

# Prohibition Comes to Caltech

During registration, each student will receive a copy of the new drug and alcohol policy. The new policy is prompted by the Drug-Free Schools and Communities Act Amendment of 1989 which requires that, "as a condition of receiving funds or any other form of financial assistance under any Federal program, an institution of higher education must certify that it has adopted and implemented a program to prevent the unlawful possession, use or distribution of illicit drugs or alcohol by students and employees." The school's policy is based on the recommendations of the Drug and Alcohol Policy Advisory Committee (DAPAC) from June.

The following is a reprint of the recommendation:

### Recommendations of the Drug and Alcohol Policy Advisory Committee (DAPAC)

**Philosophy.** Caltech's concern over the illicit use and the abuse of alcohol and drugs results from the serious health hazards caused by substance abuse and from the potential legal penalties for those convicted of unlawful use, possession or distribution of these substances.

Caltech's primary approach in preventing substance abuse is to educate its students regarding its medical and psychological hazards and to increase student sensitivity to the ways in which substance abuse interferes with the rights and privileges of others. The Institute encourages the further growth of a community where substance abuse is not condoned and where those with related problems are provided with assistance.

Caltech has a long-standing tradition of students action responsi-

bly and refraining from actions that are damaging to others or to the Institute. Members of the Caltech community are expected to take responsibility for their own conduct and to comply with state and federal laws as well as with Institute policy and the Honor System.

### General Principles Regarding Drugs and Alcohol at Caltech

-The use, possession, cultivation, manufacture, sale or transfer of illegal drugs is prohibited.

-Members of the Caltech community are expected to act lawfully with respect to the possession and consumption of alcoholic beverages. Consumption of alcohol by individuals under 21 is prohibited.

-Institute funds, except when authorized, may not be used to purchase for events where those under 21 will be present. In certain circumstances, the Director of Residence Life (for events sponsored by or held in undergraduate houses) or the Dean of Students or the Dean of Graduate Studies may grant such permission.

-Events must comply with the guidelines set forth in the Party Policy Document available in the Offices of the Dean of Students, the Director of Residence Life, and the Dean of Graduate Studies.

-Alcohol use may not be the focus of social activities.

-Events where alcohol is consumed are open only to members of the Caltech community and their invited guests.

-No advertising for campus events may contain direct or indirect reference to alcoholic beverages or drugs.

-The operation of Institute equipment or vehicles after consuming alcohol or drugs is prohibited.

### Guidelines for the Consumption of Alcohol by Students

(Definition of "Common Area": Any area outside of an individual's private room or apartment.)

-No shared supply of alcohol available to undergraduate house residents is allowed in a common area. One example of this is stocked beer refrigerators.

-Student gatherings within the private room of a host need not be officially approved or registered. Students are expected to take personal responsibility for obeying the law.

-Any event in a common area where individuals of legal drinking age may consume alcohol is to be registered with the Director of Residence Life or the Dean of Graduate Studies (for graduate student events) at least one week in advance of the activity. Rotation events are covered by this policy.

-Parties in Institute-owned off campus houses where alcohol is served are to be registered with the DRL or the Dean of Graduate Studies if fifteen or more individuals are present. Gatherings smaller than this will be treated as if they are in a private room in a student house.

-No consumption of alcohol or drugs can be required as part of a stack on Ditch Day.

-Drinking contests are not permitted nor may alcohol be given as a prize.

-Consumption of alcohol is not allowed at any Southern California Intercollegiate Athletic Conference (SCIAC) events. Conference rules state that the sponsoring team could forfeit the game if alcohol is discovered among the spectators.

continued on page 5

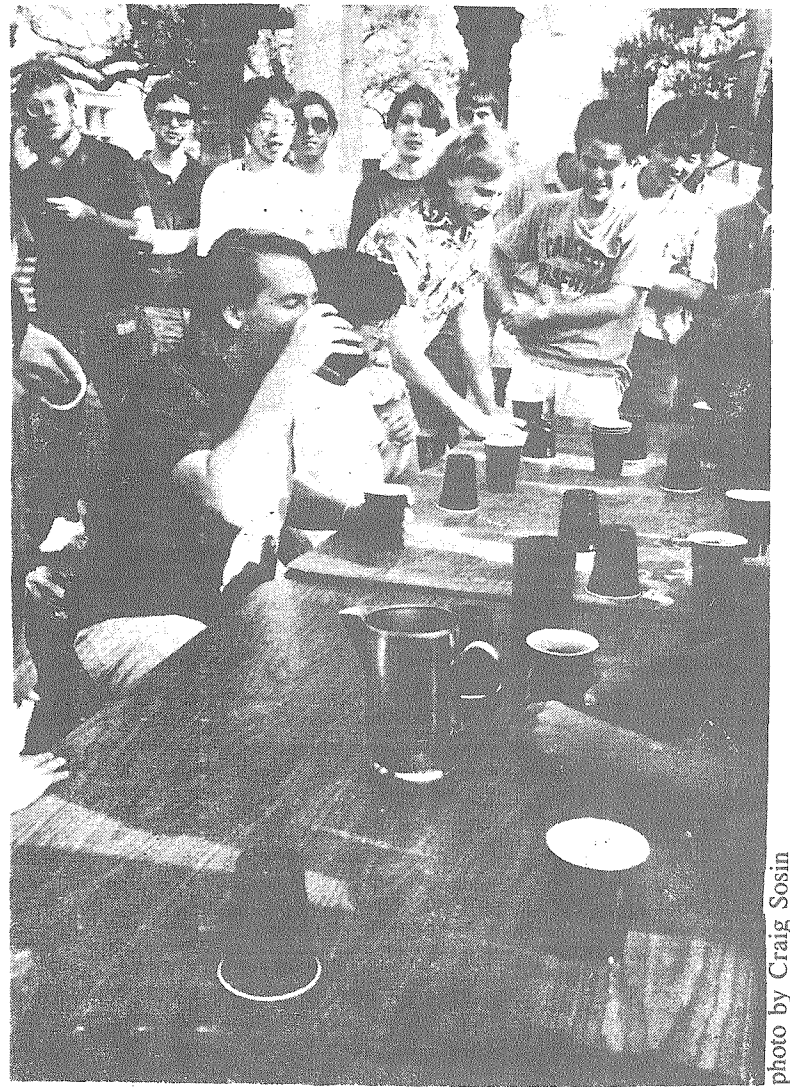


photo by Craig Sosin

With the new DAPAC rules, scenes such as this from the annual crew race will not be seen this year at Caltech.

\*\*\*\*\*  
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 \* one of the editors (Celina M., Dan P., Michelle T., \*  
 \* and Emily W.) Your help will be much appreciated. \*  
 \*\*\*\*\*

# Professors Discount Caltech's 1990 Reaccreditation

By Chris Dunn

Professors have discounted as slipshod and parochial the final report of the Evaluation Team for Caltech's 1990 reaccreditation.

The Western Association of Schools and Colleges (WASC) evaluates its member schools every ten years. The Evaluation Team gave Caltech its mid-term report card this summer.

The team's report has received more severe and concrete criticism than Caltech's 1990 Self-Study received from the report, which belittled the Self-Study as "skimpy."

As "a source of disappointment," the Self-Study, for which Vice Provost David Goodstein was mainly responsible, "did not address the recommendations [of the 1985 Evaluation Team]," according to the report.

"The Self-Study has the appearance of a report pulled together at the last minute in a way which avoided the kind of self critical [sic] examination that the WASC sees as being an important and continuing attribute of any institution of higher education," read the report.

Goodstein's personal interpretation of those remarks is that the team misjudged the urgency for ex-

tensive probing at Caltech, a small, "extremely unbureaucratic" place. Without the layers and layers of bureaucracy characteristic of Pentagonal schools like the University of California, Caltech lacks the surplus labor to spend the thousands of hours of time that WASC expected.

Provost Paul C. Jennings likened Caltech to an orchestra that recruits the most talented musicians in the world and then asks, "OK. Who here can conduct?"

Goodstein called the language of the report "vaporous," an accusation comports with the sentiments of much of the Humanities and Social Sciences faculty.

John Ledyard, from the Social Sciences side of the HSS division, disapproved the ambiguity of the report. He spotted consecutive pages on which the HSS courses were deemed not technical enough and then too technical.

To both he said, "I think that's just dead wrong." Although he admitted that some courses are more technical here than at other schools, he averred that a student could satisfy all HSS requirements in a variety of ways "without seeing a derivative." He also noted that students in their answers on course

surveys evenly divide over the sufficiency of technical content.

Another ambiguity was the report's consistent use of the title "HSS" where Humanities might have been intended. This often smeared the vilification of Humanities instruction across the entire division.

Professor Dan Kevles vociferously defended Humanities and accused the team of paying "no attention to the realities of teaching at Caltech." The report cited an absence of coherence in Humanities. Kevles disagreed with both the need and the feasibility of strict coherence.

Kevles saw "arguments to be made [for and] against too coherent a curriculum." He asked whether subsequent courses should build or reinforce.

At Caltech, humanities consume roughly one tenth, or six courses, of an undergraduate's stint. With the stringent core curriculum imposed in technical fields, scheduling difficulties and a want of flexibility bar long HSS sequences. Under those constraints a six-course block still leaves room for some succession: the division responded to the 1985 report with the two-term Freshman Human-

ities courses.

