



A Mechanical Filming

160 Techers hired at \$1.25 per hour

by Ken Whang

Even before fall registration, a Caltech lecture hall was filled by students when, last Sunday afternoon, 160 Techers gathered in 201 E. Bridge for the filming of lecture segments of *The Mechanical Universe*, Caltech's physics course for television with former Ph 1 lecturer, David Goodstein. At the scheduled starting time of 1 pm, the students posing as students appeared to be ready for a lecture to begin.

The lecture hall, home of freshman physics for many years, looked quite the same as usual except for some temporary paneling on the front walls and a track set up behind the front counter for the television camera dolly. Also new in the physics classroom were phrases from the television world. Mark Rothschild, the associate producer, used a bullhorn to tell participants to "settle in" and "stand by."

The first forty minutes of the session was devoted to minor seating rearrangements in the lecture audience. Each participant held up a sign with his assigned number, then responded to requests like, "84, come on down here to the front row."

The front of the lecture hall was given a disproportionate number of women, perhaps to disguise the audience as one from a more "normal" college than Caltech. In the first two rows, there were actually only a dozen or so Techers; the rest were students from other local schools whose attentive heads and shoulders are the foreground for many of Goodstein's lecture shots.

Sunday's filming session was the last of the lecture shooting for *The Mechanical Universe*. Scenes involving only Goodstein and a small part of the lecture audience were finished during the summer. The filming on Sunday required a full lecture hall listening and taking notes, reacting to Goodstein's humor, and entering and exiting the classroom. Each program of the 26-part series will begin and end in the lecture hall, switching to real life and computer animated examples during the program.

In the audience reaction shots, participants were instructed by signs to produce a "chuckle," "big laugh," "big groan," or "little groan." Goodstein attempted some jokes of his own, receiving the

greatest reaction to comments on the student houses. He also kept attention by discussing the progress of the production and advertising the science writing course which has assisted in script writing for the series.

The filming went fairly smoothly, but many participants were surprised by the amount of time that was asked of them. After nearly three hours of filming, Goodstein was on his third shirt and many students were losing their patience.

"Yawn," said Karen Condie, "this is slightly more interesting than sitting around twiddling my thumbs."

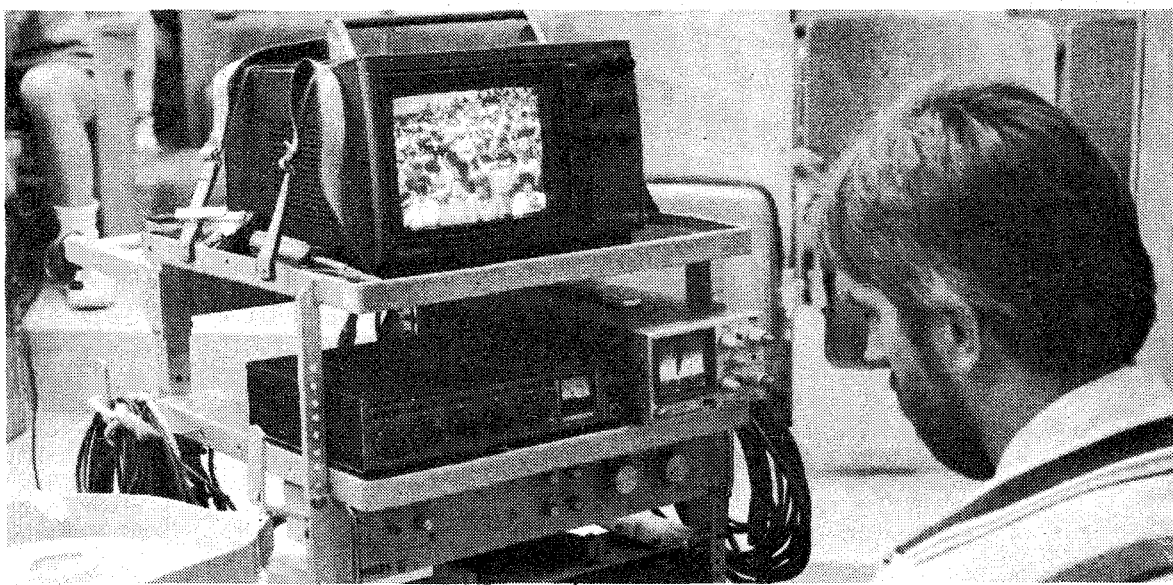
Sherry Smith added, "they're not paying us enough and they ran out of food too early," referring to a bribe of five dollar bookstore certificates and a two hour supply of cookies.

But otherwise, it was "nice for about the first hour," said Bob Bolender.

The Mechanical Universe is being produced by The Corporation for Community College Television. The corporation is currently working on one other project, a series on computers titled *The New Literacy*.



The Mechanical Universe audience reaction shots were filmed last Sunday afternoon. Above, looking down from the audience. Below, looking back.



photos by Karyn Betzen

Liepmann Appointed

Dr. Hans W. Liepmann has been appointed the first Theodore von Kármán Professor of Aeronautics at the California Institute of Technology. The professorship was endowed by aerospace and other corporations, foundations, and individuals—many of whom were friends, colleagues, or former students of Theodore von Kármán, who is recognized as having contributed more to the fundamental understanding of atmospheric and space flight than any other person of our age. Dr. T. F. Walkowicz, president, National Aviation & Technology Corporation, was chairman of the committee that sought funds to endow the chair.

"It is fitting that Dr. Liepmann, who now heads the Graduate Aeronautical Laboratories at Caltech (GALCIT) which von Kármán initially guided to world preeminence, has been appointed to the professorship named in honor of this renowned aeronautics pioneer," said Caltech President Marvin L. Goldberg.

