California Tech

Associated Students of the California Institute of Technology

Volume LVIII.

Pasadena, California, Thursday, January 26, 1967

Number 15

Caltech-Scripps Conference to be Held Feb. 17-19

A novel approach to eliciting group response will characterize this year's Caltech-Scripps Conference at Camp de Benneville Pines in the San Bernardino Mountains from February 17 to 19. Dan Metlay, conference chairman, though keeping the exact nature of the weekend's activities under wraps, emphasizes that they will not be of the traditional discussion type or of the abstract nature of last year's experiment in developing self-expression.

Expression

"We have tried to get away from the standard conference format of lectures and discussion groups," said Metlay. "Each individual at the conference will have the opportunity to express himself in his own way."

Entitled "The Ugly Green Blimp, or Caltech's Answer to the Yellow Submarine," the YMCA-sponsored venture should provide a welcome break from the usual routine for the 55 Teckers, 55 Scrippsies, and 25 faculty members drawn from both schools that will attend. The conference will provide an excel-(Continued on page 8)

Notices

Nominations for ASCIT elections are now open and will close Feb. 6 at 9:30 p.m. Nominations and filing fees should be submitted in writing to Kermit Kubitz in Fleming or John Cummings in Ruddock. Candidates for the nine ASCIT Board positions and California Tech Editor and BOC Secretary will eat in the Houses February 7 through 9. The election will be February 14. Candidates will have a chance to attend a meeting of the Board on February 6th.

WANT TO MAKE \$\$\$

Sell ads for the Big T. 5 to 10 percent commission on every ad you sell. See Geo. Sharman (110 Page, X-2152) or call G. Christoph (355-2074 evenings).

RADIO STATION-ANYONE?

All students interested in setting up a campus radio station (commercial, not "ham") are cordially invited to Winnett Clubroom No 2, Tuesday, Jan. 31, at 8:00 p.m. to discuss ideas. Anyone with experience is welcome. Those unable to attend but interested can drop off a note to Richard Strelitz, Fleming 52, to tell of their plans and ideas.

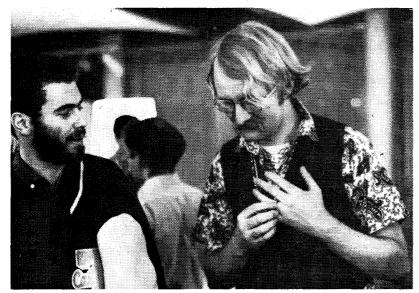
TOTEM STILL LOOKING

Totem will accept material (poems, essays, short stories, and artwork) through Saturday, February 4. Contribute, and show that not all campus publications need quietly expire from creeping apathy. All those interested please contact Rich Rubinstein in Blacker. SKI ASPEN

Riders wanted to go to Aspen for Spring Vacation. Share driving and expenses. Call 797-8900 eves. HONOR KEYS AND

CERTIFICATES

If you think you deserve consideration for one of the above and you have not yet been contacted by the Honor Point Committee, please send a note to Eric Young, Ruddock, giving your qualifications, by Wednesday, February 1.



RICHARD BRAUTIGAN, POET, and Peter Balint hold an informal discussion Monday night in Winnett Lounge. Brautigan and his contemporary, Hoyem,

Profs, Courses to Suffer Evaluation

The Educational Policies Committee is busy preparing for its triennial comprehensive instuctor-and-course poll of Caltech students. According to Gary Christoph, EPC chairman, the poll should be ready for distribution by the end of February. A resolution of the BOD entrusts the 15-member committee "with the general responsibility of discussing, investigating, and making recommended changes as it sees fit, in the educational policy of the Institute." These polls are occasionally supplemented by polls taken on specific courses.

The main purpose of the EPC poll is to provide feedback for the faculty, who are very interested and serious about the results. Obviously the poll could not bring about the firing of a full professor, but it could let all the faculty know how they and their teaching methods stand in the eyes of the students. Each instructor of undergraduate courses, from the rank of teaching assistant to full professor, gets a report about himself. In addition, the head of each department receives a summary of reports for his department, which he can use for determining how courses in his subject area can be taught better.

Because so much information is needed for a valid poll, a computer will be used to tabulate the results. Each poll will consist of four pages of questions, all multiple choice. Teachers and classes will be rated in each question on a scale from 1 to 5, and the answers to questions about each class will be put on a separate IBM card. Since the poll includes third term last year, as well as this year, each Tecker will receive about 10 IBM cards. The twenty or so questions on each course will cover the lectures, text, instructor, attendance, grade in course (for comparative purposes), and the judged value of the class.

Another important feature of the poll is an additional sheet for particular comments about the curriculum. Christoph emphasized that, since the poll is anonymously filled in, the most frank and constructively critical comments are desired. should also be personal, not "what everyone feels" but "what

Extra evaluation of I feel." courses is encouraged, because representative comments will be included with the numerical averages, as tabulated from the 6,000 cards.

100 percent participation

The EPC poll will be circulated by representatives in each House and in Winnett for off-campus students; they will be collected a week later. In the last poll three years ago about 80 percent of the forms were returned. Christoph is aiming for 100 percent participation this year, urging everyone to take enough interest is his school to spend the half hour needed to complete the

In the past, courses such as Ma 2, Chem 41, and Chem 46 have actually been changed for the better because of student pressure. Christoph stated that the best form of feedback is simply talking to the faculty. Too few students take advantage of the easy accessibility for contact. Professors appreciate compliments on their lectures, too, as well as suggestions for making courses better.

RECALL DEFEATED OVERWHELMING VO

by Benson

This week's thrilling meeting of the inimitable BOD produced floods of controversy which the California Tech is happy to enlarge upon. A numerous flock of scandalous reports made their entrance into the discussion, though not into the minutes.

While the campus awaited breathlessly the results of the recall election, Ed Kelm, chairman of the election committee, was unavailable for comment. At last report Monday night, doughty master Kelm was hiding out in Argentina. Yet, on Tuesday night, as the tireless Tech staff toiled on into the darkening twilight, the prodigal Kelm was located industriously working in the EE91 lab deep within the bowels of Steele.

Burn, ballots, burn!

Upon prodding from Martin Smith, the white knight, Klem hurried home to his abode, whereupon the results were relayed to Fred Lamb, who cheerfully conducted a straw vote of the BOD from his telephone. It seems that Sir Edward had burnt the ballots after counting, and only he and cohort Pollock were cognizant of the figures, and Pollock informed staff members that he did not know the results. He had merely counted, and had left the difficult job of adding the columns to Kelm. All of this despite the fact that all ASCIT ballots are to be stored for one year.

Finally, the results reached the Tech office after the candles had burned low, and here they are:

Of 698 eligible voters, 502 cast ballots in the recall election. 318 or 63.2% voted no in support of Mammy Meo, and 184 or 36.7% voted for Meo's recall. Originally, 183 signed the recall petition.

The results were a great satisfaction to all but 183 of the undergraduates. Meo had drama-

tically threatened to guit his post if he did not receive a majority of the votes cast. This stand had ben a bone of contention among the staff, since no one is currently available who is stupid enough to take over as iterim editor (as a matter of fact, no one is stupid enough to be editor next year either-volunteers welcome).

Erehwon.

Shy BOD

When Meo, sitting in on the Monday night meeting of the BOD, asked in general about the attitude of ASCIT toward a nonaffiliated Tech, it precipitated a discussion which, unfortunately, cannot be reported. Upon Smith's recommendation, the meeting went into closed session. thereby depriving the student body as a whole of any information on this important topic as regards the student government. A commendable action indeed.

Deadline Nearing For March, April SS Corps Tests

Caltech students who have not previously taken a Selective Service College Qualification Test to insure deferment from the draft may obtain forms in the Registrar's office to take the test in March or April. This is a timely opportunity to do so before the idleness of summer makes students liable for induction, because the test will probably not be given again until November.