The report does not recognize the existence of these courses because the team analyzed transcripts only for the freshman year (1986-87) of graduating seniors; the members were aware only of the situation already described by the 1985 report.

One professor said of this retrospection, "This is just carelessness."

The report refers to "insularity from the rest of higher education that, if unchecked, cannot serve Caltech well in the long run." One professor observed that if there is such an insularity, it is one "which I think has served the place pretty well for the last fifty years."

The Evaluation Team was apprised of these and other objections in a written response to the draft report. According to one professor the response was "just ignored," though "maybe not entirely."

"The WASC report, insofar as it relates to humanities, is an unfortunate, disappointing, and in many ways inexplicable document," said Kevles.

Despite the grumbling of the HSS division, Gary Lorden, Vice President of Student Affairs, called the evaluation "basically a positive

thing." Reaccreditation poses no threat to well-established schools like Caltech. Instead, explained Lorden, the process holds up a mirror, giving the school a chance to improve itself.

The 1985 report led to some curricular changes, like the Freshman Humanities sequencing, and it may have stimulated others, like the attempts of the division to nourish writing skills.

According to a recent article in The Chronicle of Higher Education, WASC and the Middle States Association of Colleges and Schools have broadened their evaluations to include recruiting and retention of minority students and professors. Middle States "delayed reaccrediting Bernard M. Baruch College of the City of New York because of concerns about diversity," says the article.

While extolling the process of reaccreditation, Lorden admitted that the Evaluation Team should have stayed longer.

*Editor's note: If you are interested in the evaluation team's report, extra copies are on file in the office of the vice president for student affairs.*

## INSIDE

**Freshman Rotation Listing**  
 pages 2 and 6

**Cross-Country and Soccer Action**  
 page 8

**Jim's Journal**  
 page 2

# Rotation Listing Rotation Listing Rotation Listing

ABBAS, AHMED  
 ABEDIN, MOEEN  
 AINSWORTH, PAUL E.  
 AKBER, SOFIA  
 ALDRIDGE, MICHELIN  
 ALLISTON, ERICA  
 ANDERSON, WILLIAM  
 BAKER, JONATHAN  
 BAKER, MATTHEW  
 BANG, WON  
 BARKER, JEFFREY  
 BARTON, ELIZABETH  
 BARTS, JENNIFER  
 BARWIG, SARAH  
 BASSETT, JOHN  
 BASSETT, TROY  
 BELLUOMINI, WENDY  
 BENGOCHEA, XAVIER  
 BENNETT, BEVAN  
 BERGSET, OLE  
 BOWDEN, NED  
 BOWERS, MARK  
 BRADLEY, WILLIAM  
 BRANDT, DAVID  
 BROOKS, EILEEN  
 BRUNDAGE, MICHAEL  
 BRUNER, KAREN  
 BUSH, GILLIAN  
 CARDOZA, NINA  
 CARLIN, PETER  
 CARON, JAMES  
 CARSTAIRS, SHAUN  
 CHANG, CHINLEY  
 CHAUDHARY, SUNEAL  
 CHENG, MARK  
 CHEN, HONG  
 CHEN, MARCUS  
 CHEN, MARY  
 CHEN, WAYNE  
 CHEUNG, WING SZE  
 CHOI, HENRY  
 CHUAN, CHEK  
 CLEMENS, MICHAEL  
 COUGHLIN, KATHLEEN  
 CRAMER, ERIN  
 CUMMINS, GRAHAM  
 DANG, BANG  
 DELANY, CHAD  
 DENNISTON, JEFFREY

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 -/BL LL/DA RU/PA PA/RI DA/RU RI/LL FL  
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 DICELY, CHRISTOPHER  
 ECKLAND, ELLIS  
 ELLIOTT, BRYCE  
 ELLIS, ROBERT  
 ERIVES, ADALBERTO  
 ESAU, CHRISTINE  
 EUBANKS, BRENT  
 EUSTANCE, NICOLE  
 FINK, THOMAS  
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 FOUGHT, STEVEN  
 FUKUDA, SEIYA  
 GARCIA, JOSE  
 GARRISON, CHRISTIAN  
 GHARIB, MOHAMMAD  
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 GOINS, EDRAV  
 GOLDBERG, DAVID  
 GOPI, RAMESH  
 GRANADOS, DAVID  
 GRANT, STANLEY  
 GREEN, REBECCA  
 GROSJEAN, CHARLES  
 HALLORAN, CHARLES  
 HAMMIG, MARK  
 HANELY, LINDA  
 HARRISON, MICHAEL  
 HASHMI, SHAMEEM  
 HATCH, KIMBERLY  
 HEITZMANN, MAXIMILIAN  
 HIDAJI, HOOTAN  
 HOLBOKE, MONICA  
 HORNSTEIN, JOHANN  
 HOSKINS, MICHAEL  
 HSIEH, WEN  
 HUNNICUTT, HEATH  
 IGNATOWICZ, JOVANNA  
 JAMISON, JULIAN  
 JOHNS, CAROL  
 JOHNSON, MATTHEW  
 JORDAN, MIQUEL  
 KANAMORI, TADASHI  
 KANGAS, MIKKA  
 KAZADI, MBUYI

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continued on page 6

I had a hard time getting up today.

My alarm went off at 7, but I reset it for 7:30.

At 7:30 I reset it for 8, and at 8 I reset it for 8:30.

I thought I'd feel more like getting up each time, but I never did.

Jim's Journal

by Jim

Jim's Journal

by Jim

I live in my own apartment now.

Tony, my old roommate, lives in the same building, just down the hall.

My other old roommate, Steve, came to visit me today.

I said, "what's up?" and he said "The sky."

Jim's Journal

by Jim

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 Volume XCII • Number 1  
 September 28, 1990

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 Emily Wen  
 Lindee Goh

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 Brian Kurkoski

WRITERS  
 Chris Campo  
 Chris Dunn  
 Raif Majeed  
 Atulya Risal

PRODUCTION  
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 40-58 SAC  
 California Institute of Technology  
 Pasadena, California 91125  
 (818) 356-6154

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**Monday, October 1st**  
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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

features

# Underground with Tech's Plumbers

By Raif Majeed

As you read this, thousands of gallons of water are being channeled systematically through the Caltech campus's complex water supply and disposal system. Handling the system, and all the repairs and emergencies that arise therein, is the responsibility of the Caltech Plumbing Shop, located in the Physical Plant complex. Most of us will only see the staff of Plumbing at work if we need an emergency repair. But that's not all they do.

When I called the Plumbing Shop asking to do a profile, everyone I talked to referred me to Mr. Harold "Buzz" Shutt, the senior plumber with over 30 years of experience in the field. With his short blonde hair, ruddy complexion, solid frame and firm handshake, he gives a compelling impression of a man hardened by years of difficult labor. When I caught up with Mr. Shutt, he and his partner, a tall plumber named Bill Gilmore, were conducting an operation on the southeast part of campus.

"This is what we call a tagging operation," said Mr. Gilmore. "There's a valve being replaced on one of the main water lines leading into Caltech. Of course, they'll be shutting off the flow through that valve, meaning a long service interruption affecting the Athenaeum and all the undergraduate houses which could last for several days. But we can minimize the interruption by drawing water from a different line.

"To do that, we'll need to open and close different valves, and we may even have to reverse the flow in certain pipes. So we're putting tags on the valves today so that the people who divert the water flow know which way to turn each valve."

For some jobs, the plumbers may bicycle across campus; on this day, Mr. Shutt and Mr. Gilmore elected to walk. We took the path near Jorgensen, crossed San Pasqual and entered Thomas from the back. Once inside, we descended into the steam tunnels. "You're an undergrad, right? You probably know more about these tunnels

than we do," Mr. Shutt said with a chuckle.

But nothing could be further from the truth. I could barely keep up as they navigated with ease through the maze of tunnels. They seemed to step over and duck under every obstacle without looking. And not only did they know all the tunnels, they knew all the equipment inside the tunnels as well.

Mr. Shutt pointed out the high-lights as we passed by. "This pipe carries water this way, through the valve with the red handle over there. So it comes in from the south, through here, and up into the building. The pipe's going to need replacing real soon. That pipe going across carries the waste out. . . ." We came upon the first target valve. Mr. Gilmore explained, "The water from the alternate supply will have to come in here, from the pipes behind you. So this tag will tell us to open the valve and let the water through."

"We usually have a lot to do," noted Mr. Gilmore, "but it's not very exciting work. We may be called upon to do jobs that aren't really plumbing-related if we have some experience at doing it."

"Basically, we do all the stuff nobody else wants to touch," Mr. Shutt added.

And so it went, tagging valves in Thomas and talking about plumbing at Caltech. We came back to ground level and walked into Firestone, where we re-entered the tunnels.

Mr. Gilmore pointed out an open pipe with a red wheel-handled valve and smiled. "This one has an interesting story behind it. It's an emergency release valve connected to—"

Suddenly, Mr. Shutt walked up to the wheel and began turning it open. But nothing came out. "See? This thing is useless. You can turn it all you want, nothing'll happen. They've got to replace it someday."