Liepmann, formerly the Charles Lee Powell Professor of Fluid Mechanics and Thermodynamics, is one of the outstanding researchers in the world in fluid mechanics—and

one of the most notable contributors to modern aviation. During the 1940s, he and his students at Caltech studied questions of boundary layer flow stability and transition, turbulent shear flow, and transonic flow and shock waves, that helped to lay the groundwork for high speed flight.

His pioneering work in aircraft buffeting in 1947 led a field of investigators, as did his work in rarefied gas flow, magnetohydrodynamics and plasma physics during the 1950s. Research in turbulent mixing during the 1970s is leading to the evolution of more efficient combustion in engines and to the development of a new generation of high-energy chemical lasers. His research in boundary layer flows is making important contributions to a new generation of more fuel-efficient aircraft.

Liepmann is well known as an excellent teacher and for his influence on graduate students who have studied with him and moved on into influential roles in industry and the academic world. Eight of his first nine students are members of the National Academy of Engineering, and two, of the National Academy of Sciences. He has been named by students of Caltech as one of the Institute's most outstanding

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The Fantasticks to be Presented

Now, from the people who brought you last spring's highly acclaimed musical *Brigadoon*, Caltech proudly presents the fall production of *The Fantasticks*. *The Fantasticks*, a joyous celebration of love and life, is the world's longest running musical of all time, still going strong at the Sullivan Theatre in New York, with close to 10,000 performances.

Featured songs in this musical are some great favorites such as "Try to Remember (the Kind of September)", "Soon It's Gonna Rain", and "They Were You".

The plot concerns two feuding fathers whose son and

daughter have fallen in love. We discover, though, that the father's feud is a ruse, arranged only so that the children would fall in love, since children will act only contrary to their parent's wishes. The other characters include El Gallo the narrator, and his accomplices, a moth-eaten actor, and an Indian who is very good at death scenes.

At the fathers' bidding, El Gallo and his cohorts stage an elaborate kidnapping of the girl, so that the boy will be able to rescue and subsequently marry her. The couple, however, discovers the plan and rejects their fathers'

manipulations and each other. They go their separate ways into the world, where they learn that all is not as sweet and simple as they had imagined.

The secret of the play's longevity lies in its ability to communicate the intangible realities of lost love and innocence with magical music and great wit.

Dr. Don Caldwell, head of Caltech's Men's Glee Club, will again direct with his wife Wendy serving as music director. The cast consists of two Caltech staff (Susan Cave as Luisa and Pat Houseworth as the mime), two Caltech

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editorial

About that "Open Letter"

In the presentation of an important issue, style is often as important as content. This was demonstrated last Tuesday morning when, outside of the term's first freshman physics lecture, an "Open Letter to Freshman" criticizing current Rotation policies was distributed.

The letter, signed by Behzad Sadeghi, had a public message in its three, typeset pages, but the message was clouded over by so many extraneous personal opinions that few had the patience to read it. In addition, the letter was directed quite specifically to freshmen, freshmen who had hardly begun rotation week.

Author Sadeghi alienated some of the upperclass audience immediately by addressing the letter to freshmen, as though upperclassmen were corrupted and unsaveable. Within the letter he noted that "many upperclassmen unthinkingly follow any ritual branded as a 'house tradition.'" He later omitted the qualifying "many," asserting that "Freshmen are subjected to pressures designed to indoctrinate them into accepting this system by upperclassmen who were themselves indoctrinated during their Freshman year." He tried to explain in the letter "why we have hundreds of upperclassmen who are infuriated" by "what goes on in the houses," assuming, of course, that this "why" clause is unquestionably true. I think that many upperclassmen not only disagreed with these statements, but were also rather offended by this judgement of their characters.

Sadeghi further alienated his audience, upperclassmen and freshmen alike, by blatantly violating rotation rules while they were in effect, too late for any constructive changes in this year's rotation process. He described the specific rating systems of the various houses and then detailed the final pick procedures. Had he waited until after rotation to publish this information, he would not only have avoided violating these rules, but also would have caught the student body after a week of considering the rotation process.

Perhaps the greatest obstacle to communication of his ideas, though, was the inhibiting size of the letter. The topic of rotation was not introduced until after a page of tedious examples of the ritual behavior of upperclassmen compared to the great scientific achievements of Caltech. These two groups of ideas could not and were not contrasted in a parallel, organized fashion. The examples of upperclass behavior cited were not representative of student life, and included a few statements that were clear generalizations. "On occasion," he wrote, "a student is attacked...and 'showered' for what he or she said. A Freshman...can be showered for not answering a ringing telephone." These things do not happen in most of the houses, and in all of the houses it is well known that any student can avoid being showered by simply saying that he does not want to be showered.

A last point about the letter that diminished its credibility was the fact that it was signed by only one author. Sadeghi claims that it was a joint effort, but none of the other authors was willing to sign the work.

What disturbs me most about Sadeghi's letter, though, is that I agree with much of what he is saying. I strongly feel that we need to question our traditions periodically, and that the process of rotation deserves questioning and sustained debate. But Sadeghi's poor strategies in presenting this issue have already engendered negative reactions from much of the student body. He has effectively clouded over an important issue with generalizations, irrelevant comparisons, and bad timing. The way to make long term changes in rotation procedures is not by a revolution, but through rational exposition and sustained debate.

I hope that you will seriously consider the current procedures of rotation, despite Sadeghi's presentation of the issue.

—Ken Whang



photo by Praveen Asthana

A New Option?

Freshman displays his choice.

