Maynes On U.S-Soviet Relations

by Chris Meis

Charles William Maynes, editor of Foreign Policy magazine and nationally syndicated columnist, spoke on U.S.-Soviet relations in Baxter Lecture Hall, Wednesday.

Maynes gave a detailed history of contact between the two super-powers, from the first treaties through the Alaska land sale to current nuclear detente.

In the prepared talk, Maynes cited demographic differences that separate the two nations. Furthermore, demographic changes such as the rapidly increasing dependency rate of the U.S. continue to erode the military of improved Soviet relations. The dependency rate, which will reach over 50 in the next century, will make it almost impossible for the U.S. with the Soviet Union to sustain its projected defense spending.

Later, Maynes outlined problems that currently hamper improved relations with Russia. "American diplomacy must rest on analysis, not fear," Maynes said. He added that "confusion in the land about our relation to the Soviet Union" must end.

Maynes concluded saying, "there seems likely to be a vigorous attempt to improve relations.

The talk was sponsored by the Caltech Y as part of its Friends Dinner.

Students Fly Space Shuttle Experiments

by Julian West

This serial first appeared in the Vancouver Province.

The recent successful retrieval of errant communications satellites once again focused attention on the American space program. But one group of techers is doing more than just talking about the space effort. They're part of it.

Some undergraduates are getting a chance to put their training to good use, through engineering to the test—by conceiving, designing and building and launching "getaway specials" built and flown in the Space Shuttle.

The payloads are built to fit into desktop-sized packages called "getaway specials" because they are an inexpensive way of getting into space. $10,000 a shot may not sound cheap, but it's a tiny fraction of the multi-million dollar cost of launching a communications satellite.

One group, which is called the Student Space Organization (SSO), already has one "getaway special" built and ready for launch. It contains two experiments: one to test the feasibility of making exotic alloys in space, and one to study the effects of reduced gravity on the growth of plants.

Matt Crandall, a second-year student majoring in physics, is demonstrating the payload. At first glance, it looks complicated, but one soon learns to pick out familiar elements.

For instance, what is a Nikon camera doing in there? Well, since the experiment will fit into space sealed up tightly in a metal cylinder, the students need some way of recording their results. Hence, the camera will take photographs of the experiment every half-hour to indicate its progress over time.

Since the experiment could run for a couple of days, that amounts to a lot of photographs. That explains the huge film reel attached to either side of the camera, which they have specially modified to fit 475 exposures of 35mm film.

Directly in front of the camera lens is the experiment itself—four small plastic cells containing mixtures of oil and water. One cell will contain an equal ratio of oil to water. One will be 90% oil, and another will be 90% water. The fourth is reserved for advanced testing of a future experiment.

At the beginning of the experiment, the mixtures will be stirred using a magnetic stirrer. Then they will be photographed over time.

On earth, oil and water separate because of their different densities. In the absence of earth's gravity, that will not happen, but droplets are expected to form because of the effects of surface tension.

This experiment has direct application to a very real question in engineering: will it be possible to make alloys of metals in space which could not be made on earth because of the different densities of the metals?

The students decided to use oil and water to simulate metals for two reasons. First, they are transparent, and so can be photographed, while metals cannot. Second, they are liquids at room temperature, and while it is cold in space, the electronics of the experiment are expected to generate a lot of heat.

Another good reason for having the payload at room temperature is the second experiment it contains. That one will germinate radish seeds in an attempt to discover how their response to gravity works.

The seeds will be grown in water and in the dark, on a series of aluminum disks which are rotating at different rates. The disks will provide a centrifugal force on the plants. This is the same force you feel when you whirl a heavy object on a string about your head. In effect, it will provide an "artificial gravity" on a very small scale.

The radish seeds will be grown at gravities ranging from one-thousandth to one-thousandth of normal earth gravity. They will be examined for evidence of response to gravity.

Then individual cells will be examined under an electron microscope. This will test the theory that it is the movement of tiny structures, called amyloplasts, in the cells which enables the plants to detect which way is up.

If the plants begin to grow in a preferred direction just when there is enough gravity to draw the amyloplasts to the bottoms of the cells, then the group will have settled an interesting biological question.

This knowledge may eventually be important in developing one or more of the undergrad off-campus houses would be converted into housing for married grad students, which is currently in very short supply.

Under this plan, some modification of the grad house would probably be needed, since undergrads typically seem to require far more kitchen space than grads. One room of the grad house would probably be converted into an extra kitchen, to supplement the one already existing in each grad house.

Another possibility is to use one or more floors of a grad house as women-only housing, since the annex is currently the only type of segregated housing at Caltech. Dr. Brennen stressed that there are no definitive plans yet as to what course of action will be taken, but that some sort of mixed grad and undergrad housing is definitely planned, and ideas are being solicited.

Students Fly Space Shuttle Experiments

by John Beahan

The Master of Student Houses, Chris Brennen, working in conjunction with the Graduate Housing Office, is currently examining proposals for a group off-campus housing facility which would contain both graduate and undergraduate students.

This possibility has arisen, explained Dr. Brennen, because of the reduced need for single grad student housing, which resulted from the completion of the Catalina grad housing complex. There are a number of different possibilities for the form this housing would take, and the Master is currently seeking input from both grads and undergrads concerning their preferences and evaluations.

One of the proposals being looked at is to open a graduate house to undergrad occupancy. To conserve the number of grad and undergrad spaces,
There’s Ain’t No Such Thing As A Free Truth, Either

To the Editor:

It is a sign of the times that Caltech’s emblem no longer bears the motto “The Truth Shall既 be Told.” It may only have been the print which recently disappeared, but the spirit is also gone. Nothing better than the attitude of President Goldberger towards the Caltech community illustrates this.

For those of us who had forgotten his behavior in the Arrowhead Center controversy, the news of the closing of Baxter Art Gallery has refreshed our memories. Yet if the intrigue and secrecy which clouded the first affair were dispelled and thus allowed for decent solution, little light has yet been cast on the closing of the Art Gallery and no solution has been arrived at except for President Goldberger’s final solution.

Too few questions have been asked; too many lies have been told. To have a public debate has been but a weak reflection of the concern, resentment and anger which the community feels. Some have minced their words; I will weigh mine.

It is not true that Baxter Art Gallery was closed for financial reasons; little funding came from the Institute and very little could have been obtained from other sources. It is not true that Marvin Goldberger consulted with anyone (except perhaps his wife?) he encountered, he has confronted everyone with a fait accompli. It is not true that Baxter Art Gallery contributed little to the life of the Caltech community; its exhibits were a source of great enjoyment for many and even those who were indifferent to its appeal recognized the gallery as a good instrument for public relations.

What is true is that there never was an official public announcement or reasonable explanation for the closing (the community was informed through the Los Angeles Times).

Furthermore the timing for this action, coinciding with summer recess, seemed deliberately designed to limit public debate. Indeed, the administration did not want any “irresponsible” letters to be sent to a representative to explain its decision to a concerned group of students who gathered last summer to discuss the problem. The articles and letters which have since appeared in The California Tech have been useful in raising the level of awareness, yet they have not provided all valid answers or explanations.

Rumours spawned by the uncertainty and confusion aside, the President’s motives are now shifting from the fanciful to the real. The motives for the action are the unhealthy substitutes for the truth. It is time for President Goldberger to justify or better yet to rectify his action.

—Louis Godbout

Senior

ASCIT Actions

To the Editor:

I would like to clarify some financial points made in K. A. Thompson’s letter. First, not a single penny of the students’ money is being used to pay for the ice machines or the copier lease. It was simply a good idea that we came up with and pursued. Contrary to Mr. Thompson’s implications, we did not just arbitrarily decide to implement it. The IHC (i.e. house presidents) were asked to discuss it with members of their houses and they agreed that they were good ideas. Next, funding was discussed. If people were not interested and copiers were expensive, we continued on page 3
ASCIT Actions

Copy and Ice Machines Paid By Outside Funding - ASCIT

from page 1

are quite aware of the fact that we are being entrusted with students' money. That's why we spent a lot of time and energy looking for outside funding from the Housing office, President, Alumni Association, and Development. Due to our efforts and the generosity of the above-named sources, the copier lease and the ice machines will be provided at no cost to the students (and, I might add, higher quality than the copier currently available for 24-hour use). Similar efforts are being made to fund the ASCIT van.

Second, the WATS line. When I came into office, two years ago, the damage had already been done. Although it is not true that the BOD actually does the billing, I agree that some not insignificant amount of irresponsibility on the part of the previous BOD and the WATS Line Director was involved. This is why we then decided, without the help of Mr. Tuckman, that the responsibility for the billing should not be placed in the hands of one student, and that the software should include an ID check. Two years ago, the WATS line bill was $27,000. The first thing we did was try to do the 1 1/2 years worth of billing that was overdue. We negotiated with the Institute to remove the thousands of dollars worth of interest that had been accruing, turned off the WATS line, and made plans for a more fail-safe system. The system is only now coming into effect due to reluctance on the part of the Institute to take over the billing and difficulty of obtaining appropriate software.

