volume LXXXVIII • Number 13
16 January 1987

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Published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc. (but primarily by the Editors). The opinions expressed herein are strictly those of the authors and do not necessarily reflect those of the Editors.

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 letters for expediency or for any other damn reason they feel like. So there.

Turn in copy to the *Tech* office mailbox, room 107 Winnett. The deadline for copy is Wednesday at 5PM; for announcements, Tuesday at 5PM. Late copy may not be printed unless prior arrangements have been made with the editor.

Subscription requests should be directed to the attention of the business manager. Rates are \$3.00 per term, \$8.00 per annum (one year), \$100 per life (many years).

Printed by News-Type Service, Glendale, California
ISSN 0008-1582

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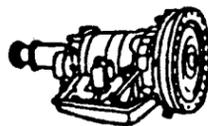
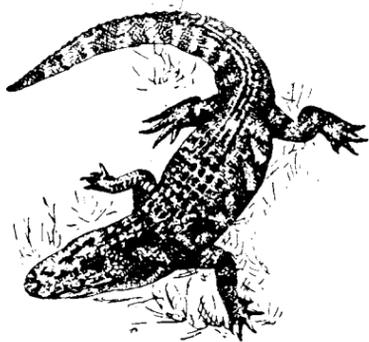
The Last Chance For the Contras?

by Hasok Chang

Thousands of contras have entered Nicaragua, leaving their Honduran camps to step up their guerrilla warfare against the Sandinista government. According to diplomats in Managua, nearly half of the 10,000 to 12,000 rebels are in Nicaragua now. At least 67 of their commanders have completed two months of indoctrination in a secret Florida camp, and CIA agents are training soldiers in Honduras. Supplies purchased with the \$100 million in U.S. aid approved

by Congress last year are also arriving, and Administration officials are hopeful about the chances of overthrowing the Sandinistas.

However, many predict that the apparent boon will be short-lived, if ever significant. Last week, congressmen introduced bills to refuse the delivery of the last \$40 million of the already approved aid; after all, there is little prospect of the approval of any further American aid by the newly-elected Democratic Congress.



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NEXT WEEK: *A Boy & His Dog*

The Inside World

Blacker: *WARNING:* This week's Inside World contains a subliminal message. If you are paranoid about being manipulated to the point where your subconscious mind degenerates into programmable Play-Doh, then I suggest you stop reading and flip to the next page. You will then fold this newspaper and stuff it into your back pocket or purse. After lunch you will put your life savings into an envelope and deposit it into the W mail slot in Blacker House. You will mail a copy of this week's newspaper to all your friends and relatives. Await further instructions next week.

—Your master, *Arex*
Dabney: (Alright. Nonzero spasticity. (Stipulated.) Forgotten.)
 Meanwhile, back in the real world...

The ancient R'hum-px ritual was completed. Totally exhausted, the High Priestess slumped against the blackboard, clutching her ceremonial stuffed toy dinosaur to her breast. Ignoring her, the rest of the faithful filed out silently. Passing through hallways marked with intricate and abstruse graffiti and thence down countless flights of stairs, we came at last to a vast underground cavern.

"Nice place," I murmured, noticing the blazing fireplace, the unused piano and the melted blimp.

TPAZ9970, resplendent in the traditional bunny slippers and deely-boppers, banged the gavel on the television. "The Excomm meeting is now in session," he intoned.

Hearts began to pound with anticipation. The room grew deathly still.

"Mass exodus a Disney," prayed the guru.

"Mass exodus a Disney," responded the congregation.

"Then the time has com," TPA stated. "The frosh must be [CENSORED]." This was tradition; all but H agreed. The frosh were thus expelled from the room.

Now a much smaller and more worldly group faced de Prez. "And after that... elections." I felt a thrill of both hope and fear. Was the time finally right? Would we rise up and smite our oppressors with the mandate of the people? "It's the only way."

Suddenly we heard shouts, a ringing bell, and a jackhammer. "Raid!" yelled our lookout. We ran for the exits... but too late. Enforcers streamed in with a burst of laser fire and subdued us all.

I, myself, was knocked unconscious in the confusion. When I came to, I was handed a specimen bottle by a leering Enforcer in a red-and-blue shirt.

"Drug tests," he announced, snickering.

