Don't blame us, the typesetter broke.

# **Late Edition**

Signups for ASCIT offices are open now on the MOSH's door. Quit whining about AS-CIT and run for office.

Volume XCI, Number 15

Pasadena, California

**February 2. 1990** 

# Cannon Centennia

by Lanny Boswell

February 7, 1990, marks the 100th anniversary of the Fleming Cannon. As the actual date of its construction is unknown, and February 7 is exactly nine years since the Cannon's return to Caltech in 1981, that day has been chosen as the Cannon's birthday.

To celebrate this event, the Cannon will be fired at 5:00 p.m. on Friday, February 9. Also I have decided to submit the following story of the Cannon, telling its history starting from the very begining, over one-hundred years ago.

In 1884, Congress approved the construction of what is now known as the Fleming Cannon "to be put to use in the Government service." What actually happened to the Cannon in the hundred years since has been the stuff of legends.

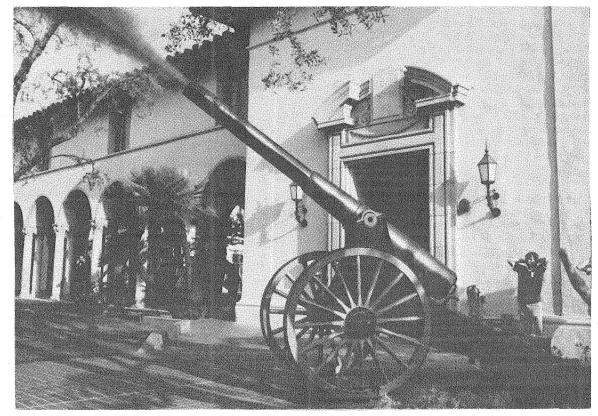
Unfortunately, the "stuff of legends" often becomes the "stuff of myths," and many untrue tales of the Cannon's origins and history still exist, ranging from the claim that it is French, to the claim that it is made of brass. Thanks to the work of Kent Nordstrom (Cannon Master 1988-89), the true story of the Fleming Cannon has been discovered.

The Cannon, itself, is a steel, 5-inch diameter siege gun, Model of 1890, number forteen of thirtythree constructed by the U.S. Army. The barrel weighs 3600 This type of cannon was shipped to Cuba during the Spanish-American War and was used for training purposes until the end of World War

From 1925 until 1972, the Cannon sat on the lawn of Southwestern Military Academy in San Marino, where it was the target of several "repaintings" by each year's graduating class from San Marino High School. The mistreated cannon gave Southwestern an undesired military image, despite the fact that the academy had ceased being a military school years earlier. The added burden of the Vietnam issue made the Cannon a problem that Southwestern wanted to be rid of. Helpful as always, the men and women of Fleming House came to the rescue.

After months of planning and preparation, on the night of October 7th, 1972, eighty Flems made their way to Southwestern's lawn. Originaly moving the Cannon required the use of seventeen horses. Lacking horses, the Flems began the journey back to campus, using muscle power.

Carefully avoiding the San Marino and Pasadena police, the Flems pulled the Cannon for three miles, ending with a bell-ringing Olive Walk procession to the Cannon's current location in front of the doors of Fleming. There it sat



for three years until some overenthusiastic house members started to wonder about the maximum capacity of the Cannon's powder chamber.

Originally, the Cannon called for a twelve pound charge of black powder, which could propel a forty-five pound shell fo a distance

continued on page 5

by Roy Lee

An enthusiastic audience gathered last Wednesday evening at a crowded Baxter Lecture Hall to discuss the realities of global environmental mayhem.

The program, titled, "One Earth, Many Nations: The Politics of the Global Environment," and sponsored by the Caltech Y in association with the Angeles Chapter of the Sierra Club and the Pasadena Chapter of the United Nations Association, featured keynote speaker Dr. Sherwood Rowland, codiscoverer of the CFC-ozone connection, along with moderator Larry Mantle, and a response panel consisting of Gary Herbertson, Francis Wheat, and Alan Maler.

Perception of the environmental issue has grown noticeably over the past two yeras, and thus has sparked the formation of local chapters of environmental groups,

remarked Betty Sandford, Co-Chair for United Nations Association. Dr. Sherwood Rowland, the

first speaker, presented the scientific aspects of two major catastrophes: the destruction of the ozone layer and the Greenhouse Effect.

One main focus of Rowland's presentation included the global aspect of the environmental dilemma. He noted, for instance, that radioactive fallout from the Chernobyl disaster was detected in Irvine, California within the short span of fourteen days.

Rowland named chloroflourocarbons (CFCs) as the primary culprit for the destruction of the ozone layer, which serves to protect the Eart from harmful ultraviolet radiation.

The increase in CFCs, particularly CFC-11, CFC-12, and CFC-113, which are found in refriger-If you have any concerns that ants, aerosols, and coolants, has already been noted on a world basis and could potentially lead to two major effects: the increase in UV rays below the ozone layer and unknown consequences in the stratosphere.

Although the ozone hole above the Antarctic has been widely publicized, Rowland remarked that, "This ozone problem is not confined to Antarctica." He later went on to comment that the northern hemisphere also experienced similar ozone depletions of up to six percent.

On the Greenhouse Effect, continued on page 3

CRIME TIP: This month there have been seven major auto-related crimes, including the theft of two automobiles. As a result, security is concentrating personnel in parking lots. However, persons working after 5:30 p.m. are encouraged to leave their car in the 341 S. Wilson parking structure.

1/24 Two suspicious persons were observed loitering near book cases in the sub-basement of Crellin Lab at 10:00 a.m. When a witness approached them, the suspects stated that they were looking at the books, but left immediately.

1/24 A car stereo was taken from an auto parked near Arms Lab. The door was apparently forced open with a screwdriver left at the scene. The perpetrator took the removable stereo which was underneath the driver's seat, ransacked the glove compartment, tampered with the ignition switch in an possible attempt to start the engine, and stole speakers from the car's trunk.

1/24 At 6:44 p.m., a witness reported a magazine solicitor in the Catalina complex. Security spoke with the solicitors and several others who had a Texas operators' license. They were informed of standard institute policy regarding solicitors and asked to leave.

1/25 A bike locked with a cable to a handrail was stolen from the area north of Beckman Labs.

1/25 An undergraduate living off campus sustained severe cuts to his left forearm and left thigh when he attempted to walk through a glass door. The victim had thought that the door was open. Paramedics took him to Huntington Medical Hospital for treatment.

1/26 An unknown person broke the pane of a Robinson Lab window, possibly by throwing a rock.

1/29 Two persons approached Crellin Lab workers, asking to buy teaching copies of textbooks. Security found the suspects elsewhere in Crellin. The two had a license to work for the Book Cover company in Sacramento, CA. Security informed the two that they would be arrested if found on Caltech property under similar circumstances.

1/30 A handicap parking sign was stolen between 1/26 and 1/30 from the north wall of Beckman Auditorium.

1/30 There was a fender-bender in the Wilson parking lot. The responsible party agreed to pay for damages.

1/30 A Toyota GT S parked in the West Wilson parking lot was stolen. The vehicle was equipped with an anti-theft device, but it was not armed at the time of the theft.

Total dollar value stolen this week: \$12,800.

Newer, faster format Crime and Incident Beat: now all times are reported in standard a.m./p.m. format.

The first session of the 1990 Student Faculty Conference is now only two weeks away. The panel that will present the initial summary of opinion on the subject has been constituted. The members were invited both in view of their responsibilities within the institute, and the interests shown in the essays submitted to the Y. The mem-

Upinder S. Bhalla, Graduate Student, Behavioral Biology

Annmarie Eldering, Graduate Studnet, Environmental Engineering Science (138-78)

Andrew P. Ingersoll, Professor of Planetary Science (170-25)

Cliff Kiser, Undergraduate, Blacker (1-60)Jenijoy La Belle, Professor of

Literature (101–40) Daniel T. Langdale, Director of Admissions (1-63)

James Z Lee, Associate Professor of History (228-77)

Elaine Lindelef, Undergraduate, Dabney (1-58)

Jonathan D. Melvin, Member of the Professional Staff, E&AS (104 - 44)

Sergio Ruiz, Undergraduate, Page (1-53)

you would like to see aired in the presentation feel free to contact any of these people. Hopefully we'll see you at noon on the 16th of February in Winnett.

The second session will be on the 2nd of March, also in Winnett at noon. It will focus on the Honor System. Essay applications to be on the panel were actually due yesterday, but the announcement was buried on an inside page of this newspaper, so there is still time. If you are interested in touch with Lucy Guernsey in the Y or one of the Deans of Students within the next couple of days.

INSIDE

# **Grand Campus Survey**

page 10

# Tennis Team Wins Season Opener

page 12

Lloyd's Journal

## Gary Has New Veggies

Dear Chandler Diners and Chandler Management,

Thank you for responding to my call for veggies. I have just finished a salad comprised of fresh lettuce, spinach leaves, alfalfa spouts, bean sprouts, cucumber, bell pepper, radishes, China peas, mushrooms, summer squash and cherry tomatoes. A veritable feast with only 160 calories. Thanks to

Broomball. The spring tournament is tentatively scheduled for the night of March 3-4. Get your teams together!

Caltech Fun Run. For those who enjoy running or jogging, you can join this group, which meets at the Caltech Y on Wednesdays at 4:30.

Co-sponsorship. If your club or organization would like the cosponsorship of the Y, come by and fill out our form. Forms are due to Brian in the Y Office an hour before the Monday noon Ex-Comm Meetings.

Faculty-Student Activities. To promote faculty-student relations, the Caltech Y is giving \$25 per

the reintroduction of fat free fresh vegetables to the salad bar losing those extra holiday pounds will be a breeze. If you are as appreciative of the new salad bar items as I am tell the cashier next time you dine at Chandler. We don't want Gary to think his responsiveness has gone unnoticed or unappreciated. Sincerely,

-A Slenderizing Caltech Fatso

student-faculty couple for activities involving both students and faculty members. Limit one usage per student per term. Contact the Y for more details.

Fund Drive. Please fill in the forms which are/will be given to you. The charge is minimal and put on your student account.

Futures For Children. The Y still has reduced admission tickets for this extraordinary event to be held tomorrow evening.

Recycling. The Caltech Y is joining with other groups in promoting recycling. The first step is White Paper baskets in the computer room and around campus.

# ENTERTAINMENT

# Year of the Sequel, Part The sequel that everyone knows Picture Show, are all scheduled to

by Shane Sauby

How many sequels did you see iast year? There was Ghostbusters II, Indiana Jones and the Last Crusade, Lethal Weapon II, Star Trek V, and Back to the Future II.

Well, if you like seeing the same people in the same characters, doing slightly different things, then welcome to the Year of the Sequel Part II.

Please follow the instructions (don't just throw in random trash), and help us recycle.

Special Lecture. Beekeeping and Spiritual Values. For more information see the announcement in the What Goes On section, or contact the Y.

Thank You! Last week we wrote that our poster supplies were missing. They have been returned, so we thank whomever is responsible.

