



The Dave Brubeck Quartet, appearing tonight in Beckman Auditorium. From left to right: Dave Brubeck, piano; Paul Desmond, alto sax; Joe Morello, drums; and Gene Wright, bass.

KNX's Cordic MC

Brubeck Quartet to Entertain at Beckman

Dave Brubeck, internationally acclaimed as one of the world's foremost jazz personalities, and world's top record seller in this area, will bring the Dave Brubeck Quartet to the stage of Beckman Auditorium on Thursday, March 2 at 8:30 p.m., to present a jazz concert in the inimitable Brubeck manner. Rege Cordic, popular KNX disc jockey, will be the show's MC.

Cover boy

Dave Brubeck is the symbol of progressive jazz in the minds of people all over the western world. When he had the rare honor of having his picture on the cover of *Time Magazine*, it was apparent that Dave Brubeck had emerged as one of the few jazz men of any era to capture world-wide recognition. His history-making world travels, under the auspices of the United States State Department, have carried the message of jazz to the far corners of the world as a thing of art and beauty, bridging lingual, cultural and racial differences, and creating real communication among peoples of different cultures. His work abroad has been acclaimed among the most successful of all U.S. State Department Cultural Exchange Tours.

Award winner

Winning national and international awards in recognition of their outstanding contributions to jazz is a common event for Dave Brubeck and his Quartet, who have won at one time or another virtually every poll and award in jazz.

Brubeck, a native Californian, began improvising piano themes of his own at age five. By age

thirteen, he had had contact with jazz and was causing a sensation with local dance bands. Brubeck continued his music studies through college and after serving in the armed forces during W.W. II, he returned to California to resume composition studies. He soon organized an experimental jazz group known as "The 8."

It didn't take long for Paul Speegle (then NBC Program Director and now a prominent San Francisco newspaper columnist) to hear of him. There was to be a revolution in modern jazz with the discovery of Dave Brubeck.

The rest is jazz history. Brubeck is now and has been for some years, one of the most sought-after personalities in the jazz world, and the Dave Brubeck Quartet has become recognized as the outstanding jazz combination in the history of jazz.

At last word tickets were still available, so don't miss it, that's tonight at 8:30, in Beckman Auditorium. You can check on tickets at 793-7043, but expect a mob scene at the gate. See you there.

Censors Rampant; "Free Press" Not "Classy Paper"

The *Los Angeles Free Press* is being denied permission to place a newspaper stand on the Caltech campus. Irvan O'Connell, an independent distributor for the *Free Press*, approached Kermit A. Jacobson, Caltech's Director of Procurement and Auxiliary Services, late last year in order to ask permission for such a stand. Jacobson did not give an answer directly; after a few weeks he asked for samples of the paper, then early this month came through with the answer, which was negative.

Mr. Critic himself

The reasons he gave to O'Connell and to the *California Tech* were that only "first class papers," such as the *Wall Street Journal*, the *Los Angeles Times*, and the *Pasadena Star-News*, are allowed on campus. Jacobson said he had drawn the line at the *Free Press* because a line had to be drawn somewhere. He also claimed that the space in front of Chandler Dining Hall was already too crowded with newspaper stands.

Keep students innocent

Jacobson said he had consulted with several people, including Dr. Lee A. DuBridge, about the matter and that the decision not to allow this newspaper stand was reached in accordance with the objectives and policies of the Institute. He was certainly not trying to shield the students from the *Free Press*; as a matter of fact he did not think that there would be much student interest in the matter. When asked, Jacobson commented that he would be glad to reconsider the question if he received evidence of substantial concern on the part of the students.

The *Free Press* is now being widely distributed to all the college campuses in the Los Angeles area. Coincidentally, the only other campus where they have had difficulty placing a stand was another technical school, Cal Poly at Pomona.

Student Houses Elect New Officers; Despotism Reigns

The time of year has come when house members are accosted by "good friends" they never even knew were living on campus, when bull sessions turn, momentarily at least, away from the Eternal Subject to discuss whether Zola Snidefitch would make a good House Raunchmaster; Teckers' minds turn to thoughts of POWER. The Student Houses are having elections again.

At this writing, all the houses except Blacker had finished their elections, and doors were being emblazoned with new titles with alacrity of a Pentagon office. Blacker's results will be in on Friday.

Sneaky Sophs

In Page, a *coup d'etat* brought five sophomores and six frosh onto the excomm, only one excomm office, Treasurer, being held by a junior, Greg Thompson. Rob Drew is president, Gene Smith is vice president, and secretary, Neil Holmes. Social Chairman are Don Curry, Chris Cunningham, and Pete Wilzbach; Athletic Managers are Ron Gregg, Bruce Ault, and Scott Eliot; and the new library was turned over to two frosh, Jim Garrels and Don Engleman.

Lloyd house elected Norm Whitely President, Gary Berman Vice President, Bob Vance Secretary, and Jim Woodhead Treasurer. Social Chairmen are Joe Devinney, Rich Thornberry, and Phil Erwin; Athletic Managers are Martin Frost, John Williams, Mike Girard, and Arunas Barkus. Bruce Steinke became the new comptroller, Richard Crandall is House Rep-at-Large, and Glenn Prestwich is the new House Librarian. Whitely is looking forward to his first official duty, escorting the Playmate to dinner.

Supervision?

Under the supervision of a senior Election committee dressed as Red Guards, Ruddock elected Erno Daniel President, Ed Seguin Veep, Larry Hunt Secretary, and Bert Roffman Treasurer. Bill Butterworth and John Bol-

land became Athletic Managers, and the new Social Chairmen are Dennis Bocekay, Roger Chevalier, and Jim Merable. Bill Nichols is the new librarian. Ruddock recognized outstanding ability in their chosen fields by electing House Master Waiter Les Fettig, and House Master Debater, Gary Cable.

D.E.I.

Dabney's new excomm consists of Ray Ellis, John Lehman, John Dancz, and Bob Mitze, respectively President, V.P., Secretary, and Treasurer; John Bennett, Mark Johnson, Dave Kuehn, and Phil Samson, Social Chairmen; and Steve Johnson and Craig Tyner, Athletic Managers.

