

Volume XCII, Number 4

Pasadena, California

October 19, 1990

Centennial Float Takes Shape

by Chris Ho

"For every action there is an equal and opposite reaction." Sir Isaac Newton's famous discovery now serves as the concept to Caltech's entry in the 1991 Tournament of Roses Parade. As the much anticipated centennial anniversary of our Institute approaches, all eyes are set upon the float, designed to bring in a new year of celebration among the Caltech community.

This year the theme of the parade is Humor and Whimsy, and dozens of colorful and exciting floats will grace the streets of Pasadena on New Year's Day. For the first time in many years, Caltech's project will be one of them, the result of a carefully constructed process beginning from dreams and ambitions and ending with the procession of the float down Colorado Blvd.

Entering a float originated from Michael Carr, a JPL engineer. This consequently led to the creation of the Float project, part of the Centennial Steering committee headed by Sunny Chan. The Float Subcommittee, directed by Hall Daily of Public Relations, spearheaded the operation, designed to accomplish two main goals.

The first is to unify the many aspects of the Caltech community in a cohesive, cooperative unit. This was initially achieved with the selection of the members of the subcommittee, representing all facets of the community - staff, faculty, undergrads, graduate students, JPL members and alumni. Included on the committee is Caltech senior Mark Humphreys, who will walk with the float on parade day, 1927 alumnus and former administrator Ted Combs, and Suzette Cummings of the Deans' Office, as well as other responsible and deserving members.

The second goal of the float is to entertain audiences across the

globe on January first. This all began with the selection of the float design and theme. Last year a contest was held, allowing the Institute community to submit individual ideas to be incorporated into the final design. After weeks of refining ideas, the final concept that emerged combined the humorous workings of a Rube Goldberg device to a tribute to Newton, a scientific figure well-recognized by the public.

With these in hand, the next step fell into the hands of Caltech professor Joel Burdick, ASCIT Teaching Award winner, and the class of ME 100. This class, conducted third term last year, determined the exact parts of the Rube Goldberg sequence and designed some of the components used on the float.

By this time, selecting and hiring the company responsible for the actual construction of the float had been completed. Caltech wanted a company that could devote great time, effort, and energy to a oneof-a-kind project while allowing members of Caltech to have an integral part in the process. After an intense consideration of 12 major float-builders, the Float committee chose the resources of Charisma Floats, an Altadena-based company headed by husband and wife team Ross and Ollie Young.

Caltech's float is only one of three floats that Charisma handles, allowing much attention to be given to the project. Charisma was also chosen because of the great amount of flexibility in construction methods and resources. This greatly contrasts to other companies, some of which build more than ten floats each and limited to using structures and components from past parades.

This summer the float began to take shape. Students had the opportunity once again to construct actual parts of the float, as work crews spent 16 hours a day build-

> of the research are paid by the sponsor. In addition, the student will receive a stipend of \$3600 next year, up from \$3000 this year. It is not uncommon for the student's research to be published in major scientific publications. More than twenty students this year were able

well on its way to completion.

The float is a time-travelling

vehicle, manned by Caltech

Beavers, both costumed people and

mechanized. A total of seven peo-

ple will be dressed in beaver out-

fits, which are being made by the

makers of Madonna's world tour

wardrobe. These beavers will

direct the audience's attention to the

various animated parts on the float.

begins with Carr, in Beaver

costume, moving a time indicator

at mid-float. In the front, a beaver

will emerge from a cuckoo clock,

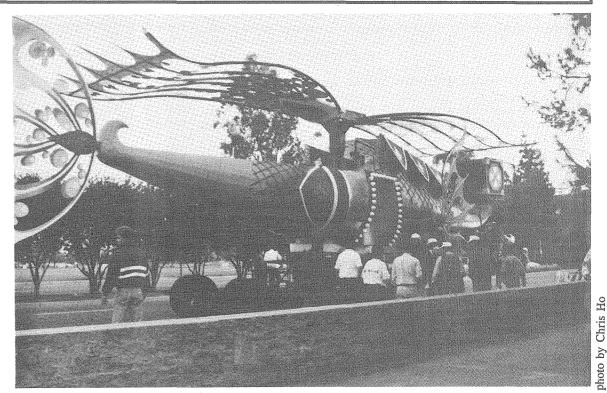
dropping a pocketwatch which

willtip a seesaw. The raised oppo-

site end will tip off the first in a

short span of domino-like books,

The rube Goldberg sequence all



The frame for the float is almost done, thanks to the many volunteers who are working on it at the Rose Bowl.

ing the chasis and support strucreleases a small sphere. This ture. The outer frame has since sphere rolls down a path and ignites been added, revealing the actual a large bunsen burner, which in shape of the float. As of October turn heats up a flask. The flask ex-13, the float is road- ready, with plodes with a puff of "smoke." On a small and separate "island" float. continuing progress being made on the animation sequence. With Ross Newton rests under an apple tree. Young doing the engineering de-The explosion shakes the tree, sign, and Ollie Young in charge of causing an apple to strike Newton artistry and decoration, each with 15 years of experience, the float is

on the head. Newton then sits up and opens his eyes in the legendary moment of inspiration.

This entire sequence should require only 45 seconds, and will provide much to see on a float measuring about 70' long by 23' wide and over 30' high in its parade continued on page 6

CRIME AND INCIDENT BEAT

- Crime tip: Non-Caltech students are often seen going through the parking lots. Make sure that your cars are locked and that nothing of value is left in plain view.
- 10/13 An aerial photograph of Caltech Campus of unknown value was removed from a wall on fourth floor Lauritsen Lab where it had been hanging.
- 10/13 A student was suspending himself by one hand from the rope in Ricketts courtyard when he lost his grip and struck the ground, sustaining minor facial injuries. The student was transported to Huntington Hospital for treatment.
- 10/13 The tire of a Chevrolet Astro Van, parked at 8451 Diana, was punctured while the owner and his family were visiting Caltech.
- 10/14 At 2221 E. California a witness observed a suspect drive his vehicle repeatedly into a red Mazda truck. The suspect was arrested for driving while intoxicated.
- 10/14 In an incident of vandalism, the radio antenna of a car parked in the Holliston lot was bent over the hood, causing light damages.
- 10/15 Another person reported that her car, parked in the Holliston lot had been vandalized. The radio antenna was completely broken off.
- 10/15 In Beckman Institute a victim was working with wires on the ceiling when he slipped on the cart he was standing on and struck his head, knocking himself unconscious. He was transported to Huntington Hospital.
- 10/15 In the mail room of the Student Activities Center office at 10 AM, a Card Controller was noticed missing from on top of the copier. The Card Controller had been present earlier that morning.
- 10/15 A group of 6-10 freshmen were observed kidnapping an upperclass member of Ricketts house after supper. The victim escaped after sustaining several dousings of water. When pressed, a suspect muttered something about "just provocation."

entertain audiences across the crews spent 16 hours a day build-Suff Seminar Weekend office. "A sponsor is someone who of the research are paid by the

Looking for a summer job with real substance? Why don't you check out the SURF Seminars at 1 PM this Saturday in Spalding Laboratory, Thomas and Baxter. SURF is an eleven year old summer research program which began under the supervision of Fred Shair Professor of Chemical Engineering. In its first year, there where eighteen students with seventeen faculty advisors. Last summer there were one-hundred and fortyfive students and one hundred and five faculty including JPL and offcampus sponsors. If you want to work on a SURF, the first step is to find a sponsor. "The SURF program is modeled on the grant process," said director Carolyn Merkel. "The student writes a proposal based on the interactions with a research sponsor and submits it to the SURF

is doing research in the area which you're interested in.

A good way to get one is to ask around. It's usually someone on the JPL or Caltech faculty but can be from off campus. The proposal is usually closely related to the sponsor's research and is hardly ever invented by the student alone. SURFs have been done in many areas from Biology to History and Geography. Proposals are reviewed by a faculty committee consisting of members in various areas of research and are almost always accepted since prescreening is done by the sponsor.

The student then spends ten weeks during the summer doing research. In addition to the research, current research seminars are held during this period by JPL and Caltech faculty. All the costs to do so. At the end of the project, the student is required to write a technical paper and give an oral seminar based on his research.

This Saturday, there will be one-hundred and twenty-five reports given. They will be held at fourteen parallel lecture sessions. Each section will be grouped by area of research. All member of the Caltech community are invited to come. A copy of the schedule can be obtained on Friday at Dabney hall. You can get more information from the SURF office, room 7 Dabney Hall.

- 10/16 A person participating in the Caltech Y tour, "Friends of Caltech," slipped on the south stairwell of South Mudd and apparently sustained a sprained ankle. The stairwell was checked and found to be sufficiently non-hazardous.
- 10/16 A person reported that he struck a parked car while backing out of a space in the Athenaeum lot. Concerned, he left a note on the Subaru sedan with his address and an explanation.
- 10/17 In the sub-basement of Downs Lab a person stated he was attempting to stop an elevator from closing by blocking the doors with his hand. He suffered a cut to the middle finger and was transported to Huntington Hospital for treatment (Murphy- 4; Caltech- 0).

