Beyond the Universe

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 and a half to the beginning of third term; the third simplifies the method for splitting advertising commissions between the Business Manager and Editor of the Tech.

**Proposed Amendment #1**

**Proposed Amendment #2**

**Proposed Amendment #3**

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

The 26 episodes in the college-level 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 classrooms, short historical portraits, and computer graphics and animation to 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 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.

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 Fliss
Thur Le

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

Bylaws Changes Proposed

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. John Schwartz, who has been appointed chairman of the Division of Biology and Biological Physics.

Dr. Wasserburg has one of the world’s finest programs in geological and planetary sciences. "Beyond the Mechanical Universe," the sequel to the highly-acclaimed "The Mechanical Universe," 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.
To the Editors:

In the February 13 editorial, "Griffiths" that I've had the chance to notice in the South House gives me the impression of a warm feeling that balanced, intelligent life really does exist in the universe. Hi. In LA yet?

Hope you don't lose it.

Sincerely,

~Someone From Lab

Happy At Work

To the Editors:

We are writing in regard of the letter that was written two weeks 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 fairly and as equal as anyone else. One will never find an employer that runs a business as Gary has in the past as well as in the future.

We write this letter of Jan. 19, "Employees were in fear of losing their jobs if they complained." As employees we have a good communication problem with Mr. Hindoyan. Mr. Hindoyan has always compromised with our needs as well as his own. When he talks of things 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 Faltihafa
Artistic Bean
Secretaries of Gary Hindoyan

Nuke-Free World

To the Editors:

On August 6, 1985, the U.S.S.R. unilaterally stopped its nuclear tests. In fact, since 1945 the successful business man that he is today.

Painting and Wallcovering

as well as his own.

ways compromised with our needs

employees we have never had a

Hindoyan. Mr. Hindoyan has al-

past as well as in the future.

as well as his own. When he talks of things 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 Faltihafa
Artistic Bean
Secretaries of Gary Hindoyan

Outa-Dis-World

by Gumbey

This is a true story.

It begins in Tokyo when the Prime Minister of Japan tells 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 give a whole plane-load of hostages out of Beirut as a gesture of good faith in exchange for all the weapons and war-materials that Iran has that we'll deliver? In exchange we'll get U.S. hostages out of Beirut and Congress will have to stop bickering at us selling arms to Iran. Yes, that's the place. 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. has to figure how to sell weapons to Iran (which is against the law) and not let anyone know. We had to do something else.

What??

Attention: Before reading further fasten your seat-belts, ex-
guish your lights and put your seat-trays in their full up position. While the U.S. was trying to figure out how to trade weapons for hostages (something we'll 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 Iran) for $1 billion because we don't 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 bickering at us selling arms to Iran! Yes, that's the place. They forgot that the U.S. and Iran don't like each other very much.

THE CALIFORNIA TECH

Volume LXXXVIII • Number 15
30 January 1987

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Jens Peter Alffe • Josh Kuratze

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INTERIOR PHOTO EDITOR
Josh Kuratze

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Huy Cao • Estabith Géhrez

ANNOUNCEMENTS
Josh Kuratze

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FREE ESTIMATES
Joey Francis • Chris Menl

THE INSIDE WORLD
Baxter LECTURE HALL 7:30 p.m.

WINNER: Alex Wei

Dunby: Al Patterson

Fleming: Steve McAdams

Levitt: Tom Dabney

McKinnon: Steve McAdams

McGill: Glenn Tesler

Morgan: Mike Klein

Patterson: Mike Klein

Richardson: Sam Weaver

Ritchie: Sam Weaver

Rickey: Sam Weaver

Sanché: Brian Smith

Glenn Tesler

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PUBLICATIONS DE PUBLICATIONS DE

The plot thickens by Gumbey.
They Are Not Tech

by D. C. Current

There's a company around which has been selling what appears to be a bogus electric neck-lace. 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 worked: "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 what 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 use the name with a hyphen. Yuk!