(Continued on page 3)

Bradbury Speaks Before Freshman Dinner Forum

Ray Bradbury, one of the best-known writers of science fiction in the United States, spoke on "Creativity and the Scientist" at last Friday's Freshman Dinner Forum. He ranged far afield from his topic, throwing many of his own interesting ideas before the



audience, such as printing a story on a Playboy fold-out.

The stories came

He began by describing himself as a moralist writing cau-

tionary fables about the interaction between man and machine. He writes spontaneously, beginning with an idea and gradually working out a story as he progresses. To do this he stuffs his mind with large quantities of information.

Bradbury pointed out that no intellectual magazine predicted the coming of the space age. The only mass media magazine to attempt this, *Collier's*, received an adverse reaction to its articles. Most of the speculation was in scientific and science fiction magazines. This is one example of how "science-fictional" the major aspects of our life are today.

Keep the bomb!?

Another example of this is the hydrogen bomb, which Bradbury feels is the "greatest peace provoking device of our times." It provokes peace because no one dares use it, thus preventing full scale wars.

Feelings came to the surface intellectually for Bradbury, who makes all his decisions emo-

(Continued on page 3)

Notices

GO TO EUROPE THIS SUMMER

Thousands of jobs, paying up to \$400 a month, are available for American students throughout Europe. Find out more about this American Student Information Service program in the *Tech* office.

THE POWER OF THE HOLY SPIRIT

will be the topic of Reverend Charles Hardin, president of the United Evangelical Churches, at the Caltech Christian Fellowship meeting at 5 p.m. on Thursday, March 2, in Winnett Clubroom No. 2. Dinners may be transferred through Chandler Dining Hall.

GREENSTEIN TO SPEAK AT FROSH FORUM

Jesse Greenstein, professor of astronomy, will talk on the subject "Astronomy and Values" tomorrow evening at Chandler. Students may transfer their meals to the Greasy or come to the meeting at 6:30. All students are welcome.

ATTENTION, SENIORS!

The "Class Dues" that appeared mysteriously on your last student account statements are really your senior picture fees. You have not been robbed.

All those who have ideas about a possible Class Gift or are interested in being on a Class Gift Committee, please contact George Sharman, 110 Page.

WIN BIG IN STORY CONTEST

Over \$6,000 in prizes are offered by *Story Magazine* for winners in short fiction, poetry, drama, biography, essays, journalism, movies, TV scripts, photo-essays, and cartoons. Details about the contest are available in the *Tech* office.

THE NEXT NINETY YEARS AT CALTECH

will be the subject of a special lecture given by Weir, Bonner, Harrison, and Brown in Beckman, 9:00 p.m., March 7-8, and presented by the Industrial Associates Office.

Editorial

Try Honesty for Polls

Polls, polls, polls. What would life here be without them? Right now the Educational Policies Committee is asking us about courses and instructors, Dr. Eells wants to know about drug usage, and the Interhouse Committee seeks opinions on Rotation. One tends to look scornfully at questionnaires and IBM cards after a week of this fact-finding.

Unfortunately, unless someone thinks of a more comprehensive and less tiresome way of giving accurate and complete information that can be tabulated and analyzed, these aggravating polls will always be with us. Did we say accurate and complete? Pardon us for this wholly unwarranted generalization. The student body is doing a good job of showing that well-constructed polls which infringe on its time or might result in damnable facts coming to light ought to be ruined.

The EPC spent many weeks preparing a survey of courses and instructors in the hope of improving the climate of the most important thing that exists at Caltech, the educational process. Preliminary returns of this poll have been extremely light; should this trend continue, a small sample space will result. Thus the poll will have been entirely worthless, especially since the bias involved in not completing the questionnaire correlates well with dissatisfaction over certain aspects of the educational process. You should recognize that complaining to the EPC about a particular course is far less effective than having the entire class give it poor ratings on an authoritative poll.

Dr. Eells's survey on marijuana and LSD usage is intended to produce the answer to the questions raised in a previous issue of the *Tech*. A provision also existed for those who had scruples about participating. In spite of this safeguard, though, this poll will be inaccurate. Reliable sources of independent information confirm the rumor that undergraduates are wrecking the poll by giving false information. They fear being busted by the police. Much more significant is the fear that the percentage of users might, in fact, be quite high. Should this contention prove true, then, the cheating students say, the undergraduate student body will end up with a poor name. Frankly, these students are afraid of the truth.

But we argue that if you really want marijuana usage to become legal, you must assert the fact that even the more intelligent members of society use that hallucinogen. And by asserting this fact as a group, you have the added security that in unity there is strength.

—Les Fishbone
Kirk Benson

Towering Eyeful

by Hunk

Last week at the Pasadena Art Museum, I got into an argument with a man who claimed that there were no good artists any more. He said we should go back to the "Old Masters" and have Reagan shut down all the modern art museums. What he was mainly complaining about was the present retrospective exhibition of works by Paul Klee, one of the greatest of twentieth-century artists.

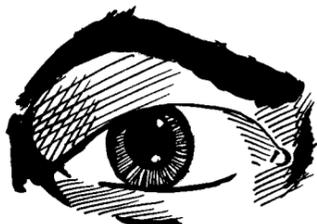
It is true that at first glance many of Klee's works seem childishly simple and naive. But it doesn't take long for the discerning viewer to notice the genius in his paintings. Through the use of line and color Klee represented a fantastic, somewhat dreamlike view of the world around him.

Lost in translation

Klee had a sense of humor which is illustrated mainly by the titles of his pieces, many of which are puns and wry comments on the pictures. (Unfortunately, the puns are lost in translation.) Two typical titles are "Swamp Water-sprite" and "Dumb Devil." You can imagine the pictures that go with the titles, or you can go see them at the museum.

* * *

For people who thought the student films shown at Culbertson were experimental and avant-garde, now is an excellent



opportunity to bring them back to reality. The "Anger Magick Lantern Cycle," a showing of real experimental movies by Kenneth Anger, is now taking place at the Cinematheque 16 at 8816½ Sunset, on the Strip.

