



Final dress rehearsals for annual student play point to fine production, as seen here.

'Dark Of The Moon' Showing In Culbertson This Weekend

"Dark of the Moon," starring Tami Kiry, Art Robinson, Stu Goff, a special effects and lighting staff led by Dennis Evans, and a supporting cast of thousands, opened last night at Culbertson. It is scheduled to run three more nights. Tickets are still available for one dollar from a variety of sources, including House social chairmen, the News Bureau, the "Y", the members of the cast, and director Mike Talcott. Only a limited

number of tickets are available for the week end performances.

A new development, announced this week, is that the play will be made available to the outside world. It will be taped by station KPFF (FM) for broadcast at some later date.

"Dark of the Moon" is a full-scale production, balanced between comedy and drama. The Appalachian Mountain setting is the source for the musical numbers. The climax of the play comes at an "old-fashioned religion" meeting which ends as the irrational congregation-turned-mob incites the rape of Barbara Allen.

Ostensibly, "Dark of the Moon" is the story of Barbara Allen, from the folk song of the same name. In fact, it becomes an investigation of various facets of the human mind, particularly the evil. These dark sides are represented by witches and the supernatural on one hand, and by the natural, in the form of mob violence, on the other.

Tech Seniors Get 26 N.S.F. Study Grants

Twenty-one Caltech seniors were awarded National Science Foundation Fellowships for the academic year 1960-1961. Among other schools receiving awards, only Harvard had more Fellows, with a total of 24. MIT received 21 awards.

The seniors who received awards were Eric Adleberger in physics, who plans to go to the University of Rochester; Donald Andersen, Math, Cal.; Thomas Bergstresser, Physics, Cal.; Philip Brooks, Chemistry, Cal.; David Cassel, Physics, CIT; Bradley Efron, Math, Cal.; Alfred Hales, Math, CIT; Lester Hirst, Physics, U. of Penn.; Ronald Lawler, Chemistry, Cal.; William Mock, Chemistry, Harvard; John Munson, Physics, Cal.; James Nearing, Physics, Columbia; Melvin Neville, Chemistry, Harvard; Gerald Pearson, Chemistry, Cal.; John Rix, Physics, Harvard; Wesley Shanks, Physics, CIT; William Sinoff, Engineering, CIT; Stephan Stevens, Physics, Harvard; Lawrence Trafton, Astronomy, CIT; Howard Weisberg, Physics, CIT, and John M. Wright, Chemistry, Harvard.

Five more seniors won N.S.F.-Caltech co-operative fellowships to pursue graduate work at the Institute. These include: Thomas Bowman, ME; Joseph Cauley, Ph.; Jerald Parker, Ph.; Peter Rony, Che., and Louis Toth, ME.

Option Changes Emphasize Electives, Fewer Courses

BY PETE METCALF

The Division of Engineering has proposed a drastic change in the undergraduate engineering options which will eliminate most of the present requirements and substitute a more effective advising system.

If the suggested change is approved by the faculty, the present civil, electrical, and mechanical engineering options will be discontinued at the end of the year and a general engineering option will be substituted. All present undergraduates who are not graduating will be affected by this change.

In addition to the number and types of courses affected by the engineering division will be altered substantially.

Sophomores will be required to take only Ma2, Ph2, H2, PE2, and 15-21 units of electives under the new requirements.

Juniors will only be required to take En 7, AM 115 and 116 or Ma 108, and PE.

Seniors will take a humanities elective, H5, a new course called technical presentation, and PE. In addition, students planning to graduate from the Institute will have taken Ec 4 ab, and enough elective units to make a total of 580. These electives are open to anyone who has mastered the prerequisites.

In order to make sure that each student undertakes a meaningful program a much more extensive program of counseling will be provided. Each freshman who has elected the engineering option will have a conference with Dr. Donald Clark to try to determine where his interests and abilities lie.

The Division of Engineering will then assign the frosh to an adviser whose interests best

match those of the freshman. The frosh and his adviser will then make up a tentative program for the next three years and submit it to the Division by the 3rd of June. The present system of having the adviser sign pre-registration cards each term will remain unchanged.

Not only have the requirements for the engineering option been changed, but the number and types of the courses have been altered in order to take advantage of new advances in engineering, and to eliminate some of the repetitive and unimportant courses for which the demand has not been great.

SPECIFIC CHANGES

AM 15, Differential Equations, required of engineering majors since time immemorial, will no longer be offered at all. Instead, AM 115 will be beefed up and credit will be increased to 12 units for undergraduates. In addition, AM 116 will cover more material and will also be worth 12 units for undergraduates.

The Engineering Conference, Me 50 and EE 70 will be changed to E 10 and E 11 (respectively, and entitled Technical presentations.

Replacing PM 1 and PM 2, PM 10, Engineering Physical Metallurgy, and PM 11, Metallography Laboratory, will be offered. PM 18, Physics of Metals, will be changed from second to first term.

AM 1, Applied Mechanics-Statics, and AM 4ab, Applied Mechanics-Dynamics, will no longer be offered. In their place will be provided a more theoretical course, AM 8abc, Mechanics of Solids I. For those students wishing to delve further into this subject, an advanced course

will be offered, AM 9abc, Mechanics of Solids II.