Total value stolen this week: \$1798

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The California Tech

opinion uestions About Suicide Air Cond. in the SAC

by Jason T. Lee suicide-n one who dies by his own hand; the act of killing oneself intentionally.

OK, so we've all heard about that before. In fact, being at Caltech. I'm sure some of the upperclassmen have thought about it before. For me, my first four weeks at this institution have been pretty hectic and at this point I'm still adjusting to the pressures that confront my fellow frosh and I daily.

When I went home last weekend, I found out that a classmate of mine in high school had committed suicide. I had not seen him much in the past few years, but we were really good friends in junior high.

Stil, I was shocked. I thought suicide was a thing that could only affect "other" people. Sure, I knew it occurred, but I would never come across it. I knew this guy, I used to talk to this guy, I saw him everyday, I joked with him, I played ball with him.

I saw him a few days before I came out to Caltech. He had already started college; he said he was having ao good time. And now, four weeks later, he is dead.

And you know what the worst thing is? There is no one to blame. There is nowhere to vent my frustration. I guess all I can do is keep writing and hoping that such a gruesome act is never again repeated, anywhere.

My frustration revolves around a logical and obvious question, why? What purpose did his act serve? What good came out of it?

And these are the questions that everyone here at Caltech needs to answer. For my fellow frosh who haven't figured it out yet (or maybe you haven't even attended a lecture or done any homework yet), this place is hard. I'm sure high school was a breeze for all of us, and now we come to perhaps the toughest college in terms of workload and difficulty.

There may be times at around 3 in the morning when we're working on Chemistry homework sets and we'll wonder why we're doing this to ourselves (I still haven't figured out why, I invite you to come up to me and tell me what you think), but the important thing to remember is that it could be a lot worse.

Life is not bad, life is not good, life is great. The freedom to express ourselves in any form is such a wonderful avenue that it makes everything we work and struggle over worth it.

Suicide may seem to be a simple solution to all problems. But rather it is the contrary, it only makes problems more complex, especially to those who know you and care about you.

Some may call suicide a form of expression. Yes, perhaps it is, but again, I ask you, what did my friend accomplish by killing himself? He left a note to his parents explaining his reasoning. Without going into details, he basically felt that in his parents' eyes, he was a failure. He was not self-confident, he didn't like himself, and was always trying to change himself so others would like him.

I doubt that particular scenario is a major concern here at Caltech, but still, suicide could be considered an option, based on the enormous amount of stress our young minds go through.

Once again, the questions comes up, what purpose would suicide serve? Think about it, has my friend done any good by his deed? Has he made anyone laugh or smile? Is there any reason at all to commit suicide? NO.

By Emily Wen

Have you ever had a meeting in SAC club rooms? Or practiced in the rehearsal rooms? Or developed films in the darkrooms?

Michelle and I were develping films for the TECH in the publication darkroom end of last term. We were almost suffocated to death! One time someone spilled chemicals in the darkroom, and the smell lingered in the SAC for a few days. And yesterday, the computer in the TECH office broke down because of the immensely high temperature inside the office.

problems in the Student Activities Centre. The ventilation system does not seem to work, and most rooms do not have windows to let air in. It is unbearable to stay in them for any period of time. Even working on TECH with the windows open at night can get really hot and uncomfortable sometimes.

When most labs and classrooms have air-conditioning on campus, why can't the SAC also install an air-conditioning system? SAC is really nice to look at but not to work in. If the condition does not improve soon, someone may actually suffocate in SAC.

Ventilation is one of the main

What, No Interhouse?

editorial

by T. James Bassett

I've got the blues, I've got the rotation blues... "Just what the hell is Interhouse?"

SENIOR ONE: "Interhouse is awesome! Or it was awesome." LITTLE T (1990): "Interhouse: The only reason a normal high school

student would want to come to Tech.' SENIOR TWO: "It's...well...Oh what's the use, it doesn't exist

anymore."

LITTLE T (1988): "Interhouse: Annual dance to cause the be ginning of the Southern California

rainy season." ALÚMNI (CLASS OF 1945): "Interhouse? I remember Interhouse. That was the funnest event all year. Say, when is it this year?

ONE (AGAIN): "Yeah, it's a shame you frosh will never get to see In-

To have Interhouse or not to have Interhouse, that is the question.

"So rotation is really over? Really?" Stop. Chem time. (So, electrons are particles and waves?) THE TECH (OC-TOBER 12, 1990): "Interhouse is cancelled. Go home everybody.' Break out the milk and cookies, kiddies. It

was Interhouse. See you at Norm's. Get lost.



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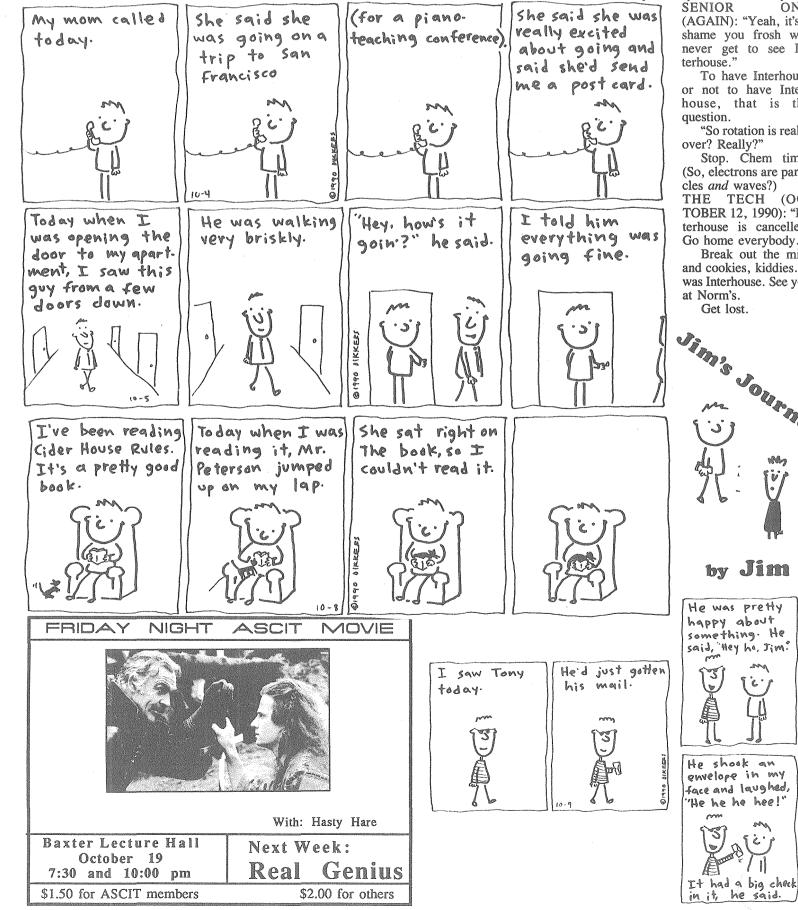
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entertainment

Movies With Shane

by Shane Sauby

What do you think the difference would be in your life if one little thing changed a long time ago? Maybe a lot or maybe a little? Well, James Belushi finds out exactly what would have happened in one of last weeks releases.

Mr. Destiny is about Larry, the guy who missed that ninth inning home run in the state highschool championship. Now its twenty years later, exactly, and its Larry's thirty-fifth birthday. Larry has lost his job, has gotten fake vomit for his birthday, and worst of all he didn't get his Wheaties. On his way home though, Larry's car dies in front of "The Universal Joint."

He wanders inside to call a tow truck and meets Mike (Micheal Caine), a friendly bartender who seems to know more about Larry then most family members. Mike pours Larry his specialty, "The Spilled Milk" and then the fun begins.

That twenty year old game has gone the other way, with Larry hitting the winning home run and becoming the hero. He quickly discovers that he married the bosses daughter, took over the company he worked for in his other life, and is basically a real shmuck compared to the guy he used to be. Thus Larry starts to find out the good and bad things about this new life and, of course, starts to realize how good his old life was.

This film has its moments. There are some hysterical scenes where Belushi just raises his eyebrows. Micheal Caine is charming as the supernatural entity who pops up now and then to give Larry a hand in coping with his new life. Overall, this gets two big thumbs up. I think its the best comedy out right now.

Another new movie is Memphis

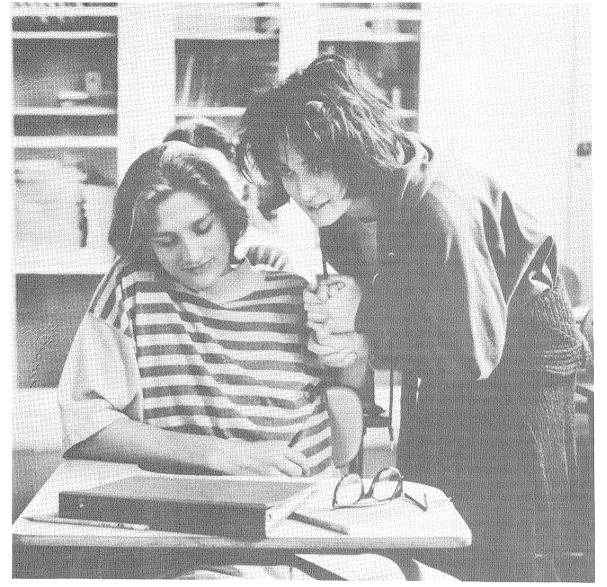
Belle. This is an action/drama about the crew of the Memphis Belle, a World War II bomber that flew a twenty-five consecutive successful missions. It stars Matthew Modine and Eric Stoltz as the pilot and communications officer of the Belle. Also featured is John Lithgow as the Army PR man who is going to turn the crew into national heroes upon their return.

