**EARTHQUAKE SHAKES UP CALTECH CAMPUS**

**Happy Birthday L. Terry**

*by John Fisher*

Last Thursday morning, while the Tech was being printed, Caltech received its first and only bomb scare of the week. Yours truly, being up for (immoral reasons) at 5:00 a.m., happened to pass by Winnett Student Center and found Campus Security guards, B&G trolls, and Pasadena’s finest, crawling all over the building, opening doors, crawling around on their hands and knees, peering under shelves and bookcases. Naturally, this sort of cloak and dagger intrigue captured my interest, and I investigated.

At 2:10 Thursday morning, Ken Elwell, head of the campus bookstore, received a phone call at his home from a man who said he was going to blow up the bookstore in two hours. A short time later, Lowell Peterson of Graphic Arts received a second call, in which the caller claimed that in addition to the bookstore, he was going to blow up the basements of Parkinson and Spaulding.

These two individuals were obviously kind of upset, so they made calls to the appropriate people. Ken Elwell of Security

**Tech Weathers Bomb Scare**

*by Peter Beckman*

A new chapter in the saga of building climbing opened last Friday night when Dwight Carey and Bob Durst of Rickettes House ascended Millikan Library. While others have gone down the building, this was the first time anyone had managed to climb up more than a couple of stories.

The ascent began along the south face of the section which houses the staircase, shortly after seven p.m. Using a grappling hook device which was inserted in the holes of the concrete ventilation grilles, the climbers slowly ascended the wall. After getting past the first hurdle, the long climb to the first grille, progress was steady until the top grille was reached. This was glared in and there was no way to insert the hook. Finally, a rope was lowered from the top and the climbers pulled themselves up to the roof.

Carey reached the top at 10:40 and Durst followed about a half hour later. They were greeted by a rather large reception committee of fellow Scarees, newspaper trolls, and random curiosity seekers who crowded on the small section of roof or sat nonchalantly on the cornice. Three bottles of California champagne completed the occasion.

Carey and Durst decided to climb Millikan because no one had been known to have attempted it before. The article on building climbing in the Star News spurred their interest and they decided to try Millikan before someone else beat them to it.

They planned the climb for over a month. After carefully checking the outer walls for possible routes, they built the equipment that they needed. Although the plans for the climb were semi-secret, several persons in the administration knew of the plans. They suggested that it be done at night rather than during the daylight hours. Campus Security noticed one practice for the climb but did nothing.

Although they like to climb, Durst and Carey claim it is not their favorite hobby, Carey prefers hiking and Durst likes fishing. They are members of Caltech’s currently nonexistent Alpine Club, under whose auspices the climb was made. Carey is an experienced building climber while Millikan was Durst’s first ascent.

Preparation and safety are 90% of any climb, according to Carey and Durst. Too many climbers run into trouble because they attempt a climb on the spur of the moment, ignoring even the most basic aspects of safety.

While the two are unsure of what their next climb will be, they will no doubt try Millikan again for the challenge of reaching the top completely by themselves.

**Joint Concert Planned**

*by Paul Levin*

What would you do if your bed started moving around at 6:00 a.m.? Hang on for dear life! Go to the bathroom? Go back to sleep? None of the above? Tuesday morning Southern California experienced its worst earthquake in many years. Damage in Pasadena and the surrounding areas cannot even be estimated.

The shock was so great that freeway overpasses collapsed and one water reservoir had to be drained. Pavers were buckled, fire started, plate glass windows crashed to the sidewalk, and electric power went out. One TV station in Burbank, KNBC, had to broadcast from its mobile unit because there was no power in the station.

For all its pre-eminence in the geological sciences, Caltech and its Seismological Research Lab had to take a back seat to the scientists at the University of California at Berkeley. The seismographs at Caltech’s lab are being shipped because the whole building was shaking! Apparently the quake centered in the vicinity of Newhall, at the southern end of the San Fernando Valley. Its strength was around 6 or 6.5 on the Richter scale.

Caltech did not escape damage. Throop Hall, long considered an earthquake hazard, weathered the quake as well as could be expected. Its worst damage was some cracked plaster and a broken light fixture. Other campus buildings, including the almost-new Business Services Building, suffered plaster damage.