Proceeding to the basement of Guggenheim, we came to a large room filled with huge dull green piping. In the center were two gigantic belt drives, connected to fans about five feet wide. "When

this stuff is running, you can't hear anything else. I think I got some of my hearing loss from working down here, but that was back before OSHA."

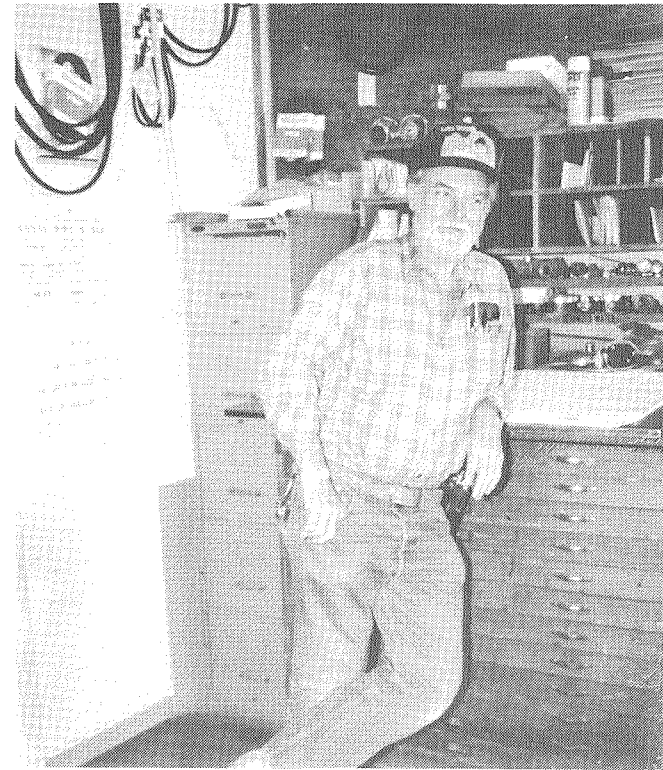
He pointed to a corner. "When my father was here, he did a lot of the welding in this room. I've done some of the welding, too, like here in the corner."

Mr. Gilmore waved his hand at the machinery. "This stuff hasn't been used in a long time. They've taken some of the stuff out and sold it to a company in China. They don't scrap it because it would cost too much to tear it out."

Mr. Shutt added, "Basically, everyone who knows how to use the equipment is retired or no longer alive, so the stuff just sits here and rots."

As they tagged the last valves they discussed their work, and it became clear that their schedules keep them very busy. Even when away from work, they remain on call for emergencies at certain times during the week.

Sid Lucero, another member of the Plumbing Shop, summed it up. "Everyone has a different specialty. I usually work on fume hoods, someone else does welding, and so forth. But when there's an emergency, we all pull together and cooperate. After all, we're all plumbers."



Mr. Harold "Buzz" Shutt, from the Caltech Plumbers.



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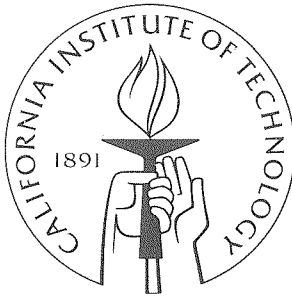
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1. **Wait until your first class meeting before purchasing texts.** This could save you from getting the wrong books and making unnecessary returns. *Know which section or track you are enrolled in; some texts differ depending on class section.*
2. **Please read the following Refund Policy carefully—it may save you money!**  
SALES RECEIPT must accompany all returns. Show the cashier all items being returned to obtain a CLEARANCE SLIP. Do not write your name in a book until you are absolutely certain you will not need to return it. REQUIRED/RECOMMENDED TEXTBOOKS may be returned during the first three weeks of the current term only. GENERAL BOOKS must be returned within two weeks. NO REFUNDS ON PAPERBACKS except for textbooks as above. SUPPLIES may only be EXCHANGED for different color or size.

**USED TEXTBOOKS**

Used textbooks are available for many Caltech courses at the Caltech Bookstore. Look for the "USED" label and save!

# CALTECH BOOKSTORE

*Extended rush hours October 1, 2, and 3*

**8:15 a.m. - 5:30 p.m.**



**\$5,000**  
**COMPUTER SCIENCE**  
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- No financial questions asked
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Join our dynamic group of past and present scholarship winners:

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Applications available:

Call Green Hills (800) 765-GREEN  
Financial Aid Office, 515 S. Wilson  
Dean of Students Office

The Inside World

This Week's **Inside World** was written by:  
**Blacker: Walker Aumann**

**Blacker**

And as the summer draws to a close, a young man's thoughts turn to mush as the impending school year gets closer and closer. Shaking with fear, he searches his mind for any memories of the summer—any little shred of happiness to cling to during the next turbulent year, but he fails miserably to discern any bliss out of the perfectly bland summer that has just passed. Okay, maybe it wasn't that bad, but it certainly doesn't make this easy. But wait, there must be something that happened this summer...

"Jack not name. Jack job."  
Another class earned the right to leave this institution and go off into the world to sink or swim as best they could. Only time will tell what becomes of those we knew and loved, but early reports are returning already. Marty is happily employed as a waste management engineer, and grad school finished with Chris Hurwitz in record time. As time goes by, memories of them begin to fade into the distance while they lose tangibility. Even now you can reach out, and your hand goes right through them.

"Nice day. If it is. Which I doubt."  
It was a wonderful summer for being on the road, unless you're in Marty or Hoyt's cars. It's a sad day (or night, as it were) when the Camero can only do 70 before giving out. Sigh. Meanwhile, Marty's car zoomed right along. Just don't ask it to do mountains. Or deserts. Or to start nicely. Don't even mention concrete barriers.

Auction notice: Studio apartment in scenic Pasadena. Lots of closet space. Loft, desk, drawers, and sofa included. Minimum bid: 500w/channel.  
Remarkably, the courtyard remained relatively peaceful except for a minor skirmish in early August. Surprisingly, there were no casualties even though the sounds of victory could be heard in the Tunnel computer room.

"Elvis is dead. A wet frosh is a happy frosh. Ditch day is tomorrow."  
We are pleased to announce the first annual Rotation Contest. In an attempt to push rotation rules as far as they will go, we will offer our eternal gratitude to the frosh that annoys Rich Benzinger the most during rotation (call him "George" and make fly noises whenever you see him. Offer him grape agar. He loves it!). Keep the brownies coming, Dave, or your name could be here next week.

No, I'm not bitter though I've got every right to be  
I realize that this world is just not meant for me  
When everyone scowls and turns when I come near  
No one every says it, but it seems perfectly clear  
Well that's just fine; it's okay by me  
But there's someone I'd like everyone to meet  
I'd like to introduce you to my close personal friend,  
Mr. Beak

I asked her to the prom  
She said, "no!"  
Well that's alright  
That's okay  
Honey, there's someone I'd like you to meet  
Meet Mr. Beak  
Beak beak beak  
There's a better place for you  
And it's not to far away  
You just have to die first  
And I know who'll send you on your way  
Meet Mr. Beak  
Meet the beak  
Meet the beak

Beak him in the face  
Beak him on the head  
Beak him in the ear  
Beak him in the mouth  
Beak him in the nose  
Beak him in the heart

Just give him the beak  
You went away with him and left me all alone  
Loneliness chills me to the bone  
You know I'd give anything to be with you  
But I can take no more - with you I'm through  
We had so much but now there's someone else to take your place  
And now you two shall meet, right here, face to face  
Meet Mr. Beak  
Your head he will seek  
They follow me to hell and back  
They tell me of the things I lack  
Scorn and ridicule, that's life for me  
But just this once they're gonna see  
That it's alright  
It's peachy with me  
We'll all get together, just have a seat  
Beak beak beak  
Meet Mr. Beak

They left me out of everything, but two can play that game  
I founded a club all on my own, and gave it a bitter name  
It grew and grew like nothing ever before seen  
And all the members had one thing in common - 120/115  
Beak beak beak  
Meet Mr. Beak  
You get the beak  
Beak beak beak

**DAPAC**

from page 1

**Guidelines for Serving Alcohol in Common Areas**

-The sponsoring organization assumes full responsibility for compliance with Caltech guidelines and state laws concerning the use of alcohol and drugs.

-For parties in common areas, two students representing the sponsoring organization must register the event with the Director of Residence Life or the Dean of Graduate Studies, accepting direct responsibility for compliance with Caltech guidelines and the law.

-Designated servers are required at any event where alcohol is served and those under legal drinking age are present. Student servers must be at least 18 years old and juniors. The DRL or the Dean of Graduate Studies (for graduate student events) will decide when the servers must be professional bartenders and when student servers can be used.

-Servers may not consume alcohol until their duties are ended.

-Hosting seminars will be held for undergraduate servers, house and club presidents and social teams. Such individuals must be attend one of these meetings each academic year prior to the first event of each term where alcohol is served.

-A Caltech ID with a gold background is the acceptable means of legal drinking age identification for undergraduates. A graduate student

continued on page 8

**SHOW & TELL.**

That's what we're all about at RSL. Our knowledgeable, non-commissioned sales people will show you the latest in audio/video and tell you everything you need to know to make an informed decision. What's more, if you find a lower locally advertised price on any item we offer, let us know. We'll refund the difference.