The test is also considered a prerequisite to admission in many graduate schools, since only the upper academic quarter of the graduating senior class is exempt fom being drafted from graduate

Freshmen especially are urged cause the absence of grades in their beloved pass-fail system could render the hapless frosh doubly ripe for plucking. The test is a three-hour written exam to be given March 11, March 31, and April 8. Pick up places, details, and applications in the Registrar's office. Deadline for posting applications is February 10.

Nominations for ASCIT offices are now open, and the Tech editorship may go begging. Don't let this powerful, prestigious office go vacant. Step forward now! Have the entire campus come to you on its knees, begging you not to mention their names. Cash in on the graft and corruption which flows daily into the office. There is very little time left for on-the-job training under the auspices of the old editors. One person has already expressed a willingness, provided others run with him. Yellow-power!

Committee of Students

A group of concerned undergraduates met last Thursday in Winnett Clubroom 1 to form the nucleus of an independent, campus-oriented "underground" news-

Subterranean music

The newspaper is set up as a nonprofit (not by intention) cooperative enterprise. This means that all those who invest money will share in any profits proportionately to their investment. The committee consists of Dave Lewin, Mike Farber, Vern Cormier, Bill Hocker, and several others, including several members of the New Right. The newspaper, to be called Notes from the Underground, will serve as a forum of opinion on and off campus. The founders feel that the format of the California Tech does not permit free discussion of the political, social, artistic problems of today's world, and the journal will attempt to fill this intellectual void. The group has decided to limit editorial censorship to legal problems. At present the paper will be a mimeographed broadside, several pages in length, which will be sold for approximately a nickel a copy.

Random ramblings

Anyone with anything to say on any subject is welcome to submit his articles, cartoons, random ramblings, or other masterpieces. The first issue, which will go on sale in a week or two, is slated to contain commentaries on the State of the Union message, Reagan's educational policies and how they may affect Caltech, and random philosophising by members of the New Left and the New Right on campus.

All suggestions, articles, or other notes of import should be directed to Mike Farber in Blacker House. Hate mail should be directed to the circular file.

Editorial

Cut the Umbilical Cord?

Caltech students and faculty memers have talked a lot this last week about the role of the **California Tech** and its responsibility to the student body; last Friday we had an election on that very issue. Recently confirmed in office, we think a statement on editorial responsibility is necessary—and we'd also like to propose a change in the setup.

A newspaper in a democracy—and we idealistically regard ASCIT as one—must present all sides of a question to the electorate, in order to allow them to choose. Even if the Board of Directors, not to mention (ahem) the Excomm, feels differently, we regard it as our unmitigated, unadultrated **obligation** to inform the student body of every important development on campus.

But what if honor prick me off as I come on? What then? What if we are sued? Unfortunately, since the masthead carries those odious and heinous words, "Published weekly during the school year by the Associated Students. . .," we won't have to pay. Old Mother ASCIT will foot the bill for us, just as she subsidized us for years while the **Tech** was in debt, but she also has the theoretical power to censor the paper.

Editorial board threat

Legally, the whole Board could troop to the **Tech** office late Tuesday night every week and demand to see the copy, deleting every line that those nine old women thought objectionable. **De jure,** the editors would only have the power to recommend. After all, ASCIT publishes the **California Tech,** not Meo and Middle-ditch. Such a state of affairs is not likely with present BOD—nor the present editors, we assure you—but it is possible. To prevent the possibility of such a bald travesty of justice, the election results serve as a precedent (sic semper tyrannis!), but to make **sure** that the undergraduate newspaper remains smutty and free, it ought to be separated from ASCIT altogether.

That way, no one would have the power to tell the newspaper what to print. It would be an undergraduate newspaper reflecting the views of its editors, which is as it should be. For printing the truth, no one could touch the editors; for printing malicious falsehoods, the editors would be sued. Those are the good points.

Problems

The problems are 1) circulation, and 2) money. Without compulsory subscriptions, it would be an incredible pain in the neck to distribute papers **only** to those undergrads who subscribed. Since the paper would be outside the protective wing of Mother ASCIT, the finances would become vital to its survival, and the BOD might stand idly by as a rotten business manager steered our blessed vessel to destruction. Either of these two obstacles might prove insurmountable.

Solutions

One way to lick the circulation problem is the institution of "House subscriptions" to the **California Tech.** A House could subscribe, in this system, either en masse or not at all. If all seven Houses subcribed, the circulation and money situation would parallel the present paradise, except for details such as rent.

We could raise the already obscenely high subscription rate.
We could raise the advertising rate and lose customers.

Looking at the problem from all aspects, we think it's easier to remain in ASCIT, but we want to sound a note of warning. Future attempts to control the **California Tech** are probable, and you must defeat them. The price of liberty is eternal vigilance.

—Michael Meo John Middleditch

On to Boston!

Last December 19, Pete Cross finished 17th in the Culver City Marathon with a time of 2 hours, 45 minutes, and 21 seconds. His time, one of the best among the 200 starters, would have placed him about 40th in last year's world-famous BAA Marathon, run on April 19, Evacuation Day, in Boston. Why don't we send Cross to represent Caltech in this year's BAA Marathon?

Of course it isn't guaranteed that Cross, Athlete of the Year 1966 at Caltech and holder of the varsity records in the mile and the two-mile, will finish 40th in the BAA. All marathons are different, and the same effort on the Boston course might give Cross a much worse time; at the Culver City race, however, Cross beat a man who was 43rd in the BAA last year by an eightminute margin. During the fall Cross ran an average of 65 miles per week in workouts; he has since upped it to 80 miles per week. From personal experience, to boot, we can say that Pete is in top shape.

The money should be the least of the problem, for with the airlines' half-fare plan Cross could fly to Boston and back for a paltry \$160. Let's go, Sports Department.

–Michael Meo John Middleditch

Letters

Lectures Mobbed

Editors:

We sincerely regret that some students were unable to attend Professor Fred Hoyle's recent Beckman Auditorium lecture because of the crowd. On Monday evening, January 9, over 2000 people were turned away. The lecture was repeated on Friday, January 13. All who arrived by 8 p.m. sharp heard the lecture. We hope you were not among the 300 overflow, although we did provide listening in Dabney Hall.

During the past two academic years, reserved seat tickets were distributed to Caltech faculty and students for the lecture series. This policy was abandoned in the fall of 1966 because 60 to 70 percent of the tickets ordered by faculty and students were not used, and faithful members of the community complained of empty seats in the front. For one lecture, we issued 1600 tickets for 1200 seats but ended with 200 empty seats after discouraging others from coming.

New base state

However, in an attempt to again provide a means for students to obtain seats for our most popular lectures, we are proposing a new limited basis, reserved section seating policy. For those lectures which we anticipate will draw capacity crowds, there will be a section for Caltech faculty and students with admission by special ticket. Each time we anticipate a capacity crowd, we will notify the students by campus mail.

For the Winter Caltech Lecture Series currently in progress, we expect to have a turnaway crowd for:

Monday, January 30, 8:15 p.m. John C. Lilly, MD, Director

Communication Research Institute, Miami, Florida speaking on:

Problems of Scientific Research with the Dolphin.

Tickets for the special reserved section are available in person from the Caltech Ticket Office until 12 noon, tomorrow, January 27. Your tickets will entitle you to admission to the special section on January 30th between 7:45 p.m. and 8:00 p.m. After 8 p.m., the section will be opened to general public seating.

Please present your tickets at the **west** side of the main entrance doors of Beckman Audi-

CaliforniaTech

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

Editors: Michael Meo and John Middleditch, Editors-in-chief; Jeff Hecht, Features; Jim Cook, Managing; Vincent Johns, Copy; Peter Balint, Sports.

Staff: Peter Balint, Kirk Benson, Dave Lewin, Les Fishbone, Glenn Engebretsen, Dan Vil-Iani, Terry Reedy, Frank Griswold, Len Doberne, Roger Goodman.

