Nominations for ASCIT Prez, Veep, and the most sought after, respected, esteemed, honored, influential, notable, cherished, reputable, prestigious, worthy, important, ...

The California TECH

famous, renowned, popular, recognized, acclaimed, significant, illustrious, noble, lofty, dignified, prominent, splen-dorous, and most excellent job - that of Tech Editor

January 11, 1991

Volume XCII, Number 11

Pasadena, California

Beavers Slap Their Tails Durin



Caltech's entry, "For Every Action...A Reaction" is a popular float in the Pasadena Rose Parade.

by Chris Martin & Amy Hansen

Ya know, they never said that being a beaver would be pretty. I mean, I figured I'd be all sweaty and my feet would hurt and all. But those Beaver costumes were just dog ugly! I would've fit in better on Halloween than New Year's.

The funny thing was, the kids loved them. Their eyes got all wide when they saw me and most of them wanted to shake my hand. The rest of the crowd kinda liked them, too, even if they couldn't tell they were supposed to be beavers. Some people thought we were bears, or chipmunks, or gorillas. I thought the giant foam rubber tails were a dead giveaway. But ing the initial judging. That's probmost of the people camping out on Colorado were about as dumb as a bag of ball bearings, so I guess it's O.K.

When I rode down Colorado, I found that the costume gave me a strange power over the spectators. When I waved at them, they waved back. When I clapped my hands, they clapped along with me. The other people on the float found they could do the same thing. There were seven of us in all: me, Mike Nassir, Mark Humphries, Laurie the grad student, a couple of Alums named Mike, and a guy from JPL. It was a good thing the crowd liked us, cause they sure would've been confused by the float.

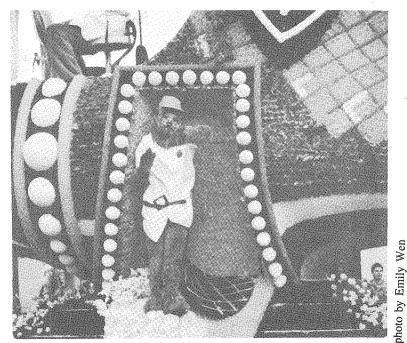
the float v

isn't working the rest of it can't work either. Ya see, our computer that controlled the whole works broke down. Typical, huh? Personally, both of us hate computers. You just can't trust them to do anything right, especially control a parade float. And if you're reading this article, it's a stinking miracle, cause it probably had to go through about three computers to get to you. Anyway, we had to control the float by hand, after that. So it didn't quite look right, and it was kinda confusing to watch if you didn't understand what was supposed to be happening.

The float didn't even work durably why we didn't win any of the awards we so richly deserved. But I thought the float looked good even without the animation. We had a lot of Caltech students helping to finish the float. They had the job of attaching thousands of flowers in the last couple of days before the parade. When it was done, even Bob thought it was a good looking float. That's right, 'ol Bob Newhart, the Grand Marshall of the parade. He told me, "That's a good looking float."

I said, "Thanks, Bob," but I don't think he heard me through my beaver mask.

After the parade was over, we parked the float up on Sierra Madre. About this time, the beavers were getting tired, so they were replaced by the second shift. That was me, John Krowas, Bill



Swanson and Cathy Hafer. The float was roped off, but thousands of people filed by to see it. Our job was to run around the float, wave at the masses, and to shake hands. Especially to shake hands. "I must have shook hands with every rugrat in Pasadena!" said John Krowas.

We also had to answer all sorts of annoying questions like "What's the float supposed to do?", "Why didn't you guys have a prank?" and "Newton? Where's the city of Newton?" That's why I preferred to stand up on the float, wave to the kids, and pose for pictures. The

kids were all thrilled that I was waving especially to them! We're talking some serious time in therapy later in life. Then there were the bigger kids that will probably spend some time in jail in later life. These kids were pulling my fingers and face and yelling "You're not a real beaver!" Like I said, I spent a lot of time up on the float.

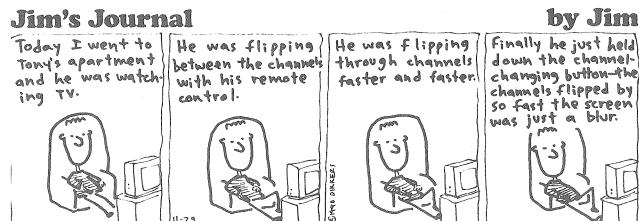
But once the day was over, it was worth it. We had a lot of fun and maybe some more people will recognize the name Caltech. Hopefully they won't associate it with a bunch of ugly beavers.

CRIME AND INCIDENT BEAT

- Crime Tip: Is there a gang in Pasadena? Read the first three entries and think about it. Be alert and ready to avoid these kinds of incidents
- 12/7 A student returning to campus from Jack in the Box on Colorado was harrassed on Hill by three persons in a white pick-up. When the student approached San Pasqual, he was chased to campus by one of the persons who had previously been in the truck.
- 12/7 Another student was walking south on Holliston when a vehicle with three persons, apparently between 15 and 18 years of age, in the vehicle passed him. One of the persons asked if the student was a "techer." A short time later a person, apparently from the vehicle, ran up behind the person and stole some papers.
- 12/7 A third student was jogging east on Lombardi Road when he was approached by three persons apparently between 18 and 19 years old. The student was asked if he was a Caltech student. When he didn't reply, a suspect demanded his wallet, and struck the student when he found the student had no wallet. The suspects fled in a vehicle, possibly a late model Ford LTD, when a car approached the scene.
- 12/7 A computer, locked down in room 51 of Sloan Lab with a cable, was found stolen. There was no evidence of forced entry.
- 12/9 Three unknown persons were found playing instruments in the lobby of Fleming. Security was called and the persons were advised that they were trespassing, and were escorted off campus.
- 12/11 A student parked and locked his bike in the rack east of Ricketts House. The student returned and found his bike missing and a piece of the lock on the ground.
- 12/14 Å student found that the right side rear window of her car was broken, and the dashboard and stereo had sustained extensive damage. The car was parked in the Michigan Del Mar parking lot.
- 12/17 A member of the staff had parked his 1991 Mercury Tracer in one of the spaces south of the tennis courts while the courts were undergoing surface work. He noticed that the hood of the car had several scratches on it when he returned.
- 12/19 A student had parked and locked his bicycle to the rack on the south side of Page House. The bike was found missing.
- 12/19 A locked bicycle was removed from the rack at 348 South Catalina.
- 12/20 A blue denim jacket was left on a chair in the computer room of Jorgensen Lab. The jacket was apparently removed without the owner's permission.
- 12/21 A Ruddock House member showed exquisite culinary skill in destroying a toaster, setting off the fire alarm and calling security.
- 12/21 The microwave oven in the Lloyd House kitchen was discovered missing by a custodian. There was no evidence of forced entry.
- 12/23 The driver's side window of a faculty member's vehicle parked on Wilson at San Pasqual was smashed.
- 12/26 Another Ruddock House member, in attempting to rival a previous incident, burned toast in the first floor kitchen, setting off the fire and smoke alarms.