The Caltech Y is located on the second floor of the Winnett Student Center (the building where the Bookstore is). Our phone extension is x6163.

responsible party will be charged

for the cost of the repair. If the fire

marshal finds a smoke detector has

been tampered with, damaged or

removed, he will fine the respon-

sible party \$1,000 or confine

When a smoke detector goes off

does the fire department auto-

of these alarms sound and there is

a fire, pull one of the hallway pull

stations and call the campus emer-

Next Week: The Dream

gency number, extension 5000.

him/her in jail for 6 months.

is coming, unless you've had your head in an oven, is Back to the Future III. Being shot simultaneously with BTTF II, saving somewhere in the neighborhood of 10 to 12 million dollars, Back to the Future III will be released sometime this summer. Marty and Doc get to run around in the old west, fight it out with Biff's great-grandfather, and try to fix a DeLorean. If you liked II, you'll want to see III, believe

On the list of "Why did you make a sequel?" sequels is Back to the Past, a sequel of Future Force. Did anyone see the first one? Also, Basket Case 2, Delta Force II, The Gate II, Puppet Master II, and Maniac Cop II are all sequels to movies that basically no one saw

(If you did though, the sequel is coming out this year.)

In the worst title for a sequel

For those of you with a taste for the scary or horrifying, there are more of them for you this year. Prom Night III: The last Kiss is scheduled for spring release, while Childs Play 2 and A Nightmare on Elm Street 6 will come out in the

There is one entry in the surprise sequel category. The Gods must be Crazy II is scheduled for spring release. N!Xau goes on another adventure, this time searching for his children who accidentally get picked up by

There are a couple of sequels that are hoping to do as well as their predecessors. Peter Weller returns in Robocop II, which follows Murphy through battles with a drug-crazed gang, mind "rehabilitation," and another nasty robot. Meanwhile, with his partner Nancy Allen's help, he tries to gain back his lost humanity. Another 48 Hrs. brings Nick Nolte and Eddie Murphy back together again, to fight an Aryan-supremist biker organization.

Joe Dante brings back his furry monsters in Gremlins 2: The New Batch. This time they're terrorizing New York City. Young Guns II takes the survivors from Young Guns and tells the story of how Billy the Kid REALLY died. Finally, Bill and Ted return in, of course, Bill and Ted's Excellent Adventure II. What bodacious people from the past will they meet this

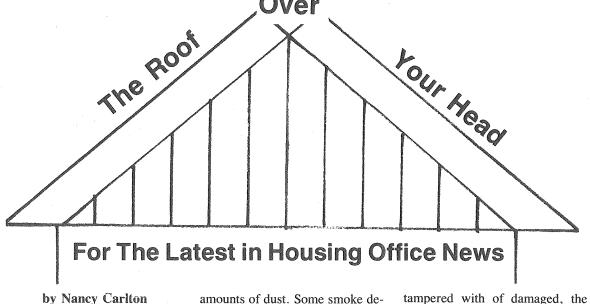
In the random sequels section

category is Subhumanoid Meltdown: Class of Nuke Em High Part II. Mutants abound at Tromaville University, where the student body gets to battle for their lives. Gore and blood guaranteed.

poachers.

there are a few entries. Ernest goes to Jail, The Rescuers Down Under, Neverending Story II, Rocky XXI (Just kidding, its only number V), and Texasville, a sequel to The Last

Team



by Nancy Carlton Questions and answers concerning smoke detectors.

Why do we need smoke detectors in student housing units? Smoke detectors are needed to protect lives by providing early warning of fires especially at night. Six out of every 10 fatal home fires start at night.

Why do smoke detectors sometimes sound when there is no smoke? Smoke detectors detect to fix a smoke detector by yourself. airborne particles and can be set off If the Housing Department finds a

amounts of dust. Some smoke detectors are equipped with trouble alarms which sound whenever there is a mechanical problem with the smoke detector.

What should I do if I think something is wrong with a smoke detector? If you live in student housing call the Housing Office if the problem occurs between 8:00 a.m. and 5:00 p.m. If the problem occurs after hours call Physical Plant at extension 4717. Never try by aerosol sprays, steam and large smoke detector has been removed,

matically respond? The smoke detectors located in the hallways of the north and south complex are linked directly to Central Plant. When they go off the fire department is summoned by Central Plant. The fire alarms in the student rooms are local alarms that are not linked to Central Plant. If one

**\$5** OFF ANY SERVICE WITH THIS AD SERVICES: NAILS . HAIR . BODY MASSAGE **FACIALS & SKIN CARE** Private room for waxing Men's Hairstyling by licensed Barbers Designer Haircuts including Flat Tops Hair Unlimited 256 S. Lake (818) 793-6222

### MOVIE NIGHT ASCIT FRIDAY 'AN ASTONISHING ACHIEVEMENT'! SEAN F. MURRAY CONNERY ABRAHAM MAIB With: Walking 7:30 & 10:00 p.m. Baxter Lecture Hall \$1 for ASCIT members \$1.50 for others

years after the original. Scanners II: The New Order is scheduled for fall release. In this film, the son of the original scanner must resist a group of scanners who want him to

The sequel that I've been wait-

ing for is finally coming out nine

join their New Order.

come out in 1990.

Finally, the best for last category, including two movies which are the third in a series. The Two Jakes stars Jack Nicholson, who also directs, as private eye Jake Gittes. This should be one of the better sequels this year. Along with The Two Jakes, Exorcist III, and The Godfather III are both scheduled for 1990 release. The second Exorcist sequel comes thirteen years after first sequel, focusing on the same town. Its seventeen years later and there is a strange string of murders being committed, with all the victims being priests. The sequel to see though, is The Godfather III. Both the original and its sequel won the Academy Award for Best Picture. Francis Ford Coppola directs and co-writes the third installment in the saga of the Corleone family. Al Pacino stars, with Diane Keaton and Talia Shire. The real question isn't whether it will win an Academy Award, but probably how many will it win?

That covers the sequels coming out this year. There are a few other movies worth mentioning, but I'll save those for next week.

# THE CALIFORNIA TECH

Volume XCI • Number 15 February 2, 1990

> **EDITORS** Scott Kister Mark Lyttle Paul Socolow

CRIME BEAT EDITOR Brian Kurkoski

WRITERS Chris Ho Rov Lee Shane Sauby Lindee Goh

**PRODUCTION** Nick Smith

BUSINESS MANAGER Sonny Arcilla

OFFICE MANAGER Gavin Claypool

> CIRCULATION Peyjen Wu Ayman Awad

THE CALIFORNIA TECH 40-58 SAC California Institute of Technology Pasadena, California 91125

(818) 356-6154

Published weekly except during examination and vacation periods by As sociated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the

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 letters for literacy, expediency, or else.

Turn in copy (preferably in WordStar format on an IBM-compatible floppy disk) to the *Tech* mailbox outside SAC room 40. The deadline for copy is Wednesday at noon; for announcements, Tuesday at

Subscription requests should be directed to the office manager. Subscriptions are \$3.50 per term, \$9 for one year, \$17 for two years, \$24 for three years, and \$30 for four years. Life subscriptions are available for \$125.

Printed by News-Type Service, Glendale.

ISSN 0008-1582

# February 2, 1990

# SURF's Up at the SURF Kickoff Dinner

by Lindee Goh

The 1990 SURF (Summer Undergraduate Research Fellowship) Kickoff Dinner started promptly at six in the evening on Tuesday, January 30. Undeterred by the sudden burst of rain that night, faculty and corporate SURF sponsors, former student SURFers, and other guests of the SURF board arrived at the Athanaeum, gamely shed their water-logged overcoats and mingled with the growing crowd in the reception area inside.

The dinner was opened by Terry Cole, a JPLer who plays an ac-

tive role in the SURF program, thanking the various, sponsors and people that made SURF possible, making special mention of "his boss" Carolyn Merkel, Joan Spears and the founder of SURF, Fredrick Shair. In his opening remarks, Caltech president Tom Everhart commented on the great opportunities Caltech gives to undergraduates in allowing them the early experience of working in a laboratory environment. In the classroom, "problems are set by others." In the lab you set yourself a problem and must devise ways to

Keynote speaker Fredrick H. Shair, Professor of Chemical Engineering and Founder of the Caltech SURF program, after-wards spoke on "The Beauty of SURFing." He reflected on the importance of technology today, the advances in science over the recent years, and how much the Caltech "family", faculty, undergraduates, graduates, post docs, and yes JPLers, were involved in these advances. The SURF program encourages this spirit of exploration. The word "leadership" characterizes SURF, for SURF creates opportunites for greater development of personal qualities such as responsibility, perseverance, integrity, cooperation and professionalism, and fosters leadership

The dinner ended on a highnote with Professor Shair remarking that "the SURF is the wave of the

This year's SURF program is dedicated to Fredrick Shair, who founded SURF in 1979 and "without whom there would be no

### Environment

from page 1

Rowland named carbon dioxide and methane as the two gases which wreak the most havoc on the atmosphere. He noted that both gases have experienced two-fold increases within a century, and that the primary cause of carbon dioxide concentrations was the burning of fossil fuels, while the secondary cause was the destruction of tropical rain forests.

Alan R. Maler, one of the three panel members and a practicing attorney, directed the environmental issue to the forum of legislation enacted to counter the effects global pollution.

"Action by alchemy," or "legislation by crisis" was the term used by Maler to describe the idea that political action is not taken until an actual crisis develops. He gave several illustrations of this, including the cause-effect relationship between the 1969 disaster when a river in Ohio caught on fire and the enaction of the Clean Water Act just three years later in 1972.

In addition to the Clean Water Act, Maler listed nine important pieces of federal legislation that were enacted to combat the growing environmental problems, which included the Occupational Safety and Health Administration, the Clean Air Act, and the Toxic Substance Control Act.

Although a number of important acts were passed, Maler nevertheless remarked that the history of environmental acts consists of a series of patchwork legislation, and that a lack of consistency has led to a lack of a comprehensive, overall view.

On the international level, Gary Herbertson spoke of the United Nations Environment Programme and its effects on the environment. Environment

### Tennis

from page 12

6-2 demolition. Mukherji and Sonny Arcilla powered their way to a grinding 7-6, 3-6, 6-3 assault in the second spot with a mix of Mukherji's finesse and Arcilla's pure strength. In fact, Arcilla broke strings in both his rackets in minutes, as the SCC pair fell before them. Rounding out the doubles were Ng and Chris Ho, who lost in two sets.

In the end, it was a marvelous start to a hopeful season. Wish the team luck as they hit the road to play Menlo and Dominican Colleges in the Bay area this weekend and try to extend their undefeated mark to 3 and 0.