To Change Rotation

The House system at Caltech is not perfect, neither is Rotation necessarily. It is doubtful that any procedure for human social interaction will ever be deemed 'perfect'. Because of this, such systems should be continually under review. Mr. Sadeghi has stated his views and actually stimulated this review by the distribution of his own "Open Letter to the Freshmen."

Nevertheless, I strongly question his motives and the high ideals he attests to in light of the very non-constructive, even destructive way in which he presents them. Mr. Sadeghi makes sweeping generalizations about the student body and uses the editorial "we" when

really he means "myself and some of my friends." The IHC and MOSH Chris Brennan urged him to delay publication until after Rotation Week, citing:

1) The Freshmen's lack of experience with any of these policies, and therefore inability to draw any logical conclusions about such things;

2) The response of upperclassmen, that, because of his timing, see Mr. Sadeghi as attempting to destroy the system, not improve it;

3) Our inability to change Rotation this year; and

4) The necessity of Rotation Rules and the proper adherence to them.

Mr. Sadeghi apparently decided that the sensationalism

of distributing on Monday of Rotation Week outweighed these arguments, and that his ideas were so important that rational restrictions placed upon our community no longer applied to him.

Intelligent discussion requires not only logical thoughts, but also presentation of those thoughts in a positive, non-destructive manner. This should also include some suggestions of alternatives, which Mr. Sadeghi neglects or does not have the capacity to offer.

The IHC is always, but especially at this time, anxious to hear alternatives and other thoughts about Rotation and the House System. Please make your thoughts known to your house president.

—John Krehbiel
IHC Chairman
x6287, x3772

ASCIT Social Notes

by Dan Schwartz

ASCIT Dir. of Social Activities

I want to welcome all of you transfers and freshmen to Caltech, party mecca of the West. I serve on the ASCIT Board of Directors and chair the Executive Social Committee (ESC), which is composed of the social teams of each House, an on-campus and an off-campus assistant, and a music consultant. All mumbo-jumbo aside, I organize the schoolwide parties and activities at this place!

This term, the ESC will subsidize a blast at Disneyland

or Magic Mountain, and hold a bash with another college, one blessed with a better than 6:1 ratio, and provide a surprise or two. Details next week!

Keep your eyeballs peeled for the ESC music questionnaire, to be published in the *Tech* next week. The poll will help us provide the tunes you need to live.

The ESC wants suggestions and criticism, which may be directed at me at 134 Page House, x6274, or any other ESC member.

Have a great one!

The Caltech Y Fly-by

Does it ever feel like you are only running on half a mind? Cynthia Corngold would like to help you develop your spatial, intuitive, non-verbal and perceptual right hemisphere functions through the medium of art. Relaxing and instructive sessions will be conducted Friday afternoons at the 'Y', 3 to 6 pm starting October 7. No fees, assignments or high-pressure situations—it's all play.

MANY, MANY upcoming 'Y' events. Stay tuned.

For further info call the Y office at 356-6163.

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TONIGHT at 7:30 and 10:00

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THE CALIFORNIA TECH

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No Experience Necessary

A Special Section on Student Activities at Caltech

Chamber Music

The Chamber Music Group aims to bring together students interested in playing in various types of chamber music groups, including woodwind and brass quintets, string quartets, piano trios, etc. The group will meet once a week with professional coaches. For more information, contact William or Delores Bing at 684-8964.

Karate Club

Karate has been practiced at Caltech since 1956, making the Caltech Karate Club the oldest karate club in America. We are privileged to have Mr. Tsutomu Oshima as our instructor. He is also head of Shotokan Karate of America, an organization of which we are a part. The Karate Club regularly participates in Kyu Tests and Special Training. Karate can offer as much a challenge as any course at Caltech and we hope you can join us. Beginning practice is MWF 3-4 and advanced practice is MWF 4-5. Also, club practices are TuTh 4:30-5:30. For more information call Tom Hearn at 356-6974.

Caltech Chinese Student Assn.

The Caltech Chinese Student Association (CCSA) is one of the most active organizations on campus. All Caltech students, including non-Chinese, are welcome to join the association.

The purpose of our organization is to introduce and promote Chinese culture. We also have numerous social and athletic events. Some of the activities planned for '83-84 are a joint picnic with other colleges, a Chinese New Year party, a graduation picnic, basketball tournaments, Chinese movies, Mandarin classes, T-shirt sales, food sales, and much more. All the activities will either be free or subsidized by the CCSA for our members. We also have a mini-Chinese library in the Dabney basement.

If you are interested in joining us, please come to our Welcome Party on Saturday, October 8 at 6:30 pm in Winnett Student Center. The membership fee is \$5.00. We will provide free dinner for new members.

Current officers are: Kenneth Hui, President, 1-53, 578-9755; Eric Pan, VP, 150 S. Chester, #203, 793-6075.

Men's Volleyball Club

The Men's Volleyball Club is an informal club for people wishing to learn and play high quality volleyball. We practice twice a week, play in tournaments and matches, and organize the CIT Sunday morning volleyball tournaments. We are proud to have Sandy Frey as our coach. Starting this year we are forming a JV squad in addition to our varsity group. To join the club we ask that you be interested and be willing to train at the practices; a lot of prior experience is not necessary. No dues are required beyond your own outfitting. We practice Monday evenings 7:30 pm to 9:30 pm and Thursday mornings 8 am to 10 am at the gym. Please contact Byron Siu for further information at x6692, mail code 452-48, or just show up at one of the practices.

Wind Ensemble

Directed by William Bing, the Caltech Wind Ensemble meets once a week, Thursdays from 7 to 9 pm, in Beckman Auditorium. The Wind Ensemble is open to all members of the Caltech community.