The story is centered on the last mission, deep into German territory, and the courage of the crew. The performances by all are strong, with major credit going to the supporting characters. The action sequences are frenzied and confusing, but this only heightens the feelings of danger that these men experienced. This movie gets two thumbs up, being a well done action movie that is solely based in reality and not on another planet.

Finally, I saw Welcome Home Roxy Carmicheal. I have been trying to figure out what to say about this movie. Its about two things really. First, its about a small town in Ohio getting ready to welcome home Roxy Carmicheal, a girl who left fifteen years ago for Hollywood to become famous.

In a roundabout way she does grab stardom, and is returning to Clyde, Ohio, for the opening of a school named in her honor. But the movie is really about Dinkie Bousetti, an orphan who has become an outcast at every school she's attended. She starts asking questions about Roxy, especially annoying her old highschool sweetheart played by Jeff Daniels. Dinkie thinks that Roxy is her real mother, and so plans to meet her and run off with her when she arrives. I guess the plot is kind of confusing, isn't it?

Well, the plot is a little confus-



Winona Ryder stars as Dinky Bossetti and Thomas Wilson Brown plays Gerald Howells in "Welcome Home, Roxy Carmichael." Opposites attract-she's the town rebel and he's one of the most popular high school students in Clyde, Ohio.

ing to explain, but easier to follow when you see the film. Its also pretty predictable, with a couple of minor exceptions, so there aren't many surprises. The acting is fine allowing the movie to flow up to its climax of the Friday night dance. I think this is a good movie if you like your drama sweet or your comedy dramatic. I'll give it a big thumbs up, but only one thumb.

One final note, I looked at the paper today and discovered I had seen almost everything out, or at least knew whether a movie was any good or not. So from now on I'll try and give you: The Top Five

Movies to go See Immediately 5. Ghost (Drama/action/ghost story) 4. Memphis Belle (Action/drama/historical movie) 3. Pacific Heights (Micheal Keaton psy-chopath movie) 2. Mr. Destiny (Funny It's a Wonderful Life movie) 1. Fantasia (You know what this one is!)



kids joining gangs and doing drugs on the street just straighten up, get some skills, and find a job! They're all dangerous anti-social types, and they like it that way! Let's just round them all up and send them to fight in Saudi Arabia...maybe then they'll kill our enemies instead of us and each other.

Hey, wait...find out first what makes these kids tick, then figure out what to do. Maybe there's another solution . . .?

Max Scott, director of Boys' Republic, came here to speak about one solution that works. He runs a group home for boys who are committed by the courts because they can not live at home. Most of them are from broken homes, many have been physically abused. About a third have been sexually abused. On the street, they were getting into more and more trouble.

Gangs are very attractive to continued on page 7



KALEIDOSCOPE OF • A TECH public frents

> **BERKELEY SHAKESPEARE FESTIVAL Twelfth Night** Saturday, October 27 at 8 p.m. Beckman Auditorium

TECHTIX & CIT STUDENT RUSH TICKETS GO ON SALE FRIDAY, OCTOBER 26 CIT Faculty & Staff: 11.25 - 10.00 - 8.75 CIT Students: \$7.50

Call campus extension 4652 for information

m Z	LAEMMLE	THEATRES
TERT	ESQUIRE 2670 E. Colorado Blvd. (818) 793-6149	COLORADO 2588 E. Colorado Blvd. (818) 796–9704
A I N	Philip Kaufman's erotic drama	Akira Kurosawa's
N E	Henry and June	DREAMS
Z T	Daily 4:45, 7:30, 10:00 p.m. Sat-Sun matinees 1:30 p.m.	Daily 4:30, 7:00, 9:30 p.m. Sat-Sun matinees 2:00 p.m.

The Inside World

This Week's Inside World was written by: Dabney: Rob Hannah Page: Ajay Chheda Ricketts1: Amit Mehra and Alex Sugiyama Ricketts2: Charles Cook and Lindsey Dubb Ruddock: Chris Martin	Blacker Dabney Fleming Lloyd Page Ruddock Ricketts	1 0 0 0 1 0 3 0 3 6 0 2 0 0 2 0 0 2 0 2 0 5 0 2 7 0 4 1 1 6 0 1 0 4 5
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Dabney

I can't take the abuse. Man I just don't know what it is but it's been a real tough week for me. I often say to myself that I am really a sensitive human being with needs and feelings just like everybody else. Just because my needs invovle lime jello and young women shouldn't make things all that different should it? To prove my sensitivity I will express myself in this work that is Dabney's Inside World. I've been watching things around this house and I've been wondering what planet some of these people live on, culture differences just weren't that large last time I checked.

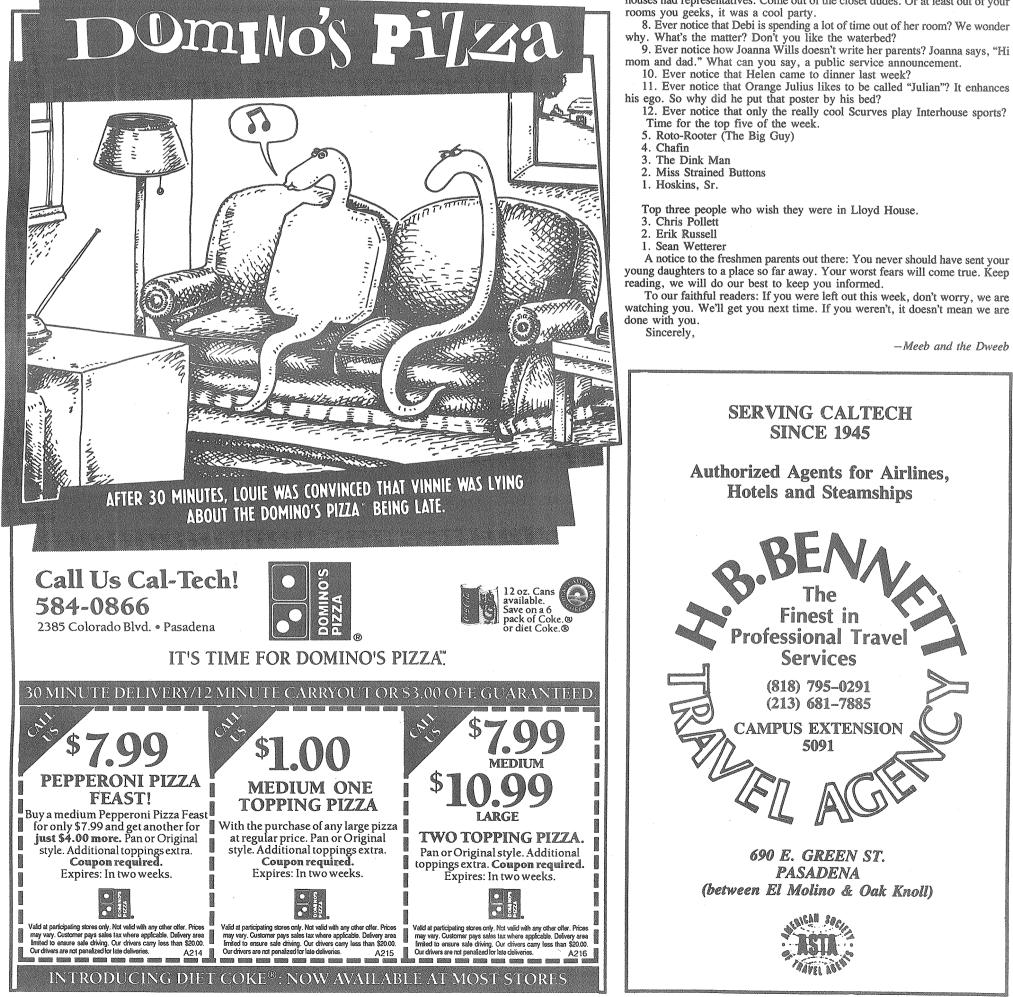
First off, I'd like to mention the undisputed success of 'Hug a Flem' night as rotation ended. As Fleming house proceeded to prove their manhood (and womanhood, I'm no sexist) by marching through the houses, they were greeted by the loving arms of Dabney and and each given a warm embrace. I've never seen the Flems leave the courtyard faster. I was fortunate enough to hug the big guy himself, Bill Swanson, and let me tell you Bill, you give a great hug.