—P.S. *Eau de Nym*

Fleming: What can you do with \$6,000? You can kidnap 8 Darbs! You can buy cannonballs and pay the fine for using them. You can give the money to Damage to put in a money market fund that takes advantage of the high interest rates of the current economy. Or you can take a bob-bitchin' trip to Tahoe.

Elections are coming up. The current officers were persuaded to wait an extra week before abdicating. Tune in next week for results.

The God-King Fleming Ultimate Frisbee Team is well on its way to rolling up another first place in the ol' standings. Does anyone smell Animal Meal? Oh, that's just the lingering odor from last year. But seriously, Discobolus is just a win streak away.

Laura Hernandez has yet to get the bikini underwear she left in Ed's room.

—*Al Fansome*

Lloyd: ... The alarm rings at 6AM. All classes start at 6 now. "Kaltech"... things are so different since the occupation. I say hello to Lloyd President Lev Nayvolinski on the way to 95. Taught by Katok, now. All classes are taught by Katok. A fine, hard-working citizen.

The occupation didn't put much of a damper on the ski trip, though. We dined like kings on the fine imported spaghetti from Leningrad. Skiing might have been better if the rationing hadn't limited it to one ski per person.

Elections are coming up Feb. 2nd. Should go much faster this year with only one name on the ballot. Another good aspect of unperson Theron Stanford's dinner jokes, decried as "the opiate of the masses."

But not everything is so great under the new rule. I hear that some supplies, particularly shoes, are next to impossible to get in the southern regions...

—*Loyal comrades Skeeter & Jethro, who have always been the only two people writing this column.*

Page: Here it is boys and girls, the **First Annual Page House Trivia Test**. If you can correctly answer all of these questions you're a hip type of guy (or girl). If you can't, then you're a *loser*. If you live in Page and you still can't then you're either a lame frosh or just *totally* lame.

Some of these questions are experimental and will not count toward your final score.

① Who first said, "Page House has the biggest dicks on campus?"

a) Vito Ferrante
 b) Ed Zanelli
 c) Nancy Drehwing

② An alley in Page was named Pussy Alley because it had the most:

a) cats
 b) girls
 c) squatters

③ The identity of the mysterious authors of "How to Pull Serious Hardcore Bitches" is:

a) David Bruning and John Bowers
 b) Marc Gladstein and Rico Valentine
 c) Kevin Pond and Kenny Horneman

④ A redhead who most desperately wants sex from Vito is:

a) Dean Wilbur
 b) Sean Trabosh
 c) Will Slate
 d) other

⑤ John Beck's preferred diet consists of:

a) Candy
 b) Sushi
 c) Anything from your own garden

⑥ Chicken

a) Ha
 b) Hoy
 c) Power

⑦ Bower

a) Ha
 b) Hoy
 c) Power

⑧ Vito

a) Dick!
 b) Dick!
 c) Dick!

⑨ Lloyd

a) Sucks
 b) Sucks
 c) Sucks the big dick

10 The word that characterizes the dominant force in Page House is:

a) Cunt
 b) Syndicate
 c) Beer

11 If you're severely pussy-whipped, the best thing to do is:

a) Enjoy it; you're getting more than most Techers ever will
 b) Dump the bitch
 c) Give her a good tongue-lashing

12 The Page Boy that Ed Zanelli is most "pissed-off" at is:

a) Vincent Vito Ferrante
 b) Richard "Mega" Mgrdechian
 c) Robert "Bullseye Bob" Maher

13 Chris Brennan's "favorite" Aussie is:

a) Vicki Lane
 b) Paul "Crocodile Dundee" Hogan
 c) James "Daihatu Dundee" Ibbetson

The Johns are getting it this year. John Bowers was given a bath in Baxter for his infidelity to Page House. Fish fell in with him but didn't get too wet. Score: Frosh 1, Bowers ½.

To the dismay of some (and the amusement of others), Vinnie F. has decided to grace the ballot with his name again this term! That's right Chris; yours truly may brighten up your life with another term as Page House President.

Some lowlifes from Whittier came by Tech, stealing and pillaging. Next time they come through Page they get the living shit kicked out of them. We have reason to believe that these cumdrips are responsible for the stitches on Mickey's chin (Mickey doesn't remember how he got them).

And last, but certainly not least, Marc Gladstein got his stereo back in working order (yeeeeeeesss), and Pussy Alley is now regularly shaken with 300 watts of the best funk. Screw anyone who doesn't appreciate it.