complicated piece of machinery which we put together in ME 100. The basic idea of the float was a Rube Goldberg time machine. By Rube Goldberg, I mean that one device on the float triggered the next device on the float [a style of invention made famous by a cartoonist named Rube Goldberg]. It also means that when one device

Amy Hansen slaps her Beaver tail on Caltech's centennial float.



12/27 A computer was stolen from room 170 of Jorgensen Lab. The

computer was locked down with a cable, which is also missing. 12/27 A student in Fleming reported that her new credit card had possibly been stolen from her mail box. She received a bill for \$4,713.70 in unknown charges on her card. The bank had sent 2 cards on December 12.

12/28 A student parked and left her car on San Pasqual Street for a few days. She found that someone had smashed the rear side windows on both sides of the car.

- 1/1A Macintosh color monitor was stolen from the computer lab in Fleming House. The lock was broken and several circuits of the computer were damaged.
- 1/6 A Trek 930 Mountain Bike was removed from Alley 4 in Fleming. The bike was unlocked.
- 1/7 Five 8010 Fluke multimeters and several wire wrap guns were found missing from rooms 6 and 35 of Steele Lab.
- 1/7A suspect was approached by security when he was observed in the 341 Wilson parking structure. The suspect said he worked for NASA at JPL and produced a fake id. The suspect was told to leave the area or be arrested.
- 1/7 A locked 7-speed Trek bicycle was removed from the racks between Braun and Marks Houses.
- 1/8 A student found that several food items and soft drinks were stolen from the Fleming House kitchen near the library. The kitchen has no door and is easily accessible. Several other food items were found missing from the kitchen near room four. Total value stolen, missing, or damaged: \$11,000

January 11, 1991

S W E Bulletin

by Celia Ng SWE...SWE...SWE. Do you know what SWE stands for? Society of Women Engineers. Do you know who it's open to? To anyone and everyone in the Caltech community, undergrads, grads, professors, etc. And it's not just open to women engineers; it's open to mathematicians, biologists, artists, and even men! Of course, most of the SWE activities are focussed to benefit women engineers, but everyone is welcome to join!

We have the coolest activities that aren't a waste of your time since they'll help you find a job! Earlier this school year, we had a Resume Workshop led by Career Development Center counselor Rosana Gatti. You don't have to be a woman to need a good resume!

Well, if you missed the Workshop, you still have another chance. On Feb. 26, 1991 (a Tuesday night), SWE is holding its annual Dinner With Industry, cosponsored by the Career Development Center, Alumni Association, ASME, and hopefully some others as well. This is how it goes. We all get dressed up and go for an intimate dinner at the Ath (for a very low fee, less than \$10-price variable depending on the number of companies involved) and get a chance to talk to representatives from various technical companies. Resumes are submitted to all the participating companies and we all get good summer and permanent jobs! Sound good? Well, this event is even open to non-SWE members (with only a small additional cover charge)!! It's lots of fun and a great opportunity to get that job you've been dying to get. There's even door prizes, which is reason enough to show up!!! So when does this "opportunity knocks NOW" kind of deal gonna be?? Tuesday, February 26, 1991. Reception begins at 6 pm, dinner at 6:30. Approximately 50 spaces available. If you are interested, call 578-9923



Contrary to popular belief, this float is not from Newton college, and it is Isaac Newton, not Johnny Appleseed on the float.

or write to 1-55, asking for me, Celia, ASAP before spaces are all taken

Another wonderful cause sponsored by the SWE is the (also annual) Frosh Interest Panel. This may be familiar to the sophomores. It is a service provided to the unknowing freshmen trying to decide on their major. Seniors are preferable as panel speakers. It's informal and fun! If you are a junior or senior and would like to speak about your major (you'll get a free dinner or something) give me a buzz. This event will tentatively be held about the second week of third term. FROSH-BE THERE !!

And now to \$money\$ talk. SWE has a SWE Technical Presentation Competition in which you can get FREE transportation to SWE National Student Conference in San Diego (June 23-29, 1991) as well as other great prizes I don't know the specifics of. Submit technical papers related to engineering, no more than 10 pages of text. Deadline: March 1, 1991. Also, there's the **1991** Soph/Jr/Sr Scholarships, open to SWE members only. Deadline to enter: February 1, 1991. Scholarship forms are in Ruddock #236 or call 578–9923 to have one mailed to you.

If money isn't your thing, but traveling is, there's the SWE Conference at San Francisco State University campus, to be held Feb. 1-3. There will be several workshops (technical, professional development, student interests) you can choose to go to, as well as a Job Fair (20 companies, not just Bay area). If you are interested, contact me. Entrance fee is \$25-35, but if you're a SWE member, you'll

The California Tech

Movies German

[Reprinted from On Campus]

How do German historians, writers and filmmakers view their own recent past? THe Caltech community is invited to seek the answer to that question at a series of films-all but one made by German filmmakers and all dealing with the subject of the Third Reich. The series will be shown on consecutive Monday evenings, beginning at 7:30 pm in Baxter Lecture Hall. They are open to the public without charge.

The nine-week series is a part of a three-part history course, "Germany: The Unmasterable Past," that is being taught by Professor of History Robert Rosenstone, Assistant Professor of History Diana Barkan, and Lecturer in German Andreas aebi. The course focuses, as do the films, on the ongoing debate about how Germans identify with their pastspecifically the Nazi period.

The series opener, on Monday, January 14, will feature the most famous Nazi film ever made, Triumph of the Will. This 1936 masterpiece, directed by Hitler's favorite director Leni Rienfenstahl, is 'a self-celebration of the party and the new order,' and features the famous Nuremberg rally, which, according to Rosenstone, was ac-******

be subsidized some of the fee (ahh...the benefits of being a SWE member are so bountiful!).