But on to new topics. One of which is this Rich guy and his roommates. What is it with this fella. We're well aware of his last roommate and now he's gone out of control. The guy went and found himself yet another young lady to room with, from the freshman class and knowing her less than two weeks! Sure, sure, you say, but it's Rich and how could anything be more innocent. Well, I think this g-rated lifestyle of his is just an act and he's really a big Casanova type behind closed doern. I don't less that the sure of the lifestyle of his is just an act and he's really a big Casanova type behind closed doors. I don't know what kind of babe-magnet he's got but I'm buying the soundtrack to 'The Little Mer-maid' tomorrow, and putting it on my personal top ten playlist.

Oh, and here's a little pleas to these freshmen women who have just arrived. Would you all please decide who you'll be going out with while you're here at Tech? It would be a great favor to me so I wouldn't have to keep coming into the courtyard and seeing hoards of men who I don't know, hanging out in a house where they don't live. Not that I mind people hanging out, I love the idea, but they seem to be concentrating more on getting your attentions as young attractive females tha say, talking to anyone who has testicles. WHOOPS! Looks like my tact meter just went right off the scale. I'll try to restrain myself in the future.

Well, I certainly hope that I've shown everyone that I really am the sensitive, caring kind of nineties man that everyone finds so attractive these days. Oh, and just a quick reminder, Tuesday is the night to go to the e-bar for a demonstration of Artaud's theater of the absurd. Well, this great green ship that is Dabney sails on, but I'll always have my eye out for those Darbs who choose to travel the waters via sailboart fuel between their ears. Adios.

-roberto



Ricketts1

Welcome to this week's inside world. Today's theme is harsh on your fellow scurves. Why, because it must be done. First, the frosh. So you thought Ricketts House was cool during rotation,

we tricked you fools. We are just as lame as the rest of Caltech. We can't believe you fell for the Four-Square and Pot Fire stuff. There won't be another Four-Square game till third term prefrosh weekend. Suckers. And those rumors about Black Mass in the Courtyard, they're all true. Wait till we sacrifice your late physics homework.

A HELPFUL HINT FOR THE FROSH: the way to her heart is NOT to grope her when you shower her. You know who you are.

ANOTHER HINT: the best way to hit on a frosh woman is to get seven of your close friends to join you to camp out in her room while she is not there. A REAL HINT FOR THE FROSH MEN: sweep them off their feet before

they realize the power of the Ratio. STILL ANOTHER HINT: If she knows your name, you're all set, dude. If not, get a life. You're a loser. A HELPFUL FROSH WOMAN SAYS: save these and study them, the up-

perclassmen still haven't got a clue.

Your two helpful writers have been watching you this past week. We have made several observations, here's a few.

1. Ever notice how some people sit in the Caltech Bookstore and read science fiction books for hours at a time? Some actually try to disguise their actions by hiding behind the bookcases. Even worse, some social vice presidents do it at the mall. That's right, we be "dis"-ing you. 2. Ever notice that when you go to room 8, to ask for directions on Splatter-

House late at night, the occupant is not likely to be in the mood for discussion? So why was the door only slightly ajar? What was the muffled gasp in the darkness? Has daddy called?

3. Ever notice that Carlos Ramirez has only been showered once since getting into the House? "The girly-men frosh couldn't even shower me if they were in body armour and taking steriods." Hey, he really said it.

4. Ever notice that Sacha enjoys the rope ladder a lot?

5. Ever notice that Roto-Rooter (real initials P.R.) stands under the rope ladder? A lot?

6. Ever notice that Erika always brings a can of diet caffeine-free Pepsi to dinner? And what does she eat? Can we watch?

7. Ever notice that Flems, Page Boys and Rudds are REALLY uptight about their sexuality? Case in point: the CLAGS party last Friday night. All four other houses had representatives. Come out of the closet dudes. Or at least out of your

A notice to the freshmen parents out there: You never should have sent your young daughters to a place so far away. Your worst fears will come true. Keep

watching you. We'll get you next time. If you weren't, it doesn't mean we are

-Meeb and the Dweeb



The California Tech

The Inside World

Page

Let the rape begin. welcome to the new, no longer just louder and funnier but drier, Page house.

Before I get to the juicy tidbits, I have to say something about this year's frosh class first. I though last year's frosh class was weak and lame, but I was wrong!!! This year's frosh class (includes the new transfers as well) takes the showers when it comes to being weak, lame and ineffective. I mean to think that interhouse was canceled because the phrase 'BUILD IN-TERHOUSE, FROSH!!!!' would have no meaning to them. I mocked the WAITERS last year and put them down at the bottom of the 'skills' ladder because I thought nothing could go lower. These new frosh, however, are another story. They better not ever graduate because one needs skills in the real world and even people hiring 'unskilled laborers' jobs would not hire this pathetic bunch. Talk about being clueless, these frosh make Clouseau look like Charlie Chan. I will be generous and acknowledge that they do have some of the strongest frosh ever. I mean at least three of them. Mr. GT5.0, Mr. Clueless, and Mr. Canuck have done the 6-man lift. Believe me, doing the 6-man lift is no easy task. For those of you still interested in doing it, please inquire in rm. 217 and we'll gladly accomodate you. After all, we know that we don't have the smartest frosh here but we like to knoe if we have the strongest ones. That's enough FROSH BASH for now. Let's move on to the events of this week. First has anyone seen Mr. Origami recently? I mean he seems to have disappeared ever since the announcement by Mr. Heinosity. To quote Mr. Heinosity, 'Remember, ONE CASE !!!' And in a stunning move showing the creativeness and sharp wit expected, the challenge was flung back in the face of MR. egregious. Both incentive plans are still in effect full force. So go to it, FROSH. The FROSH elections results are in:

Say Ahh Fuk You DO That for ---- BELL FROSH Joe 'Take Me ELVIS' Long ---- WORK FROSH My call (me) 'Princess' Brundage ---- FROSH PRINCESS Robbie 'Laryngitis' Langston --- CHANGE FROSH Ari 'It's your turn in the barrel' Pine -BIRTHDAY FROSH

Ari 'It's your turn in the barrel' Pine -BIRTHDAY FROSH and up for grabs is the office of BEER FROSH by the following nominees: Dave 'Hi, I'm Clueless' Goldberg, Jennifer 'Produce Department' Trittschuh.

Side note: ARI, THE SQEAKING NOISE FROM YOUR ROOM IS KEEPING OTHERS AWAKE, SO CUT IT OUT OR OFF.

The much awaited TOP FIVE LIST is back:

TOP FIVE WAYS TO TURN TECH INTO UCLA

5. Extrapolate minor incidents to theoretical ends,

- 4. Use the honor system to enforce fascism,
- 3. Blame it on the federal government,
- 2. DAPAC, and

1. Create new offices with fancy names.

Weather update:

albany 53/35 anchorage 64/35 boston 54/48

MOUNT WILSON -25/-50 WIND CHILL: 40

toledo 45/37

This weather update is brought to you by a grant from the 'SPARE THE FROSH A GRUESOME END' society for the advancement of the FROSH to sophomores.

-It ain't easy being cheesy

Ruddock

I narrowly escaped hypnotization this weekend. I mean, there's no other explanation. The Ruddock picnic last weekend had more than 60 people turn out for it. I know, cause half of them rode in my van. To put that number 60 in perspective, that's about twice the number of frosh you can find in Jo and Nina's room on any given night. How did we get 60 people to come to the picnic? Well, we did have orange watermelon, we did have B-B-Q tomatoes, and we did get to see Matt Baker make love to a tree. But none of these were pre-anounced!

I figured it out when I saw everyone crowded around Dave Lin singing Kum-buy-ya. He had hypnotized them into coming to the picnic, and he was now giving them orders to start hanging out in Alley 3 and listening to Christmas music all year round. Fortunately, Lady the Psychic Dog sensed the danger and sent everyone home. If y'all want to enjoy a Barbeque without the folk music, come on over to Ruddock and join the White Boys Club. Now this club is open to everyone at Caltech with an interest in white boy culture. We'll be having cookouts, going to baseball and hockey games, talking about pickups and power tools, and challenging all those other sissy clubs, like CSA and SWE, to wiffle ball games. We've already got 26 members, so if you see someone wearing a baseball cap and talking about riding lawnmowers, it's probably one of us.

By today, Fang oughta be stumbling around Ruddock House in his usual donut-state (glazed over on the outside, and jelly for brains). And we've got a couple options for his wounded leg: Numero-Uno: Peg Leg. This may not be too comfortable for Fang, but it will make him look like a pirate, which is cool. Plus we can use him to start fires if we spin him around real fast. Numero-Two-O: Bionic Implant. With this he can come and go from our second story room by using the window. But he'll wake us up at night making Steve Austin "jugga-jugga" sounds. If Fang is well enough on Sunday, he can come out for the GAAC. This year's theme is the Third World Olympics, so be there at 3:30 for some fun. Rich will probably have us burn effigies of Bush and eat sandy Twinkies.