Anger, recently featured in *Time*, *Newsweek*, and the *New York Times*, is one of the leading "underground" film-makers of the past decade. The feature of the show, the film for which he is best known, is *Scorpio Rising*, a movie about a motorcycle gang which shows it the way it is. It is realistic, funny, gross, and, in a perverted way, beautiful. Other films being shown are *Inauguration of the Pleasure Dome*, subtitled "Lord Shiva's Dream" (the sacred mushroom version), *Eaux D'Artifice*, *Fireworks*, and a preview of the yet-to-be-completed *Kustom Kar Kommandos*. *Pleasure Dome*, made before Timothy Leary became so popular, is a real psychedelic movie showing, more or less, a combination of a peyote costume party and a black mass. *Eaux* is the most beautiful of Anger's works. It is a dance of the water of the Tivoli Gardens of Italy to the music of Vivaldi.

The whole show is a unique experience quite unlike ordinary Hollywood-type movies. Here is your chance to see what is going on in the forefront of film-making.

Vinograd Speaks Lucidly About Viruses and DNA

"The Rings of DNA" were the subject of last Monday night's lecture given by Dr. Jerome Vinograd, professor of chemistry and physics. The first part of the rather disjointed lecture entailed another review of the basic nature of DNA and how it operates as genetic material. The rest of the lecture explored the nature of DNA rings, and the experimental methods used to obtain information about them.

For two reasons, much current research is being concentrated on viruses. The medical reason is that viruses are responsible for many diseases. The second is that the structure of DNA is much simpler and much easier to deal with. The length of the DNA strand in polyoma, the virus used by Dr. Vinograd, is 1.5 microns, as compared to 2 mm. in coli bacteria and one meter in a human cell. In addition, the DNA in this virus forms a complete loop. This is pleasing to the experimenter since DNA is very fragile; if the loops are still intact after

the DNA is separated from the virus, the molecule probably has not been damaged.

The two research methods discussed both use an ultracentrifuge. The first is the determination of the rate of fall of a molecule through a fluid. This measures the resistance of the molecule to motion through the fluid which in turn gives some hints about the structure of various forms of the some molecule. The second method uses a solution of a salt such as cesium chloride which forms a uniform density gradient after a few hours in the centrifuge. This can be used to measure density and separate substances of different density. This method has been used to separate the loop DNA in the mitochondria of malignant human cell from the non-looped DNA in the nucleus. When this was done, some extremely small loops of unknown origin were discovered.

Tweedie Draws Large Crowd to Drug Lecture

"Who's Afraid of Narcotics" was the subject of a lecture given by Dr. Donald Tweedie, a clinical psychologist, at the weekly lecture-discussion sponsored by the Caltech Christian Fellowship. The purpose was to acquaint Caltech students with the variety of drugs currently in use and their respective effects.

Tweedie classified psychotropic (conscious-modifying) drugs in four categories. True narcotics act as depressants restricting consciousness to a state approaching sleep, or hypnosis. They are used primarily to reduce both physical and psychic pain. Drugs in this class range from mild barbiturates occasionally producing psychological dependence to the most powerfully addictive—heroin. Alcohol lies between these extremes.

With an effect opposite to that of narcotics are the mood elevators. Although their biological mechanism is not yet understood, these drugs have become increasingly popular.

Status symbols

In order to reduce anxiety without the sedative effects of true narcotics, tranquilizers have been developed. They formerly had a tremendous impact upon treatment for the mentally disturbed. Now, among certain groups, they have become a sort of status symbol.

In the fourth classification are the experimental psychedelic drugs that increase and distort conscious processes and cause hallucinations. LSD, currently the most popular drug in this class, is the most potent.

Curiosity killed . . .

Tweedie showed that intent is a primary factor in determining one's attitude toward drugs. A drug of use medicinally to counter physical or emotional illness may be harmful if taken merely out of curiosity. Furthermore, one must consider the legal implications involved in using a drug prohibited by law.

His lecture was filled with references to sociology and anthropology to clarify the uses of and attitudes toward drugs in other cultures and in other ages.

California Tech

Published weekly during the school year except during holidays and exams by the Associated Students of the California Institute of Technology.

Editors: Kirk Benson and Les Fishbone, Editors-in-chief; Mike Heneray, Features; Jim Cook, Managing; Vincent Johns, Copy; Charles Creasy, Sports; Glenn Engebretsen, Photography.

Staff: Peter Balint, Dave Lewin, Dan Villani, Terry Reedy, Len Doberene, Bill Atwood, Tim Hendrickson, Roger Goodman, Jon Haviland, Jeff Hecht, Jim Downum, Bill Fleissner, Rick Sinclair.

Business: Bob Berry, Manager; Kim Gleason, John Walters, Circulation Managers.

California Tech, Publication Offices: 1201 E. California Blvd., Pasadena, California, 91109. Second-class postage paid at Pasadena, California. Represented nationally by National Educational Advertising Services, Inc. Subscriptions: \$1.50 per term, \$4.00 per year. Life subscription: \$100.00. Printed by Bickley Printing Co., 25 South Fair Oaks Ave., Pasadena, Calif. Volume LXVIII, Number 20, Thursday, March 2, 1967.