Frisbee Club

Meeting Sunday, October 2 at 3:00 on the football field. If you're into Ultimate, golf, DDC, freestyling...come out and meet others. Beginners welcome. If you can't make it or for other info call Joe D.D. or Craig Zupke at 578-9768.

Jazz Band

The Caltech Jazz Band offers members of the Caltech and Pasadena communities the opportunity to play in a "big band" using arrangements of all styles and periods, including compositions by members of the band. Regular attendance is stressed since there is only one player per part. Admission is subject to an audition. The Caltech Jazz Band plays numerous concerts, dances at the Athenaeum, and shows at the New Ice House, and was the winner of the Outstanding Band Award at the 1981 Orange Coast Jazz Festival. Guest soloists with the band have included Bobby Shew, Gary Foster, Joel Dibartelo, Pete Christlieb, and Bill Watrous. For further information, please call William Bing, 684-8964.

Big T

The Big T, Caltech's undergraduate yearbook, is now looking for photographers, writers, layout trolls and also editors. Actually, if you just want to help us, we will be glad to have your help. No experience is needed for any position since on the job training is available.

For more information, and a chance to see your name in print, come to the first Big T meeting on Friday, October 7 at 7:30 at 125 Baxter or contact the 1984 editor, Roger Fong, at x3961.

Tau Beta Pi

Tau Beta Pi is a national engineering honor society. The chapter at Caltech admits members from all options except H&SS. Selection of new members is made each fall. Lifetime dues are \$50.

There will be an officers' meeting on Monday, October 3 at 7:30 pm in 125 Lloyd. All officers and interested members should attend. For more information contact Ted Williams (577-8789), or come by Room 125 Lloyd House.

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The Fantasticks

from page 1

graduate students (Peter Felker as El Gallo and James Garvey as Louisa's father/actor), one Caltech undergraduate (Dean Elzinger as Matt) and two from JPL (Howell Johnson as the Indian, and a surprise). This production has almost become a reunion of the spring musical *Brigadoon* in that all but Susan and Howell participated in that

show.

The show will run at the Winnett Center Lounge. The show will be presented on October 26, 27, 28 and 30; November 2, 3, 4 and 5 at 8:00 pm and on November 6 at 3:00 and 8:00 pm. Tickets will go on sale for \$6.00, and students for \$4.00.

This production will be dif-

ferent from previous shows in that we have contracted a professional choreographer for this show. As a result, we intend to emphasize dancing much more than was done in the New York production of *The Fantasticks*. We also intend to pull some novel "tricks" in the staging and setting of this show which should serve to highlight the intimate and human qualities of this well-loved musical.

Because this play has so

much to communicate on the values of the relationship between parents and children, we wanted to do something special to include as large a section of the Caltech community as possible in this production. As a result, on Saturday, November 12—Parent Day—(the day that the parents of the undergraduates come to visit) we will be giving a benefit performance at 7:00 pm for all parents. The two weeks before this we also plan to encourage

the undergraduates to come by, dedicating the show each night to a different undergraduate house, with seating for members of that house available for \$2.00 on their night. This will enable as many undergraduates and their parents as possible to share with each other the special message which is *The Fantasticks*.

The production of the show has been funded by the Caltech Alumni Office, The Caltech Y, GSC, TACIT, ASCIT, The Master of Student Houses Office, and the Dean's Office.

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Liepmann

from page 1

teachers. His textbook, *Elements of Gasdynamics*, written with Anatol Roshko, Caltech professor of aeronautics, is a widely used and frequently cited classic. Born in Berlin in 1914, Liepmann came to Caltech as an assistant professor in 1939. During World War II, in cooperation with the Douglas and Lockheed Aircraft Corporations, he created the first courses in high-speed aerodynamics ever given in this country. He has been widely active as a consultant to government and industry.

Dr. Liepmann has received many awards for his work—among them, the Ludwig Prandtl Ring, the highest honor of the German Society for Aeronautics and Astronautics, and the Worcester Reed Warner Medal of the American Society of Mechanical Engineers. His most recent awards include the 1978 Monie A. Ferst Award of Sigma Xi, the national scientific society, and the 1979 Michelson-Morley Award of Case Western Reserve University.

He is a member of both the National Academy of Engineering and the National Academy of Sciences, a fellow of the International Academy of Astronautics, and American Academy of Arts and Sciences, and the American Physical Society, and an honorary fellow of the American Institute of Aeronautics and Astronautics.

Theodore von Kármán, as director of GALCIT from 1930 to 1949, and in a variety of advisory positions thereafter, profoundly influenced industry, the military, and international cooperation in engineering, as well as aspects of aeronautical research and engineering education.

Under his leadership, GALCIT became the world's leading academic center for teaching and research in aeronautics, and a magnet for outstanding students. Throughout his career he kept a close relationship between GALCIT and industrial firms, and welcomed the opportunity to work on current practical problems of aviation. His influence was critical in the development of southern California as a center for the commercial aircraft industry.

The Right Stuff

Using both sides of the brain

"Learn to use your whole brain," says Cynthia Corngold. "Put it *all* to use!"

Ms. Corngold, an art therapist, observes that "as a Techer you are great at the verbal, the symbolic, the logical and the analytic functions of the brain's left hemisphere.

"Now learn," she declares, "to use the spatial, intuitive, non-verbal and perceptual right hemisphere."

She will encourage you to do so in a series of Friday afternoon Right Brain Labs she'll be conducting in cooperation with The Caltech Y.

Beginning October 6, the RBL will be found each Friday, from 3 to 6 pm in the Y's workroom upstairs in Winnett. All graduates and undergraduates are welcome.

