



VITA BREVIS, ARS LONGA EST -See page two for controversial details. Photo by K. Gant

Peaking Don in Gel

By Lee Sunderlin

Twenty students in the introductory geology class, GE 1, along with three graduate students and Dr. Donald S. Burnett, spent the weekend viewing the scenic rocks of the Owens Valley, 300 miles north of Pasadena. The trip was quite an adventure.

The Owens Valley lies on a fault next to the Sierras. Earthquakes, glaciers, and volcanic activity helped shape the area. The class would travel by bus to interesting sites and get out to examine the area. The first major site was Red Rock canyon, where erosion had worn sandstone into sheer cliffs. Another spot was the Bishop Tuff, the remains of 125 cubic miles of lava shot out of what is now Long Valley, a twenty-mile wide crater. Nearby was Hot Creek, where the brave swam among the steam vents. Water temperature varied about 70 degrees within a few feet because of the cold currents and isolated vents. Another local eruption left a huge mound of obsidian, but light snow and driving wind at the 7500-foot altitude made our stay there short. We also saw a dry waterfall that had carved a 150-foot gorge through old lava.

The group spent the nights under the stars and meteors, which made the trip an astronomy lesson as well. Even the rain did not stop the brave (or stubborn or foolish) from getting soaked instead of fleeing to the bus.

Nighttime entertainment was provided by the guitar playing of James Abbott and stories about the history of the area provided by Dr. Burnett. (Do you know what John Muir was doing during the 1857 earthquake? How about his dog Carlo? What long object "raped the Owens Valley?" Hint: you drink its product—the Los Angeles

aqueduct).

Overall, the trip was a lot of fun and a fair amount of learning. The only major problem was incompetent vehicle maintenance; the trip

nearly ended in disaster. If you want to see the world (or at least Southern California), or, if you like what passes for high adventure, take GE 1 and go climb a rock.

Sunney Chan Chats

Briefly on Student Life

By Steve Rabin

Sunney Chan, one-time Executive Officer for Chemistry, is now Master of Student Houses, a job he describes as that of being a catalyst for the improvement of student life. Chan considers the sense of rejection and isolation with which new students start to be a major problem. "Freshmen who don't get picked by the House they wanted feel very disappointed, and off-campus house membership can be a nebular thing. I want to put all freshmen on campus."

House Living

"If we were to fix up the off-campus houses real well, more than just patching here and there, it is reasonable to suppose that more upperclassmen would move off. Forming 'clusters' of off-campus houses would make up for decreased communication, with three or four houses forming a social unit.

"The houses are fire traps, some rooms are substandard, and kitchenettes makeshift, especially in the old houses. We must set minimal stan-

dards—but without considering students to be pawns of numbers. The quality and price of Food Service...Housing everybody, so no one need sleep in a 'lounge'...These are humane considerations.

"But seeing to proper feeding and housing is just a part of the job. Another part is to talk with students and create opportunities for them to enrich themselves socially, intellectually and culturally."

Caltech Students

"I think everyone admitted to Caltech is capable of doing well here. But there are problems of adjustment, and problems for people with strong egos. All of you are smart, but some of you aren't motivated. There is a high degree of anti-intellectualism on campus—and it's contagious! It's an attitude. Students have to appreciate what education is about from the very start. Education means more than Ph 1 or Ph 2, more than just avoiding flunking out or getting a 4.0 GPA, more than even reading and doing problem sets. Education means interacting with others and putting some quality in life."

Dr. Chan's office hours are 11:30 am to 1:30 pm, although he will see you at other times by appointment. "I want to talk to anybody about anything so don't be shy." He can be reached at x2194.

GALCIT Will Open Doors

By Dave LePoire

There will be a GALCIT (Graduate Aeronautical Laboratory at Caltech) open house on Saturday, October 18, from 10 am to 1 pm. The three buildings involved in aero research, Guggenheim, Firestone, and Karman, will be available for touring. There will be 22 different displays of various research activities and instruments, and graduate students will be around to explain them [And who's going to explain the graduate students?—eds.]. Those who wish to attend should first go to the central reception area in

the basement of Karman (the hydrolab). A description of the displays has been prepared.

The displays include: determination of loads on an airport control tower due to the installation of a ground search radome (this is done in the GALCIT 10 ft. Wind Tunnel); research on shock waves in turbulent flows which occur on supersonic aircraft wings and in high energy pulsed gas lasers; and a new experimental technique called particle streak velocity field measurement to measure flow velocity.

ATTENTION COMPUTER TROLLS!

(CNB) - Caltech has been awarded a \$600,000 grant by the Jones Foundation of Los Angeles to establish a unique computer network at the Institute. The new network will link a wide variety of computers and peripheral devices on the Caltech campus.

Although several dozen other such local computer networks exist at universities and advanced research laboratories around the country, they are smaller than the planned Caltech system. They typically join limited types of computing equipment, not the heterogeneous population of devices found in most institutions.

Thus, the Caltech high-speed transmission network will not only link the Institute's many computers, but will also provide communications among the various devices.

"This transmission network represents a technical and management challenge of the first magnitude," said Caltech President Marvin L. Goldberger, "and one that will work substantive changes in the intellectual life at Caltech. The exchange of ideas and information, and the sharing of expensive equipment, will

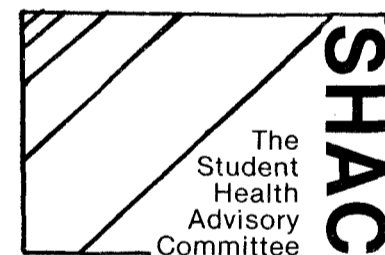
greatly enhance our research and teaching efforts."

About 80 various computers and minicomputers and countless smaller microcomputers are currently installed at the Institute, both at the main campus computing center and at laboratories spread across campus.

