California Tech

Associated Students of the California Institute of Technology

Volume LXII.

Pasadena, California, Thursday, November 17, 1960

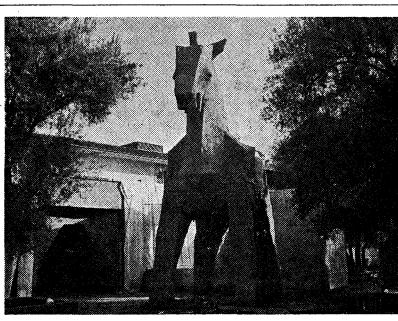
ASCIT Drive Aids Charity

The 1960 ASCIT Consolidated Charities Drive was launched Monday as a service of ASCIT for the student body. Instead of innumerable charities canvassing the campus every year, charities are chosen by ASCIT and represented by one-weeklong drive. Contribution cards passed out by the UCCs allow the student to donate cash or to charge to his next term's bill any amount divided in any way he wants among three charities: the American Cancer Society, Multiple Sclerosis Society, and the World University Service.

Money donated to the American Cancer Society may well be a donation to Caltech since out of \$639,000 spent in L.A. County, \$196,000 goes to the Institute this year. The Multiple Sclerosis Society is fighting a disease that largely affects young adults, attacking the central nervous system. The World University Service is active in all phases of education; they have aided colleges wrecked by the recent earthquake in Chile, done work in the Congo, where there were only 17 college graduates last year, and generally helped students everywhere.

Donations should be turned in to the UCCs by Friday; off-campus students will receive their cards by mail and should return them to Paul Purdom or Kurt Anderson.

Money collected this year should be between \$1000-\$2000. Collections have been falling steadily for the last four years, and it is hoped the trend will be reversed. Students should keep in mind the fact that a year's worth of charity is involved, and contribute accordingly.



The prond Trojan horse, built by the Ricketts, Page, Ruddock combine, rears its head in agony as the rain attempts to reduce him to soggy paper, Saturday afternoon.

Houses Receive Books, Tickets

Interest has recently been expressed in forming libraries for the Student Houses at Caltech, according to a proposal announced at the last RA meeting.

The mechanism of setting up the libraries may be as follows: Students are to give to their RAs lists of books that they feel should be included in the House libraries. These books should preferably be those which cannot easily be found in campus libraries. The RAs will then compile a list of the best books, which will be further sifted into one integrated list and then the completed list will be formally considered. If the list is suitable, the necessary funds may be donated for the libraries and the books will be purchased. purchased.

It is expected that as the years progress the libraries will continue to grow and acquire more volumes.

Another recent development is the formation of a Caltech Cultural Club. The purpose of the club is to provide opportunities for students to attend various cultural activities in the Los Angeles area that they might not be able to enjoy because of financial reasons.

The first cultural activity of the term is the Royal Ballet of London, formerly the Sadlers Welles Ballet. They will be opening in Shrine Auditorium tomorrow night; six Tech students will have \$10 orchestra seats for the performance.

Future events will probably include concerts at the Philharmonic, operas at the Shrine, and various plays around town.

Asilomar Conf. Coming Soon

Seminars. Discussions. Parties. Girls. The annual YMCA-YWCA Asilomar conference will be held during the last part of Christmas vacation (Dec. 27-Jan. 1) in the Monterey area.

The conference will feature platform addresses every morning by Dr. Herb Otwell, visiting theologian at Tech last year. The various seminars will cover race relations, love and sex, U.S. foreign relations (led by Dr. Rodman Paul), religion and the arts (led by Al Green), campus problems, and ethics and Christianity.

Snow Challenges The Somniloquists

BY CRAIG BOLON

Sir Charles Snow will speak at Caltech Tuesday, November 22, at 8:15 p.m. in Dabney Lounge. He has been brought here as part of the Carnegie series, and his announced topic is "The Scientist in Government." We may hope that Caltech's reputation has issued far enough that he will comment on the subject about which he is most outspoken, that of the conflict between the scientific and literary cultures.

Will C. P. Snow explode a smug complacency? The Great Chestnut of the Caltech Undergraduate School has long been that its grads are not merely scientists but human beings, because they have been educated in the humanities. This propaganda has resulted in a far more culturally diverse student body than Tech might have otherwise enjoyed. But is it borne out in fact at the Institute?

Snow approves of the enthusiasm, the social optimism, the rigorous methods, and the impatience for progress of the scientists. But he emphatically disdains their cultural impoverishment, because it puts them substantially out of contact with the rest of civilization. And these are the people whom Snow says "hold the future in their bones."

