BIBLION THE CALIFORNIA TECH TO KXX-TEXVIKON

VOLUME LXXXVIII NUMBER 15

PASADENA, CALIFORNIA

FRIDAY 30 JANUARY 1987

Party at Occidental

by Rob Soderberry

The ASCIT ESC presents a dance party tonight at Occidental College. The New Marines perform live at Stewart-Cleland Hall on the Occidental campus. Dance to their new wave underground

sound from 9:00pm until the early morning hours. Admission is free with your Caltech ID. See the flyers around campus for directions. Call me, Rob Soderbery, for more info (x3761). Do it for science!

Housing Committee

by Josh Kurutz

President Goldberger's office created a committee two weeks ago that is designed to implement Institute policy regarding the maintenance of the undergraduate houses. According to the presidential directive, this Committee on Undergraduate Housing Maintenance is to establish lasting procedures that deal with maintenance difficulties and to review particular disputes over outof-the-ordinary maintenance.

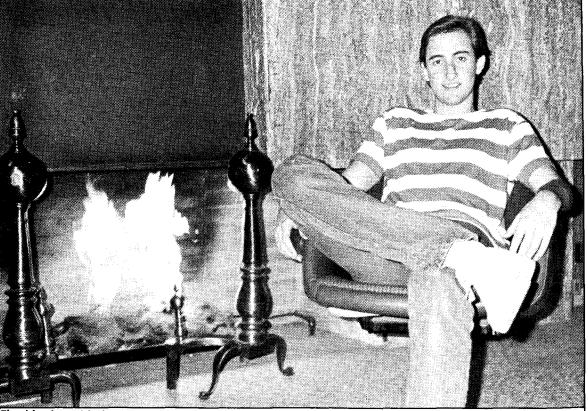
The policy being enforced is the one established in October last year. This committee is not designed to change this policy or hear student input other than from the IHC Chairman, a member of the committee

Since this administrative body

is to make permanent procedure and should not be needed for the long term, it will be disbanded by June, 1987.

Glen Cass, the chairman of the Maintenance Committee and the Student Housing Committee can authorize spending money from the Undergraduate Housing Reserve, which was established at the beginning of this term.

The Reserve was established to provide funds for the houses to pay out-of-the-ordinary maintenance. Each on-campus student was charged \$10 by the Institute and the Institute matched this contribution and put the money in reserves for each house. At the end of each term, funds not used to pay for extraordinary maintenance can be used by the members of the



Fireside chat with the new President—Jeff Tekanic is the ASCIT president-elect. He welcomes all undergraduate ASCIT members or not) who wish to discuss the state of the university. A run-off for the office of ASCIT treasure to be held today.

house at their discretion.

The members of the committee are Glen Cass (chairman); Dick Barker, Superintendent of Shops, Physical Plant; Stan Borodinsky, Assistant to the V.P. for Student Affairs; Chris Brennen, MOSH; Jim Minges, Director of Business Services; and the Chairman of the

this year. During his 25 years of

service to NASA, he has twice

been awarded the NASA Medal for

Distinguished Public Service (1978

and 1972), and he received the

NASA Exceptional Scientific

Achievement Award in 1970. He

was elected to the National Aca-

S.B. in 1951, his S.M. in 1952, and his Ph.D. in 1954, all from the

University of Chicago. He joined

Caltech in 1955 as assistant profes-

sor of geology, became appointed

associate professor in 1959 and

professor of geology and geophy-

sics in 1962. He was named Mac-

Arthur Professor of Geology and

Geophysics in 1982.

Dr. Wasserburg received his

demy of Sciences in 1971.

Beyond the Universe

[CNB]-"Beyond the Mechanical Universe," the sequel to the highlyacclaimed series "The Mechanical Universe," will make its Los Angeles debut on KCET, Channel 28, on Tuesday, February 3, at 12:30рм.

The 26 episodes in the collegelevel telecourse will air over a 13-week period, at the rate of two programs a week, on Tuesdays and Thursdays, from 12:30 to 1:00pm. The series will also be shown on Tuesdays and Thursdays on KLCS, Channel 58, from 6:30 to 7:00pm, starting February 10.

The series covers electricity and magnetism, Einstein's theories of special and general relativity, and the emergence of quantum mechanics as the basis of physics. "Beyond the Mechanical Universe" uses classroom scenes, historical portrayals, and computer graphics and animation to supplement and illustrate the scientific material and portions of both the text and film sequences have been used for this term's Physics 1b.

Since its first airing in 1985, "The Mechanical Universe" has appeared on public television stations throughout the country, and has been adapted as a teaching tool in numerous high schools, colleges, and universities.

The series has received more than a dozen awards for its scientific content and use of special effects, including prizes at the American Film Festival, the National Educational Film Festival, and the International Science Film Association.

The creator, project director, and host of "The Mechanical Universe" and "Beyond the Mechanical Universe" is Dr. David Goodstein, professor of physics and applied physics at Caltech. The computer-designed special effects were created by Dr. James Blinn, lecturer in computer science at Caltech, technical staff member at the Jet Propulsion Laboratory, and one of the world's foremost innovators in the field of computer animation.

Beyond the Mechanical Universe" is produced by the California Institute of Technology and the Southern California Consortium, and is funded by the Annenberg/CPB project.

Wasserburg New Geology Chairman

[CNB]-Dr. Gerald J. Wasserburg has been appointed chairman of the Division of Geological and Planetary Sciences at Caltech, as announced by President Marvin L. Goldberger. Dr. Wasserburg assumed the position on 1 January, succeeding Dr. Peter J. Wyllie, professor of geology, who has been the division's chairman since 1983.

"Caltech has one of the world's finest programs in geological and planetary science, and in Jerry Wasserburg we have a scientist of outstanding international reputation to represent the division," said Dr. Goldberger. "We are certain that he will bring the same energy and commitment to his role as chairman that he has brought to his 31 years of research as a member of the Caltech faculty."

Dr. Wasserburg is the John D. MacArthur Professor of Geology and Geophysics and director of the Lunatic Asylum, a worldrenowned research center for the study of moon rocks, meteorites, and dust from interplanetary space. He is internationally recognized for his pioneering research in the fields of isotope geology and planetary

science, and for his role as adviser to NASA on the directions and development of the U.S. space program.

The recipient of numerous honors, Dr. Wasserburg was awarded the prestigious 1986 Crafoord Prize of the Royal Swedish Academy in Stockholm last September, in recognition of his fundamental research on the origin and early evolution of the solar system. Often referred to as the Nobel Prize of the "other" sciences (astronomy, biosciences, geosciences, and mathematics), the Crafoord Prize of \$190,000 was presented to Dr. Wasserburg by King Carl Gustav of Sweden in a ceremony at the Academy on 24 September.

Dr. Wasserburg's recent honors include the U.S. Senior Scientist Award, the Wollaston Medal of the Geological Society of London, the J. Lawrence Smith Medal of the National Academy of Sciences, and the Harry H. Hess Medal of the American Geophysical Union, all presented in 1985. He will receive the Holmes Medal of the European Union of Geosciences in April of

Treasurer Hopefuls Run off

-Vote Today

Vote today for your favorite candidate for ASCIT treasurer. The following candidates made the run-off:

> Paul Brewer Jeff Flint Thu Le

Circle the candidate of your choice (on the ballot; not here, dummy) and/or cross off your least preferred.

Bylaws Changes Proposed

The following amendments to Article XIV (Publications) of the ASCIT bylaws will be voted on at the general election on February 2. What the amendments change from current practice is shown in bold type. The first two proposals push the date for assuming office back about a month for two appointed positions to allow the newly elected Board of Directors time to appoint them. The third simplifies the method for splitting advertising commissions between the Business Manager and Editor of the Tech.

Proposed Amendment #1

SECTION 11. The Editor of the California Tech takes office at the beginning of the corporate fiscal year; the Business Manager of the California Tech takes office at the beginning of third term; . . . [remainder of section unchanged]

Proposed Amendment #2

SECTION 13. The Publications Darkroom Chairman is responsible for maintaining the publications darkroom, authorizing persons to use the facilities, and filing negatives for the use of the publications. He will receive a salary of one hundred fifty dollars (\$150) for the year's work. He takes office at the beginning of

Proposed Amendment #3

SECTION 8(a). [beginning of subsection unchanged] . . . The net commission will be distributed as follows: two-thirds (3/3) will go to the Business Manager and one-third (1/3) will go to the Editor.

Hitlin, Schwarz Fellows

[CNB]-Dr. David Hitlin and Dr. John Schwarz of Caltech have been elected Fellows of the American Physical Society (APS), an honor conferred annually upon a select number of scientists for outstanding and innovative research in the physical sciences. The two physicists were elected APS Fellows in December of 1986.

Dr. Hitlin, professor of physics, was named a Fellow for his studies of the role of weak forces in the decay of elementary particles containing charmed and strange heavy quarks. Quarks are

stituent of matter.

Dr. Schwarz is professor of theoretical physics. He was elected an APS Fellow for his fundamental role in the development of superstring theory, the first viable candidate for the long-sought unified field theory that accounts for all the laws and phenomena of

Dr. Hitlin received his B.A., M.A. and Ph.D. from Columbia University in 1963, 1965 and 1968 respectively. He joined the Caltech

continued on page 7

Intelligent Life?

To the Editors:

"Graffiti" that I've had the chance to notice in the South Houses gives me the reassuring, warm feeling that balanced, intelligent life really does exist in the universe. Ho. In LA yet!

Hope you don't lose it. Sincerely,

-Someone From Lab

Happy At Work

To the Editors:

ago and of Jan. 19, 1987. We, the present employees of Gary Hindoyan feel that the people who have written the past letters did not have the correct information. As employees we are treated very fairly and as equal as anyone else. One will never find an employer who runs a business as Gary has in the past as well as in the future.

We quote the letter of Jan. 19. "Employees were in fear of losing their jobs if they complained." As employees we have never had a communication problem with Mr. Hindoyan. Mr. Hindoyan has always comrpomised with our needs as well as his own.

If there is such thing as "food abuse" Gary Hindoyan would not be the successful business man that he is today.

In conclusion, if there are true complaints why don't the people complaining face the man in charge?