Also on campus are numerous expensive devices such as high-resolution graphic plotters, laser printers, mass storage devices, and high-performance tape drives, which could be used more efficiently in a shared network. The campus network will utilize either cable television technology or data links consisting of hair-thin glass fibers carrying data via light waves. The resource will enable each user to have access to all the facilities on campus.

According to network planners, the system will also allow ready linkups with the wide variety of computers at other universities and research institutions via national networks, and will represent a model for other institutions and for the computer industry.

The Jones Foundation is based in Los Angeles and was funded under the terms of the will of the late Fletcher Jones, who died in 1972. During his lifetime, he was the co-founder and chairman of the board of Computer Sciences Corporation, with its headquarters in El Segundo.



Caltech is a campus full of problems. Some of them are here just because no one is willing to do something about them. SHAC -The Student Health Advisory Committee- is a new committee, one which plans to do something about some of the problems on campus. Its purpose is to act as liaison between the students and the Health Center.

Caltech's SHAC already has many projects in mind. SHAC sees that there is a need for students to know what to do in medical emergencies, what services are available at the Health Center, and when they are offered. Students need to know that health services are free, and that there are nice people at the Health Center willing to help students get through their years at Tech. Students need to know that their medical records are confidential.

That's what SHAC is all about. If you want to join, you can come to our next meeting, **Wednesday, Oct. 22nd at 4pm in the Health Center.**

Be there...
Tech needs help now.

LETTERS

Cherchez La Femme a Shame

Dear Mr. Nichols,

Now that you've declared an open season on hunting females, a reply from one of your potential "quarries" is called for. Your juvenile chaser's creed tactics of alternately badgering and ignoring a woman you are interested in may have worked fine for you in junior high school, but they can't form a basis for any kind of relationship between mature adults.

You seem to be operating from two faulty assumptions about women: first, that we perceive harassment as a sign of affection; and second, that we always want what we think we can't have. You imply that when a male chases or harasses a female she believes he likes her, and this makes her like him somewhat. Then when he acts aloof, she believes she's in danger of losing his affections and this makes her want attention from him even more. You seem to believe that this pro-

cess will continue alternating through cycles of ever-increasing mutual affection, heading towards some unspecified climax. This is obviously ludicrous. Along with your insistence that women are eager to be forced into these bizarre rituals it reveals your true ignorance of human nature.

I was extremely offended by your suggestion that men "get tough" with women they are interested in. Although it's impossible to tell what you really meant, it seems like you're saying that women enjoy having violence done to them. This is a very irresponsible thing to advocate. And at any place except Caltech, it would be unnecessary to point out that it's also untrue.

Men and women at Tech will get along better when we stop playing these kind of games with each other.

-An Insulted Reader

And Once Again Another Art Gallery Fiasco

To the Editors:

In an act of physical protest *Horizontal Pillar* was removed from its original location on the Court of Man. The protest was obviously directed against the location of the work and not the Pillar itself. However, in moving the work, its esthetic and physical determinants were destroyed.

The nature of one of the arguments that the piece presents is that artifact has to be responsive to human need.

In response, therefore, while the Court of Man is the ideal conceptual and physical location for the work—contrary opinion cannot be disregarded. A compromise has been proposed. The new location will be accepted if the minority that desires this conclusion will position *Horizontal Pillar* correctly. Otherwise it will have to be destroyed.

-Jud Fine

COMMENTARY

This past weekend *Horizontal Pillar* by Jud Fine was moved from its original location in the Court of Man to a site in between Dabney Hall and Gates Laboratory. This action was soon assailed by the director of the Baxter Art Gallery in the following manner:

Though I cannot and will not condone the irresponsible and selfish act of a few individuals who took it upon themselves to alter and remove *Horizontal Pillar* by Jud Fine from its original installation, their actions have become a part of the art work.

As conceived by the artist, the sculpture, composed of inexpensive, common materials, is formed by a group effort and basic, manual labor. The materials are flexible and reusable; and the concept of the artist can be accommodated in the new location. However, to be properly presented, *Horizontal Pillar* must be leveled to form a straight, horizontal line that diagonally bisects the given plot.

To accomplish this, I request that those individuals who moved the sculpture carry out the labor required to finish the piece and reimburse the artist for any additional material expenses (not

more than \$100.00). The work should be carried out in an organized manner, under the supervision of the artist or Baxter Art Gallery personnel, on or before Tuesday, 21 October. Those who will participate in the reinstallation of *Horizontal Pillar* should contact the Baxter Art Gallery for further details.

-Michael H. Smith
Director

I respect Mr. Smith's opinions as the director of the gallery; however, I do feel that in this statement, and in other actions he has taken since its publication, he has made some gross errors of judgment.

Mr. Smith refers to our project as "the irresponsible and selfish act of a few individuals" and has described us as a minority that has resorted to terrorist practices. I hate to disillusion Mr. Smith, but I believe it is he and his world of so-called art-appreciators who are by far the minority in this case. Virtually every person I have discussed this issue with over the past month has felt the work of art did not belong in the Court of Man, if they were even of the opinion that it was a work of art to begin with. The fact is that the majority of the Caltech community felt *Horizontal Pillar* was quite out of place in the Court of Man; and I rather doubt that the flux of outside visitors to the art gallery could ever

collectively represent a majority over the members of Caltech community.

Actually, it is fortunate that it was our group that organized to move the pillar. Our primary concern was simply to move the pillar with special consideration to make sure it was not damaged. I had heard plans of other groups that would not have been considerate. Face it, the pillar could very easily have been thoroughly trashed. Instead of a well-planned project of fifty members of Ruddle House left it misplaced but undamaged.