The traditional culture is frankly afraid of science, comments Snow; and it is this culture which largely manages our modern governments. Therefore, to take their part in guiding the new age which science is creating, the scientists must be able to communicate on common grounds with the "intellectual" society. They can claim that it is up to the intellectuals to learn the language of science, but this does not absolve them of their obligation. And since

Announcements

FIRST AID AND RESCUE The Caltech Civil Defense First Aid and Rescue Team will science is rapidly becoming the main force in this age, this obligation approaches a moral responsibility.

In this book, The Two Cultures and the Scientific Revolution, Snow says, "As one would expect, some of the very best scientists had and have plenty of energy and interest to spare, and we came across several who had read everything literary people talk about. But that's very rare . . . In fact, we thought the discovery that Dickens had been transformed (by the scientists in general) into the typespecimen of literary incomprehensibility was one of the oddest results of our investigation." This is the sort of thing that Snow means by the "cultural (Continued on page 6)



MacLeish To Visit At Tech

Archibald MacLeish, poet, playwright and true intellectual, will arrive at Caltech November 30 to begin a three-day Leaders of America visit. While here on his YMCA-sponsored stay, MacLeish will be available for conversations with students during most of his waking hours.

Several opportunities will be provided for meaningful discussions with MacLeish in the fields of modern literature and the role of the intellectual in government.

Reading-discussion groups are being organized through the

CIT Arena Theater Reads J. B. Friday

BY LARRY McCOMBS The Caltech Arena Theater will present a reading of Archibald MacLeish's verse play, "J.B.," this Friday at 8:30 p.m. in Culbertson Hall, in order to acquaint Caltech students with at least a portion of his philosothough modernized. Their children are killed by automobile accidents, war, and rape; J.B.'s home and belongings are lost in an atomic attack; and finally his skin is covered by the sores of radiation poisoning.

In the final scene, MacLeish has left the story as told in the Bible to make a point of his own. The biblical Job repents of his sins, begs forgiveness of God, and regains all his belongings. But J.B. rejects not only the temptations of Satan, but also the humble acquiescence which God demands. In the end he says, "We can never know . . . We are and that is all our answer. We are and what we are can suffer. But CIT ARENA what suffers loves. And love will live its suffering again . . and still live . . . still love." In MacLeish's play, the three comforters who come to Job are a pastor, a psychiatrist and a Communist. Portrayed by Art Robinson, Rich Harris and Steve Langley, they offer J.B. the dubious comforts of our modern society.

the YMCA Leaders of America program.

Directed by Mike Talcott, former Tech student now studying at the Pasadena Playhouse, the reading will be done with full costuming, staging, and lighting, but the actors will work with scripts in hand.

In "J.B.," MacLeish has taken the story of the Book of Job and transposed it into a modern setting. Mr. Nickles (Phil Kern) and Mr. Zuss (Stu Goff), two ex-actors now working as vendors in an old broken-down circus, decide to play the parts of God and Satan in the circus' version of a play about Job. As they do so, the rest of the actors appear and the performance goes on, sometimes under their control, but often controlling them. Job, or J.B. (Bob Lollar), and his wife Sarah (Robin Street) are visited by all the misfortunes of the biblical Job, al-

As did the Book of Job in the Bible, the play attempts to come (Continued on Page 2) Chapel will be non-denominational. It will deal with some religious episode in an intellectual rather than conventional manner. There will also be firesides, talent shows, sing sessions, dances, beach parties, a New Year's Eve party, tours, hikes, and spontaneous recreation.

Registration cards are now available in the YMCA office. You should try to sign up before November 30 for the lowest registration fees. The entire cost of the conference will be about \$50, but the Y is providing scholarships for those unable to pay the entire fee. hold its first meeting tonight, Thursday, November 17, at 7:30 p.m. in 108 Dabney. Standard and advanced first aid courses plus training in rescue techniques will be offered. All interested students are invited to attend.

SURPLUS REQUESTS

The ASCIT Board will consider surplus requests at its Novomber 21 meeting. Organizations which have a request standing, or who will WANT to make one, are urged to have representatives present.

ASCIT XMAS DANCE

The ASCIT Christmas Dance will be held on December 3 in Dabney Lounge. No band has been picked yet but some entertainment will be provided by Jim Scull's informal dance band. Admission will be a gift to be given to some orphanage. YMCA office to talk about Mac-Leish's poetry and his play, "J.B."