Sincerely,

-Cathy Fallahsafa Aristin Bean Secretaries of Gary Hindoyan

Nuke-Free World

To the Editors:

On August 6, 1985, the U.S.S.R. unilaterally stopped its testing of nuclear weapons. Since then, the U.S. has conducted over 18 nuclear tests. In fact, since 1945 the U.S. has conducted more nuclear tests - 830 - than the rest of world combined - 808. (Source: Center for Defense Information.) The Soviets will end their self-imposed testing moratorium after the first U.S. test of 1987, which is scheduled for February 5.

The alternative to continued weapons testing is a Comprehensive nuclear Test Ban (CTB), which has been the avowed goal of every president from Eisenhower to Carter. Unfortunately, the Reagan administration opposes a CTB. It gives two reasons, neither of which is valid, for this opposition:

1) Verification. This is no longer an issue. Through a scientific exchange program, the Soviets have let American scientists set up We are writing in regard of the manned seismic monitoring staletter that was written two weeks tions in the U.S.S.R., which would detect any nuclear tests. Progress is now being made in allowing the Soviets to do the same on American soil.

2) Reliability. Some argue that weapons testing is necessary to ensure that existing weapons are reliable. In fact, most testing is done on new weapons, not existing ones. The blueprints still exist for the bombs we have manufactured in the past. If we truly desire a reliable arsenal, we can simply dismantle existing old bombs and build new ones according to original specifications.

The alternative question is 'Why support a CTB?" First of all, a CTB represents the first step in halting the arms race. With the super powers no longer concentrating their efforts on building new nuclear weapon systems, they can concentrate on finding ways to reduce the existing nuclear arsenals. Secondly, a CTB will prevent the development of destabilizing new 'Third Generation' nuclear weapons such as advanced neutron bombs and hydrogen bombs desinged to concentrate their energy on small targets. Finally, if you support a CTB treaty you will be in good company. Both the Senate and the House of Representatives have passed resolutions calling for a CTB, and opinion polls show that a majority of the American public favors a test ban.

The time to stop nuclear testing is now, before the Soviets end their moratorium. It is time for the Reagan administration to 'just say no' to a continued arms race.

-Ann Terese Heil

OPINION

From the Editors

No Need For Two Elections

Two years ago it was decided to hold the elections for ASCIT president and treasurer two weeks earlier than the other officers. The split election was in effect an experiment, to see whether the transition between the incoming and outgoing elected members would be smoother.

The most obvious effect of this procedure has been to double the work of the election chairmen and to inconvenience the rest of the student body with two contests. Yet no effect on the transition has been evident-new officers have learned from the old regardless of when the

PUBLICATIONS (**) EMPIRE

Splitting the elections may give

a loser in the first contest the op-

portunity to seek another office

(note that this has affected only one

person during the trial period for

the split procedure). But this seems

scant justification either to bother

the entire campus with two elec-

tions or to stagger the new govern-

propose a single election for all the

ASCIT offices open to a general

The Board of Directors should

Outa-Dis-World

by Gumby

This is a true story.

It begins in Tokyo when the Prime Minister of Japan tells the Prime Minister of Iran that the President of the United States thanks him for Iran's assistance in obtaining the release of four hostages in Lebanon. The Prime Minister of Iran says to tell the President of the United States that Iran would be willing to get a whole plane-load of hostages out of Beirut as a gesture of good faith in exchange for all the weapons and spare-parts that Iran had bought from the U.S. before The Hostage Crisis and that have since been sitting in American warehouses. The U.S. could not do that as it was against the law. We had to do something else.

What???

Attention: Before reading further fasten your seat-belts, extinguish all smoking material, and put your seat-trays in their full upright and locked position.

figure out how to trade weapons for

hostages (something we'd never do, just ask the Western Allies) Israel says, "We've been selling weapons to the Iranians (who want to wipe Israel off the face of the earth, right after Iraq) for years. Why don't we get the U.S. to provide the weapons that we'll deliver? In exchange we'll get U.S. hostages out of Beirut and Congress will have to stop bitching at us for selling arms to Iran." Yea, that's the plan! They forgot that the U.S. and Iran don't like each other very much.

The Plot Thickens...

Enter an ex-officer in the Shah's secret police and a Saudi Arabian zillionaire. They tell the U.S. that they'll arrange the deal and finance it for a percentage of the profits. Now the U.S. had to figure how to sell weapons to Iran (which is against the law) without the proper paper end-user certificates or something (which is against the law) and not let anyone know. Robert McFarlane, of the National Security Council, remembers that he has this Lt. Col. North in the While the U.S. was trying to basement of the White House who continued on page 5

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7:30 & 10:00 p.m. \$1.50 for others

NEXT WEEK: Casino Royale

OPINION-

They Are Not Tech

by D. C. Current

There's a company around which has been selling what appears to be a bogus electric necklace. The product is called the "Pulsar Energy Crystal."

The necklace was promoted in the October 26, 1986 issue of Buffalo Magazine. This is how it supposedly works: "A solar cell in the pendant generates half a volt of electricity, positive on one side and negative on the other. This electricity is absorbed into your body via the gold-plated chain.'

The manufacturer claims that the necklace makes you feel good because "the juice neutralizes the harmful effects of positive ions in the environment," but hastens to add that "nobody has proved this," and that it's "just a theory."

That isn't what is surprising about this add, because there are lots of bogus products. So what is shocking?

The manufacturer is Cal-Tech Labs in San Diego!

Folks, these pseudo-scientists are using the Caltech™ name in vain! They have the nerve to charge \$20 for a fake product in our name!

Worst of all, they got our name wrong! Many people mistakenly write "Cal Tech," but these guys have the audacity to soil our proud name with a hyphen. Yuk!

Something, indeed anything, must be done to stop this great in-

justice (by which I mean the hyphen). If you'd like to see the ad first hand, it has been posted in front of a Lloyd room for the last

The ad brings up the question of whether these companies can legitimately use "Caltech" so misleadingly. Undoubtedly they can. During one of my phonebook-reading sessions (notice how ugly and awkward the hyphens are) I found a whole list of Caltech's. This was the Orange County white pages, and I don't doubt that there are other Caltech's in southern California.

If it were up to me, I'd organize an organization to combat this sort of thing: The Committee Against misLeading unTough and Easy Consumers unHappy (abbreviated CALTECH).

Germany

by Huy Cao

Despite his party's worst showing since 1949, Chancellor Kohl's conservative coalition won a parliamentary majority which will keep it in power four more years.

Helmut Kohl's Christian Democrats, in a coalition with the centrist Free Democrats, captured 53.4 percent of the vote and 266 of the 496 seats in the lower house of Parliament.

Nevertheless, the results were disappointing for the coalition. The Christian Democrats dropped by more than four percentage points from their showing in the 1983 elections, and opinion polls had predicted a much greater margin of

continued on page 4

Philippines Mess

by Maneesh Jain

The semi-anarchic state of the Philippines has lately deteriorated. As the military commanders under General Ramos thwarted an attempted pro-Marcos coup by rebel troops nearly all of President Aquino's cabinet joined about 15,000 militant leftists who staged a march to protest last week's killings of 19 peasant demonstrators.

The peasants' group, Farmers Movement of the Philippines demanded a sweeping program of land reforms which are necessary in the Philippines where 2% of the people own 1/4 of the land. The killing of the demonstrators has plunged the Aquino government into a deep crisis and the President personally ordered her cabinet to join the march in a shrewd move to defuse the mounting tension and

The killings, considering their unprecedented violence and bloodshed, have struck a potent blow to Aquino's image. These events have been especially injurious to her since she needs all the support she can get for Monday's coming constitutional plebiscite (to replace the constitution she scrapped last March). The coming referendum is in fact the cause of the recent unrest. Aquino's adversaries are making the best of the opportunity to tarnish her image and possibly remove her. The opposition wants to derail the charter for various reasons. Communist leaders fear that free elections and the consequent establishment of Congress

will seriously impair support for their insurgency. Similarly, right wing politicians find the prospect of the approval of the Constitution and the resultant guarantee of a six year Presidential term for Aquino unacceptable. Leftist leaders fear she might introduce new foreign elements into the government. Thus, Aquino's government is struggling to survive as it is buffeted from the left and the right.

In her ousting of former defense minister Enrile two months ago, Aquino seemed to have created maneuvering room. But now she is again in a tight spot with widespread violence and a tenuous hold on the stability of the nation. Although she is likely to secure a six year term following the plebiscite, the young leader will have to use all her prowess and wit to survive the afflictions that continue to plague her.

Beeb Free

The Soviet Union has stopped jamming the Russian-language radio transmissions of the British Broadcasting Corporation. The reason, said a Soviet spokesman, is so cultural and information exchanges can be encouraged between the two countries. A BBC spokesman welcomed the cessation of the jamming.

BBC also expressed the hope that the relaxation can be extended to BBC's Polish-language transmissions as well. The jamming was started six years ago during the rise of Poland's nowoutlawed Solidarity trade union.

Other broadcasts from America and the West will continue to be jammed because they broadcast "biased information," said the Soviet spokesman. Jamming of Western radio broadcasts began in the late 1940's.

ENTERTAINMENT

Beastie Boys Cheerfully Rude

by Peter Alfke

Licensed To Ill The Beastie Boys **Def Jam Records**

Lovely Thunder Harold Budd Editions E.G.

Are the Beastie Boys the Elvis of rap? Are they the white boys who will take a black sound and make it safe for the masses? Well, no. Run-DMC certainly didn't seem to have any trouble getting airplay this year, and only lack of money (mine) prevented their Raising Hell from making my list. There are, however, two big things

besides their race that the Beasties have that differentiate them from the rest of the rap genre. First, they are obnoxious as all hell. Arrogance has always been a part of rap, with each crew detailing their superiority over everything in existence. But it took the Beastie Boys to brag about getting thrown out of a White Castle hamburger stand. They don't take themselves seriously in the least, they're cheerfully lewd, rude and crude, a parent's nightmare, in the best tradition of rock stars. And y'know, in the midst of eloquence and social commentary, one really needs the occasional hymns to beer, girls and partying.