When I originally assumed responsibility for our moving *Horizontal Pillar*, we were willing to do further work on it to make it straighter and level. However, in negotiations we have had with Mr. Smith and Mr. Fine concerning the proper reinstallation of the piece that have made a number of demands we consider

continue on page

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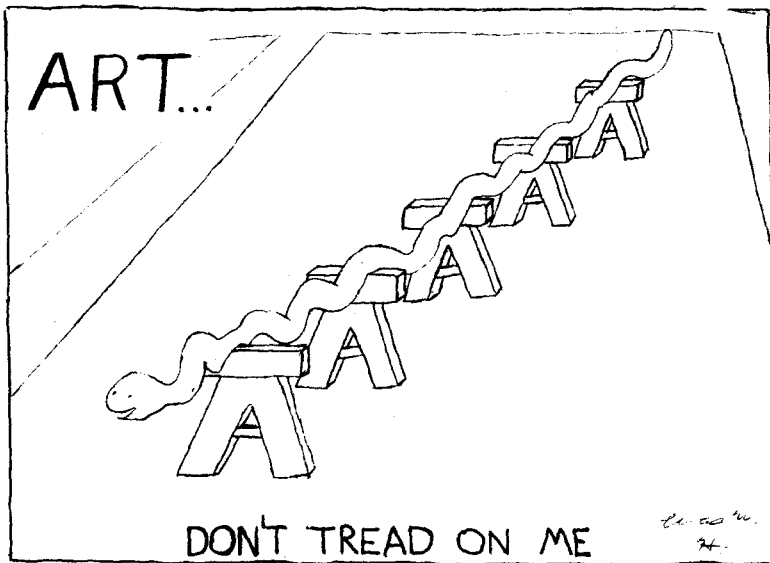
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THE CALTECH Y fly-by

Today, Friday, October 17: Let's all come together on the Quad for a NOON CONCERT with the Pasadena Art Ensemble. Brought to you once again by P. Pat Productions.

Today, Friday, October 17: Open discussion at 2 P.M. with Dr. Philip Zimbardo, Professor of Psychology at Stanford University.

Saturday, October 18: A United Nations Day program. Highlighting the day's events will be a talk by Lord Caradon, former British ambassador to the UN. The hour-long talk starts at 10 A.M.; however, don't miss some of the other events—the program will run from 9:30 A.M. to 3 P.M. in Winnett Lounge. Come on up to the Y for more information.

Wednesday, October 22: UPDATE NOON DISCUSSION with David Stevenson, associate professor of planetary science, speaking about "The Interiors of Jupiter and Saturn." At noon in Clubroom One—bring your lunch.



I grew up in the Suburbs. I remember being shocked when I first saw men digging up the street. There was dirt underneath, just like in the garden at home! I suppose it's common sense to think of a city being built on top of a pile of dirt, but no one had ever told me that was the way it was. All you need is a façade, something a little more substantial than a Hollywood set, and you feel like you're standing on firm civilization.

That day changed my attitudes toward architecture forever. I was always wondering what was under the street or behind the doors or between the walls around me. I nearly died of excitement the day I found a secret walled-off room in my grandpa's farmhouse. I spent summer days crawling through grungy sewer pipes with my friends and digging secret forts in the soft Illinois earth. If it was secret, hidden, and unexplored, it touched a smoldering place in my heart and kindled a conflagration of curiosity.

As you might have guessed by now, this is an article about the Caltech tunnels. Don't worry. I'm not going to describe the tunnels or draw you a map. If you love tunnels like I do, you'd rather find them yourself anyway. All I really want to do is encourage a few adventurers to cast their glances downward and wonder about the hidden features of their campus.

You'll notice I didn't mention steam tunnels. True, steam pipes share the cozy comforts of the primary catacombs, but there are many cool tunnels as well. Take as an example the "Infinite store room" under the old houses. One can meander aimlessly for hours, through chambers large and small, examining the treasures therein. The whole subterranean network exudes an air of antiquity, of dust and mildew. There it was that I

made my home for two terms, in an obscure crypt beneath Blacker House. There it was that I ate and studied and slept, surrounded by the deepest of silence and solitude. Once and only once was I discovered by a fellow denizen of the depths, a wandering cook enjoying a joint. Only a fantastic coincidence brought my bliss to an abrupt end, as Mr. Gang happened by one Sunday morning and chanced to catch a glimpse of me disappearing into a hole with a wheelbarrow full of cement. Ah, well, nothing lasts forever.

There are many other examples of steamless tunnels as well. Student houses old and new are of course riddled with "hyperspace" above ceilings and between walls. Less well known are the recesses honeycombing the Synchrotron Lab. Sadly the architectural style embodied by these examples seem to have been supplanted by more straightforward forms.

Still, Caltech offers a number of obscure isolated tunnels to tease the would-be master of tunnelry. The Guggenheim tunnel is as grand a trench as any in the more northern caverns. The Dabney-Gates tunnel, in contrast, is barely passable and dead-ends at one extremity. Robinson offers its famous pit, but perhaps more satisfying is the little-known "Room With No Entrance" in the lawn mower

shed by Robinson's east basement door. Undoubtedly there are many more examples, enough to justify a lifetime of exploration.

There's more to Caltech's tunnels than a series of trenches, mind you. They carry with them a romantic tradition from bygone eras. Here flourished untold civilizations, vanished but for runes and cave paintings. There a tormented soul once cried his anguish to a deaf world. And what's this, the remains of a prehistoric picnic? Time stands still in the tunnels. Graffiti of all eras blend into a sociocultural patchwork quilt on the walls and pipes. One imagines psychohistorians, millennia in the future, muttering over such inscriptions as "Eat Noodles" and "Imp Nix". What, they might wonder, was early technological man like? What drove him to the tunnels? Pagan rituals, symbolic return to the womb, genetic proclivities, anal fixations, intoxicated stupor?