Final addendum: Mega passed Lit.

—*Stupid Frosh*

Ricketts: "So," you might ask, "what is going on in Ricketts House?" Well, I'm glad you asked. We have a cocktail party this afternoon, so if you haven't invited faculty, yet, go do it now so that at 4:30 (or whatever time we actually decide to start drinking) there will be someone to talk to.

Now that I've plugged the cocktail party, I can get progressively more obscure: Even though the Institute is out to abolish the house system, we will get new, non-pastel paint. If you don't believe me, just try to go through Cherry without noticing what color it is! Blue primer went up in Broken Cherry yesterday, so there is hope for continued success.

Is the "mysterious smell of 17" gone? Go up and find out for yourself; Charles has to find something to fill up that room of his, so it may as well be frosh. Oh, and don't be frightened. He likes frosh—they're more tender than upperclassmen so you don't have to baste them as often.

By the way, I happen to like werewolves, but they are too hard to understand.

Glen, I opened two hearts, but I have to go to class, so why don't you just play this one hand?

I love you Bob Lee!

—Giggles

continued on page 6

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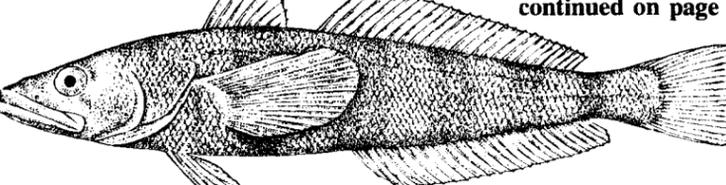
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We will be on campus for interviews on January 19. Contact your placement office for details.

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If you meet the Oracle standard of excellence, you may be eligible to receive a one-time bonus equal to 10% of your annual starting salary.

SPORTS

Hockey Slaps USC

by Jason

The Caltech hockey team started the second half of the season on a winning note, beating USC 6-4.

The game was played at Ontario which is easily the worst rink I have seen in California. With the blue lines only about 30 feet apart, it promised to be a relatively high scoring game. And it was.

The opening period was pretty even with both teams scoring one goal. In the second period Caltech broke the game wide open outscoring USC four to one. The Beavers added another goal in the third period.

With just over a minute to play USC really came on strong, scoring two goals. But it wasn't enough to keep the Beavers from winning. Everyone got in on the scoring. Phil Askenazy got a hat-trick. Jim Bower got four assists, thereby leading the team in scoring (as well

as penalty minutes).

Mike Freeman was credited with a goal and an assist. Brooke Anderson and Marty Zimmerman got a goal apiece, and Haj Sano, Pat Dobson, and Martin Brouillette received credit for assists.

Even Dwight "that's-not-fighting,-that's-just-roughing-with-intent-to-cause-severe-injury" Berg, the team gimp, got in on the action. Dwight and a USC coach did excellent zebra imitations when the referees decided to take a holiday.

The Caltech ratio strikes again. The Beavers are now the only Division II team that doesn't have a female player. Our next game is Wednesday night at 10:45PM against Cal State Northridge in Burbank. Watch the battlin' Beavers try to construct a winning streak.

New and Improved Interhouse Ultimate Schedule

Date	Time	Home	Visitor	Referees
Jan. 13	7:45PM	Blacker	Page	Fleming
	8:45PM	Ruddock	Ricketts	Dabney
Jan. 14	7:45PM	Fleming	Ricketts	Page
	8:45PM	Lloyd	Blacker	Ruddock
Jan. 15	7:45PM	Lloyd	Dabney	Page
	8:45PM	Ruddock	Fleming	Blacker
Jan. 19	7:45PM	Dabney	Page	Lloyd
	8:45PM	Ricketts	Blacker	Fleming
Jan. 20	7:45PM	Page	Ruddock	Blacker
	8:45PM	Ricketts	Lloyd	Fleming
Jan. 21	7:45PM	Fleming	Page	Blacker
	8:45PM	Ruddock	Lloyd	Dabney
Jan. 22	7:45PM	Lloyd	Fleming	Page
	8:45PM	Dabney	Blacker	Ricketts
Jan. 26	7:45PM	Blacker	Ruddock	Lloyd
	8:45PM	Ricketts	Dabney	Page
Jan. 27	7:45PM	Dabney	Ruddock	Ricketts
	8:45PM	Page	Lloyd	Blacker
Jan. 28	7:45PM	Page	Ricketts	Lloyd
	8:45PM	Fleming	Dabney	Ruddock
Jan. 29	7:45PM	Blacker	Fleming	Ruddock