OK. Let's say you're the quiet type. You don't like to meet new people, you don't like to leave your room. Well, I've got one for you types too! SWE Resume Book. This is YOUR chance! This Resume Book is so that when companies ask, "Do you have some resumes for your oh-so-talented SWE members (so we can give paying them great jobs...hint...hint)?" I can say, "Sure! Here it is, babe." Mail your resume to me or give it to me in person and I'll get copies of them made for each of the interested companies.

See all the stuff SWE can do for you?? Join now, like today! Applications in Ruddock #236.

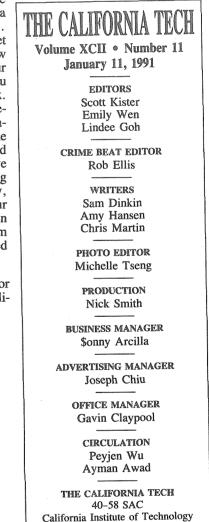
tually created to give Rienfenstahl something to film.

In addition to Triumph will be Night and Fog, a 30-minute film, dealing with concentration camps, made in 1955 by French director Alain Resnais. Resnais is probably bes known for Hiroshima Mon Amour.

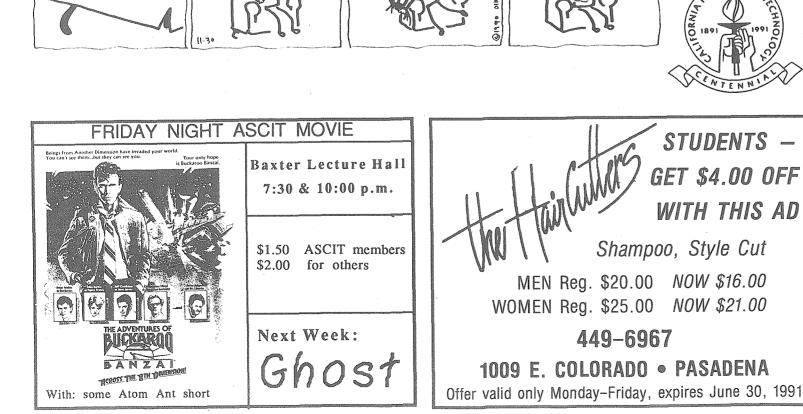
On January 21, the very rarely shown Murderers Are Among Us will be the feature. Made in East Germany in 1946, Murderers is an indictment of the Nazis who were at that time known to be living there among the other survivors of the war.

On January 28, the showing will be of the also rare, and 'powerful', according to Rosenstone, The Bridge, the story of a group of fanatical 14-year-old Nazi youths who, during the last days of the war, defend a bridge against the Allied invaders. The film was made in 1960.

The remaining six films in the series, which will be described in more detail in later issues of On Campus and The California Tech, will be: February 4, Tin Drum; February 11m Wannsee Conference; February 18, David; February 25, Marriage of Maria Braun; March 4, Now After All These Years; March 11, Wings of Desire.



by Jim **Jim's Journal** Today I noticed that Mr. Peterson I picked her up I felt her paws she hardly ever and she seemed sits under there. and her skin was dry and chapped. really tired. has been sitting under my chair all the time. STITUTEO



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Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editors reserve the right to abridge and edit all submissions for literacy, expediency, or anything else.

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Dikkers' characters have actual basis

reprinted from the Daily Iowan by Susan Stephenson

"It's Zen-like," says cartoonist Scott Dikkers on "Jim's Journal." "So many people don't get it. What Jim does is pointless."

The "Jim idea" was introduced when Dikkers decided to express his characters' thoughts through Jim instead of in diary form. "The characters act out Jim's diary," he said.

"Jim couldn't possibly exist in reality," Dikkers went on. "He's a vessel through which you see the world - a bullhorn. He never reacts because he's not a part of it."

Dikkers said Jim is modeled after a friend in California. "Jim's Korean. It's a fact that never comes up in the cartoon," Dikkers said. My friend "really didn't like the

cartoons at first, but after he saw a couple of cartoons he changed his mind," he said.

Tony, on the other hand, is a "stereotypical dumb, brash, sexist, immature college student," said Dikkers, adding that he feels sorry for Tony but tries to make him likable anyway.

Steve is Tony's friend from high school, and Jim doesn't think they have many friends in common. In reality Steve is modeled after a friend of Dikkers from high school.

"Humorless and set in his ways, Steve is a typical "Star Wars" geek - really into movies," Dikkers said.

Steve has already made his first movie starring Tony and Jim and Dikkers says that Steve will probJim Jim Jim F CCC: Jony Tony Neow Meow Meow Meow Meow Meow

ably get into more movies.

Mr. Peterson is based on all cats, especially Dikkers' own cat, Felix. "(Felix) is quite a cat, always attacking our other two cats," Dikkers said. In one episode, Steve decided it was time to get Mr. Peterson fixed. ("It seemed he knew his fate as it was being discussed.")

Dikkers thought it would be funny if they had never checked its gender and made Mr. Peterson a girl. After coming back from the veterinarian's office, Steve brought the gender news. Tony said, "A cat's a cat."

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Mankind Blessed, Not Cursed

Free Christian Science Lecture

Sunday, January 13, 1991 at 2:00. Arcadia Christian Science Church 100 W. Duarte Rd. (Four doors West of Santa Anita) You are invited!

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The Inside World

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This Week's Inside World was written by:	Dabney	11 0 0
Llovd: Jeff Hagen	Fleming	13 0 0
Ricketts: Alex Sugiyama & Amit Mehra	Lloyd	26 1 1
Ruddock: Chris Martin	Page	22 0 0
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	Ricketts	1533

You know what the problem with Christmas break is? You have to come back. Not just come back, but come back with all sorts of useless stuff you have to find a place for. Like that set of luggage you got for Christmas. Sure it's use-ful, but what are you going to do with it? Where are you going to put it? The trunk room? Sure, if you're willing to go down there. Have you ever stood in the trunk room, with the lights out, and listened? You hear breathing. And drool dripping on concrete. And sharp claws scraping against cardboard boxes. Basi-cally some kind of hellish creature just waiting to make a meal out of some in-nocent person putting their dysfunctional Christmas presents away. They'll tell you that all that's down there are rats, but then again, they told us asbestos was safe too. Besides, we know all the rats are down in the Coffeehouse.