Or do you suppose a social scientist of amazing perception, aided by a powerful computer, might realize that students of the twentieth century used them to get to classes when it rained?

- Chuck Nichols



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Commentary from two

unreasonable, and therefore we will not be able to comply with their wishes. Such demands include that we add extra structural support to eliminate the sag that already existed in the pillar before we ever touched it, and that we only perform our work under the direct and constant supervision of art gallery personnel.

Mr. Smith has attacked us in referring to us as irresponsible and selfish terrorists and he feels that our action is on the level of the book-burnings of Nazi Germany. I personally feel he is overreacting to the situation and does not have a proper perspective of the issue. I feel that we at Caltech should be grateful for the efforts that are made by the Baxter Art Gallery to add a variety of cultural exhibits to our environment. However, when these exhibits interfere with the normal activities of Caltech life tensions are bound to develop between conflicting viewpoints.

Over the past few years, the Court of Man has become a major site of student recrea-

tional activity. It is the only large open field on campus that is lit at night so that students may use it to relax after the rigorous activities of the normal school day. The placement of *Horizontal Pillar* on this site prohibited such use and therefore came to be resented by much of the student body. When construction was first begun on the pillar I approached Mr. Smith and warned him about the likelihood of such sentiment on a large scale and the possible backlash that might occur. This entire affair could have been avoided if our initial complaints and warnings had been heeded. Unfortunately, there was no possibility of making our views known before construction began because of the existing procedural guidelines for authorization of such exhibits. Hopefully these guidelines can be improved upon so that a similar state of affairs does not develop with future exhibits.

- Sid

HARVARD BUSINESS SCHOOL

MBA PROGRAM

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THURSDAY, OCTOBER 23

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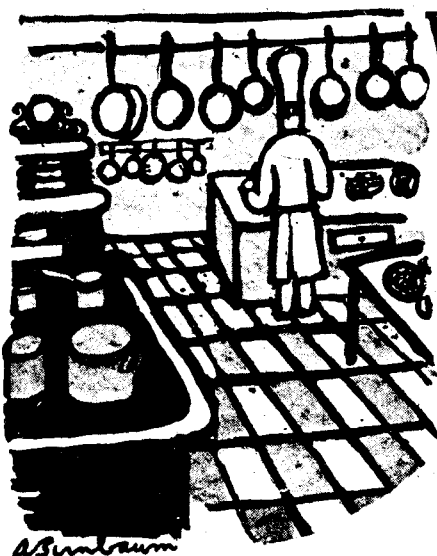
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ENTERTAINMENT

MOVIES plays SPECIAL EVENTS

Cultivate Your Gardens

By Jeff Eriksen

Auditions for the 1981 Caltech Musical will be held October 25 and 26, Saturday and Sunday, from 12:30 to 6:00 pm, in room 19 Baxter. All Caltech and JPL faculty, staff, and students are invited to try out. All parts are open. Come by or call the Theatre Arts office to arrange for audi-

tion time, or simply show up and try your luck. We will hear everyone who arrives before 6:00. Singers are strongly encouraged to prepare a song and bring music for the accompanist. Music and scripts are available for checkout from the Theatre Arts office from now until auditions.

Anyone interested in dancing in the show should come to the separate dance auditions either morning from 10:30 to noon. Wear loose clothes for dancing, please.

Instrumentalists are also being asked to come to these auditions and sign up so we can tell what parts we are missing. Orchestra auditions will be held January 10. Lots of vital staff positions still need to be filled. We need volunteers for makeup crew, assistant producer, assistant business manager, light crew, costume coordinator, costume crew, technical director, set crew, stage crew, properties coordinator, prop crew, assistant director, stage managers, publicity coordinator, and prompter. Come on by auditions and sign up. The more people we have, the more we can spread the work (and the fun!)

ASCIT MOVIE

Friday Night 7:30 & 10:00

ASCIT Members 50¢ Others \$1.00
Baxter Lecture Hall

ZARDOZ

Next Week **Dr Strangelove**

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Follow the rumbling noises. The rumbling noises lead the way.

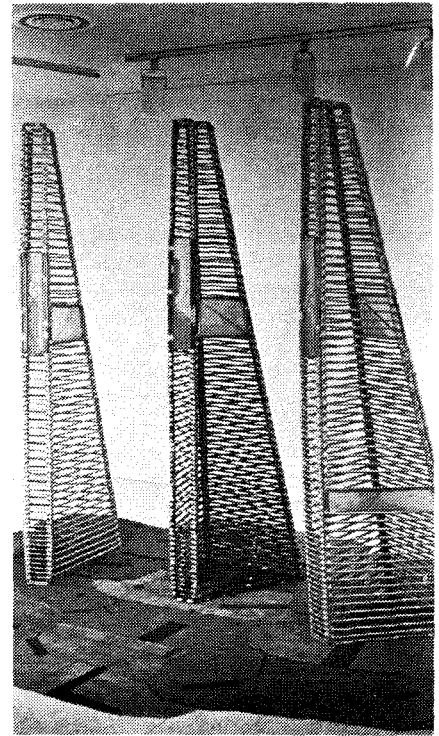


Photo by Mark

Listen to the rumbling noises. The rumbling noises lead the way.

Artwork for the desert

Marsia Alexander, creator of *The Desert Piece: Nomadic Sculptures, Set III* will discuss her artwork in the spacious outdoors.

Saturday, 25 October 1980, 9am through 4pm, Alexander will be out on the Mojave Desert with some of her works as part of the *Architectural Sculpture* exhibit at Caltech's Baxter Art Gallery. She will give concentrated performances at 11am, 1pm, and 3pm. The Art Gallery will supply transportation to the display and back, but you should try to reserve a seat if you wish to

go. (Call ext. 1371 if you need more information or would like a seat.) If you are going there on your own, the location is The Alpine Buttes, just east of Palmdale, in the Mojave Desert. Take Fwy 405 and Fwy 5 north; NE on 14 to Palmdale Blvd; east through town to 110th St; north on 110th St and east on Avenue "O"; turn at the posted signs.