Third, it is true that, at this point in time, The California Tech is financially independent. However, this independence is affected by the competence of the editors and business managers who change every year. The California Tech has, in the past, as has every student publication, had to come to us for loan financing in times of difficulty. The point I was trying to make in my letter was only that we spend a great percentage of our time just making sure that all the clubs and publications have as much financial support as possible, not all of which comes from student dues, as mentioned before.

Lastly, I'd just like to bring up the Honor system. We shouldn't have to run after every student who knows full well they owe us money. We're only 9 people, after all! Speaking of the honor system, would K. A. Tuckman please stand up? The registrar says we've never had any student by that name. I wish people would stop writing letters about things they know nothing about.

Teresa Solberg
ASCIT Director-at-Large

Serving Caltech & JPL since 1938

Pasadena's only complete source of ART, DRAFTING, CHART-MAKING, and LAYOUT supplies.

Now open Thursday evenings until 9.

Pas Graphics
1292 East Colorado Blvd., Pasadena CA 91106
(213) 681-0615

Kinko's
Open early, open late, open weekends... The Future of Copy.

Buy Caltech Cards
and save 20%

CALL TECH'S
Burger Continental

TO ALL CALTECH STUDENTS AND FACULTY:
Have your BREAKFAST with us 6:30-11:00. Ham, bacon, or sausage, 3 eggs, country potatoes, and zucchini bread for only $1.99 with Caltech ID, Monday thru Friday.

SPECIALTIES: SHISH-KABOB, SHAORMA, SOUVLAKI-STEAK
HOMEMADE PASTRIES: BAKLAVA, BURMA, AND NAPOLEONS

good food at reasonable prices refills on soft drinks at all times seconds on salad bar

For the Entire Month of November
A free root beer float to all Juniors, Seniors, and Grad Students

Faculty, Grad Students, Attend!
Mondays and Tuesdays are Beer Days. Half price on beer.

B. C.: On Lake Avenue
½ Block North of California
Notes from here

Who Ya Gonna Call?

by Mike Chwe

One of the more successful, and funny, movies this summer was Ghostbusters. The most important marketing symbol for the movie was the now-familiar red-circle-and-slash around a frightened-looking ghost. It was featured in full-page magazine ads, T-shirts, and prominently in the movie. So I guess we shouldn't be surprised to see endless repetitions on this theme, including "Costbusters," "Conventionbusters," and "Pricebusters." The circle-and-slash appeared in political campaigns as "Fritzbusters," "Reaganbusters" (we ain't afraid of no actor), and even "Vorebusters." Closer to home, one of the ideas suggested for Blacker's Interhouse theme was "Nerdbusters."

So why are the circle-and-slash and the "busters" suffix so widely imitated? The icon's success definitely testifies to the power of mass marketing to create our symbols, to determine what we put on our chests, and even to establish the vocabulary of our political process (i.e. "Where's the beef?"). But I think that there's more to its success than the successful marketing of a successful movie.

The "ghostbusters" idea is nothing new, at least for my generation. I remember watching, several years ago, a Saturday morning television series called "Ghostbusters," which featured wacky heroes, strange anti-ghost technology, a gorilla, and a great theme song. The red-circle-and-slash, of course, has long been featured on road signs everywhere. What do the circle-and-slash and the "busters" really mean? The circle-and-slash on road signs is easy to interpret. It means, "Don't do this." But what does it mean when it covers a ghost? It obviously doesn't mean "Don't be (or become) a ghost." In the movie, it means, "We bust (i.e., kill, destroy, exterminate) ghosts."

About a year or so ago the "No Bozos" stickers enjoyed substantial popularity. On each sticker was a picture of Bozo the Clown covered by a red-circle-and-slash, accompanied by the words "No Bozos." The idea was that you could place these stickers wherever you didn't want to be bothered by "bozos." So in this case the circle-and-slash meant "Don't come around here if you're a bozo."

I guess that the circle-and-slash, in the "Ghostbusters" and "No Bozos" cases, could also mean "What's inside (ghost, bozo) should not exist." But really, the circle-and-slash and the "busters" suffix, especially for the general case, don't seem to mean anything specific at all.

A few weeks ago at a rally at USC, Walter Mondale had to deal with some particularly noisy hecklers, a few of whom decided to throw things at me for holding my Mondale-Ferraro sign too proudly. Anyway, one of them was dressed in a paramilitary-style jumpsuit, black leather boots, and ski goggles. He stood up on a chair, shouted "Who can you call?" and other hecklers yelled "Fritzbusters!" Afterward he was interviewed by some camera crew, perhaps for the eloquence and creativity of his message. More recently, when Gerry Ferraro and Teddy Kennedy appeared at the Hollywood Palladium (no hecklers this time), featured prominently in the rally was a large "Reaganbusters" sign, which appeared in the next morning's Los Angeles Times.

I'm tired of the whole "busters" business, and am hoping that the whole thing will go away. But it upsets me that we now have a symbol and catchword for hatred (from slight aversion to extermination), which is confused and "funny" enough to be used in public discussion.

In some recent campaign I can't remember which) buttons of a slice of watermelon covered by a red-circle-and-slash were circulated. Maybe they signified that the wearer simply didn't like watermelon. But the imprecision of the circle-and-slash scares me. Maybe the buttons meant "Blacks should be exterminated."

In Santa Cruz, a northern California college town with a "mellow" reputation, the hundreds of transients living there have been dubbed "trolls," because many of them live under city bridges. Since July, nineteen transients (and possibly many more unreported) have been assaulted by groups of teenagers. In September a clothing store sold three thousand "Troll Busters" T-shirts, with a caricature of a vagrant covered by a red-circle-and-slash. In this case, it's pretty clear what the circle-and-slash means.

So an innocent symbol of ghost extermination has caught on, and in no new symbol for old-fashioned violence. But I think the symbol will lose its novelty, and it will soon be forgotten. I hope so.

BLOOM COUNTY

by Berke Breathed

THE HAIR CUTTERS

HIS AND HERS
OPEN EVENINGS

449-6967  449-1022

$3.00 Discount for Caltech students with this Ad

1009 E COLORADO PASADENA
NEXT TO THE ACADEMY THEATRE
PARKING IN REAR

REAL ESTATE OPPORTUNITY OF A LIFETIME!

—Studio Condo—

2 Blocks walking distance from campus

—$52,500 purchase price.
—Only $2,000 to move in.
(Includes downpayment and closing costs.)

1 year TICO Insurance Co construction warrenty.
11 1/4% fixed interest—30 year amortization.

Contact Victor Herrell at 449-5030

Sponsored by Caltech Y
Do you know that George Orwell's "1984" is a forecast written in code? I do. I broke the code.

Sound incredible? 30 million of Orwell's readers have been told that 1984 is about the Russian dictator Stalin (Stalin is Big Brother) and about Soviet totalitarianism and the individual's loss of freedom living in a Communist state. This is what I thought too after being recognized as an expert on Orwell's 1984 for about six years. Then 3 years ago...

Let me introduce myself. I am a scientist trained to do advanced research. I worked in cancer research and preventive medicine.

Am I a scientist with credentials? Yes, I hold advanced degrees from the University of Chicago and the University of California at Irvine, I graduated Phi Beta Kappa from New York University and did two years of research in Preventive Medicine at Sloan Kettering Institute.

Orwell's 1984 first caught my eye in 1971, it was assigned reading for a Future Studies course (remember Alvin Toffler?). I taught at the University of California Irvine during Spring 1972. An incident in class convinced me that his vision of the future may have come from some information to which George Orwell had access while working for the British government. Ingtired by the possibility, I performed a simple analysis of his 1984 and was able to isolate some definite predictions. Articles were written. I was interviewed extensively by the press. You may have seen me on TV or heard me on the radio any time during the past 10 years. The Associated Press and the United Press International did stories on me. I appeared several times at Town Hall of California as a speaker and I did a guest segment on the "Today Show." It was all quite exhilarating. .

Hidden Meanings

Then, three years ago, things changed. A biography of George Orwell appeared by Dr. Bernard Crick. I read it very carefully and reviewed the good reference work by Professor William Scitichoff on the origins of 1984. Knowing I had to go more deeply into Orwell matters, I read all of his works again. I visited old bookstores and libraries all around the United States and did research at the Library of Congress. I was a frequent visitor to the great UCLA libraries. I talked to educated people about Orwell's England during World War II.

What I discovered is that the novel 1984 is really a forecast written in code. It is similar in concept to Kafka's Travels, the satirical masterpiece by Jonathan Swift, a favorite reading by Orwell. I concluded, had decided to write about the future world of 1984 and did so in satire. I had to break the code by plowing through double and triple meanings and by analyses of dry nonsense and double entente. Orwell could do it. I was sure. He had written Animal Farm as a satire, about the same time he laid out the first detailed outline of 1984. It is obvious to me that Orwell spent four years writing the satirical code. His effort does justice to Edgar Allan Poe in "The Gold Bug." Or would intrigue Sir Arthur Conan Doyle or, in the present day, the spy-story writers Len Deighton and Frederick Forsyth. Like "The Purloined Letter," Orwell's message was right there under people's noses all the time, but until now, nobody has disclosed the true meaning of the "Orwellian" 1984 forecast.