And the smiles and spirit

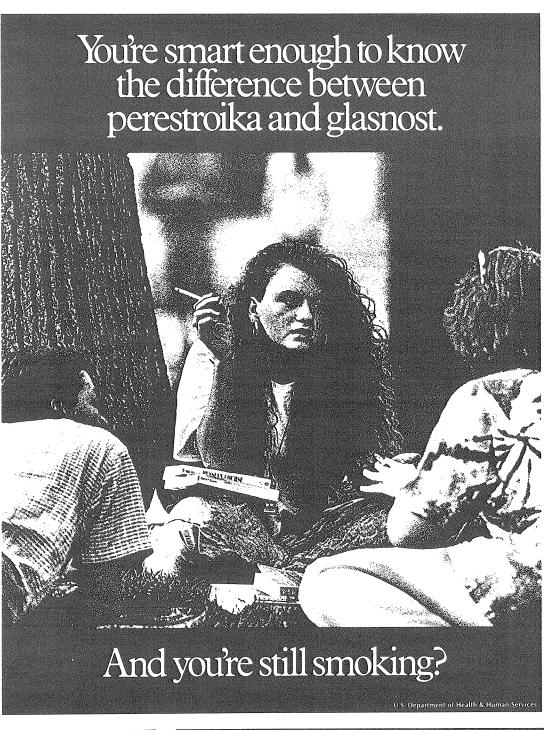
Programme was created with two objectives in mind: (1) to bring governments together on the problem of environmental pollution and (2) to create a secretariat within the United Nations to coordinate activity.

One important topic that cropped up during Herbertson's presentation was the dilemma of poorer nations and the environment. Much of the environmental problem is related to the destruction of the tropical rain forests in South America, where many of the countries gain revenue from exploiting their natural resources.

Although many environmental issues were touched upon, one important issue that was not discussed was the Malthusian questionpopulation control. Nevertheless, the United Nations and Sierra Club have subdivisions that deal with this issue.

In the past, Caltech has not been a hotbed of environmental protectionism. Public assemblies that deal with the environment have brought the spotlight upon the need for reform and regulation. Due to the scientific nature of Caltech, an awakening of environmentalist consciousness is needed, for many of the environmental problems are related to the scientific world.

On April 21, the city of Pasadena will host numerous activities and events on the Arroyo Parkway, next to the Rose Bowl, to encourage and foster interest in the environment, which will be part of a nation-wide observance of Earth Day. Although events such as these have focused attention on and marked the increasing importance of environmental issues, in the words of Sandford, the solution to the environmental problem is "not just an event; it is a process."



### **ACADEMY** BARBER SHOP

27 N. Catalina Ave., Pasadena Open Tues.-Sat., 8 A.M.-5 P.M. 449-1681

### LOWEST AIR FARES

\$258.00 RT Atlanta \$258.00 RT Chicago \$298.00 RT New York Phoenix \$ 38.00 RT



\$796.00 RT Bangkok \$1046.00 RT Bangladesh \$1165.00 RT India \$488.00 RT London \$668.00 RT Paris \$560.00 RT Tokyo

More lowest fares are available. Prices are subject to change.

Call (818) 794-0210 FREE WORLD TRAVEL

### **HAPPY HOUR at the dentist?**



Dr. Richard S. Phillips, D.D.S. 1302 North Altadena Drive Pasadena • 797-6778

New Patient HAPPY HOUR SPECIAL (Tues. & Thurs., 2-6 p.m.) Cleaning/Exam \$18.00 (reg. \$70.00) expires June 1990



Paul Wallach's Guide to Restaurants of

Los Angeles and Southern California

as a Restaurant of Distinction

### MANDARIN CUISINE AND SEAFOOD

LUNCH SPECIAL from **425** Choice of 13 entrees 11:30 a.m.-3 p.m.

EARLY BIRD DINNER SPECIAL Choose from 13 items ONLY **525** 3-7 p.m. DAILY

### **CLASSIC DINNERS**

Sunday-Thursday 3-10 p.m. Friday-Saturday 3-10:30 p.m. Between Altadena Dr. & Sierra Madre Blvd.

### 2475 EAST COLORADO BLVD., PASADENA

FOR RESERVATIONS: (818) 449-8018

Open 7 Days . Cocktail Lounge . Food To Go Orders Welcome . Free Parking in Rear



### Sweeney Todd

Hairstyles of Distinction

Special Caltech Student Discount

1818 E. Colorado Blvd., Pasadena, on the corner of Colorado & Allen

(818) 795-5551

Ask for CAROLYN

# LAEMMLE THEATRES

# **ESOUIRE**

2670 E. Colorado Blvd. (818) 793-6149

Winner, New York Film Critics Daniel Day-Lewis

# LEFT FOOT

Daily 5:45, 8:00, 10:10 p.m. Sat-Sun matinees 1:00, 3:30 p.m.

### COLORADO

2588 E. Colorado Blvd. (818) 796-9704

"Best New Director" -New York Film Critics

Kenneth Branagh's

Daily 7:00, 9:45 p.m. Sat-Sun matinees 1:20, 4:10 p.m.

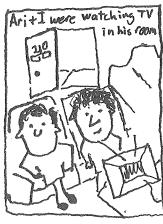


















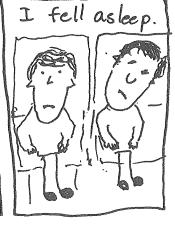


loyd's Journ







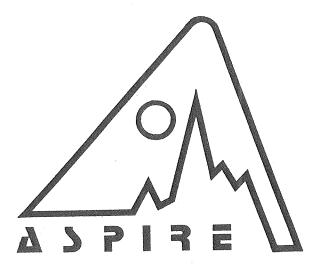








# SUMMER JOB SEARCH SEMINAR



THURSDAY, FEBRUARY 8 2:30 - 3:30 P.M. WINNETT CONFERENCE ROOM

> SIGN-UPS REQUIRED (CALL CAROL, X6361)

> > AND

DROP IN TO DISCUSS YOUR JOB SEARCH

ANY WEDNESDAY OR THURSDAY FROM 2-4 P.M.

CAREER DEVELOPMENT CENTER 08 PARSONS-GATES, X6361

The Marin County Educational Foundation is offering grants for the 1990-91 academic year. Applicants must be Marin County residents and must complete a SAAC or FAF. For more information and/or an application contact the Financial Aid Office at 515 S. Wilson or call x6280. Deadline to apply is March 2, 1990.

Women's University Club-American Association of University Women is offering merit scholarship gifts for the 1990 summer session and fall regular session. Must be a U.S. citizen, a resident of L.A. county or an adjoining county, and currently enrolled in a graduate degree program in a local accredited university. Must have a minimum 3.75 GPA in a program of at least 8 units completed in semester preceding application. Show participation and leadership in groups or committees at the university or in the community. Must be available for an interview. Deadline for application is February 23, 1990.

The Planetary Society actively encourages science students through a variety of programs. The Mars Institute Contest is open to students in both high school and college, and college undergraduates are eligible for the College Fellowship Awards. For entry details write to: The Planetary Society, Scholarship Department, 65 N. Catalina Ave, Pasadena, CA 91106. Deadline for completed applications to be received by The Planetary Society for both the Mars Institute Contest and College Fellowship Awards is April 16, 1990.

Work In Japan?

If you missed the presentation about working in a Caltech alum's Japanese factory last week, you still have time to submit a brief letter of interest to the Deans' Office. The deadline is today, February 2nd. If more information is required, talk to Chris Hurwitz or David Carta, last year's par-

Summer Internship

The MacNeal-Schwendler Corporation (MSC) is now accepting resumes for its 1990 Summer Intern Program. Both U.S. and non-U.S. citizens are invited to apply. All candidates should be upper division undergraduates or higher and available for ten weeks this summer. They have advertised 14 positions. MSC is located on Colorado Blvd. about a block past the Pasadena/Los Angeles border. Application deadline is to-day, February 2, 1990, and the Career Development Center thinks they are pretty strict about this deadline. For more information about this and other summer job possibilities, stop by the CDC, 08 Parsons-Gates, or call x6361.

Jesse Unruh Fellowship
The California State Assembly offers one

of the oldest and most prestigious legislative fellowship programs in the nation. Up to eighteen individuals are selected nation-wide to spend 11 months (October 1990 through August 1991) in the Assembly as legislative aides and committee consultants.

Applicants must have completed a BA or BS degree by the time the fellowship year begins. There is no preferred major. Recent Fellows have had backgrounds in such diverse fields as aeronautics and astronautics, development studies, rhetoric, religious studies, law and biochemistry

In addition to paid enrollment in the graduate seminar, Fellows receive a monthly stipend (\$1560 plus periodic cost-of-living adjustments) and medical, dental and vision coverage.

Completed applications must be received no later than February 15, 1990. For appli-cations, contact the Dean of Students, 102 Parsons-Gates.

SURF's UP.

Applications for SURF-90 are now available in the SURF Office, Rm. 3, Dabney. Students should pick up a proposal packet, complete the application portion, and give a copy to potential research sponsors. Proposals are due Friday, March 2nd.

Career Development News

The City of Pasadena Water and Power Department is seeking applications for \$3,000 Energy Services Scholarship Program. Ten scholarships may be awarded during program year 1990 to fund academic projects related to the research and demonstration of energy-efficient developments. Graduate and undergraduate students in electrical power or energy-related disciplines are encouraged to apply. Deadline is February 15, 1990.

### Financial Aid Deadline

Undergraduate students are reminded that financial aid applications for 1990-91 must be submitted to the College Scholar-ship Service by March 2, 1990. Financial Aid applications and information packets for next year were mailed to students in early December, 1989. If for any reason you did not receive an application information packet, please stop by the Financial Aid Office, 515 S. Wilson, to request a duplicate packet.

### Cannon

### from page 1

of six miles. In January of 1975, a charge of between three and five pounds (depending on who is telling the story) was set off with the Cannon pointed directly at the doors of Page House. The destruction which followed prompted the administration to have Southwestern take the Cannon back. So, on January 17, 1975, the Fleming Cannon once again found itself on the lawn of Southwestern. It would be over six years before Fleming could reclaim its pride and joy, and bring the Cannon home.

On February 7 of 1981, after months of negotiations, in a reenactment of events almost a decade earlier, the Cannon was once again pulled three miles and placed in its old spot in front of Fleming House. With only one exception it has sat there ever since.

Harvey Mudd College has always claimed to have a rivalry with Caltech. In 1986, several Mudd students decided to prank Caltech by stealing the Cannon. Waiting for spring break, when there would be little opposition to their plans, the Mudd students made their move. Loading the Cannon on a truck, they hauled it back to their campus. When the Flems came back from spring break, they found that their cannon was missing.

After finding out what happened and acquiring the neccessary transportation for a three ton cannon, they left to reclaim it. Arriving at Mudd, they loaded the Cannon with spaghetti and taught the Mudd students that it's not wise to fool with Fleming.

Since then the Cannon has been secured to the Olive Walk and placed on the non-RF list, making any future pranks on it an honor code violation. With new safety rules, encouraged by the administration, it is unlikely that Fleming will ever lose the Cannon due to overenthusiasm. Currently the Cannon is fired six times per year - for Rotation, Ditch Day, Bastille Day, Commencement, and the end of the first and second terms. It is also fired for special occasions, such as next week's birthday celebration.

Nothing in Fleming's history rivals the story of the Cannon. It has been a favorite Rotation topic, site for class pictures, and source of memories ranging from the "Nordstom modified pound" and the Lloyd jello incident, to the day Fleming blew Page's doors wide open. The Cannon has touched the lives of all who have been involved with it. It is much more than a three ton piece of metal or an antique war relic. It is a part of history and a special part of the Caltech community.