**Preparations for West Coast Earthquakes**

*by Peter Beckman*

Continued on Page Six  

**Volume LXXII**  
Pasadena, California, Thursday, February 11, 1971  
Number 17  

**Photo by Ctein**
Gentlemen:

My birthday began last Thursday morning at approximately 2:15 a.m. when I received a call from Central Plant saying there was a threat of a bomb in the bookstore. I arrived on campus a few minutes later. My first contact was with John Fisher coming out of the photographic lab. He caught me trying to get into Louise Hood's office to use the telephone. I remained on campus until after 4:00 a.m. which supposedly was the time the bomb was to have gone off.

Thursday I was scheduled for a special hearing in Los Angeles so I left the campus at approximately 8:30 a.m. I gave testimony and was re-enrolled until after 4:30 p.m. It was around 2:30 when I arrived back on campus feeling very tired and somewhat discouraged. I almost did not stop in my office, but for some unknown reason did so anyway. When I reached my desk, your paper was open to the full-page “Happy Birthday” greeting. I cannot adequately describe what a terrible lift this gave me. It was certainly a gesture beyond my wildest imagination.

This is simply a freebie effort to say “Thank you” with my deepest and most sincere appreciation.

Terry Suber

NOTICE TO ASCIT CANDIDATES:

If you wish to have a statement published in next week's California Tech, make sure that a typed copy of your statement has been turned in to the Tech office no later than 6:00 p.m. Monday. Under no circumstances will we accept hand-written or late copy.

--The Editors

Saturday, Today's ASCIT Board of Directors meeting in the dining room of House Page to lament the scarcity of candidates for next year's election. The board, in an emergency, nominations for all offices that have at least one candidate will be open until 10:00 a.m. in the Dean's office (Winnett Student Center). As of 7:30 p.m. Today's meeting only people who had applied for all the offices up to date: Alex Seita, Steven Watkins, Robert Healey, President; Thomas Marx - Treasurer; John Fisher - Secretary; Norris Krueger - Director; Jim Henry, Life; Michael Mariani - Director at Large; P. Neches, P. Levin, P. Beckman - Tech Ed. The eight offices which now have no candidates are Vice-President, Director of Academic Affairs, Interfraternity Council Chairman, the second Director at Large, Political Analysts (Activities Committee), Athletics Chairman, Vice-Chairman, and Board of Control Secretary. Ethelmen, take note; at least one of the two offices at large must be a freshman.

George Bernard Shaw stated, "Democratic government is a form of government which insures that the people get exactly what they deserve." One of the worst forms of government proclamations for several years was to draft provokes us to be more and more vocal. Readers express to the Tech in all articles herein are strictly those opinions of the author and do not necessarily represent those of the Tech or the Tech staff.

Ira D. Moskatel

The California Tech
Thursday, February 11, 1971

ASCIT Abounds
With Offices but Candidates Are Few
by Alex Seita

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Ira D. Moskatel


**Public Vs. Private--The Chemist’s Place**

by Philip Massey

The role of the chemist in industry today is not quite what Dr. Richard Gordon spoke about to some thirty people at the Chemistry and Society Seminar, held yesterday afternoon in 22 Gates. The talk, "The Technological and Societal Revolution and the Private Sector or the Greening of Caltech and Monsanto," was centered around more questions than points.

Dr. Gordon that he conveyed greetings from an “institute of cultural shock,” a reference to a number of changes that have been made, and which are taking place, in the Monsanto Company. These changes encompass a different way today, or some of industry at least, has of looking at things—especially science.

He's All Private

He pointed out that institutes like the Monsanto Company and Caltech are all alike in some ways, important ways in his opinion. They all are private, private in the sense that they have no tax base, their continued existence is not guaranteed, and they all have to do something for someone: they have obligations to certain individuals. Among these similarities is the fact that it is as easy for a scientist to get a job in industry now as it is for him to get a job here.

As it was in the beginning....