OAK & BLACK



**NOW ONLY \$69 EA**  
MFR LIST \$85 EA  
**INFINITY'S COMPACT BOOKSHELF SPEAKER SYSTEM JUST REDUCED**

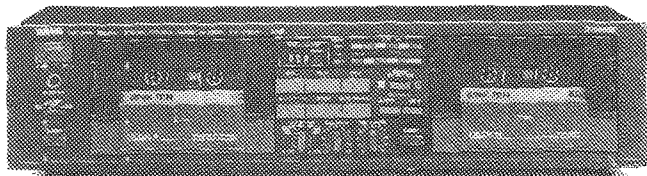
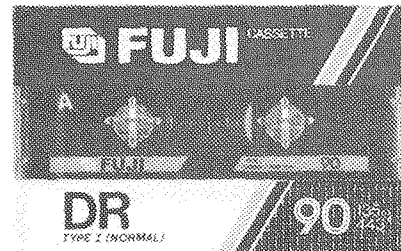
Much of the thinking which went into Infinity's \$50,000 IRS V reference system can also be found in their RS 1001. This compact and efficient 2-way bookshelf system uses a 4.5-inch injection-molded graphite woofer to deliver thunderous bass. 1/2-inch Polyspherite dome tweeter provides clean, transparent highs. Works great with systems ranging from 8 to 50 watts.



**STOCK UP ON FUJI 90-MINUTE CASSETTES NOW & SAVE!**

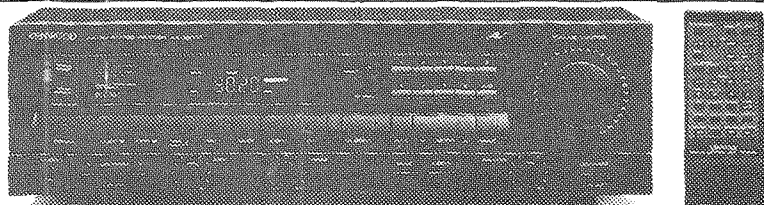
REGULARLY \$4.99 PER 6-PACK

**NOW ON SALE 67¢ EA**  
SOLD ONLY IN 6-PKS  
Get the new school year off on the right foot with this great buy on quality DR 90 TYPE I normal bias audio cassettes from Fuji. While the supply lasts!



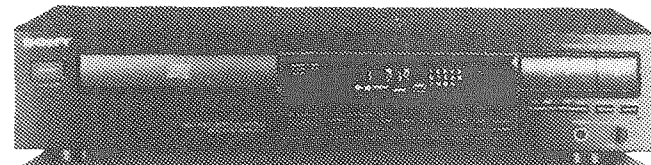
**YAMAHA 42% OFF \$199**  
MFR LIST \$349  
**STUDY THE SAVINGS ON THIS YAMAHA NATURAL SOUND DOUBLE CASSETTE DECK!**

The KX-W202U features proven Yamaha dependability plus continuous playback of 2 cassettes, high speed dubbing, Dolby B&C, automatic tape type selector, MPX filter, music search and remote compatibility.



**KENWOOD NOW ONLY \$229**  
MFR LIST \$299  
**A 60 WATT/CH RECEIVER YOU'LL LEARN TO LOVE!**

The KR-A5020 is a real winner! It features 60 watts/channel, full remote, quartz tuning with 30 presets and preset scan, motorized volume control, two VCR audio inputs, CD direct switching and A/B speaker switching.



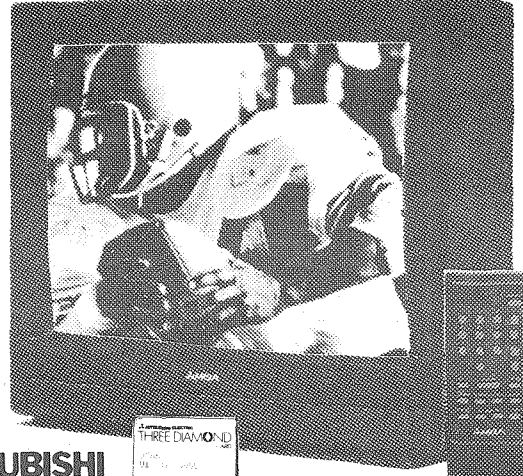
**SONY 32% OFF \$128**  
MFR LIST \$190  
**SUPER VALUE ON 4X OVERSAMPLING CD PLAYER!**

Sony's CDP-291 lets you program as many as 20 different selections in any order you choose. Also includes 4X oversampling, a custom edit function, fader, shuffle play, music search and remote compatibility.

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**SAVE ON THIS 20-INCH STEREO REMOTE TV!**

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**At Last!!!**

The *1990 Guide to TOC/DOC* is hot off the presses.

Avoid the rush and request yours now! Just send this coupon to the library.

<p>Mail to:</p> <p><b>Millikan Library</b></p> <p><b>1-32</b></p>	<p>Yes, send me my <i>free</i> copy of the <i>1990 Guide to TOC/DOC</i> now!</p> <p>Name: _____</p> <p>Address: _____</p>
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Also, stop by to learn more about the Library and the special services we offer.

**Welcome Reception on October 1st from 3:30 - 5:00**

on the South Lawn of the Millikan Library with cookies and refreshments.



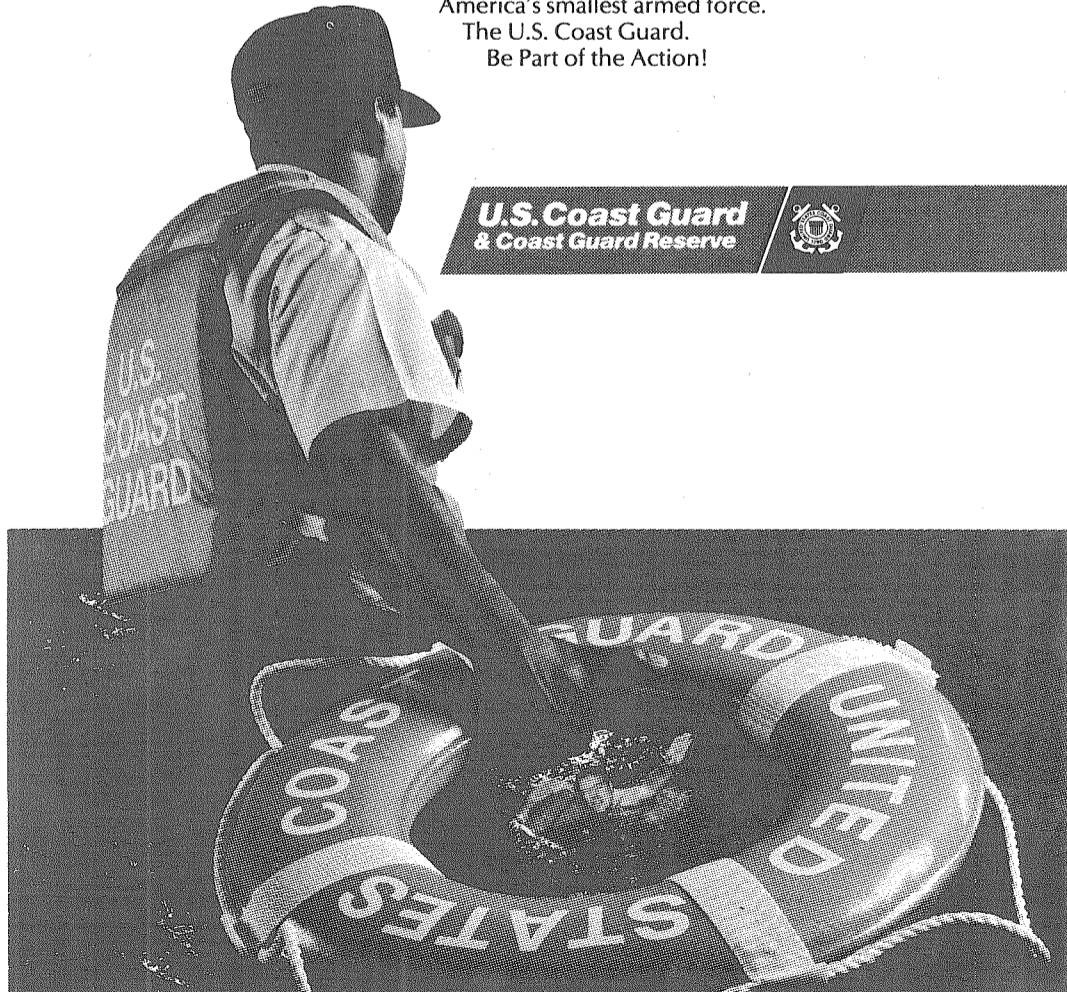
**Briefings for the online systems 5:30 - 7:30 evenings**

October 1st - 25th on weekdays, Monday through Thursday on the second floor of Millikan Library.

# Practice is Over.

Every 90 minutes, the Coast Guard saves a life. An impressive statistic from a small group of people who also stop drug smugglers, protect the environment and more. As a member of the Coast Guard, these opportunities become your opportunities—right away. The day you join, practice is over and you're on!

So if you want action and you're looking for a chance to do something important, take a look at America's smallest armed force. The U.S. Coast Guard. Be Part of the Action!