If that sounds like heavy metal, continued on page 4



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ENTERTAINMENT

Thriller Starts Right, Stumbles to an Ending

The Bedroom Window

Written and directed by Curtis

Starring Steve Guttenburg. Isabelle Huppert, Elizabeth McGovern

An adulterous wife sees a woman assaulted, almost strangled outside her paramour's apartment. The wife can't go to the police, so her lover, using her description of the villain, presents himself as an eyewitness. Then suspicion, doubt and violence are entangled in the thriller, which seems to work until the end.

The characters are all familiar types, so there's no need to establish motivation, and the movie can move quickly to the more important action. Steve Guttenberg plays a nice guy attracted to his boss's wife (Isabelle Huppert). Huppert is excellent as a stolid bitch and serves as a foil for Elizabeth McGovern, who plays a workingclass girl, the initial victim of the

So long as the focus is on the

action, the movie keeps a swift pace, and you may able to ignore flaws in the plot. It is harder to be forgiving at the end where the action (especially the chase scene) is drawn out and rather predictable. Also, characterization becomes more important at the end, and although Guttenberg is called a "romantic fool" at least twice, it is hard to believe that he is any more than a nice guy short on brains.

The Bedroom Window is an homage to Hitchcock, and many critics have already remarked on the play of allusions to "Suspicion," "Rear Window," "Vertigo," "Psycho," and especially "North by Northwest." The movie's end is a disappointment, however, not because Hanson fails to imitate Hitchcock, but because he does not allow his talent for a swift enjambment of scenes to continue to the conclusion. The review would not be complete without remarking on the dazzling performance of Isabel Keating.

-R.E. & G.S.

CALTECH MOVIE CALENDAR

Day	Date	Time	Class	Movie	Location
Mon.	2-2	3-5:00PM	H 161	Reed-Insurgent Mexico	Baxter Lect
Mon.	2-2	2:00рм	L 105a	The Roads of Exil (French)	not availab
Mon.	2-2	7:30рм	L 130b	Chinesisches Roulette (German)	Baxter Lect
Tue.	2-3	7:30pm	Hum 103	Lolita	125 Baxter
Thu.	2-5	9-11:00am	Psy 112	I Never Promised You a Rose Garden	25 Baxter

Year's Top Albums

by Peter Alfke

Why do it? Well, first off, because it's something hep rock critics all must do. Secondly, it gives me an excuse to review all those great albums that came out last year that I didn't get around to

But primarily, I'm listing my fave records of '86 in response to the vast numbers of people who think there's no more good music being made anymore. True, the Top 40 is shit. So are KROO's and KLOS's virtual Top 40's. Record company executives and radio programmers are steering straight down the middle of the road, delivering unto us such garbage as Lionel Richie, Mr. Mister, and Chicago.

Small wonder that most of those who aren't habitually glued to MTV or KIIS-FM have beat a shrieking retreat to the haven of "Classic Rock", a retro format consisting of just what AOR stations have been playing for the last fifteen years, with any troublesome new material excised. After a bilious glance at the Top Ten, blasts from the past like Led Zeppelin, Pink Floyd and Yes seem good indeed. Many of the groups played on KLSX were genuinely innovative in their time; trouble is, that time was 1975. Not that everything KLSX plays is old: as one deejay put it, "it doesn't have

to be old to be classic rock!" And thus is wheeled out the latest dinosaur rock and faceless pop, the likes of the "NEW" Genesis, the "NEW" E.L.P., and of course Meet-the-new-Boston-Same-asthe-old-Boston. Who says the of my faves are completely out of phase with public tastes, for which I neither damn nor praise them. Sonic Youth make exciting and powerful music that is just too noisy to appeal to many. There are other obscure bands, of which the same can be said, that I don't happen to like.

Baxter Lecture Hall not available

Baxter Lecture Hall

But there are several albums on my list that, in a perfect world, should have sold millions of

The Twelve Best Albums of 1986: (Presented In Purely Alphabetical Order)

Licensed to Ill, the Beastie Boys Lovely Thunder, Harold Budd Victorialand, Cocteau Twins Human Frailty, Hunters and Collectors Happy Head, the Mighty Lemon Drops Le Mystère des Voix Bulgares Parade, Prince Graceland, Paul Simon EVOL, Sonic Youth Manic Pop Thrill, That Petrol Emotion Giant, the Woodentops Skylarking, XTC

seventies are dead?

Nonetheless, the music scene is not stagnant. A small amount of scraping through the scum at the top of the charts will disclose a lot of excellent and innovative music. Sometimes you don't even have to scrape that hard; three of the albums on my list made it to the upper reaches of public consciousness despite being good. The rest? Some

copies. They're accessible. They're fun. They're everything rock'n'roll should be, but a handful of guys in suits think they're not what the people want. So my objective here is to bring these sounds to your attention. At least two people went out and bought the Woodentops' album because of my review; if that happens with the other albums listed here I'll be happy.

Concerts are Coming

by Pete Alfke

What's this? Nothing to do this week (other than work)? Well, you may not have noticed, but there are several concerts scheduled for the next few days, right here on campus. That's right, no excuses about transportation. They're all fairly cheap, so no excuses about money. If you miss these, it's only because you're being a sodden lump.

First, in Ramo Auditorium on Saturday night at 8:00pm, there's Tapestry. Tapestry is not just a wall hanging. Tapestry is the name of a group that combines music and drama to capture the spirit of 16th and 17th century England.

Harpsichordist Laurette Goldberg, sopranos Anna Carol Dudley and Judith Nelson, and actress Rella Lossy use dramatic scenes and music to offer a humorous look at an opulent century.

Actress Lossy, the artistic director of Tapestry, has taught, directed, choreographed and performed in radio and theater productions in the San Francisco Bay area. She creates the scripts for Tapestry, based on extensive research here and in England.

Harpsichordist Goldberg, the music director, has performed in Europe, Israel and Australia. She is head of the baroque program at the San Francisco Conservatory of Music and is on the faculty of the University of California at Berkeley.

Soprano Nelson, widely known in Europe as a leading interpreter of baroque music, is also a member of the Concerto Vocale, a record prize-winning ensemble.

Soprano Dudley, a graduate of the Oberlin Conservatory of Music, is noted for her performances of 20th century music, and has sung under the direction of some of the foremost conductors of our time.

Caltech student tickets are priced at \$7.50 in advance; rush tickets go on sale tomorrow for \$6.00 (with student I.D.; limit 2 per I.D.). Caltech faculty and staff may purchase TECHTIX for \$7.50 tomorrow from noon to 4:30pm at the Caltech Ticket Office.

So, you've already made plans for tomorrow night? A pity, but

understandable. How about next Thursday?

At 8PM on Thursday, February 5, the Tannahill Weavers will appear in Beckman Auditorium.

The Tannahill Weavers (Roy Gullane, Phile Smillie, Iain MacInnes, Ross Kennedy and Stuart Morison) combine traditional melodies on pipes and flutes with rhythms on guitar and bouzouki, resulting in what you might call Scottish folk music.

The Tannahill Weavers formed in Paisley, Scotland, and are named after the town's reknowned weaving industry and local poet Robert Tannahill. They have produced several records, including the appropriately-named The Tannahill Weavers, which won the Scotstar Award for record of the

Caltech student prices for this show are \$6.25-5.00-3.75; Caltech student rush tickets are \$6.00 on the day of the show (2 rush tickets per student I.D.).

prices are \$10.50-8.00-5.50. TECHTIX will be sold on Feb. 5 to faculty and staff from noon to 4:30 for \$6.25-5.00-3.75

Faculty and staff advance ticket

Surely you're not already book-

continued on page 7

Beasties

from page 3

you're not too far off. But the Beastie Boys are utterly devoid of the pretension and bombast that make metal basically worthless. Difference Number Two is that they do, however, use a lot of righteous power-chord guitar riffs, and both "Fight For Your Right (To Party)" and "No Sleep 'Till Brooklyn" are even mixtures of rap and metal that should warm (or is that chill?) any headbanger's heart.

And the Beasties know what they're doing when they shop for riffs-they go right to the master. namely Jimmy Page. Various Led Zeppelin guitar licks, spliced

directly from the original songs, find completely original uses here. Look especially for "Ocean" and "Custard Pie". (Those clever Beasties use only half the "Ocean" riff, inducing a "waiting for the other shoe to drop" feeling in any Zeppelinhead.) In addition, the beat to the appropriately-named "Rhymin' and Stealin' " is a tapeloop of the drum track to "When

the Levee Breaks". Not that the

Boys rummaged through nothing but Zeppelin; astute ears will notice some Clash, Creedence Clearwater Revival, the theme to "Mister Ed", and God knows what else.

There is, also, more than just metal to the Beasties' madness; other songs range from relatively pure rap ("Hold It Now, Hit It") to bouncy music-hall sexism ("Girls") to Chicano rap with horns ("Slow Ride"). continued on page 11





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OPINION

Contra-gate

from page 2

is already doing all kinds of secret (and possibly illegal) stuff. "Ollie will do it, he'll do anything!"

Ollie, Dewey, and Louie

So, Ollie and this CIA guy, Dewey, opened a bank account in Switzerland. Ollie (Field Marshal North in the Pentagon) was in finance and accounting, and Dewey was in purchasing and transport. You see, Ollie had already set up a system to move money to Nicaragua (really Honduras and Costa Rica) to support the "contra freedom fighters" (who are really Somocista ex-National guardsmen, you know, the guys who shoot American newsmen at roadblocks). The money came from the King of Saudi Arabia and the Sultan of Brunei, around 700 million dollars. You see, Congress made it illegal to give money to the contras, so the Reagan Administration had to get the money from someplace. Everybody but Ali Baba is in this story, except there are more than 40 thieves. Nobody knew about this until the arms-for-hostages deal was discovered later. Then they forgot about it.

Dewey had to get the weapons. Here's how the CIA gets weapons. Go to an Army base and whisper, "How many TOW missles you got?" The Army guy asks, "Why'd'ya wanna know?" Whisper a stern reply like, "None of you damn business!" (Remember to whisper, that's the most important part). The Army guy smiles and says, "Need-to-know, huh?" Nod your head and give a disgusted look at him. "OK, I'll have 500 TOW missles in the paper recycling bin on the corner of 12th and Euclid at midnight." That is all there is to it.