Business: Bob Berry, Manager; Kim Gleason, Circulation Manager; Mike Pollock and Ed Kelm, Finks.

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 LVIII, Number 14, Thursday,

January 19, 1967.

torum on Monday evening, the

Please pick up your tickets at the Caltech Ticket Office, 332 S. Michigan Ave., just north of the Beckman Auditorium parking lot before noon on Friday, January 27th to ensure a reserved seat.

We hope that this new procedure will meet with your approval. Again, may we remind you that the special section (1) will be used only on events for which we expect capacity crowds (and which we will announce by campus mail); (2) will be open for your use only between 7:45 p.m. and 8:00 p.m. on the evening of the lecture; and (3) may be entered only by presenting your ticket to the Auditorium ushers.

Faculty Committee on Programs

New Editors?

Editors

The long-standing campus tradition of apathy toward events on campus, and in particular toward publications, has continued to grow. The **Totem** is now in better shape than the **Tech** and the **Big T**, but that means nothing. Neither of the latter two publications has an obvious editor in sight for next year.

The **Tech** is in bad shape to face another term. The staff reached a low point for the first issue of this term, but remains woefully inadequate. The editors spend a considerable amount of time in the frantic search for someone to write something to fill out the paper. The copy staff is composed of the copy editor, and occasional stray people wandering into the office.

There is only one photographer—a senior. Frosh as usual provide the bulk of the staff.

On top of Old Smokey

On top of this, there may be no editors next term. Sophomores normally provide the candidates for editor—there are only two sophomores with any significant experience on the staff now. I am one, and I am considering running—if I can find at least two other reasonable people to be coeditors. Even if I am personally unable to run, I am willing to devote time to putting together a team that will, and to give what help I can in running the paper.

I have heard some people express the attitude that "the paper was so bad I wouldn't work on it." Now is the chance for some of these people to get together and do something to make it a better newspaper. They have done their part to make it worse by doing nothing. There isn't enough staff now to do everything that should be done. More work gets piled on, and staff members quit because there is too much work. They can't be blamed. Anybody who wants to be on the staff can write all he wants-no matter how badly. The paper has to be filled somehow. This is one reason the paper isn't the ultimate in journalistic excellence.

The present situation makes me wonder if the student body wants a newspaper. The bulk of the student body certainly has done nothing to show they do.

The only way there is going to be a California Tech after the ASCIT elections is for the group that has rationalized reasons for not working on the staff to change its way of thinking.

Jeff Hecht

Folk Dancing!

Editors:

Though I was glad to see the Museum written up favorably in your last paper, I was disappointed. I know I'm feeling defensive about the implication of rebellious youth (which is, from my viewpoint, unfounded), but what really was missing was the greatest portion of the whole of the Museum—the folk-dancing.

There are many very talented people who dance at the Museum, some of whom have been dancing for many years. There are also people like me who haven't been dancing long but enjoy it. There are beginners' classes on Friday night and more advanced classes of various natures on Wednesdays through Saturdays (Tuesdays are belly dancing classes). Lessons begin close to 8 o'clock, and are over around 9:30.

I can see why your reporter seemed to think the "newness" of the Museum wore off—one can drink coffee and play chess anywhere.

Respectfully, Kathy Sinsheimer

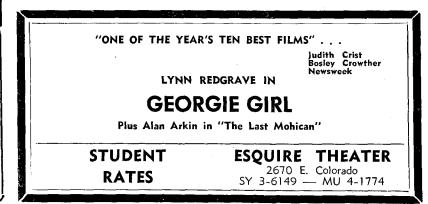
Raunch 69

Gentlemen (if such appellation be appropriate in this case):

We are most curious as to the facts and circumstances which happen to surround the most untimely and unexpected demise and subterrification of your rotten, filthy rag. Or perhaps, is admittedly circumstantial and hearsay evidence which has come to our attention in this matter not to be trusted but rather, due to the indolence, turpitude, and incompressibility of your hirelings, yea, indeed, of your serene, incomparable, selves, is it possible that our mere physical senses are deceived in the face of the greater truth which surrounds us from above, and below, and from the left, and from the right, without cease or end, world without end, in that, perhaps, as might be hoped, for the greater glory of mother Tech, you still are publishing upon occasion, but somehow, transfer and bequeathal of said matter to our humble selves has been interrupted, for which, shame! Should, in fact, the latter sad fact be the case, we would then politely request (and in that circumstance only) that you 696969-6969696969696969 PIGS get off your respective blubberous 6969-69 and send forthwith unto us issues No. 1, 2, 6 (six), and 10 through whatever absurdity is the current high number displayed on your issues, for which you ruddy Shylocks have already long since collected our last pen-

Love and kisses, George N. Reeke, Jr. Et Al

Ed—See box on front page.



1003 E. Celorado Admission: \$2.00 (\$1.50 before 5:00) w Fox student card.*

Friday and Saturday: Short - 12:30, 4:37 Our Man Flint — 12:45, 4:52, 8:55 The Quiller Memorandum - 2:42, 7:00, 10:52

Times given are only estimates. COLORADO

2586 E. Colorado 796-9704 Admission: \$1.00 for students Friday: Blue Max - 9:00

Alvarez Kelly --- 7:00 Blue Max — 12:30, 5:10, 9:55 Alvarez Kelly -3:10, 7:55

CROWN 129 N. Raymond 796-3131 Admission: \$1.25 w Statewide student card, \$1.50 without.

Friday: Hallucination Generation-7:58, 10:59 Wild Angels -- 6:30, 9:31

Saturday: Hallucination Generation -- 1:58, 4:59 8:00, 11:01 Wild Angels - 12:30, 3:31, 6:32, 9:33

ESOUIRE 2670 E. Colorado

Admission: \$1.50 for students

793-6149

Morgan - 702, 10:24 School For Scoundrels — 8:40

Saturday: Morgan - 7:42, 11:04 School For Scoundrels - 6:03, 9:26

792-7139

770 E. Colorado Friday and Saturday: Then Venetian Affair The Professionals Times unavailable

UNITED ARTISTS 681-6577 606 E. Colorado Admission: \$1.50 w United Artists student card. \$1.75 w out.

Any Wednesday -- 5:53, 10:06 Darling -- 7:49 Saturday:

Any Wednesday — 1:40, 5:53, 10:06 Darling - 3:36, 7:49

UPTOWN 2316 E. Colorado 793-4330 Admission: \$1.25 w Uptown student card,** \$1.50 w out

Penelope --- 7:00, 10:35 Cincinnati Kid - 8:42

Saturday: Penelope - 3:28, 7:03, 10:38 Cincinnati Kid - 1:30, 5:65, 8:45

*If you are bereft of a Fox student card, one can be bought, included in an admission price of \$2.00. Good for six months. **An Uptown student card can be purchased under following plan — first night: admission plus card, \$1.50; second night: admission, free; following nights: admission, \$1.25.

Itinerant Juniors to

travel abroad during the summer other than those mentioned in last week's Tech; go courtesy of the DuPont Company. You need only be one of the two or three winners of the Junior Travel

Starting in 1957, the Institute has been awarded \$5000 yearly for this contest. Each fall, the top 30 students in the junior class are invited to compete. After Christmas vacation, each must submit a written outline of a project which would make the trip especially significant to him. Usually related to either a personal hobby or vocational interest, the projects are allowed wide latitude. The winners are announced around the first week of March.

See Fred Lamb's article . . .

The winners last summer were Dan Metlay, Fred Lamb and David Van Essen. Metlay went to Great Britain to study problems in race relations. Lamb went to Africa to study problems in government. Van Essen went to Germany to study conservation practhe Forest Service and is inter-

Holford, and John Tucker. Tucker. interested in skin-diving, decided upon underwater archeology in the Mediterranean as his project. Visiting both new and old finds, he excavated classic Roman ships and sunken Greek cities.

... on next page

A karate enthusiast, Holford wanted to learn more about the martial arts. With his travel prize, he was able to go to Japan and met some of the top practitioners of kendo (swordfighting), judo, karate, sumo, and kyodo (archery).