## Rotation Listing

- |                       |      |       |       |         |       |         |    |
|-----------------------|------|-------|-------|---------|-------|---------|----|
| KAZADI, SANZA         | -/RI | RU/PA | FL/DA | DA/BL   | PA/FL | BL/RU   | LL |
| KETEFIAN, GERARD      | -/FL | LL/DA | RI/PA | PA/BL   | DA/RI | BL/LL   | RU |
| KHALAK, ASIF          | -/RU | BL/DA | FL/RI | RI/PA   | DA/FL | PA/BL   | LL |
| KHAN, ZAFRARIYAB      | -/RI | FL/BL | DA/PA | PA/LL   | BL/DA | LL/FL   | RU |
| KIM, FRANCES          | -/LL | BL/RI | FL/RU | RU/DA   | RI/FL | DA/BL   | PA |
| KIM, SEONG-MIN        | -/DA | FL/BL | LL/RI | RI/PA   | BL/LL | PA/FL   | RU |
| KJERULF, BRIAN        | -/PA | LL/FL | DA/BL | BL/RI   | FL/DA | RI/LL   | RU |
| KRUM, DAVID           | -/PA | BL/DA | RU/FL | FL/RI   | DA/RU | RI/BL   | LL |
| KUBICKY, JOSEPH       | -/BL | PA/FL | RU/LL | LL/RI   | FL/RU | RI/PA   | DA |
| KUHNS, LUCIA          | -/PA | DA/RU | FL/RI | RI/LL   | RU/FL | LL/DA   | BL |
| KURT, TOD             | -/DA | RU/RI | PA/FL | FL/BL   | RI/PA | BL/RU   | LL |
| LANDY, BRIAN          | -/RU | LL/BL | FL/PA | PA/DA   | BL/FL | DA/LL   | RI |
| LANGSTON, JAMES       | -/LL | RI/FL | BL/DA | DA/RU   | FL/BL | RU/RI   | PA |
| LARSH, LANCE          | -/BL | DA/LL | RU/PA | PA/FL   | LL/RU | FL/DA   | RI |
| LAUNEY, CHRISTOPHER   | -/RU | BL/PA | LL/RI | RI/DA   | PA/LL | DA/BL   | FL |
| LAU, WA-TO            | -/RI | FL/LL | BL/DA | DA/RU   | LL/BL | RU/FL   | PA |
| LEE, ALBERT L.        | -/DA | FL/BL | PA/RU | RU/RI   | BL/PA | RI/FL   | LL |
| LEE, ALBERT S.        | -/DA | BL/LL | RU/RI | RI/PA   | LL/RU | PA/BL   | FL |
| LEE, HYONG            | -/DA | PA/RI | FL/LL | LL/BL   | RI/FL | BL/PA   | RU |
| LEE, JASON            | -/BL | LL/FL | RI/DA | DA/PA   | FL/RI | PA/LL   | RU |
| LEE, VANIA            | -/PA | FL/RU | BL/LL | LL/DA   | RU/BL | DA/FL   | RI |
| LIANG, XINLING        | -/LL | RI/DA | BL/RU | RU/PA   | DA/BL | PA/RI   | FL |
| LIMPASUVAN, VARAVUT   | -/RU | DA/RI | LL/BL | BL/FL   | RI/LL | FL/DA   | PA |
| LINES, ANDREW         | -/DA | LL/FL | PA/RI | RI/BL   | FL/PA | BL/LL   | RU |
| LIU, RICHARD          | -/RI | DA/PA | RU/LL | LL/FL   | PA/RU | FL/DA   | BL |
| LOFTSGAARDEN, ERIC    | -/BL | DA/RI | PA/LL | LL/FL   | RI/PA | FL/DA   | RU |
| LONG, FORREST         | -/FL | BL/PA | LL/RU | RU/RI   | PA/LL | RI/BL   | DA |
| LONG, JOSEPH          | -/RU | FL/RI | LL/PA | PA/DA   | RI/LL | DA/FL   | BL |
| LOPEZ, MARC           | -/RU | LL/DA | RI/BL | BL/PA   | DA/RI | PA/LL   | FL |
| LO, YI-WEN            | -/RI | LL/FL | RU/PA | PA/DA   | FL/RU | DA/LL   | BL |
| MACHACEK, CYNTHIA     | -/RI | FL/PA | BL/RU | RU/DA   | PA/BL | DA/FL   | LL |
| MAHADEVAN, ROHAN      | -/BL | FL/LL | RI/PA | PA/DA   | LL/RI | DA/FL   | RU |
| MALEK, MARC           | -/PA | LL/FL | BL/RI | RI/RU   | FL/BL | RU/LL   | DA |
| MALIN, SACHA          | -/RU | BL/PA | RI/LL | LL/FL   | PA/RI | FL/BL   | DA |
| MARGOLIT, NEAR        | -/BL | PA/RU | FL/DA | DA/LL   | RU/FL | LL/PA   | RI |
| MARTIN, SARAH         | -/LL | RU/BL | PA/DA | DA/RI   | BL/PA | RI/RU   | FL |
| MAST, STEPHEN         | -/RI | FL/BL | RU/LL | LL/DA   | BL/RU | DA/FL   | PA |
| MATZNER, AARON        | -/DA | RI/RU | LL/FL | FL/PA   | RU/LL | PA/RI   | BL |
| McADAMS, KRISTIN      | -/FL | DA/RU | RI/BL | BL/LL   | RU/RI | LL/DA   | PA |
| McALLISTER, BRIAN     | -/DA | RI/LL | FL/BL | BL/RU   | LL/FL | RU/RI   | PA |
| McDOWELL, CHANDLER    | -/BL | DA/PA | RI/FL | FL/RU   | PA/RI | RU/DALL |    |
| MEYER, ERIKA          | -/RU | BL/DA | PA/FL | FL/LL   | DA/PA | LL/BL   | RI |
| MILLER, JENNIFER      | -/LL | FL/RI | BL/DA | DA/PA   | RI/BL | PA/FL   | RU |
| MINEIRO, PAUL         | -/BL | RU/FL | DA/LL | LL/PA   | FL/DA | PA/RU   | RI |
| MIYAKE, KAY           | -/PA | DA/RU | RI/LL | LL/BL   | RU/RI | BL/DA   | FL |
| MIYAKE, TERU          | -/RI | PA/BL | DA/LL | LL/RU   | BL/DA | RU/PA   | FL |
| MOESKER, LISA         | -/RU | FL/LL | BL/RI | RI/PA   | LL/BL | PA/FL   | DA |
| MOORE, ROGER          | -/LL | DA/RI | BL/PA | PA/RU   | RI/BL | RU/DA   | FL |
| MOORE, WILLIAM        | -/DA | FL/BL | RU/PA | PA/LL   | BL/RU | LL/FL   | RI |
| MORARU, DAN           | -/DA | PA/RU | BL/FL | FL/RI   | RU/BL | RI/PA   | LL |
| MULLENDORE, GRETCHEN  | -/RI | FL/PA | LL/DA | DA/RU   | PA/LL | RU/FL   | BL |
| MULQUEEN, MICHAEL     | -/DA | PA/RI | BL/RU | RU/LL   | RI/BL | LL/PA   | FL |
| MUNOZ, ROBERT         | -/DA | LL/FL | RU/BL | BL/PA   | FL/RU | PA/LL   | RI |
| MURDOCH, JAMES        | -/DA | RU/RI | FL/PA | PA/LL   | RI/FL | LL/RU   | BL |
| NAONE, RYAN           | -/LL | FL/BL | RI/RU | RU/PA   | BL/RI | PA/FL   | DA |
| NEADERHOUSER, JOHANNA | -/DA | LL/BL | RI/FL | FL/RU   | BL/RI | RU/LL   | PA |
| NEWELL, STEPHEN       | -/PA | DA/RI | RU/BL | BL/LL   | RI/RU | LL/DA   | FL |
| NG, CHIN-CHIN         | -/RU | RI/DA | LL/PA | PA/BL   | DA/LL | BL/RI   | FL |
| NG, HIOK              | -/BL | FL/RI | DA/PA | PA/RU   | RI/DA | RU/FL   | LL |
| NGUYEN, NHAT          | -/LL | RU/DA | BL/FL | FL/RI   | DA/BL | RI/RU   | PA |
| NICHOLS, DAVID        | -/RU | RI/FL | LL/BL | BL/PA   | FL/LL | PA/RI   | DA |
| NORTH, DONALD         | -/DA | PA/LL | BL/RI | RI/FL   | LL/BL | FL/PA   | RU |
| OLSEN, GARY           | -/FL | RU/PA | BL/DA | DA/LL   | PA/BL | LL/RU   | RI |
| PACHTER, LIOR         | -/FL | DA/BL | RU/PA | PA/RI   | BL/RU | RI/DA   | LL |
| PAIK, OON-GIL         | -/BL | RU/LL | DA/RI | RI/FL   | LL/DA | FL/RU   | PA |
| PAK, SHAN-NG          | -/RU | DA/RI | FL/PA | PA/BL   | RI/FL | BL/DA   | LL |
| PARKS, JOHN           | -/LL | BL/DA | PA/RI | RI/RU   | DA/PA | RU/BL   | FL |