His "office hours," a traditional Leaders of America feature, will be devoted to intimate discussions with students in his suite of rooms. MacLeish hopes to steer office hour conversations into discussions of government. Another high point of Mac-Leish's visit will be a panel discussion between him and several Caltech faculty members on "Communication." This panel will be scheduled for evening presentation, and will be followed by questions.

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The California Tech will not be published next Thursday, Thanksgiving Day; publication will be resumed the following Thursday, December 1. Happy Thanksgiving!



"Your adviser is watching you!"

Editorial Big T Blasts Off

The Big T got off to the best start it's had in a number of years last Monday, when the ASCIT Board decided to let it be published again with its present format and under the direction of Pete Fischer and Bob Schmulian.

Fischer and Schmulian have eight other people who have indicated a desire to work on the Big T. However, they won't be able to do the job alone. We expect them to be all over campus soliciting help and material, just as we do for the California Tech.

We also feel that if the students here are really interested in having a yearbook, they'll put a little individual support behind it. Already, we've a prime example of excellent student support.

Dabney House has talked with the Big T editors and has offered to take responsibility for the activities section of the yearbook, with respect to the Student Houses. This particular section has in the past been one of the chief headaches of **Big T** editors.

However, Dabney has stated that they will not be responsible for obtaining pictures and information from the other houses to go in the Yearbook. Each house will be responsible for its own activities section, and Dabney will co-ordinate the arrangement in the book itself.

We wholeheartedly endorse the support and interest shown by Dabney in the outcome of the 1961 **Big T.** This is one of the first incidents this year in which we've seen students tackle a problem on their own initiative and come up with something constructive. And we expect the other houses will come through just as well.

Should this yearbook be forced to come out late, as those of the past two years have had to do, then we advocate either the abolition of it, or a large reduction in the format. If student support for the yearbook, which is very apparent now, dies in the next few months, then perhaps a serious appraisal might be made with regard to Tech students undertaking any projects of considerable length and significant magnitude.

J. B. Delves Into Questions Thinking Man Concerned With

(Continued from page 1)

to grips with some of the deepest questions a thinking man can ask about religion, and the purpose of life. If God is God, how can He be good and still permit evil to exist? Why do the just suffer? Why do men go on living and trying, despite their suffering?

Because of the peculiar device of a play within a play, Mac-Leish is able to have his characters question themselves and their actions in a much deeper fashion than would otherwise be possible. The audience is constantly reminded that it is merely watching a play. Two circus roustabouts (Bill Kern and Larry McCombs) portray many of the parts throughout the show. The scripts which the cast carry serve to heighten this effect. Throughout, MacLeish has made maximum use of the freedom which modern lighting and bare-stage theater can lend

o the art.

Others in the production include Bob Poe, Gary Chamness, Anna Moore, Claire Shelley, Kathy Matthews and Lois Crane.

During MacLeish's visit later

EPC Polls ees

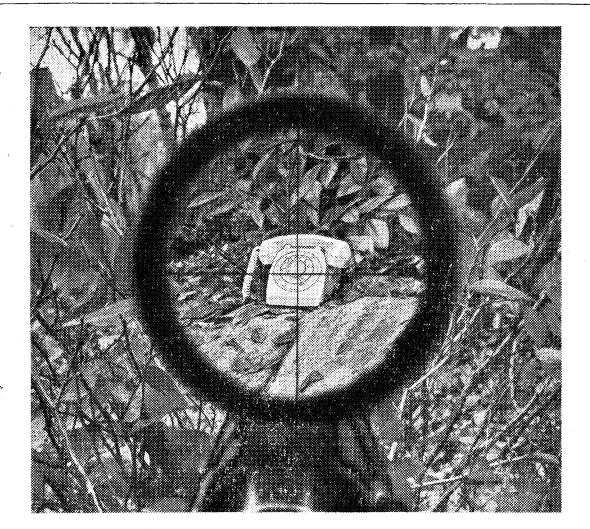
The Educational Policies Committee distributed, last Monday, a poll among Caltech upperclassmen in order to investigate the problem of student advisers. In response to complaints from students about the adviser situation and in an attempt to put into use some constructive suggestions, these polls have been distributed to about four students for each adviser, and are to be turned in today.

At a recent meeting of the EPC about one-half of the members expressed dissatisfaction with the system. They complained that advisers were often difficult to find and once avail-

this month, at least one meeting will be devoted to a discussion of the play and its significance. It is hoped that many students will see the play and thus be able to take a greater part in the discussion of it.

able gave very impersonal service. Some also felt that choosing courses was difficult when advisers did not know about elective courses in other options.