In the two years preceding 1965, Roger Davisson, active in

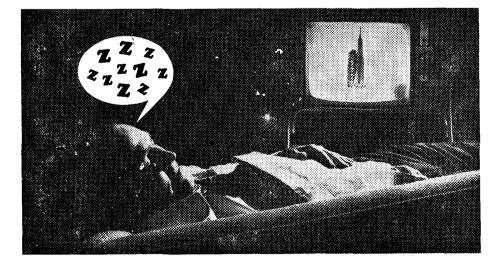
(Continued on page 5)

Vie for Travel Prizes Seen Complete in There is vet another way to tices. He has worked before for

ested in problems of pollution. The winners the year before, 1965, were Bill Colglazier, Doug

Colglazier, after working for a bus company in San Antonio, investigated metropolitan transit in South American cities. He spent most of his time in Sao Paulo, Brasilia, and Rio de Janeiro, all in Brazil.

he race to the moon seems a bit tame to Edison engineers.



Don't misunderstand.

It isn't that our engineers aren't interested. Nobody could be more intrigued. But they have quite a race on their hands.

Edison is racing Southern California. In the next 10 years, we'll serve an estimated 21/2 million more people.

The race to keep pace, electrically, demands creative engineering of the highest

Edison is completing a nuclear generating plant at San Onofre, California. In fact, our staff is already making plans 20 years ahead.

Under study: thermionics, thermoelectrics, magnetohydrodynamics, and other methods of direct conversion that show promise for tomorrow's power systems.

Sound exciting enough for you?

If you're a candidate for a bachelor's or advanced degree in electrical engineering, mechanical engineering, industrial engineering, civil engineering or chemistry, you may be our man.

Phone (213) 624-7111 or write:

Mr. H. T. Jurewitz Southern California Edison Co. P.O. Box 351, Los Angeles, Calif. 90053.

Maybe you won't go to sleep watching the moon shots on TV. But you won't be envious either.



Southern California Edison An equal opportunity employer

-well, almost-at the Third Annual Caltech -Computer-Controlled Debate Tournament on February 17th and 18th. The computer will pick the top 16 teams in the tournament and place them in elimination brack-In fact, all but the judging and

Computer Control

Debate Tourny

by Stephen Horner

Computers will rule the world

timekeeping will be done by the machine-enabling the small (but powerful, of course) Caltech debate squad to handle efficiently a large tournament (so far 78 teams from 15 states have entered). Since the computer is able to carry out its functions so quickly, it is able to do other tasks which provide conveniences available at no other tournament, such as printing complete records of the results for every team as soon as the tournament is over. Being the most highly automated debate tournament in the nation, Coach Herb Booth (no relation to the computer building) has received requests from many other schools for information for holding their own computerized tournament. Numbers are nauseating

The Booth computer complex will do all of the crank-andgrind work, such as setting up the six preliminary rounds. matching teams and judges so that no team meets another team from its own school, the same team twice, too many teams from one geopraphic area, or the same judge twice. Furthermore, at the close of the preliminary rounds, the IBM 7094-7040 will calculate. for each team, an overall rating, 50 percent of which will be based on win-loss record, 20 percent on personal ratings, 20 percent on their opponents'

According to Booth, "All debates will be open to anyone interested in observing." Caltech students can also help by keeping time during the debates. Those interested should contact David Dockstader in Fleming.

records, and 10 percent on the

difference between their ratings.

The Model United Nations delegation sorely needs a Tecker with charm, wit, savoir-faire, sophisfication, and sprezzatore, but mainly interest in Yugoslavia's economy. Trip to Portland, Oregon, is involved. See Meo in Lloyd House.

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



STUDENTS PROTEST against rebel Smith regime at UCRN graduation ceremony

Travel Prize!

Universities Squelched In Southern Rhodesia

one of the three juniors who won a travel prize last year. Fred's research project was the study of resettlement problems in Kenya. However, his travels carried him to many other countries, among them Southern Rhodesia where the traditional freedoms of Western Civilization are summarily lacking.

It is before dawn in Salisbury, Rhodesia, 27 July, 1966. There is a knock at the door. Upon answering the knock, you are confronted by two police officers who inform you that a detention order has been issued on you and that you are now under arrest and are to be taken immediately to Salisbury Prison. The order reads in part:

"This order is based on a belief that you are likely to commit acts in Rhodesia which are likely to endanger the public safety, disturb or interfere with the maintenance of an essential service." (The emphasis is mine.) The detention order is for an indefinite period. There will be no trial. There can be no appeal. This is the situation which faced nine professors and ten students at the University College of Rhodesia and Nyasaland last summer.

Today in the United States we have grown used to student organizations which vigorously express student opinion and to student activism which seeks to go beyond the borders of the academic community to effect changes in our whole society. Faculty have grown used to widespread academic freedom. We may often wish certain elements were less vocal or less irritating, but academic freedom is an ideal which is firmly held and vigorously defended.

South of the border . . .

In Africa south of the Zambezi, universities which seek to preserve their autonomy and academic freedom, and student organizations which seek to express student opinion are fighting for their survival. Rhodesia considers itself in a state of war with Great Britain as a result of the Rhodesian unilateral declaration of independence in November, 1965. In South Africa it is an ideological war which has caused a steady deterioration in the position of the academic com-

munity I came in contact with the situation at the University almost immediately after my arrival in Rhodesia. On the evening of mv second day in Salisbury I spoke to Christopher Hill, on the University faculty, and we agreed to meet for lunch together the next day. He was unable to keep the

Editors' note: Fred Lamb was appointment since he was in prison at the time. During the following days I had a chance to talk extensively with other faculty, students, and Rhodesians outside the University with whom I came in contact with.

Time off for snaking

The arrests at the University were a consequence of a sequence of events which had begun nine months earlier with the unilateral declaration of independence. At the time African students at the University were in the midst of term exams and did not protest. At the same time, their younger brothers and sisters protested loudly, and two grammar schools marched on Salisbury in protest. The children were severely caned by the authorities and when the University students arrived home for vacation, the African communities jeered, "Where were you?"

As a result, students returned to the University determined to protest. In March they demonstrated, and by all accounts it was a quiet and orderly one. Even so the President of the Student Union not only dissociated the students from the demonstration officially, but publicly apologized for the behavior of the demonstrators. The Africans were furious.

Students brawl with bigots

At the same time the University granted new powers to the Student Union to regulate student behavior off-campus as well as within the University. The action was aimed at dampening high-spirited brawls in nearby pubs. but the action was ill-timed and totally misunderstoood. The Africans began boycotting classes, and five faculty stopped teaching as a result of the boycott.

At noon the students asked to see the Principal. They were put off until 6 p.m. as the Principal was in a committee meeting. At 6 p.m. they converged outside the meeting room. Shortafterwards the Principal ly (Continued on page 6)

HOFFMAN ELECTRONICS CORPORATION

of Southern California will be on campus Friday, Jan. 27, 1967, to interview B.S. and M.S. graduates in electrical and mechanical engineering who are interested in career positions encompassing initial assignments in circuit design, packaging or systems engineering in radar; VHF, UHF, and single side band communications; or air navigation systems. Please contact your placement office to set up an appointment with the Hoffman representatives, or for further informa-

Expose Tech to Internationalismo

Three ex-Peace Corps volunteers from South America, now staff members, visited the campus to inform aspiring students about the Corps Wednesday through Friday of last week. Jon Deason, 26, stayed in Ricketts House, while Christopher Byers, 24, and his wife Kathleen, 23, were housed in the Athenaeum.

An Athenaeum Luncheon Forum Wednesday and a meeting with seniors that night, plus the Grad Sack Lunch Thursday, were the major appearances of the Peace Corps members. During their stay they manned a small booth outside Winnett for consulation by students wishing to ask questions about their recent work.