I found a whole list of misleading, untough and easy-to-tarnish Caltech names! These guys must be doing something that requires a fundamental change in the way that Caltech operates.

Beef Free

by Huy Cao

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 now-outlawed 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 Affix

Licensed To ill The Beastie Boys Def Jam Records

Lovely Thunder

Harold Budd

Editions E.G.

Are the Beastie Boys the Elves 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 need anyone to show them how to use the occasional hymns to 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 Beasties 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 sense. ii

The Beasties are the Beasties because they are the Beasties.

Hamburgers

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Thriller Starts Right, Stumbles to an Ending

The Bedroom Window
Written & Directed by Curtis Hanson
Starring: Steve Guttenburg, Isabelle Huppert, Elizabeth McGovern

The prolific director seems a woman assaulted, almost strangled outside her paranoid apartment. The police can't get to the police, so her lover, using her description of the villain, presents himself as an eyewitness. The film's gory violence and nervousness about action and style are entangled in the new thriller, which seems to work until the end.

The characters are all familiar types, and there's no need for establishishment of motivation, and the movie can move on quite quickly to the more important action. Steve Guttenburg plays a nice guy attracted to his boss's wife (Isabelle Huppert). Huppert is excellent as a sweet bitch and serves as a foil for Elizabeth McGovern, who plays a wily, classless bitch, the initial victim of the rapist.

So long as the focus is on the action, the movie keeps a swift pace, and you may be 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, the villain becomes even more important at the end, and although Guttenburg is called a "romantic hero" at least twice, it is hard to believe that he is any more than a nice guy shots on. The Bedroom Window is an homage to Hitchcock, and many scenes are packed with a play of allusions to "Suspicion," "Rear Window," "Vertigo," "Psycho," and "Promised Land," North by Northwest. The movie's end is a disappointment, however, because Guttenburg fails to interest 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 Isabelle Keating. — R.E. & G.S.

Beasties from page 3

The Beasties are already far back. But the Beastie Boys are utterly devoid of the pretension and bombast that made people think them a "romantic fool" at least twice, it is hard to believe that he is any more than a nice guy shots on. The Bedroom Window is an homage to Hitchcock, and many scenes are packed with a play of allusions to "Suspicion," "Rear Window," "Vertigo," "Psycho," and "Promised Land," North by Northwest. The movie's end is a disappointment, however, because Guttenburg fails to interest 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 Isabelle Keating. — R.E. & G.S.

and Bob Mainieri, both "New York" living in Los Angeles. They are the baroque program at the San Francisco Conservatory of Music and are on the faculty of the University of California at Berkeley.

Sophie 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.

Sophie Nelson graduated from the Oberlin Conservatory of Music, is noted for her performance of baroque and classical music, and has sung under the direction of some of the foremost conductors of our time.

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

So, you've already made plans for tomorrow night? A pity, but because you're off the campus, you may purchase TECHTIX for $7.50 tomorrow from noon to 4:30P.M. at the Caltech Ticket Office.

Beasties

by Peter Alffe

Why do it? Well, first off, because it's something we 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 right away.

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 KROQ'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 a shot at the legendary status of classic rock. Why don't you try a shot at the legendary status of classic rock? Why? Because you're not too far off. But the albums on my list made it to the upper reaches of public consciousness despite being good. The?Some copies. They're accessible. They're fun. They're rock'n'roll. They're not just or numbers or stars, and they're not trying to be. And 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 Woodstocks' album because of my review; if that happens...
Toad want a party. Wine coolers and mixed drinks provided by one of Blacker's Gay in 5A!
The rest of his Cabinet said he accepted.

The money came from the King of Costa Rica to support the "contra" war.

You see, Congress made it illegal to give money to the Contras.

You see, Ollie had already set up Ollie, Dewey, and Louie (and possibly Ronnie) to bring in some cash.

Your head and give a disgusted look - Sincerely, blah, blah.

- Concerned Citizen

If you can't
Dear Hicks,

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.