The poll calls for the advisee's name, option, year, and adviser. The main questions cover the adviser's knowledge of courses in his option, the availability of the adviser, the usual frequency of consultation with him about educational plans, the adviser's interest in your academic problems, and general satisfaction with the adviser. Ample room is allotted for remarks by the advisee.

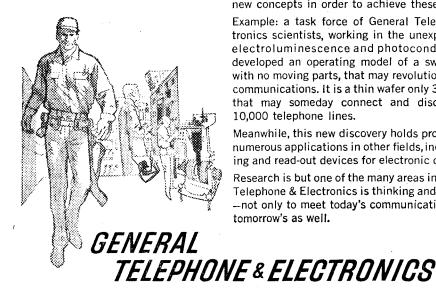


Zeroing in on the future

Let's all pitch in and give the project a hand!

Published weekly during the school year by the Associated Students of the California Institute of Technology, Incorporated. Editors Tom Tisch, John Todoroff **Managing Editors** Lance Taylor and Roger Noll **Editorial Staff** Larry Gershwin, Barry Petersen, Dan Entingh, David Helfman Butch Lungershausen, Bob Greenwald, Chuck Leonard, Bill Meisel, Richard Karp **Business Staff** Cleve Moler, Manager Circulation Manager: Howard Monell The California Tech, 1201 East California Blvd., Pasadena, California. Member of The Associated Collegiate Press Second Class postage paid at Pasadena, California Printed by Bickley Printing Co. Represented nationally by National Advertising Service, Inc. Subscriptions: \$1.00 per term, \$3.00 per year. Write: Circulation Manager.

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tions system that will be needed to meet the demands of tomorrow. And we're constantly shooting new ideas at this target.

In our 24 research laboratories, more than 3500 scientists and engineers have their sights set on entirely new concepts in order to achieve these results.

Example: a task force of General Telephone & Electronics scientists, working in the unexplored areas of electroluminescence and photoconductivity, have developed an operating model of a switching device with no moving parts, that may revolutionize telephone communications. It is a thin wafer only 3 inches square that may someday connect and disconnect up to 10,000 telephone lines.

Meanwhile, this new discovery holds promise of having numerous applications in other fields, including switching and read-out devices for electronic computers.

Research is but one of the many areas in which General Telephone & Electronics is thinking and working ahead -not only to meet today's communications needs, but tomorrow's as well.

GENERAL

Government Shakeup Startles Student Body

BY ROGER NOLL

The whole student body was aghast last week when the Board of Directors, after conferring in a smoke-filled room for nearly three hours, resigned their positions and threw their support to Dave Kubrin to set up a temporary junta until order can be restored. In making this unprecedented move, ASCIT issued the following statement:

"After considerable serious thought on the matter, we, the ASCIT Board of Directors, have deemed it necessary to resign our duly elected offices. After careful consideration of the recent arguments put forth by the Honorable David Kubrin, we have decided that we are incompetent, dishonest, haughty, aloof, conceited, and immoral. In light of these findings, we meekly succumb to the great popular political upheaval going on around us, and relinquish our position of power. We most humbly suggest that the Caltech student body allow that champion of the lower class, Colonel David Kubrin, to form a temporary government, with himself as Monarch, and handle the affairs of the student body until a permanent governing body, preferably a Student Council. can be formed."

This document was sigined by all the Board members except Chuck Brooke, who was absent, unexcused. Dave Pritchard witnessed John Golden's "X".

Monsignor David Kubrin was available for comment immediately. He told reporters that he was amazed and pleased by the Board's "return to common sense," and promised to announce his plans for a new government immediately. With a look of stern dedication, the Crusader informed the reporters that "I think it in the best interests of my fellow students, especially those with poorer grades, to abandon the drive for a Student Council, in light of recent developments. I'm certain I can establish an efficient, honest, friendly, palsy-walsy and duly humble Monarchy without using the name Student Council."

Reaction on campus has been quick and devastating. In an emergency session held last night, ExComm briefly discussed the recent developments, and then turned their efforts to more serious matters. They will pass out a poll today at PE classes which calls for each student to personally evaluate the competence of Bill Bauer, and to comment briefly on Mr. Kubrin as a father image.

were suggested because of their widespread leadership training and abilities.

Many student leaders were available for comment. Doug Shakel, only man on campus with four years' experience in student government, when asked what he thought about the developments, commented, "I don't think it will affect Dabney House much."

Rod Dokken, when informed of Sir Kubrin's ascendency, remarked, "Kubrin? ROARRRRR!"