In an off-the-cuff interview the trio emphasized the great practical knowledge gained in Peace Corps work. Kathleen Byers mentioned how people-to-people contact in the Peruvian slums let her know how much of her sociological learning was really pertinent. Jon said that his previous travels in Central and South America had given him only a superficial glimpse of Latin life, like that of a tourist. Actually living with villagers in Colombia brought home the real personality of the people.

Jon. Christopher, and Kathleen also pointed out the two-way growth to be achieved in personal contact with people of a different culture. Not only did they aid the South Americans in selfhelp and construction projects, but in addition they themselves were returned an equal measure of greater experience in solving problems, as well as personal satisfaction and many new friends.

The Coffeehouse fund drive, our sources reveal, has been a solid success. Watch this space next week and see what happens to it. Watch also for Joe Rhodes's article on the fund drive.

Peace Corpsmen Student Stimulation Stations

by Richard Brautigan and Andrew Hoyem

- 1. The nice thing about coffee is that it's legal. Richard Brautigan, 1967
- 2. Coffee, though a useful medicine, if drunk constantly will at length induce a decay of health, and hectic fever. Jessee Torrey, 1819
- 3. If they call for Postum, roast 'em! B.B.D. & O., 20th cent.
- 4. Coffee has two virtues: it is wet and warm. Dutch proverb
- 5. The fashion for Racine will pass off like that of coffee. Marie de Sevigne, 17th cent.
- 6. Charles Audubon dipped his watercolor brush into his coffee cup by mistake . . . only once. Andrew Hoyem, 1967
- 7. Coffee, which makes the politician wise, And see thro' all things with his half-shut eyes. Alexander Pope, 1688-1744
- 8. A dog drinking a cup of coffee is man's best friend. Richard Brautigan, 2067
- 9. Complacencies of the peignoir, and late Coffee and oranges in a sunny chair Wallace Stevens, 1879-1955
- 10. Take Tea and C.

Andrew Hoyem, 2167

- 11. After the coffee things ain't so bad. Henry Heret Knibbs, 1847-1945
- 12. There is only one handle on a coffee cup for a very good reason.

Richard Brautigan, 2267

13. Coffee should be black as Hell, strong as death, and sweet

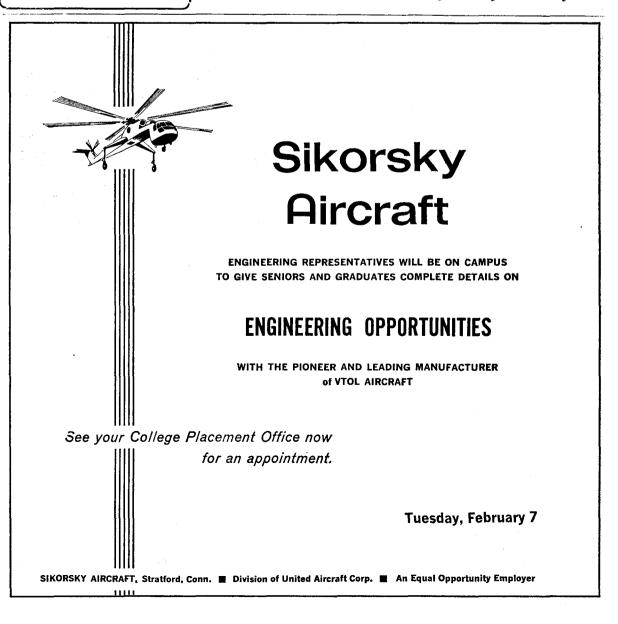
Turkish proverb

- 14. It's always midnight on Coffee Standard Time. Richard Brautigan, 2367
- 15. Let no man grumble when his friends fall off, As they will do like leaves at the first breeze: When your affairs come round, one way or t' other, Go to the coffee-house, and take another.

Lord Bryon, Don Juan

Note: Ordinarily only 14 Stations are observed, but we are including the variant 15th in honor of Helena, who found an ancient goal post from a football game played in 33 a.d. and opened a toothpick factory, selling to tourists and pilgrims until the year 327 a.d., and who founded the first chamber of commerce in a new technological age.

Eds note: By way of one-upsmanship, we'd like to ask for remembrance also of Helena's son, Augustine, who did the first urban renewal plan on the City of Dog in North Africa. In his day a flourishing civilization stood on the south shore of the Mediterranean, but thanks to years of selfless community concern on the part of Christian monks and later inspired Moslems, we now have the scenic wastelands which adorn so many travel posters today.



Poly Sci Department to be Formed Under Elliot, Smith

234 S. Brand

Reservations Phone

245-5043

HEARTS & FLOWERS

TRAVELERS 3

The Rockefeller Foundation has given the Humanities Division at Caltech \$200,000 to study the impact of new science and technology on society. The grant will finance the first two years of a Caltech eight-year plan to strengthen the Humanities Division, with special emphasis on developing a political science program.

The plan is to include opportunities for interested students to spend a summer working in Washington D.C., trips for faculty to capitals of many countries, as well as the United States, and a program to bring men with current or recent experience in gov-

Two Locations

FOLK MUSIC

and COMEDY

Twice the Music

Double the Fun

ernment to Caltech.

The plan also includes a strengthening of the faculty by appointments this year in political science, and later appointments in economics and human behavior studies.

A first step toward the pot-toodistant goal of offering an undergrad major in political science was the recent appointment of David Elliot, history professor, as "executive officer of the Division of the Humanities and Social Sciences." Elliot will assist Hallett Smith, head of the department, and will be especially responsible for the development of political science.

24 N. Mentor

Reservations Phone MU 1-9942

BYRON & HOWARD

BROWN & SHELTON

FATS JOHNSON

at the ICE HOUSE (S)

Houses Reveal Social Programs

Social programs in campus this term range from the traditional to the avant-garde. A number of Houses, trying to economize, will be leaning heavily on Institute and ASCIT activities to fill up weekends.

Fleming, out of debt for the first time in several years, is saving money in order to be able to establish a small TV lounge in one of the empty rooms. They will have the standard couple of exchanges, and a candlelight dinner-with-theater party; the most creative event is a make-yourown-art alley party. There is a possibility that they will hold an off-campus party this term or

Dabney is going lean on campus activities except for assorted exchanges and stomps.

PPSRPIRSC Party

Blacker is going a little farther out, Friday night's event being described as a "Pot Party with Subsequent Raid by Police and Immediate Recall of Social Chairmen." Other Blacker events will include a picnic lunch in the mountains, the "Dan Erickson Memorial Beer Party," a hootenanny exchange, and a rather cryptic event entitled "Gee, It's The Fourth Under-Cover Kremlin Espionage Dance." The final event on their calendar, for March 11, is expressed only as "SNAKE"

The highlight of the Ricketts all-campus calendar besides events is Apache dance, coming up late in the term. They also have posted an exchange, a candlelight dinner and theater party, and intercollegiate sports events.

Ruddock has one of the more creative calendars. Activities planned for the northeast end of campus include bowling parties; a kite flying contest; "Nevada Night," a gambling party; a Valentine's party, and a psychedelic

Thingies with Trip

Lloyd's theme this term, as expressed by, respectively, their treasurer and social chairman, is "cheap" and "sophisticated." They plan a couple of alley parties, a T.R.I.P. (Terribly Ridiculous Infantile Party), and a "Folk Thingie" with a group of folk singers from Oxy who are described as "broke but good."

Page's social chairman's comment was, "We've given up all the traditional activities, and this term we're going to have fun."

the Griffith Park Zoo and Planetarium, and will include a sports car rally (for station wagons, skateboards, and go-karts), a dinner exchange, a wine-tasting party, and the first annual Red Baron Festival, a party to which all House members must bring a girl whom they have never dated before. Red Baron points will be given to House members who are shot down.

Caltech Standing In Putnam Test Extremely Poor

A team of three senior mathematics majors won honorable mention for smogland in the annual William Lowell Putnam Mathematics Competition.