### Save 50% on LASER PRINTER CARTRIDGES

We refill empty laser cartridges

> Hewlett-Packard Apple Wang

100% Guarantee

Call Laser Network at (213) 287-0470

Free pick-up and delivery

\$5 off for first cartridge exp. 1/31/90

### The Inside World

This Week's Inside World was written by: Blacker: Walker Aumann and Noam Bernstein Dabney: David A. Edwards Lloyd: Ari Kaplan and Aaron Lipman Ricketts: Joe Dadek

> Blacker 25 0 5 0 0 1 6 38 0 1 1 3 2 7 Dabney 20035008 Fleming 27 0 6 0 4 3 13 Lloyd 15 0 4 3 0 0 7 33 0 0 2 1 0 3 23 1 2 4 2 4 13 Page Ruddock Ricketts

Dabney

I'm free! I'm free! [evil laugh] No more roompicks, no more ExComm Minutes, no more overhead projectors! Now with elections over, I can just sit back, enjoy my huge room, and count the days until I get to hear the president of Dartmouth. Seth took Maneesh's place this year by nominating himself for everything. Too bad he doesn't know more about my love life. It's good to know that this year we got our priorities straight and brought a TV so we could watch

the Super Bowl during elections. Congratulations to our new officers: President: Pete "Cheech" Wyckoff V-Pres.: Dave "Chong" Bourgeois

Secretary: Ivar "Balls" Knutson Treasurer: Rob "\$60 for 60 women" Hanna Social V-P: Riki "No Competition" Moilanen Comptroller: Yair "Suck My" Zadik

Marine Biologist: Brad "Rub-a-Dub-Dub" Threatt Athletic Manager: Jon "Buttlicker" McGill

Historian: Alan "the Wave" Low

Librarian: Steve "the Hair" Anderson Chemist: Mags "Blondie" Taylor

Food Rep: Sven "U is for Underwear" Peterson

Alley 4 is the new Alley of the Gods and Goddesses after our successful defense of Alley 5's challenge. Of course, without Dean "I don't bowl that well" Brettle's 140 average and Chris "Squatter" Oei's terrible sense of direction, we may not have pulled it off. Overall, we did extremely well, even though Jennifer did get the booby prize. We're receiving new challenges, if any of the other alleys has the guts to put their pride on the line against us. And now a little memory test from Rotation:

Match those Frosh!

Kirsten Babbitt Swagato Banerjee

G. Richard Benzinger Raghav Chari

5. Trux Fulton 6. Stephen Heise 7. Jon Lange

8. Dong Lin Alan Low 10. Linda Maepa

11. Gabriela Mallen-Ornelas

12. Betsy Marvit 13. Evangelos Metaxides

14. Alf Mikula 15. Erika Moilanen

16. Seth Noble 17. Sven Peterson 18. Keith Seitz

19. Jill Soha 20. Amy Stern 21. Maggie Taylor

22. Stephen Thompson 23. Brad Threatt 24. Patty Tsai

25. Chris Ulmer 26. Roy Wada 27. William Watson

28. Andre Yew 29. Rich Zitola

K. Indiana Avenue L. Iron M. Jai-Alai N. Just Visiting O. Kitchen P. Long Island Iced Tea Q. Lutetium R. Margarita S. Peach T. phonophobia psychrophobia V. Rum Buck

H. Conservatory
I. German Chocolate Cake

A. anthropophobia

bathophobia

J. Illinois Avenue

B. Ballroom

E. Boardwalk

Carbon G. Colonel Mustard

D. Batik

W. Sabbath Scandium Y. Spumoni Z. Tattoo AA. Tea BB. Tycoon

CC. Water Works Answers are at the bottom of this column. And now, from the Dabney House

version of Spy magazine, here comes:

Separated at Birth: The Caltech Edition: Sven Peterson and Lurch and Tommy Newsome

Alan Low and Steve Bard and Nick Biery Rich Zitola and the dummy in the Twilight Zone episode where Cliff Robertson

Yair Zadik and the Venusian diner owner with 3 eyes in that Twilight Zone

# La Grotta di Capri Pasta House

### Starting February 1:

Free Delivery of Pizza and Dinners

FREE bottle of wine with every delivery

### Discount with Caltech ID:

Dinner for 2 for \$11.95 includes pasta dish with soup or salad and selected dessert

(818)796-7652

1770 E. Colorado Blvd. **PASADENA** 

Located near the corner of Colorado & Allen (parking in rear, enter from Meredith Ave.)

Richard Benzinger and David A. Edwards Richard Sincovec and John Lennon

Trux Fulton and Raggedy Andy and Dee Wallace in "Firestarter" Dirk Runge and Rachel Schwartz Brad Threatt and Harold Zatz Amy Stern and the picture of Dr. Who in the Alley 2 computer room Jon Lange and Stephen Heise David Morton and Charles Manson Elaine Lindelef and any "Amy" Swagato Banerjee and Alf Mikula and the lead bear from "Country Bear Jamboree" Swagato Banerjee and John Travolta

Rob Hanna and Danny De Vito

Ivar Knutson and Gaby Mallen-Ornelas

Reneau Kennedy and Susan Howard and Jill Clayburgh

Allen Kennedy and Ben Kingsley Keith Seitz and Todd Allendorf Tien-Yee Chiu and Bloody Mary from "South Pacific" Maneesh Sahani and Richard Bang

Give me a break. I had a busy week. 1-D, 2-N, 3-W, 4-G, 5-K, 6-I, 7-F, 8-AA, 9-C, 10-CC, 11-Q, 12-M, 13-A, 14-Z, 15-B, 16-BB, 17-L, 18-J, 19-H, 20-P, 21-R, 22-E, 23-X, 24-T, 25-V, 26-S, 27- U, 28-O, 29-Y

-Tech's Darbana

Back by popular demand, the Blacker Hovse Inside World. Sorry, dudes, but we've got work too. There's more to life than the Inside World (or so they tell us). We were kind of hoping that the frosh would get a clue and do something, but we forgot that our frosh are LAME! The frosh have been persecuted with no ill (or even dampening) effects on the perpetrators. Welcome to the new kinder, gentler Blacker Hovse when you can RF more than half the frosh and

Well, maybe not all of them are completely lame, just mostly lame. Any more news on "The Perfect Ride", Bill? After the stunning performance of your first one, we can hardly wait. Don't knock yourself out too much, though. Remember, you're the one who gets to clean up after it now.

I wil give the Cubs one thing. They could probably beat the Broncos in football. Baseball, on the other hand, is a different story...

Roompick was a while back. We're mostly moved in now. Only a half dozen or so boxes left, and I'm sure we'll be done by next roompick, although moving out went rather smoolthly with nothing obstructing our path, including the hooks in the closet. Also, we hereby resolve not to blast obnoxious music into the library anymore. We're sorry if we annoyed you. Stay out of the courtyard.

We'd like to express our sympathies for those poor unfortunates in Ricketts that, due to their roompicks, are forced to live on our courtyard and listen to the annoying sounds of sophomores flaming to the sound of yum-yum monsters. The president's life is such a difficult one. Speaking of yum-yums, the Lloydies have gotten to 36th level. Congratulations, guys, that's better than we'll ever

As usual, Nominations succeeded in their primary purpose. Dinner went even longer than expected, although we didn't reach last year's record of over 400 offices. Oh well, there are always write-ins. They also succeeded in their secondary purpose - exposing the true desires of certain members of the hovse. And all this time, we thought the sounds coming out of 00 were cats being tortured to death. Besides, isn't that sort of thing illegal in New Hampshire?

Hovse elections we as serious as ever. Suprise events included John Sunu-

nu's sudden withdrawl from the presidential race and endorsment of Ben Holland, and Graham "Synonym" MacNamara's fanatic support after proclaiming himself the emperor, messiah, and God incarnate. It was a joke, dammit. Why didn't any of the frosh get it? In a distinctly antisocial move, several people maliciously voted for the Antisocial Team for social team, and we didn't cast any of them. Not even we are that antisocial. And remember, Monday is a mandatory Metallica Monday. Mosh it up!

This week's social event: Pestering social team about this week's social event, Pete about alley ordering, Andrea about the hovse list, Brian about a card catalog, and ath team about sugar bags, dammit. This week's Antisocial event: watching frosh build their variable voltage regualted power supplies.

"Boy, that's gotta suck."

INTERIOR ACTIVITIES REPORT FORM BHE&SDC/TRK12

Authors' Names: Shadowstar and trolllarge

Supervisors' Names: Supervisors? We don't need no stinkin' supervisors Supervisors' Initials Verifying Authenticity Of Above Authors' and Supervisors' Names: K.N. & A.C.

### SERVING CALTECH **SINCE 1945**

Authorized Agents for Airlines, Hotels and Steamships



690 E. GREEN ST. **PASADENA** (between El Molino & Oak Knoll)





STUDENTS GET \$4.00 OFF
WITH THIS AD

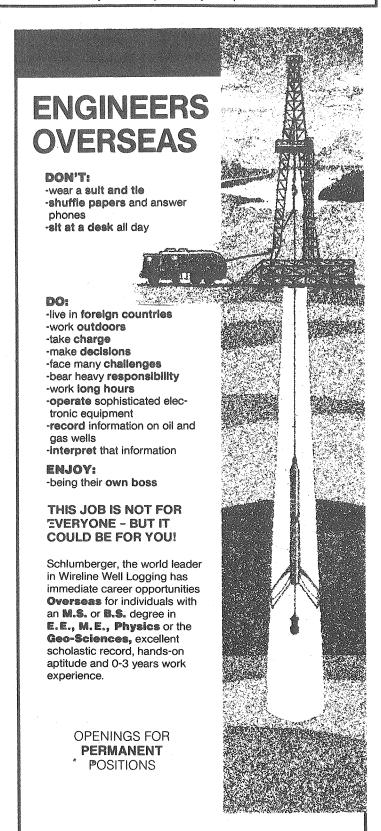
Shampoo, Style Cut

MEN Reg. \$20.00 NOW \$16.00 WOMEN Reg. \$25.00 NOW \$21.00

449-6967

1009 E. COLORADO • PASADENA

Offer valid only Monday-Friday, expires June 30, 1990



For more information, please contact:

### **SCHLUMBERGER-INTERNATIONAL**

Recruiting Coordinator 2707 North Loop West, Suite 1090 Houston, Texas 77008

(713) 863-9673 (in Texas) 800-222-1587 (outside Texas)



Exceptional people. Exceptional technology. Worldwide



ASCIT Elections Update
After all protests had been considered, the initial presidential and vice-presitential election was ruled valid,

After all protests had been considered, the initial presidential and vice-presitential election was ruled valid, and David Geraghty was elected as new ASCIT president and there was a runoff between Craig Volden and Kevin Luster. Nominations for upperclass director-at-large, frosh director-at-large, IHC chairman, director of academic affairs, secretary, treasurer, director of social activities, athletic manager, activities chairman, and *Tech* editors. Statements are due to the *Tech* by Wednesday, February 7, and elections for these offices is on Friday, February 9.