Lloyd

---

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 out 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 flame of fire, like from a blow torch, shot out. He was trying to disguise himself as an evil shrewy Italian waiter playing the 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."

Dear Hey,

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 Poz Sprinkle 4 or 5 drops of Grenadine into a cup at Bailey's Irish Creme. Try not to scratch.

Love,

Steve, Jeremiah, & Anther

---

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Baxter Lecture Hall

Tuesday 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 Scicky, 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.)

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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 ever-present 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 stayed 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 managed to hold Redlands to 53 points.

Practice Begins For Tech Tennis Teams

by Darragbeer

The men's and women's tennis seasons have 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 is 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

WEALTHY SPORTS CALENDAR

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Sport</th>
<th>Opponent</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat.</td>
<td>1-31</td>
<td>10:00 AM</td>
<td>Swimming (M&amp;W)</td>
<td>Redlands &amp; Whittier</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>1-31</td>
<td>11:00 AM</td>
<td>Tennis (W)</td>
<td>Christ College</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>1-31</td>
<td>1:00 PM</td>
<td>Tennis (M)</td>
<td>Occidental College</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>1-31</td>
<td>1:00 PM</td>
<td>Fencing</td>
<td>Occidental JV</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>1-31</td>
<td>1:00 PM</td>
<td>Basketball</td>
<td>Occidental College</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sun.</td>
<td>2-1</td>
<td>3:00 PM</td>
<td>Soccer (W)</td>
<td>Redlands JV</td>
<td>Caltech</td>
</tr>
<tr>
<td>Tue.</td>
<td>2-3</td>
<td>1:00 PM</td>
<td>Tennis (M)</td>
<td>Occidental College</td>
<td>Occidental College</td>
</tr>
<tr>
<td>Tue.</td>
<td>2-3</td>
<td>3:00 PM</td>
<td>Tennis (W)</td>
<td>Cal State Long Beach</td>
<td>Caltech</td>
</tr>
<tr>
<td>Wed.</td>
<td>2-4</td>
<td>7:30 PM</td>
<td>Basketball</td>
<td>Mt. Saint Mary’s</td>
<td>Caltech</td>
</tr>
<tr>
<td>Wed.</td>
<td>2-4</td>
<td>9:45 PM</td>
<td>Ice Hockey</td>
<td>Marymount College</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>2-7</td>
<td>12 noon</td>
<td>Baseball</td>
<td>Cal State Northridge #2</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>2-7</td>
<td>1:00 PM</td>
<td>Fencing</td>
<td>Alumni</td>
<td>Caltech</td>
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<tr>
<td>Sat.</td>
<td>2-7</td>
<td>1:30 PM</td>
<td>Tennis (M)</td>
<td>SDSU &amp; UCLA</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>2-7</td>
<td>1:30 PM</td>
<td>Tennis (W)</td>
<td>Christ College</td>
<td>Caltech</td>
</tr>
<tr>
<td>Sat.</td>
<td>2-7</td>
<td>6:00 PM</td>
<td>Basketball</td>
<td>Pomona-Pitzer (JV)</td>
<td>Caltech</td>
</tr>
</tbody>
</table>

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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 9:45 PM.

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 BHC.

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 a non-voting member of the Board of Directors.
Disease Fellowship

The Graduate School of Allergy and Infection Diseases (GSAID) will sponsor a fellowship program for up to six minority and non-minority students. Students receive 6-8 weeks of biomedical research training in GSAID laboratories and are provided a travel allowance of $500. To apply, students should be highly motivated and enthusiastic about research. The fellowship is open to all graduate and undergraduate students. Applications are due by March 7, 1987.

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 merit and/or social service in the community, and financial need. For more information contact the Financial Aid Office, 12-63. Deadline is March 31, 1987.

Med School Money

The American Medical Association is offering 350 scholarships to students planning a career in medicine. To apply 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 Army Reserve training each year. There are no application fees in this program. This scholarship pays 100% tuition, books, and fees, and provides room and board. Applications are due by May 1, 1987. For more information contact the Financial Aid Office, 12-63.