to buy slacks . . .
you have to SEE slacks

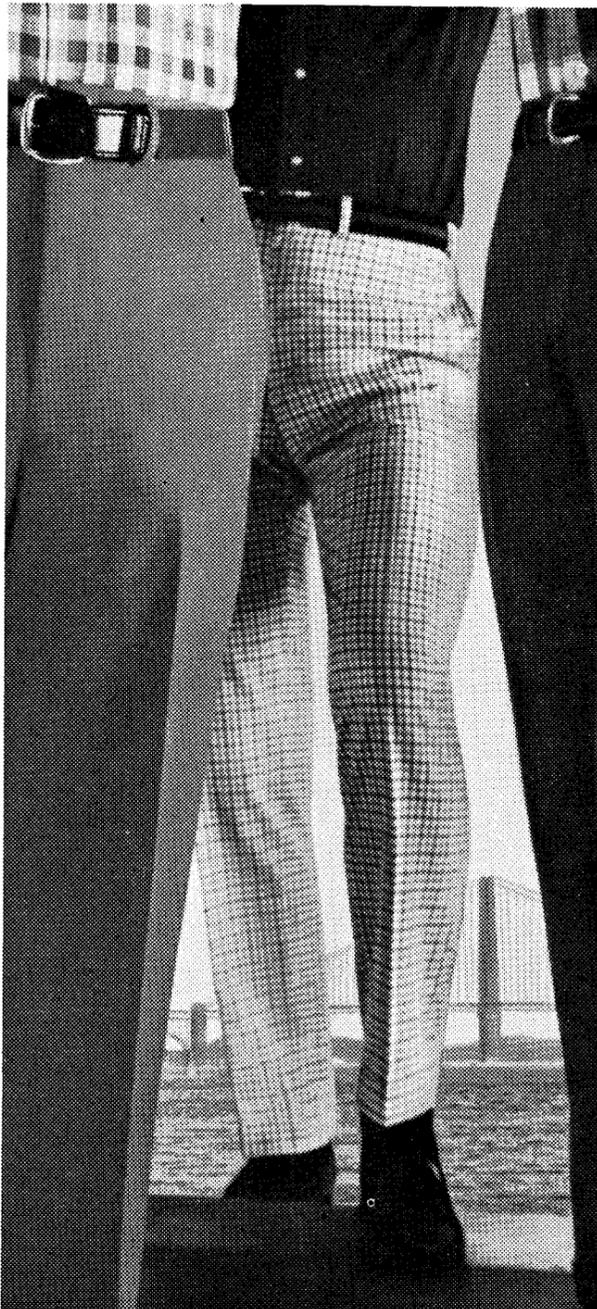
So here's a sweeping San Francisco scene — of spectacular Cambridge Classics. Classic Ivy Styling in the magnificently casual San Francisco manner. Wide range of rich, action colors and patterns. *Never need pressing.* (About \$10.) Ask your favorite store or write for name of store nearest you.



cambridge classics

CACTUS CASUALS

BOX 2468, SOUTH SAN FRANCISCO, CALIFORNIA 94080



Literary Magazine Seeks Non-Student Subscriptions

by Dick Rubinstein

Totem is back to stay at Caltech. The response to requests for material for the March issue was good—over seventy different pieces were received. **Totem** will be available tomorrow, but we need your support to publish further issues.

Beginning third term, **Totem** will publish twice per term. We feel that by publishing more often, more students will be giving the opportunity to express themselves through creative writing. We know there is enough ability at Caltech to provide **Totem** with material to publish regularly and frequently. To do this, however, we must have

the full support of the student body. **Totem** is beginning a policy of continuously soliciting material. We need poetry, short stories, essays related to any of the humanities, humor, pictures and drawings—anything creative. And we need it now.

We ask a favor: To be able to afford to publish more and better **Totems**, it is necessary that we sell subscriptions to as many non-ASCIT members as possible. We request that you help us by inviting your parents to subscribe (using the form provided). It's a small favor to ask, but it will help to provide Caltech with a good, regular literary magazine.

"Totem": An Imaginative Job

by Dr. William R. Cozart

Campus literary magazines often offer a good index to the questions and concerns of contemporary culture in general. The forthcoming issue of Caltech's student literary journal, **Totem**, is no exception.

The March issue, edited by Dick Rubenstein, is a rich sampling of poetry, photography, and prose by more than a dozen contributors. After a couple of readings of the entire issue, one is reminded of a line from the American poet Wallace Stevens: "Today the mind is not part of the weather."

Imagination

For the entire anthology is about the life of the imagination: the dilemma the mind faces in constructing its hypothetical

models of reality which often conflict with the givenness of the external world. Almost all of the poems (and there are 14 of them) deal with this problem. And the most extraordinary piece in the issue—"Many Words" by Dan Nemzer—is a chilling and fascinating story about an obsolete Caltech computer which insists upon adhering to a humanistic model of man in the face of newer computers which are programmed with more "advanced" models.

The contributors, their editor, and faculty advisor John Zeigel of the English Department are to be congratulated on an issue of high quality and provocative interest. Their achievement is worthy of the attention of the entire campus community

They Came, Looked, and Conquered

(Continued from page 1)

The Flems' new leaders are President Dick Wright, Vice President Martin Dowd, Treasurer Frank Johnson, Social Chairmen Tom Baze, Bill Bradley, and Les King, Secretary Ken Yano, Librarian Bob Brackenbury, and Athletic Managers Jim Stanley, Richard Burton, and Lonnie Martin. Their BOC representative is Sidney Harmon.

Last but not least

Final results of the Ricketts election are: Craig Nelson, President; Curt Frank, Veep; Alan Beagle, Secretary; and Mike Beaver, Treasurer. Four votes had to be taken before resolving the hotly contested office of President. Social Chairmen are: Don Lowe, Rusty Keys, Rick Lohman, and Bill Long; Athletic Managers: are Chris Henry, Jon Okada, and Bob Tarjan.

He Outscored Dr. Tweedie

(Continued from page 1)

tionally. For example, he knows a good play when he feels jealous of the author. Emotions are based on the data a person has accumulated during his lifetime and reflect his inner tensions. If these tensions are not released, insanity can result. One of the evils of our society is disapproval of such release.

Existentialist

All that a person leaves behind is his work. An individual should investigate many possible jobs thoroughly until he finds something that is exciting to him, then do this. Bradbury feels that his writing fills this qualification. In closing, he wished that all present could find a search involving great emotion.

Two Locations



at the ICE HOUSE (S)

<p>GLENDALE 234 S. Brand Reservations Phone 245-5043</p> <p>THE NITTY GRITTY DIRT BAND With a new hit: "Buy For Me The Rain" LEE MALLORY And his hit single: "Take My Hand"</p>	<p>PASADENA 24 N. Mentor Reservations Phone MU 1-9942</p> <p>BUD DASHIELL BILL MORRISON RUSTY STEGALL With a new c/w hit: "Mornintown Ride"</p>
---	--

FOLK MUSIC and COMEDY
Twice the Music
Double the Fun

TOTEM SUBSCRIPTION FORM

Please enter the following subscription:

NAME

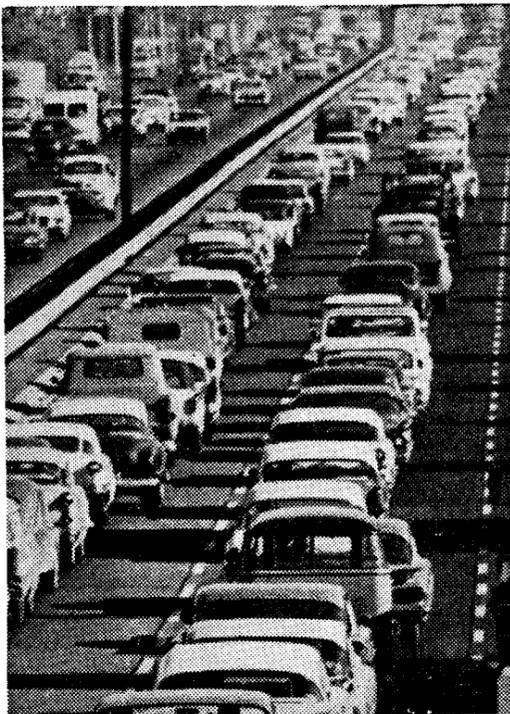
ADDRESS

CITY ZIP

6 Issues (1 year)\$2.
12 Issues (2 years)\$4.

Also please send me the following back issues at 25c each:
.....March 1966June 1966
.....I enclose payment.Please bill me.

Mail to: Totem Subscriptions, Caltech,
Pasadena, California 91109



Engineering is a social science

Society is on the move. At least you think so until you try to get somewhere. Then you find that everything is tied up into knots.

To get where we want to go, we'll have to look to technology to provide new means of mass transportation.

Right now, McDonnell is taking several steps in what ultimately may prove to be the right direction. With their knowledge of systems, human factors, aerodynamic design and metals fabrication, McDonnell engineers are in a unique position to plan and develop the urban transportation systems of the future.

It's a two way street. Which way are you headed?

Build a better future for your country and yourself at McDonnell.

MCDONNELL

Box 516, St. Louis, Missouri 63166

A Plans For Progress And An Equal Opportunity Employer

We cordially invite
California Tech
students and faculty
members to bank with us.

Complete banking services
including:

- Automobile Financing
- Bank-By-Mail
- Certificate of Deposit
- Checking Accounts
(Bookkeeping by electronic automation)
- Collateral Loans
- Drive-In Banking
- Escrows
- Foreign Banking
- Letters of Credit
- Home Modernization Loans
- Life Insurance Loans
- Money Orders
- Night Depository
- Personal Loans
- Real Estate Loans
- Safe Deposit Boxes
- Savings Accounts
- Travelers Checks
- Trust Services
- U. S. Bonds

Auto Banking Center at Colorado and Catalina Office, 1010 East Colorado and Citizens Commercial Trust & Savings Bank of Pasadena, hours: 9 to 4:30 daily; 9 to 6 Fridays

PASADENA
Head Office: Colorado and Marengo
Colorado and Catalina Office: 1010 E. Colorado
LA CANADA
La Canada Office: Foothill and Beulah

Citizens
Commercial Trust
& Savings Bank
of Pasadena

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION
MEMBER FEDERAL RESERVE SYSTEM

Affairs Look Blacker For Interhouse Sing

by Rick Sinclair

The annual Interhouse Sing will be held this Saturday evening, March 4, and once again it looks like a Blacker day for the other six houses. The "Glee Club" House seems a runaway to take the choral competition, and thus retain the trophy it has held for the past three years. Blacker is even fielding two out of the three quartets being entered! Although only one will be counted in the competition; that of Ben Cooper, Greg Bourque, Marshall Schor, and Bob Miller; Terry Brun's Ruddock four will have a stiff fight to keep the quartet title they won last year.

Do blonds have . . . ?

Ruddock's chorus of 26, though it has only two Glee Club members, is one of the better groups around. "Black is the Color of My True Love's Hair" is among the Ruddock entries.

The Blacker men have 17 (count 'em!) Glee Club members out of a force of 32 singers, led by Dan Nemzer, the Music Man of Tech. They plan to sing "Cantate Domino," plus two humorous songs.

Ricketts, also a bastion of Glee Club men, will rival the Ruds for second place with 30 voices led by Peter Bloomfield (off campus) and Walt Jaffe. Their presentations will include the hearty round, "Come Sing This Round with Me."

Fun for all

Bass Jon Romney is leading 25 Page singers in "Swansea Town," an English sea chanty, and the hymn "Sine Nomine." Page's is attitude to let the judges hang and just "have fun" putting forth their musical best, since its chances for victory are slim.

Dabney enters the Sing with great spirit: one third of the house will take part. Stacy Langton and John Bennett lead the Darbs; despite their lack of tenors the men of Dabney are confident of a fine showing.

Shame!

Apathetic (or maybe just a-musical) Fleming and Lloyd will not sing this year, perhaps because of the absence of Glee Club impetus in the Houses.

The accompanists in the Sing can be rated roughly according to their house's musical ability. Blacker has the incomparable Dave Erlich at the piano, while

Ricketts counters with Peter Rumsey, incomparable in his own right. Dabney boasts Ray Ellis at the keys, and Ruddock has Doug Reese playing. Ruddock will also present unusual guitar and accordion accompanists, Harvey Butcher and Pete Bendix respectively.

A showboat

Altogether the Sing promises to be an attractive (if not fully professional) musical showcase, as well as a lot of fun for all the participants and listeners.

WANTED

Free-lance translators and technical editors for all languages. Scientists only. Excellent pay. P.O. Box 162, Montrose, California.

STUDENTS, if you need **HELP** in fulfilling your language requirement- inquire about tutoring services at **BERLITZ,**

THE LANGUAGE CENTER
170 South Lake Ave.
Pasadena
SY 5-5888

DOW CHEMICAL

Interviewing March 6 & 7

ENGINEERS
CHEMISTS
TECHNICAL SALES
BUSINESS MAJORS
AND OTHERS

Locations throughout the United States
For information contact your Placement Office

— an equal opportunity employer —

MAR. 7-19

DOUG WESTON'S
Troubadour
9081 SANTA MONICA BLVD.

ODETTA
ONE OF AMERICA'S
GREATEST FOLKSINGERS
PLUS
ROBERT JASON

MAR 21-26 — GLENN YARBROUGH

Did you like beer the first time you tasted it?



A lot of people say no. They say beer is one of those good things you *cultivate* a taste for . . . like olives, or scotch, or kumquats.