# SOFTWARE ENGINEERS

Caere Corporation needs top-quality software engineers to develop algorithms and products based on image- and pattern-recognition technology. We are the world leader in page-recognition software and recently won *PC Magazine*'s Award for Technical Excellence. Located in Los Gatos, California (just southwest of Silicon Valley), Caere is a fast-growing company that offers challenging projects in a highly creative and supportive environment.

Caere will conduct on-campus interviews February 7. We require programming expertise and a B.S. or M.S. in Computer Science, Electrical Engineering, Mathematics, or Physics. Skills in C, assembly, UNIX, NeXT, Macintosh, pattern recognition, image processing, and quality assurance are assets.

Come to an informal meeting with Carl Alsing. Carl, the midnight programmer in *The Soul of a New Machine* and Caere's Manager of Software Development, will talk about "How to Teach Machines to Read." Refreshments and interesting ideas will be plentiful. You'll be able to talk to Carl about your interests and ambitions. The meeting will take place in SAC Room 13, from 4 to 6 p.m., on Tuesday, February 6.

CAERE CORPORATION
100 Cooper Court
Los Gatos, California 95030

February 2, 1990 /

# -movies-Flashback

by Shane Sauby

Ask anyone over thirty, or anyone who loved *Easy Rider*, who they would pick to play a hippy in a movie and they would say Dennis Hopper. Some of you may remember him as the alcoholic assistant coach from *Hoosiers*, or the whacked out science teacher from *My Science Project*. In the later he returns from the future with a beard, brandishing a peace symbol and stating that the future *will be groovy*.

Well, in the Paramount release, Flashback, Dennis Hopper is the perfect hippy. His entire manner says rebel, but only when it needs to, and the rest of the time he's laid back and peaceful.

Hopper plays Huey Walker, the man who made the cover of time twenty years ago, after pulling a prank on the Vice-President, Spiro Agnew. He's arrested by the FBI for malicious activity or some such, and promptly escapes. Its twenty years later, and an anonymous phone call helps the FBI catch him again.

Now its up to John Buckner, played by Kiefer Sutherland, to transport him from San Fransisco to Spokane, where he will be tried. With a little help from the weather, a long train ride ensues, during which Walker plans his escape. When they reach a stop over, Huey is in Buckner's clothes, impersonates John, and places John in the custody of the local police. While in jail, Buckner is abused by the sheriff, who is running for Congress.

After a phone call from the FBI, the identity problems are solved, Walker and Buckner are brought back together (I'll let you find out how), and then both become fugitives as the Sheriff Hightower tries to kill them both.

The movie as a whole is fine comedy and good entertainment. Both Sutherland and Hopper do fine jobs of portraying their different, yet similar characters. Hopper is great at being slightly off-center, looking at things differently then most of us, and seeing the good in the bad and vice versa.

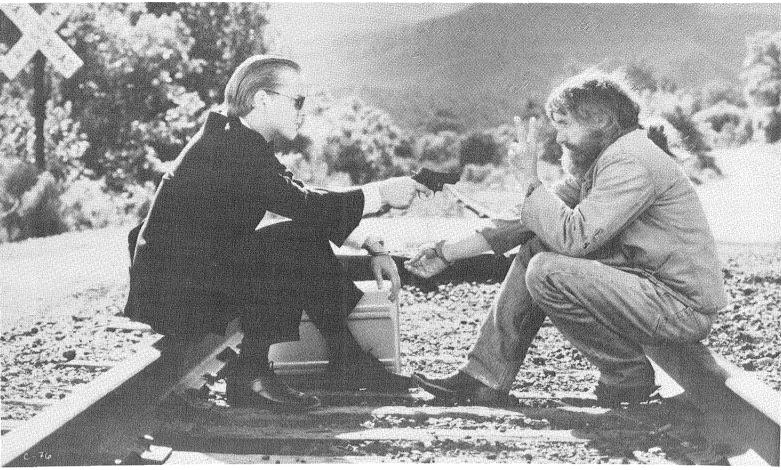
There are some moments in the beginning of the film where the obvious message of the movie is blatantly exposed, but these moments are few and far between. The action scenes are a little too staged and forced in places, but the flow of the movie is fairly good.

Along with Hopper and Sutherland, there are some fine performances put in by the supporting characters. Carol Kane shows up as an old friend of John's, being both happy to see him and upset that he hasn't kept in touch.

The funniest performances other then the leads were the two bungling ex-rebels that Huey bumps into in a bar, played by Richard Masur and Michael McKean. There bungling attempt to save Huey from the FBI backfires completely.

Overall, *Flashback* had its moments and actually gave the viewer something to think about. It rates three and a half stars.





Slick FBI agent John Buckner (Kiefer Sutherland) keeps Huey Walker (Dennis Hopper) at gun point while Huey just wants to make peace

# CAMBRIDGE SYSTEMS CENTER McKinsey & Company, Inc.

cordially invites candidates for degrees in

Computer Science and Electrical Engineering

and those who have experience building complex computer systems

to attend a presentation and discussion of

### SYSTEMS CONSULTING OPPORTUNITIES

Wednesday, February 7, 1990

/ pm

Student Activity Center

Room 34

McKinsey & Company is an international consulting firm which specializes in problem solving for a broad range of prestigious corporations and, to a much lesser extent, non-military government institutions. Founded in 1926, McKinsey & Company now has 42 offices in 21 countries.

The Cambridge Systems Center was founded in 1984 to provide McKinsey offices around the world with the resources required to address complex technological issues. Our work covers a broad spectrum of activities, from hands-on prototyping to creating conceptual solutions to abstract problems in systems and networking technology. We are *not* looking for people interested in general business consulting; rather, we seek those who wish to apply their rigorous technical skills to real-world situations.

McKinsey & Company, Inc. is an Equal Opportunity Employer

### Ricketts

Enter TELNETconnect chrome %telnet chrome 4201 Welcome to TinyRHIS connect Messiah Hobag

You are in a misty area. You cannot see anything or anybody here. Somehow you seem to know which way leads

This is a brick-floored area with a large cement POT in the center. Exits lead off to various parts of the house. Fizyx looks at the POT with a satisfied expression. Suddenly a large fireball crupts out of the POT, singeing your eyebrows.

Up Your Allev

This alley is the home of many bizarre creatures. You see the Limey and the Furr'ner doing disgusting things beyond the Rad tape

up Herc Alley You see a whopping huge pillow at the end of the alley. Lying on the pillow is Ross TenEyck, a superior fencer and a man who has never glommed anyone in his life. He is busy glomming Joanna.

You see a number of people here playing TinyMUD, a game on Chrome which allows you to construct little worlds in which to roam around. These people seem to have no life as they are busy simulating Ricketts House and the rest of Tech on the computer. Guru is here writing the Ricketts House Inside World(RHIS).

A wild-haired, bearded man with penguins on his feet.

ask guru about ph106 notes

"Go find them yourself. I'm busy now. Why don't you guys figure out how to do your 106 on your own?"

Snatch Alley

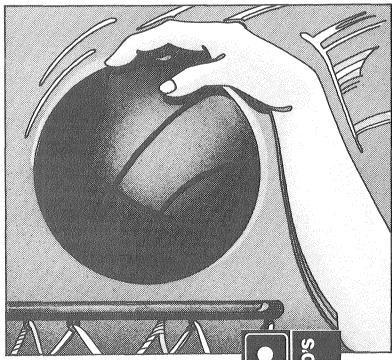
There is a heavy concentration of Froosh(sic) in this alley, many of which are named Dan, hobbling around on crutches,

You enter the room of a cute Froosh girl, who is busily babbling about Malathion and Three Little Fishies. You see several Immoral Influences hanging about.

Snatch Alley

One of the Dan's is going on about his home planet of Gallifrey. He displays the Mark of a Time Lord on his left wrist and hauls out his TARDIS which is currently in the form of a trunk.

While going down the stairs to Cherry, you stumble and twist your ankle. You fall to the bottom of the stairs, which is conveniently located outside an ex-Health Advocate's room. She patches you up and kicks you out screaming, "Pay your Housebill!"



CALLUS 584-0866

2385 Colorado Blvd.

© 1990 Domino's Pizza, Inc.

12 oz. Cans available. Save on a 6 pack of Coke®

> Our drivers carry less than \$20.00. Delivery area limited to ensure safe driving.

Get \$2.00 off any Domino's Pizza

Coupon required. Not valid with

with two or more toppings.

participating locations only.

any other offer. Valid at

Expires: In two weeks.

California Vegi, Vegi, Fiesta or Hawaiian. Tax not included. Coupon required. Not valid with any other offer. Valid at participating locations only Expires: In two weeks



Fast, Free Delivery™ 584-0866 2385 Colorado Blvd. Pasadena DPJ-90-174A

WITH TWO TOPPINGS

Now get a large Original with two toppings from Domino's Pizza for only \$10.99. Additional toppings extra.Tax not included. Coupon required. Not valid with any other offer. Valid at participating locations only. Expires: In two weeks.

> Fast, Free Delivery™ 584-0866 2385 Colorado Blvd.

Pasadena DPJ-90-174B



Fast, Free Delivery™ 584-0866 2385 Colorado Blvd. Pasadena DPJ-90-174C

12 MINUTE CARRYOUT / 30 MINUTE DELIVERY OR \$3.00 OFF. GUARANTEED.

Cherry Alley

This a long red alley with little activity. From one room Beethoven can be heard.

Ricketts Courtvard

The pot is still here. It is surrounded by grunting Phlegms failing miserably to lift it. Obviously, they don't realize that it is cemented into place.

Ricketts Lounge

Upon entering, you immediately note that the ceiling of Ricketts Lounge looks amazingly like a waffle. The lounge is filled with people playing bridge, watching TV, or sitting in front of the fire. Frank walks in wearing a pair of ludicrous boots.

look boots

Looking at the boots is too painful, and the idea of them on Frank nearly causes you to burst into laughter. Frank walks out of the lounge, and you soon hear the sounds of a car in the process of disintegrating. north

Olive Walk

People are wandering about, going to class or to the Ath.

As you attempt to enter the Master's Office, a wild-haired, bearded man with a blue baseball cap threatens to PNG you from the Universe for daring to disturb him. You quickly retreat to the Olive Walk. You cross the RF courtyard, go down the stairs into the SAC, and enter...

The Coffeehouse A number of booths and tables with comics strewn everywhere. A variety of food-like substances are available. Bonus Awarded! The Jeitner is working the counter tonight. order milkshake

"I refuse to serve anyone wearing a bathrobe. Go put on some real clothes and I'll serve you," the Jeitner says with a grin that makes you want to push in his face.

give jeitner a boot to the head

Just as you are about to show the Jeitner just what you think of him, a crowd of Scurves rush into the room and stare at the clock. All of a sudden, they shout "Bust o' Justice, Bust o' Justice, Bust o' Justice, UT!" Then they turn around, face the Jeitner, and say "Hi, Dave!" The Jeitner is nonplussed. follow scurves

You follow the Scurves back to Ricketts House. L.D. Alley This is the alley of Ouiet Froosh. They certainly seem rather noisy for quiet people. In fact, Weird Al music is blasting out of one room at the end of the hall.