Summer Fellowship

Summer School at Weimann

Summer School at Weimann University in Weimann, Israel, 1987. The program is designed for graduate students and focuses on different fields of science, including computer science, mathematics, and physics. Applications are due by March 15, 1987. For further information contact the Financial Aid Office, 12-63.

A Term of Energetic Research

The Department of Energy announces a Research Seminar for undergraduates at five National Laboratories. Students spend one academic term in energy-related research at the forefront of science with state-of-the-art facilities and equipment. The program emphasizes hands-on scientific and engineering interactions. All enrollment activities include seminars, academic writing, computer use, and research instrumentation training. Faculty-student research teams are encouraged. Academic credit can be arranged in many cases for mathematical and physical science research experience.

International-American $$

Undergraduate and graduate students of Italian-American background are eligible to apply for a scholarship sponsored by the National Italian-American Foundation. All scholarship requirements vary from major in science to majors in business. Scholarship amounts vary from $250 to $2,500. A brochure listing the scholarships and their requirements is available in the Financial Aid Office, 12-63. Deadline is May 15, 1987.

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 stipends and are accommodated in MIT Campus Housing in Cambridge. roommate 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 02173-6073

American Science and Engineering Students Association Fellowship Program

The American Science and Engineering Students Association announces a new Science and Engineering Students Association Fellowship Program. It is the first of its kind and is designed to provide an opportunity for minority students to participate in ongoing research. The program is available in the Financial Aid Office, 12-63. Deadline is May 15, 1987.

Engineering Scholarship

Consulting Engineers announces the 1987 Scholarship Competition for upper division undergraduates in Engineering. To be eligible, a candidate must be a junior or senior as of fall 1987, be upper of his/her engineering class, or working for a B.S. degree in Engineering, or interested in Consulting Engineering as a career, or A.U.S. citizen. Engineering students with strong acumen and character qualifications who meet the requirements are invited to obtain complete details and applications forms from the CEAC office in Sacramento by calling (916) 449-3222. Applications must be received no later than February 16, 1987.

State Assembly Fellowship

The State Assembly Fellowship is now being accepted for participation in the California State Assembly Fellowship Program. It is designed to provide an opportunity for minority students to participate in ongoing research. The program is available in the Financial Aid Office, 12-63. Deadline is May 15, 1987.
Gay & Lesbian Discussion Group

An ongoing discussion group on Gay-Lesbian topics is held every Tuesday evening from 7:30-9:45 PM at the Archibald Young Health Center. All members of the Caltech community are welcome.

Refreshments are provided. For further information please contact Bruce Katz, x2691.

Indoor Soccer

The women's indoor soccer game is Saturday night at 9:30. We will be at 7:00 from the v.  Call Konstantin Offner x9376 for more info.

Summer Conservation

The Student Conservation (SCA) offers college students, recent graduates and others interested in working outdoors, the opportunity through a conservation program involving actual field experience, to develop job skills, gain work experience and cultivate professional contacts 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 a listing of summer/fall field positions to: The Student Conservation Association, 1001 Seventeenth St., N.W., Washington, DC 20036.

Applications for summer positions are due at the SCA office (x6154) and let us know.

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 (x6150) 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, forensic genetics, immunology, molecular genetics, and physiology. Each student conducts an original research project within the ongoing program, supervised by a member of the research staff. The focus of the program is to introduce students to mammalian genetics and development using multidisciplinary experimental approaches and generally defined laboratory animals, primarily mice.

The cost is $1500 for the nine weeks, including housing, travel, and meals. Applications are available from the Financial Aid Office, 12-63. Applications and requests for financial aid must be submitted to Professor Jenijoy La Popolo, the Colosseum, the Roman Forum, Circus Maximus, Vatican City and the Sistine Chapel.

Money For Women

Applications for summer positions are due at the SCA office (x6154) and let us know.

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 (x6150) and let us know.