So, how about that Caltech Rose Parade Float? Hmmmm. I asked some relatives about it, they thought Isaac Newton was neat, but they couldn't figure out the significance of all the raccoons. I was worried that we wouldn't have any pranks on New Year's, but I guess the float was prank enough. It did actually seem to work on TV, God knows Stephanie and Steve didn't know what was going on. By the time it drove by us though, it was rather, well, inert. Actually, the best part of New Year's was walking around on Colorado the night before. Looked a lot like Interhouse. If you didn't get your free peanut butter M & M's, you weren't dick.

Not much going on in Lloyd these days, though there's only been three of them. Randy got a bell. Yeah. Camp Radford blew up. Yeah. We're all going to get drafted. Yeah. Caltech might have a 1:1 ratio sooner than we thought. Too bad we won't be around to enjoy it. I have just one question. Now that Pete has moved off, does he still think we all suck?

Ricketts

Dear Readers

Welcome back to Caltech. Since the frosh have been with us a term, it is now appropriate to really make fun of them. It is not a harsh thing to do, since it builds character. If it were not for the upperclassmen, 95% of the frosh would have no personality

Ultimate Frisbee is the next Interhouse Sport, here are some rumors: Mark Lyttle says, "We're going to kick Lloyds' Butt, up and down, left and right." He feels the Maroon Machine's Ultimate team will destroy all.

The Ricketts RA, Rob Miles, expressed interest about playing. His first question was, "So is Ultimate physical? Do we play Page Thursday?" Rumor has it Russ Manning has decided to show up for second term so he

can play

John Raguin has been visiting us this week, having dropped by from Cor-nell. John was upset to find out Karin Johnson removed herself from the Rick-etts Atheletic List to play for Lloyd. "She's a traitor," commented John. John was also glad to hear of Ricketts resurgence in Athletics. "You guys should con-centrate all year on beating Page in football."

 \bigcirc

Hint for the Lovelorn: We all know how awkward it is to pay social calls One does not want to look foolish if she is not in. People will notice when you walk in and out. So what to do when she lives in Ruddock? Our suggestion is to go to Lloyd's library and look out the window to see if her room light is on. This prevents you from being embarrassed by the guy who is playing basketball in the courtyard. Mark says he is getting poor buying sodas trying to make it look like that is what he is really there for. Don't worry Mark, Roto-Rooter's sister will go out with you.

Some of the frosh still have not gotten the hang of registration. Sacha Malin wanted to know where McKeown Building was located, after all that's what it said in the course listing. Get a clue, that's the prof's name.

Since none of our frosh flamed or got UASHed, we can't write about them in public. Instead, let's try to predict who will win the Jen Wright memorial award. Will it be Brent? Who knows, time will tell. Rumor has it that Mad Groper will join the Back Rub Club. Beware.

It seemed like certain members of the Back Rub Club flamed big time last term, you know who they are; no names are necessary. Parents, please advise your children not to join in, those backrubs can be dangerous. Just go to a hotel

Next week: Profile on Danny Holste-Lille.

The Playoff Picture: Look for the Raiders for trash the Sin-sin-@-tea Beagles. Bo Jackson will bust another big one. The press has been down on the Giants for weeks, look for them to have a big game. Play the over/under betting on the over. Washington will take the 49ers, taking advantage of their weak secondary. The 49ers can be beaten deep. In a close game, Miami will take Buffa-lo, not that anyone cares since it is a AFC game.

It is now when folks speculate about who will be elected House president. That's useless. The real action is the race for Ath team, that's where the glory is. The refereeing opportunities provide excellent face time for all those think-ing abour running for ASCIT offices. Its a good way for you to get to know those North House guys.

Remember, close the door frosh. See ya next week.

Ruddock You see what you get? You darn Lloydies, with all your money, choose to get some cheap apartments instead of the expensive condos Ruddock went for. And what happens? They burn down! Sorry, guys, but if you feel like whining about it this weekend, don't look for me. I'm gone skiing!

I'm hoping for a higher injury count this year than last year. Actually, the only injury we had last year was an unconfirmed report that Mateo got frostbite on his garbonzas. So just because you can't ski, don't be afraid to join us on the slopes. Actually, we could score some breaks and sprains off the slopes, too. Cause there ain't no DAPAC at Snow Summit! And those steps are a bitch to all the and the DAFAC at Show Summit: And those steps are a bitch to walk up when they're glazed with ice. And when your glazed, too. If you know what I mean. And I think you do. So what happened here over break? While Dick Clark was having his Rock-

ing New Year's Eve, me, Del, and John Krowas were having our own Stumbling New Year's Eve. Hey Page. Wonderin' where your designer shopping cart went? I don't really remember, to tell you the truth. We also went to the Santa Anita shooting range and taught Amy how to defend herself against Arab terrorists and John when he's horny. We also went to the L.A. auto show and picked out the new Red Rhino Party Van. A Ford Econoline 350. Armor plated. 450 bhp V-8. Ram grill. Cool sirens. \$110,000. I'm taking donations. John Krowas also cleaned Nina's room. You'll make a fine wife someday, John.

Ya know, I was sniffing around Gary's dumpster the other day, and I started thinking about Chris Dicely. He is outta here! Need we say more? Yes, we need. Read all about it in next week's BFD. Kris, Netta, and Keith are also outta here. Actually, they're just off-campus, but Kris says we'll never see her again. Kinda like Nancy Hong. Guess she don't like it here no more. A little bitter, (kinda like Nancy Hong)?