Caltech invariably places high in the competition; unfortunately though, it went down in the standings for the second consecutive year. This is due somewhat to the conflict with Interhouse Dance and to the failure of the Mathematics staff to encourage students to enter the competition; only those who happened to see the notice on a certain bulletin board learned about it. Yea, team!

The team was composed of Glenn E. Engebretsen, 21, of Playa del Rey, Calif.; Stacy G. Langton, 21, of Salt Lake City; and Kim D. Gibson, 21, a Pasadena High School graduate whose father, Forest G. Gibson, is a special administrative assistant at Caltech's Jet Propulsion Labora-

Engebretsen and William C. Mitchell, 21, Caltech senior from Oxford, Ohio, also received honorable mention in the individual competition.

Itinerant Juniors

(Continued from page 3)

forensics since high school, went to Great Britain to observe the political campaign there. George Brackett toured the major art galleries and museums in Spain, Greece, Italy, France, and England. His avocation was sketching and painting.

Joe Weis, a philatelist, studied postage-stamp printing in Europe. He also visited some physics research institutions. Dick Burgess, intending to investigate research facilities in European hospitals, visited its major medical research institutes.

Do not get the idea from the above the prize is only for trolls. It is not intended that one spend all, or even most, of his time on his project. The idea behind the (Continued on page 8, Col. 1)

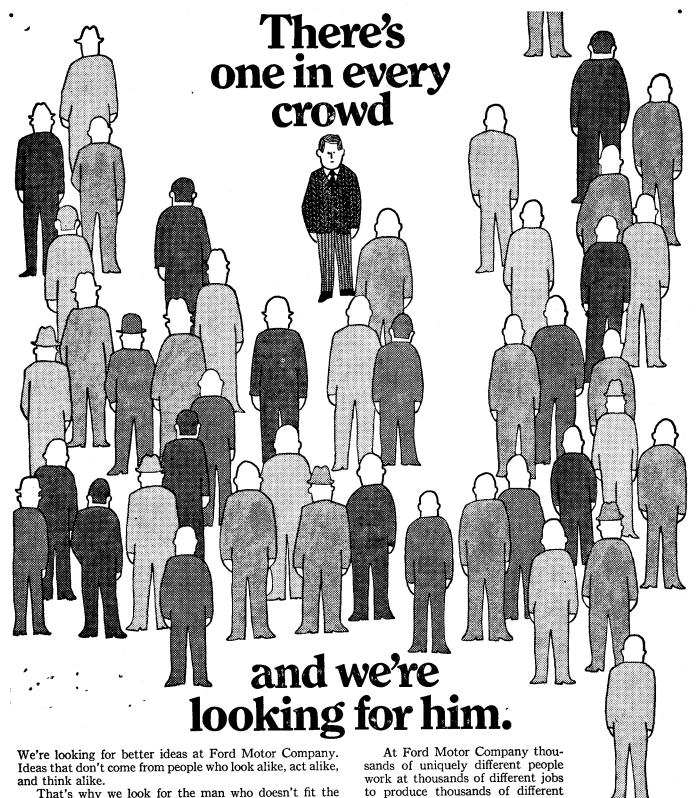
Want to be more than a face in the crowd?

At Ford Motor Company we're looking for better ideasin everything from automotive marketing to steel-making and basic research. Ideas that don't come from people who look alike, act alike and think alike.

Whatever your major-arts, science or business—if you want to be more than a face in the crowd, we want to talk with you. Call your placement office for an appointment.

February 24, 1967

Dates of visitation:



That's why we look for the man who doesn't fit the mass mold.

And we don't stop with looking, either. When we find the man, we try to cultivate his uniqueness. With a College Graduate Program which offers immediate opportunities for individual development. With a rotational assignment sys-

tem which assures immediate responsibility and constant visibility by management.



THE AMERICAN ROAD, DEARBORN, MICHIGAN—AN EQUAL OPPORTUNITY EMPLOYER

products.

assembly line. You.

But there's one thing we'll never run through an

So, if you want to be more than just another face in the

crowd, write our College Recruiting Department. Or Better

yet, make a date to see our representative. He'll be on

campus soon looking for better people with better ideas.

Intelligence Report

by Fehder and Jacobs

For an evening of entertainment that's decidedly "different," yet juite inexpensive, take a trip to the Silent Movie. Yes . . . it is now possible for you to thrill your date with the same film epics your father (grandfather?) attended as a young swain — and for only 90c!

Located at 611 No. Fairfax, the theater is some distance from the center of the Hollywood entertainment area. Dress is, as you might expect, "casual" — but we suggest that you take a couple of pillows along to sit on. The bare wooden seats can become a bit uncomfortable after two or three hours.

The playbill at the Silent Movie is listed under the "Hollywood" section of the "Independent Theatre Guide" in the L. A. Times. We doubt, however, that the movie titles will mean much to you. You should call the box office (OL 3-2389) to get the show time anyway, since there is generally only one show an evening (usually starting at around 7:00 p.m.).

To get to the theater, take the Hollywood Freeway north to the Melrose exit. Take Melrose west to Fairfax, and turn left (south). The theater is about a block down, on the right, You will drive quite a distance on Melrose, and there are, unfortunately, no "landmarks" near the Fairfax intersection — so watch the street signs carefully. Do NOT park in the lot about a half-block north of the theater; the exits from the lot are chained shut at about 10 p.m.

After the movie, you might consider running up to McGoo's — just "999½ steps east of Grauman's Chinese Theatre", on Hollywood Blvd. The food at McGoo's is overpriced, and the pizza is not as good as Shakey's; but





COLLEGE STUDENT

FACULTY MEMBER

P-CN



a trip there will let you "complete" the evening with a hour or so of singing "olde favorite" songs from the same era as the movie you've just seen. The entertainment format is much the same as that at a Shakey's except that there isn't a swarm of little children running around, and song sheets are provided to help you remember the words that go with the old familiar melodies.

More Rhodesia

(Continued from page 4)

emerged and told them their noise had delayed the meeting and that he would not see them until 10 p.m. That time came and went and the students became more angry and unruly. The Principal called in police and had the students arrested. The class boycott gained momentum nad four more faculty stopped teaching.

An Official investigation produced the Birley Report which charged the Administration with astonishing inepititude. The Administration invited officals of the Smith regime to the July graduation ceremony in spite of misgivings of faculty and students. The result was a demonstration by African students who

blocked the aisle and held up signs saying "REBELS ARE REBELS" and "CAMPUS UNCLEAN." As white students tried to shove the demonstrators out of the aisle fighting broke out. Police quickly cleared the area and the following week 31 students who participated in the demonstration were summarily expelled. This time even the Student Union protested.

Gonakodzingwa is Hell!

But the Smith regime was not satisfied. That Wednesday the nine faculty who had stopped teaching were arrested, as mentioned above. The faculty have all since been deported. Ten students were seized. Five of the students are now in Gonakudzingwa, a concentration camp for political criminals in the desert south. One escaped across the

border into Botswana and is now in London.

The others are under house arrest. Since then 40 more students have fled across the border into Botswana, another faculty member has been arrested and charged with plotting sabotage, and warrants have been sworn out against two more who fled the country.

Perma press measures

The university, as a multiracial community in an increasingly segregated society, has been a

(Continued on page 8)

WANTED: ROOMMATE

Furnished apartment, \$35 per month, plus utilities. San Gabriel. Call Tuesday through Thursday, 5:30 to 6:30 p.m., at 289-8168.

Why become an engineer at Garrett-AiResearch? You'll have to work harder and use more of your knowledge than engineers at most other companies.

If you're our kind of engineer, you have some very definite ideas about your career.

For example:

You've worked hard to get a good education. Now you want to put it to work in the best way possible.

You will never be satisfied with run-of-the-mill assignments. You demand exciting,

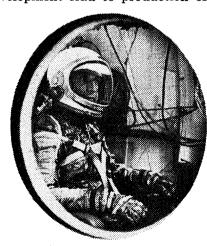
challenging projects.