The money to pay for this came from the Saudi zillionaire and some Canadian investor friends of his.

THE PLOT

Here's how the whole scam worked.

1. Money from some Canadians and a Saudi goes to pay for weapons.

2. The CIA used this money to pay the Pentagon for the weapons. Since it was the CIA doing the purchasing they charged half price.

3. The weapons were "purchased" from U.S. Army bases in Alabama, Texas, Italy, and Turkey.

4. The weapons were flown to Portugal (?) where the Israelis picked them up and flew them on to Israel then to Iran.

5. The volume of weapons became so large the Israelis had to hire a Danish freighter to carry the arms to Iran. To cover their tracks the freighter brought pistachios back from Iran.

6. After four trips the pistachio market in Israel collapses.

7. Iran sends a check for the goods to Israel.

8. Israel sends it back and reminds the Iranians the deal was for hostages.

9. Iran gets the lunatics in Lebanon to release two hostages. 10. Iran sends money to

Switzerland. 11. The investors take their cut plus comission.

12. Since there is a large amount of money left over, because of a 200% mark-up, Ollie and Dewey (and probably Ronnie) decide to send the rest to the

13. Ollie and McFarlane go to Iran with Irish passports. They bring with them a cake shaped like a key, a promise of a Colt .45 pistol for each high-ranking Iranian (after all our armed forces now use an Italian 9 mm, and we need to do something with 70 jillion used Colt .45's), and a Bible signed by none other than Ronald Reagan. Why someone sends a Bible to a bunch of old Muslim fanatics is beyond me. I guess the Iranians are suspicious also, their intelligence (?) is examining it very closely.

14. The Iranians finally got tired of playing and "leaked" the news to a Lebanese newspaper. They then enjoyed the joke they pulled on us. We got even though. The CIA sent both Iran and Iraq spy information, but they changed it before we sent it. Bwa-ha-ha! That's a knee-slapper, ain't it?

15. The shit hit the fan.

Reagan said he didn't know. The rest of his Cabinet said he didn't know and they didn't either. Even Casey, Director of the CIA, savs he didn't know. You would think he had a brain tumor or something. This is confusing and silly. Either Reagan knew what was going on, broke the law, and lied; or he's just stupid. I've always believed he was just stupid.

If I was President I'd have a simple solution to all the world's ills. I'd write a letter.

Dear (insert world leader's name),

The United States apologizes for(insert specific problem, for example, to Chile, 'assassinating your popularly elected president and supporting a crazy general,' etc.) and would be willing to negotiate a mutually agreeable settlement. Your end of the deal is to quit causing problems. If you continue to make life difficult, I'll have my grandchildren (if there are any left) write your grandchildren and apologize for my nuking the shit out of you.

-Sincerely, blah, blah.

The first place I'd vaporize would be Beirut. I'd give the people two weeks to split and call the Russians up and tell them that they can test their anti-missle systems over Beirut if they want. I guess this is what they mean when they talk about the peaceful use of the atom.

Germany

from page 3

victory for them. By contrast, the Greens were the big gainers; although they received only 8.3 percent of the votes, that is a big increase over their 1983 result of 5.6 percent.

The Kohl Government has advocated close relations with the United States, while the Greens take an anti-NATO stance. The strong gain of the Greens will insure that sharp criticisms of American foreign policy will continue within the West German Government.

The Inside World

The Blacker Reader

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Debauchery Rampages Through Blacker House CANNES-Just last weekend, non-stop partying spread throughout the house like an epidemic. The first signs appeared on Friday night when a disgruntled Bibi Jentoft-Nilsen said in a loud voice, "I want a party." Wine coolers and mixed drinks provided by one of Blacker's bartenders were sampled by various house members, the favorites being the Midori daiquiri, various laced ice cream shakes, and what can only be termed as "the Big Stick." The Cannes party spread as other houses were drawn in onto the sleeping porch and danced to such big names as English Beat and B-52's. The drinking and dancing did not subside until early morning.

The Cannes debacle was succeeded the following evening as alumni Dave Agabra brought into the lounge cups, ice, and a keg. The Thumper syndrome quickly caught on, requiring more than one table. The tempo increased as the keg and its partakers trekked to the Fleming dining hall, attracting several beer-loving Flems. Unfortunately, not all of Fleming was pleased with the sudden intrusion, and resorted to conventional washing and showering. Fighting for their right to party, the besotted Moles et. al. returned to their lounge and killed the keg. Things for now have returned to normal, but it is only a matter of time before a wave of screaming, dancing, and getting plastered strikes

Personals Please send all 'Personals' entries to: Blacker Reader, 1201 E. California Blvd., Pasadena CA 90045. All entries become property of the Blacker Reader.

Single Hybrid Male wants to get acquainted with Caucasian females of few morals in twosies or threesies. Non-Catholic sisters are OK. Please reply with group picture

Oriental Female, 5', professional type, seeks athletic white man who doesn't ask questions. Brad Scott need not apply. Respond to Reader #12

Snow White, Where Are You? Seven lonely guys remember good times with female pal, especially at drinking parties. Please respond with symbol and second symbol to

Nerds Wanted by clinical psychology research group. No therapy or drugs; observation of subject in natural environment and forced social conditions. Must have a GPA of 3.9 or more and wear glasses. Apply with photo and transcript to Reader #239.

Call Me arex: sound psychiatric advice from Arex Wei, J.B.S.

All material sent to 'Dear arex' becomes property of Arex Wei. Submit personal problems to: Dear arex, 1-60, California Institute of Technology. Readers of the Blacker Reader acknowledge the right to print any or all submissions without fear of criminal charges or lawsuits.

Dear arex.

I have a problem. It regards my friend, Margi (not her real name). Her boyfriend, Nathan (also not a real name) seems to be showing excessive interest in me of late. Whenever we are alone together, he insists on displaying his bare bronze buttocks for me to see. What can I do to divert this unwanted attention?

-Not Gay in 5A!

Dear Not Gay, Don't be overly sensitive to this open behavior. Your friend's friend is trying to express through body language his interest to discuss things face to face. In fact, by responding in kind, you will not only impress him with the milk-white pureness of your underskin, but it will also encourage him to open up and reveal his private thoughts.

My neighbor, whom I will only identify as a penguin-toting female, "hits" on every guy she sees – several times, in fact. Ouch! What can I do to retain the use of my forearm? Not in the Mood

Dear Not in the Mood.

This is a very real problem in society. I myself can recount a situation not so long ago when my bruised biceps were the object of much attention. Number One Most Important Thing: never hit back-it encourages the enthusiastic return of many love taps, which is exactly what they are, in my expert opinion. I believe that your female friend, like mine, is an unfortunate case of deep sexual repression. By hitting her back, you are unwittingly responding positively to what she construes as a displaced sexual advance in her subconscious mind; it's no wonder your muscle feels the ache of over-abuse. The best way to stop any further aggressions is to brush aside the superficial behavior and dive into the heart of the matter. Say, "Penguin-toting female, I feel very attracted to you. Will you stop by my room for some orange juice?" Too shocked by this sudden actualization of her pent-up desires, she recoils. I could almost put my personal guarantee on this, but just in case this doesn't work or if the problem gets worse, then a 6" lead pipe casing should be equally effective.

I was riding my bike down the Pacific Coast Highway when some faggoty-ass truck driver runs me over and breaks two of my ribs and my middle finger. The mofo also trashed my wheels and scratched up the bodywork. Can you tell me where I can find replacements for heat-treated aluminum rims and an air brush, too?

Dear Live.

–Live from New York

I am glad to hear that you are OK, but heat-treated aluminum rims are outmoded -vanadium-plated chrome-moly wheels are in. Sorry, babes.

There is a big blond bruiser whose favorite activity is to terrorize helpless people by tossing machetes in the air and pretending not to catch them as they fall within an of becoming one of his juggling implements. What can I do to stop this? He's a menace to this community

Dear Concerned,

I just happen to know that the one weakness that all blond-haired muscle-brains share is a fondness for "art." This is an outlet for them to release their anxieties in; the bigger the masterpiece, the better. A simple note subtly outlining the various ways his artwork can be defaced should be more than enough leverage to get an amicable arrangement. Don't go so far as to actually vandalizing his works, though; we wouldn't want any of those delicate neurons in his brain to go 'snap,' especially while he's juggling hazardous

I have been getting deeply involved with a Boy who has a great personality and is very good-looking besides. However, he is subtly hinting that we should get more intimate. I would like to, but I don't want to seem too "easy." How long can I put him off before one of us bursts from uncontainable passions?

I can see that personal pride is getting in the way of your mutual desires. If you can't find a good compromise, maybe you can arrange a situation where a seeming "oopsie' places you and your friend in an undeniably accidental but satisfying union. For instance, you and your beau go on a picnic in the woods; when walking along the side of the lake, you trip and fall in. To rescue you, he must also jump in. The cold water excites your skin, your thin blouse clings to your body, and you are in his arms - you can take care of the rest, right? For more explicit and completely true happenings, I recommend the letters section in any issue of Penthouse.

My son spends too much time thinking about girls and not enough time doing his school work. I can tell by the way he sprints to the phone every time it rings whenever he is at home. I'm also worried that he drinks too much, doesn't get enough sleep, wastes

continued on page 6



More Inside World

his money, and spends too much time reading and writing trash articles like yours. How can I get him back on the right track so that he will be a good boy again?

Not to worry. He's probably just passing through a phase. Just continue being as supportive and understanding as you can, and always bring home-cooked meals every time you visit. And by the way, I always hit the hay before one.

Dabney: Lots of numbers, both great and terrible. Twenty-two or 6 to 1. Five hundred. (Tuesday). One and twenty. Forty-three. 60 or 5 to 1. Seventeen or 2.4 to 1. Thirty-nine to twenty. And lest we forget, seven. (A salute to the sacrifice of the seven of one and the three of twenty, humans of the stars.)

Locally, KFH and dBOB got high - 30' more than the rest - last Saturday. "A" sick Darb. Six-foot submarines holding up mountains. Bikes and Mikes and "J"s and the maze. But too few frosh?