And Al Pfeffer, when reporters questioned him, said, "I'm certain that Brother David will bring an era of prosperity, growth and happiness to the Caltech community. Why, Dave has always been deply concerned about his fellow students, and ever since he was a freshman he has been campaigning to abolish the inefficient governmental methods of ASCIT." It was later learned that Pfeffer had been appointed assistant to the Monarch by Leader Kubrin.

It is the opinion of this editorial body that the new regime will be able to run the government in a manner unlike that to which we are accustomed. They will not have the efficiency problems, for they have eliminated one terrible time consumer in former ASCIT meetings, namely, petitions submitted by the Kubrin supporters. Also, they will not have the problem of seeming hard to approach to the average student, for Kubrin has long been associated with the average student. Finally, they will not have to worry about subsequent power struggles and complaints from other students - at last count 547 Caltech students had applied for admission to L.A. State.

Student Tickets Available For Phil Concerts

Student tickets at reduced rates are still available at the Caltech Bookstore for the Los Angeles Philharmonic Orchestra concerts in Pasadena. Student rates are \$6.00 for \$9.00 seats at the concerts which begin Novem-

Techmen Can Flowering Big T **Cruise Over Buds, Will Bloom** Thanksgiving BY CRAIG BOLON

For those who are interested in the sea, sailing, sight-seeing, and swimming, there is going to be a four-day Thanksgiving holiday sailing cruise. The schooner "Martha" will leave at 8:30 a.m. Thursday, November 24, from Long Beach Marina and sail until Sunday at 5:30. Stops will be made at Avalon and in different coves along the coast of Catalina. There will be many opportunities for skin-diving, swimming, and enjoying the scenery.

Participants should bring warm clothes, swimming suit, rubber-soled shoes, and a sleeping bag, in addition to whatever else they might find suitable.

Those interested and willing to pay the price of \$35 should contact Cindy here at Caltech, Ext. 1207.

After a vicious and apparently victorious fight for life, the Big T has again risen to the task (from its ashes). At the BOD meeting last Monday night, editor Pete Fisher revealed that he and assistant editor Bob

Schmulian now have a staff of

seven members, and they expect

to produce a full-size yearbook

for 1960-1961. The members of

this staff are Mike Ball, Mike

Levy, John Madey, George

Reeke, J. Herm Rickerman, Kay

In addition to the regular staff,

Dabney House, through Bill

Francis, Doug Shakel, and Art

Turner, has volunteered to write

the sports section, the activities

section, and the columns on

their seniors. If this offer is

accepted, all non-House activi-

ties desiring coverage should be

reported to one of the fore-

Sugahara, and Bob Williams.

named representatives.

Although their format is yet far from definite, the editors hope to make several substantial improvements over the Big Ts of past years. In addition to cutting out extraneous pictures, a practice successfully initiated in the current little t, they hope to enliven the standard-type captions and write-ups. In other words, to quote Fisher, "We'll try not to stretch the fact that we're from Caltech."

Tentatively, the main sections of the format will be Faculty, Seniors, Underclassmen, Houses, Activities Sports, and Ads (the raison d'etre). Hopefully, the editors "see no reason why the yearbook shouldn't come out by May 21." A little skeptically, we offer them our encouragement (and our support?), and hope this happy blindness is at least semi-permanent.

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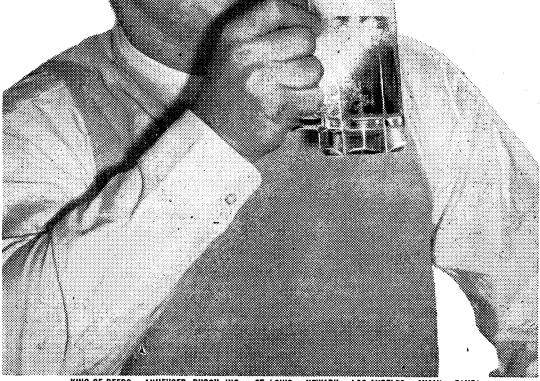
Also in special session last night was the Interhouse Committee. John Lohman suggested that the IHC support an active counterrevolution, and if possible, establish a triumvirate of himself, Gary Walla and Bill Hogan to assume control of the campus government. These three

ber 30, featuring Georg Solti, guest conductor, and Gary Graffman, pianist.

Alfred Wallenstein will be the guest conductor on December 21 with the L.A. Philharmonic. Featured at that program will be the Roger Wagner Chorale and soloists doing Part I of Handel's Messiah and also Monteverdi's Magnificat.