You not only accept individual responsibility — you insist upon it.

Does that sound like you? Then AiResearch is your cup of tea.

Our business is mainly in sophisticated aerospace systems and subsystems.

Here, research, design, and development lead to production of



actual hardware.
That means you have the opportunity to start with a customer's problem and see it through to a system that will get the job done.

The product lines at AiResearch, Los Angeles Division, are environmental systems, flight information

and controls systems, heat transfer systems, secondary power generator systems for missiles

and space, electrical systems, and specialized indus-

trial systems.
In each category AiResearch
employs three kinds of engineers.

Preliminary design engineers do the analytical and theoretical work, then write proposals.

Design engineers do the layouts; turn an idea into a product.

Developmental engineers are responsible for making hardware out of concepts.

Whichever field fits you best, we can guarantee you this: you can go as far and fast as your talents can carry you. You can make as much money as any engineer in a comparable spot — anywhere. And of course, at AiResearch, you'll get all the plus benefits a top company offers.

Our engineering staff is smaller than comparable companies. This spells opportunity. It gives a man who wants to make a mark plenty of elbow room to expand. And while he's doing it he's working with, and learning from, some of the real pros in the field.

If the AiResearch story sounds like opportunity speaking to you—don't fail to contact AiResearch, Los Angeles, or see our representative when he comes to your campus.

We'll be happy to talk to you – about you and your future.

And put this in the back of your mind:

In a field where meeting challenges pays off in rewards...

AiResearch *is* challenge



An equal opportunity employer

AiResearch Manufacturing Division Los Angeles

Sign up now in the Placement Office for interviews. An AiResearch representative will be interviewing on campus Friday, February 3.

Matmen Lose Twice Basketball Team Beats

The Caltech wrestling team, weakened by the ineligibility of some of its members, was de-

Week's Wrestler



This week's wrestler is Douglas Mason, a freshman who competes in the 191 lb. class. Mason, who comes from Florida, now resides in Dabney House.

He came to Caltech with a year of high school and in competition here he has won two matches, both by pinning his opponent.

In Coach Gutman's opinion, "Doug is a very dedicated wrestler. His drive to improve his wrestling skills sets a good example for the entire team. He is what I describe as the new breed of Caltech athlete. He has picked wrestling as his sport and is now in the process of developing himself as a future champion. An athlete of his nature is a pleasure to coach."

feated last week by two of the toughest opponents it has yet faced.

Last Wednesday at Pomona they were again crushed by the same team that had badly beaten them only a week earlier. Alan Beagle, wrestling at 177 lb., pinned his man in 1:21, scoring Caltech's only points in the 34-5 defeat. In exhibition following the regular competition Dick Thornberry decisioned Mark Dyl of Pomona with a 6-0 score. Both men were wrestling their second match of the day.

Saturday, the Beaver matmen faced undefeated Biola. Again the only points were scored by Beagle, this time wrestling heavyweight, as Biola won 36-5. Later in exhibition, Beagle got another pin, thereby extending his winning streak to 12; nine pins and three decisons.

The Caltech basketball team lost to LaVerne in a thriller 96-95 on Friday night and came back to trounce Life College for the third time this year 88-74. On Tuesday it was the same old script; CHM clobbered the Beavers 97-72 for their 34th consecutive loss in conference play.

LaVerne, featuring a tight full-court press on their midget court, wiped out an early Caltech lead and was ahead at halftime 52-42. But the Beavers caught fire in the second half. Jim Pearson and Jim Stanley found their range, and with help from a zone press of their own, Caltech cut the margin to three points. La-Verne increased its lead to nine, then the Beavers cut it down again.

Suspense

With two minutes left in the fourth quarter Caltech went ahead by one. With 27 seconds

to go they still led 95-94. Pearson apparently had the ball kicked away from him in the backcourt. Stanley, who had a chance to pick up the ball, let it roll out of bounds. The referee gave the ball to LaVerne despite vehement protest from Caltech. The LaVerne guard then calmly sank two freethrows after being fouled on an attempted layup. Saturday night bath

Saturday night against Life College a determined Caltech five built the lead early and led by 17 at halftime. Stanley had one of those nights all basketball players dream about; he just couldn't miss. The lead was as large as 28 in the second half, so they

just coasted to an easy victory. Stanley scored 33 points, and Terry Bruns contributed 23 points and 20 rebounds, the latter being his best of the season.

Switel

Claremont-Harvey Mudd, playing at their best at home, harrassed the Beavers relentlessly with a half court and occasionally a full court press. All-league candidates Harmsen and Barton controlled the boards; Bilger and Barton broke the "box-one" defense which had worked for Caltech so well in the past. CHM built an early lead and simply ran away with the game. Stanley was again high scorer for the Beavers with 21 points.

Rugger Wipe Loyola

The Caltech rugby team managed to use its superior strength in an erratic manner to beat Loyola 18-12 in the first game of the season.

Early in the first half the team combined well to produce brilliant rugby plays culminating in touchdowns ("ties" in rugby terminology) by Tony Collings, Steve Wolfe, and Jean-Pierre Laussade. Laussade was particularly impressive in beating five men with a deceptive, swerving run.

Boo Mick!

Unfortunately Mick Mortell's kicking form was off, failing to convert any of these tries and missing several penalties. (Tries

count for three points, conversions for two, and penalty kicks, which are like field goals, are also three.) Loyola scored after recovering a loose ball from a blocked kick, making the half-time score 9-3.

As the game progressed, the lack of fitness and experience of the Caltech players became obvious, and the more mobile Loyola team capitalized on dropped passes, stupid kicks, and poor cover defense to score two scrambling tries and a penalty kick. In the second half Caltech managed to scored nine points on a try and a penalty kick by Robert Bellue and a try by Ken Jacobs.

(Continued on page 8)

California Tech Finances to Show Year-round Surplus

For the third time in three years, the California Tech has climbed out of debt. A tally of the Tech's assets and liabilities as of January 1 showed an astounding balance of \$1,177.74. Last year at this time, business manager Stuart Galley reported a balance of \$481.30, so our profit for the calendar year was a tidy \$696.44.

This hopefully marks the end of the **Tech's** financial difficulties, which date back to 1962. When business manager Lee Molho took office that year, he discovered among the unkempt records and undeposited checks a debt of about \$3500.

J. C. and the boys

An austerity program, along with aid from ASCIT, the initiation of Institute payments for faculty subscriptions, and hustling business managers, finally enabled J. C. Simpson to report an estimated balance of \$40 on Jan. 1, 1965.

But as his successor, Stuart Galley, learned, Simpson had chosen the best possible time to report this balance. Revenue from faculty and off-campus subscriptions is already in the coffers at this time, although expenses for these items will not be

was \$430.44.

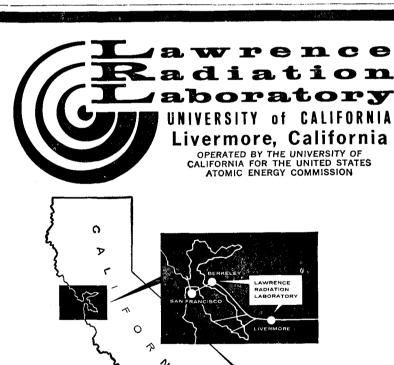
incurred until later. This, plus the fact that advertising volume usually slacks off second and third terms, resulted in a debt of \$783 the following September. Conscious of his predecessor's mistake, Galley reported both the actual (\$481.30) and corrected (\$-342.70) balances.

New eds. to get shaft

As our corrected balance this year is a positive \$87.74, the Tech has at last culminated its five year climb out of debt. But don't start jumping for joy just yet, since even now our financial situation is shaky. This year's total profit was less than last year's, primarily due to a slump in national advertising. However, this may just be an apparent effect, since there are some indications that the bulk of our advertising, the recruiting ads, has shifted to second and third terms.

Zot! B. B. is sterile!