Gordon pointed out that until the Second World War the differences between "modern chemistry" and alchemy were existent only in the minds of chemists. DuPont was about the only company that actually supported fundamental research, i.e., a person rather than a project. This question of research as opposed to applied science is one that has plagued the scientist since Pasteur. What Gordon says is happening now, what he and his people are trying to do, is not to try to look for a distinction that may or may not be there. He stated that the constant reaction he got from his friends in the academic world was that he and other scientists who work in industry have "sold out," that they are willing to produce to meet the market. He argues that this just is not so, that the people in industry are in a position to do something about tomorrow.

A Matter of Belief

Industries are not monolithic, he continued, but collections of individuals. Some of them do care about the insane things men do to themselves and others. Some are still concerned with making a better toothpaste. Yet, the purpose of the scientist in industry is to understand, the same as that in an academic environment. The difference may lie in that one is in a position to help shape the tomorrow and the other is not.

Gordon asked questions more than actually lecturing. What should an institute, be it an industrial or academic decide it will and will not do? How much are industries responsible to the public well being and how much to themselves? Gordon argues that by serving people the industry will survive; if it doesn't, then it won't survive.

Carter Encounters Caltech Sunday

by E. Gansner

The composer's composer, Elliott Carter, will be on campus this Sunday, February 14, as part of the Encounters Contemporary Music Series. Carter, who has just been named winner of the Gold Medal for Music by the National Institute for Arts and Letters, will take part in an open seminar and a lecture in Beckman. The evening will conclude with a performance of Carter's two string quartets by the Composers String Quartet.

The seminar will begin at 4 in the afternoon in Winnett Lounge. Carter will discuss his works and talk about the development of modern music from his viewpoint. Then, at 7, he will give a free lecture in Beckman concerning his music and, in particular, his string quartets, Nos. 1 and 2, that evening's program. The concert itself will begin at 8 p.m. in Beckman, where the Composers String Quartet will take over, playing the two lauded quartets.

Wann's Guggenheim a Radiation? Carter is one of the most

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**CAMPUS INTERVIEWS:**

February 26, 1971

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**THE MORE... THE MERRIER?**

**Declare A Tax On People**

by Malcolm Handte

As Harrison Brown graphically illustrated Monday night, the Earth's ability to support many more humans than already inhabit it is of little solace to societies which find the problems of only two or four billion people almost insurmountable.

The circumstances which today threaten the future of civilization, and possibly the species as a whole, are perhaps unprecedented. Among them are: staggeringly expensive and fearfully dangerous military rivalries; systemic, societal and personal psychological breakdowns under the impact of ever more rapidly evolving technologies; and an increasing awareness of and dissatisfaction with patterns of wealth distribution, both in this country and in the world.

Since each of those problems would inevitably be aggravated, perhaps beyond all hope of solution, but further numerical expansion, the conclusion that the world-wide rate of population growth must be drastically reduced as a major first step towards safeguarding the future of mankind is easily arrived at.

Unfortunately the means by which that goal can be accomplished with a minimum of unfavorable economic and social disruption has yet to be clearly enunciated by the theorists, let alone adopted by the frequently myopic governmental agencies, or accepted by stubborn, traditional, and often superstitious peoples.

A Modest Proposal

If we are to play the game according to the normal rules, then the decision to limit personal rate of reproduction must be uncoerced. It could however be influenced by economic incentives such as a tax on people which could be justified on the basis that the part of the environmental impact of a person's existence that cannot be compensated for by other means such as taxes on garbage generated or energy used and which would mainly correspond to the air

Continued on Page Six
Elvin Jones, Englund Productions, Zachariah, John Rubinstein, Pat Quinn, Don Johnson, among others.

**Earth Day Meeting this Sunday**

There will be a meeting in the CEAC office this Sunday at 7:00 to discuss Earth Day. Anyone interested is welcome to attend.

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**The Critical Ear**

Earlier works. All of the songs were written by Greenbaum himself. It is obvious since no songwriter could survive writing that kind of music alone.

Moving Fingertips Moving Finger could have easily been created as a rock opera of the life of a woman. As a rock opera it would have easily surpassed the quality of Tommy by The Who. Moving Fingertips contains one of the best collections of songs ever gathered on various aspects of life. In each of these songs one can picture the characters acting out their parts in the songs. This album is a worthwhile addition to anyone's word collection.