Suddenly, in synchronization, two women burst out of their rooms, run down to the room with the music and lob hand grenades into it. After a loud "Ka-BOOM!", they turn back to their rooms with satisfied smiles, enjoying the sisouth

Broken Cherry

This blue alley contains a whopping huge couch. Some people are sitting on it discussing various unimportant topics. Seniors' rooms are open, but the Seniors seem to be out hiding.

As you climb the stairs, you are horrified to see a body hanging from the floor above. You then realize it is merely stuffed clothes and a toy eagle. Prexy Several large Senior rooms are in this alley, 'Los, and the Froosh double. Leopold and 'Los are debating in a heated frenzy about how many hit points God has.

'Los and Leopold ignore your pain and continue debating. Ben wanders up and joins in the conversation.

You dash down the stairs, tweaking the guard pterodactyl's nose on the way, not stopping until you reach... Snake You can't get much further from the rest of the house than here. The only live spot seems to be Shroom's room. Shroom Room of Tromey

This room is full of mathematician and computer paraphenalia. Sitting in a corner is the mighty machine, Chrome. Boy, just think how many people you could annoy by turning it off. turn off chrome

Tom runs in shouting, "You fool, you can't turn off the computer when you're already in it!" He drives you out of the room and shuts the door. Snake

Still pretty boring.

home

There's no place like home... There's no place like home... There's no place like home... You arrive home without your possessions.

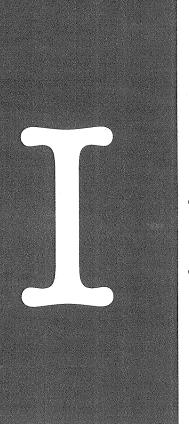
This room contains many tomes of wisdom and some places for contemplating them. As usual, the room is filled with people hanging out and doing or avoiding work. They're on the bed, in the chair, sitting on the floor, and standing around in the doorway.

You say "go away" Amazingly, the crowd actually listens to you, allowing you to get to sleep at a decent hour for a change. Too bad you have two problem sets due tomorrow.

Good move. \*\*\*Disconnected\*\*\* Connection closed by foreign host. %logout -The Physics Messiah and his pal Guru



February 2, 1990



# t's like getting paid to go to school.

Backpacks and frisbees abound. Challenge is in the air. Heated debates erupt from passionate beliefs.

Surprise! It's Microsoft. The premier software corporation in the world has more the feel of a college than a multinational corporation. Intellectual energy. Eclectic decor and dress. All on a modern, wooded campus in the Eastern hills above Seattle.

Microsoft is better than college, however. You get your own room — a private office with a door. You have access to the latest microcomputer technology, as well as the brains that helped create it.

So now you don't have to give up the fun and excitement of college in order to make it in the "real world". All you have to do is join Microsoft.

# Software Design Engineer

As a Software Design Engineer, you will design, develop, and implement applications and systems software for microcomputers. Your projects can include networking, sophisticated graphical interfaces, operating systems, compilers, powerful personal and business applications, and multimedia.

# Program Manager

Actually, "Technical Catalyst" would be more accurate. Because we believe engineers are the best people to envision and design product features. To create the user and programmer interfaces. To write the specs, and drive them through to release.

If you'd like to impact the agenda for the future of Microsoft products, bring your impressive technical skills and unique ability to make things happen to Microsoft.

# Ready for some real fun?

If you are about to graduate with, or are working towards, a Bachelor's, Master's or PhD degree in Computer Science, Electrical Engineering, Math, Physics, or related technical degree, then we want to hear about your microcomputer programming experience, design skills, and/or exposure to managing projects.

Microsoft will be interviewing on campus:

# February 16, 1990

Come talk with us on February 15 at the CalTech Career Fair.

See your Career Planning and Placement Office for more details.





# Caltech Readers Poll Rules

No Xeroxed Ballots
Ballots must be dropped off
at the *Tech* office, room 40
in the SAC, or sent to *The*California Tech 40-58 by
Thursday, February 8.
One ballot per person,
please.

Circle One:
Student
Faculty
Staff
Other

Next issue is our last issue, we hope, The Best of Caltech Issue. So, by filling out this survey and sending it back to us we promise to get you the results before the administration gets us the results of the campus life survey that we filled out last year.

# Humorous comments or elaborations on your answers are encouraged.

1.	Best Pizza									
2.	Best Chinese Food									
3.	Best Mexican Food									
4.	Best Hamburgers									
5.	Best Thai									
	Best Sandwiches									
7.	Best Coffeehouse Waiter									
8.	Most Irritating Coffeehouse Waiter									
9.	Best Place to Buy Condoms									
10.	Best Grocery Store									
11.	Best Local Band									
12.	Best Radio Station									
13.	Best Line to Get a Woman/Man in Your Room									
14.	Best Euphemism for Vomiting									
15.	Best Excuse for Not Graduating in 4 Years									
16.	Best Music Store									
17.	Favorite Band									
	Best T.V. Show									
19.	Favorite Movie Theatre									
20.	Best Tech Editor (Circle One) Mark Scott Paul									
21.	Most Annoying Tech Editor Mark Scott Paul									
22.	Best Classroom									
23.	Best Teacher									
	Best Toilet									
	Best Outgoing ASCIT Officer									
	Best Off-Campus House									
27.	Best Caltech Sports Team (Bridge and Debate are Not Sports)									
28.	Best ASCIT- or Y- Sponsored Event in the Past Year									
29.	29. Best Caltech Party Party in the Past Year									
30.	Best Newspaper									

# 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.

### Cinematech

This week, Cinematech presents Ingmar Bergman's classic film The Seventh Seal. This timeless work, on life, death, and chess, will be shown at 7:30 and 10pm on Saturday.

### Caltech SEDS Meeting

The next meeting of Caltech SEDS will be held on Monday, February 12 at 7:30 pm in Rm. 13 (Clubroom A) of the SAC. We will be discussing our plans for future SEDS events, including tours of Palomar, JPL and the Rockwell facility in Palmdale, where the Space Shuttle Endeavor is being built. We will also discuss our plans for the Get-Away specials we have inherited. We will be showing the video of the post-flight news conference of STS-30 (Atlantis/Magellan). Refreshments will be served.

### Fishing For Ideas

The Fishline, a newsletter serving all Christians of the Caltech community, needs material! If you have any ideas, upcoming events, or articles that you would like to share, please submit them (Mac format, if possible) to *The Fishline*, 126-58. Also welcome are announcement by neighborhood churches, Christian groups and clubs, as well as mailing list additions. Contact Mike Nassir (578-9833) for more infor-

### Science, Ethics and Apes

Philosophy professor John Dupré of Stanford University will be speaking on the subject of "Conversation with the Apes: The Scientific Study of Language" on Wednesday, February 7 at noon in the Judy Library, Baxter Hall. This brown bag lunch talk is part of the Science, Ethics and Public Policy series.

### Caltech Sailing Club

The Caltech Sailing Club will hold its first general meeting on Wednesday, Feb. 7th at 6 pm in Rm. 23 of the Athletic Center. Stop by to find out how you can join.

### Wanta Get Cultured?

If you would like to know about local theatre, museum or activity center activities and schedules, leave a message in the IN box of *The California Tech* or write to mail code 40-58. There is too much information to be printed, but inquiries will be answered, to the best of Shane Sauby's ability.

### The Red Door Needs You

The Red Door Café is looking to hire some undergrads to work at our new place (under the red awning, across from Winnett). It's a lot of fun, and we pay \$6 an hour. Call Sharon at 577–1953 or x4757.

### **NSS President Speaks At Caltech**

On Friday, February 16 at 8 pm in 22 Gates, the Students for the Exploration and Development of Space and the California Space Development Council present Mr. Charlie Walker, former space shuttle astronaut and currently the president of the National Space Society. Mr. Walker's talk is entitled "An Individual CAN DO Research and More in Space." For information, contact Irwin Horowitz at x4121 or 577-1930.

### 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.

### **Submit To The Totem**

An effort is now underway to produce another issue of the Totem, the Caltech literary magazine. In the past, the main barrier to publication has been profound apathy (i.e., submissions have been about a tenth that required). This is a plea for all interested students to submit their art, poetry, and short fiction or, at least, to offer suggestions. Please include your name, campus address, and phone number. Submissions to Ben Schaeffer, 1-59, x6173.

### Interested in Sailing?

You too can use the Caltech sailboats. Find out how by joining the Caltech Sailing Club. Contact Axel or Martin at (818) 568-9168. Open to students, faculty and staff.

### Gay/Lesbian Discussion Group

On the 1st and 3rd Tuesdays of each month, all students, staff and faculty are invited to an ongoing discussion of Lesbi-an/Gay topics, from 7:30 to 9:00 pm. The speaker for February 6 will be Michael Shere from Gay & Lesbian Alliance Against Defamation. After the talk, time is devoted to informal talking, with refreshments provided. This confidential meeting is held in the Health Center Conference Room; call x8331 for further information.

### Bee Keeping & Human Spirit

The Caltech Hillel in conjunction with the Caltech Y is co-sponsoring a unique, challenging and fun evening with Rabbi Richard Israel on Tuesday, February 13 from 7:30 to 9:30 pm in Clubroom 1 of Winnett Center (2nd floor). Mr. Israel is an avid beekeeper and uses beekeeping as a metaphor in addressing many of the social and political issues of our time. His approach is interdisciplinary and applicable to all faiths. The lecture and slide show promises to be humorous as well as enlightening, and of course FREE!!

### Play Bridge

Play bridge at the Caltech Bridge Club this Monday. We meet every Monday at 7:15 pm at the Red Door Cafe in Chandler Dining Hall. No card fee, no membership fee, no partner needed. Undergrads, grads, faculty, etc. welcome.

### Attention Writers!!!

The Literature Faculty is pleased to announce the 44th Annual McKinney Competition. The Mary A. Earl McKinney Prize is awarded each year for excellence in writing. Only full-time students officially registered at Caltech as undergraduates are eligible to enter the competition. This year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be typewritten and double-spaced. In the poetry category, entrants may submit up to three poems. Submissions of prose fiction should not exceed 12,000 words. Essays may be ones prepared for a humanities class or any good piece of original writing on a topic relevant to the humanities. The prize in each category will be \$250.

Each student is entitled to only one entry in each category. All contestants must submit their work to Professor Jenijoy La Belle, Division of the Humanities and Social Sciences, by no later than April 20, 1990. No entries accepted after 5 pm, April 20. No entries will be returned. Each category will be judged by a committee from the Literature Faculty. Essays will be judged on the quality of thought and the effectiveness of the writing. Winners will be announced the last week of May, and the names of the winners will appear in the commencement program. The Committee may divide the award in each category in case of more than one outstanding submission. Previous winners in any one category are not eligible for the competition in that

If you have any questions, contact Dr. La Belle, x3606, or Odessa Myles, x3609.

### **Potential Clippers Tickets**

The Caltech Y may be able to get L.A. Clippers tickets. Anyone interested in attending a Sunday, Feb. 25, 6:00 pm game against San Antonio, or a Friday, March 30, 7:30 game against Atlanta, please come by The Caltech Y for preliminary signups. 15 to 20 people are needed to get a good discount on tickets-could be a great house

### **Korean-American Students**

The Korean-American Student Association meets on alternate Mondays at 8 pm in SAC Rm. 13 (Clubroom A). The next meeting will be on February 12, and follow every *two* weeks. All members, and those who want to be members, are encouraged to attend. As always, there will be free munchies. Please contact Dong-su Kim at x8309 if you have any questions.