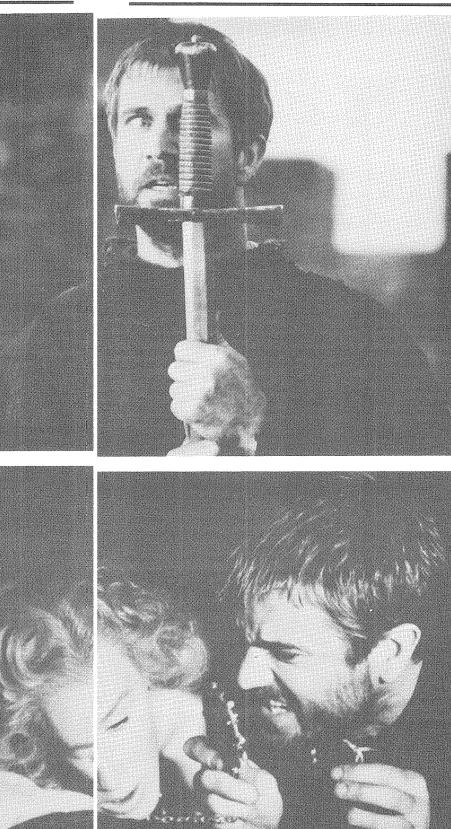
Speaking of bitter upperclassmen, Nik is back. And he says he's gotten over Oriental women, which means he's desperate. So watch out girls. Keith finally came back today. I thought he had been drafted onto Desert Shield. I could see him in his black raincoat and beret, looking at his boots, kicking sand, saying, "You know what guys? I really hate it here! No one wants to do anything but sit around." But he came back to find out that Ali had melted his amp trying to play 200 watt speakers through 28 gauge wire. Guess Ali misses those frosh Phys labs. Fang's new name is Saint Bobo Rodriguez.

Well, I gotta go. We've gotta party here in Alley 4 that's going to get crank-

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		4	T92		amor	nd le	ad	to t	the	8, I	Ī., 2	and	Α,

partners jack and ace of clubs. On the ace of clubs, I pitched the ace of hearts, looking at the king in declarer returned a diamond and my partner signaled with the deuce. If I had been paying attention and known that declarer had two and my partner had four, then the two of diamonds would show a prefer-

ence for clubs. As it was, I fell asleep and continued a third diamond. Declarer trumped partners jack in hand and led the three of hearts. At this point I had a second chance to recover from my stupor. If I take the ace here, I can still cash three more clubs and a trump, but I did not. At no point did I stop to figure out what was in declarers hand. I naively played low, hoping that declarer would put in the ten of hearts and lose to partners queen. A fourth diamond was called from the dummy and declarer pitched the queen of hearts.

My partner said, "yeah, yeah" and led another club. He was familiar with the trump promotion. If I have Qx of spades and declarer has the AK, declarer can draw my trumps, but if my partner leads a suit that neither declarer nor I can follow to, declarer loses. East can ruff low in which case I can overruff, or he can ruff high in which case I score my trump later. My trump is promoted and declarer loses a trick. Note that even though the board was out of clubs, the ruff and discard gave declarer nothing this time.

January 11, 1991

Things are grave for me now

if I do not do something spectacu-

lar, declarer will make this con-

tract. I trumped in and threw

caution to the four winds. I cashed

the king of clubs and led low to

dummy! After declarer followed to

all three clubs, I knew he started

with three clubs, two diamonds,

two hearts, and that he had to have

at least six spades for his bidding.

That meant my ace of hearts was

not going to take a trick.

rid

by Sam 1

• Q94

♦ Q63

Vul: N-S

South West

2 NT

Pass

I defended this hand at Arts

Bridge Center in Arcadia last

Saturday. Art Gulbrandsen runs a

fun game at 333 Santa Anita. Art

is a great guy who comes over once

in a while to direct special events

at the Caltech Bridge Club. Art

offers a Caltech student discount –

ask him about it if you go over

there. He also pays you five dol-

lars the first time you play there.

North

Pass

Pass

♣ K3

2 ♡

Pass

Opening lead:3 ♦

♡ Â9752

B

🔶 JT

♡ KJT4 ♦ T985

🏘 Q74

East

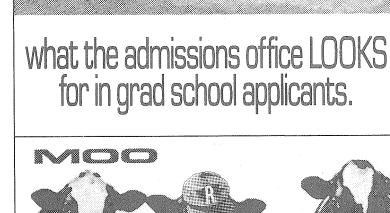
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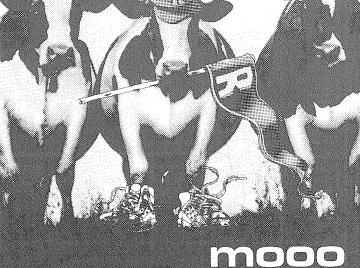
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Whitacre Public Relations

DRIVERS WANTED

Delivery driver. Full or part-time.





They aren't looking for look alikes. They're after students that stand out. (Note our friend with the pennant.) The kind of students that have attended

WE'LL ERASE YOUR

If you're stuck with a student loan that's not in default, the Army might pay it off.

If you qualify, we'll reduce your debt by $\frac{1}{3}$ for each year you serve as a soldier, so after just 3 years you'll have a clean slate.

You'll also have training in a choice of skills and enough self-assurance to last you



-Meeb and the Dweeb



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Milan

Geneva

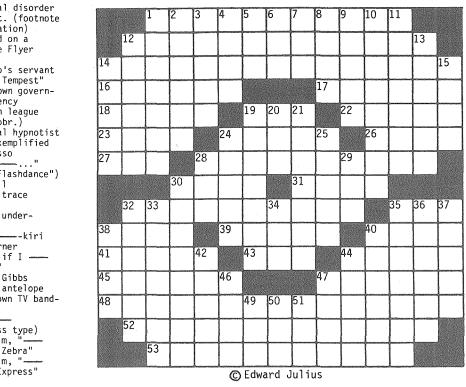
Barcelona

rossword Puzzle Answers on page 8 19 Political disorder 41 "...not with -----ACROSS