Maybe. But we think it makes a difference *which* brand of beer we're talking about.

We think Budweiser is an exception to this "you've gotta get used to it" rule. It's so *smooth*. (You see, no other beer is Beechwood Aged; it's a costly way to brew beer, and it takes more time. But it works.)

So whether you're one of the few who has never tried beer, or a beer drinker who suddenly feels the urge to find out why so many people enjoy Budweiser, we think you'll like it.

From the very first taste.

Budweiser

KING OF BEERS • ANHEUSER-BUSCH, INC. • ST. LOUIS
NEWARK • LOS ANGELES • TAMPA • HOUSTON

FREEDOM!

What is it?
How is it attained?
Do we have it today?

No other concept than Freedom has been so earnestly sought, but, tragically, so totally misunderstood. Yet it is solely the understanding of this concept that will permit life on earth to advance past this present age.

It is with this motivation that we invite you to a study in depth into the concept of Freedom, its roots and its fantastic potential for Man if ever fully applied.

The first meeting will be Thursday, March 9, 7:30 P.M.; guest fee is one dollar.

Arroyo Motor Inn
Conference Room
400 S. Arroyo Parkway
Pasadena

J. S. Snelson, Lecturer
Liberal Institute of Natural Science
and Technology
For further information call
355-6076 (eves.)



"Caught At Last" by Hugo Kaufmann. Another enduring study from Security Bank's "Famous Painters" series. We'd like you to think of Security Bank as being enduring, too. Start a permanent banking relationship today.

Make your financial partner **SECURITY FIRST NATIONAL BANK**

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION ©1967, Security First National Bank



Basketballers Close Season

The Whittier Poets defeated the Caltech Beavers last Tuesday night in a basketball game at Whittier. The loss was the eighteenth of the year for Caltech against four victories, and it brought a disappointing season to a disappointing close. That sort of thing is not too unusual in varsity athletics at Tech.

What is perhaps more unusual, however, is a contest between a varsity team and a haphazardly thrown together squad of Interhouse competitors. But this was the case last Friday night when the Caltech Coffeeheads challenged the varsity Beavers to a basketball game for the



benefit of the up-and-coming campus coffeehouse. The challenge was accepted without hesitation. About 100 spectators filled into Scott Brown Gymnasium at 25c a head to see the varsity smother the Coffeeheads by the score of 101-71. Leading the charge for the Beavers were Terry Bruns and Jim Stanley with 27 and 20 points respectively. Hot hands for the Coffeeheads were Roger Noll with 22 and Sam Ward with 10.

Wrestlers Finish Year in Fine Form

"This particular victory was the greatest thrill I've had as a coaching experience, and it certainly makes the season well worth the effort!" This is what wrestling coach Tom Gutman had to say about his grapplers' performances of February 22 when the Caltech wrestling team won its first match of the year against Whittier, SCIAC'S strongest squad. The dual meet was held at Whittier, and when the mats were finally cleared, Caltech had chalked up an impressive margin of victory, 23-13.

Creasy

The Beavers captured five of the eight matches, four by pins and the other by a decision. The winner by decision was freshman Ken Higgins who wrestled in the 130-pound division. Freshman Dick Thornberry managed to pin his opponent in an impressive performance in the 160-pound class. Wrestling at 167, sophomore Joe Devinny, who had been steadily improving throughout the season, matched Thornberry's heroics by masterfully pinning his man, too. Then

Alan Beagle once more demonstrated why he is Mr. Wrestler as far as Caltech is concerned by man-handling his foe to the mat for a pin; Beagle tussled in the 177-pound division. Heavyweight Doug Mason (191) had the awesome task of following his teammates' outstanding achievements, and he stepped in and pinned his man. "For the first time this year", Gutman remarked, "the team came up to its potential. Considering that nine out of the ten members are freshmen, this is one of the finest teams I've coached. In a couple of years, they could be the best in the conference."

Writes verbose

This Saturday after the Whittier meet, the Caltech grapplers participated in a conference tournament at Pomona in which they fared much better than they had done in any other tournament this season. No doubt they were inspired by their victory over Whittier; in addition, the tournament carried a little added significance since it was their

(Continued on page 6)

CIT Nine Loses Two

Caltech's varsity baseball season got under way last Saturday when the Beavers traveled to Cal State at Fullerton to play a doubleheader. Both games were seven innings long. In the first game, Fullerton southpaw Ronnie Jensen pitched a brilliant no-hit, no-run ball game, defeating the Engineers by a score of 5-0. Four of Cal State's five runs came in the second inning. All four of the runs were earned despite the fact that Tech's frosh catcher, Charles Creasy, was charged with two passed balls and a throwing error. From the second inning on, the game was routine and unexciting. Jensen pitched the entire seven innings for Cal State. Les Fettig was the starter and loser for the Beavers; he was relieved in the fifth by Phil Paine who pitched effectively for three innings.

CIT didn't fare much better in the second game either, as they could manage only singles by shortstop Lonnie Martin and second baseman Jay Chapyak without a run. Cal State won 8-0 behind the pitching of James Valdes and Steve Peterson.

Caltech will play a doubleheader on Saturday at Biola College. Their home opener is next Tuesday against Azusa Pacific.

Swimmers Fare Well at Oxy Meet

The Caltech Beavers paddled their way into third place in the SCIAC Swim Relays held last Saturday at Occidental College. All of the other five member schools of the conference were represented in the contest. The point spread by school was: Claremont-Harvey Mudd, 89; Redlands, 72; CIT, 71; Occidental, 64; Pomona, 52; and Whittier, 16.

Tech never finished worse than fifth in the eight relay events. The 200-yard breaststroke relay team of Mabry Tyson, Lick Lohman, Mike Stefanko, and Henry DeWitt set a new meet record of 2:02.6 while winning their event quite easily. The old record was 2:05.5 by a team from Claremont. The Beavers also won the 400-yard medley relay when Claremont was disqualified. Teckers Greg Wright, Carl Reed, Maarten Kalisvaart, and Tyson swam the distance in 4:02.9, only 0.2 second off the school record. CIT finished second to CHM in the 500-yard freestyle relay in a very close and exciting race. Tom Davis, Kalisvaart, Wright, and DeWitt finished in a time of 4:41.1, only 0.6 second behind the winners. The team was third in the 400-yard freestyle relay and fifth in each of the following: 200-yard freestyle relay, 200-yard backstroke relay, and the 400-yard individual relay. Tech divers John Eyler and Steve Johnson ended up fifth and sixth, respectively.