Looking at Alexander's *Desert Piece* in its natural surroundings will add a new perspective to her artwork, so take a free break in the great outdoors and hear what she has to say.

THE WOMBAT COMETH

BSEE/MSEE BSIE/MSIE COMPUTER SCIENCES

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CAMPUS FEATURES

This afternoon at 2:00PM., Dr. Philip Zimbardo will be leading an open discussion in Winnett Lounge. Dr. Zimbardo, currently a professor of Psychology at Stanford University, received his B.A. at Brooklyn College, his M.S. and Ph.D. at Yale. He is an educator who loves to teach and has done so in courses ranging from individual tutorials to large lectures of over 600 students. His textbook *Psychology and Life* is a classic which introduces psychology to most college undergraduates in the United States.

Dr. Zimbardo's classic research on vandalism included the planting of abandoned automobiles on New York streets to film respectable middle-class adults stripping and devastating the marked cars. His study of role relationships and the powerful impact of prison environment on normal, healthy college students in prison he created in a basement at Stanford University has made his name widely known throughout the lay community.

The discussion today will delve into psychology, but will drift with the whims of the audience, depending on the questions asked of Dr. Zimbardo. This event is open to the public and is sponsored by the Caltech Y.

After Magritte

It was a quiet evening at home. Mother was sleeping quietly on the ironing board, Harris, dressed in a tuxedo and fishing waders, was changing the lightbulb in the bathtub, and Thelma was crawling around looking for the missing .22 calibre bullets.

This is the setting for *After Magritte* which will be performed this Friday and Saturday at 8PM., and Sunday at 7pm in Ramo Auditorium. It will also be performed the same time next weekend. Admission is free for Caltech students, and \$3.00 for everyone else.

Also playing will be *Willie B.*, a scene from an unfinished Vietnam War era play, and the *Gobble Ups*, a series of fables by Oscar Mandel.

Additionally, on Friday nights, anyone who wishes to see the late ASCIT Movie will receive half off the normal admission price if they present the ticket stub from that evening's performance.



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Most of the people at Tech, and certainly all of us freshmen, are aware of the various forms of frosh initiation. Most freshmen had their first experience with it last Sunday when they found out which house they were a member of. All frosh were showered, except those in Dabney (supposedly because of apathy) [not at all; Darbs operate on a higher plane—eds.] and Fleming (for other reasons). The freshmen in each house, as part of their initiation, have certain jobs they are required to do. For

instance, they must answer the phone before it rings 3 times, keep ice trays filled, turn down the sound on the TV during commercials, and make change for any upperclassman that wants it.

However, there is one form of freshman initiation that most freshmen are not aware of, since it has been banned. I am referring, of course, to the ancient tradition of snapping frosh suspenders. According to some upperclassmen (I wouldn't know since I am only a frosh—who else would write for *the Tech?*), hazing in the

form of snapping frosh suspenders has been around since 1934. This tradition was ended this year due to pressure applied to the Master's Office by several administrators. Sunney Chan said that hazing of this sort will result in severe punishment of the house involved.

The administrators, who asked to remain nameless, based their arguments on a large scale study done at UCLA by a research team headed by Dr. Stephen Rogers. In the study, 500 white rats were fitted with suspenders which were snapped 25 times a day. After three weeks the rate of cancer was much greater than with the control group.

Of course, it's important for freshmen to remember that upperclassmen are usually very helpful, and do not really

spend all their free time picking on freshmen. For instance, I had been planning to major in physics when I came here, but several upperclassmen helped me realize my mistake, and I am now majoring in applied biology. So when you frosh are mad at the upperclassmen after a frosh-wash or a greased-frosh race, just remember, they are not much worse than we are—just older.

—Mignon Belongie

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4 Cups Unfiltered Apple Juice
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MUSIC

SFB-Big Band Concert Dance. The big band sound of the '30's and '40's.

The Sinking of the Titanic. The U.S. premiere of a new opera by Wilhelm Dieter Siebert.

Eberhard Blum Flute Recital. A renowned flutist in solo recital.

Rias Kammerchor in Concert. A 47 member a capella choir called the "Musical Ambassadors of Berlin".

Musicalische Compagny. Seven artists perform Renaissance music on the original instruments.

Blandine Ebinger, Chanteuse. A well-known chanteuse in a cabaret setting.

Tangerine Dream. A rock concert featuring one of the most imaginative of the European avant garde rock groups.

No-Set Ensemble. The pure sound of German improvisational electronic music.

Kreuzberger Streichquartett. Berlin's renowned string quartet, winner of many international competitions.

Catherine Gayer, Vocalist. The international opera star in her own one-woman "cabaret" act.

Christiane Edinger, Violinist. This much acclaimed classical soloist appears in recital accompanied by Gerald Puchlet.

Siegfried Palm, Cellist. A solo appearance by the highly acclaimed German cellist.

Free Music Production. Berlin's leading exponents of "Free Jazz".

Gruppe Neue Musik. This 17 member ensemble is the foremost contemporary classical music group in Berlin.

For student event information call: (213) 793-7043

FILM, PHOTOGRAPHY AND LITERATURE

Women Filmmakers from Berlin. Leading filmmakers from Berlin discuss their films and the working conditions in Berlin.

"Berlin Portraits" A photo exhibit by Henry Ries.

The Current Berlin Literature Scene. A seminar featuring readings and discussions by nine of Berlin's leading writers of the younger generation.

THEATRE AND DANCE

Rick Cluchey San Quentin Drama Workshop. Performances of Samuel Beckett's "Endgame" and "Krapp's Last Tape".