George Orwell, I am convinced, was not just a novelist. He was, in fact, a journalist, who wrote thousands of words a week. Like Jonathan Swift, he was an essayist, and wrote news commentary for the BBC. His great "insider" 1984 is a forecast in the grand design, more complicated than we can imagine. Orwell even named names of whom he thought would rule the world in 1984 — from his own experiences. He looked so far ahead that some of his thoughts could not be deciphered until now.

The Military Predictions

What I have found out about Orwell's forecast is now available. In Briefing Book format, its title is The 137 Predictions: Orwell's 1984, it examines all of the "Orwellian" predictions. In Briefing Book format, it is clad in soft cover. Richly illustrated, it is written for intelligent readers, for distinguished members of Congress and state legislators. For perspective thinkers and for future chancellors of great universities. Originally written for the informed "insider," it is now available for you to enjoy first with your family and friends.

Volume One is now available. It is called The Military Predictions. The volume dives deeply into Orwell's predictions for the future of warfare. It analyzes the world he confronts daily as a commentator and interviewer for the BBC. Also, the world as encountered by the professional forecaster looking about four years to the future of the British (and the American) war machine.

The text elucidates Orwell's ideas and the forces acting on George the journalist and the forecaster, that were into his future vision of the western world. Orwell predicted (and four decades of technological progress have brought to pass) weather warfare and missile launched explosives far more powerful than the atomic bomb. Orwell foretold that today there'd be helicopter gunships and radio-controlled guided missiles (like the cruise missile slung in the belly of B-52 bombers). Orwell also foresaw widespread use of defoliants on the battlefield. And, as ultimate offensive weapons, use of battle lasers (or "lenses" in space), improved nerve gases and laboratory-created microbes immunized against all possible antibodies.

Scouring these Orwell's other prophecies (like his "soil submarine" and "planes independent of earth"), this report mines no words and cuts right to the core. Each military prediction is detailed chronologically from 1944, when Orwell got the idea for 1984, to the present day. You will receive the newest "insider" information never put into print — until now.

Yours for $21.50

Here is my offer. To receive your copy of this must-read information on Orwell's military predictions, send $21.50, plus $3.00 (because the report is mailed first class to get it to you more quickly). Send it to DG Futurist, Box 55, Culver City, California 90230.

I unreservedly guarantee that you will get as much pure enlightenment reading about the future, satire, browse cunning wit, secret code in 1984, as I have. It is a forecast — a scenario with predictions — better written than any other forecast written since the war.

You run no risk. If, after carefully reading the report, you do not think that it accurately elucidates George Orwell's ideas and the forces acting on him, return the book within 10 days and receive your $21.50 back, plus the $3.00 postage. No questions asked.

Need more persuasion? The first 100 buyers will receive at no extra cost, a bonus: Two articles that will help you tell others the 1984 story. They are, "Countdown to 1984," by David Goodman which appeared in The Futurist magazine, and, complete with detailed references and footnotes, "Is Orwell's 1984 One Year Away?" an essay delivered at California's Town Hall. It escaped the attention of the assembled press corps who, most likely, expected to hear something else.

If you act quickly, you can receive your copy of The 137 Predictions: Orwell's 1984. Volume One: The Military Predictions and "Countdown to 1984," and the limitedly distributed, "Is Orwell's 1984 One Year Away?" a speech delivered at California's Town Hall. It escaped the attention of the assembled press corps who, most likely, expected to hear something else.

So accurate was George. His 1984 predictions came true. . .

GEORGE ORWELL
Blacker: How the heck does This Thing work? Wha...? I'm on? PFFFFFFT! TESTING ONE TWO! HI MOM! HAH! Huh? Oh, Sorry.

So, if you were there Saturday afternoon, you know how bad it looked. But soft? What light through those windows, what a break...! Tis the sun (god it really is) Tis the sun...! Fountains O' Doom! Yes, as the mists swirled through the muddled halls, hordes danced and danced until... (dramatic pause)... even the cows came home.

What is it? It is! If you can walk in the basement dry. Who cares?

5 points for Scott McFrosh & Friends!

An Italian film director is not sufficient!

The guy from R.I.

Flemings' question as to whether Intercourse was it, Who can deny that Flemings' was in place to be? The Courant is according to Egg featuring the Jaccuzi was outstanding, as was Braddock's lounge. Morgan did a great job with food, and Randy & Frank had the games swinging. The play by Glyde, Matt, and Bill was the icing on the cake.

Saturday you get the chance to Bill Grod for beer, dammit.

This week's Social Event is the J.D. Treasure Hunt. Does Alley 4 have a team yet? I'm sure they'll win.

Beware of Country Club.

—Fa Temple

Page: This year's Interhouse Party was an amazing success. Hundreds either trekked through a jungle and into the depths of a volcano, danced to the beat of our band The Duck Club, roam on the sandy shore of a lagoon, or went floating through the air on a tram ride. A few, like John Herndon, went floating through the air, but only after the bar had become a few bucks richer.

Page was labored for six days and we rested the morning of Intercourse. Not really, but something special made everything come together. Mark Dombrowski, Lew Aronson, and Steven Molnar did a fantastic job with the ride. Tom Gould and his Mongoloid horde made a steaming volcano, while Paul Filmer and Doug Stroher changed a duff hallway into a living jungle and smoldering passage through the volcano. Anne Davitto added a few touches here and there and brought out the tropical paradise in Page House. Special thanks to Robby Dow and his plucky bunch for being such great sport. Their unremitting efforts at the bar. Without their help, John Herndon's liver and handshaking ability would not be the same. Last, and perhaps least, Dan Schwartz, with his amazing ability at verbal seduction, saved Page House many dollars and hours of work by not talking to Bill Grod for beer, dammit.

Friday. In the future, when you tell your friends about the Interhouse Party, be sure to remind them that the Party starts in Page House.

—Cindi LaPitte

Ricketts: Remove a man's music and he gets back to work... The house was buzzing with preparation. Construction, props, costuming are all in progress for that one event that Ricketts excels at. That's right, last week was all just anticipation of Intercourse Clean-up.

Once again Rickett's moved into a power burn, kicked off the pyrotechnic destruction of the chosen style. In order to have the house back to "normal" in minimum time.

In other news, the first clues to the whereabouts of the missing brake drum have arrived. Also, this weekend's great Gumbobolos challenge against our favorite Gumbobolos House, Ruddock, in Volleyball.

—Bob Bolender

Ruddock: Okay, what's in the latest news reports from the old Bud?

After an opening to the Moles, the Ruddock and Interhouse teams pulled together to win two straight games over Lloyd and Ricketts and raise its record to 2-1. And as an encore to its 6-0 season, the Ruddock softball team, playing with the Interhouse handicap, beat Lloyd 5-1 to take the Discobolus trophy.

Last weekend was Interhouse (if you didn't know that, you must have been somewhere way past Xenon). Anyway, Cafe Ruddex was a great success with its good food, good drinks, and great band. If you missed it, TS buddy - you missed a good one.

This weekend's social event is broomball with Page. Now, if you don't know what broomball is, it's like ice hockey with sneakers. And we all know what hockey is an excuse for, right? So let's see how it fights. Watch Schmer - he'll show you how the game's supposed to be fought.

And remember, Thanksgiving is only a week away.

—I'm walking a line
— I'm walking a line
— Just barely enough to be living

—Has

The Food Scoop

continued from page 2

on top of the fact that we have a small student body which also discourages catering companies. Family-style dinner also means the food won't be fresh, but it does have the advantage of good food regardless of how many students actually sit at those tables. Food is wasted overabundance of rich foods in your diet. Other symptoms of indigestion are often associated with overindulging, overeating, or a combination of these factors. Although in this instance we blame indigestion on overindulgence, it can also be caused by emotional stress and is something to be aware of if there is no holiday to pass the blame on to!

Commonly, however, symptoms of indigestion result from an episode of increased food or alcohol consumption. For example, if you have â€œnothing actually to do with the heartâ€‌ is a burning sensation under your left breast, which is often caused by drinking, eating or smoking too much. The well-known bloated or gaseous feeling of indigestion is often caused by swallowing air along with your food although it can sometimes be traced to an overindulgence of rich foods in your diet. Other symptoms of indigestion may be relieved simply by improving eating habits and reducing emotional tension.

However, if you feel your indigestion warrants medical attention it would be helpful to keep track of the circumstances under which your symptoms develop, such as: do they seem to be related to specific types of food; do they occur regularly and at specific times of the day or do they appear only when you are under considerable tension?