### L.A. Philharmonic Tickets

The Caltech Y has L.A. Philharmonic tickets at \$5 each for the following dates: April 1, 8, 15, 20, 27. Come by the Y for

### **Benefit Concert**

Enjoy an evening of music, dance, video and storytelling with the popular Bolivian band Yatiri, and the Texas-based Chaski. Jamie Allen (local comoposer) will add to this special evening which also includes storyteller/singer Angela Lloyd. The program will also include a live performance of the soundtrack to Peru: A Moving Experience, a film without narration. The event is Saturday, February 3rd, 1990, 8:00 pm at the Pasadena Presbyterian Church. Tickets are \$7 at the Y (second floor, Winnett). For more information, call (818) 355-1070.

### Badminton, Anyone?

Badminton is played on Mondays and Fridays in the gym, from 9 am until 11 am. Intermediate players (faculty, staff and students welcome). For information, please call Cherrie Leighton, x4915, Division of

### Career Development News

The Careeredge Regional Collegiate Job Fairs will have approximately 65 major corporations attending. The companies will be looking to hire for the entire southern California area. This year there will be two fairs, one Tuesday, March 6th in Anaheim, and one Thursday, March 8th in Los Angeles. Stop by the Career Development Center, 08 Parsons-Gates, for more infor-

### Voyager's "Last Picture Show"

During the next four weeks the city of Pasadena's cable television channel (Cencom channel 55, KPAS) will broadcast a review of Voyager 2's encounter last summer with Neptune. This recap features Voyager project scientist Edward C. Stone, professor of physics and vice president for astronomical facillities at Caltech. Dr. Stone's presentation, taped at his Earnest C. Watson Lecture at Caltech, includes some of the stunning close-ups of Neptune and its moon Triton during what many observers called Voyager's "last picture show" last August.

The program started this week, and runs for four consecutive weeks on Mondays at 9 pm, Wednesdays at 10 am, and Saturdays at 7 am. For more information, call KPAS at (818) 794-8585.

### Do You Read?

The California Tech currently has three review copies of books: Stand Up Comedy, the Book, God, I Listened, and Out of the Shadows of Night. If you would like to review one of these books, and possibly keep it, please contact Shane Sauby at 577-4423 or mail code 40-58.

### **Last Chance For Chamber Music**

The Caltech Chamber Music Ensembles present a their third and final winter series free concert on Saturday, February 3 at 8:00 pm in Dabney Lounge. The performance, which includes two trios by Beethoven, a trio by Brahms, a quartet by Fauré and a Sonatine, a brass quintet by Bozza, will be followed by a reception.

### More Horse History

Part 3 of 6 of The History of the Horse will be shown on Monday, Feb. 5 by the Caltech Non-existent Equestrian Team. All are welcome to come and watch. As usual, it will be on our big screen in Rm. 19 Baxter, noon to 1 pm. Bring your own lunch. If any questions, call Liz at x4515 or Victoria at x3828.

### **Bouncy Singers Need Homes**

Up With People, the international group of young performers, will be coming to Pasadena on February 12-14 to present their silver anniversary show, "Face to Face" at the Pasadena High School Auditorium. The proceeds from the show are going to the Pasadena Citywide Arts Program. The 170 members of this cast, representing 23 different countries, need places to stay during their visit, especially with families. If you are interested in offering space to these temporary "exchange students" from around the world, please call Sarah at 794-1156.

Also, if you're 18-25, single, in good health and have boundless energy, call her if you're interested in spending a year on the

### Japan-America Conference

Positions are available on the American delegation of the 1990 Japan-America Student Conference (JASC). JASC is an internationally coordinated program for university studnets held alternately in the U.S. and Japan. The program is held in English. This year's program will start in Anchorage, move to Seattle, and conclude in San Francisco. There will be an orientation in Portland before the program. JASC is open to any student who is a U.S. citizen or has permanent resident status. Application deadline is February 23, 1990 for this summer's program. The Career Development Center has more information and applications. Stop by at 08 Parsons-Gates.

### **Upcoming Folkdancing Events**

Folk dancing on Tueday nights in Dabney Hall Lounge. Teaching from 7:30-9:00 pm, with dancing from 9:00 to 11:30ish. Join us on Feb. 6th for our first "Beginners' Night." A great way to get started. Last but not least, come on February 13th for our 21st Anniversary/Valentine's Day Party, with live music.

### **Speech And Debate Meetings**

Debate meetings and meetings for the Speech Team will be held Mondays from 4:30 to 5:00 this term in SAC Rm. 13. Meetings will be for information, tournament registration, and practices. For more information, contact Craig Volden at 1-60

### Voices Needed!

On March 23, 1990 the Caltech Men's Glee Club will perform Argento's *The Reve*lation of St. John the Divine for the Intercollegiate Men's Choral Festival in Santa Barbara. This annual event draws together the best men's choirs from all over the country. Caltech will be a featured chorus at this year's festival. We welcome all those interested in singing, regardless of what you think of your own ability. Please call Don Caldwell at x6197 ASAP.

# scholarships

Scholarship Listings
The Financial Aid Office has applications and/or information on the following scholarships. All qualified students are encouraged to apply. The office is located at 515 S. Wilson, 2nd floor, phone x6280.
The Gloria Fecht Memorial Scholarship

Fund is offering a scholarship of ranging from \$1500-2000 to a young woman attending a university in California or Arizona. Applicants must have an interest in golf and financial need. Applications must be mailed on or before March 1st.

The Coors Veterans' Memorial Scholarship Fund is offering scholarships ranging from \$2,000 to \$5,000. Applicants must be sons or daughters of Honorably Discharged Veterans, active military personnel, or American service personnel Killed in Action, Missing in Action, or Died in the Line of Duty. Applicants must also be under the age of 22 as of March 15, 1990, have completed a minimum of one semester of college with a minimum 3.0 cumulative GPA. Deadline is March 15, 1990. The Sylvia W. Farny Scholarship has a

grant of \$1,000 to be awarded to a student for the final year of undergraduate study. Applicants must be U.S. citizens and studying Mechanical Engineering. Deadline is February 15, 1990.

The Arizona Honors Academy has an opportunity for undergraduates to discuss important world issues with writers, sovietologists, national security officers, historians, physicists, and arms negotiators at their summer session entitled "Seeking National Security in an Insecure World." Applicants must be undergraduate students who have completed 27 semester hours with a minimum cumulative GPA of 3.5. Deadline is February 15, 1990.

The American Society of Naval Engineers sponsors a scholarship program to encourage students to enter the field of naval engineering. Scholarship awards of \$2,000 each are available for the 1990-91 academic year. Undergraduates in their final one or two years and graduate students who have not received an advanced degree are eligible. Applicants must be U.S. citizens and demonstrate a genuine interest in naval engineering. Financial need is not required, but may be taken into consideration. Deadline is February 15, 1990.

The Energy Exchange of Greater Los Angeles will award scholarships of \$1,000 each to students entering the junior or senior year of college September '90. Their major must be engineering or computer science with a GPA of 3.0 both overall and within their major. Applicants must be U.S. citizens and demonstrate excellent oral and written communication skills. For applications contact the Financial Aid Office at 515 S. Wilson Ave. Completed applications are due in the Financial Aid Office by Febru-

Got any good ideas for a Martian speedometer? In the international mission to be launched to Mars in 1994, Soviet winddriven balloons will carry scientific instruments in a gondola and in an international guiderope (affectionately called "the snake"). The Planetary Society invites ideas for solutions to design problems of the "snake". For more information contact Dr. Bruce Murray, The Planetary Society, 65 N. Catalina Ave., Pasadena, CA 91106 or call (818) 793-5100. Deadline for entries to be received at The Planetary Society is February 16, 1990.

# **SERIOUS MUSIC**

The Beatles The Stones The B-52's The Cure The Sugarcubes

# THE PHIL

We're talking **SERIOUS** 'MUSIC...like Beethoven, Brahms, and Mozart. The Los Angeles Philharmonic gives you this serious music... TOTALLY LIVE... in a setting that's much more intimate than the Coliseum or the Forum. And where else can you get an incredible deal like **TWO TICKETS FOR \$5.00** in February for a live concert, just by showing up at the Philharmonic's Music Center Box Office with your current, valid student I.D. no more than 2 hours before the concert. (You don't have to camp outside all night just to get seats behind a speaker.)

Here's a great idea...join the Philharmonic's free Student Frequent Buyer Program by calling (213) 850-2050, buy 3 tickets and get a fourth ticket FREE.

### **FEBRUARY SPECIAL** 2 TICKETS FOR \$5.00

### This Week!

Fri. and Sat., Feb. 2 and 3, 8:00; Sun. Feb. 4, 2:30 Simon Rattle, conductor Anne Evans. soprano Hans Sotin, bass

Messiaen: Et exspecto resurrectionem mortuorum Wagner: Ride of the Valkyries and Final Scene from Die Walküre

Sun., Feb. 4, 7:30 Mercedes-Benz Celebrity Series Recital Radu Lupu, piano Music by Bach, Schumann, and Liszt

Next Week! Thu. and Fri., Feb. 8 and 9, 8:00; Sun., Feb. 11, 2:30 Simon Rattle, conductor

Stephen Hough, piano John Aler, tenor Beethoven: Piano Concerto No. 3 Liszt: A Faust Symphony (with Men of the Los Angeles Master Chorale)

Mon., Feb. 12, 8:00 Mercedes-Benz Celebrity Series San Francisco Symphony Herbert Blomstedt, conductor Haydn: Symphony No. 86 Carlson: Rhapsodies Dvořák: Symphony No. 7

Tue., Feb. 13, 8:00 Mercedes-Benz Celebrity Series San Francisco Symphony Herbert Blomstedt, conductor Beethoven: Overture, Leonore No. 2 Sessions: Symphony No. 2 Tchaikovsky: Symphony No. 2 (Little Russian)

Upbeat Live free pre-concert discussions 1 hr. before concerts (except Mercedes-Benz Celebrity Series)

For the whole scoop, just call (213) 972-7211.

Seating at the discretion of the Box Office, subject to availability.
Artists, dates, and programs subject to change.

LOS ANGELES PHILHARMONIC

Location

Menlo College

# SPORTS

# Men's Tennis Finds Victory Loma Linda 83, Caltech 57

shots. Overcoming first set jitters,

Wang came back strong in a 3-6,

7-5, 6-1 thriller. In transitionary

varsity, Robert Liu played a tough

match, but ceded in a two-set loss.

the day, entered doubles with con-

Caltech, having already won

by ThunderChris

Welcome back, tennis fans! It's going to be another action packed season of Caltech tennis! Saturday, January 27 marked the opening of the men's season with the crushing of Southern California College (SCC) 7-2 in beautiful Costa Mesa. Let's take a sampling of the awesome pregame discussion.