Not this Saturday. Very few upperclassones at dinner Friday, heh heh. Lime jello and leather teddys. Now she says "Furry?" but means not—I think she's practically a snake-better watch it-that or a whale.

Hot tubs 'n' records 'n' scurves 'n' moles 'n' clean the hot tub, frosh! Lots of flakes of skin and skins of flakes and drunk belly dancers and their glasses. Every sophomore drinks in the triple. Mmm. HCl. Good stuff.

Altered states and up too lates - ("Three A.M. Start 139 yet?" "Nah.") and pH meethers (Yep. They ogle. Hike good, boo.) init(frosh)-31 hrs. (Read at lunch.)

- "A

Fleming: Here's a list of the new officers:

Prez-Catanzaro Veep-Vazquez

Secretary - Slovik

Treasurer – Damage, in a narrow victory over NO, so if you have any problems stay away from me because I don't have to be nice to you anymore.

Farsome Devia's attack on the Super Bowl didn't quite get off the ground as well as expected. But that just means that there will be impressive halftime shows during Interhouse football season.

Oh yeah, Francis called the sperm bank. Randy Brown can give! (but Bradley Scott can not). Bill Gray says, "why not get paid for something I already do for free? Congrats to Jeff Tekanic, ASCIT Dictator.

Brian Hayes is Batman.

Laura has her underwear.

Lloyd: So many people look to our column for advice each week for advice and guidance, that we decided to add a feature called "Ask the Hicks."

Dear Hicks.

Is it true that people from Nebraska are immune to chicken pox, but can spread it to others?

Not chicken pox. The rumor you are thinking of refers to corn root worm. Stay away from people from Nebraska unless you had this disease as a kid.

Dear Hicks. What is sodomy?

-A Little Girl from Indiana

Dear L.G.F.I., Ask a Flem.

I have a problem. I can't seem to get the Blacker women to stop chasing me. I run away and they chase me and I have to hide in the library. Once, one forced me to go to the Coffeehouse with her. Please help me. I don't know what to do.

This is the Inside World, not Fantasy Island, Earl:

What if you have to put out the entire stupid 256-page yearbook for wages of about fifty cents an hour? What if your roommate... says that your eyes are too round? What do you do if you're grade point average is lower than the price of gasoline?... What if you're almost broke, and your family's not doing much better? What if your car has no insurance and runs about as often as Page House hosts a CLAGS meeting?... What would you do if Warren Emery called you on the phone at least six times a day?... And if your favorite music is rap, yet you're middle-class, white, and can't breakdance?... What if you're suddenly "not absolutely" sure you've had the chicken pox?

Please give me some answers. I need them fast.

-Hep me, Hep me, I been heep-mo-tized

Take heart, things could be worse. You could be like Mr. John Haba, of Pasadena, California, who in addition to your problems also wears Run DMC t-shirts, has an annoying shoulder shrug and was born in a city where the rivers periodically catch fire.

Drink of the week is the Chicken Pox. Sprinkle 4 or 5 drops of Grenadine into a cup at Bailey's Irish Creme. Try not to scratch.

-Skeeter, Jeremiah, & Jethro

Page: Satan Visits Caltech!

"I AM THE GOD OF HELLFIRE!" he reportedly screamed to no one in particular. "When he spoke, it wasn't like a human voice," said a reliable witness. "It was like Satan

himself had risen from the depths of Hell. It was like something not of this world. "He was about twelve feet tall, with flames spewing from his face and body. When he held up his hand a great lance of fire, like from a blow torch, shot out. He was trying to disguise himself as a sleazy Italian water-polo player wearing a leather jacket, but he was doing a pretty poor job of it." said the witness. "He screamed vile, bad, evil, obscene words at my wife and woke up my kids."

This recent event could possibly explain some of the other mysterious occurrences in this neighborhood, such as a broken window, disappearing geese and house plants, loud giggling in the middle of the night, and bells and other strange noises at odd hours. There is a growing belief that Caltech students living nearby are involved in demon worship. They own at least one cat, and the neighbors report hearing strange voices. "One of them says over and over again 'I am the Black Knight! I challenge you!' Another screams hysterically at odd hours of the night 'park me! park me!' or something like that."

While, at Caltech, there have been numerous instances of flaming, frequent sightings of evil wenches (most notably in Fleming house), an occasional demonic visitation (in Blacker), and of course, the infamous mid-term from Hell, this sighting is a spectacularly unusual event. The person identified as Satan apparently left in a white car of Japanese manufacture. If you see such a car or a person fitting the above description, do not attempt to apprehend him. He is to be presumed armed and dangerous

In case you don't find Vi- I mean, Satan jumping around your driveway threatening to kill your kids and eat your geese, here are a few things to look for to amuse yourself around Page House:

•The cutest frosh butts in page: Female: Kate Loomis—look for those blue and white shorts bouncing around the

Male: Ed Ratner—the tighter the better

•Betting Pools: Talk to Steve "the Bookie" Perry about gambling your tuition away.

The Super Bowl and ASCIT presidential elections are history (poor Bruno—he's 0-2), so we have to find some new stuff to bet on, like:

•Page presidential elections: According to the latest Perry poll, your best bet for the next High Exalted Totally Severe President of Page House is Mega, followed reasonably closely by Dean, then Konstantin and Düges. and the Dwight. (only five

continued on page 10



Special LIVE Showings

BEYOND THE MECHANICAL UNIVERSE

Baxter Lecture Hall Tuesdays and Thursdays 12:30 - 1:00 PM

BEGINNING *TUESDAY*, February 3.

Open free of charge to the Caltech Community

Fellows

from page 1

faculty in 1979 as associate professor and was named professor of physics last year.

Dr. Schwarz earned his B.A. from Harvard in 1962 and his Ph.D. from the University of California in 1966. He came to Caltech as a research associate in 1972 and was appointed senior research associate in 1981. He became professor of theoretical physics in 1985.

Concerts

from page 4

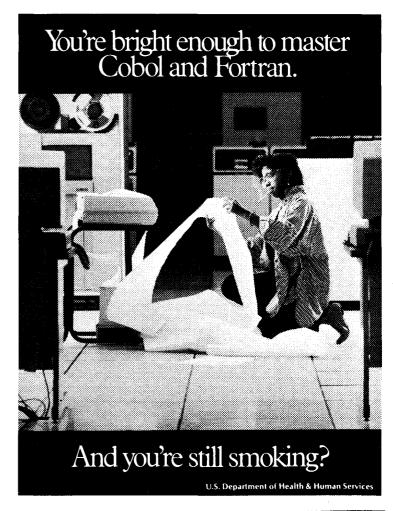
ed up for Saturday, February 7th, are you? How about making the long, arduous walk to Winnett Lounge for the Caltech Folk Music Society concert by Carla Sciaky, who performs original songs and traditional folk songs from around the world. Tickets are \$6 in advance, \$7 at the door. The concert begins at 8pm.

Tickets for all three concerts can be purchased at the Caltech Ticket Office, just north of the Beckman Auditorium parking lot. For further information, call x4652. (That's 356-4652 for those of you calling from off campus.) (Area code 818 for those calling from far off campus.)

A-Bomb Mutates Corn In Bikini Test Blast



Professors Ernest G. Anderson (left) and George W. Beadle, Chairman of the Caltech Division of Biology, inspecting a row of dwarf mutant corn on the Caltech Biology Experimental Farm at Arcadia, Calif. This dwarf is a result of mutation and is grown from progeny of seed exposed to atomic radiation at the Bikini atom bomb test.



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public events

FULL RANGE OF EVENTS THIS WEEK IN BECKMAN AND RAMO AUDITORIUMS

Tonight, don't miss "Rome and the Romans" an Armchair Adventures travel film personally narrated by Clay Francisco. This presentation begins at 8 p.m. in Beckman Auditorium.

Highlighted will be the sometimes ancient, sometimes merely old and often very new Rome. Francisco explores Rome from the legendary founders, Romulus and Remus, to a current production of Verdi's "Aida" in the Baths of Caracalla.

Tickets to this film are priced at \$7.50-6.00.

Saturday evening brings
Tapestry to Ramo Auditorium.
Beginning at 8 p.m. the curtain rises
on harpsichordist Laurette Goldberg,
sopranos Anna Carol Dudley and
Judith Nelson, and actress Rella
Lossy as they take a humorous look
at 16th and 17th century England.
Through dramatic scenes and music,
you'll see an opulent century abundent with excess, grandeur and
passion.

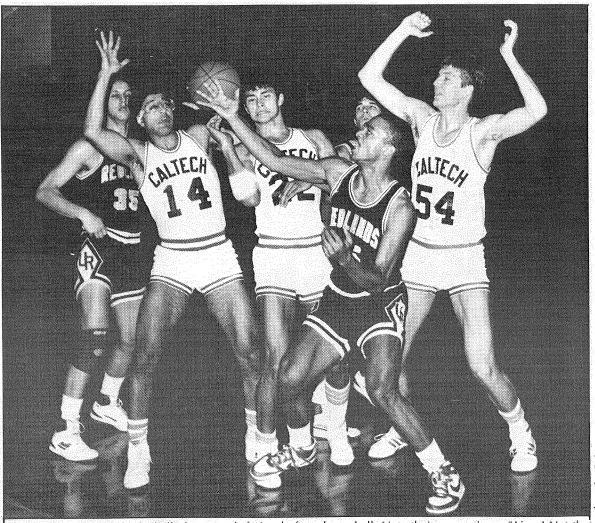
CIT students can purchase tickets to Tapestry for \$7.50; CIT student rush tickets go on sale the day of the show for only \$6.00. CIT faculty and staff tickets to Tapestry are \$13.00. TECHTIX - half price tickets for \$7.50 - go on sale today between noon and 4:30 p.m.; subject to availability and limit 2 tickets per CIT I.D.

Thursday, February 5 will be a treat for folk music lovers. Scotland's Tannahill Weavers will perform in Beckman Auditorium beginning at 8 p.m. They combine traditional melodies on pipes and flute with rhythms on guitar and bouzouki into an unforgettable evening.