If your symptoms are not done—you should enjoy a happy, healthy, heavenly Thanksgiving dinner. To begin, if your symptoms persist or in any distress it is best to seek professional help or a combination of these factors. If symptoms of indigestion result from under which your symptoms are paid for. Students will not be responsible for damages caused by swallowing air along with your food although it can sometimes be traced to an overindulgence of rich foods in your diet. Other symptoms of indigestion may be relieved simply by improving eating habits and reducing emotional tension.

However, if you feel your indigestion warrants medical attention it would be helpful to keep track of the circumstances under which your symptoms develop, such as: do they seem to be related to specific types of food; do they occur regularly and at specific times of the day or do they appear only when you are under considerable tension?

If your symptoms are not done—you should enjoy a happy, healthy, heavenly Thanksgiving dinner. To begin, if your symptoms persist or in any distress it is best to seek professional help or keep track of meals that might be tried soon. Food and company to upgrade the quality or issue meal cards. A compulsory 10-meal-a-week plan also perpetuates the unhealthy practice of eating only 2 meals a day. Especially considering the long hours students tend to keep, a third meal is essential for health, either at 7 am or 1 am. However, the availability of the already existing 2 meals, it is perhaps wiser to look for an outside source for the third meal.

There are not many alternative sources for breakfast. Without cars for eating at midnight. Cooking is out of the question given the state of campus kitchen facilities. Laziness also forbids that option. One solution is moving the Coffeehouse on campus, maybe into Winniet Student Center next to the Restrooms and off. It is open regular long hours and has had an increased menu selection this year. It is a bit inaccessible though, in Holliston. Additionally, the student center needs to have a place where students can get food (not just a food court or espresso) at most hours.

Other possibilities include either eliminating the compulsory board contract enrollment or issue meal cards. A compulsory meal card (computerized or course) can keep track of meals eaten and only those consumed are paid for. Students will not pay for exceptionally bad meals and hopefully, that would compel the food service company to upgrade the quality. Whatever the solution, one should be tried soon. Food and nutrition are serious matters.

Mark her plate of mystery meat and slop, I find it hard to laugh. I should always be recognized that only the consumers can effect a change on this issue. Although the Institute has contributed to nearly every major defense issue of recent years. That's why we're selecting in choosing MS and PhD graduates to join us in taking on the next generation of challenges. We're looking for tomorrow's experts.

You'll also be working on crucial projects in CFI systems, strategic and tactical weapon systems, nuclear weapon effects, high energy laser systems, magnetohydrodynamics, and electrical power systems. Present and future contract awards will allow you the opportunity to apply your talents to a wide range of leading-edge technologies.

If you qualify for the R & D Associates program, you'll enjoy working with a wide range of leading-edge technologies.

You'll also be working on crucial projects in CFI systems, strategic and tactical weapon systems, nuclear weapon effects, high energy laser systems, magnetohydrodynamics, and electrical power systems. Present and future contract awards will allow you the opportunity to apply your talents to a wide range of leading-edge technologies.

R & D Associates is the strategic career choice for technical graduates who want to make an impact on significant projects in scientific analysis and systems engineering. Our distinguished staff of over 100 associates has contributed to nearly every major defense issue of recent years.

That's why we're selecting in choosing MS and PhD graduates to join us in taking on the next generation of challenges. We're looking for tomorrow's experts.

If you qualify for the R & D Associates program, you'll enjoy working with a wide range of leading-edge technologies.

You'll also be working on crucial projects in CFI systems, strategic and tactical weapon systems, nuclear weapon effects, high energy laser systems, magnetohydrodynamics, and electrical power systems. Present and future contract awards will allow you the opportunity to apply your talents to a wide range of leading-edge technologies.

R & D Associates is the strategic career choice for technical graduates who want to make an impact on significant projects in scientific analysis and systems engineering. Our distinguished staff of over 100 associates has contributed to nearly every major defense issue of recent years.

That's why we're selecting in choosing MS and PhD graduates to join us in taking on the next generation of challenges. We're looking for tomorrow's experts.

If you qualify for the R & D Associates program, you'll enjoy working with a wide range of leading-edge technologies.
Buckaroo Reviews
A Weekly Column by Matt Rowe

Difficult Loves
Italo Calvino
Harcourt Brace Jovanovich

Okay, so, like, apologies for the somewhat...uh...sparse? entertainment section last week. Ineluctable modality of the schedule or something. Actually, I was having too much fun reading a book. The book was, as you might have guessed, Difficult Loves by Italo Calvino. From "Theft in a Pastry Shop":

"Now the moment had come to force the till."

"Hold this," said Dritto, handing the flashlight to Baby with the beam pointing downward so that it could not be seen from outside.

"But Baby was holding the flashlight with one hand and groping around with the other. He seized an entire plum cake while Dritto was busy at the lock with his tools, and began chewing it as if it were a loaf of bread."

Italo Calvino has been writing in Italy since World War II, but the rest of the world has only noticed him in the last fifteen years or so. You might think he's one of those European authors you never hear of until he wins the Nobel Prize: the kind you always imagine walking through the old part of town in a sweater, smoking a pipe and looking into second-story windows. He may; I don't know. The point is, he's not dour and serious like everyone else in the business seems to be these days. The main reason he's my favorite author is that I've actually bought the book.

The Sixth Time's The Charm
by Diana Foss
Winter's Tale
Mark Helprin
Pocket Books

There's a big rack in the bookstore, and it's full of these pretty paperback books. They're blue, with a picture of what looks like a city at night on the bottom of the cover and a starry sky on the top. A translucent horse flies through the air. In the middle of the cover, in white Art Deco letters with gold edges, is Winter's Tale. Mark Helprin. If you pick up the book and read the back cover, you're probably thinking, 'pretty book; wonder what it's about?' I read: "Vault into the cold clear air across a frozen, fabulous time of love and laughter with Peter Lake, master thief, and his flying white horse. Thunder toward the 21st century, leading lunatics, lovers, rascals and dreamers over snowdrifts, through raging storms, furious battles, walls of ice and pillars of fire, to the golden city of our glorious future." And if you're like me, the first five or so times you do this, you end up putting the pretty book down and buying some physics text instead.

Well. The sixth time I actually bought the book. Let's get straight to the point here. This is the most beautifully written book I've read in a very long time. It is peopled with wonderful, sharply drawn characters, and the story flows along and pokees into all sorts of lovely, quirky corners. For once I found myself in complete agreement with The Wall Street Journal, which quoted on the back cover as saying, "Mr. Helprin writes like an angel!"

Winter's Tale is a love story about New York. I've never been to New York, but reading this book did something to convince me that some of the rapturous things my friends say about "the city" are actually true. While the blurb quoted above implies that Peter Lake and his flying white horse are the main characters of the novel, and indeed theirs is the majority of the story, the real focus is the city itself. New York City, as Helprin writes about it, is alive, especially in the wintertime, and it gives the book its name. We watch the glittering city of the late nineteenth century move and grow into the golden city of the dawn of the twenty-first. One of the characters carries with him a platter that bears an inscription, the most significant line of the book, and all of the plot summary that I'm going to give: "For what can be imagined more beautiful than the sight of a perfectly just city rejoicing in justice alone."

Rather a cryptic plot summary, you say? Winter's Tale is one of those books whose "plot" is impossible to summarize. In my opinion, mood and characterization are more important in this novel than story line, but the story and its conclusion are eminently satisfying. Peter Lake, you'll be thoroughly enjoyed by people who only read science fiction and fantasy, as well as by those for whom "science fiction" is a dirty word. (Or two dirty words, anyway.)

The Sixth Time's
The Charm

If you're looking forward to advanced research and development projects that stretch the imagination, Lockheed is looking forward to meeting you.

Sign up at your campus placement office. And make plans to graduate into a universe of career opportunity when you build your future with Lockheed. Lockheed is an equal opportunity, affirmative action employer. U.S. citizenship required.

Personal interviews will be held between 9 AM - 4:30 PM on Wednesday, November 21, at Parsons Gate, Room 8.

Lockheed-California Company
Leadership in Technology
Interhouse 19
Photos by Min Su Yun (MSY) and Ron Gidseg (RG)
Jazz Review

Best Jazz Debut

By John Fourkas

Makoto Ozone

Columbia Records

As promised, here is my pick for Best Debut Jazz Album of the Year: Makoto Ozone by Makoto Ozone (of course you have never heard of him; this is his debut album). This 23-year-old jazz pianist is nothing short of amazing. He was born in Kobe, Japan to Minoru Ozone, one of Japan's finest jazz pianists. He began playing the piano in his teens (as a self-taught pianist and Ham- mond organ), and later came to the United States to study at Berklee College in Boston. Interestingly, he has never had his own piano.

And so it is Ozone's diverse and intricate compositional style which first grabs the attention of the listener. Once caught, that attention is firmly held by unbelievable piano playing. Ozone constructs fabulously interwoven melodies which put many fully orchestrated pieces to shame, and yet retains a spare, simple feel. The only three instruments: piano, vibraphone (played by Gary Burton, who also played on all of the vibraphone), and bass (played by Eddie Gomez).