| PASQUINE, JEFFREY     | -/RI | PA/FL | LL/BL | BL/DA   | FL/LL | DA/PA   | RU |
| PATTON, JAMES         | -/LL | RI/PA | DA/FL | FL/RU   | PA/DA | RU/RI   | BL |
| PEJIC, MICHAEL        | -/RI | BL/DA | LL/FL | FL/PA   | DA/LL | PA/BL   | RU |
| PEREZ, SANDEE         | -/PA | BL/FL | LL/RU | RU/DA   | FL/LL | DA/BL   | RI |
| PERLMAN, DAVID        | -/RI | BL/FL | PA/LL | LL/RU   | FL/PA | RU/BL   | DA |
| PETTY, AARON          | -/LL | FL/DA | RI/PA | PA/RU   | DA/RI | RU/FL   | BL |
| PINE, ARI             | -/RU | PA/FL | LL/DA | DA/BL   | FL/LL | BL/PA   | RI |
| PIPPENGER, PHILLIP    | -/RU | BL/RI | DA/LL | LL/PA   | RI/DA | PA/BL   | FL |
| PITERA, JED           | -/FL | RI/BL | LL/PA | PA/DA   | BL/LL | DA/RI   | RU |
| RADFORD, JIM          | -/FL | LL/PA | RU/DA | DA/RI   | PA/RU | RI/LL   | BL |
| RAMIREZ, ANTONIO      | -/RI | FL/DA | LL/PA | PA/BL   | DA/LL | BL/FL   | RU |
| RANGEL, ANTONIO       | -/LL | RI/DA | FL/BL | BL/PA   | DA/FL | PA/RI   | RU |
| REMPEL, ARON          | -/RI | PA/BL | FL/RU | RU/LL   | BL/FL | LL/PA   | DA |
| RHEE, STEPHEN         | -/BL | RI/RU | DA/FL | FL/LL   | RU/DA | LL/RI   | PA |
| ROPE, TODD            | -/BL | LL/RU | FL/RI | RI/DA   | RU/FL | DA/LL   | PA |
| ROTHEMUND, PAUL       | -/LL | FL/PA | RI/BL | BL/DA   | PA/RI | DA/FL   | RU |
| ROTHENBERG, INGRID    | -/LL | FL/PA | RU/DA | DA/BL   | PA/RU | BL/FL   | RI |
| ROWLAND, DOUGLAS      | -/PA | LL/RU | BL/DA | DA/RI   | RU/BL | RI/LL   | FL |
| RUDISILL, DANIEL      | -/RU | RI/BL | DA/FL | FL/PA   | BL/DA | PA/RI   | LL |
| SACKETT, KATHRYN      | -/RU | FL/LL | PA/DA | DA/RI   | LL/PA | RI/FL   | BL |
| SADEGHI, BENHAM       | -/LL | RU/FL | RI/BL | BL/DA   | FL/RI | DA/RU   | PA |
| SANDBERG, STEVEN      | -/DA | RI/BL | LL/RU | RU/FL   | BL/LL | FL/RI   | PA |
| SCHAAF, JAMES         | -/LL | RI/PA | FL/DA | DA/BL   | PA/FL | BL/RI   | RU |
| SCHAUFER, LAWRENCE    | -/LL | RI/PA | BL/FL | FL/DA   | PA/BL | DA/RI   | RU |
| SCHNEIDER, KEITH      | -/PA | RI/BL | RU/DA | DA/FL   | BL/RU | FL/RI   | LL |
| SHAO, ESTHER          | -/FL | DA/BL | RI/LL | LL/PA   | BL/RI | PA/DA   | RU |
| SHERMAN, JAMES        | -/RU | BL/FL | RI/DA | DA/LL   | FL/RI | LL/BL   | PA |
| SHIH, KAREN           | -/BL | RU/RI | LL/FL | FL/DA   | RI/LL | DA/RU   | PA |
| SILVA, MONICA         | -/BL | RU/PA | RI/LL | LL/DA   | PA/RI | DA/RU   | FL |
| SIU, SHIYIN           | -/PA | BL/DA | RI/LL | LL/FL   | DA/RI | FL/BL   | RU |
| SMITH, STEVEN         | -/RU | RI/DA | FL/BL | BL/LL   | DA/FL | LL/RI   | PA |
| SPRINGER, LINDA       | -/PA | RI/RU | FL/BL | BL/DA   | RU/FL | DA/RI   | LL |
| STADLER, LAURENT      | -/RI | RU/FL | BL/LL | LL/DA   | FL/BL | DA/RU   | PA |
| STAPLETON, JUSTIN     | -/DA | RI/FL | RU/BL | BL/LL   | FL/RU | LL/RI   | PA |
| STEPHENS, KURT        | -/RI | BL/FL | RU/DA | DA/PA   | FL/RU | PA/BL   | LL |
| STOWELL, RONALD       | -/LL | DA/RU | FL/BL | BL/PA   | RU/FL | PA/DA   | RI |
| SU, MICHAEL           | -/PA | DA/FL | RU/RI | RI/BL   | FL/RU | BL/DA   | LL |
| SURKA, DEREK          | -/RI | RU/DA | PA/LL | LL/BL   | DA/BL | BL/RU   | FL |
| TAI, SHIO-HSIA        | -/PA | RI/LL | FL/RU | RU/BL   | LL/FL | BL/RI   | DA |
| TAM, TING KIN         | -/RU | DA/BL | RI/PA | PA/LL   | BL/RI | LL/DA   | FL |
| THOMAS, MICHAEL       | -/RI | LL/RU | PA/BL | BL/FL   | RU/PA | FL/LL   | DA |
| THOMPSON, MICHAEL     | -/FL | LL/RI | BL/RU | RU/DARI | BL    | DA/LL   | PA |
| TONGCO, EMERSON       | -/RI | PA/DA | FL/BL | BL/RU   | DA/FL | RU/PA   | LL |
| TRITTSCHUH, JENNIFER  | -/RI | RU/FL | LL/DA | DA/BL   | FL/LL | BL/RU   | PA |
| TROTTER, BRIAN        | -/RI | BL/RU | PA/FL | FL/DA   | RU/PA | DA/BL   | LL |
| TUROCY, THEODORE      | -/RI | RU/BL | DA/FL | FL/LL   | BL/DA | LL/RU   | PA |
| UGLESICH, ROBERT      | -/LL | BL/RU | RI/PA | PA/DA   | RU/RI | DA/BL   | FL |
| VASANAWALA, SHREYAS   | -/FL | RI/PA | RU/LL | LL/BL   | PA/RU | BL/RI   | DA |
| WACHHOLZ, TIMOTHY     | -/PA | LL/BL | RI/RU | RU/DA   | BL/RI | DA/LL   | FL |
| WALKER, JOSHUA        | -/PA | RU/DA | FL/BL | BL/LL   | DA/FL | LL/RU   | RI |
| WALLACH, NATHAN       | -/PA | BL/RU | FL/LL | LL/RI   | RU/FL | RI/BL   | DA |
| WALTON, DAVID         | -/DA | FL/PA | RI/RU | RU/LL   | PA/RI | LL/FL   | BL |
| WARD, CHRISTOPHER     | -/BL | RU/LL | PA/FL | FL/RI   | LL/PA | RI/RU   | DA |
| WARNEKE, BRETT        | -/PA | RU/BL | LL/DA | DA/FL   | BL/LL | FL/RU   | RI |
| WEBB, SAMUEL          | -/FL | BL/LL | RU/RI | RI/DA   | LL/RU | DA/BL   | PA |
| WEI, JENNIFER         | -/RI | LL/DA | PA/FL | FL/RU   | DA/PA | RU/LL   | BL |
| WEMHOFF, ERIC         | -/RI | BL/RU | DA/LL | LL/FL   | RU/DA | FL/BL   | PA |
| WILENSKY, STEVEN      | -/BL | LL/DA | FL/RI | RI/PA   | DA/FL | PA/LL   | RU |
| WONG, MICHAEL         | -/PA | FL/RU | LL/RI | RI/BL   | RU/LL | BL/FL   | DA |
| WUNDERLICH, ERICA     | -/FL | LL/DA | BL/RU | RU/PA   | DA/BL | PA/LL   | RI |
| YAMAGATA, DENISE      | -/DA | FL/LL | RI/BL | BL/PA   | LL/RI | PA/FL   | RU |
| YEZRIELEV, BERTA      | -/LL | RI/RU | PA/FL | FL/BL   | RU/PA | BL/RI   | DA |
| YODER, SARAH          | -/BL | RI/PA | LL/DA | DA/RU   | PA/LL | RU/RI   | FL |
| YONGSUNTHON, RUCHIREJ | -/PA | BL/RI | LL/DA | DA/FL   | RI/LL | FL/BL   | RU |
| ZEN, WILLIAM          | -/BL | LL/RU | DA/PA | PA/FL   | RU/DA | FL/LL   | RI |
| ZEWAIL, MAHA          | -/PA | BL/RU | DA/RI | RI/FL   | RU/DA | FL/BL   | LL |
| ZEYLIGER, ALEXANDER   | -/LL | BL/FL | DA/RU | RU/RI   | FL/DA | RI/BL   | PA |
| ZUG, ANDREW           | -/BL | FL/DA | RI/LL | LL/PA   | DA/RI | PA/FL   | RU |

# what goes on

# scholarships

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 commercial events unrelated to Caltech will not be published.