Attention Writers!

The Literature Faculty is proud to announce the 4th Annual McNichol Competition. The May A. and Emery K. McNichol 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 prize year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be accompanied by a double-spaced list of the entrant's name, year of birth, and the number and title of the work submitted. This list must be accompanied by an original copy of the work to be judged. The McNichol Prize is $2000, equally divided in each category. The McNichols are sponsored by the Literature faculty. Winners will be announced at the Awards Night on May 15. The Norris will be conducted by a panel of judges. Any student may enter a work to this contest. All entries must be postmarked by April 30, 1987.

Beauties from page 4

Licensed To Ill is a perfect album on some atavistic level. When you want to turn the old school sound into the new school sound, try this. The overall sound of this album is so crisp and savor some cracking beatbox and grunting questions (by the goonish class clowns (one of others. Yes, we are talking about the nebulous category known 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 nodeling, there's real validity to the idea of music meant to be digested on a non-intellectual level. Lovely Thunder is, typically, slow-moving, self and the melodies. You can't listen to it intently, but it's wonderful background music, peaceful and stirring.

Lovely Thunder is performed on pianos (at times heavily synthesiz-
ed) and synthesizers. The format of the six pieces is basically a slow background progression, almost always but not quite repeating, with other instruments playing over it. None of the sounds are traditional melodies or harmonies, yet they all hang together strongly. "Hand-reader" comes the closest to Brian Eno's Ambient music, consisting entirely of electronic sounds and sounds. Only full-time students officially registered at Caltech are eligible to enter the competition. This prize year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be accompanied by a double-spaced list of the entrant's name, year of birth, and the number and title of the work submitted. This list must be accompanied by an original copy of the work to be judged. The McNichol Prize is $2000, equally divided in each category. The McNichols are sponsored by the Literature faculty. Winners will be announced at the Awards Night on May 15. The Norris will be conducted by a panel of judges. Any student may enter a work to this contest. All entries must be postmarked by April 30, 1987.

Attractive women are every where. However, one might say we're decorated in shiny dedicated pianos.

"Ice Floes in Eden" lays bell-like electric piano on a polyphonic wash of synth and electronic thunder-crashes and an incognito orchestral fanfare, mixed into the background, not quite long noodles but a bit of it is empty noodling. "Lonely Thunder is, typically, slow-moving, self and the melodies. You can't listen to it intently, but it's wonderful background music, peaceful and stirring.

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WHAT GOES ON...

Caltech Scholarly and Technical Books
For more 10¢ & Resale Clothing...

Space Group Meeting

The Caltech chapter of the Students for the Exploration and Development of Space will be meeting on Tuesday, 3 February at 9:00PM at Winnett Student Center. Come see a space film (TBA) and discuss plans for the year.

Chinese New Year Party

The CSSA is sponsoring a dance to celebrate the Chinese New Year this Saturday, January 31st. The dance will start at 8:00PM and go until 11:00PM. Everybody is welcome! Students from other colleges and faculty members and their guests are invited to attend.

German Film

In conjunction with the 1.123 course, the Caltech Alumni Films (1970) will be shown on Monday, 2 February, at 7:30PM in the Kerckhoff Hall. The film, directed by R. W. Fassbinder, has English subtitles.

Medieval/Renaissance Society

The Caltech Medieval/Renaissance Society will have its meeting Tuesday (2 February) at 6:00PM in the Y Lounge. Pin- back buttons will be available to those who attend.

Science Fiction Club

The Caltech Science Fiction Society is a club for people who need help with their science fiction. Our next meeting is on Wednesday, February 4, at 6:00PM in the Y Lounge (top floor). There will be a discussion of the latest books and movies, and we will show the first episode of the new TV series The Hitchhiker's Guide to the Galaxy. We meet monthly, so mark your calendars.

Career Info Meetings

Instant Corporation, a leading developer of software for managing databases and office automation systems, will be in Winnett, room 2-770, on February 3rd. Refreshments will be served. Marketing departments of all sizes will be meeting on Tuesday, 3 February at 9:00-10:00AM in Winnett Lounge.