Oskar Schlemmer and Dance. Works by the famous Bauhaus choreographer Oskar Schlemmer. Musical accompaniment by the No-Set Ensemble.

Triadisches Ballett. Performing the "Triadic Ballet" dance as silhouetted through unique costumes and sculptural movement.

ART AND ARCHITECTURE

Realism and Expressionism in Berlin Art. A showing of paintings by seven contemporary Berlin artists.

Realism and Fantasy in Architecture. An exhibition of architectural designs.

Hans Scharoun Architectural Exhibit. A display of photos and architectural renderings of Berlin's pioneer of model housing.

SPECIAL EXHIBITS

Berlin: A City in Search of its Future. An exhibit and multimedia presentation of the life of Berliners, past and present.

Telebus. A new system for transporting the handicapped developed in Berlin.

Products from Berlin. An exhibit of products developed and produced in Berlin today.

For a detailed calendar of events listing dates, locations and ticket information call the Berlin/LA 200 information office: (213) 627-3731.

This is an endorsed Bicentennial project.

BERLIN

MORE SPORTS THAN YOU WANT

Women's V - ball Suffers Defeat

By Michael Walsh

Despite a lot of enthusiasm and inspired play, the Caltech women's volleyball team lost a tough home match to Scripps JV, 15-7, 14-16, 11-15, last Saturday.

The women's effort was highlighted by well-placed spiking by starters Norma Ofsthun and Lynmarie Thompson, as well as some tricky serving by Sandra Loh and Sue Fuhs. Unfortunately, serving proved to be the team's downfall. After jumping to a 10-1 lead in the final game in a scoring blitz that featured six aces, the team failed to make a point in its next seven services, allowing Scripps to overtake and eventually defeat the Beavers.

Although the loss was disappointing, Coach Yela Luzar was still pleased with the team's performance. She noted that "we were topsy-turvy in the Redlands tournament. The girls played with a new offense today and did 150 percent better."

Caltech got off to an excellent start, tossing up quite a

few balls that Scripps found difficult to handle. By the time the visitors had mounted a rally, the Beavers were leading 13-3, and won the game handily.

The second game was closely contested. Scripps provided their one scoring burst to lead 8-3, but the women fought back to a 10-10 tie. From there

the team traded points tenaciously, and Scripps eventually got the winning score.

Also turning in good performances for Caltech were starters Sue VandeWoude and Ann Rosenthal, and substitutes Noemi de la Puente and Kaitlin Drisco. Providing support were reserves Clara Spalter and Eliza Sutton.

One Out of Three Ain't Bad

By Gordo

The Caltech Cross-country Team ran its only home meet of the season last weekend. There was a rather mixed performance among the men's team, leading to a loss to

Redlands as well as the expected defeat by Oxy. The men's team did manage to defeat Whittier.

Caltech's first runner was Karl Clausing, who ran a 12 second personal record time

(PR) and came in third overall. His was the best individual performance against an Occidental squad by a Tech runner in years. Second was Eric

continued on page 7

This Week In Sports

Soccer Club:

Saturday, October 18, 11AM, Here:

Caltech vs. Woodbury

Soccer:

Saturday, October 18, 11AM, Redlands

Caltech vs. Redlands

Wed., October 22, 3:00PM. Here

Caltech vs. La Verne

Water Polo:

Wed., October 22, 4:00PM, Here

Caltech vs. PCC

Football:

Friday, October 17, 3:00PM. at Claremont

Caltech vs. Claremont

J.V.

Cross Country:

Saturday, October 18, 10:00PM at Whittier

Caltech vs. Claremont

Mudd-Scripps and La Verne

Women's Volleyball:

Saturday, October 18, 2:00PM, Here

Caltech vs. L.I.F.E

Bible College

Tuesday, October 21, 6:30PM, at La Verne

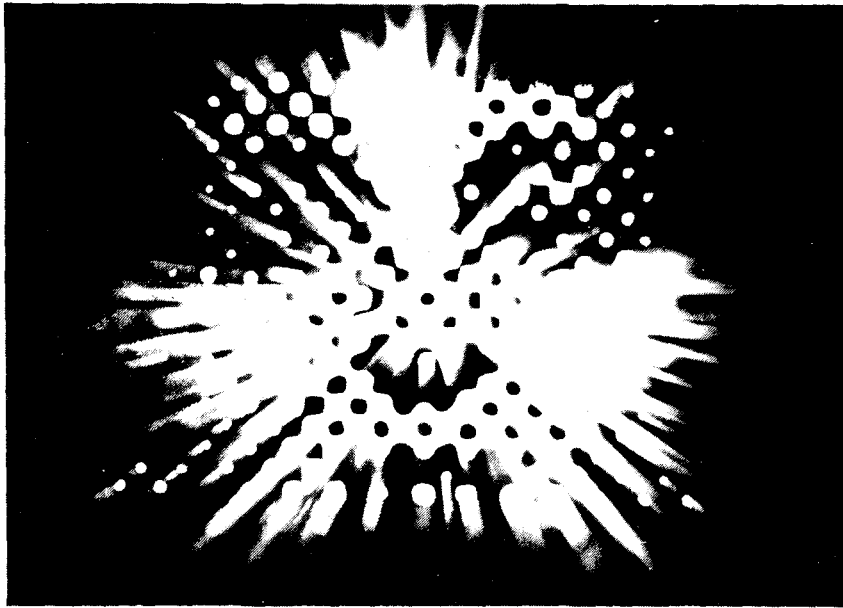
Caltech vs. La Verne

J.V.

Thursday, October 23, 7:30PM, at Pomona-Pitzer

Caltech vs. Pomona-Pitzer

J.V.