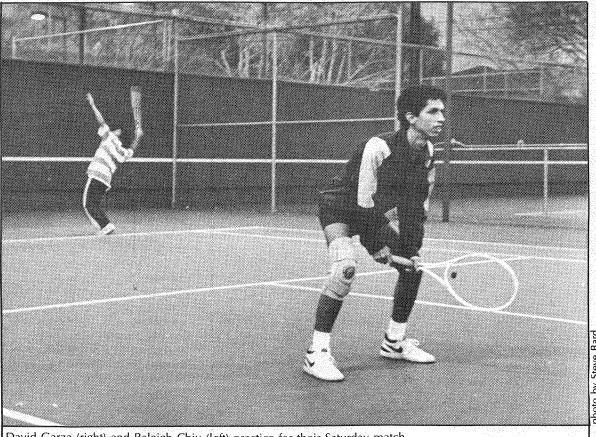
CIT student tickets to this concert are priced at \$6.25-5.00-3.75; CIT rush tickets go on sale the day of the show for \$6.00. CIT faculty and staff tickets are \$10.50-8.00-5.50. TECHTIX - half price tickets for \$6.25-5.00-3.75 - go on sale Thursday between noon and 4:30 p.m. Limit 2 tickets per CIT I.D.

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

SPORTS



Caltech and Redlands basketball players grab furiously for a loose ball. Note their expressions: "Aieee! Not the ball. Please, no, not the ball. Aram Kaloustian (#14), Bill Gustafson (#22), and Brett Bush (#54) grimace



David Garza (right) and Raleigh Chiu (left) practice for their Saturday match.

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent
Sat.	1-31	10:00am	Swimming (M/W)	Redlands & Whittier
Sat.	1-31	11:00ам	Tennis (W)	Christ College
Sat.	1-31	1:00pm	Fencing	Occidental College
Sat.	1-31	1:00рм	Tennis (M)	Faculty
Sat.	1-31	6:00рм	Basketball	Occidental JV
Sun.	2-1	3:00рм	Soccer (W)	Our Gang
Mon.	2-2	1:00pm	Golf	Best Ball Tournament
Tue.	2-3	3:00рм	Tennis (M)	Pomona-Pitzer
Wed.	2-4	3:00pm	Tennis (W)	Mt. Saint Mary's
Wed.	2-4	7:30pm	Basketball	Marymount College
Wed.	2-4	9:45PM	Ice Hockey	Cal State Northridge #2
Sat.	2-7	12 noon	Baseball	Alumni
Sat.	2-7	1:00рм	Fencing	SDSU & UCLA
Sat.	2-7	1:30рм	Tennis (M)	Christ College
Sat.	2-7	1:30pm	Tennis (W)	Whittier
Sat.	2-7	6:00pm	Basketball	Pomona-Pitzer (JV)

Location

Caltech Christ College Cal State Long Beach Caltech Occidental College Blair High School Annandale Caltech Caltech Caltech Pasadena Ice Center Caltech Caltech Caltech Whittier Pomona-Pitzer

Basketball Excitement - Redlands Game Ends Streak

by Lloyd Free

The Caltech basketball team has staged an impressive turnaround over the past few weeks, having won three of their last four contests.

They put together a three game win streak beginning on Saturday, January 17 with a home victory over Claremont-Mudd JV. Thereafter, the Beavers proceeded to roll over the JV squads of La Verne and Whittier. The main reason for this sudden string of victories can be attributed to the vast improvement in Caltech's offensive output.

Center Brett Bush and point guard Ed Zanelli have shared the majority of the team's scoring load, often combining for 40 or more points each game. Senior forward Bill Gustafson has proven to be a formidable offensive rebounder, while freshman guard Jason Karceski has become an everpresent threat as a long-range shooter.

This past Wednesday night, the Beavers took their three game streak and a red hot offense into

Caltech's gym to face Redlands JV. Unfortunately for Tech, the Redlands shooters were even hotter.

In an explosive first half, Redlands shot a blistering 65% from the field while Caltech hit an equally impressive 58%. From the free throw line, there was no letdown as Redlands went 12 for 14, and Caltech shot an incredible 11 for 12. After the dust settled, Redlands was up 49 to 42 going into the locker room at halftime.

The second half started off badly for Tech, as they picked up six fouls to Redlands zero in the opening five minutes. Despite their problems defensively, the Beavers staved within striking distance throughout most of the second half. Then, trailing by several points with about seven minutes left in the game, Brett Bush fouled out of the game on a very, very questionable charging call.

A couple minutes later, Caltech's other big man, Bill Gustafson, fouled out also. Even with an undersized lineup, Caltech mancontinued on page 9

Practice Begins For Tech Tennis Teams

by Drroagbeer

The men's and women's tennis season has begun, with a blaze and a flash. The teams began official practice at the beginning of this month, and will be playing their first matches of the season this Saturday, 31 January.

The women's team, coached by Ginny Marum, will play their first match at Christ College. The team young, mostly frosh and sophomores, and naturally Ginny is happy about that. Lack of strong attendance due to sickness (several cases) and stress fracture (one case): has been a problem, but the members are all enthusiastic about the coming season.

On Saturday, the men are taking on the infamous faculty team, made up of Caltech's hottest old racket swingers of the podiums. The faculty usually manage to eke out a victory, but last year it was the other way around, the team emerging victorious. The faculty,

continued on page 9

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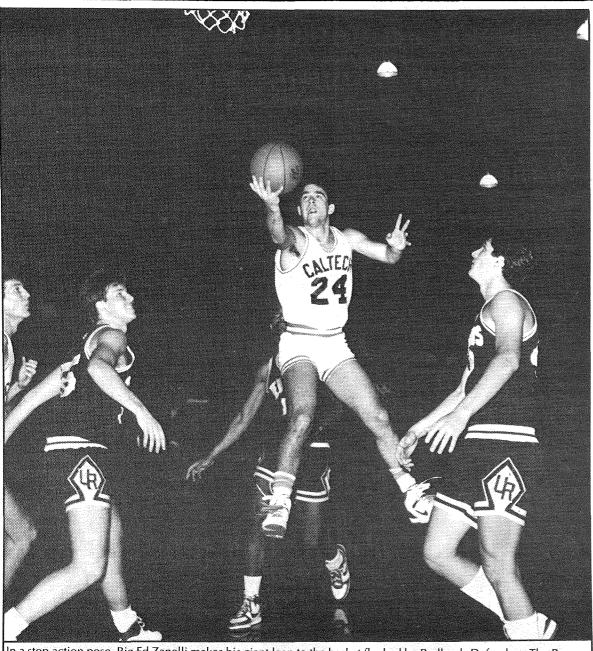
Qualified professionals are invited to contact our Corporate Personnel Office at (818) 787-7380, or send a resume in confidence to Corporate Personnel Department, XonTech, Inc., 6862 Hayvenhurst Avenue, Van Nuys, CA 91406.

> XonTech will be at the **Career Development Center** on Friday, February 13th, 1987. Sign up today for an interview!



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SPORTS



In a stop-action pose, Big Ed Zanelli makes his giant leap to the basket flanked by Redlands Defenders. The Beavers lost the game in overtime 104-95.

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Hockey Team Iced

by Jason

The hockey team's two-game winning streak came to an end Wednesday night against Cal State Northridge's Division I team.

An interesting facet of the game was that it was no-check, a new rule instituted for interdivisional games. It didn't really work out too well

The small size of the rink combined with the fact that most of the players were used to playing only full-checking hockey meant that a lot of contacts occurred and the result was a slew of penalties especially in the later stages of the game. On the other hand the new rule resulted in lots of very fast

skating and offense.

Unfortunately for Caltech, all of the offense during the early part of the game was generated by Northridge. By the time Caltech scored in the third period, CSUN already had scored five times. Lionel Laroche made the first goal, assisted by Martin Brouillette.

Martin also assisted on the next Caltech goal, scored by Jim Toth. Later, Dave Braun scored an unassisted goal. The final score was 6-3 Northridge.

This was the last game against a Division I team. Next Wednesday the Beavers host the CSUN #2 team at 9:45pm.

Ath Manager Duties

by Chris Schofield

An additional duty has been added to the responsibilities of the ASCIT Athletic Manager. In the future, the ASCIT Athletic Manager will be appointed as one of the student representatives on the Athletics and PE Committee. Currently, all of the representatives are appointed by the IHC.

In addition, it is suggested that the ASCIT Athletic Manager meet

periodically with the house athletic managers to talk about athletic needs. The reason for this change is to improve the level of communication between students and and the faculty in regards to athletics.

The current duties of the ASCIT Athletic Manager include dealing with letter awards and letter jackets. The ASCIT Athletic Manager is not a voting member of the Board of Directors.

Basketball

from page 8

aged to tighten up the score in the final minutes and even held the lead with less than a minute to play. However, both sides displayed some clutch shooting in the final minute or so, and left the score knotted at 89–89 when time expired.

Over the course of the five minute overtime, the absence of Bush and Gustafson proved to be too much for the Beavers to overcome, as Redlands pulled away to a 104-95 victory. Redlands simply dominated the boards in O.T. and drew several fouls which their excellent free throw shooters converted into points quite easily.

Leading scorers for Tech were Ed Zanelli (29 pts., 10 assists, 5 steals), Brett Bush (18 pts., 12 rebounds), and Jason Karceski (23 pts., three 3-point baskets)

Caltech's next game is Saturday, January 31 at Occidental, and you can be sure that the Beavers will be eager to get back on the winning track once again. Be there, if you can, for what promises to be another night of exciting Caltech basketball action.

Tennis

from page 8

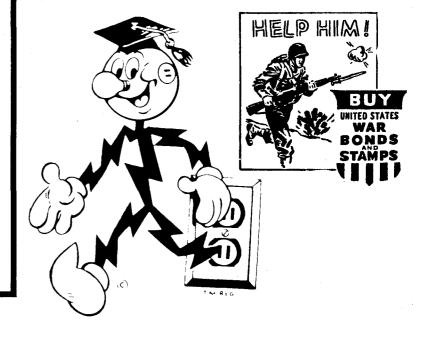
however, have the option of revenge in the classroom, so it may be better if they win on the courts.

The match should be very exciting, as coach Mike Jackson himself will be playing the number one position for the faculty. Coach Jackson is, however, less than optimistic about his chances and those of Donald Cohen, the number two player for the faculty, against the mighty Raleigh Chiu and Mark Vermies. "I think if we beat them, we will be lucky. Mark and

Raleigh are verrry good. In fact, the whole team is good this year," says Jackson.