Speaking of low budget entertainment, I saw Evil Dead II the other night. This is probably the best living dead zombie movie ever made. This guy Ash, who happens to be the toughest man in the world, takes his girlfriend out to an old cabin for some nookie. But before they even have a chance to get nekkid, his girlfriend gets possessed by an evil spirit from some book. This makes her so ugly that Ash has to chop her head off with a shovel. But she comes back to life. Her body starts Flashdancing in the woods while her head bites Ash's hand and hangs on like a giant chigger. So he has to put her head in a vise and saw it up with a chainsaw. But the fun's just beginning, because some rednecks show up just in time to get possessed and splattered all over the cabin. The highlight is when the spirits possess Ash's own hand and it starts pulling Three Stooges' routines, smashing dishes on his head and making him do somersaults. What can you do? If you're the toughest man in the world, you cut that darn hand off and replace it with a chainsaw. Then Ash is ready for the showdown with the giant evil tree spirits. Here's what we got: 5 dead bodies, lots o' zombies n' zombie bits dying, 40 gallons of blood, man through windshield, man into tree at 100 m.p.h. (twice), head in vise. Heads roll. Hands roll. Hand crawls. Hand mutters. Eyeballs pop. Eyeballs fly across room into girl's mouth. Shovel fu. Axe fu. Shotgun fu. Chainsaw fu. Trapdoor fu. Gratuitous chase through cabin. Gratuitous spirit- eye view. Evil trees. Bleeding walls. Dancing headless woman. Zombie stomping. Time-travel Oz tornado. Angry bridge. Academy Award nomination for Ash for saying, "We just cut our girlfriend's head off and buried her in the woods. Things are not fine!" and "Give me back my hand!" Four stars, check it out.

Ricketts2

Hello. We're here on location in Ricketts Hovse, reporting directly to you all the interesting and useless information from the past week.

Housing finally delivered on its promise to provide Ricketts with seating arrangements for its spacious outdoor sauna and mudwrestling arena. However, we may have a slight problem, since they are made from wonderful plastics that always break when our elephants sit on them. Not only that, but they melt at boiling, so we might have to turn down the sauna temperature a little bit. To top this all off, the cushions are "all new material consisting of polyester fiber batting 100% This [cushion] does not meet CA Bureau of Home Furnishings flammability requirements technical bulletin 117. Care should be exercised near open flame." We love our new furniture so much that we have decided to do away with all pot fires so we won't damage it

decided to do away with all pot fires so we won't damage it. Speaking of pot fires, the Ricketts Hovse volcano has yet to spew forth this term. We are patiently waiting for approval of our age old techniques. With the recent congressional amendments to the laws of physics due to last second budget reform, our past 20 years of fireball experience may no longer be valid. Indeed, it is speculated that the entirety of Ricketts may well be in danger of spontaneously combusting at any moment. It is also widely believed that if such an event were to occur, the fire alarms would not go off. Resident expert on spontaneous combustion, Dr. Gregory Ellory Hale, was quoted as saying, "That sucker could blow at any moment!!!" We are arranging evacuation plans even as we speak.

We, the Great Conquering Heroes in Maroon, returned Saturday from the perilous and surreal thrill of GRE taking to find firetrucks and paramedics in the Ath lot. The first thought that ran through our heads was, "Please let it be Blacker." But such was not meant to be. As we walked with trepidation toward the courtyard, we were nearly trampled by a whole hoard of wildebeasts. Apparently they were attracted to Ricketts by the scent of catsup in the lawn. In their frenzied attempts to root out this menace, several Scurves were exposed to too much mucus and suffered lacerations and broken noses. Unfortunately, several evil alums were on the scene and were able to call the paramedics in time.

Mello, if you piss on the pillow one more time, we've got a meat grinder warmed up and ready...

The Herc Interstellar Construction Yard (HICKEY), was officially opened this week. Unfortunately, they were quickly converted into their component atoms by the evil Alterians.

The first alley challenge in two terms was offered this week, with Herc challenging Crud in jello wrestling, Baccanal, and vomiting for distance and accuracy. The wimps of Crud have yet to meet this challenge, and considering the feeble losers living in that poor sotten excuse for an alley, it is unlikely that they ever will.

Multiple choice:	
1. Pablo	a. Dan
2. Phlegming	b. Dan
3. John	c. Dan
4. Ward	d. Dan
5. Wart	e. Dan
6. Sandeep	f. Sheep
7. Sarah	g. Dave
8. Brian	h. Dave
9. Steve	i. Dave
10. Bill Swanson	j. Dave
	-

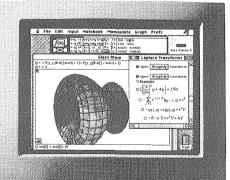
Just a quick word to Bill: It doesn't matter how loud it is if it sounds like shit!

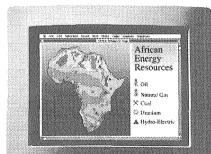
Now for Ricketts Home for the Partially Profound corner: Debi Tuttle is a bagel, and Monica is cream cheese, and they are both in search of lox.

Well, that's it for this week folks, we'll just leave you with this one thought: Chris Pollet has the hots for Andreja.

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For further information visit the **Campus Computing Organization** Jorgenson Building 158-79 356-4612



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October 19, 1990

letters

Hitler, Hussein, and the Anschluss Analogy The Lessons of History and the Case for War

During the present crisis over Kuwait, much has been made of the comparison between Iraqi President Sadaam Hussein and a previous ogre on the international scene – Nazi Germany's Adolph Hitler.

With all due respect to the millions who suffered and died as a result of his demented dreams for world conquest and "racial purity," the comparison is actually rather unfair to Herr Hitler. True, both brutally crushed all domestic dissent, both engaged in wars of aggression, and neither had any qualms over the use of mass murder to advance their own aims. Prior to his Final Solution though, even Hitler had limits – limits Hussein does not even recognize.

When Hitler set out to swallow up his neighbors in the late 1930's, he felt constrained to observe certain formalities so as to "justify" his aggressions before the court of world opinion. In most of these cases he could claim, with some degree of legitimacy, that he was just defending the "right" of German peoples living therein to be "reunited" with a greater Germany; and up until his attack on Poland, he had sense enough to merely threaten his victims into yielding.

Indeed, by the time Hitler began what would ultimately become the most destructive conflict yet seen on this planet, he had gained sufficient strength to take that risk.

In evaluating just how dangerous Hussein and his ambitions are to the present world order, consider how the course of history might have changed if Hitler had behaved back then the way Hussein is acting now. The closest historical parallel we have to Hussein's assault on Kuwait was Hitler's annexation of Austria in the Anschluss of March 12, 1938, the first of his "peaceful" foreign conquests that led to World War II.

A basic difference between the two cases should be noted whereas a substantial number of Austrians, perhaps even a majority, welcomed the Anschluss, virtually no one in Kuwait (aside from some disaffected and opportunistic Palestinians) has felt anything but animosity for the Iraqi invasion and Hussein's self-proclaimed annexation. Nevertheless, there were still plenty of anti-Nazi Austrians in 1938 prepared to defend their national existence, so let us imagine that the Austrian leadership had been made of sterner stuff, and instead of capitulating, had actually ordered the army to fight.

In addition, let us suppose that Hitler had failed to adequately prepare world opinion, and had launched his invasion without so much as a formal ultimatum. With only the flimsiest and most pernicious of pretexts for cover, what might the consequences have been?

Austria would, of course, have been conquered by the German Army in relatively short order, though the ruggedness of the countryside might have prolonged the chances for an organized resistance. More important, the revolution in international relations provoked by such a naked act of aggression would inexorably have led to Hitler's own downfall. The first casualty would have been the appeasement policy of the West, then in full flower in 1938.

Such an unambiguous warning that Hitler was not to be bound by any consideration of international legality would have forced Britain and France to rethink their entire attitude toward collective security. cooperation with the Soviet Union, and the defense of those states such as Czechoslovakia and Poland clearly targeted for future Nazi aggression. Let us now suppose that a shocked League of Nations, responding to an Austrian plea for aid, managed to impose an effective embargo on all German trade - something like the current UN economic sanctions against Iraq. Though Germany was in a much better position to at least feed itself then than Iraq is now, the cutoff of essential raw materials for its war industries would have resulted in the rapid crippling of its still nascent military potential.

What if Hitler had then employed tactics similar to those used by Hussein in reaction to these sanctions, and to any lingering Austrian resistance? Unarmed civilians demonstrating against the invasion gunned down in the streets. Citizens of states observing the embargo prevented from leaving the newly enlarged German Reich, and then rounded up by the Gestapo to serve as "human shields" at strategic installations.

by Brooke Anderson

You walk through large, ornate metal doors and into a room illuminated by a crystal chandelier. Striding over to a leather chair at an oak table, your resolute steps muffled by the red carpet, you survey the faces of those already present. In their eyes you see cal-

The laying siege to those nations' embassies in Vienna that failed to close in recognition of Austria's de facto extinction. The seizure of people from protected compounds in violation of diplomatic immunity. Austrians and Germans alike threatened with execution for the harboring of foreign nationals. The confiscation of nearly everything removable from Austria for use back in Germany proper. The sending of vast numbers of German Nazis to colonize whatever might be left, just in case a plebiscite should someday prove useful. Most ominously of all, the threat of a chemical rain of death against any state daring to oppose him.