**Truck Tracks**

Truck Tracks is a group that sounds similar to early Steppenwolf and Led Zeppelin. The music itself has a marked resemblance to that of Led Zeppelin but their rhythm and style are all of their own. Although their music hits you hard initially, Truck Tracks lack the talent of interest. If you lean how to vary the rhythm and beat in their songs, then Truck Tracks will be a group to watch in the future.

**Life by Sly and The Family Stone**

This is a great album by one of the finest groups of our time. Their combination of hard rock with just the right touch of soul has created a musical masterpiece. “Life” can live on as the staple of the evening or parties. The last time I saw Sly was at the Forum over a year ago: they had the entire audience actually dancing in the aisles.

This album brings out this same same type of group. Perhaps the best recommendation that I can make as to the purchase of the album is that eight of my friends have heard it and six of them have asked to borrow it.
The 1971 Capri from Lincoln-Mercury beat everybody.

It was named "Import Car of the Year" for 1971 by "Road Test" magazine.

Here are just a few of the things they had to say about the Capri.

"All of our staff had heavy exposure to the car during the months just passed, along with dozens of other imports, but despite this varied experience, our choice was unanimous."

"...in some years it's difficult to pick a single one that's outstanding. That was not the case this time."

"Remember that theoretically, Rolls Royce was just as much in contention for this award."

"To find a match for the car's roadability, you have to compare it with something much more expensive such as a Porsche 914 or a Datsun 240Z."

"Now...available as an option the spanking new 100 horsepower, overhead-cam four...and that extra cost isn't much...$50 surcharge for the optional power. What you get for that modest sum is a Capri that will do zero to 60 mph in 11.8 seconds...without sacrificing much if any of the 24.5 mpg economy served up by the standard model."

"...the Capri corners like a Siamese cat on sandpaper."

"The four-speed gearbox with its fully enclosed 'rail' shift linkage stems directly from the LeMans-winning GT40 Fords."

"No car at any price except the rare few that are equipped with genuine ZF boxes can compare for shifting ease with the Capri's so-called 'rail-linkage' in the standard four-speed box."

"...options include a three-speed automatic transmission..."

"Another surprising feature on a modest-cost, volume-produced engine (100 hp) is the use of twin-venturi Weber carburetion. Though probably not the same design, the six Weber 2V's used on the 12-cylinder Lamborghini cost $1,800 to replace."

"The Capri...represents a remarkable bargain...it offers outstanding value at any reasonable price—say, even $2,900 in standard form...would be a good buy with just normal handling characteristics."

"There's not much fault that can be found with the Capri, a tangible that caused us to choose it as our Import Car of the Year for 1971."

Unquote.

The Capri. Under $2,500 mfrs. suggested retail price. See your Lincoln-Mercury dealer for his price.
Bomb Threat Proves Empty

Continued from Page One

showed up looking for a full coffeepot and L. Terry Suber, Chief of the infamous B&G Syndicate, was woken up, as were his lieutenants - (one claimed to have made it from Burbank in 15 minutes). Most of them almost had their eyes open by the time they arrived. A unit of the Pasadena Police was called in for consultation: he arrived at the brilliant conclusion that the buildings should be searched and called for more units. Before long there were five white cars with funny lights on top parked on Greasy Street.

A search of Winnett flushed out nothing but a darkroom troll, and results were similar in the other two buildings involved. Although it was becoming obvious by this time that the threat was a hoax, all utilities except electricity were shut off as a precautionary measure. Ken Charles was heard to remark that it was just a sadistic plot to get him up at 2 o'clock in the morning. More seriously, since Suber was due to testify elsewhere in this issue), the possibility that the threat was planned to wear him down before his rough day ahead is more likely.

Suber praised the way the whole situation was handled, with the right people being called in immediately without panic or excess commotion. As no big bangs occurred, operations were shut down at around 3:00; Suber and his lieutenants went home. Charles went off to prepare his reports, the Pasadena Police went back to watch the massage parlors, and I went to bed before my 8:00. (yawn)

Tax People. . . . . . .