Space Group Meeting

At 1:00PM on February 4, Stephen Albon, a professor of physics at the Hebrew Union College in Cincinnati, Ohio, will be coming to Caltech to present a lecture entitled "Science and a Philosophy of Liberal Religion." The talk will be held in room 245, Y Lounge, and is open to all members of the Caltech community. For more information contact the Caltech Y.

Science and Philosophy

At 10:00AM, Thursday, February 5, Ralph Albin, J. Roten, a professor of philosophy at the Hebrew Union College in Cincinnati, Ohio, will be coming to Caltech to give a talk entitled "Science and Philosophy." The talk will be held in room 245, Y Lounge, and is open to all members of the Caltech community. For more information contact the Caltech Y.

NSF Engineering Program

A new National Science Foundation program, "Computers and Graduate Engineering," is being offered to make computer education more attractive and to improve the quality of engineering education by encouraging creative activities. This new creativity will be awarded to students who have had a year of experience in the area of research.

Approximately 30 grants per year will be awarded competitively to students, who must do full-time graduate work. Applications must be submitted by March 15th. The award will be for a maximum of $10,000 per year for up to three years. The grants will be available to students who are doing research in any field of engineering. The grants will be used to provide money for research, equipment, or student travel. The deadline for application is April 1st.

SF Applications

For more information contact Ralph Wolf at 4-3141. SF Applications will be available in the Y Lounge, 2-11. All messages will be handled confidentially.

Parian Travel

For your official and personal travel needs...

ACADEMY BARBER SHOP
27 No. Carolina, Pasadena
Open Tuesday-Friday - 8:30 A.M. - 5 P.M.
449-1681

CLASSIFIED
HELP WANTED—
EXCELLENT Income for part time home business employees. Call (213) 553-3207.

DONORS NEEDED for off-campus student
fund. For more info call (213) 553-3207.

HOUSING—
Furnished Front Bedroom one mile north of campus, every month, $150.00 additional, utilities included. $225 per month. May exchange cooking. Light housework by part or full time available. Expecting June move. Three day letter! Roberta Riley 793-8447, after 9:00PM.

SERVICES—
Learn French in easy way by an ex-
pert native Paris teacher. Recommended by lyceum universities and the French Con-
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ANNOUNCEMENTS—
INTEL CORPORATION Presentation
Monday, February 2, 1987, 4:05 pm
6:30 pm social hour, Wrenn Lounge
Nebraska Engineering Center

CALTech BOOKSTORE

tax—J. K. lasser, H & R Block, Arthur
Ext. 449-6967

HELP WANTED—
OFFICE SERVICES—
Office assistants wanted. Send written application to Office of Personnel, 218-51 Caltech.

Naval Scholarship

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

Bell Mathematics Prize

The E. T. Bell undergraduate mathematics research prize of $500 will be awarded to the best undergraduate paper written by a Caltech junior or senior. Contests will be held each year for November following the current academic year. The prize of $500 will be awarded to the contestant and act as sponsor. Each stu-
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tests nominated must submit their papers in final form to their faculty sponsors by the end of the fourth week of March. A faculty committee will then judge the papers and announce their decision before the end of third term. The committee will award multiple prizes in cases of a tie or other worthy entries. The names of the winner (or winners) will appear in the commence-
ment program.

Morgan Ward Competition

The Morgan Ward Competition is open to graduating seniors who do not wish to engage in graduate study more attractive and to improve the quality of engineering education by encouraging creative activities. This new creativity will be awarded to students who have had a year of experience in the area of research.

Approximately 30 grants per year will be awarded competitively to students, who must do full-time graduate work. Applications must be submitted by March 15th. The award will be for a maximum of $10,000 per year for up to three years. The grants will be available to students who are doing research in any field of engineering. The grants will be used to provide money for research, equipment, or student travel. The deadline for application is April 1st.

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