Indeed, one begins to suspect that Ozone has received musical classical piano training along with his jazz piano training. The superb blending of these two styles is perhaps even more pleasing than Ozone's melodic invention and technical excellence. Put these three things together and you have a marvelous debut album.

Mikado Comes to Tech

Caltech Musical

by M.S. Petersen

Once again, the Caltech Musical Society presents an unusual story of Frankenstein's monster, in cumbrous dissonance. This feat of necromancy is due to director Bruce McLaughlin (Hammond and JPL), and producers Jerry Burch (alum/grad student), Rosanna Gatti (Career Development Office), and George Williams (alum/JPL). This year's musical is Gilbert and Sullivan's Mikado, an appropriate choice since 1895 marks the Japanese gentleman's centennial.

For those of you out there whose attention was not captured by the countless repetitions of the record player, and thus cannot remember that the plot goes something like this (in so far as one can explain it): the Gilbert and Sullivan plot: Nanki-Poo, son of the Mikado (or Emperor) of Japan, has fled his father's court to escape the unwanted attentions of Katisha. He falls in love with Yum-Yum, ward of Ko-Ko, the Lord High Executioner in 1895, and wishes to marry her himself. Meanwhile, the Mikado has ordered Ko-Ko to execute somebody or lose his job; however, it turns out that Ko-Ko is himself under sentence of death (for flirting) and 'who's next to be disappointed cannot be another's head until he's cut his own off.' And that's just the first act. Sounds silly? Yes it does. Wonderful. Once you're hooked, you too will be tempted to rise from the grave to tap your toes once more to the tune of a "Wandering Minstrel".(Don't believe me? G&S madness has even dragged poor old Bruce, who once managed to graduate, back to Caltech ...)

Auditions are to be held November 17 and 18, 10-6 in the Aeronautics Auditorium. Come along, even if you don't act or sing, since musicals are always a great deal of fun to work on, and there's plenty of opportunity to build sets, construct costumes, hang lights, run props, do make-up (the entire cast will be done up as Japanese). Arie Michelson, music director and biology graduate student, will be looking for musicians and rehearsal pianists.

The musical is open to the entire Caltech community, including grads, undergrads, staff, faculty, JPL, and family. It's a great chance to meet some of these people in a relaxed social atmosphere.

Don't miss it: join us!

Movie Review

Can Anyone Stop Schwartzenneger?

Shrew

by Nick Smith

The Oregon Shakespeare Festival's much-acclaimed production of The Taming of the Shrew will be performed tonight at 8 p.m., in Beckman Auditorium. The play -- the basis for the film Kiss Me, Kate -- is one of Shakespeare's most popular comedies. It's the story of Kate, who has a penchant for slapping her husband, Petruchio, a man determined to marry her, but finds her a lot of fun, but it also makes a great Lit paper (or Tech article for that matter). The number of $5 student rush tickets will be available. Call the Caltech Ticket Office for more information.

The Terminator

by Becky

The Terminator's story of Don's grandfather Marblehead, Massachusetts. However, there are a limited number of USC subsidies. 3 tickets available to Caltech students (minimum of 2 tickets per student). Tickets and additional information are available from the Caltech Ticket Office (356-4652).

Folk Music Society Presents 3

by Brian Toby

The Caltech Folk Music Society presents an unusual triple-bill concert featuring three of our country's best songwriters at 7:45 pm tomorrow (Saturday) night in Dabney Hall. This will be the first time that the Folk Music Society has featured concerts on the same stage. (This concert will begin earlier than normal. Ozone has such performances can have a full, unburied set.)

Don Lange performs a style influenced by Chicago blues. However, much of Don's writing evokes social and political concerns with our world. His song "Take the Children and Run", inspired while Don was performing at a college near Three Mile Island at the time of the nuclear accident, has been used as an anthem by anti-nuclear energy groups around the world. Another of his songs attacks the Woody Guthrie-inspired image of the hobo-as-hero, by describing the story of Don's grandfather through the eyes of the family that he abandoned. Bill Grif- fin's songs are powerful. Don, is a member of the well known bluegrass group, the Cache Valley Boys, which is made up of Mac Coli, the eminent Scottish songwriter, called Don, "the best singer in America."

When the late great singer and songwriter, Stan Rogers, appeared here at Caltech, he sang Bob Franke song saying, "here is a song by one of my favorite songwriters." Bob Franke's songs are the stuff that has spanned through very different sources as inspiration for his writing. As a devout Christian, it is not surprising that many of Bob's songs have religious undertones, but often in un- traditional ways. The Black Sheep Review said "the main theme in his work is [the] saving of lives and lift each of us beyond our limitations." Bob and his wife make their home in Marblehead, Massachusetts. This will be his first Southern California concert appearance.

Dick Pinney primarily per- forms his own songs and songs of his former partner, Greg Veale. Dick's album Devil Take My Shiny Coins was a "pick" by People magazine, which noted Dick's "jaunty picking style, lyrical freshness and his attractive voice. Variety described him as "a first-rate introduc- tion to Dick's writing is dedication to originality and integrity, but beyond and his wonderful, diverse to categorize. Dick recently moved to Studio City from the midwest. Since then, he has performed at KPFK, McCabe's, Caltech and for the Olympic athletes.

Concert ticket for the public are $5 if purchased in advance, and $6 at the door.

However, there are a limited number of USC subsidies. 3 tickets available to Caltech students (minimum of 2 tickets per student). Tickets and additional information are available from the Caltech Ticket Office (356-4652).

OPEN HOUSE IN PASADENA—567 S. LAKE AVE. SKI PROGRAMS TO YOUR FAVORITE AREAS IN THE WEST. WIN A GIFT CERTIFICATE FOR TRAVEL! DOOR PRIZES & REFRESHMENTS!

JOIN US FROM 4:30 PM TO 6:30 PM ON WEDNESDAY, DECEMBER 5, (818) 792-1165

The Caltech Folk Music Society presents an unusual triple-bill concert featuring three of our country's best songwriters at 7:45 pm tomorrow (Saturday) night in Dabney Hall. This will be the first time that the Folk Music Society has featured concerts on the same stage. (This concert will begin earlier than normal. Ozone has such performances can have a full, unburied set.)

Don Lange performs a style influenced by Chicago blues. However, much of Don's writing evokes social and political concerns with our world. His song "Take the Children and Run", inspired while Don was performing at a college near Three Mile Island at the time of the nuclear accident, has been used as an anthem by anti-nuclear energy groups around the world. Another of his songs attacks the Woody Guthrie-inspired image of the hobo-as-hero, by describing the story of Don's grandfather through the eyes of the family that he abandoned. Bill Grif- fin's songs are powerful. Don, is a member of the well known bluegrass group, the Cache Valley Boys, which is made up of Mac Coli, the eminent Scottish songwriter, called Don, "the best singer in America."

When the late great singer and songwriter, Stan Rogers, appeared here at Caltech, he sang Bob Franke song saying, "here is a song by one of my favorite songwriters." Bob Franke's songs are the stuff that has spanned through very different sources as inspiration for his writing. As a devout Christian, it is not surprising that many of Bob's songs have religious undertones, but often in un- traditional ways. The Black Sheep Review said "the main theme in his work is [the] saving of lives and lift each of us beyond our limitations." Bob and his wife make their home in Marblehead, Massachusetts. This will be his first Southern California concert appearance.

Dick Pinney primarily per- forms his own songs and songs of his former partner, Greg Veale. Dick's album Devil Take My Shiny Coins was a "pick" by People magazine, which noted Dick's "jaunty picking style, lyrical freshness and his attractive voice. Variety described him as "a first-rate introduc- tion to Dick's writing is dedication to originality and integrity, but beyond and his wonderful, diverse to categorize. Dick recently moved to Studio City from the midwest. Since then, he has performed at KPFK, McCabe's, Caltech and for the Olympic athletes.

Concert ticket for the public are $5 if purchased in advance, and $6 at the door.

However, there are a limited number of USC subsidies. 3 tickets available to Caltech students (minimum of 2 tickets per student). Tickets and additional information are available from the Caltech Ticket Office (356-4652).

OPEN HOUSE IN PASADENA—567 S. LAKE AVE. SKI PROGRAMS TO YOUR FAVORITE AREAS IN THE WEST. WIN A GIFT CERTIFICATE FOR TRAVEL! DOOR PRIZES & REFRESHMENTS!

JOIN US FROM 4:30 PM TO 6:30 PM ON WEDNESDAY, DECEMBER 5, (818) 792-1165
INSTRUCTORS

EARN AS YOU LEARN

EDUCATION IS EXPENSIVE

Exceptional students (3.0 gpa) majoring in:
ENGINEERING
MATHEMATICS
PHYSICS

or have taken one year of calculus
and calculus based physics, you may

EARN UP TO $13,700 AS A JUNIOR
AND UP TO $15,900 AS A SENIOR

The Navy's ENGINEERING program will pay you while you remain in college.