Can there be any doubt about how the international community would have responded to such ruthless contempt for every tenet of civilized conduct and human decency? No nation with even the slightest interest in selfpreservation could have avoided declaring war on such a renegade regime. Hitler would have soon found himself surrounded by a ring of unbreakable steel, and even his erstwhile ally Mussolini would have had to abandon him.

If WWII had been fought at all under these conditions, it would have been a short and relatively painless affair, particularly when compared with what actually took place. Needless to say, he could not possibly have survived such a challenge, let alone prevail, and the inevitable result would have been the early eradication of both Hitler and Nazism. It is a sad commentary on the depths of cynicism to which most of us have sunk that such a sense of moral outrage has not yet been reached over these same atrocities now being committed by Hussein.

What lessons can we draw from this analogy? The one most obvious is that Sadaam Hussein, with his limitless ambitions and utter lack of ethical restraint, unquestionably presents a clear and present danger of the sort once posed by Adolph Hitler. Any com-

promise with someone so demonstrably deceitful and potentially malignant is no more possible or desirable now than it ever was with Hitler; and though we can all hope economic sanctions will eventually lead to his overthrow without the need for armed conflict, we must not shrink from such a prospect.

Few wars have ever been won without offensive action of some kind, so if the time comes when continued Iraqi intransigeance necessitates a military response from the United Nations, then so be it! - for Sadaam Hussein has in effect already declared war on the entire civilized world.

Make no mistake, this is a war that we must not lose or back away from, for the other lesson to remember is that failure to check wanton aggression only leads to a stronger and more determined aggressor. If Hussein had been sanctioned when he first made war on Iran back in 1980, or even when he initiated the use of poison gas against the Iranians or his own Kurdish population, he would not now be the menace that he is.

Unfortunately, the world community not only failed to take any effective measures against these initial violations of international law, some states actively assisted in the expansion of his military capabilities, naively assuming he represented the lesser evil vis-a-vis Khomeini's Iran. Hussein must be stopped now, while even most of the Arab world is arrayed against him, and when the cost of even a worst-case outcome would be far preferable to the alternative of acquiescence.

If not, the next time could see him in firm control of the world's oil supply, and commanding the allegience of some 200 million Arabs armed with nuclear as well as chemical weapons. A Third World War fought under those terms might well spell the end of both civilization and history.

-Riley R. Geary 252-21 x6946 Seismology Lab Staff riley@bombay.gps.caltech.edu

Investment Fun

bend them to their will. With a nod of satisfaction, you acknowledge the abilities of this elite group to which you belong, and sit down to the task at hand. It is a difficult task, not one for the weak or indecisive, but you know the group is up to it. Although the week was turbulent, it is time to lay down a ing) before it is all hogged down. Of course, this doesn't preclude bringing to bear those analytical skills which you have finely honed here at Caltech; indeed, another member seems to be discussing the intricacies of puts and calls as explained by contour integration, although it's hard to tell since his

The California Tech

Food Committee Minutes 10-18-90

Present: me, Jon Lange (Da), Jessica Barnett (Fl), Chris Myers (Ll), Wayne Davis (Pa), Debi Tuttle (Ri).

Last week, we decided to meet with Gary once a month since from now on, we are having a six-week cycle food menu. The members of the food committee will meet once a week to discuss general food matters.

Comments and complains:

1. People prefer cheese slices to cheese squares in the sandwich counter.

2. The Italian food will be better if it is made spicier.

3. Last Tue, there was not enough food in Page.

4. No lobster and fish. And someone think that the monte cristo is unnecessary too.

5. It will be nice to have more variety of meat for the submarines. 6. B.C. should try to use fresh ingredients in its entrees. People found hamburger meat in the lasagna on Wed night, meat in the dressing on Tue, and ham in the sweat and sour pork.

7. The amount of sauce and gravy put on the ham and potato should be cut down.

8. The South Houses would like to cook their steak outside.

9. When students request for "a little bit" of food during lunch, the servers usually ignore the request. Food waste could be cut down if large heaps of food is not being put on each plate.

Compliments:

 The steak last Thurs is really good, very juicy and delicious.
 Lunch this Thur is the best of all the lunches so far.

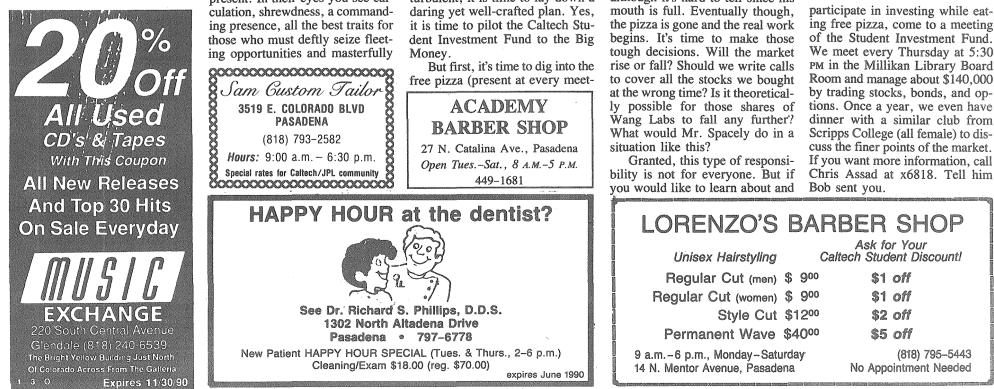
3. Overall, the quality of the food has increased.

Float

from page 1

configuration. Appearing very early in the parade order, it will be hard to forget the very special nature of the Caltech's centennial float. As Ross Young commented, "It's one of those special floats....There will be nothing like it again."

If you would like to help decorate Caltech's float, two instructional programs will be conducted to introduce volunteers to the decoration process. These presentations will be held on Wednesday, November 7, in the Winnett Lounge, and Tuesday, November 13, at Rosemont Pavillion. Both are scheduled from 7:00 pm to 8:30 pm. If you have any questions or would like to volunteer, please contact Lenore Freise at 356-2188 for more information.



Boys Republic

from page 3

kids with no other structure. Members get support from the gang/peer group, and act delinquent in order to be accepted. The psychology becomes one of group delinquency - kids do things that they would never do individually in order to prove themselves, to be accepted into the group.

Drug dealing is viewed as the way to get ahead, to get fast cars and make money. Actually, most street kids are just used by the big dealers, and get to hold on to hardly any of the profits of their selling. A few 'trusted contacts' have brand-new BMW's and Mercedes, but these are the exceptions.

Boys' Republic's job is to break the cycle of delinquency, gang psychology, and drug use. They boast a highly successful program - no fights, not even graffiti. Peers help each other, and come down on kids who make trouble instead of encouraging them. The key is a structured program, open group discussions, and a work philosophy.

Boys in the program go to classes, do athletics, work on a farm raising beef cattle, go to group therapy, and have an 8 PM curfew. They don't have time to get involved in trouble. Some years ago, the boys had to work in order to earn their room and boardotherwise they would be thrown outside in a pup tent and starvation rations. Regulations no longer permit this...but they still have to work in order to earn privileges around the home. The idea is not to be cruel, but to toughen the boys up, not to let them blame parents or society for their problems and thus feel 'entitled' to support. Everything that happens to them is a direct consequence of their own actions.

Despite the toughness, boys know that they matter to those around them. Group disscussions are run each day to work through problems and the conduct of the group members. These discussions are very open-kids can tell off counselors, other kids, without fear of repercussion. Constructive confrontation is the key to breaking down negative groups, and the pecking order that supports them. Peer leaders open up in the groups-new members of the home are amazed that 'cool' peers will openly discuss their feelings and problems.

Despite all the successes, however, the outlook for graduates is harsh. With a high school education and no family to support them, boys who turn eighteen must go out and work through school or find a job. They used to join the military en masse, but recently that has been less of an option. Some scholarships from the program are available, though not enough to

what goes on

Online Schedule of Classes

The Caltech schedule of classes, as published by the Registrar's office, has been added to the online INFO system, accessible via CITnet. A write-up on using the INFO system is available from the CCO Consulting Office, 162 Jorgensen.

Submit announcements for What Goes

On on forms available outside the Tech

office (SAC room 40A) and in the

copy/mail room (SAC room 37), or use a

plain piece of paper. Send announce-ments to 40–58, or put them in the IN box outside the *Tech* office. Indicate the date(s)

the announcement must run. Announce-

ments for the current issue must be

received by 5 pm Tuesday and should be

shorter than 75 words. Announcements

will be published as space becomes avail-

able and will be chosen according to size

and interest to the Caltech community.

Announcements for commerical events

unrelated to Caltech will not be published.

Today, October 19, is the last day to sign

up for a free dinner with an American fa-

mily. Stop by the Caltech Y (2nd floor, Win-

nett) and sign up for either the evening of

Friday, Oct. 26, or Saturday, Oct. 27.