In other swimming action last week, Caltech defeated Cal State Fullerton 85-17 and lost to Cal State Los Angeles 59-45 and to Cal Poly 56-48. The Beavers' record in dual meets is now two victories against four defeats. Their next meet is against Claremont at Claremont on tomorrow.

FULLTIME (or almost) TEACHING POSITIONS FOR 1967-68:

CHEMISTRY (CHEM Study)
PHYSICS (PSSC) and
MATHEMATICS

Contact Willis Stork, headmaster, or A. B. Babcock, assistant headmaster

POLYTECHNIC SCHOOL
1030 E. California Blvd.
792-2147

FOUR OSCAR NOMINATIONS, INCLUDING "BEST ACTRESS"

LYNN REDGRAVE IN

GEORGIE GIRL

Plus Alan Arkin in "The Last Mohican"

STUDENT
RATES

ESQUIRE THEATER
2670 E. Colorado
SY 3-6149 — MU 4-1774

PRESENTING CONVAIR

...A Great Name in Aerospace

The Convair Division of General Dynamics Corporation is one of the largest and most sophisticated aerospace and research firms in the country. It was formed in 1965 through the merger of two divisions of General Dynamics: the old Convair Division and the Astronautics Division, both in San Diego.

The heritage of Convair dates back to aircraft production prior to and during World War II. In recent years the former Convair Division produced the Air Force F-102 and F-106 jet interceptors, the 880 and 990 jet transports, and the Little Joe solid rocket booster. The Astronautics Division was the home of the Atlas, the first free-world ICBM, and the subsequent development of the Atlas as one of the nation's major space launch vehicles; many other aerospace and research programs were undertaken by Astronautics including Centaur—the first U.S. space rocket powered by liquid hydrogen.

Company Description

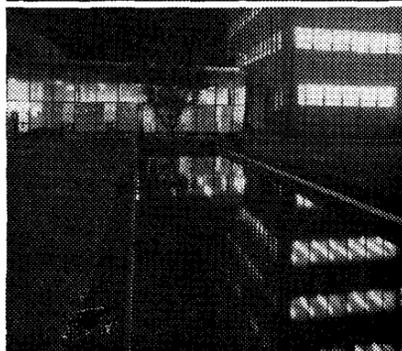
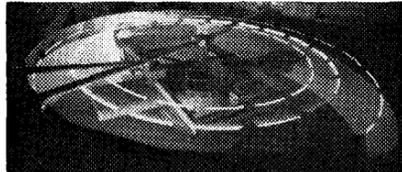
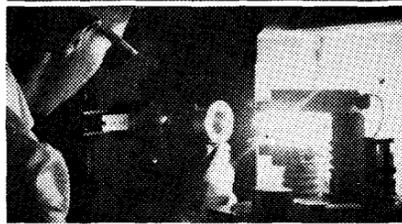
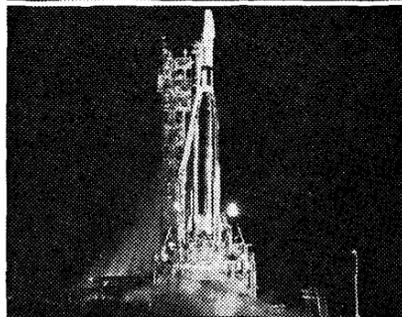
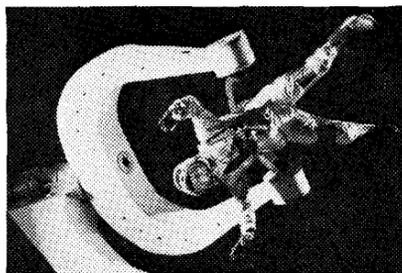
Convair is primarily involved in research, development and production connected with the aerospace industry. Its primary efforts are in complete systems and programs. The spectrum includes space launch vehicles, electronics systems, maneuverable re-entry vehicles, commercial and military aircraft and oceanographic research.

Major programs include the Atlas space launch vehicle; the Atlas/Centaur booster program used to put the Surveyor spacecraft on the moon; the design and installation of complete telemetering stations; conversion programs on Convair military and commercial aircraft; satellite research; manned space systems, and oceanographic telemetering buoys.

Opportunities

The variety of Convair products requires engineering graduates at all degree levels with majors in aeronautical, electrical, electronic and mechanical engineering, engineering mechanics and engineering physics.

Engineering or science graduates will be assigned to the following areas: advanced



GENERAL DYNAMICS Convair Division

San Diego, California
An Equal Opportunity Employer

systems, systems analysis, space sciences, life sciences, information sciences, scientific data processing, aeroballistics, dynamics, thermodynamics, guidance, structures, mechanical design, electrical design, reliability, test engineering and materials research.

Special Features and Attractions

Convair offers outstanding fringe benefits including an Employee Savings and Stock Investment Plan to which the Company contributes as well as a Retirement Plan and Tuition Assistance Programs. Convair engineers can select from many company-sponsored educational assistance programs and determine for themselves which is best suited to their particular requirements. These programs, held in conjunction with four highly rated local colleges and universities, include a tuition refund plan, an irregular work week to permit college attendance, an advanced-degree work-study program, special courses and seminars, and Doctoral Fellowships, among others.

One of the nice things about working at Convair is living in San Diego... one of the country's truly great resort centers. With only 10 degrees difference between January and July highs, the sunny San Diego climate is pleasant throughout the year.

Two great bays and 70 miles of ocean beaches provide all year aquatic sports and fishing. Exciting Mexico is just a few miles away. Nearby mountains, a world-famous zoo, and a marine park add to the fun... plus 64 golf courses for year 'round play. San Diego is an ideal family city with excellent schools. As the country's 16th largest city, San Diego offers the best in cultural attractions, performing arts, professional sports, and other entertainment.

Our representative will be visiting your campus soon. Contact your College Placement Officer to arrange an interview appointment, or write to Mr. J. J. Tannone, Supervisor, Professional Placement and Personnel, General Dynamics Convair Division, 5606 Kearny Villa Road, San Diego, California 92112.