WE WILL BE IN THE CAREER PLANNING AND PLACEMENT CENTER ON NOVEMBER 28. COME SEE US.

ENGINEERING PROGRAMS
4727 WILSHIRE BLVD.
LOS ANGELES, CALIF. 90010-3891
(213) 468-3321 OR
TOLL FREE (800) 252-0559

BENEFITS: Medical, dental, free travel, etc.
Can You Spell Schwarzenegger?

from page 10

movie is that it's not just a chess endgame, whose classic mix of tactics and strategy, the terror of facing a perfect foe, the rush and rush, the knowledge that if you don't make the right move, the game is over. It's a mirror and a simulation of what it feels like, for a chess player, to be in the presence of a master. It's not just entertainment, it's also a spiritual experience, an opportunity to confront one's own limitations and to strive for excellence. The movie is a lesson in life, in the importance of focus and discipline. It's a test of wills, and the player who emerges victorious will have a greater sense of self and a deeper understanding of the game. The film is a testament to the power of chess, and a call to arms for all who aspire to greatness. Now, supposing Calvino sounds interesting to you. You're probably not about to buy a chess set and start playing Difficult Loves; it'll run you $4.95. But what I recommend instead is Marcolin, or The Seasons in the City a collection of twenty stories—which I'm sure you should agree would make perfect bedtime stories—from the early sixties. Marcolin is a perfect place for a quick buck for just a few bucks. Buy a couple; they make great presents. You as the chess writer wish to try the Baro in the Trees (a very normal picnic scene novel with a singularly bizarre premise) and if on a winter's night a traveler (1979), which holds great promise for more possible novels to come. Both of these can be had in nice-but-cheap paper editions, available at Hunter's, 8th and Broadway. For free volumes on the experiment are those in Difficult Loves.

Buckaroo Reviews

from page 7

never had more fun reading. The twenty-eight short stories that comprise Difficult Loves come from the forties and early fifties. The book is divided into four sections: "Rivera Stories," "Wartime Stories," "Postwar Stories," and "Stories of Love and Loneliness." While the "Wartime Stories" and some others seem unpublished, none lacks the singularly bemused (and bemusing) subjects Calvino delights with.

Calvino's talent is in noticing what is bizarre about the everyday. The adventurer of "The Adventurer of the Quest for the Star of Pisa" is traveling overnight by train to Rome to see his girlfriend. He anticipates (as the reader does) the happiness he will find at the end of his journey (the story), and the invasions of conductor, fellow passengers, and the climate leave us just as frustrated as he, half because they are not the goal of his trip, half because even in themselves they are unimaginably bad. It is, on the whole, it is interesting, because the reader, too, wants to reach the station at the other end.

Calvino tells his stories with an almost childlike simplicity. A lot of the time, he's talking about his love, then twenty about herself. The directness, the straightforwardness, the abstractness, of his tales gives them the feel of fables. It is no surprise then, after writing the stories in Difficult Loves, Calvino went on to compile a master collection of Italian Folktales. His recent work, such as if on a winter's night a traveler, is more experimental, but Calvino is still delightfully in playful writing for the child in all of us.

Buckaroo Reviews from page 7

not just entertainment, it's also a spiritual experience, an opportunity to confront one's own limitations and to strive for excellence. The movie is a lesson in life, in the importance of focus and discipline. It's a test of wills, and the player who emerges victorious will have a greater sense of self and a deeper understanding of the game. The film is a testament to the power of chess, and a call to arms for all who aspire to greatness. Now, supposing Calvino sounds interesting to you. You're probably not about to buy a chess set and start playing Difficult Loves; it'll run you $4.95. But what I recommend instead is Marcolin, or The Seasons in the City a collection of twenty stories—which I'm sure you should agree would make perfect bedtime stories—from the early sixties. Marcolin is a perfect place for a quick buck for just a few bucks. Buy a couple; they make great presents. You as the chess writer wish to try the Baro in the Trees (a very normal picnic scene novel with a singularly bizarre premise) and if on a winter's night a traveler (1979), which holds great promise for more possible novels to come. Both of these can be had in nice-but-cheap paper editions, available at Hunter's, 8th and Broadway. For free volumes on the experiment are those in Difficult Loves.

Buckaroo Reviews from page 7

never had more fun reading. The twenty-eight short stories that comprise Difficult Loves come from the forties and early fifties. The book is divided into four sections: "Rivera Stories," "Wartime Stories," "Postwar Stories," and "Stories of Love and Loneliness." While the "Wartime Stories" and some others seem unpublished, none lacks the singularly bemused (and bemusing) subjects Calvino delights with.

Calvino's talent is in noticing what is bizarre about the everyday. The adventurer of "The Adventurer of the Quest for the Star of Pisa" is traveling overnight by train to Rome to see his girlfriend. He anticipates (as the reader does) the happiness he will find at the end of his journey (the story), and the invasions of conductor, fellow passengers, and the climate leave us just as frustrated as he, half because they are not the goal of his trip, half because even in themselves they are unimaginably bad. It is, on the whole, it is interesting, because the reader, too, wants to reach the station at the other end.

Calvino tells his stories with an almost childlike simplicity. A lot of the time, he's talking about his love, then twenty about herself. The directness, the straightforwardness, the abstractness, of his tales gives them the feel of fables. It is no surprise then, after writing the stories in Difficult Loves, Calvino went on to compile a master collection of Italian Folktales. His recent work, such as if on a winter's night a traveler, is more experimental, but Calvino is still delightfully in playful writing for the child in all of us.
Caltech Football Gets Huge Win For Homecoming

by Santosh Krishnan

The Caltech football team won the Homecoming game with a brilliant offensive and defensive onslaught. The Beavers defeated the North East Bengals in a 52-28 win.

Following a touchdown run by Beaver QB Martin Brouriellette on Caltech's opening drive, a fumble by the Bengals on the ensuing kickoff placed the Beavers, well positioned to score, at the Bengal 20. This led to another Brouriellette touchdown, resulting in a 14-0 CIT first quarter lead.

In the second quarter, the Bengals attempted a fake punt play from their 25. The Beaver defense, however, was not fooled and CIT was once again threatening to score. Two plays later, Lee Mallory ran it in, increasing the Beaver lead to 21 points.

The Bengals then started their comeback. A long pass from Bengal QB Castro set up a touchdown, but a heads-up performance stopped the two-point conversion play at the goal line. Then Martin Brouriellette was sacked and fumbled. The Bengal recovery set up their second touchdown. This time the two-point conversion was good, and CIT led by only 7.

With the momentum shifting towards the Bengals, CIT needed the big play. This was provided by Dwight Evard. On the next play, Evard took the Bengal kick-off 85 yards for a touchdown. After Steve Collins ran in the two-point conversion, Caltech led 29-14.

The Bengals then set up a long drive, but lost the ball when Lee Mallory recovered a fumble. In the waning moments of the first half, a long pass from Castro set up the Bengals a first-and-goal from the 3. With only 4 seconds left, the Bengals scored a TD and succeeded in the two-point conversion, thus making the score 29-22. Thus at the end of the first half, the Beavers had the lead but not the momentum.

CIT took the opening kickoff of the second half and scored with a Lee Mallory TD run to lead 36-22. The Bengals, however, came back to score a TD on a long pass from Castro. The extra point was no good, and the Beavers led 36-28.

Towards the end of the third quarter, Caltech, with some fine running by Gene Toshima, drove to the Bengal 14. Martin Brouriellette then ran in from the 11 for his third touchdown of the day to put the Beavers ahead 42-28.

The extra point kick was missed, but a face-mask penalty against the Bengals gave Caltech another chance. This time it was a pass to Steve Roskowski, and Caltech led 44-28. On the resulting Bengal drive, a fumble gave Caltech the ball at its 28. Following an eleven-yard pass reception by Steve Roskowski and a ten-yard run by Lee Mallory, Brouillette ran the ball to the epsilon yard line. An illegal motion call against the Beavers, however, returned them to the 5. The next play featured a TD pass from Brouillette to Roskowski, and Steve Collins ran in the 2-point conversion to make the score 52-28.

The defense stopped the Bengals on fourth down to give Caltech the ball at the Bengal 38, and the offense took over again.

A pass to Roskowski gave CIT a first down at the 11 and set up a nine-yard Vince Riley run to the 2. The Beavers then fumbled, but the Bengals had only a few seconds with which to operate, leaving the score at 52-28 Caltech.

Next week, the Beavers play the Ventura County Athletic Club. This will be the last game of the season and will be played at the Antelope Valley J.V. field. The "Pasadena powerhouse", as Scott Ostler called the Beavers (L.A. Times, Part III, Wed. Nov. 14, 1984, p.3), will be going for the win and their second straight winning season. Antelope Valley is only a few hours from here, and everyone who can go should go.