D.C. - "Hey guys, let's go to the beach!"

Upperclassman - "The beach? We have a tennis match to play!"

"Yeah, but it's such a nice day. I wanna go to the beach! Besides they don't have any tennis courts here."

"What? They don't have any courts here?

"Nope. We're so good we blew their team AND the courts right off the earth!'

"What? No team either?"

"Nope. Hey coach, can we go to the beach?"...

That's right, sports fans. The men's tennis team looked around and couldn't find the opposing team. Until they decided to check out a nearby park.

"Ah ha! There they are. And look! They have nice uniforms."

"Well, you know the nicer the uniforms, the worse they probably

Coach - "Okay, everyone get two of three tennis balls and take them to the courts."

Hemant - "Then what do we do with them?

Okay, so the pregame discussions weren't all that awe- inspiring. But don't worry. Caltech's

Scott Kister

(59-29)Mark Lyttle

(54 - 34)Paul Socolow

(52 - 36)

Scott Kister

Mark Lyttle

Minnesota at

Michigan St.

Michigan St.

Minnesota

Minnesota

Indiana St.

Tulsa

Tulsa

Indiana St. at Detroit at

S Florida

S. Florida

S. Florida

Jacksonville

Loyolla, Ill

Loyolla, Ill

Detroit

tennis team had lots of talent and welcomed SCC back to collegiate tennis after fifteen years of absence with a nice defeat.

In singles, junior Dan Pang started the new year in the Beavers' number one spot and wasted no time trashing his opponent 6-2, 6-3. Pang forced his opponent to throw up weak shots and had no problem cleaning up in each set. Number two Hemant Keny forged off well to build a 6-4 first set lead playing solid tennis, but his opponent reconstructed his game and handed him a loss with third set

Jimmy Ng also played a three set match, and eventually burned his foe in a 6-4, 4-6, 6-3 conflagration. Ng scorched him numerous times with hellish topspin lobs, singeing the SCC player's confidence as well as his ego. Bappa Mukherji, starting for CIT after a year off from team, won his singles match 6-3, 6-4 with a little strategy, cunning, and luckcombined.

In the fifth and sixth singles, Coach Mike Jackson started two freshmen, Greg Wardle and Kevin Wang, each with great potential. Wardle, complimented as being "consistent as a ball-wall," got to every shot in his match, and kept the ball in play, waiting for his opponent to make the unforced errors. The errors did pile up, as Wardle marched on to his first collegiate varsity match 6-3, 6-1. Wang, in his first match, found himself playing a rather large opponent but with rather weak, dinky

George Mason Rutgers

VA-Common Rutgers

VA-Common Rutgers

Georgia Tech Utah

Georgia Tech Hawaii

Georgia Tech Hawaii

North Carolina Utah

N. Carolina at Hawaii at

VA-Common George Wash

Jacksonville at VA-Comm at G. Wash at

	fiden fresh SCC retur	man , cru	Dushi nd	anny ing i	/ C ther ing	hu n u shc	rol nde ots	led er h in a	ove neav 16-3	y S,
•			OMERIA III CINE	enantippenone.	V	V	Ľ	L	K	

Day

Fri.

Date

2-2

Time

11:00 am

Sport

Tennis (M)

	fg	fg	3pfg	ft	rebo	und	s		
	m-at	perc	m-at	m-at	df	of	Α	TO	Pts
Swanson	7 - 8	87.5	0-0	2-6	4	7	0	1	16
Karceski	5 - 7	71.4	3-5	1 - 2	1	0	4	3	14
Oslakovic	4 - 8	50	0-0	0-0	0	1	4	5	8
Ahle	2-6	33.3	2-5	0-0	2	0	3	4	6
Creath	3-6	50	0-0	0-2	4	0	0	2	6
Ralph	2-7	28.6	1-3	0-2	1	1	5	1	5
Kollmorgen	1 - 4	25	0-0	0-0	0	0	1	2	2
Totals	24-46	52.2	6-13	3 - 12	12	9	17	17	57

### EKLY SPORTS RESULTS

CONTRACTOR DE L'ANDRES DE L'AN	ON THE RESIDENCE AND THE PARTY OF THE PARTY	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT		
Day	Date	Sport	Opponent	Results
Thu.	1-25	Swimming (M-W)	Loyola Marymount,	LMU, W 28-134
			Occidental, and	Occidental, M 80-144, W 30-107
			Colorado College	Colorado College, M 39-200, W 28-138
Sat.	1-27	Basketball	LaVerne	50-85
Sat.	1-27	Tennis (M)	Southern Cal College	7-2
Sat.	1-27	Tennis (W)	Christ College	3-5
Sat.	1-27	Swimming (M-W)	Whittier	(M) 146-28, (W) 32-128
Wed.	1-31	Basketball	Loma Linda	57-83

### WEEKLY SPORTS CALENDAR

Opponent

Menlo College

	Sat.	2-3	10:00 am	Fencing	1	USC	& UCSĎ		Calte		
	Sat.	2-3	10:00 am	Tennis (W)		Pome	ona-Pitzer		Pom	ona-Pitzer	
	Sat.	2-3	11:00 am	Swimming (M-	W) 1	Redla	ands		Pom	ona-Pitzer	
	Sat.	2-3	11:00 am	Tennis (M)		Dom	inican College		Dom	iinican College	
	Sat.	2-3	12 noon	Baseball		Pacif	ic Coast Baptist B	lible	Calte	ech	
	Sat.	2-3	12 noon	Basketball (JV)		Redla	ands		Redlands		
	Sat.	2-3	2:00 pm	Basketball (V)		Redla	ands		Redlands		
	Sat.	2-5	1:00 pm	Golf	,	Whit	tier		Occidental		
	Tue.	2-6	3:00 pm	Tennis (M)	:	South	nern California Co	ollege	Caltech		
	Tue.	2-6	7:00 pm	Baseball		La V	erne JV		La Verne		
	Wed.	2-7	3:00 pm	Tennis (W)	İ	La V	erne		Calte	ech	
	Wed.	2-7	6:00 pm	Basketball (JV)		Pomo	ona-Pitzer			ona-Pitzer	
	Wed.	2-7	8:00 pm	Basketball (V)		Pomo	ona-Pitzer			ona-Pitzer	
	Sat.	2-10	11:00 am	Swimming (M-'			Riverside			Riverside	
	Sat.	2-10	12 noon	Baseball (2)		Pac.	Coast Baptist Bib	le College		3.B.C.	
	Sat.	2-10	12 noon	Track			nvitational I		Calte		
	Sat.	2-10	6:00 pm	Basketball (JV)	(	Clare	mont-Mudd		Calte		
	Sat.	2-10	8:00 pm	Basketball (V)	(	Clare	mont-Mudd		Calte	ch	
	S Alabam	na at	American at	Marquette at	S Carolina	at	Wisconsin at	Northwest	n at	Va. Tech at	
NC-Charlotte				Butler	Tulane		Indiana	Ohio State		Louisville	
			Old Dominion	Datici	i utane		mana	Omo State		Louisvine	
	NC-Charl	lotte	Old Dominion	Marquette	S. Carolina		Indiana	Ohio State		Louisville	
				•							
	NC-Charl	C-Charlotte Old Dominion		Marquette	S. Carolina		Indiana Ohio State			Louisville	
		C Cl. 1.									
NC-Charlotte		C-Charlotte American M		Marquette Tulane		Indiana Ohio St		Ohio State		Louisville	
	0.1.1	<b>C</b> : .	D 0	0 1 0 1	C 1:6	. 4	A	Stanford a		Utah St. at	
	Colorado		Fresno St. at	San Jose St. at			Arizona at		ı	UNLV	
Air Force		e	UC-Irvine	CS Fullerton	Oregon St.		Washington St.	Oregon		UNLV	
	Colorado	St	UC-Irvine	CS Fullerton	Oregon St.		Arizona	Stanford		UNLV	
	Colorado		UC-Irvine	San Jose St.	Oregon St.		Arizona	Stanford		UNLV	
	Colorado		Fresno St.	CS Fullerton	Oregon St.		Arizona	Oregon		UNLV	
	Colorado	St.	FIESHO St.	Co Function	Oregon St.		/ 11 12 UHA	0108011		U.121	

### Loyolla, Ill Paul Socolow Indiana St.

Sam Gustom Tailor
3519 E. COLORADO BLVD
PASADENA
(818) 793-2582
Hours: 9:00 a.m. - 7:00 p.m.
TAILORING for
LADIES & GENTLEMEN
ALTERATIONS
RESTYLING
INVISIBLE REWEAVING
Special rates for Caltech/JPL community

WIN A HAWAIIAN VACATION OR BIG SCREEN TV PLUS RAISE UP TO \$1,400 IN JUST 10 DAYS !!!

> Objective: Fundraiser Commitment: Minimal Money: Raise \$1,400 Cost: Zero Investment

Campus organizations, clubs, frats. sororities call OCMC: (800) 932-0528 or (800) 950-8472, ext. 10

# on Green

RESALE CLOTHING

WÓMEN

1136 E. Green St. • Pasadena (818) 796-9924

Mon 10-6 • Tues-Thurs 10-5 • Fri-Sat 10-3

DINE Gamaica Again IN

TAKE 0UT

Authentic Jamaican Food . . . Try It Nuh!

Oxtails & Beans Curry Goat Curry Chicken BBQ Ribs & Chicken

10% Discount with Caltech ID

2057 N. Los Robles Ave. at Woodbury Road in Pasadena (818) 797-3642

Tues.-Thurs. 11-9 Fri.-Sat. 11-10 Closed Sun. 3-8 Mondays

## **CLASSIFIED ADS**

HELP WANTED-

A RESPONSIBLE NON-SMOKER to take care of a 6-month-old child at our home in Pasadena, Mon.-Fri. 7:30 a.m.-5:30 p.m (somewhat flexible). Either live-out or live-in possible. Salary negotiable; references requested. Call (818) 577-1781 evenings 6-8 p.m.

SERVICES -

ELLEN'S SILKSCREENING South Pasadena Custom printed tee's, sweats for clubs fraternities, etc. (818) 441-4415.

NEED MORE MONEY to afford college? Learn how to qualify for more financial aid and scholarships guaranteed! For a free information package, call National Academic Funding Services. (800) 252-7211.

.\$4.00 for first 30 words; RATES. 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

### PARIAN TRAVEL

Caltech Officially Approved

Most professional, courteous, economical and efficient service for your official and personal travel needs. Free service to you.

> Airlines, Cruises, Tours, Hotels, Car Rentals. Individual, Commercial, Groups.

> > (818) 577-8200

468 S. Sierra Madre Boulevard, Pasadena

### LORENZO'S BARBER SHOP

Ask for Your Caltech Student Discount!

Unisex Hairstyling

Regular Cut (men) \$ 900

\$1 off

Regular Cut (women) \$ 900

\$1 off

Style Cut \$1200

\$2 off \$5 off

Permanent Wave \$4000 9 a.m. - 6 p.m., Monday - Saturday

14 N. Mentor Avenue, Pasadena

(818) 795-5443 No Appointment Needed

### THE CALIFORNIA TECH 40-58 SAC Pasadena, California 91125