Tickets are still available for the Coleman Chamber Concerts. The remaining concert prior to Christmas vacation will be November 20 with the Shapiro Schonbach Gottlieb, featuring selections from Beethoven, Boch, and Mozart.





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dled the programming.

Biggest fiasco in the comput-

er's exam schedule is History 5.

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| 'ge Crowd and compelling one. | After a month of trying, Cal- tech's Burroughs 220 computer coughed out a finals schedule | there are 322 conflicts. Disdaining the computer, Mrs. Hanes said, "The final arrange- | at the Troubadour II |
| After the intermission, the quartet performed the Beetho- ven Quartet No. 9, in C major, opus 59, No. 3. This, as with | with but eight conflicts out of 58 courses. Mathematics Profes- sor Robert Dilworth and Regis- trar's assistant Mrs. Hanes han- | ment of the schedule will have to be done by hand." She plans to have the schedule out by De- cember 1. C'est la vie. | Barbara Dane |

Baker String Quartet Plays To Large Crowd

BY DAVID HELFMAN

Last Sunday evening at 8:15, the Baker String Quartet played to a nearly capacity audience in Dabney Lounge. The quartet, made up of Israel Baker, first violin; Ralph Schoeffer, second violin; Alvin Dinkin, viola; and Armand Kajroff, cello, played a program consisting of quartets by Viotti, Debussy, and Beethoven.

Giovanni Battista Viotti, an Italian violinist-composer, lived just prior to and during the life of Beethoven, a fact which is clearly brought out in the B flat Quartet, one of 21 of his works in this form. As in much of the music of that period, this quartet is well constructed and not easy to play, although the Baker Quartet made it sound quite simple. Their tone was clear and well blended, but at times just a shade off pitch. In this work there are several individual passages which give each member the opportunity to show his personal musicianship, something again which this group can make seem easy. The only noticeably bad feature, something that cleared up to a great extent later in the program, was the fact that the cello part ranged from a full, coordinating, vibrant quarter of the whole to an unclear, indistinct sub-voice.

The Debussy G minor Quartet is a flowing, motile work, almost to the point of being an exercise in sonorities and tonal effects. It, again, takes good playing to produce the correct mood and, again, the quartet achieved this mood. As a whole the piece has excellent construction, at the same time decidedly rhythmic and gently moving. This feeling is especially noticeable in the second movement, one which utilizes one line passing from instrument to instrument against a pizzicato background, completely shaped and molded into a unified pattern. Debussy gets some sounds which can only be typified as "wierd," but the work is an interesting

opus 59, No. 3. This, as with both previous works, is concise and clear, with no lack of ideas. It was written in 1808, between Symphonies Nos. 3 and 4, and it distinctly takes on the composer's feeling of that period: just jutting forward out of the slightly cramped, inhibiting style of Mozart, but not quite with the force and assurance of truly Late Beethoven as in the 9th Symphony and the last quartets. One thing is certain: it is Beethoven. The performance of this piece had something lacking, however. The first two movements seemed to be uncontrolled, as if the instrumentalists had lost their feeling of unity and were groping their way along a long, dark, uninteresting passageway. But the

last half was much, much better, due mostly to the inherent vigor of the fugue-based finale, which was done exceedingly well by the quartet. The next major concert in the Pasadena area (discounting tomorrow's recital by Sviatoslav Richter, tickets for which are not available) is the first per-

Richter, tickets for which are not available) is the first performance of the season of the Los Angeles Philharmonic Orchestra at 8:30 Wednesday, November 29. The conductor will be Georg Solti and Gary Graffman will be piano soloist in the Rachmaninoff Second Piano Concerto. I strongly recommend, certo. I strongly recommend attendance at this concert. It should be quite interesting.

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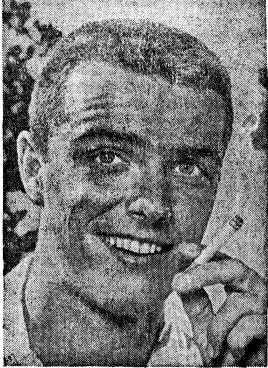
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Dinner



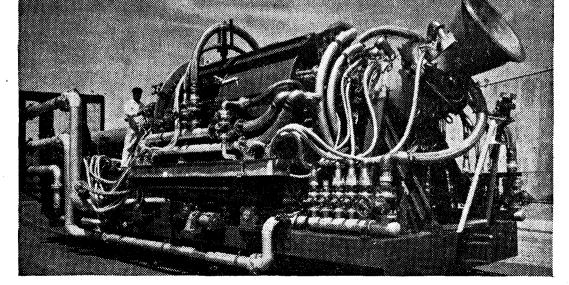
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ON NOVEMBER 18

Lawrence Radiation Laboratory staff members will be on campus to answer your questions about a career in nuclear research.