	ACHUSS		but a whimper."	20
1	Where one might	43		
	study Andy Warhol's		ment (abbr.)	21
	works (3 wds.)	44	Pondered	21
12	Enrollment into		Belonging to Mr.	24
	college	10	Starr	25
14	"Calculus Made Sim-	۵7	Part of the classi-	23
	ple," e.g. (2 wds.)		fieds (2 wds.)	28
16	Evaluate	48	Possible place to	20
	Extremely small	10	study abroad (2 wds)	29
	Follows a recipe	52		23
	direction	52	ton, Ohio (2 wds.)	30
19	Belonging to Mr.	53	Orson Welles film	32
* 2	Pacino	55	classic (2 wds.)	52
22	Of land measure		classic (2 wus.)	33
	Meets a poker bet		DOWN	33
	Gay (WW II		DOAM	34
L 7	plane)	1	Those who are duped	35
26	Capri, e.g.		"Do unto"	36
	Belonging to Mayor		Fourth estate	37
- /	Koch		Goals	57
28	Irritate or		Well-known record	38
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30		6	label Well-known king	40
30	Train for a boxing		Well-known king	40 42
	Train for a boxing match	7	Well-known king 151 to Caesar	42
30 31	Train for a boxing match and the	7 8	Well-known king 151 to Caesar Prefix meaning milk	42 44
31	Train for a boxing match —— and the Belmonts	7 8 9	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.)	42 44 46
31 32	Train for a boxing match —— and the Belmonts Processions	7 8 9 10	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky	42 44
31 32	Train for a boxing match ————————————————————————————————————	7 8 9 10 11	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky Most immediate	42 44 46 47
31 32 35	Train for a boxing match ————————————————————————————————————	7 8 9 10 11 12	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky Most immediate Like a sailboat	42 44 46
31 32 35	Train for a boxing match ————————————————————————————————————	7 8 9 10 11 12	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky Most immediate Like a sailboat Cash register key	42 44 46 47 49
31 32 35 38	Train for a boxing match — and the Belmonts Processions Diet supplement (abbr.) Scottish historian and philosopher	7 8 9 10 11 12 13	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky Most immediate Like a sailboat Cash register key (2 wds.)	42 44 46 47
31 32 35 38	Train for a boxing match ————————————————————————————————————	7 8 9 10 11 12 13 14	Well-known king 151 to Caesar Prefix meaning milk Confused (2 wds.) — husky Most immediate Like a sailboat Cash register key (2 wds.) En — (as a whole)	42 44 46 47 49 50
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immediate		leader

- under-—-kiri ner if I -Gibbs antelope wn TV band-
 - 9 Pince-(eyeglass type) 1968 film, "——
 - Station Zebra"



McKinsey & Company, Inc.

Invites Undergraduates of all majors

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Monday, January 14, 1991 at 4:00 p.m.

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McKinsey & Co. is an international strategic management consulting firm with 48 offices in 23 countries around the world. We serve mostly Fortune and International 500 company top executives on issues of strategic importance. Our mission is twofold: to help clients make substantial and lasting improvements in their performance, and to build a firm that is able to attract, develop, excite, and retain exceptional people

The California Tech

Grindel Grunfindel's Grotto:

Excerpts from the notorious Ari Odes and other peculiar passages.

by RowenOak

Ari, Ari, pumpkin fodder Had a wife but didn't want her. Put her in a tesseract In which she just fit if neatly packed. Dedicated to Ari Kaplan By Winifred Plop Ding Erkel Erkel Zig Zag Kali Kali Kahari (The Silly Candidate)

I wish I had a headlight As green as shiny newts.

- I doubled it at Parkington
- And tangled up my boots.
 - Dedicated to David "Klein" Perlman and his Hoopdee By Noseflesh the Unknowing

Ari, Ari, on safari,

How does the hunting go? "With animal rights activists shooting

the breeze, I'll get no good photos, you know."

By Milli Fifi Vanilla Fweeble

Dink Dilly Doogan ran out in the street To fetch his palsied cat. Along came a steam roller, all trash to delete

And squashed Dink D. Doogan

'Til he wasn't so round anymore.

(The cat escaped). Dedicated to Tod Kurt By Fifi Fletch Lives

Rub-a-dub-dub, Seth in a tub, And who do you think he sees? Four Ruddock women peeking in

the door. Snapping shutters and shouting,

"Cheese!' Dedicated to Seth Bittker, a Studly

Moses indeed By Polyethylene

Sing a song of six-pence (All that Ari's got) Called his mom and begged for more But send it she would not.

When his letters he opened, Ari began to sing, For Hans Enfrans* had left him bucks And some weird slimy thing.

*Hans Enfrans, n. North American bike brownie. Frequently appears on Saturday night to pump you up. See Brownie In Motion, ed. Z. Xyliri, for further information.

CLASSIFIED ADS

FOR RENT-

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Interviews will be held February 1991. Interview requests should be accompanied by a resume, transcript, and SAT/GMAT/LSAT scores as available. Requests will be accepted at the presentation or should be submitted by January 20, 1991 to:

> Mr. Ed Lambert McKinsey & Company, Inc. 400 South Hope Street Los Angeles, California 90071-2890

INTEREST RATES ARE DECLINING and now is an excellent time to consider refinancing your home, condo, or appartment units. Call "Clark" for info (818) 301-4922. Temple Financial.

HELP WANTED-

TEACHING ASSISTANTS NEEDED to tutor students by phone. Teaching Assistants needed in Computer Science and Computer Engineering and Electrical and Mechanical Engineering. Tutor students by phone at your convenience to supplement your income. Send resume & transcripts to Carena del Uno, Kennedy-Western University, 28310 Roadside Dr., Agoura, CA 91301, 1-818-889-8443.

RECEIVE \$20 FOR PARTICIPATING in a study on work and marriage. Dual-earner couples wanted in which at least 1 spouse is a graduate student. (213) 326-6869. RATES \$4.00 for first 30 words; ...10¢ for each additional word. Send written ad with payment to 40-58. Deadline is 6 p.m., Monday before issue. No charge for on-campus lost & found.

what goes on

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 announcements to 40-58, or put them in the IN box outside the Tech office. Indicate the date(s) the announcement must run. Announcements 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 available and will be chosen according to size and interest to the Caltech community. Announcements for commerical events unrelated to Caltech will not be published.

Health Center Spouse Costs

In response to student demand, the Health Center and Counseling Service will make their 1990-91 Spouse Programs available 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 enrolls in both programs, it will be \$100 each term. Registration forms for these programs will be available at the Health Center, You may call for details at x6393.

U.S. Attorney To Speak

Lourdes Baird, the U.S. Attorney for the Central District of California, will give an OWC lunchtime talk on Wednesday, Jan. 23 at noon in Winnett Lounge. To quote the L.A. Times, "She came late to the legal profession. Now she'll head the biggest federal judicial district in the country." Bring your brown bag lunch to the talk of this ground-breaking woman. Everyone is welcome.