"For full human functioning," says Cynthia Corngold, "both right and left modes of the brain are necessary.

"That's true for all kinds of creative work, whether it's writing or painting, developing a new theory in physics, or dealing with environmental problems."

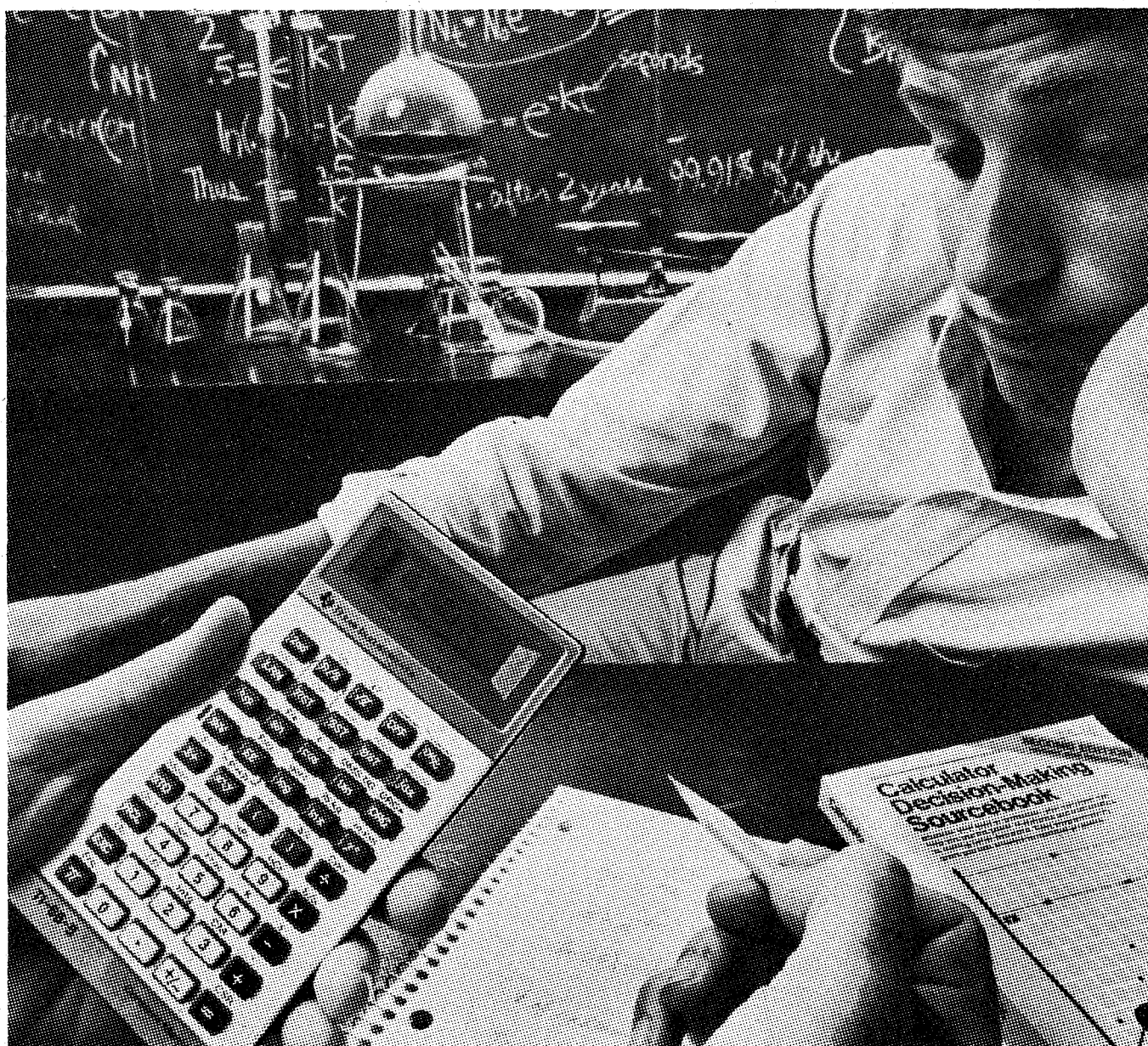
Participants in the Right Brain Labs should come prepared to play—through the medium of art, Ms. Corngold says.

"You need not know how to draw, but you will be able to play with color and space. Better yet, there are no grades and no assignments. It's all play—after a long hard week of classwork."

No fees will be charged, and further information is available by calling the Y office at x6163.

Weekly Sports Calendar

DAY	DATE	TIME	SPORT	OPPONENT	LOCATION
Sat.	10-1	10:00 am	Soccer	Occidental	Occidental
Sat.	10-1	1:30 pm	Football	Los Alamitos Vikings	Caltech
Sat.	10-1	2:00 pm	Women's Volleyball	Clare-Mudd-Scripps JV	Caltech
Sat.	10-1	11:00 am	Cross Country	Westmont	Pepperdine
Sat.	10-1	All Day	Water Polo	Pepperdine Tournament	Pepperdine
Mon.	10-3	4:00 pm	Soccer	Christ College	Christ College
Tue.	10-4	6:00 pm	Women's Volleyball	Redlands JV	Redlands
Wed.	10-5	4:00 pm	Water Polo	Cal State L.A.	Caltech
Wed.	10-5	3:00 pm	Soccer	Pomona-Pitzer	Caltech
Fri.	10-7	6:30 pm	Women's Volleyball	Whittier JV	Whittier
Sat.	10-8	9:30 am	Cross Country	Whittier & Occidental	Claremont
Sat.	10-8	10:00 am	Water Polo	Alumni	Caltech
Sat.	10-8	10:00 am	Soccer	La Verne	Caltech
Sat.	10-8	2:00 pm	Women's Volleyball	L.I.F.E.	Caltech
Sat.	10-8	1:30 pm	Football	Cal Poly Pomona	Cal Poly