Coach Marum also coaches at (a local high school), and Mike Jackson also teaches the tennis classes offered at Caltech, so both are quite involved in tennis, in and out of school.

The men's tennis team is quite well supported this year, and has several excellent players, most of whom are sophomores or freshmen. Both the women's and the men's teams can look forward to an exciting and hopefully rewarding season.



Disease Fellowship

The National Institute of Allergy and Infectious Diseases (NIAID) will sponsor a Summer Fellowship Program for minority and non-minority students. Students receive 6-8 weeks of biomedical research training in NIAID laboratories and are provided a training stipend. Summer fellows train in very active and highly productive research laboratories. The mentor system is used, and counseling is offered. Weekly research project(s) to peers, and specialists in their particular field of interest. Although travel will be provided by the NIAID, housing must be covered by each of the candidates from their stipend.

Nominees must have a 3.0 or higher GPA, preferably higher in their science coursework. Selection criteria shall include academic records, GPA, special achievements, recommendations from major professors and Deans, the student's letter of motivation, and curriculum vitae. Applications are due no later than March 2, 1987. For further information please call Mr. Vincent Thomas or Dr. Katherine Jaouni at (301) 496-4846 or (301) 496-1409.

Scholarships For the Blind

The National Federation for the Blind has six scholarship programs available for 1987-88. Applicants must be legally blind. Scholarships are awarded on the basis of academic excellence, service to the community, and financial need. For more information contact the Financial Aid Office, 12-63. Deadline is March 31, 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.

Summer School at Weizmann

The Weizmann Institute of Science's annual Karyn Kupcinet 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 accomodation 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.

A Term of Energetic Research

The U.S. Department of Energy announces a new Science and Engineering Research Semester for undergraduates at five National Laboratory Research Centers: Argonne National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley Laboratory, Oak Ridge National Laboratory, and Pacific Northwest Laboratory.

The new Student Research program offers challenging research opportunities at five U.S. Department of Energy laboratories. Students spend one academic term in energy-related research at the frontier of science with state-of-the-art facilities and equipment. The program emphasizes hands-on scientific and engineering investigation supplemented by educational enrichment activities including seminars, academic courses, workshops, and advanced instrumentation training. Faculty-student research teams are encouraged. Academic credit can be arranged in many cases through home institutions for the research

Student support includes a weekly stipend of up to \$175, round-trip travel reimbursement, and housing. Applicants must be U.S. citizens or permanent residents and be juniors or seniors with a GPA of at least 3.0.

Application deadlines are April 15 for the Fall 1987 program, or October 30 for the Spring 1988 program.

For detailed information and application forms, write to: Student Semester Research Program, Division of University and Industry Programs, ER 44, Office of Energy Research, U.S. Department of Energy, Washington D.C 20585.

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 accomodated 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

Italian-American \$\$\$

Undergraduate and graduate students of Italian/American background are eligible to apply for a variety of scholarships sponsored by the National Italian/American Foundation. All scholarship requirements vary from majors in science to majors in business. Scholarship amounts vary from \$250 to \$2,500. A brochure listing the scholarships and their individual requirements is available in the Financial Aid Office, 12-63. Deadline is May 15, 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, @ 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.

State Assembly Fellowships

Applications are now being accepted for participation in the California State Assembly Fellowship Program. Set to begin in August, 1987, twelve persons will be selected to work with state Assembly members and their staffs in Sacramento.

Fellows serve in the State Capitol with responsibilities equivalent to those of legislative or committee staffers. Tasks include legislation, analyzing bills, working with constituent groups, organizing press conferences and helping to develop legislative strategies. A stipend of \$1300 per month, plus health benefits, is paid for the eleven-month Fellowship year.

Minimum qualifications for selection are a BA or BS degree (by August 1987), and completion of applications along with three letters of recommendation and transcripts.

Applications and information are available in the Deans' office. Deadline for applications, letters and transcripts is February 20.

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.

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.

Summer Abroad...87

The Experiment in International Living is looking for highly qualified people to lead their Summer Abroad programs. The basic qualifications of leaders are: 1) An intimate knowledge of the language and culture of the country to which a candidate applies to lead; 2) Experience in leading, working, or living with U.S. teenagers; 3) A minimum age of 24 and the holding of a B.A. or equivalent; 4) An active interest in international understanding.
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groups of 6-15 Experimenters to more than 20 countries, instilling self-esteem, fostering the development of positive attitudes and international understanding in today's generation of young people.

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More Inside World

candidates, unless Bruno wants to go to 0-3). Elections are Friday evening during/after dinner (Scheduled starting time: 6:45). Be there. Drink lots of beer and vote. Be on the lookout for despondent former presidential candidates jumping in front of cars or falling from high buildings and such things.

•Who's Screwing Whom: And when, and where, and how many times. And when they're not (no ketchup jokes, please)

•Whip, whip, whip: How much longer will S.B. and the Whipping Boy remain an •Bitchin' Oxy Party: How many dollars worth of damage will happen to the Oxy

campus (nearest \$1000)? For those of you who like a sure thing, how many bitches will Miguel "Steve" Errea pull back to Caltech in his mobile Chevy Blazer Love Palace. •Ed the Rat: How long before Ed dies of starvation or other unnatural causes? (House social event: Viking funeral and beer party. Look out for nearly dead former presidential candidates on bathroom floors.)

•Poker: Just regular poker, in the library, at random times, for those of you who don't like to bet on completely random stuff. Talk to Steve "the Minister of Games"

•For those of you who prefer drinking to gambling, there's been talk about getting more beer, better beer, more kegs, bottling beer, and brewing our own. (Page Boy Brew-weekends were made for general anesthesia.) Talk to Steve "the Brewmeister" Perry for further information.

Coming Soon - The official House sponsored Trip to the local Applied Genetics Institute. We know you've been practicing hard (that's the only way to practice), so now's our chance to show off your talent and make some money for the house at the same time! You also get a free virility check! A free case of beer (winner's choice) goes to the guy with the highest sperm count. Find out if you can have any kids of your own. Find out if Doug Roberts has been wasting his money on all those rubbers. Be up there with the big names in Page House like John "Fists of Fury" Bowers and Fred "the Ejaculator Guy" Upton, not to mention Fred "Big Fred" Ferrante. They have videos and pictures for those guys who have a little trouble getting started. Bring your own gloves. This is a house event. Everybody comes!

-Could it be---Satan?

Ricketts: There is a plot, and it is indeed thickening. Two, three, sometimes four times in a week, the dregs of Ricketts watch its development. Some of them come to play bridge, others for the atmosphere in the lounge, and a few come just to hear Lisa screech out the theme to Star Trek. That's right, I'm talking about the Blacker invasion. It's a cheap way to get an Apache invitation, but be fair, a few have been known to help with phone night; but on the other hand, our frosh are getting tired of showering in new members. But who cares, our frosh are wimpy anyway, as the sophomores prove time and again. It looks like PCDE is going to be confusing, cause whose gonna be left in Blacker to shower Scurves? I'm sure we can count on Fleming for a fun time, though, and we can count on Page for eggs and chocolate syrup. Or nothing. Let's all go and piss on Blacker House, Piss on Blacker House,

Piss on Blacker House,

Piss on Blacker House, Let's all go and piss on Blacker House,

Till it floats away!

Don't forget frosh and pseudo-frosh, initiations are just two weeks away. Be sure and bring your clean undies!

-Shithead #1

Ruddock: Yawn!!!

-Bets the Frosh

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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.

Indoor Soccer

This week's indoor soccer game is Saturday night at 8:30. We will leave at 7:00 from in front of the Y. Call Konstantin Othmer x3976 for more info.

Summer Conservation

The Student Conservation Association (SCA) offers college students, recent graduates and other persons 18 years old or older, the opportunity, through a conservation program involving actual field experience, to develop job skills, gain work experience and cultivate professional con-

tacts in the resource management field. The SCA is presently accepting requests for applications and listings of the 700 positions that are being offered during the 1987 summer and fall season. Positions begin at varying dates throughout the summer and fall. Any person that is interested in participating or learning more about the program should send a postcard requesting an application and listing of the summer/fall RA position to: The Student Conservation, P.O. Box 550C, Charlestown, NH 03603, or telephone the SCA at (603) 826-5206/5741

Applications for summer positions should be received in March to receive the best chance at selection for top choices.

When In Rome...

"Rome and the Romans," an Armchair Adventures travel film, will be personally narrated by Clay Francisco tonight at 8PM in Beckman Auditorium.

Rome, the Eternal City, is sometimes ancient, sometimes merely old and often very new. Francisco explores Rome from the legendary founders, Romulus and Remus, to a current production of Verdi's "Aida" in the Baths of Caracalla.

Other highlights include the Piazza del Popolo, the Colosseum, the Roman Forum, Circus Maximus, Vatican City and the Sistine Chapel.

Tickets to this film are priced at \$7.50-6.00. They can be purchased at the Caltech Ticket Office, located just north of the Beckman Auditorium parking lot. Call campus extension 4652 for further information.

Money For Women

The College Women's Club of Pasadena is offering scholarships for 1987-88 to full-time undergraduate and graduate women. Scholarships are for \$2,000 and can be used for tuition/fees, textbooks, and lab fees. Applications are available from the Financial Aid Office, 12-63. Applications and requested forms must be returned to the Financial Aid Office by February 13.

Photo Editor Wanted

The *Tech* is still looking for a photo editor. Any person with darkroom experience who wants control of the photography in the newspaper should call the *Tech* office (x6154) and let us know.

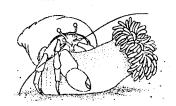
Summer Biomed Program

The Jackson Laboratory, in Bar Harbor, Maine, is sponsoring a 9-week program in various areas related to biomedical research, including biochemistry, developmental genetics, formal genetics, immunology, molecular genetics, and physiology. Each student conducts an original research project within the on-going program of a member of the research staff. The focus of the program is on research training in mammalian genetics and development using multi-disciplinary experimental approaches and genetically defined laboratory animals, primarily mice.