Health Center Spouse Costs

In response to student demand, the Health Center and Counseling Service will

make their 1990-91 Spouse Programs avail-

able to all students' spouses regardless of

their insurance coverage. The fee will be \$50 each term-charged to the student's

account-for each program, Medical or

Counseling. Therefore, if your spouse en-

rolls in both programs, it will be \$100 each

term. Registration forms for these programs

will be available at the Health Center. You

TODAY is the last day to sign up for a dinner presentation with Al Shaff, speaking

on "The Handling of Success and Failure:

Learning vs. Lamenting," on Monday, Oct. 22, 6:30 pm at the Ath. There is no charge

for this event, but you must be signed up at The Caltech Y.

Come hear Larry Bruce, CEO of the

U.S. Committee for UNICEF speak on "Celebrating 1990 International Literacy

Year" on Sunday, October 21 at the Ath.

There will be a no-host bar at 11:30 fol-

lowed by lunch at 12:30. The United Na-

tions Day Luncheon Committee has FIVE

free spaces for students who sign up at the

Y by TODAY, October 19. The Caltech Y

is subsidizing up to 15 students \$10 of the

\$17 (you pay a cheap \$7) for a great lunch

and program at the Ath. (Also appearing will be the Peace Child Repertory Theater)

Wanted: Students who enjoy being with

children ages 14 months to 5 years and who

have 2 or more consecutive hours free to

substitute, for pay, at the Children's Center.

Please call x6860 for employment interview

appointment. Fun and hard work guaran-

On Wednesday, October 24 at 4 pm in

the Judy Library in Baxter, Professor Mor-

dechai Feingold of the Center for the Study

of Science in Society, Virginia Polytechnic, will be speaking on "The Other Sir Isaac

newton: Reflections on the Origin of 'Two

The Caltech Student Investment Fund

meets Thursdays at 5:30 p.m. in the Mil-

likan Library Board Room. Free pizza is

served every meeting. If you are interested in helping manage about \$140,000 by trad-

ing stocks, bonds, and options or are in-

terested in learning about the stock market,

stop by. For more information, call Chris

teed, wonderful kids, friendly staff.

The Other Sir Isaac?

Cultures'.

Investment Club

Assad at x6818.

may call for details at x6393.

Entrepreneurial Dinner

UNA Day Luncheon

Job Opportunity

International Students

Off-Campus Folkdancing Join the Pasadena Folkdance Co-op ev-

ery Friday evening at 7:30 pm at Throop Unitarian Church in Pasadena at the corner of Del Mar and Los Robles. The club offers beginning instruction at 7:45 pm and intermediate at 8:30 pm. Each month the community is invited to participate in line, set and couple dances from all over the world. A \$2.00 contribution is requested of nonmembers.

Decorating Caltech's Float

All members of the Caltech/JPL community interested in volunteering to decorate Caltech's entry in the 1991 Rose Parade are invited to attend one of two float-decoration programs. These instructional presentations are both scheduled from 7:00 pm to 8:30 pm. The first will be in the Winnett Lounge on campus on Wednesday, Nov. 7; the se-cond will be at Rosemont Pavilion on Tuesday, Nov. 13. Rosemont Pavilion, the Caltech float's building site, is located at 700 Seco Street at the corner of Rosemont.

These programs will be presented by Charisma Floats, which is constructing Caltech's "For Every Action . . . A Reaction float. The object of both presentations is to acquaint Caltech/JPL people with the fundamental aspects of float decoration ("petalpushing") and to provide a preliminary schedule for the Dec. 26-31 decoration period.

If you are interested in volunteering to decorate the float and cannot attend either of these programs, please call Lenore Freise at 356-2188 to ensure that you will be contacted later this year with additional information.

Service League Offers Money

The Caltech Service League now has a fund request form. All campus organizations requesting financial aid from the Service League must use this form. The forms are available at the MOSH's office and at Lydia Matthew's office in Parsons-Gates, x6315.

Let The Games Begin

Every Friday night, the Caltech Gamers meet to enjoy role-playing and board games. Friday meetings are in Winnett Clubroom 1 at 8:00 pm. Meet others who share your interests. All welcome! Most common Friday games are fantasy role-playing, but it's a good time to find players to share whatever games you like.

Why Graduate School?

The GEM Program will present a twohour national interactive videoconference on "Why Graduate School in Science and Engineering?" on Tuesday, October 30, 1990. Viewing will be from 10 am to 12 noon in Baxter Lecture Hall. The goals of the conference are to inform science and engineering undergraduate students of current trneds in American graduate education in science and engineering, to demonstrate the advan-tages of graduate education, and to inform students of resources and financial assistance available, among other topics. The Career Development Center, x6361, has all the details.

On-Campus Recruiting for Seniors

On-Campus Recruiting for bachelor's and master's students starts October 29. If you didn't receive a package of information from the Career Development Center and are intersted in participating, stop by our office and get on our mailing list. Each year. between 150 and 200 companies come on campus to interview prospective graduates. also compile a r hook

Horse Flies

The Caltech Non-existent Equestrian Team is still showing (and will continue to show) horse-related videos every Monday from noon to 1 pm. Join us and see people try to defy gravity (and fail) and all kinds of exciting things. Our big screen presen-tations are in Rm. 19 Baxter. Bring your lunch. If you have any questions, etc. please call Liz at x4515 or Victoria at x3828.

October-AIDS Awareness

The Pasadena AIDS Community Coordinating Committee has a full calendar of events for AIDS Awareness Month-the Pasadena Health Department has counseling and free HIV testing (for information call 405-4391). For more information on calendar events, call or visit the Student Health Center on Arden Road, x6393-it will be posted in the lobby.

Cave Art

Count Robert Begouen will be giving a lecture and slide presentation on "Treasures of the Volp Caverns: Prehistoric Art" in Baxter Lecture Hall on Tuesday, October 30, 1990 at 4:00 pm. There is no charge for this wonderful and exciting presentation.

Free Film Series

The Caltech Film Program this fall will feature dramatic films that deal with the subject of history. Included will be films from the United States, France, Germany, Afri-ca and the Soviet Union. The films, screened as part of Professor Rosenstone's class, H131, are free and open to the entire campus community. Screenings are Monday nights at 7:30 in Baxter Lecture Hall.

The film for October 29 will be Oktober (U.S.S.R.-1927), directed by Sergei Eisenstein.

Totem Coming Out Soon

The 1990-91 edition of the Totem, the Caltech literary magazine, is tentatively set to be printed at the beginning of second term. More submissions in the form of artwork, poetry and short fiction are encouraged, however. The deadline for these submissions is the last day of classes this term. Please send your submissions to Michael Simpson at Mail Code 1-53 or drop them by room 217 of Page House.

B.F. Goodrich Wants Inventors

B.F. Goodrich is sponsoring a collegiate inventors competition to promote American invention and technology. The program will reward up to three entries \$5,000 each for submitting the best inventions. Faculty sponsors for each of the three winning student inventions will receive \$2,500 each. Winners may be selected from one or more of the three categories (which the Dean's Office forgot to give us).

Administered by the National Invention Center, the competition is open to all fulltime U.S. college students.

Inventions will be evaluated by a panel of nationally recognized engineers, inventors, mathematicians, scientists, environmentalists, biologists, medical doctors and patent attorneys.

Students are welcome to enter the competition individually or in teams. Patent rights of each entry will be closely protected. All entries must be submitted by December 31, 1990.

For more information, contact the Dean of Students, 102 Parsons-Gates, x6351.

Folk Dancing On Campus

The Caltech Folk Dancers invite you to come and join us for folk dancing on Tuesday nights in Dabney Hall Lounge. Dances are taught from 7:30 pm to 9:00 pm, with dancing from 9:00 until 11:30 or midnight.

Ride Board

Need a ride home after exams? Want to go to San Francisco for the weekend? Feel bad about driving alone? Want to save gas and help others as well? Now you can, with Green Hills Scholarship The Green Hills Software Corporation has announced the availability of \$5,000 Computer Science scholarships. These renewable scholarships are to be awarded to juniors and seniors with an interest or experience in computer science. The Green Hills scholarship is based solely on academic performance with no regard to financial need. The deadline for submitting the Green Hills Scholarship application has been extended to November 1, 1990. Applications are available at the Financial Aid Office, 515 S. Wilson, and the Dean's Office, 102-31.

October 19, 1990

money

Scholarship Listings The Financial Aid Office has applications and/or information on the following scholarships. All qualified students are encouraged to apply. Our office is located at 515 S. Wilson, second floor.

The California Irrigation Institute has announced the availability of a \$1,000 scholarship award for the 1990-91 academic year. To be eligible, students must be either juniors or seniors, enrolled full-time in a course of study leading to a major in an irrigation- or water-related field of study. The deadline to apply is November 1, 1990.

The National Space Club will award a \$7,500 scholarship for the academic year 1991-92. The scholarshipo is in memory of Dr. Robert H. Goddard, America's rocket pioneer. Applicants must be U.S. citizens in at least their junior year and have the intention of pursuing undergraduate or graduate studies in science or engineering. The deadline to apply is January 4, 1991.

The Northrop Corporation is offering scholarshiops at Caltech for the 1990-91 academic year. The scholarship is open to juniors in Electrical Engineering with at least 3.3 GPA and a career interest in the defense aerospace/electronics industry. The applicant must be a U.S. citizen, a resident in geographic proximity to a Northrop facility and must not be a concurrent recipient of another company's scholarship. Applications are available in the Financial Aid Office at 515 S. Wilson. The deadline is :00 pm on Friday, November 1.