COSMIC COALESCENCE

Where does science fiction end and reality begin? It's all in the mind's eye. Be it the creative imagination used to produce Star Wars, The Black Hole, and The Empire Strikes Back, or the more scientific approach of hypothesis testing and experimentation, the distant galaxies of science fiction coalesce into reality with the advanced technology now being developed at a company called TRW.

It was the Defense and Space Systems Group of TRW who made possible the Viking Lander biological experiment which looked for life on Mars and the High Energy Astronomical Observatory which looks for quasars, pulsars and black holes in deep space. Professionals at TRW-DSSG are now involved in such impressive technologies as high

energy lasers, communications systems, plus other future projects still considered science fiction.

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NOVEMBER 10-11

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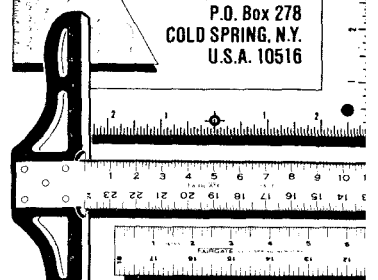
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X-Country from six

Korevaar with a steady race all the way. Shawn Larson was third, with his best performance ever. In the number four spot was Lewis Collins who was racing his first cross-country meet, and fifth was Vince Cammarata who was running slower than usual due to an injury which prevented him from doing much hard training over the past few weeks. Paul Eskridge, running a 34 second PR, came in sixth for Tech, and Randy Field, another runner who seemed off this time, came in seventh. Also in the meet were Rob Murphy, Jim Drake, RC Colgrove, and Eugene Hu. The meet results are unusual; the score against Oxy was the best it has been in years, and yet a Redlands squad of the same runners Caltech easily defeated in four separate races last season beat us. Some degree of concern is warranted, but the overall emphasis this season is more on the championship meets than on the dual meets, and we will get a return shot at Redlands next week at LaVerne in the SCIAM meet.

The women forfeited their meets again and are now down to only three runners. The three all had fine races however. First runner, Julie Kornfield, was 49 seconds closer to the meet winner this week than she was at Pomona. Karen Close ran a 30 second PR on a much slower course than last season. Finally, Carlotta Paulsen ran at a faster per-mile pace on Tech's hilly, twisting, trail course than she did on Pomona's flat, pavement course two weeks ago. All three women ran fine races, despite the inevitable forfeits.

The team runs its final meet of the regular season this Saturday morning at Whittier. LaVerne and Claremont-

Scripps will also be there. For the women it will be an opportunity to gauge their personal levels of improvement against the Whittier runners again. The men will be trying to salvage a winning record (it is now 2 - 3) as well as gearing up for the SCIAM championship next Saturday.

LIBRARY Thrills

By Rod Casper
(Readers Services Librarian)
If you want a book that the Caltech libraries don't have, you can turn to the

Interlibrary Loan Service in Millikan (2nd floor) for help, providing you are a faculty member, graduate student, or staff member. Since June 1979 the library uses an on-line request system to tap over six million books in over 2000 libraries.

When a request is sent via a computer terminal, it can go to five libraries without further input. If the first library responds "NO" or does not respond at all within three days, the request is automatically transferred to the terminal of the next library. The major advantage of this system is that Millikan knows which libraries have a given item, from the terminal display for the book which has

been called up from the data base, and all messages are transmitted quickly via terminals rather than by U.S. mail.

In the year July 1979 through June 1980 the library requested 468 books through this system, of which 451 were received. 60% of the requests were filled by the first library in the sequence. Only 8% of the requests needed the fourth or fifth library in the sequence. The median number of days to fill a request was eleven days, including the actual shipping of the volume. Of the filled requests, 160 came from libraries outside of California.



Classified Ads

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Furnished one-bedroom. Quiet area (between 210 freeway and Villa). Rent \$255.00 + s/d., utilities paid. Window air, carport. Call 355-3571 for appointment.

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HELP WANTED

Babysitting in my home. Tuesday, 12:00-5:00. 2 boys (5 & 9 yrs). 1 mile from campus. Call after 7 p.m. 681-8988.

TECHER SKILLED in carpentry or home construction needed quickly for small projects in Tech office. Leave note for business manager or call x2154.

OPPORTUNITIES

WE NEED YOUR HELP. Learn to earn up to \$500 per thousand stuffing envelopes. We show you how. Details: send 25¢ and SASE to: GELD, P.O. Box 2124, Yorba Linda CA 92686. (Please mark envelope with "G/6".)

ADDRESSERS wanted immediately! Work at home — no experience necessary — excellent pay. Write National Service, 9041 Mansfield, Suite 2004, Shreveport LA 71118.

Buying or selling something? You, too, can take out an ad in The California Tech! \$2.50 per inch plus 40¢ per extra line for Classifieds. Bring ad copy to the Tech office or call extension 2154. O.K.?

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More than a calculator, the HP-41C can become a complete personal computation system. Expand memory to 2,000 lines. Add a Card Reader, and Optical Wand that inputs bar-coded programs, a printer that also plots, plus plug-in applications modules that provide solutions to problems in business, science, and engineering.

The HP-41C. Never before has this much power been this easy to use or this adaptable. So visit a Hewlett-Packard dealer now. Then make the professional decision: buy an HP. For details and the address of your nearest dealer, CALL TOLL-FREE 800-547-3400, Department 658M, except from Hawaii or Alaska. In Oregon, call 758-1010. Or write: Hewlett-Packard, 1000 N.E. Circle Blvd., Corvallis, OR 97330, Dept. 658M.



* all the news that fits in print *

FLYING

Pedaling About

Do you get up early on weekends and bicycle through the San Gabriel Mountains? Are you the world champion bicyclist? Or do you just like to leisurely ride your bike around? Then the Caltech Cycling Club is for you. There is a toolroom available to members and trips will be planned. The first meeting will be at 7:30 pm on Monday, October 20 in Clubroom 1 in Winnett Student Center.