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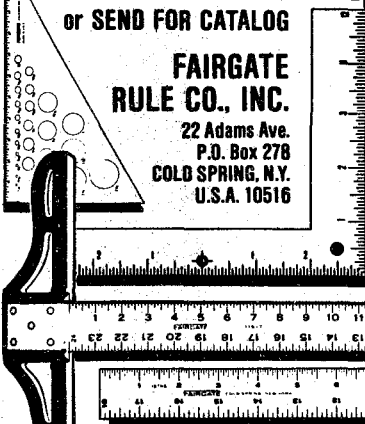
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Activities at Caltech

from page 3

The Caltech Y

The Caltech Y offers its members:

- visiting speakers of fame & accomplishment
- sailing and skiing get-aways
- films & discussions
- local concerts and performances by noted and maybe not-so-noted artists
- interest-free loans
- a book exchange
- Friday noon concerts on the quad
- the chance to decompress a bit during finals
- and even more

Membership is extended to everyone in the Caltech community at no cost!

A twelve-member student committee serves to conduct the programming, and its members are chosen during second term. Everyone's ideas and time are welcomed year-round, no matter what degree of participation!

In short, The Y can introduce you to all sorts of personally enriching, entertaining, educational, relaxing, helpful, and probably just-plain-good things. And, hopefully, The Y and all of its friends can be one of the Caltech opportunities to become a *thoughtful* as well as a *thinking* human being.

Student Space Organization

The Student Space Organization (SSO) is an undergraduate research group developing small payloads for Space Shuttle flight. We have a payload that will fly in May of next year and we would appreciate help from anyone who is interested. We meet on Mondays and Thursdays at 5:00 pm and Saturdays at 2:30 pm in 210 Thomas. For more information, contact:

Connie Bennit
Project Manager
x4766 or 578-9370

Jujitsu Club

The Caltech Jujitsu Club was founded four years ago by Leif Bennett, a now ex-teacher and third degree black belt. Jujitsu, "The Gentle Art," focuses mainly on throws and falls. It relies more upon skill and swiftness for its effectiveness than it does on force, making it suitable for both men and women. The club meets two to three times a week, and participates in several contests a year. New members are always welcome. There will be an organizational meeting next Tuesday, October 4, at 7:30 in the gym. If you are interested come then or contact Dan Briggs (356-6093, #2 Blacker-Dabney Basement), or Kathy Sheedy (255-1373 evenings, or Lloyd House).

Organization of Women at Caltech

The Organization for Women at Caltech (OWC) is a campus-wide group that seeks to ensure that rights, privileges, and status are equally available to women and men at Caltech. We sponsor many programs of interest to women students, including weekend camping trips, films, concerts, and athletics; speakers on women in science, women's issues in politics, career development, self defense, fitness, and many more topics. We co-sponsor many programs with the Caltech Y and the Dean's Office. Meetings and programs provide a way for women to meet and interact with each other at Caltech.

The Organization is partially funded by the Institute. Membership is open to students, staff and faculty of both sexes; dues are \$7.50 per year and entitle you to voting privileges, notices of all meetings and events sponsored by the OWC, and our monthly newsletter, *One to One*. Our fall kick-off meeting, the annual OWC Extravaganza, will be held Wednesday, October 19 in the Braun outdoor auditorium, from 4:30-6:30 pm, and is open to everyone.

For a brochure or more information please write to the Organization for Women at Caltech, mail code 104-6.

Caltech Gamers

The Caltech Gamers act as an organizing and contact point for various forms of role-playing, simulation, miniatures and computer games. The 'regular' meetings are in Clubroom 1 of Winnett Center on Friday and Sunday evenings at 8:00 pm. This is when ongoing campaign and multiplayer games are typically run. The club possesses a moderate collection of simulation board-games—historical, science fiction, etc. for the use of members. No dues, open to everyone. Drop by and learn, play, or just meet other gamers. For more information contact Bill Peterson (211 Booth) or Jennifer Jerlstrom (Dabney House).

Caltech Lesbian and Gay Society

Caltech Lesbian and Gay Society

Caltech Lesbian and Gay Society is an organization devoted to the understanding and acceptance of bisexuals, lesbians and gays in the Caltech-JPL community. Graduates, undergraduates, alumni, faculty and staff are all encouraged to attend, and the meetings are confidential.

This year we will be working on political issues and will have speakers, social events, fund-raising and raps. Meetings will be held on Sundays at 2:00 in 210 Baxter, starting October 9. Come see what it's all about!

For further information, contact Teresa Solberg at x3771 or Josh Susser at x3776.

Theatre Arts

Theater Arts at Caltech (TACIT) is preparing for one of its most exciting seasons ever, with six full-scale productions, ranging from Shakespeare to Shaw, and including an evening of original material by a Caltech graduate student.

Theatre at Caltech has proven highly attractive to students. In addition to the usual glittering fascination of the stage, drama provides an outlet for emotional and artistic creativity, valuable in the intense academic environment of Caltech. Furthermore, the program is open to all members of the Caltech community, so that graduates, undergraduates, staff, JPLers, and Nobel-laureate faculty members can meet as equals in a friendly and informal setting. Working together day after day to achieve artistic perfection (up to the usual Himalayan standards of Caltech), the group develops a marvelous sense of camaraderie which is unequalled in any other activity.