## History & Philosophy Courses

Students have two great once-in-a-lifetime learning opportunities in history and philosophy this fall.

In the field of philosophy of science, Professor Barbara Horan is offering PI 102, Scientific Explanation and Prediction, Tuesday at 1, Thursday 1-3.

Professor Mark Kisshlansky, a leading scholar of Stuart/Tudor history and professor of history at the University of Chicago, is teaching H 161, English Political Thought: 1603-1689, Wednesday 1-4. Check them out on registration day!

## Off-Campus Folkdancing

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

## Symphony Auditions

Auditions for the Caltech-Occidental Symphony Orchestra will be held on Sunday, September 30 from 7:30 to 10 pm in Rm. 1 of the Student Activities Center. Sign up on the Bulletin Board in the SAC or call Allen Gross (conductor) at (818) 796-8966 or (213) 259-2574, or Tracy Fu (manager) at 449-3418.

This year's repertoire includes Beethoven's Seventh Symphony, Strauss' Death & Transfiguration, Saint Saens' "Organ" Symphony, Britten's Cantata Academica (with the Caltech Men's and Women's Glee Clubs), and more. The first rehearsal is Monday, October 1.

## Student Health Insurance

All registered graduate and undergraduate Caltech students are automatically enrolled in the Mutual of Omaha medical health insurance plan. After a \$100 deductible—the first \$100 in medical expenses each academic year, the plan will pay 80% of the first \$6,250 of covered expenses, and 100% of the balance of covered expenses up to the maximum benefit of \$100,000 for each accident and each sickness.

In mid-October, Caltech students will receive by mail—a card and sticker with the new master policy number for 1990-91 academic year, and a brochure, explaining the insurance coverage. If you wish to obtain these materials sooner, please contact the Student Health Center.

Students may *elect* at time of their initial 1990-91 registration at the institute, to enroll their spouse and/or dependents without showing evidence of insurability. Contact the benefits office, x6443, for information regarding the cost of these premiums.

## Come Play Music

Musicians who play woodwind, brass, percussion, string or keyboard instruments are welcome to join Caltech's Wind Ensemble, Jazz Bands and Chamber Music Ensembles. Auditions will be held on Sunday, Sept. 30 from 1-4 p.m. and Monday, October 1 from 3-6 p.m. and 8-10 p.m. in room 12 of the Student Activities Center.

A wide variety of exciting events are planned for the ensembles this year, and an effort is made to accommodate all interested musicians. For more information call Bill or Delores Bing at (213)684-8964 or just stop by on Sunday or Monday.

## Folk Dancing On Campus

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

## Ride Board

Need a ride home after exams? Want to go to San Francisco for the weekend? Feel bad about driving alone? Want to save gas and help others as well? Now you can, with Caltech's new ride board, set up by the Caltech Environmental Task Force and the Caltech Y. Come by the Board, just outside the Y Office on the second floor of Winnett, and use the provided cards to offer a ride or look for a ride. Save money, hassle, time and gas! Reduce smog—use the ride board!

## Attention All Seniors!

On-Campus Recruiting for seniors and master's students begins on October 29. With all the commotion involved in getting moved in, a lot of you might not have your on-campus recruiting information mailed to the right place. If you don't receive your package, stop by the Career Development Center and we'll give you one. Each year, between 150-200 companies come on campus to interview graduating students. If you want to be involved, be on the lookout for our information!

## Attention Again!!!

The Career Development Center has lots of information on applying to graduate schools. We have applications to take the GREs (the deadline to register for the December test date is October 29), NSF Graduate Fellowship and Minority Graduate Fellowship Applications (Deadline: November 9), and various other fellowship information. We can keep your letters of recommendation on file for you, and even help you with your statement of purpose. For more information, stop by the Career Development Center.

The Career Development Center is located downstairs in Parsons-Gates, Rm. 08. Our office hours are 8-12 and 1-5. Or give us a call at x6361.

## 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.

## Online Schedule of Classes

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

## H&SS Course Schedules

To assist students in planning their 1990-91 course schedules, lists of humanities and social science courses to be offered fall, winter, and spring terms are available in 228 Baxter.

## The Putnams Are Coming!!!

The 51st Annual William Lowell Putnam Mathematical Competition will be held this year on Saturday, December 1. Please sign up quickly, in Sloan, if you wish to take it. As usual, we hope many participants will enjoy a day of math problems and donuts.

## Guitar Classes

Guitar classes for fall quarter will meet on Tuesdays starting Oct. 2 in Rm. 1 of the Student Activities Center, as follows:

Beginning guitar	4:30-5:30 pm
Intermediate guitar	3:30-4:30 pm
Advanced guitar	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.

## Green Hills Scholarship

The Green Hills Software Corporation has announced the availability of \$5,000 Computer Science scholarships. These renewable scholarships are to be awarded to juniors and seniors with an interest or experience in computer science. The Green Hills scholarship is based solely on academic performance with no regard to financial need. The deadline for submitting the Green Hills Scholarship application has been extended to November 1, 1990. Applications are available at the Financial Aid Office, 515 S. Wilson, and the Dean's Office, 102-31.

## Watson Fellowships

The Watson Foundation provides post-graduation fellowships of \$13,000 (\$18,000 for married students) for a year of independent study and travel. Fellowships are not intended to support formal studies at a foreign university. They encourage, instead, an informal break in the normal sequence of undergraduate/postgraduate education. Caltech seniors are usually chosen for this award. In fact, a 1990 graduate, Jennifer Low, is a Watson Fellow this year.

One to three page project proposal drafts are due in the Deans' Office on Friday, October 12, 1990. Keep in mind that successful proposals generally have a single topic of study or investigation that reflects a student's long-standing interest in that area. Also, the foundation will be making a concerted effort this fall to increase the quantity and quality of projects having a business focus. Seniors should stop by the Deans' Office if they have any questions about this program.

## Lit/Psy 150a Offered Fall Term

Professor Louis Breger's Lit/Psy 150a will be offered fall term, Tuesdays 9:00-12 noon. It wasn't on the prereg list, so be sure to catch it on Registration Day, October 1.

## Scholarship Listings

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

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

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

**The Northrop Corporation** is offering scholarships at Caltech for the 1990-91 academic year. The scholarship is open to juniors in Electrical Engineering with at least a 3.3 GPA and a career interest in the defense aerospace/electronics industry. The applicant must be a U.S. citizen, a resident in geographic proximity to a Northrop facility and must not be a concurrent recipient of another company's scholarship. Applications are available in the Financial Aid Office at 515 S. Wilson. The deadline is 5:00 pm on Friday, November 1.

## 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.

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sports

# CC Beaten by Poets

by Chris Campo

"Maybe I should go and get a blood test." Senior cross-country runner Mark Lyttle pondered his performance in the first meet of the season—a hilly four miler known as the Whittier Invitational at Ralph B. Clark Regional Park. Just as the park is a natural burial ground for fossils of dead prehistoric animals, so also it was a burial ground for the hapless Caltech team.

With only five runners having returned to school for the September 15th meet, the Beavers were undermanned and outgunned. "We got our butts kicked," said senior runner John Pham. Tech's men finished 11th in a field of 16 teams.

The men have had Whittier as an archrival for the past two years, and have succeeded in beating them soundly in the past. At the Whittier Invitational, however, Tech managed to come up with 286 points to Whittier's superior 128.

**"I think that was the worst race of my Caltech running career"**  
—Mark Lyttle

Unfortunately, lower scores are better in the sport of cross country.

The one bright aspect of the meet for Tech was the impressive performance of returning junior runner, Dan "Terminator" Flees. Flees was 24th in a field of 110, finishing ahead of every Whittier runner but one in a time of 22:47. The rest of the Beaver pack lagged a ways behind the Terminator, with the Beaver tail being Mark "Blood Test" Lyttle in 27:33. "I think that was the worst race of my Caltech running career," commented the usually upbeat Lyttle.

The following Saturday the Beavers were back to take another crack at Whittier - this time on their home course at the Lower Arroyo in Pasadena. This time the men had some more ammo, stoked with the arrival of transfer student Aaron Matzner from Whitman College.

The Beavers improved somewhat in relation to Whittier's run-

ning Poets (CIT 36, Whittier 23), but the meet was still a victory for Whittier. Both the Poets and the Beavers had to concede victory to the strong Claremont-Mudd Stags (CMS 21, CIT 38; CMS 23, WHIT 32). All three teams beat up on LaVerne College, whose runners forfeited the meet because of an incomplete team.

Stellar performances came from runners "Terminator" Flees and new kid on the block, Aaron Matzner. In his season debut, Matzner ran a blazing 28:28 over the twisty-turny, notoriously slow 5.2 mile Lower Arroyo course. Matzner's time was good for second place to sensational Claremont runner, Brian Barnes, and was a new Caltech school record. (The previous record of 28:46 was set in 1987 by John Gehring.)