Guitar Classes at Caltech

Guitar classes for winter quarter will meet on Tuesdays starting Jan. 15th in Rm. 1 of the SAC as follows:

- Beginning class: 4:30-5:30 pm Intermediate class: 3:00-4:00 pm Advanced class: 5:30-6:30 pm

Classical and flamenco repertoires are explored but techniques transfer to other styles of guitar. The beginning class includes a jazz/folk chord system. Classes are free

to Caltech students and other members of the Caltech community (space permitting). Undergraduates can receive 3 units of credit if they choose. Private instruction on any level can also be arranged. The instructor, classical guitarist Darryl Denning, has an international background in performance, recording and teaching and can be reached at (213) 465-0881.

Online Schedule of Classes

The Caltech schedule of classes, as published by the Registrar's office, has been ad-ded 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.

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.

Assembly Fellowship Program

The California State Assembly is sponsoring the Jesse Marvin Unruh Assembly Fellowship Program. It is one of the oldest and most prestigious legislative fellowship programs in the nation. Up to eighteen individuals are selected nationwide to spend 11 months in the Assembly as legislative aides and committee consultants. Stop by the Career Development Center, 08 Parsons-Gates, for more information.

SWE Engineering Competition

SWE Spring Scholarships SWE Spring \$1000-4000 scholarships. Open to sophomore, junior and senior women in engineering, with a minimum 3.5 GPA. Applications due February 1, 1991. Interested? Call Celia Ng, 1-55, 578-9923.

Be In The Top Ten

Caltech juniors are invited to participate in Glamour magazine's 1991 Top Ten College Women Competition.

Glamour's prestigious competition honors college juniors of outstanding achievement. This year's winners will be selected from five distinctive categories: Creative arts/Communication/Humanities, Science and Technology/Health, Politics/International Relations/Business and Economics/Entrepreneurship, Public Service. [A special award should be offered for turning that punctuation into five categories.] Candidates will be judged on academic excellence, involvement in community or campus activities, and personal interests.

Ten winners will receive national recognition in Glamour's October 1991 issue and a cash prize, plus an all-expenses paid trip to New York City to meet with top professionals in their field.

Contact the Dean of Students Office for information. Deadline is February 15, 1991.

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 or in Rm. 33 of the SAC 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.

Teach English Overseas

The International Office for ASIA-YMCA of the USA is assisting the National Council of YMCAs of Japan and Taiwan in recruiting people to teach English as a second language in community-based YMCAs. If you are interested, please stop by the Caltech Y (2nd floor Winnett) for mor information. Application deadlines: Taiwan, January 15 for July placement, April 15 for October placement. Japan, March 15 for September placement.

Galileo's Trial Reconsidered

On Thursday, January 17th at 4 pm in the Judy Library in Baxter, Professor Mario Biagioli of UCLA will speak on the subject of "Galileo's Trial: A Reconsideration. This talk is part of the Science, Ethics and Public Policy series.

Folk Music Concert in Dabney

Guitarists Chris Proctor and Harvey Reid will perform tonight, January 11, at 8:00 pm in Dabney Hall Lounge. Both are fingerstyle guitarists who play music ranging from Celtic and baroque to ragtime and blues. Reid also plays banjo and autoharp, and both are composers of instrumental mus-ic as well as performers. This is a Caltech Folk Music Society concert. Tickets are \$8 general admission, \$4 for Caltech students.

Planning To Visit Paris?

Two Caltech grads who currently live in Paris, Drs. David Brin and Cheryl Brigham, will be visitin L.A. this spring. They would like to trade houses with someone who would be visiting Paris, roughly Feb. 25–April 1. If interested, please call Tom McDonough at 795-0147, or write mail code 138–78.

Gay/Lesbian/Bisexual Discussion A Gay, Lesbian and Bisexual discussion group meets the 1st and 3rd Tuesdays of each month from 7:30-9:30 pm in the Health Center. This confidential meeting is open to all members of the Caltech community. The first hour is devoted to discussion of a specific topic, and the remaining hour is open for general conversation and socializing. Refreshments are served. For information, please call 356-8331. For the meeting on the 15th, there will be a discussion of how the holiday season went, and a planning session for the new year.

Poetry Reading

James Broughton, poet and filmmaker, will be giving a poetry reading in the Judy Library in Baxter on Wednesday, January 16th at 4 pm.

Work in Japan?

If you missed the presentation about working in Japan at a Caltech alum's factory, you still have time to submit a brief letof interest to the Deans' office. The deadline is Wednesday, Jan. 16, 1991. If more information is required, talk to Hoyt Hudson or Chris Ho, last year's participants.

Post-Holidays C.L.A.G.S. Party

C.L.A.G.S. will be holding a party on Saturday, Jan. 12 from 4-10 pm. This will be an organized potluck with a white elephant gift exchange (how tacky can we get?). Call x6892 for details of location. C.L.A.G.S. is the Caltech Lesbian and Gay Society, and we welcome all community members to join in our activities

Phantom of the Opera

The Caltech Y has tickets for the popular hit *Phantom of the Opera*, featuring the return of MICHAEL CRAWFORD, Tuesday, January 29th at 8 pm. These most excellent orchestra seats are \$50 and on sale now to students and open to the general Caltech community on Monday, January 21. LIMIT TWO TICKETS PER PERSON. No mail or phone orders will be accepted.

L.A. Philharmonic Tickets

The Caltech Y has a limited number of tickets for Saturday, January 19, 8:00 pm at the Dorothy Chandler Pavilion. The concert features conductor David Alan Miller and pianist Alexander Toradze. Music for evening includes Rands: Body and Shadow; Rachmaninov: Rhapsody on a Theme of Paganini; and Mendelssohn: Symphony No. 3. Tickets are \$5, available at the Y

Laserium Tickets

Start off the term right by attending Laserium, one of Southern California's longest-running theatrical attractions. The Caltech Y has a limited number of tickets for Saturday, January 12, 8:45 pm at the Griffith Observatory. The price is \$6 and the show will be "Laserroq of the 90's."

Art Center Courses

Students interested in enrolling in courses at the Art Center College of Design in Pasadena can receive exchange credits at Caltech. There is a wide selection of courses, including introductory courses in drawing, painting, graphic design and computer graphics. Daytime and evening schedules are available. Tuition payment is waived, but students are responsible for any special fees.

The Art Center Spring Semester begins January 14, 1991. Check with Susan Davis in 221 Baxter for a schedule and course descriptions.

Hollywood T-Shirts, Posters

If you STILL don't have a Hollywood T-Shirt or poster from the infamous event, contact Joe Jensen, 1-53 or 449-8306. A few of both are still available.