from page 3

Ruddock: Greetings from Ruddock Studios—the producers of fine movies, sports films, and videos. The makers of Math 2b—Lecture 7 and The Thieves Who Were Stupid are preparing another group of tantalizing teasers: *An Exposé: Undercover in Gary's Kitchen*; *Coonbo*—a fast-paced adventure flick with even more blood and bodies than its spin-off Rambo; *Disco Ten Zillion*—*Softball*—*The Final Game*—sequel to such thrillers as *The Big Red Machine Stalls* and *The Male Who Lost His Football*. *Disco* stars the ever popular Ruddock Blue vs. the evil Yellow Shirts squared off in a game of skill and daring. Coming to a softball field near you this Sunday afternoon.

From the days before film—the house ski trip was a great success. People ate well, drank hard, played hard, and fell harder. The pictures will tell the final (true) story. Way to go Social Team. Studio execs down to Lowly cameramen (Mad Milt) are invited to this week's social event "IMAX" to see what real film makers do.

Gotta go, got a Soap Opera to work on.

—Bets the Frosh

Movie of the week: *Pretty in Pink* (a Vax Starfish production).

You're bright enough to master Cobol and Fortran.

And you're still smoking?

U.S. Department of Health & Human Services

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Fri.	1-16	2:00PM	Wrestling	Humboldt State	U.C. Davis
Fri.	1-16	4:00PM	Wrestling	U.C. Davis	U.C. Davis
Sat.	1-17	All Day	Wrestling	Aggie Invitational	U.C. Davis
Sat.	1-17	10:00AM	Swimming (M/W)	Claremont-Mudd-Scripps	Caltech
Sat.	1-17	7:30PM	Basketball	Claremont-Mudd JV	Caltech
Mon.	1-19	4:00PM	Swimming (W)	Occidental & Mills	Caltech
Wed.	1-21	4:00PM	Wrestling	Cal State Fullerton JV	Cal State Fullerton
Wed.	1-21	6:00PM	Basketball	La Verne JV	La Verne
Wed.	1-21	10:45PM	Hockey	Cal State U. Northridge #2	Pickwick Ice, B'bank
Sat.	1-24	10:00AM	Swimming (M/W)	Redlands	U.C. Riverside
Sat.	1-24	6:00PM	Basketball	Whittier JV	Whittier

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GNP SHOWCASE

Hello again...

Nothing new this week, but now that everyone is back from the Las Vegas Consumer Electronics Show, look for a report on the new things seen at the show.

That's all for now. See you next week.

DEDICATED TO QUALITY AND SERVICE

WHAT GOES ON

Gay & Lesbian Discussion Group

An ongoing discussion group on Gay/Lesbian topics is held every Tuesday evening from 7:30-9:45pm at the Archibald Young Health Center. All members of the Caltech community are welcome. Refreshments are provided. For further information please contact Bruce Kahl, x6393.

New Bi/Psych Course Offered

Bi 154 (Topics in Experimental Psychology) will be given by Dr. Bela Julesz, Sherman Fairchild Distinguished Scholar, on Wednesday mornings from 10:00 to 11:30am in 024 Beckman Labs, starting on January 28th. The title of the lecture series will be "Facts, Theories, and Metaphors in Visual and Auditory Perception".

Jazz At The Playhouse

Sunny MacKay, formerly of Donte's-North Hollywood and the Blue Parrot-La Jolla, presents, on the night before Super-bowl, Jazz at the Pasadena Playhouse. The M.C. will be L.A. Times jazz critic Leonard Feather. Performing will be Grammy Award winners SuperSax, and the L.A. Voices.

This all takes place at the Pasadena Playhouse, 39 S. El Molino, on Saturday, January 24 at 8:30pm. Ticket prices are \$17.50-\$20.00-\$25.00. For ticket information call 356-PLAY.