Continued from Page Three

Continued from Page One

Freshmen chemistry lab sections in Gates were canceled, and the building declared off-limits, when it was found that several reagent bottles had fallen from the shelves, producing some rather noxious fumes. A section of air conditioning duct was hanging from the ceiling; the other sections were on the floor along with the rubble. Workers in Noyes went in wearing gas masks.

Millikan Library was put out of commission. One custodian claims that he heard an elevator fail to the basement level. Also, a crack developed over the entire length of the stairwell though nothing dire came of it. Many books were shaken from the shelves, and the shelves themselves were distorted. One librarian said it would be at least a month before things would be back to normal. As things stand the library is closed above the first floor, and the building itself will be open weekdays until 5:00 p.m.

A water main supplying Caltech from the graduated income tax system, which, with its personal exemptions is very probably a reversal of the recent trend towards higher reproduction rates among lower socio-economic groups. The consequent shift of children into higher S/E-Cs would lead to a better educated and generally more valuable generation.

All of Brown's Horses
And All of Brown's Men Couldn't.

Continued from Page One

For the second time this term people had to be turned away from a Monday night Beckman lecture. Prof. Harrison Brown's talk on "The Limits of Growth: How Many People Can the Earth Support?" created such interest that over 150 people stood on Beckman Mall to listen to the talk loudspeakers after the auditorium had filled completely.

Professor Brown began by saying, "The earth can support many more people than you or I would care to be associated with," and then proceeded to prove his point. The largest absolute limit of population is 333 billion people. Of course, this figure is nonsense; it is based on the solution of all problems that man would encounter; meanwhile, man cannot cope with the problems created by today's population.

Currently, there are 3.5 billion persons on earth, and their problems seem too large to be coped with. One billion are affluent and getting richer, while 2.5 billion people are mired in poverty.

Rich Man

On the surface, the rich have it made. They consume more than anyone else; using, for example, 25 times more steel per capita than the poor. But the problems of nationalism, growth, technology, and pollution could destroy this prosperity.

Too much of the resources of the rich nations go to support their military establishments, so that they can be protected from each other. The per capita consumption of materials is increasing in these countries at a tremendous rate. This is accomplished partially by using the resources of the poorer nations.

The very technological foundation which created the great affluence is vulnerable. The huge, interconnected network of industry, transportation, distribution, and communications can be halted by the failure of a single component.

Finally, there is technology's stepchild: pollution. This problem can be solved technologically, but it will not be until it is solved politically and socially. In other words, it will continue until the people and the government find the will to stop it.

Poor Man

In contrast to the numerous problems of the affluent nations the poor countries have only one major problem, but it transcends all others. Their tremendous growth rates swallow any progress that they are able to achieve, and until the people of these countries are motivated to lower the growth rates, they will be unable to lift themselves to a more affluent level.

With all these problems, Prof. Brown remains optimistic about the future, but he thinks the problems are soluble if mankind has the will.

If mankind could solve all its problems, what would be the limit of growth? Historically, the first limit was reached in prehistory when the human population reached ten million. At this point the earth could support no more people who lived by hunting and foodgathering. The discovery of agriculture changed this situation drastically by increasing food production potential by several orders of magnitude. It also produced enough surplus food to allow 10% of the population to subsist on non-food sources.

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Behold!

by Bergthorne

The recent seismographic disturbance has prompted many discussions of probable causes for these events. Speculation centers around the pressure gradient of the San Gabriel fault. All such speculation is, however, mostly shallow and specious in light of recent analysis of seismographical and seismological research, which has produced a considerably more substantial argument. It would seem from these studies that Man-The, the Moon God, angered by the attack by Thwel-Mel, the Earth Creature, with his funny little rocket, decided to retaliate by causing the Universal seismographical and selenographic circumstances to be even more substantial.

And finally the moon eclipsed, then the earth quaked, and the tone of the meet soon changed, however, as a Claremont swimmer qualified for the nationals by swimming the 100-yard freestyle in 10:33.4, leaving Bob Harmon and Bob Kieckhefer far in the wake. The only Caltech swimmer to place better than third for the rest of the meet was Bob Coleman, who won the 200-yard individual medley by a hand's length and the 200-yard butterfly by a more comfortable margin.