The cost is \$1,500 for the nine weeks, including room and board, with scholarships available for participants who require financial aid. Application due date is March 2, 1987. Program runs from June 14 to August 11. For further information call (207) 288–3371, x253, or write: The Jackson Laboratory, Training & Education Office, Bar Harbor, Maine 04609.

No Snow

Due to poor skiing conditions, the ski race for this weekend has been cancelled. There will be a meeting February 3 in Clubroom 1 at 9:00 about upcoming ski team events. Call Konstantin Othmer x3976 for more info.



Attention Writers!

The Literature Faculty is proud to announce the 41st Annual McKinney Competition. The Mary A. Earl McKinney Prize is awarded each year for excellence in writing. Only full-time students officially registered at Caltech as undergraduates are eligible to enter the competition. This year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be typewritten and doublespaced. In the poetry category, entrants may submit up to three poems. Submissions of prose fiction should not exceed 12,000 words. Essays may be ones prepared for a humanities class or any good piece of original writing on a topic relevant to the humanities. The prize in each category will be \$300.

Each student is entitled to only one entry in each category. All contestants must submit their work to Professor Jenijoy La Belle, Division of the Humanities and Social Sciences, by no later than April 30, 1987. No entries will be returned. Each category will be judged by a three person committee from the Literature faculty. Essays will be judged on the quality of thought and the effectiveness of the writing. Winners will be announced the last week of May. The names of the winners will appear in the commencement program. There will be an Awards Banquet on May 28. The Committee may divide the award in each category in case of more than one outstanding essay. Previous winners in any one category are not eligible for the competition in that

If you have any questions, contact Dr. La Belle, x3606, or Betty Hyland, x3609.

Beasties

from page 4

Licensed To III is a perfect album on some atavistic level. When you want to turn the old brain on low and your 100-watt car stereo on high, and savor some crashing beatbox and grinding guitar (with minimal squealing solos, please) tastelessly backing the in-your-face rapping of three goonish class clowns (one of whom, by the way, is a dead ringer for Steve Gómez)—then there's nothing to do but invite the Beastie Boys to your room.

* * *

The Beastie Boys to Harold Budd-a more drastic transition could not be imagined, but that's alphabetical order for you. Harold Budd doesn't even make rock music; he's a sometime associate of Brian Eno whose work falls into the nebulous category known as Ambient to some and New Age to others. Yes, we are talking about that which has been widely derided as "Yuppie Muzak". While there's a lot of mystical bullshit that goes along with some of the genre, and quite a bit of it is empty noodling, there's real validity to the idea of music meant to be appreciated on a non-intellectual level. Lovely Thunder is, typically, slowmoving, soft, and non-complex. You can't listen to it intently, but it's wonderful background music, peaceful and haunting.

Lovely Thunder is performed on piano (at times heavily processed) and synthesizer. The format of the six pieces is basically a slow background progression, almost but not quite repeating, with other instruments playing over it. None of the songs feature conventional melodies or harmonies, yet they all hang together musically. "Sandtreader" comes the closest to Brian Eno's Ambient music, consisting entirely of breathy reed tones in extremely long notes, none lasting less than a second. Like Eno's music, it feels very abstract, conveying less of a mood than the other pieces.

"Ice Floes in Eden" lays belllike electric piano on a polyphonic wash punctuaged by periodic thunder-crashes and an incongrous orchestral fanfare, mixed into the background, that provides a nice textural contrast.

"Flowered Knife Shadows" is an alternate version of a piece from a recent album on which Budd collaborated with the Cocteau Twins. Its background, by 'Twin Simon Raymonde, drones in a somehow industrial fashion, evoking machinery without being cacophonous. Over this is an improvisation in distorted, metallic piano by Budd, with the same piano sound stretched to infinity hovering in between. Unlike the rest, this song is not peaceful; the jarring piano, while not unpleasant, makes the hairs on the back of your neck stand up, and the overall feeling is like that of walking in the dark through a deserted factory with something following you.

The second side of the record (or last song on the CD; buy the CD instead) consists entirely of "Gypsy Violin", a piece for synthesized strings in which the background of lengthily sustained chords slowly glides from note to note—a rather eerie sound—while a well-simulated solo violin plays over it. Budd's playing, while very slow, is not aimless: he introduces themes and sounds, repeats and alters them subtly. It is a piece that deserves all of its twenty minutes.

Lovely Thunder is music that works on the lower levels of the mind. It should not be analyzed intellectually like classical music. It must be taken in and grokked in fullness. Neither aimless folk music nor wall of sequencers, it is a set of pure and uninhabited land-scapes through which to wander.

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Truth #5: We will be recruiting on campus **Feb 2.** See your College Placement Office for more information. If you can't see us, send your resume to: ISI Logic Corporation, Attn: College Relations, 1551 McCarthy Blvd., Milpitas, CA 95035.



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WHAT GOES

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.

Letter Jackets

An order will be put in for Caltech Letterman Jackets within the next few weeks. If you are interested in ordering a jacket, please contact Chris Schofield at 795-4760.

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 5:00рм, Monday, 2 March.

Space Group Meeting

The Caltech chapter of the Students for the Exploration and Development of Space will be meeting on Tuesday, 3 February at 7:00pm in Chibroom 1 of Winnett Student Center. Come see a space film (TBA) and discuss plans for a star party.

Chinese New Year Party

The CCSA is sponsoring a dance to celebrate the Chinese New Year this Saturday, January the 31st. The dance will start at 9:00PM at Winnett Student Center and everybody is welcome! Students from other colleges are invited, so come meet people and have lots of fun!

German Film

In conjunction with the L 132 course, the film Chinesisches Roulette (1976) will be shown on Monday, 2 February, at 7:30pm pm in Baxter Lecture Hall. The film, directed by R. W. Fassbinder, has English

Medieval/Renaissance Society

The Caltech Medieval/Tenaissance Society will by meeting this Sunday (1 February) at 3:00pm in the Y Lounge. Pot luck-please bring food.

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ANOUNCEMENTS -

INTEL CORPORATION PRESENTATION Monday, February 2, 1987, 4-5 pm. 5-6 pm social hour. Winnett Lounge. Refreshments served

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Financial Aid Packets
ALL RETURNING STUDENTS:
Financial Aid Packets for 1987-88 were mailed to your campus address the week of 4 January. If you did not receive that packet or if you need additional documents, contact the Financial Aid Office, 12-63, or call

Cold, Soft and Wet

The Caltech Y will organize a series of one-day ski trips to some local (within an hour's drive) ski grounds over the coming long weekend, Feb. 20-22. If you always wanted to learn to ski yet managed to chicken out at the last possible moment, this is the big opportunity to prove yourself! Sign up at the Y for one or more days. Beginners are especially welcome. Call for details

Gay & Lesbian Students?

Yes, they do exist; sometimes in large numbers. But it would be tough to find a larger or more diverse group of gay or lesbian undergrad and grad students than at the Western States Lesbian and Gay Students Conference, to be held at U.C. Santa Barbara, February 14-16. The conference will have workshops and speakers addressing a wide variety of social, cultural, political and health issues, as well as performances by poets and singers from within the community.

This conference provides an excellent opportunity for people who are new to, or just curious about, the Gay & Lesbian community to learn and exchange ideas in a nonthreatening environment. The cost is \$10 plus meals and transportation. Carpooling

For more information contact Ralph Wolf at x6830 or leave a message at the Y office, 218-51 Caltech. All messages will be handled confidentially

Science Fiction Club

The Caltech Science Fiction Society is off to a good start, but we need people to help shape its direction. Come to our next meeting and give us your ideas; we will also be selecting officers to run the group. The meeting will be at 7:00pm on Wednesday, 4 February, in the Y Lounge (upstairs in Winnett); there will be free munchies and soda, and we'll show the first episode of The Hitchhiker's Guide to the Galaxy." For more info, call Mark Looper at 304-0006.

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Career Info Meetings

Intel Corporation, a leading developer and manufacturer of microelectronic components and systems, will be in Winnett Lounge from 4:00-6:00рм on 2 February. Refreshments will be served.

Quaker Oats, a manufacturer of food for people and pets, is looking for BS's in Mechanical Engineering and will interview on 4 February. Students interested are invited to learn more about job opportunities on 3 February, from 4:00 to 6:00рм in Winnett Lounge.

O'Connors, an investment banking com pany, will present itself on February 3rd from 11:30AM to 1:30PM. If you are interested in business, investment banking and non-traditional technical jobs, please come for lunch to Winnett Lounge

Science and Philosophy

At 8:00pm Thursday, February 5, Rabbi Alvin J. Reines, Ph.D., a professor of philosophy at the Hebrew Union College in Cincinatti, 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.

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 to 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.

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Interested in the Stock Market?

If so, then come to a weekly meeting of the Student Investment Fund, Wednesdays, at 5:00PM, in the Millikan Board Room. The Fund is a non-profit educational club that can help students learn about the stock market by enabling them to make buy and sell decisions on stocks, bonds, and other financial instruments. We have a \$130,000 portfolio. There is also a chance for you to participate in a "Merrill Lynch Investment Challenge" by having a mock \$100,000 portfolio and making decisions yourself. Contact Wesley Boudville, x6165, for further details

Summer In Livermore

The Department of Applied Science of the University of California, Davis/Livermore and the Lawrence Livermore National Laboratory offer appointments to outstanding junior (class of '88) physics and engineering students for the Undergraduate Summer Institute on Contemporary Topics in Applied Physics.

The Summer Institute will be held August 17-28, 1987 in Livermore, California. The curriculum will consist of lectures and projects on the fundamentals of magnetic fusion, laser fusion, free electron lasers, laboratory x-ray lasers and advanc-

ed computational modeling. Selection will be based on academic record, aptitude, research interests, and the recommendations of instructors.

Travel and living expenses of the participants will be funded by the Institute. In addition, a grant from the Hertz Foundation will allow payment of a \$1,000 stipend to each participant.

Applications are available in the Deans' Office, 102 Parsons-Gates. The deadline for the receipt of applications is April 1, 1987.

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.

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,

Naval Scholarship

The American Society of Naval Engineers is offering a \$1,750 scholarship for 1987-88. To apply you must be a fulltime 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.

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

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 two or four 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.

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