CALTECH public events

BALALAIKIST EMANUIL SHEYNKMAN RETURNS TO CALTECH

Balalaika and mandolin virtuoso EMANUIL SHEYNKMAN returns to Caltech Saturday at 8 p.m. in Beckman Auditorium. Drawing on such diverse sources of repertoire as Russian folk music, Beethoven sonatas and even Scott Joplin rags, Mr. Sheynkman's outstanding technical and interpretive skills are sure to create a memorable evening.

One of the world's finest ensembles, the EMERSON STRING QUARTET continues the Coleman Chamber Music Series on Sunday at 3:30 p.m. in Beckman Auditorium. This inimitable group will perform an all-Beethoven program including Quartet in E-flat Major, Op. 4 ("The Harp"); Quartet in F minor, Op. 95 ("Serioso"); and Quartet in E-flat Major, Op. 127.

There are a limited number of free tickets and tickets at \$6.00 each available to CIT students for this Coleman Concert. (Limit one free ticket and one at \$6.00 per CIT I.D.) Regular ticket prices are \$15.00-13.50-12.00-10.00.

Next Friday, January 23, you can hear our own CALTECH WIND ENSEMBLE in a POPS AND CONCERTO CONCERT. It will begin at 8 p.m. in Ramo Auditorium. Admission is free.

MORCA DANCE THEATRE will bring the excitement of Flamenco music and dance to the stage of Beckman Auditorium, Saturday, January 24 at 8 p.m. You'll marvel at this extraordinary company, which exemplifies the Flamenco, the art, music, song and dance of Southern Spain.

CIT student prices for Emanuil Sheynkman and for the Morca Dance Theatre are priced at \$7.50-6.25-5.00; CIT student rush tickets: \$6.00 on Saturday. CIT faculty and staff prices are \$14.00-11.50-9.00 for advance sales and TECHTIX - half price tickets for \$7.50-6.25-5.00 - will go on sale today between noon and 4:30 p.m.; subject to availability and limit 2 tickets per CIT I.D.

For further information about the exciting Public Events scheduled this season, call campus ext. 4652.

Another Free Concert

The Pasadena Community Orchestra will be presenting excerpts from Stravinsky's "Firebird Suite" along with other interesting bits by Delius and Verdi, in a concert on Friday, January 23 at 8:15 pm. The concert, also featuring the Pasadena Chorale, will be at the First United Methodist Church at 500 E. Colorado Blvd. Admission free, but arrive a little early for good seating.

Soroptomist Fellowship

The Soroptomist International of Los Angeles is offering a \$3,000 fellowship to an outstanding woman graduate student for 1987-88. To apply you must be a U.S. citizen and a California resident. Consideration is given to the student's potential contribution to society. Field of study is open. The Financial Aid Office (12-63) has more info. Deadline is February 15, 1987.

Med School Money

The Army Health Profession Agency is offering 350 scholarships to students planning to attend medical school. To qualify you must be a full-time student, a U.S. citizen, and under the age of 35 when you enter medical school. Students who accept the scholarship will become members of the Army Reserve and be required to attend 45 days of Active Duty Training per year they are in this program. This scholarship pays 100% tuition, books and fees, and provides a monthly stipend. There is no obligation attached to submitting an application. Deadline is May 1, 1987 for 4-year scholarships. To apply write to: U.S. Army Health Professional Support Agency, 1600 N. Broadway, Suite 300, Santa Ana, CA 92706-3954, or call collect (714) 836-2355. Additional information is available in the Financial Aid Office, 515 S. Wilson.

SWE Scholarship

Women majoring in engineering are eligible to apply for the 1987-88 Society of Women Engineers Scholarship. Applicants must have an overall grade average of 3.5 or better. Scholarship amounts vary from \$250 to \$2,500. Applications are available from the Financial Aid Office, 12-63. Deadline is February 1, 1987.

SAM/PE Money

Engineering, physics, chemistry, and metallurgy students studying materials and processes are eligible to apply for the Society for the Advancement of Material/Process Engineering \$1000 scholarship for 1987. Applicants must be full-time undergraduate students. Application forms and information are available in the Financial Aid Office, 515 S. Wilson. Deadline is February 1, 1987.

Korean Scholarships

The Korean American Scholarship Foundation is offering scholarships for 1987-88. To qualify you must be a full-time student of Korean American heritage. Scholarships average \$1,000 per student. Deadline is 31 January 1987. To receive an application write to:

Scholarship Committee
Western Region Office
Korean American Scholarship
Foundation

Box 3388, Santa Ana, CA

92703

1-800-523-5948.