This year's TACIT schedule includes three student-directed shows: Shaw's *Candida* (Oct.), French one-acts by Marivaux and others (Mar.), and *Solstice* and *Sketches*, a pair of original one-acts by student Greg Tomko-Pavia (Nov.). Also in the line-up: *The Fantasticks* (Jones/Schmidt), a musical (Oct.); *Danton's Death*, a play set during the French revolution, by Georg Buchner (Jan.); and Shakespeare's *Much Ado About Nothing* (Apr.)

In addition to TACIT, there is also a Children's Theatre group, which performs for local elementary schools; the Drama Club, a student group which organizes workshops, trips to see professional shows, etc.; and the Caltech Musical. The Caltech Musical has no formal connection with any office; it is completely student-organized, though it usually operates in conjunction with TACIT and the Music program.

For further information, contact the Theater Arts office, x6259.

Caltech Ice Hockey

If the phrase "PUCK YOU" means anything to you, you're just the person the Caltech Ice Hockey Club is looking for. Open to undergrad and grad students, faculty and staff of all ability levels, the club provides a good way to exercise and have fun playing Man's favorite sport, hockey. All equipment is available through Caltech except sticks and skates (which can be rented at the rink). Practice is once a week starting Oct. 5 and league play begins in November. For more information contact George Yates, x4105 (792-8121) or Jim Stoos, x6897 (792-7381).

Folk Music Society

The Caltech Folk Music Society is a small group of people who (1) organize concerts of acoustic music, ranging from feminist to Celtic, (2) publish a monthly newsletter listing concert information for the entire L.A. area and (3) arrange Hootenjamananys— evening get-togethers where we bring in our instruments and swap songs and tunes.

Newsletter subscriptions are \$1 for anyone with an on-campus or JPL address (\$4 for off-campus addresses), and we also have a free post card mailing list for people only interested in information about on-campus events.

If you are interested contact Brian Toby, x4181, or Simon Davies, x4427, or write to the Folk Music Society, c/o GSC, 138-78. We now run the largest college concert program of its type in Southern California, so there is always a need for interested concert staff—no previous experience necessary!

Film Workshop

Are YOU interested in the art of making films? If you are, or if your interests lie in any aspect of movie making, come to the first organizational meeting of the Caltech Film Workshop. This meeting, primarily to elect officers and draw up a charter, will be held at 5:30 pm in the Master of Student Houses' office, on Wednesday, October 5th.

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continued on page 7

No Experience Necessary

Activities at Caltech

Kelpers Scuba Club



from page 6

Discovery and relaxation, the two main ingredients, bind a group of Caltech and JPL "Kelpers". The Kelpers explore the Southern California Bight with dives to Catalina, Santa Barbara, Santa Rosa and other Channel Islands. Aboard sailboats or charter boats the relaxing atmosphere makes for enjoyable times. Bright sunny days often greet this group of underwater explorers.

Explorations don't stop at the surface of the ocean however. Meetings take place at 7:30 pm on the first Thursday of each month in the Benioff Conference Room (258 S. Mudd) accessed by the southeast back staircase. In addition, the club is hosting a "Scuba Open House" on Wednesday, October 5 in the Winnett Student Center lounge at 7:30 pm. This informal gathering is intended to allow you to meet the Kelpers and find out more about club activities. Exhibits will cover underwater photography, dive

gear, underwater game collecting, shell collecting and a continuous show of underwater slides. The next regular meetings will occur on Oct. 6 (the following night) and Nov. 3. There are brief business meetings and an array of interesting speakers. On the lighter side, some previous speakers have discussed year-long stints in the South Pacific, Great Barrier Reef escapades in Australia and diving in the Bahamas and the Virgin Islands complete with slides. However, the majority of speakers address such topics as underwater ecology, open ocean research, fish and crustacean studies and investigation of underwater mammals such as whales. Other topics covered during the year have included such diverse topics as dive gear and parallels between art history and the ways in which people have viewed the ocean over time. On October 6, the featured speaker is Dick Murphy, a marine biologist with

the Cousteau Society who will discuss parallels of our metropolitan life and life in the coral environment in a presentation (with great slides) entitled "The Coral City."

The club is also involved in two other projects, a kelp reforestation project near Pt. Vicente and an annual underwater film festival. The kelp project is a long-standing one, coordinated with the California Department of Fish and Game and a continuation of original work done by Prof. Wheeler North of Caltech. This project is funded by the L.A. Fish and Game Commission so that we can afford monthly or even bi-weekly dives to our current site below the lighthouse near Marineland. These dives started where no kelp was present, only sea urchins, and have now progressed to new areas after a year and a half of effort. A thick canopy of kelp now totally covers the original project area. Successful reforestation brings a multitude of invertebrates, fish and other marine wildlife back to a relatively desolate wasteland of rocks and sea urchins along the Palos Verdes coastline.

The other project, an underwater film festival, is used both to educate and promote interest in the marine environment as well as in diving. This year Stan Waterman will present films taken from around the world in Beckman Auditorium on Saturday, Nov. 5. Waterman is a well-known underwater cinematographer and the show should be spectacular.

Finally, Caltech provides SCUBA instruction through the athletic department. Other dive classes (basic through advanced) as well as CPR classes are available through the club. Dues for the club are \$6.00 per year which includes a subscription to the Kelpers' newsletter. Basically, the Kelpers are interested in discovering and relaxing, like most everyone, so if you're interested, please join us at one of the next regular meetings on Oct. 6 and Nov. 3 or at the Open House on Oct. 5. If you are interested in joining the club but cannot attend any of these meetings, contact Vann Parker (president) at x6066.