Much Ado About...

Mr. Ferguson

by Creasy

He usually hangs out in Room 17 in the back of the dressing room in Caltech's Scott Brown Gymnasium. He stands about five and a half feet tall, walks bow-legged, and wears spectacles which tend to slip down on his nose; you could pick him out of a crowd at a thousand yards. Just as many Caltech undergraduates know him as R. P. Feynman. His name is Lloyd Ferguson, but everybody at Tech who knows him just calls him Fergy. His job is called Chief Manager of Athletic Equipment, California Institute of Technology.

Very few, if any, college equipment managers in the country are more efficient than Fergy. None is more considerate of the people he serves than Fergy. Any athlete on campus will tell you that that old guy goes out of his way to see to it that everything is just right. And he does this with a genuine concern which may surprise you the first time you have the privilege of working with him, but which you soon grow to appreciate. Another point in Fergy's favor is his jovial, freestyle, and sort of old-fashioned, but not corny, sense of humor.

I remember the first time I met him. I'd just decided to go out for intercollegiate football while I was watching the Caltech team go through its drills. I walked up to Head Coach Bert La Brucherie and told him of my intentions, and he sent me into the gym to check out my equipment. I walked up to the window, saw a somewhat short man stuffing something into a large sack, and inquired, "Mr. Ferguson?" He turned around smiling, "Yes, that's me, but all my friends around here just call me Fergy. What can I do for you?" I've never called him Mr. Ferguson again. Even the Caltech yearbook for the past three years carried no other caption under his picture except "Fergy." Caltech is indeed fortunate to have an athletic equipment manager as efficient, considerate, and inspirational as my friend Fergy.

Sports Tidbits

Dr. R. A. Huttenback, captain of the Caltech cricket squad, has announced that the Caltech group will play its first match on April 2; practice will commence on Saturday, March 4, at 10 a.m. in Tournament Park. All interested individuals should contact Dr. Huttenback at Caltech extension 2194 or appear at the first practice . . . The Tech tennis team lost twice last week. UC Riverside beat the Beavers 9-0 last Thursday, but the match wasn't as one-sided as the score might suggest. Several of the matches were close, and Larry Brown played an exciting match, although he was finally defeated 11-9 in the third set. The following Saturday Claremont-Mudd really clobbered the Engineers, and this time the 9-0 score did justice to the one-sided meet. Only Greg Evans managed to salvage a set for CIT.

Spike Men Take Second in Relays

The SCIAAC Relays were held at Caltech this past Saturday, and the Caltech Beavers exhibited one of their best showings in recent years. The overall championship was captured by the University of Redlands, the same team that overwhelmed CIT in a dual meet one week before the conference relays. Redlands dominated both the running and field events, taking first place in four of the six relays and in six of the seven field events, thereby compiling an impressive total of 118 points out of a possible maximum of 130. Perhaps more impressive was the fact that Caltech fin-

ished second in the meet with 90 points. The remaining schools finished with the following scores: Claremont-Mudd, 75; Whittier, 53; and Pomona, 40. Perennially strong Occidental passed up the meet.

After the meet was over, the Beavers' track coach, Bert La Brucherie, was all grins, and rightfully so because his spikesters had finished second in seven events, third in five, and fourth in the remaining one. With the track squad looking so impressive this early in the young season, it seems reasonable to assume that, with the almost inevitable improvements which time makes possible, the remaining schedule of eleven track meets will result in several Caltech records being broken, probably by Pete Cross.

Stay Strong

(Continued from page 5)

last scheduled competition of the 1967 season. Higgins took first place in the 130-pound class. Thornberry and Devanny earned second place finishes in the 160- and 167-pound divisions, respectively. Derry Hornbuckle, Beagle, and Mason placed third in the 137-, 177-, and 191-pound weight classes, respectively.

Paragraphs?

With a long, hard, and worthwhile season at their backs, the Caltech varsity wrestlers will

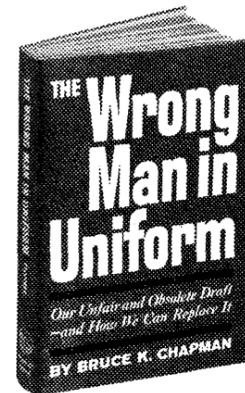
now begin preparation for next year by conscientious participation in Coach Gutman's newly organized weight training program. One weakness of most of Caltech's athletes has been a basic lack of strength. Coach Gutman and the men of his wrestling team are trying to overcome that weakness.

WANTED

Reliable ride daily for six children from Monrovia-Bradbury area to private school near Caltech, arriving by 8:10 a.m. Phone 358-2908 or 357-2963.

DOUG WESTON PROUDLY PRESENTS
BUFFY SAINTE-MARIE
 WORLD FAMOUS AMERICAN INDIAN FOLKSINGER
 IN CONCERT
LINDY OPERA HOUSE
 5212 WILSHIRE AT LA BREA
 2 NITES ONLY — MAR. 24 & 25 — 8:30 P.M.

Tickets: 4.00, 3.50, 2.50. Available at Troubadour Box Office, All Mutual Agencies, Wallich's Music City. Information: 937-3500.



THE BOOK THAT SAYS:

END THE DRAFT!

"... This book could well arouse the public and provide the force which gets the Congressional machinery moving."

—Rep. Thomas B. Curtis (R-Missouri)

AT YOUR BOOKSELLER'S

\$395



Engineering is a social science

Food. You either have it or you don't. If you don't you've got a problem. Right where you live. So has society—right where it lives. We are running out of land and we're almost out of time. Technology has no greater challenge than this problem.

Right now, McDonnell is conducting yield-per-acre studies as part of its agricultural water resource problem analysis for the Department of Agriculture. Technology, developed in support of aerospace programs, is playing a vital role.

What do you plan on doing that's one-tenth as important as this?

Build a better future for your country and yourself at McDonnell.

MCDONNELL

Box 516, St. Louis, Missouri 63166

A Plans For Progress And An Equal Opportunity Employer

PAT'S LIQUORS AND DELICATESSEN

1072 E. Colorado SY 6-6761

Open to midnight daily,
1 a.m. Fri. & Sat.

Keg Beer Party Supplies