University of Arizona

The Department of Systems and Industrial Engineering at the University of Arizona offers outstanding opportunities for graduate study at all levels. Financial support is available for outstanding students. Students who receive fellowships or assistantships are exempt from out-of-state tuition charges. If you have any questions, please call (602) 621-6552.

Career Counseling

A Career Counseling program on "Careers in Mechanical Engineering" will begin at 7:00 pm on Wednesday, January 21 in the Red Door Cafe. Undergrads and grad students welcome. Sponsored by the Gnome Club and the Alumni Association. Refreshments will be served.

Indian Fellowship Program

The Indian Fellowship Program is being offered through the Department of Education. To apply you must supply proof of Indian identity, transcript, a financial aid statement, and be a full-time undergraduate or graduate student studying engineering, business administration, natural resources, and related fields. For the application and further information contact the Financial Aid Office, 12-63. Closing date is February 6, 1987.

Engineering Scholarship

Consulting Engineers announces their 1987 Scholarship Competition for upper-division undergraduates in Engineering.

To be eligible, a candidate must be ① a junior or senior as of fall 1987, ② in the upper half of his or her engineering class, ③ working for a B.S. degree in Engineering, ④ interested in Consulting Engineering as a career, and ⑤ a U.S. citizen.

Engineering students with strong academic and extracurricular qualifications who meet the requirements are invited to obtain complete details and application forms from the CEAC office in Sacramento by calling (800)442-2322. Applications must be received no later than February 16, 1987.

Naval Scholarship

The American Society of Naval Engineers is offering a \$1,750 scholarship for 1987-88. To apply you must be a full-time student in your junior or senior year, a U.S. citizen, interested in a career in Naval Engineering. Information available from the Financial Aid Office, 12-63. All application material must be received at ASNE Headquarters by 15 February, 1987.

Summer School at Weizmann

The Weizmann Institute of Science's annual Karyn Kupciner International Science School is accepting a small number of science students (from second year) from overseas for the summer of 1987 to participate in research projects in mathematics, physics, chemistry and biology.

A modest stipend and dormitory-style accommodation near the campus are provided. No travel funds are available.

Application forms may be obtained from the Academic Secretary, Weizmann Institute of Science, Rehovot 76100, Israel. Completed applications should be returned before February 15, 1987.



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WHAT GOES ON

Announcements for *What Goes On* must be submitted on an announcement form (available outside 107 Winnett) or on a plain piece of paper. Please indicate the date(s) you want the announcement to run. Send announcements to 107-51, or put them in the mail slot in the door of 107 Winnett.

Announcements must be received by the Tuesday prior to publication.

Indoor Soccer League

A meeting for all undergraduates interested in playing indoor soccer will be held in the Y lounge on Monday, 19 January, at 9:00pm. Matches will be played once a week (Saturday nights) in Mira Loma. Contact Konstantin Othmer at x3976 for more information.

Student Advisory Committee

In accordance with a recommendation made at the Student/Faculty Conference, Professor P. C. Jennings, Chairman of the Division of Engineering and Applied Science has established an "Undergraduate Student Advisory Committee." The Committee will meet at least once each term. The purpose of the committee is to facilitate "feedback on problems arising in the courses." The committee is to serve all students registered in one of the options of the Division. The present makeup of the committee is as follows:

Students—Richard Arrieta, John Beck, Kenneth Chaney, Salim Khan, Paul Lee, Sean Wakayama, and Edward Zanelli.

Faculty—Fred E. C. Culick, James Kajija, Hardy C. Martel, Fredric Rachlen, Ares J. Rosakis, David B. Rutledge, Rolf H. Sabersky, Chuck L. Seitz, and Brad Sturtevant.

Caltech SF Library Startup

The Caltech Science Fiction/Fantasy Library will be opening for business soon. You have books I haven't read, I have books you haven't read—let's pool them! Depending on member interest, we could become a full-fledged science fiction club, with convention trips, speakers, you name it. Organizational Meeting on Wednesday, 21 January at 8 pm in Winnett Lounge. See posters around campus for details, or call Mark Loooper at 304-0006.

SURF's Up!

SURF applications are now available in the SURF Office, Room 3 Dabney. The stipend this summer will be \$3000. The SURF Office has a notebook with descriptions of a few possible projects. Deadline for proposals is 5:00 pm, Monday, March 2.