They will interview outstanding:

electronic engineers physicists mathematicians mechanical engineers (MS, Ph D) Call your placement office for an appointment.

LAWRENCE RADIATION LABORATORY

of the University of California Berkeley & Livermore, California (San Francisco Area)

Speedy Oxy Backs Run Wild, **Earley-Led Beaver Harriers** Run CHM Into Muddy Ground Crush Tech In 48-6 Victory

The varsity cross - country team moved one meet closer to a second consecutive perfect dual meet season Friday as they defeated Claremont, 26-32, in a tightly contested meet.

Never was it more obvious that cross-country is a team effort as the front men drew with their CHM counterparts, throwing the decision of the meet to Tech's third through seventh men.

Excellent improvement was the rule for both teams. Pat Earley cut his time of the previ-

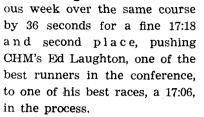
Polomen Lose To Pomona, L.A. State BY TOM TISCH

The Caltech varsity water polo team, plagued by teamwork troubles, dropped a pair of games over the week-end, first to Pomona, 7-3, and then to Los Angeles State College, 11-5, on Tuesday.

This loss to Pomona, the second in leagu play for the Webmen, dropped the Beavers into a three-way tie for first place in the SCIAC conference with the Occidental Tigers and Pomona.

Tomorrow, Friday, the Techmen take on Redlands at the Alumni Pool in their next-to-last league game. Next Tuesday the polo men will end their season against Occidental in a 4 p.m. home game.

In the Pomona game last Friday, the Techmen were in trouble from the start as Pomona scored first, surged to a 5-1 lead and coasted to victory. Bad passing and inaccurate shooting have been the principle problems for the Tech team. Forwards Bruce Chesebro and Bob Ruby, both scoring well early in the season. have lost valuable points off their shooting averages in the



Following Earley in were Richard Harris, third; Marshall Johnson, sixth; Al Whittlesey, seventh; Art McGarr, eighth; Norm Reitz, 10th; Bill Giaque, 11th; and Jim Williams, 12th. McGarr and Whittlesey had improvements of 48 and 30 seconds, respectively, for very significant contributions to the victory.

The frosh missed their chance , for a second victory as their first man, Ed Lee, twisted an ankle and failed to finish, causing a narrow one-point loss to the Claremont frosh.

The bright spot of the meet for the Tech frosh was provided by Larry Weaver, who poured on an impressive finishing kick to squeeze into second place. Also scoring for the Caltech frosh were Harold Nathan, fourth; Bob Sorensen, fifth; Jacques Calma, seventh; Dennis Holt, 10th, and Jim Hole, 11th.

Tomorrow the frosh and varsity meet Redlands in the last dual meet of the season, with the varsity heavily favored to come through with a strong team victory.

latest games. Only Fred Ha meetman is managing to keep the shooting eye zeroed in.

The Los Angeles State game, a non-league contest, saw Coach Emery experimenting with the team as he split the first string among two evenly matched squads, then rotated the squads into the game, each team playing half a quarter. The Staters iced the game in the second quarter when they pumped in five goals and held the Beavers scoreless, to give themselves a 7-2 half-time bulge. The experiment was a failure.



BY PETE METCALF

Caltech was defeated, 48-6, by the Occidental College football team in the Rose Bowl last Friday night. The tremendous speed of the Oxy backfield proved too much for the Beavers.

Oxy scored twice late in the first quarter after being held to almost no gain the first three times they had their hands on the ball. The first score was on a 72-yard run and the second on a 15-yard pass.

Caltech then marched the ball to the Oxy 23, where they lost the ball on downs. After holding the Tigers for four plays,, Caltech regained possession of the ball and Frank Marshall threw John Arndt a 53-yard pass. Aided by a Caltech fumble, Oxy then marched to another two touchdowns.

In the middle of the fourth period Caltech marched to the Oxy 25, where they lost the ball on downs. A fleet Oxy halfback then ran 75 yards for the sixth Occidental tally. A 42-

yard run resulted in the final to play in the La Verne game score of the game.

The game was a costly one for the Beavers since they lost both of their first string guards to injuries. Truman Seely severely injured his angle and Jack Arnold hurt his knee, Neither will be able to play in the crucial Claremont game.