DEAR STUDENTS OF CALIFORNIA-INSTITUTE OF TECHNOLOGY

Peace be with you.

Perhaps most of you seeing this notice will already be familiar with Pasadena and may already have a church where you feel at home. If so, well and good. A number of you are new to the area and might like to find a church. We invite you to visit with us.

On Sunday, October 2, at 8:00 AM, we are having a Get Acquainted Breakfast (rolls, juice, and coffee). Please be our guest for breakfast. This will be an opportunity to meet with some of the members of this church and to find out a little about it. After the breakfast, you can go with people you will already know to one of the various adult classes that meet at 9:00 AM. Then, we hope, you will join us for worship at 10:00 AM. If the morning hours don't work for you, or for that matter even if they do, we invite you also to join us for worship at 7:00 PM for our more formal evening service.

Please feel free to join us in worship and fellowship a couple of times soon.

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announcements

Consciousness Raising

The Organization for Women at Caltech is coordinating a Consciousness Raising (CR) group to meet weekly for two hours in the evening beginning October 12, 7:30-9:30 pm. The dates and times for the remaining nine meetings can be arranged by the group.

During the meetings the women in the group share their own experiences related to the topic of the evening. The topics will include health care, family, religion, sexuality, and violence against women. To provide topics and questions, to lead the discussion, and to "wrap-up" what is said, Betty Jetter will act as facilitator. She has been doing CR sessions for 10 years. Last year the OWC Ex-Com participated in one of her CRs—it was outstanding.

By sharing our experiences we come to see the commonality as well as the diversity of our lives as women. After the ten sessions each of us had a new perspective or consciousness as a woman, and had a closeness to the CR group members who have provided a safe place to talk about some very powerful, emotional parts of our lives.

The group size is limited to 12. Please SIGN UP at The Y Office, upstairs in Winnett Center, by October 5. If more than 12 sign up, a drawing will be held to determine who can participate. Preference will be given to OWC members.

—Julie Kornfeld

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Humanities Grants

The National Endowment for the Humanities has announced a new grants program for individuals under 21 to carry out their own non-credit humanities research projects during the summer of 1984. The Younger Scholars Program will award up to 100 grants nationally for outstanding research and writing projects in such fields as history, philosophy and the study of literature. These projects will be carried out during the summer of 1984. The application deadline is November 15, 1983.

Award recipients will be expected to work full-time for nine weeks during the summer, researching and writing a humanities paper under the close supervision of a humanities scholar. Please note that this is not a financial aid program, and no academic credit should be sought for the projects.

A booklet of guidelines and application instructions should be available for photocopying at the Student Placement Office, or write to: Younger Scholars Guidelines, Room 426, The National Endowment for the Humanities, Washington, D.C. 20506.

Fellowships

The NSF Graduate Fellowships and the Hertz Foundation Fellowships are in the Career Development Center, Room 8 Parsons-Gates, x6361. Be sure and go in soon as they go fast.

Attention Seniors

The following graduate schools will be on campus to interview prospective students. Come by the Career Development Center, Room 8 Parsons-Gates, x6361 for further information.

10-3—Rice University, Graduate School of Administration.

10-10—Texas A&M, Graduate School of Business.

10-11—Columbia University, Graduate School of Business.

10-12—New York University, Graduate School of Business.

11-10—Harvard University, School of Law.

Musicians Needed

The world's longest running musical (*The Fantasticks*) will be produced by Theater Arts at Caltech on October 26, 27, 28 & 30, November 2, 3, 4, 5 & 12. We are currently looking for a percussionist and a string bass player to complete the orchestra. We are also looking for any & all help on and off the stage (no previous experience required or necessary!). If you are interested in getting involved with the show, contact Don Caldwell at x6197, x6353, or James Garvey at x6510.

TQFRs are out

If you don't have a copy of the TQFR yet, be sure you get one. They are available in both the undergraduate and the graduate Dean's offices and also in room 229 Lloyd.

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Putnam Exams

It is time to sign up to take the exam for the 1983 inter-collegiate Putnam Mathematical Competition. Sign up sheets are on bulletin boards in the Math Department and in your house. Any Caltech undergraduate is eligible but you must sign up on one of these sheets before October 7. The exam itself takes place on Saturday, December 3, 1983. There is a morning and afternoon session; each lasts three hours. A copy of last year's exam without solutions and a copy of the 1981 exam with solutions are available in the Mathematics Office, 253 Sloan.

Last year our team won third place behind Harvard and the University of Waterloo. Our team members were Bradley Brock, Scott Johnson, and Zinovy Reichstein. Brock, Johnston and Charles Cuny received individual Honorable Mention. A total of 85 Techers took the exam. Don't be left out of the fun this year! Sign up today and save the date, Saturday, December 3, 1983.

The Tech

PA15, the Tech staff meeting and journalism class, will meet today at 12:15 in 128 Baxter. Please come if you have any lurking interests in writing, editing, photography, newspaper layout, graphic arts, or anything else remotely related to newspaper production.

Absolutely no experience is necessary.

Bag lunches will be provided.

Caltech Jewish Community Hillel

Tuesday...October 4 "Open House" 4:30—6:00 PM
Red Door Cafe—2nd floor Winnett. Wine and Cheese
Undergrads/Grads/Faculty/Staff ALL WELCOME!!!

Friday...October 7 Shabbat service/Potluck dinner
7:00 PM in Winnett, Lounge. Bring something for a
vegetarian dinner.

Saturday...October 8 Jewish Graduate Student Assoc.
Reception—Dessert. At home of Brian Toby.

Sunday...October 9 Soviet Jewry Letter Writing
Brunch—11 AM. Winnett Lounge. Help save the
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