Chow Down!

The traditional SURF kickoff dinner will be held this year on Tuesday evening, January 20 at the Athenaeum. Following custom, the SURF kickoff dinner is held annually during the week preceding the NFL Superbowl Game.

As a special feature of the evening, SURF '87 will be dedicated to Bob Sharp, the Robert P. Sharp Professor of Geology, Emeritus.

Students from the 1986 SURF class will deliver presentations on their research. Rachael Clark, who worked with Professor Mark Konishi, will speak on "The Ups and Downs of SURFing at Caltech." Ravi Subramanian, who under the direction of Professor Edward Posner, led the SURF team studying Very Large Orbiting Antennae, will give an overview of their project.

All friends of SURF and their guests are most cordially invited—and urged—to attend. For further information about the Kickoff Dinner, and to make reservations, please phone the SURF office, 356-3675.

Mammoth Ski Trip

The Caltech Ski Team will be leaving for Mammoth Mountain today (1-16-87) at 7 p.m. We are meeting in front of the Y. Skiers of all abilities are welcome. Cost is around \$25 per day for lift ticket, \$10-15 a night for lodging, \$5 for transportation, and any ski rentals if necessary. We will be returning Sunday around midnight. Contact Konstantin Othmer at x3976 for further information.

Science and Philosophy

At 8 pm on Thursday, February 5, Rabbi Alvin J. Reines, Ph.D., a professor of philosophy at the Hebrew Union College in Cincinnati, Ohio will be coming to Caltech to present a lecture entitled "Science and a Philosophy of Liberal Religion." The talk will be held in room 24 Beckman Labs, and is free and open to all members of the Caltech community. For more information contact the Caltech Y.

Waltz Party

On Saturday, January 24th at 8 pm in Old Union on the Occidental campus, the Caltech-Occidental Orchestra will provide music for an evening of waltzes. Admission charge is \$2; refreshments will be served.

In preparation for the party, there will be a dance practice, on Thursday January 22nd in Dabney Hall, beginning at 7:30 pm. The instruction will be given by members of the Caltech chapter of the International Folk Dance Association.

Free Ensemble Concert

The Caltech Wind Ensemble, directed by Bill Bing, will play a free concert on Friday, January 23, at 8 pm in Ramo Auditorium. The two soloists on this concert will be Eric Babson on oboe, and Ken Channey on the bass trombone. Seats are on a first come, first seated basis, so plan to arrive a little early for the best seats.

Guitar Classes

Guitar classes for second term are meeting on Tuesdays in Winnett Basement as follows: Beginning class, 4:30-5:30 pm; Intermediate class, 3:30-4:30 pm; Advanced class, 5:30-6:30 pm.

Classical and flamenco repertoires are explored but techniques transfer to other styles of guitar. The Beginning class also includes a new jazz and folk chord system. Classes are free to Caltech students (and other members of the CIT community, space permitting). Undergraduates can receive 2 units of credit if they choose. Private instruction on any level can also be arranged. The instructor, classical guitarist Darryl Denning, has an international background in performance, recording and teaching, and can be reached at (213) 465-0881 for more information.

Another Cooking Class

On Monday, January 26 at 7 pm the Caltech Y will be holding the second in a series of basic cooking classes. This time you'll learn how to make lasagna, a salad, and lemon meringue pie. Samples of all food will be provided. The cost to you is only one dollar. Sign up in the Caltech Y upstairs in Winnett. Feel free to attend this one even if you missed the last one.

MacValley Meets

The MacValley Users Group will meet on Tuesday, January 20 at 7:30 pm in the cafeteria of Burbank High School at Burbank Blvd. and Third St. in Burbank.

Orange Micro will exhibit "Ragtime," a pagemaking program. For further information, please contact Ruth Stever (818) 848-1277, or write MacValley Users Group, PO Box 4297, Burbank, CA 91503.

Islamic Fundamentalism

Professor Afaf Marsot, a distinguished professor of Near and Middle Eastern History, will speak on the political and sociological implications of Islamic Fundamentalism at 8:00 pm on Wednesday, January 21 in Rm. 147 Noyes Lab. Sponsored by the Caltech Y, the Middle East Studies Group, and the GSC.