John Arndt, who was the sixth best pass-catcher in the nation last week, played a fine game and caught 10 more to raise his season's total to 51. Ed Cline, who was not able

because of illness, did a great job in this one. He averaged better than 10 yards a carry for six carries.

This Saturday Caltech plays Claremont-Harvey Mudd in the CMC Home-coming game, in what should be a real thriller. Caltech has won both previous meetings, but this year both teams have similar records. Spirit is high and the desire to win is really there, since it is the last game of the year for both teams. No one is giving odds on this game.



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mud provided so thoughtfully by Mudeo manager, Junior Bob

The actual victories in the

individual contests were hotly

contested by both sides and it

was apparent that considerable,

but just, bias was present on

the part of the impartial Junior

Steve Gorman, the frosh ath-

letic manager, said in an inter-

view with a Tech reporter after

the final event, the tire spree,

"We wuz robbed; wait'll we get

next year's frosh class," and

promptly chased off after the

nearest impartial referee.

Hearn

Judges.

In Annual

Mudeo Riot



Madame (Ma) Hale keeps close check on the turnover (of guys, gals, and money) as she runs the Fleming's western bar and casino with an iron hand.

Tech Cage Teams Sharp In Practice

basketball, both frosh and varsity, are entering the final stages of practice before the season opens in two weeks. The varsity is stronger than last year's squad and expects to win more than half of its games. The frosh, with as good a team as Caltech has ever had, should be strong contenders for the conference championship!

On the varsity level, Coach Ed Preisler has injected a new note into Caltech athletics ---conditioning. The squad has been ragged by the likable mentor, and should be able to wear out the opposition in short order.

The varsity has the same old problem — not much depth. Guards Dean Gerber, Bill Ripka, Larry Brown, and Gerry Clough provide as good a backcourt as any in the league, but the rest of the positions have little depth. Tom Bopp is a standout at forward, and Brown can play this position as well as he can guard. But from there on, everything is a question mark. Pete Fisher, if he recovevrs soon enough from a broken hand, can shoot like a demon, and Roger Noll, who started at forward last year but who has been switched to center by Coach Preisler, can fill in at forward.

At center, Jim Scull has im-

The latest editions of Caltech year, but he has still to play more than a few minutes of a varsity game, and, therefore, lacks experience. department.

> The freshmen, under Coach Gary Shier, have lots of talent and lots of depth. They have been able to stay close to the varsity in both of the scrimmages to date, and should be able to beat any team they face.

> The battle for the first team on the freshman squad is really hot, with at least nine players in contention. About the only certainty is big Pat Dunn, who was an All-Conference center in California's Desert League, at center. At guard, Volker Vogt and Ken Leonard seem to have the inside track. But at forward, its anybody's guess. Leon Thompson, Dick Burgess and Ray Weiss have looked the best, but not by much.

> > THE CAMPUS BARBER SHOP **New Location:** South End of T-4 ALL HAIRCUTS \$1.50

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Sophs Triumph **Ruddock Captures** Volleyball Tourney

In a somewhat unusual finish, with three games left to play, Ruddock House is the sure winner in Interhouse volleyball. As of Wednesday morning, the standings were as follows:

| Ruddoch | 3 (| D |
|----------|-----|---|
| Dabney | 1 | 1 |
| Floyd | 3 | 2 |
| Blacker | 2 : | 3 |
| Fleming | 2 3 | 3 |
| Ricketts | 1 | 5 |
| Page | 0 | 4 |

Page has two games left to play, while Blacker, Dabney, Fleming and Lloyd each have one, thus ruling out any chance of an upset. Throughout the series, the best teams seem to have had the most enthusiastic rooting sections, which may not be entirely cause and effect, respectively.

The next sport on the Inter-

house schedule is swimming. Practice officially starts next week, with the first matches beginning after the Thanksgiving vacation. Since several of the Houses have top Interhouse swimmers, this should be a hotly contested sport.

Snow Covers Human Culture

(Continued from Page 1) impoverishment of science."

And are we at Tech exempt from such criticism? We have little reference ground for comparison with our contemporaries at other science institutions, but it appears from our general at titudes that few of us regard the literary culture as of significant moment. So go and hear what Snow has to say. Naturally, you don't have to agree with him but you do owe it to your "scien tific impartiality" to hear bot! sides of the question.

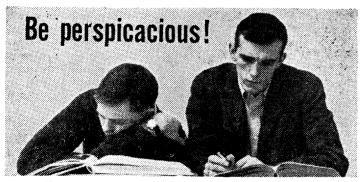


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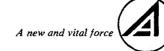
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