SEDSTUFF

Caltech SEDS (Students for the Explortion and Development of Space) is holding a general meeting on Monday, Jan 14 at 7:30 pm in SAC Rm. 25, featuring the film "For All Mankind." The agenda will include discussions of SEDS experiments to be flown on the space shuttle, shuttle landings, a local SEDS conference in March, speak-

ers, 'star parties,' and more. We are also sponsoring a tour of the McDonnell Douglas model of Space Station Freedom. We are leaving from the Cat III parking lot at 1:30 pm on Friday, Jan. 18. For information or reservations, please call Philip Rosenthal at 577-4664 or come to the meeting.

Chess Tournament On Campus

The Los Angeles County Chess Open will be held the weekend of January 19-20 at Winnett Center on campus. This is a 5-round swiss time-controlled rated tournament. Maximum time limited to 4:30 per game. Must be members of U.S. Chess Federation and Southern California Chess Federation, but you can join at the tourney. Call Frank Perez at x6859, x2816 or 304–0549 for more details.

Sign Up For Fun

Don't be a hoser or a spaz! Sign up NOW for the Don Shepard Fun Fund subsidies. Sign-ups start today in front of the MOSH office. Get your posterior in gear . . . then get over there! I mean, who else gives you a chance to go to dinner or a play nearly for

Speech/Debate Meeting

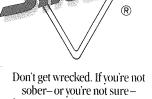
The Caltech Speech and Debate Team will be holding an organizational meeting for second term on Monday, January 14th at 5 pm in Rm. 15 of the SAC. Anyone interested in participating in team debate, Lincoln-Douglas debate, or individual speaking events, regardless of previous experience, is encouraged to attend. For more information, call Jeff Foust at x3777.

Lost Sleeping Bag An undergraduate student lost a dark green sleeping bag at Freshman Orientation on Catalina Island in September. If anyone has any information about this sleeping bag (or maybe wants it back), please contact the Dean of Students' Office, x6351 or stop by the Deans' Office, 102 Parsons-Gates.

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.

When you party remember to...



let someone else do the driving

A message provided by this newspaper and Beer Drinkers of America



National Headquarters 150 Paularino Ave., Suite 190 Costa Mesa, CA 92626 714/557-2337 1-800-441-23

money

January 11, 1991

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 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 pro-grams. 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 Chinese-American Engineers and Scientists Association of Southern California, CESASC, has announced the availability of two types of awards. One is the CESASC Scholarship awarded on the basis of academic achievement as well as demonstrated financial need. The other is the Academic Award which is based on academic performance and extracurricular activities. Deadline to apply is January 15, 1991.

The College Women's Club of Pasadena 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. 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 tran-script, current course list, 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.

The American Electroplasters and Surface Finishing Society (AESF) has scholarship awards available for undergraduates in at least their junior year in a chemistry, chemical engineering, environmental engineering, metallurgy, or materials science program and graduates enrolled in a program leading to a master's or Ph.D. degree. Award selections will be based on. but not limited to: career interest in surface finishing technologies, scholarship, achievement, motivation, and potential. Awards are not necessarily based on financial need. Applications must be postmarked by April 15, 1991.

Attention Aero Students!

Applications for the AIAA/Industry Scholarship program are now available. These are \$1000 renewable scholarships. Last year odds for getting a scholarship were 1 in 2! Check the AIAA table or call 792–1513.

Geology \$\$\$

Undergraduates in the Division of Geological and Planetary Sciences are en-couraged to apply for the Fritz B. Burns Prize in Geology. The award(s) will be made for amounts up to \$2,500 for the best proposals for undergraduate research in the fields represented by the Division.

If you are interested in this opportunity, please write a short statement (less than one page) describing the research you would like to do. Selections will be made in February, 1991. The proposed research can be loosely or closely tied to that of a Division faculty member. Deadline: January 15. 1991. Send proposals to Professor Kerry Sieh, Divisional Academic Officer, Division of Geological and Planetary Sciences, Mail Stop 252-21.

SWE Technical Presentation Competition (paper related to engineering). Must be undergrad SWE student member. Winners get free transportation to SWE national student conference. Applications due by March 1, 1991. Interested? Contact Celia Ng, 1-55, 578-9923.

January Blood Drive

There will be a one-day blood drive in Winnett Student Lounge on Wednesday, January 16 from 9:45 am to 2:30 pm. Please contact Denise Okamoto at x6374 for an appointment, although walk-ins are welcome.

"Beer Drinkers of America is a non-profit consumer membershir organization open only to persons over the age of 21.

LAEMINILE ESQUIRE 2670 E. Colorado Blvd. (818) 793–6149 Robert Redford Leona Olin	THEATRES COLORADO 2588 E. Colorado Blvd. (818) 796–9704 "Best Foreign Film" - National Board Review Gerard Depardieu	Gateway Travel 3452 E. Foothill Blvd., Ste. 428 (818) 577-2730 Caltech Approved
Havanna	Cyrano De Bergerac	Professional Staff, lowest available fares, free service.
Daily 7:00, 9:45 p.m. Sat-Sun 1:20, 4:10, 7:00, 9:45 p.m.	Daily 6:30, 9:20 p.m. Sat-Sun 12:45, 3:40, 6:30, 9:10 p.m.	Tickets Delivered Free to You on Campus

January 11, 1991

The California Tech



WEEKLY SPORTS CALENDAR

and the second se			_
Day	Date	Time	Sport
Sat.	Jan 12	8am-4pm	Swimming
Sat.	Jan 12	5:30 pm	Basketball - JV
Sat.	Jan 12	7:30 pm	Basketball
Wed.	Jan 16	9:45 pm	Ice Hockey
Wed.	Jan 16	5:30 pm	Basketball - JV
Wed.	Jan 16	7:30 pm	Basketball
Fri.	Jan 18	5:00 pm	Basketball - JV
Sat.	Jan 19	11:00 am	Swimming
Sat.	Jan 19	5:30 pm	Basketball - JV
Sat.	Jan 19	7:30 pm	Basketball

Opponent SCIAC Invitational Pomona-Pitzer Pomona-Pitzer USC #2 Occidental Occidental Claremont-Mudd Pomona-Pitzer Whittier Whittier

Location Caltech Pomona-Pitzer Pomona-Pitzer Pasadena Ice Center Caltech Caltech Claremont-Mudd Whittier Caltech Caltech





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