Grant & Fellowship Directory

A directory of grants and fellowships compiled by the Graduate School of the University of Massachusetts at Amherst is now available at the Career Development Center. We have also received the latest of Peterson's Guides to Engineering Science and Computer Jobs. Visit the Career Development Center for more information.

NSF Engineering Program

A new National Science Foundation program, titled "Creativity Awards in Graduate Engineering," is being offered to make graduate study more attractive and to improve the quality of engineering education by encouraging creative activities. These new creativity awards will support students based on their ideas as embodied in a plan of research.

Approximately 30 grants per year will be awarded competitively to students, whether they are still undergraduates or have graduated in the last three years and have not done graduate work. Grants will be for up to \$30,000 a year for up to three years and could be used to produce a graduate thesis. The grant will go to the student's institution and will provide an annual stipend of \$11,100 plus tuition and fees as well as funds for research. To apply, a letter should be sent to NSF by February 1, 1987 describing the research idea. Full information on what should be in the letter is available from the Office of the Dean of Engineering or from Chairmen of Engineering departments. The applications will be evaluated by a review panel. The grant is portable and is conditional on the awardee being accepted into a graduate school.

MIT Summer Minority Program

The MIT Lincoln Laboratory has a summer research program for undergraduate and graduate minority students. They will have the opportunity to develop valuable research expertise in areas such as communications systems, radar analysis, digital data processing, and solid-state electronics. The program extends from early June through mid-August. During the ten-week period, participants receive weekly salaries and are accommodated in MIT Campus Housing in Cambridge. Round-trip travel to the Boston area is provided for each student, as well as daily round-trip transportation between campus and the Laboratory.

Requirements: Students must have completed their sophomore year in college before the summer; they must be minority students in electrical engineering, computer science or applied physics, interested in a research career; they must be U.S. citizens.

For further information write to:
Chet Yablonski
Personnel Office
MIT Lincoln Laboratory
244 Wood Street
Lexington, MA 02173-0073

Bell Mathematics Prize

The E.T. Bell undergraduate mathematics research prize of \$500 will be awarded for the best original mathematics paper written by a Caltech junior or senior. Contestants for the Bell prize must be nominated by a faculty member familiar with their work. Students who wish to be considered for this prize should contact a member of the Mathematics faculty prior to the end of second term to discuss the nature of the research. If the entry is sufficiently worthy the faculty member will nominate the contestant and act as sponsor. Each student is entitled to only one entry. All contestants nominated must submit their papers in final form to their faculty sponsors by the end of the fourth week of third term. A faculty committee will then judge the papers and announce its decision before the end of third term. The committee may award duplicate prizes in case of more than one outstanding entry. The name of the winner (or winners) will appear in the commencement program.

Morgan Ward Competition

This math competition is open to Caltech freshmen and sophomores. An entry may be individual or joint (submitted by a group of two or more students). Each student is entitled to at most three entries, of which at most two may be individual.

An entry is to consist of a mathematical problem, together with a solution or significant contribution toward a solution. The problem may have any source, but this source should be stated in the entry. The entries will be judged on the basis of the nature of the problem and originality and elegance of the solution. Any outside references used should be indicated. (The Honor System applies here.)

Entries from each contestant or group must be placed in an envelope and delivered to the Mathematics Office, 253 Sloan, during the fourth week of the third term. The name of the contestant, or the names of all participants in the case of a joint entry, must be written on the envelope only, not on the entry. The Judging Committee will consist of three volunteers, approved by a vote of the Caltech Mathematics Club. Each judge must be a junior or senior and a member of the Mathematics Club. The judges will select a group of finalists and submit their entries to the Mathematics Department faculty who will make awards to the winners. Prizes will ordinarily be awarded for the 2 or 4 best entries, the value of each prize being \$75. Prizes for individual entries will be limited to at most one to a contestant, and no group may receive more than one prize.

De Karman Fellowship

Information regarding the Josephine de Karman Fellowship is available in the Financial Aid Office, 12-63, and the Graduate Office, 2-31. These fellowships are for seniors and third year or more graduate students for 1987-88. Grants are for \$3,000 for one year and are not renewable. For applications write to:

Fellowship Committee
Attn: Ms. B.J. Brown, Secretary
Josephine de Karman Fellowship Trust
P.O. Box 446, La Verne CA 91750
Application deadline is January 16, 1987. (That's today, gang!)

continued on page 7

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