Next year in Jerusalem.

For only $450.

A rich experience for very little money.
The Jerusalem Fellowship is offering 2 months of study and travel in Jerusalem and throughout the Holy Land, for only $450 including roundtrip airfare.

You will learn about the Jewish way in love and marriage, gain the knowledge to combat assimilation, and to fight cults and Arab propaganda on campus. It's an experience that will continue to enrich your life for many years.

How do I become one of the selected few?

Thirty people will qualify and be selected to participate.

We're looking for leaders. People who are enthusiastic and motivated. People who want to learn and who look for challenges.

We have 2 trips scheduled for 1985. On January 25 the first group will depart. Applications are due no later than December 10, 1984.

The second trip will leave on June 28, 1985 and the deadline for applications for this trip is April 1, 1985.

To obtain an application call Ruth at (213) 956-1451 or write The Jerusalem Fellowship, P.O. No. Canon Drive, Beverly Hills, California 90210.

Striving for leadership in the Jewish community.

Our community must continue to develop concerned leadership for the future. Part of that process is a solid understanding of our Jewish Heritage.

The Jerusalem Fellowship is sponsored by Aish HaTora-Jerusalem and its Los Angeles affiliate Areytna. Let's make 'Next Year in Jerusalem' this year for you.

The Basketball Beavers opened their season against CIT alums this week.
Score With Santosh

by Santosh Krishnan

Last Week's Record:
W—L: 7-7
Against Spread: 5—9
Cumulative:
W—L: 32-23
Against Spread: 25—30

AFC
Kansas City (5—6) at L.A. Raiders (7—4)
Plunkett, Wilson et al. will be healthy. The Raiders cannot loose 4 in a row.
Prediction: Raiders by 6.
Seattle (9—2) at Cincinnati (4—7)
Seattle won last week with of luck bit of luck and partial referees. They will not have this in cold Cincinnati. Unfortunately mediocrity + Chuck Knox = Success.
Prediction: Seattle by 7.
Miami (11—0) at San Diego (5—6)
Miami continues to amaze proving how evil rules this world. San Diego has no defence and Miami will become 12—0.
Prediction: Miami by 9.
N.Y. Jets (6—5) at Houston (1—10)
Prediction: Jets by 4.
New England (7—4) at Indianapolis (4—7)

NFC
Detroit (3—7—1) at Chicago (7—4)
Predictions: Chicago by 9.
L.A. Rams (7—4) at Green Bay (4—7—1) in Milwaukee
The Rams may be good, but Green Bay is better. The game may be close, but Green Bay should win.
Prediction: Green Bay by 2.
St. Louis (6—5) at N.Y. Giants (6—5)
A big NFC East battle. The Giants have been really unpredictable this year. St. Louis has lost two close games in a row. This game has definite play-off implications.
Prediction: Giants by 2.
Tampa Bay (4—7) at San Francisco
Prediction: San Francisco by 10
Washington (7—4) at Philadelphia (4—6—1)
Interconference
Cleveland (2—9) at Atlanta (3—8)
Prediction: Cleveland by 1.
Dallas (7—4) at Buffalo (0—11)
Prediction: Dallas by 6.
Minnesota (3—8) at Denver (10—1)
Prediction: Denver by 6.

Ricketts playing Ruddock in GSC Volleyball

Women's V-Ball Ends Season

by Busy Sue

Last Saturday the women on the volleyball team played their last game. We drove all the way to Newport Beach and lost. We lost to a bible school. What a waste of gas. Don't get me wrong - the game was not predictable this year. Chris M. played real well, the donuts were pretty nutritious, and the coffee was extremely black. Some people even got to sleep as we drove up for the game.

By the time we got back to campus it was almost time for interhouse; we'd managed to pass all the last minute preparations and got back just in time for the drumming.
All in all this has been a pretty good year for us. We had a lot of new people come out (for the team, not like last year) even some frosh (yea frosh) and some upperclassmen. This year, we should receive letters for the first time. I guess that makes volleyball an official varsity sport (yea us).

Next year should be even better. We'll have a bunch of returning players and hopefully some new frosh. If you dig volleyball, even if you're short and clumsy and don't think that you're very good, come play next year—it's really a lot of fun.

You are warmly invited-
for a free one hour Christian Science lecture.

Exploring the Universe:
Is It Spiritual or Material?

Thursday, November 29, at 8 p.m.
First Church of Christ, Scientist Church Auditorium
Green Street at Oakland Avenue, Pasadena
Child care provided • Free parking

*Praise ye him, sun and moon praise him; all ye stars of light
Praise ye him, ye heavens of heavens, and ye welfare that be above the heavens. Let them praise the name of the Lord, for he commanded, and they were created." Psalms 148.

Jack Hubbell, C.S.B. of Palo Alto, Caifornia member of The Christian Science Board of Lectureship
Lee Mallory crosses the goal line

MONKS PIZZA
FREE DELIVERY
304-9234

NY STYLE

HOURS
Sun-Thur 11:00-1:00 AM
Fri-Sat 11:00-2:00 AM

$2 OFF
ANY MONKS SPECIAL
2 FREE PEPSIS
WITH ANY MONKS PIZZA

ORDERED BETWEEN
11AM & 6PM
(1 COUPON PER PIZZA)
Expires Nov 30, 1984

$1 OFF
ANY L.G.
2 ITEM PIZZA

ORDERED BETWEEN
11AM & 6PM
(1 COUPON PER PIZZA)
Expires Nov 30, 1984

MONKS PIZZA FREE DELIVERY
304-9234

Lee Mallory crosses the goal line

Weekly Sports Calendar

Intercollegiate

<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>Fri.</td>
<td>11-16</td>
<td>7:30 pm</td>
<td>B. B. Varsity</td>
<td>TBA</td>
<td>Cross Country</td>
</tr>
<tr>
<td>Sat.</td>
<td>11-17</td>
<td>7:30 pm</td>
<td>B. B. Varsity</td>
<td>TBA</td>
<td>Water Polo</td>
</tr>
<tr>
<td>Sat.</td>
<td>11-17</td>
<td>1:00 pm</td>
<td>Fencing</td>
<td>TBA</td>
<td>O'Keefe Club</td>
</tr>
<tr>
<td>Sat.</td>
<td>11-17</td>
<td>3:30 pm</td>
<td>Football</td>
<td>TBA</td>
<td>Cal State Long Beach</td>
</tr>
<tr>
<td>Sat.</td>
<td>11-17</td>
<td>7:00 pm</td>
<td>B. B. Varsity</td>
<td>TBA</td>
<td>Cal State San Bernardino</td>
</tr>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>7:30 pm</td>
<td>B. B. Varsity</td>
<td>TBA</td>
<td>Pac. Coast Bap. Bible Col.</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>11:00 pm</td>
<td>Ice Hockey</td>
<td>TBA</td>
<td>Harbor number 2</td>
</tr>
</tbody>
</table>

Interhouse (Soccer)

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Teams</th>
<th>Referees</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri.</td>
<td>11-16</td>
<td>Dabney vs. Ruddock</td>
<td>Blacker</td>
<td>East</td>
</tr>
<tr>
<td>Fri.</td>
<td>11-16</td>
<td>Fleming vs. Rickets</td>
<td>Page</td>
<td>West</td>
</tr>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>Page vs. Rickets</td>
<td>Ruddock</td>
<td>East</td>
</tr>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>Fleming vs. Lloyd</td>
<td>Dabney</td>
<td>West</td>
</tr>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>Blacker vs. Lloyd</td>
<td>Dabney</td>
<td>East</td>
</tr>
</tbody>
</table>

G.S.C. Volleyball

A League

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Teams</th>
<th>Referees</th>
<th>Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>6:15 pm</td>
<td>TAPIR vs. Six Hitters</td>
<td>Bump n Grind</td>
<td>West</td>
</tr>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>7:15 pm</td>
<td>Bump n Grind vs. Brute Force</td>
<td>Six Hitters</td>
<td>West</td>
</tr>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>8:15 pm</td>
<td>Joy of Set vs. Page</td>
<td>Jet Setters</td>
<td>West</td>
</tr>
<tr>
<td>Mon.</td>
<td>11-19</td>
<td>9:15 pm</td>
<td>Upsetters vs. Jet Setters</td>
<td>Page</td>
<td>West</td>
</tr>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>10:00 pm</td>
<td>Fleming vs. Blockheads</td>
<td>Tammy's Town</td>
<td>West</td>
</tr>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>11:00 pm</td>
<td>Tammy's Town vs. Turing Machines</td>
<td>Fleming</td>
<td>East</td>
</tr>
</tbody>
</table>