Last year an optimistic Galley predicted a low positive balance for last summer—the actual balance on Sept. 18 was \$-84.94. This year a confident Bob Berry predicts that the **Tech** will not dip into the red at any time during the next few years. Barring an act of God.



MAJOR PROGRAMS NOW UNDER WAY:

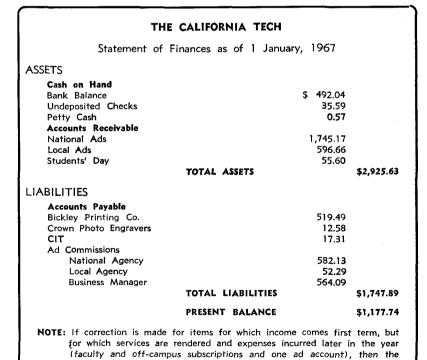
PLOWSHARE—Industrial and scientific uses of nuclear explosives. WHITNEY—Nuclear weapons for national defense. SHERWOOD—Power production from controlled thermonuclear reactions. BIOMEDICAL—The effects of radioactivity on man and his environment. SPACE REACTOR—Nuclear power reactors for space explorations...far-reaching programs utilizing the skills of virtually every scientific and technical discipline.

Laboratory staff members will be on campus to interview students in the Sciences and Engineering

WEDNESDAY, FEBRUARY 8

Call your placement office for an appointment.

U. S. Citizenship Required • Equal Opportunity Employer





actual balance is \$87.74. On this basis, profit for the calendar year



Last Saturday's student films at Culbertson were fun to watch and showed promise if you consider that the filmmakers are the TV commerical makers of tomorrow. Their technique was perfect and the overall effect cute, but, with a few exceptions, they

showed little originality.

Showed promise There were three films that showed promise: "Broken Ties," "Waiting for May," and "Contrition." "Broken Ties" presented some intriguing images of a bum and visions of the railroad through the camera's eye and through the man's eye. The merits of "Waiting for May" also lay in its images. Dealing with an old woman's recollection of her youth, the yellows and greens and the soft focus evoked a feeling of nostalgia in the viewer. Without words or mushy emotions the film managed to gain the audience's empathy for the woman. "Contrition" was the strangest of all the films. It consisted of three self-sufficient episodes which were tenuously tied together through some mysterious symbolism. This symbolism was nearly imposible to interpret, yet the film left a gloomy imprint which was purely visual and not rational.

Pinball pinap "Tilt," a film on the pinball machine s a sex symbol, was best received because of the nature of the subject matter, but, except for a few interesting camera angles, there was nothing much to The two animated films, "Three Views from an Ivory Tower" and "Claude," were clever and had cute twists for endings. The most impressive part was the way the latter film indicated its main character's detachment from the "real world." There was no background except when he bumped into something, and then the world around him suddenly came into view. "Hotdogger" and "Milk of Human Kindness" tried to tell simple stories but couldn't really get anything across.

Ignorants snowed

Many people were impressed

Travel Prizes

(Continued from page 5) prize is that a face-to-face acquaintance with other nations and their people is of increasing importance to today's future scientists. Sophomores should begin thinking now about both their GPA's and possible projects.

More Ruggedby

(Continued from page 7)

The outstanding players of the game were flanker (that's the outside forward) Bellue who crashed through for many fine runs and second five-eighth (that's the middle back) Peter Dodds who tackled well and set up many scoring moves.

join famous dropout Paul Gauguin! Cut out for Tahiti and ClubMéditerranée

H. B. BENNETT TRAVEL AGENCY

100 S. Los Robles Avenue

Pasadena, California

Lamb's Afrika by Peter Balint (Continued from page 6)

by some of the camera tricks

used in the films, but only be-

cause they have never seen them

before. To these people these

were "avant-garde" films. But in

the real forefront of filmmaking

such tricks have long been used

and have now become passe. It

is to be hoped that there will be

chances in the future for people

at Caltech to see genuine experi-

mental movies and thereby real-

ize what is going on in this,

the newest of the creative arts.

center for dissent and has come under increasing pressure. Most Rhodesians outside the University felt government action was long overdue. At the same time, the majority feel that laws like the one above which permit arrest without trial or appeal by order of the minister of justice are only temporary. I am not so confident. In September that law, which could formerly be used only in a state of emergency, was enshrined in the Constitution.

More Scrippsies

(Continued from page 1)

lent opportunity to meet girls and faculty members on an informal basis for an extended period. Interesting and rewarding relationships easily develop during a weekend in a closed community, and at the conference ample recreational time will be provided to further them. A final attraction will be a series of experimental art films.

Turn on, tune in, and drop out

The sign-up period for the weekend will begin tomorrow and end Monday; the Y office is the place to go. Cost to students

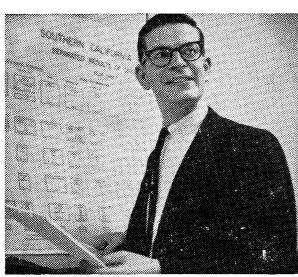
will be \$15. A five-dollar deposit will be required from each person at the time of sign-up; it will be returned to those who are not selected to go to the conference. The conference members will be chosen from the list of interested parties so as to reflect a distribution among classes and Houses; furthermore, those who have never attended the conference will receive perference.

PAT'S LIQUORS AND DELICATESSEN

1072 E. Colorado SY 6-6761 Open to midnight daily, 1 a.m. Fri. & Sat.

Party Supplies

Have you got what it takes to try for the top?



Ronald P. Patterson, B.A., 1964, in history at University of Southern California.

An engineer in the Inventory & Costs Division, Ronald is involved with the financial relations between Pacific Telephone and the independent telephone companies in Southern California. Specifically, Ronald works on cost studies for mutually handled telephone business. Last year the cost studies involved over 100 million dollars.



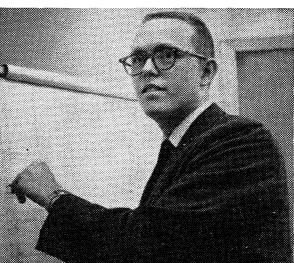
Tom Grimm, B.S. in Electrical Engineering, 1963 and M.S. in Électrical Engineering, 1965, UCLA.

In less than two years with Pacific Telephone, Tom has risen swiftly from installation foreman through the ranks to become supervisor of the Lomita Central Office. Tom, who has 11 highly skilled craftsmen working for him, is responsible for the maintenance of central office equipment worth \$2,500,000. About 18,000 telephone customers depend on this equipment to make their phone calls.



Lee Massick, B.A., 1962, in Management Theory at California State College at Long Beach.

Lee's first job: supervising the work of 17 clerks responsible for the final processing and mailing of almost one million telephone bills each month. Within five months, Lee became the supervisor of seven such groups involving 77 people who deal with record storage, monthly billings, and processing of computer-produced information.



William L. Ordway, B.S., 1963, in Electronics at Loyola University.

Bill first worked for Pacific Telephone part-time while he was an undergraduate. After a tour of duty in the U.S. Air Force, he was assigned to the Customer Service Engineering District at Pacific Telephone where he supervised ten people working on communications installations. Later Bill became a complex project engineer with four engineers reporting to him, where he handles over \$100,000 per month in construction expenditures.

PLAN TO TALK WITH OUR CAMPUS REPRESENTATIVE ABOUT YOUR CAREER (DAYS)

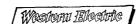
EQUAL OPPORTUNITY EMPLOYERS





BELL TELEPHONE
LABORATORIES

TECHNICAL GRADUATES FOR RESEARCH AND DEVELOPMENT WORK IN COMMUNICATIONS AND ELECTRONICS WITH ONE OF THE WORLD'S FOREMOST RESEARCH LABS.



TECHNICAL AND NON-TECHNICAL GRADUATES FOR ENGINEERING AND ADMINISTRATIVE POSITIONS THROUGHOUT THE UNITED STATES.

See Our man on campus Feb. 8, and 9.

SY 6-2713

SY 2-6814