"The course is a pretty slow one and I'm out of shape," commented Matzner. When Matzner is in shape he'll be gunning for the overall course record of 27:08, set by Emmet Hogan of Occidental College in 1988. The Terminator, Dan Flees, obtained a personal record, finishing in 7th place with a time of 29:34.

The rest of Tech's men were unable to put a dent in Whittier's armor. Mark Lyttle, finishing 23rd in a respectable 33:10, said, "At least now I know I don't need a blood test." Senior Scott Kister, usually a top performer and critical member of Tech's squad, had an extremely bad day. Perhaps it's Scott's turn to go in for the blood test. "I don't know what went wrong," said the puzzled cross country captain of his 21st place performance. One thing is certain: Kister will be out for blood and some serious payback two weeks from now at the Caltech Invitational.

The Caltech women fared about as well as the men, finishing behind Claremont-Mudd-Scripps (CIT 50, CMS 15) and Whittier (CIT 50, WHIT 15), beating La Verne because of that team's forfeit (incomplete team). Amy Hansen was the star performer for Tech, finishing in 17th place with a time of 24:22 on the 3.2 mile course.

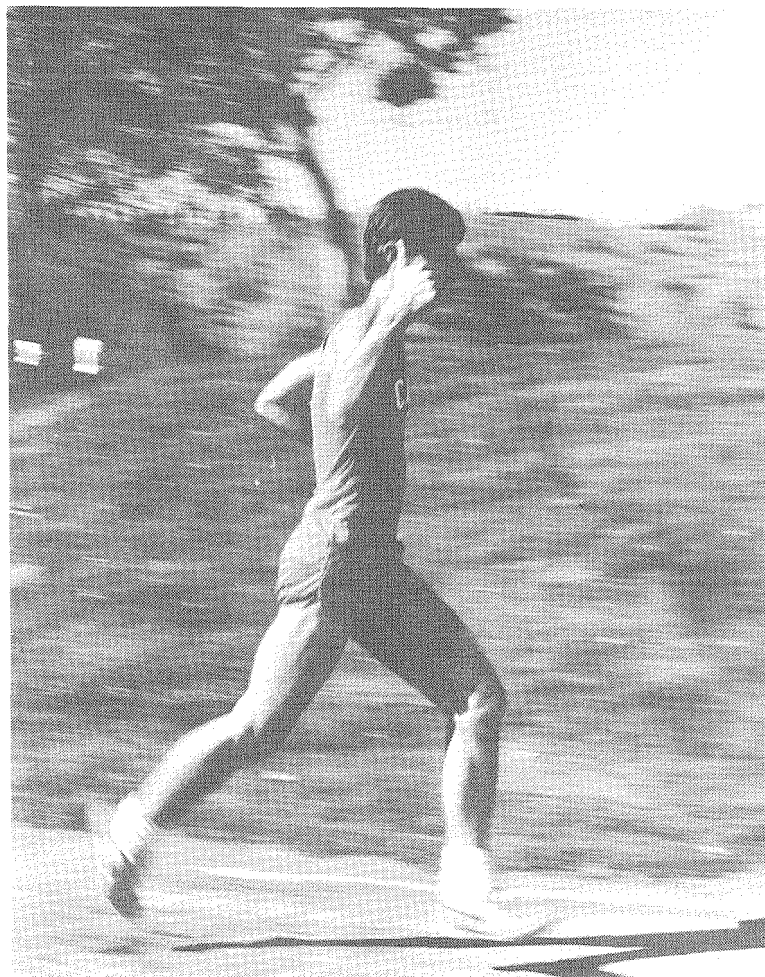


photo by Dave Kim

Junior Dan Flees likes the results of his first two cross-country races for Tech.

# Soccer Scores a Goal

By Atulya Risal

Although the September 22nd game against the alumni pointed out some of the weakness of the Caltech soccer team, one has to concede that this year's team has the potential to be one of the best teams ever fielded by Caltech.

The alumni game was played intensely by both sides. Since not all of the alumni came to the game, some of the undergraduates had to pretend that they were alumni (wishful thinking) but that did not stop it from being an all out soccer game. The first half was a real tug-of-war for the ball but James Ibbetson ('90) managed to take the ball on a fast break and put it in the net after it bounced off goalie Matt Baker who had made an excellent attempt to save the first shot. The Caltech team struggled hard to tie the score but they had to wait till the second half to get any result.

The second half was dominated by the undergraduates with occasional break aways by the alumni which were skillfully handled by sweeper Richard Baltzersen (Tigger) and fullbacks Francisco Herrera (Paco), Jim Werner. The ball was played mostly in the alumni half but the shot-to-goal ratio for the undergraduates was pretty dismal. Towards the middle of the second half Atulya Risal with an assist from Rohan Mahadevan tied the score at 1-1. Although the domination continued, the inexperience of the relatively young undergraduate team became obvious as the ball could not find the net despite the spectacular shots on goal taken by Greg Dudey, Jose Garcia and Todd McLaughlin. With the score tied at 1-1 both teams tried to get ahead but unfortunately (or fortunately for some of the tired players) the game ended with the score board reading 1-1.

The team captain Jim Werner agreed that the performance by the team was a bit disappointing but also added that the contingent of mostly sophomores and freshman has the potential to carry the team record past .500 for the season.

If the alumni game is any indication, Caltech soccer team has a lot of work to do before they can become a respectable conference team. However, with the starting lineup of 7 returning players and a talented batch of frosh, the expectation of .500+ record seems to be within reach if every player puts in his share of the effort.

Caltech soccer, got a goal!

## DAPAC from page 5

or guest may use a driver's license or another picture ID with birth date when the hose accepts responsibility for the guest.

-Only those of legal drinking age may be served. It is a violation of this policy for those served to pass alcohol to anyone under 21.

-Anyone who is intoxicated, regardless of age, may not be served.

-No direct or indirect sale of alcohol is permitted without a liquor license.

-Alcoholic and non alcoholic beverages must be free and provided in quantities determined by the proportion of guests above and below legal drinking age. Non alcoholic beverages must be appealing, e.g. name brand soda, sparkling cider, Calistoga Water, etc.

-Alcohol may not be served when the supply of non alcoholic beverages is depleted.

-Food must be available and attractively displayed throughout the duration of the event.

-Campus security must be present at any registered event where alcohol is served unless an exception is made by the DRL or the Dean of Students or the Dean of Graduate Studies.

### Sanctions

Caltech will impose sanctions on individuals and organizations who violate this policy. These sanctions will be consistently enforced and penalties will depend on the severity of the offense. Penalties can include expulsion from the Institute and referral for prosecution for violations of the law. A student who is found to be selling illegal drugs probably will be suspended or expelled from the Institute, even for a first offense.

Sanctions for less severe offenses may include the following: verbal and written warnings, community service, the completion of an appropriate rehabilitation program, social probation for an individual, persona non grata status, and suspension for the repeat offender. Social restrictions will be applied to houses whose occupants flagrantly or frequently violate policy. An event may be closed immediately or other intervention may be taken to correct the violation. Disciplinary action may be invoked entirely apart from any civil or criminal penalties that the student might incur.

## WEEKLY SPORTS RESULTS

Day	Date	Sport	Opponent	Results
Sat.	9-15	Cross-Country (M)	Whittier Invitational	Caltech eleventh out of sixteen
Sat.	9-22	Cross-Country	Claremont, Whittier, LaVerne	Men vs. CMS 38-21, LaVerne 15-50, Whit. 36-23 Women vs. CMS 15-50, LaVerne 15-50, Whit. 50-15 10-4 (Caltech's first win since 1988)
Tue.	9-25	Water Polo	Chaffey College	

## WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Sat.	9-29	9:00 am	Cross Country	Caltech Invitational	Lower Arroyo Park
Sat.	9-29	10:00 am	Soccer	Whittier	Whittier
Sat.	9-29	1:30 pm	Football	Valley Nomads (scrimmage)	Caltech
Sun.	9-30	11:00 am	Water Polo	Alumni	Caltech
Wed.	10-3	4:00 pm	Soccer	Cal Lutheran	Cal Lutheran
Wed.	10-3	4:00 pm	Water Polo	Pasadena City College	Caltech
Wed.	10-3	7:00 pm	Volleyball (W)	Pacific Christian	Caltech
Fri.	10-5	3:00 pm	Soccer	Loma Linda University	Caltech
Sat.	10-6	9:30 am	Cross Country	Occidental, La Verne, Redlands	Bonelli Park, San Dimas
Sat.	10-6	10:00 am	Soccer	La Verne	Caltech
Sat.	10-6	1:30 pm	Football	Australian National Team	Caltech
Sat.	10-6	2:00 pm	Volleyball (W)	Christian Heritage	Christian Heritage
Sat.	10-6	TBA	Water Polo	Caltech Classic	Caltech
Sun.	10-7	TBA	Water Polo	Caltech Classic	Caltech

Fred Newmann, a 1960 alumnus of Caltech, will attempt to set a world record for the most basketball foul shots made in a 24-hour period on Saturday and Sunday. Newmann intends to shoot at least 24,000 free throws in that period and he expects to sink more than 90 percent of those shots. He will also attempt to beat the record for making the most foul shots in a 10-minute period with a single ball and rebounder.

Volunteers are needed to help rebound and keep score. If interested, talk to Dan Bridges.

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