B1 League

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Teams</th>
<th>Referees</th>
<th>Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>10:00 pm</td>
<td>Derelick vs. Coherent Spikers</td>
<td>To Be Determined</td>
<td>East</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>6:15 pm</td>
<td>Derelick vs. HIM's</td>
<td>McGill Mean</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>7:15 pm</td>
<td>McGill Mean Machine vs. Rotorheads</td>
<td>HIM's</td>
<td>East</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>8:15 pm</td>
<td>Smashers vs. Earth People</td>
<td>Rotorheads</td>
<td>East</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>9:15 pm</td>
<td>Overpaid Amateurs vs. Coherent Spikers</td>
<td>Smashers</td>
<td>East</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>10:15 pm</td>
<td>Lloyd Juggernaut vs. T.B. Determined</td>
<td>Overpaid Amateur</td>
<td>East</td>
</tr>
</tbody>
</table>

B2 League

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Teams</th>
<th>Referees</th>
<th>Court</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tue.</td>
<td>11-20</td>
<td>11:00 pm</td>
<td>Ruddock vs. Kinetics</td>
<td>Not Yet Known</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>6:15 pm</td>
<td>Ruddock vs. Natural Satellites</td>
<td>Eh? Team</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>7:15 pm</td>
<td>Cubbies vs. Eh? Team</td>
<td>Natural Satellites</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>8:15 pm</td>
<td>Astronomy vs. Jerry's Kids II</td>
<td>Face</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>9:15 pm</td>
<td>Not Yet Known vs. Face</td>
<td>Not Yet Known</td>
<td>West</td>
</tr>
<tr>
<td>Wed.</td>
<td>11-21</td>
<td>10:15 pm</td>
<td>X-Men vs. Kinetics</td>
<td>Not Yet Known</td>
<td>West</td>
</tr>
</tbody>
</table>

Beaver Fencers Keep Trying

by Parry Riposte

Last Saturday the Caltech fencing team travelled to Santa Barbara and met UCSB and UCLA. They were tough competition.

The women's foil team lost 4-12 against UCSB. The leading scorer was Phyllis Li, who won all of her four bouts. She executed many effective moves to get touches. Dana Pihlboz, Susan Ridgeway, and Janice Peters did not win any but made a good showing. Against UCLA, they also lost 2-14. Li and Peters both won one bout each. They had a difficult time fencing with their opponents who had the advantage of several years of experience.

The men's foil team lost 3-6 against UCSB. Scott Grossman, Craig Keller, and Adam Lewenburg all won one bout each. Lewenburg won his first bout of the season. Grossman and Keller felt they had each fumbled away one easy bout, turning the tide and the score unfavorably. The team did not score any against UCLA and lost 0-9.

The men's epee team did well against UCSB, but lost a close match 4-5. Andrew O'Dea surprisingly defeated all three opponents. Charles Todd defeated one. Joe Bechenbach and Thomas Luke gave their opponents a hard time. The team gave a shot at UCLA and lost 2-7. The only two scorers were O'Dea and Bechenbach. The latter won his first bout of the season.

The men's saber team did almost as well as the epee team. They lost 3-6 to UCSB. The leading scorer was Chien-Wei Han, who defeated two. He thought he could have won a third bout if he had concentrated on the match better. Scott Lewicki defeated the same guy he fenced last year and was satisfied about the win. Jeff Greason and Matt Himmelstein fought hard. The team had no luck against UCLA. They lost 2-7. Han won one and could have done better if he had used more wrist action. Himmelstein scored one by forcing his opponent off the fencing strip.

This Saturday the Caltech fencing team is hosting Cal State Long Beach. The match will start at 1 pm in the gym. For anyone who has not seen a fencing match, this is the perfect time to see it. Another reason you might want to see the team is that some of the Caltech fencers are so fast that it seems as though their blades get shorter whenever they move.
announcements

CLASSIFIED

FOR SALE---
FOR SALE: AMC Gmiment 1975, body good, runs well, 82,000 miles, Cal. Title, $400. Call Peter, any time at 357-3737 after 6.

HELP WANTED---
WORK YOUR OWN HOURS. Earn extra money. Call Cathy Estrada at (818) 449-3244.

HELP WANTED---
780 Machine language programming—software. Contact Joe Vu 794-2411 after 5 PM.

HOUSING---
APARTMENT OFFERED Quiet apt. off campus. Mainly graduate students helping an active paralyzed teacher. 1 block west of Caltech w/ own bedroom and bath, ideal for person who spends most evenings working at home. Reliable, friendly person sought, prefer grad student, non-smoker. Inquire at 499-8928.

REAL ESTATE OPPORTUNITY. Studio condo downtown available for $2000/mo. Contact Myra at (213) 680-6163. Thanks, and see you on campus.

GENERAL---
AVAILABE GRANTS to Caltech students only! Queen sized bed, frame, box and mattress. Used and in good condition. (213) 680-6163.

IS IT TRUE? You can buy jets for $44 through the U.S. government? Get the facts today! Call 1-812-742-1142 Ext. 9716-A.

INSURANCE WAR! Will beat any price, or don’t want your business. DiscountedUC and Department of State tickets, good driver discount. Request ment? Get the facts today! Call on page 4 for details.


CLASSIFIED

FOR SALE---
FOR SALE: AMC Gmiment 1975, body good, runs well, 82,000 miles, Cal. Title, $400. Call Peter, any time at 357-3737 after 6.

HELP WANTED---
WORK YOUR OWN HOURS. Earn extra money. Call Cathy Estrada at (818) 449-3244.

HELP WANTED---
780 Machine language programming—software. Contact Joe Vu 794-2411 after 5 PM.

HOUSING---
APARTMENT OFFERED Quiet apt. off campus. Mainly graduate students helping an active paralyzed teacher. 1 block west of Caltech w/ own bedroom and bath, ideal for person who spends most evenings working at home. Reliable, friendly person sought, prefer grad student, non-smoker. Inquire at 499-8928.

REAL ESTATE OPPORTUNITY. Studio condo downtown available for $2000/mo. Contact Myra at (213) 680-6163. Thanks, and see you on campus.

GENERAL---
AVAILABE GRANTS to Caltech students only! Queen sized bed, frame, box and mattress. Used and in good condition. (213) 680-6163.

IS IT TRUE? You can buy jets for $44 through the U.S. government? Get the facts today! Call 1-812-742-1142 Ext. 9716-A.

INSURANCE WAR! Will beat any price, or don’t want your business. DiscountedUC and Department of State tickets, good driver discount. Request ment? Get the facts today! Call on page 4 for details.


CLASSIFIED

FOR SALE---
FOR SALE: AMC Gmiment 1975, body good, runs well, 82,000 miles, Cal. Title, $400. Call Peter, any time at 357-3737 after 6.

HELP WANTED---
WORK YOUR OWN HOURS. Earn extra money. Call Cathy Estrada at (818) 449-3244.

HELP WANTED---
780 Machine language programming—software. Contact Joe Vu 794-2411 after 5 PM.

HOUSING---
APARTMENT OFFERED Quiet apt. off campus. Mainly graduate students helping an active paralyzed teacher. 1 block west of Caltech w/ own bedroom and bath, ideal for person who spends most evenings working at home. Reliable, friendly person sought, prefer grad student, non-smoker. Inquire at 499-8928.

REAL ESTATE OPPORTUNITY. Studio condo downtown available for $2000/mo. Contact Myra at (213) 680-6163. Thanks, and see you on campus.

GENERAL---
AVAILABE GRANTS to Caltech students only! Queen sized bed, frame, box and mattress. Used and in good condition. (213) 680-6163.

IS IT TRUE? You can buy jets for $44 through the U.S. government? Get the facts today! Call 1-812-742-1142 Ext. 9716-A.

INSURANCE WAR! Will beat any price, or don’t want your business. DiscountedUC and Department of State tickets, good driver discount. Request ment? Get the facts today! Call on page 4 for details.


CLASSIFIED

FOR SALE---
FOR SALE: AMC Gmiment 1975, body good, runs well, 82,000 miles, Cal. Title, $400. Call Peter, any time at 357-3737 after 6.

HELP WANTED---
WORK YOUR OWN HOURS. Earn extra money. Call Cathy Estrada at (818) 449-3244.

HELP WANTED---
780 Machine language programming—software. Contact Joe Vu 794-2411 after 5 PM.

HOUSING---
APARTMENT OFFERED Quiet apt. off campus. Mainly graduate students helping an active paralyzed teacher. 1 block west of Caltech w/ own bedroom and bath, ideal for person who spends most evenings working at home. Reliable, friendly person sought, prefer grad student, non-smoker. Inquire at 499-8928.

REAL ESTATE OPPORTUNITY. Studio condo downtown available for $2000/mo. Contact Myra at (213) 680-6163. Thanks, and see you on campus.

GENERAL---
AVAILABE GRANTS to Caltech students only! Queen sized bed, frame, box and mattress. Used and in good condition. (213) 680-6163.

IS IT TRUE? You can buy jets for $44 through the U.S. government? Get the facts today! Call 1-812-742-1142 Ext. 9716-A.

INSURANCE WAR! Will beat any price, or don’t want your business. DiscountedUC and Department of State tickets, good driver discount. Request ment? Get the facts today! Call on page 4 for details.