Check!

The Caltech Chess Club will have an organizational meeting on Tuesday, October 21 at 7:30 pm in Clubroom 1 in Winnett Student Center.

Challenge of the Century

Here's your chance, Teachers! Radio station KPCC has a weekly radio program on present energy sources and potential energy sources. During the program a panel asks experts questions concerning our energy problems. That's where we come in. Student volunteers are needed to participate in the program and ask the experts questions. If you're interested, call Susan Lane, 578-7231.

"Elementary, My Dear Anna."

There will be a meeting for any student interested in the Watson Fellowship on Tuesday (October 21) at 5:15 pm in Jim Morgan's office (106 Dabney Hall). Anna Slomovic, a former Watson recipient, will be talking about her experiences. Free soft drinks will be served.

Watson Fellowships

Seniors: the deadline for Watson Fellowship essays is October 24. Seniors wishing to apply for these travelling fellowships should come to the Deans Office and talk to David Wales or Chris Wood about their plans.

UpAd

The sign-up sheet on Theresa's door in Winnett Center for undergraduate positions on the Upperclass Admissions Committee comes down at 5PM today. Interviews will be held next week.

Maid of Cotton???

The National Cotton Council has announced the rules for the 1981 Maid of Cotton contest, and you (well, some of you, anyway) may qualify for fame and fortune. The Maid of Cotton, for those of you not in the know, is the international goodwill ambassador for the cotton industry, traveling throughout the United States and Canada and around the world to focus attention on cotton, and away from all those nasty synthetics. In order to focus said attention, the Maid of Cotton must never have been married (maid, got it?), be between the ages of 19 and 23, be at least 5 feet 5 inches tall, and either have been born in, or moved to, a cotton-producing state by age seven. (In case you didn't know, California is a cotton-producing state.) Finalists are chosen from applications and photographs late in November and asked to participate in the selection held in Memphis, December 28-30. Applications must be postmarked by November 8, and are available from the National Cotton Council, P.O. Box 12285, Memphis, TN 38112. Persons named Dacron need not apply. The announcement sent to the Tech Office never mentioned that applicants must be female.

Drug Volunteers Needed

International Medication Systems Limited, a pharmaceutical manufacturing firm located in South El Monte (that's a few miles southeast of Tech) is looking for volunteers to participate in bioequivalence studies—testing generic equivalents against brand-name drug products. They are specifically looking for male subjects, between the ages of 21 and 40, in good health and "optimum weight for their height". Compensation paid will depend upon the duration of the study. If you are interested, please send your name, address and telephone number to: Bioavailability Study, IMS LTD., P.O. Box 3837, South El Monte, CA 91733. You will then be sent a medical questionnaire and asked to list the hours and days during which you will be available to participate.

Trick or Treat

Halloween is on its way, so is the first Caltech blood drive. As usual the kind people from the Red Cross will be treating the house which donates the most blood to a keg of beer.

This term the Caltech Red Cross Blood Bank will be available for Caltech donors in Dabney Lounge on Thursday and Friday, November 6th and 7th, from 9:45 am to 2:30 pm. If you want an appointment please call Margaret Collins at ext 2374 (Personnel). Drop-ins are always welcome.

Write of Way

Timothy Ferris, one of Caltech's artists in residence, and author of the books *The Red Limit* and *Mummings of Earth*, will be offering a writing workshop through the Caltech Y. It will begin with a talk next Thursday at 7:30pm. in Baxter Lecture Hall. Two subsequent discussion meetings will be held for those interested in pursuing the topics presented Thursday, writing in general, of Timothy Ferris in particular.

Pravda

In a recent edition of *The California Tech*, it was announced that the JPL/Caltech Russian Language Study Group meets every Thursday evening in the Steele conference room, 110. Since this announcement, however, the meeting time has been changed to Wednesday evening, same place. Students or staff members interested in brushing up or improving their knowledge of the Russian language are again invited to take part in the group's activities. For further details, please call Larry Mak, JPL ext. 5090.

A Festering Appearance

Jackie Coogan will appear in Caltech's Beckman Auditorium on Saturday, October 25, at 8pm. In "An Evening With Jackie Coogan," he will give a personally conducted illustrated tour through his scrapbook of rare photos, clippings, and memories from "The Kid" to "Uncle Fester." For information, phone 793-7043.

If you UNDER-UNIT, and your tuition cost is reduced, your financial aid is likely to be reduced also.

Should you plan to register for less than 36 units, or to drop some units, find out from the office of Student Accounts how much your tuition savings will be. Then go to the Financial Aid Office (208 Dabney Hall) and make an appointment with our beautiful directresses, Ruthie Wilson and Linda Berkshire to discuss what changes, if any, will be made in your financial award.

If you register for less than 18 units (a common last-quarter practice for graduating students), aid from most sources is automatically cancelled. CAVEAT SENIORS !!!!

Yes Virginia, there really **Birdman**. CRASH had landing. The first CRA (Caltech Redesigned Aeroplane) with Students Hindsight meeting was held last Tuesday night and people showed. Everyone there had no doubt that a flying craft would be created, but they still need *more* people. MS people, Ma & CS people, P wouldn't be bad either, and everyone is welcome. CRASH has plenty of AEs (although you can never have too many AEs).

The next CRASH meeting will be **Monday, October 19, 8 pm, in Club room 2.** Hope to see you there.

GDG to C2

The Caltech Gay Discussion Group will meet in Clubroom (upstairs in Winnett Center) 7:00 pm, tonight (October 17).

Computer Science and Electrical Engineering Majors

San Francisco Bay Area company developing state of the art computer software and hardware for integrated voice and data office communications systems seeks talented individuals interested in:

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On Campus Interviews FRIDAY, OCTOBER 31

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