The Josephine de Karman Fellowship Trust has announced the availability of ten fellowships of \$6,000 each for 1991-92. The fellowships are available to students entering their senior undergraduate year and graduate students entering the terminal year of graduate school in the fall of 1991. The deadline to apply is January 31, 1991.

The Society for the Advancement of Material and Process Engineering has two undergraduate scholarship awards programs. One program is for the engineering student and the other is for the engineering technology student. Applicants must be fulltime students and recommended by their department head or advisor. The deadline to apply is February 1, 1991.

The American Society of Naval Engineers has available scholarship awards of \$2,000 each for the 1991-92 academic year. Undergraduate awards are limited to a student's final one or two years of undergraduate education. Graduate support for studies leading to a master's degree are limited to one year. Applicants must be U.S. citizens and demonstrate a genuine interest in naval engineering. Deadline for application is February 15, 1991.

The College Women's Club of Pasadea is offering scholarships for 1991-92 to full-time undergraduate students. You may apply for a \$2,000 award which may be used for tuition/fees, textbooks, and lab fees. Full-time graduate students may apply for fellowships of \$3,000.

Application forms and instructions are available in the Financial Aid Office. Completed applications, including an academic transcript, current course litst and three recommendations are due in the Financial Aid Office by February 1. One graduate and one undergraduate will be selected from the applicant pool and then submitted to the College Women's Club by their March 1 deadline.



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sports X-Country Wins Despite Sickness and GREs

The Caltech cross-country team, despite missing key runners, managed to defeat Pepperdine, Life, and LaVerne on their home course in the Lower Arroyo. The women lost to a strong Pepperdine team, but defeated Mount St. Mary's and LaVerne.

The men's team was prepared for the loss of Chris Campo, Mark Lyttle, and John Pham, who were taking their GREs. However, the flu bug caught them off-guard. Top runner Aaron Matzner was too sick to run, and Dan "Terminator" Flees and Scott Kister were slowed by the sickness. Flees, wanting some extra sleep, ran the two and a half miles to the home course as his warmup.

Life Bible College only brought two runners, but one was Matt Messner, who was considering going after the course record of 27:08. However, when Messner hung back and let Kister set the pace at the start, it became obvious he was not trying for the record. After two miles, Messner picked it up, leaving Kister and Flees to fend off Pepperdine's top runner. Coach O'Brien later commented, "That Pepperdine guy wasn't even in the same class as Kister and Flees. No way he beats them if they're healthy." Unfortunately in their weakened states, neither could match the Pepperdine runner's finishing surge. It didn't matter, though, as Tech placed five runners in front of Pepperdine's next finisher to easily win 20-39. Life and LaVerne did not have complete teams and forfeited.

Following Kister and Flees was freshman Andy Zug, finishing fifth overall in an impressive time of 31:41 for his first collegiate race. Jonah Michaud was the next finisher in 32:00. Ned Bowden was eighth in 32:52. Kurt Storm and Tim Wacholz rounded out the Beaver's top seven.

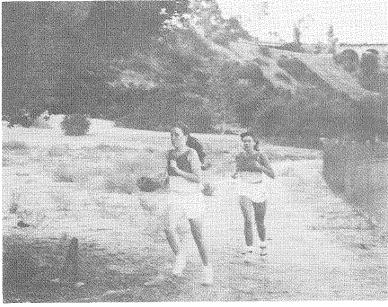
It was a day of personal bests for the women. Sophomore Amy Hansen was plagued by stomach problems, yet still finished seventh overall in a personal record of 23:26 on the course. Aimee Smith ran a strong race to finish ninth in a PR of 23:46. Emmeline Naranjo was one place back and also set a PR of 24:55. In freshman Becky

Scott Kister leads the Beavers with a third place finish overall in Caltech's race against Pepperdine, Life Bible College, and LaVerne on the Beaver's home course.

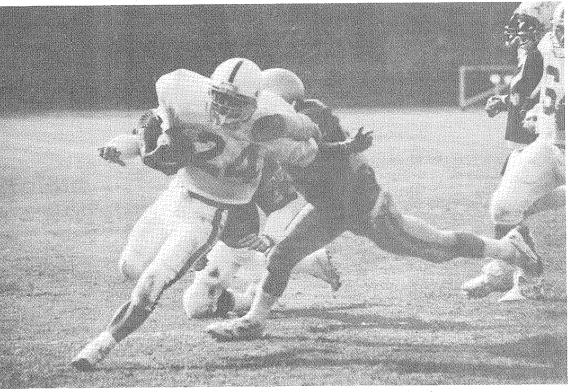
Green's first race on the home course, she finished in 24:57. Anna George, Betsy Barton, and Sarah Yoder completed the Beaverettes top seven.

Division I Pepperdine used a pack of runners to fill in the second to sixth places overall and win the meet 15-42 over Caltech. Mount St. Mary's had a great deal of depth. However, other than their top runner, who won the race, the rest of their mass was concentrated in the back of the pack. This enable the rolling pumkins to win 24-31. LaVerne did not field a complete team.

This weekend the team travels to Thousand Oaks to run a new course against host Cal Lutheran, Pomona-Pitzer, and LaVerne. Cal Lutheran and Pomona-Pitzer have excellent teams again this year and LaVerne is, well, LaVerne.



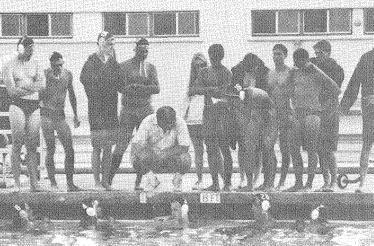
Betsy Barton and Jessie Haldeman race together on the Beaver's home course.



Cass Nakasone (24) breaks tackles and leaves defenders in the dust on a sweep play against the Antelope Valley Crusaders.

WEEKLY SPORTS RESULTS

STREET, STREET	Constant of the second second second			
Day	Date	Sport	Opponent	Results
Fri.	10-12	Volleyball (W)	Mount Saint Mary's	3-0
Sat.	10-13	Cross Country (M)	Pepperdine, Life, LaVerne	vs. Pepperdine 20-39, vs. LaVerne, Life forfeit wins
Sat.	10-13	Cross Country (W)	Pepperdine, Mt. St. Mary's	, vs. Pepperdine 42-15, vs. Mt. St. Mary's 24-31,
			LaVerne	vs. LaVerne, forfeit win
Sat.	10-13	Water Polo	Redlands	7-17
Sat.	10-13	Football	Antelope Valley Crusaders	19-6
Sat.	10-13	Soccer	Claremont-Mudd	0-10
Sat.	10-13	Volleyball (W)	Pacific Christian	1-2
			California Maritime	3-0 (advanced to finals with 7-2 round robin record)
			Pacific Christian (finals)	12-15, 15-10, 9-15
Wed.	10-17	Water Polo	Occidental	8-13
Wed.	10-17	Soccer	Redlands	0-1
Wed.	10-17	Volleyball (W)	Mount Saint Mary's	12-15, 15-8, 15-4, 15-11



WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent		Location	
Fri.	10-19	3:00 pm	Soccer	Pacific Christian		Caltech	The water polo tear
Sat.	10-20	9:30 am	Cross Country	Cal Luth., Pom-Pi	itz., La Verne	Cal Lutheran	THE MALER POLO LEL
Sat.	10-20	10:00 am	Soccer	Occidental		Occidental	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Sat.	10-20	11:00 am	Water Polo	Pomona-Pitzer		Pomona-Pitzer	
Sat.	10-20	1:30 pm	Football	Cal Poly Pomona	l	Caltech	THE CARE
Mon.	10-22	8:00 pm	Volleyball (W)	Pacific Christian		Pacific Christian	I THE CALLE
Tue.	10-23	8:00 pm	Soccer	Loma Linda Univ	rersity	Loma Linda	
Wed.	10-24	4:00 pm	Soccer	Whittier		Caltech	40-58 SAC
Wed.	10-24	4:00 pm	Water Polo	Claremont-Mudd		Claremont-Mudd	40-J0 JAC
Fri.	10-26	6:00 pm	Volleyball (W)	Cal Maritime Invi		Cal Maritime	Pasadena, (
Sat.	10-27	10:00 am	Cross Country	SCIAC Champion		Bonelli Park, San Dimas	Tubudena)
Sat.	10-27	1:30 pm	Football	San Fernando Va [This time for sur		Caltech	
Cat	10-27	2:00 pm	Volleyball (W)	Cal Maritime Invi		Cal Maritime	
Sat. Sat.	10-27	TBA	Water Polo	Chapman Tourna		Chapman	
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Individual, Commercial, Groups. (818) 577–8200			1 &	Green St. • Pasadena (818) 796–9924			
		(010)	J//=040V		1 4	Mon-Tue-Thu-Fri 10-5 • Sat 10-3	

e water polo team listens intently to coach Clint Dodd during a timeout. THE CALIFORNIA TECH 40–58 SAC CALTECH Pasadena, California 91125