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333 Billion! More People Than You’d Want

Continued from Page Six

live without having to farm.

The ultimate limit of this peasant-village system would have been five billion people but it was still very far off when the industrial revolution began to create today’s technological society. Using this technology, the limit of 15 billion people is set.

Continuing set at about four times the present crop acreage, could be cultivated. This would involve large scale irrigation and extensive use of fertilizers and hybrid strain.

With these advantages 30 billion

persons could be supported on a west European style diet or 100 billion people could be supported on a Japanese style diet. Fortunately, the energy required to make these changes would deplete the world’s supply of fossil supplies in only a few years.

But man can use the practically inexhaustible supply of nuclear energy. Using this to create synthetic foods it has been esti­mated that the earth could support 333 billion people. This would give an average density of 6,000 people per square mile over the surface of the earth. Beyond this limit, the energy output necessary would raise the earth’s mean temperature too much.

All these speculations are un­true according to Professor Brown. They completely ignore those prob­lems that mankind has been unable to solve, but instead substitute limits based on the best of all possible worlds. **

Next Monday at 8:30 P.M. Professor J. R. Jokipi will speak at Beckman Auditorium on “The Life History of a Cosmic Ray.”

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**Note:**

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### THE CALIFORNIA TECH

Thursday, February 11, 1971

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1758 E. Colorado

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Special Daytime Offer for Caltech students, faculty, alumni and employees over the age of 21.

Good from 12 noon to 3 p.m.

sandwich and beer for $1.00 (Your choice of eight sandwiches)

Upon presentation of Caltech ID.

PLUS TOP EVENING ENTERTAINMENT!

SUNDAY — Love Dance with Jicky and Bobby

MONDAY — All amateur talent show

TUESDAY — Toni Felice

WEDNESDAY — New show—Adrienne’s Space Odyssey Show

THURSDAY — Adrienne in the Vibrating Bed Show

FRIDAY — Lunch—New male & female nude dance

NEW act—Safely, the Complete Sex Symbol, a 402 lb. bottomless dancer

SATURDAY — Toni Felice in her Lilly St. Cyr Bath tub Act

Cover charge reduces to $0.50 from 7 p.m. to 12 midnight with Caltech student, faculty, alumni, or employee identification card.

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### ASCIT

Continued from Page Two

18th issue, the day before the election on Friday, February 19th.

The deadline for such statements is 5:00 p.m. Monday, February 15, in the California Tech office, and statements are to be type-written and double-spaced.

Candidates will visit each of the seven houses starting tonight in order to acquaint themselves with the student body.

Last Week

Illuminating conflicting schedules, and fatigue prevented the majority of the Board from attending last week’s meeting. But even without a quorum, Barker, Fisher, LaGrove, and Seida conducted business which was later ratified through a phone vote with the absent directors.

The financial plight of the annual Political-Military Exercise was removed with a $167 grant from ASCIT allowing free participation in PME for the Caltech Community. In addition, a grant of $100 was given to the Caltech Environmental Action Committee (CEAC) for part of the preparation costs for the second annual Earth Day at Caltech. The first celebration sponsored by CEAC brought extravagance and elegance to the campus last April 22.

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### THE CALIFORNIA TECH

February 11, 1971

### THE SMART SET

Presented by Entertainment & Atmosphere

Designed for Caltech Clients

with Richard & Pepe on Stage

Cocktails — Dancing — & Games People Play

953 E. Colorado Blvd.

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RESERVATIONS 449-8391

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### EUROCUTS

- Student travel discounts
- Official SOFA agent for over 2000 inter-European student charter flights
- 2 month student Eurailpass $125
- California Tech
- EUROPE
- double-spaced, per extra line
- Hayes 20d
- 3 weeks camping in Russia and Czechoslovakia $156
- 5 weeks camping in Spain, Portugal, and Morocco $230
- DEAN
- International student 10 card to:
- Coming Feb. 11
- houses starting tonight in
- from 7 p.m. to 12 midnight with
- the student body.

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### HI LIFE

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