Instead of the old Engineering Thermodynamics courses, a new Thermo series will be taught. Included in the new series will be a theoretical course in thermodynamics, ME 17; a heat transfer course, ME 18, will cover the more important concepts in this field. ME 19ab will cover fluid mechanics and gas dynamics, and will include study of some applications of the principles of energy conversion. ME 118abc, Advanced Thermodynamics and Energy Transfer, will be on a more advanced level than any course previously offered.

Two new courses in Physical Metallurgy will be offered, PM 5 and PM 15. PM 5abc, Principles of Metallurgy, will be offered.

(Continued on page 4)

Deferred Tuition Interest Raised

The interest rate charged students who wish to defer their tuition payments at registration and pay in monthly installments will be raised from 5 per cent to 6 per cent. The new plan was announced by George Green, Institute Vice-President for Business Affairs.

Under the present deferred tuition plan, the monthly payments are \$50. The monthly payments under the new plan will be \$55, but there will be fewer payments.

Students who have already signed up for the present plan, or who sign up this term, will still be eligible for the 5 per cent interest rate for all their loans.

The deferred tuition program is handled by Students' Accounts.

Psychologist Visits

Rogers Discusses Grades, Group Leaders

BY JOHN TODOROFF

Psychologist Carl Rogers, YMCA leader of America, concluded his Caltech visit last night with a dinner with ASCIT, Y, and house officers. In three days of highly intense discussion, Dr. Rogers expounded and explained the concept of client-centered therapy to student and faculty groups and suggested applications of the basic technique to philosophy of life, education, and group leadership.

He told student leaders Tuesday afternoon that he was somewhat surprised in that he was finding Caltech to be extremely conservative for his notion of a leading science school and his contact with MIT. He noted a prevalent student feeling of being asked to plug in and solve many problems that the student had no idea of why he was asked to solve or why these problems were important to him.

AGAINST GRADES

Rogers suggested that a curiosity and an over-all understanding of one's field should be developed before the student is

presented with the actual tools to solve the problems. He maintained, further, that it is very difficult to grow or change in an evaluative situation so that once in college such things as grades may do more harm than good. Rogers expounded learning for learning's sake rather than for the extra pay a bachelor or doctor degree will bring.

In discussing group leadership at Caltech, Roger tried to discover the problems the officers face in organizing Caltech people and where they try to strike the balance between emphasis on the goals of their organizations and the means and processes used to attain these goals. Specific topics included the formation of A.C.T.I.O.N., the Little K, the lack of interest in Totem, the success of the Glee Club, and the purpose of a student house and the problems of interhouse relations.

APATHY HIT

A majority of the officers showed a primary concern with the Caltech student's unwillingness to attempt positive action



Dr. Carl Rogers presents ideas in discussion in YMCA lounge, Monday.

to solve his problems, especially after spending numerous hours in bull sessions assuring himself that a problem exists. The prevalent defeatist attitude toward meeting women was heavily

ily attacked.

In his major address Monday night, Rogers attempted to answer such questions as "What is my goal in life?" "What is

(Continued on page 3)

Lost Weekend's Coming

LITTLE MAN ON CAMPUS

by Dick Bibler



I don't know . . . She just moved in yesterday and . . .

Editorial

Opportunities

The curriculum changes announced this week by the Engineering department are progressive, forward-looking steps in Institute policy. But we must not be content, thinking that because a big forward step has been taken, we can rest easy for a long while.

A whole host of new problems has been engendered by these curriculum changes. These problems show up in two places: the advisor system and student attitudes. The advisor system has been sorely lacking under our present system, and is sure to be inadequate to meet the new demands.

The engineering changes allow engineering students the widest latitude in planning their course of study. For this reason, a great deal of more serious student thought should go into planning a program, so that it can be both interesting and worthwhile.

On the other hand, it is time for faculty advisors to show a new concern for the welfare of their advisee. Hopefully, every advisor will have a course outline of every subject taught in his particular field, and access to those in other fields. Then perhaps he can give some concrete suggestions in course planning, valid with respect to the needs of the student, and course content.

There is another inherent danger in shifting from our present rigid curriculum to the new system of wider latitude. It will be very easy for students here to take courses that are merely in their limited interest field. Experience has convinced us that it is wise for the engineering student to have a good background in a variety of other fields—ranging from the pure sciences into all aspects of engineering.

We hope the advisors recognize this, and urge students into a variety of interesting courses.

To aid the students in making wise selections for next year's program and the advisors in directing them, we strongly urge the distribution of course outlines for the new subjects that will be offered.

Pre-registration time will soon be here. Let's not wait until then to start working toward better planned and more meaningful schedules, as they can be under the new system.

tt

Parking Space?

We've had a lot of discussion over the parking problem recently. The Athenaeum situation is certainly getting out of hand. We feel that the present institute policy of giving parking tickets is a bad deal for students and doesn't solve the problem.

The institute policy of not allowing students in the Athenaeum parking lot is a little overbearing. All that parking space near the Houses—which is unused so much of the time—is like hanging a carrot in front of a horse.

It's time for a little concrete discussion on the problem—time for the students and institute to come to a reasonable and enforceable agreement. Let's hear your ideas!

tt

Letter

Crosswalk Capers

To Teck Editor, Complaint File, Sqawk Box, or what have you? From a daily inhabitant of the establishment.
Subject: The California Street Crosswalk.

Every day, when walking in from the Tournament Park parking area, one encounters the gift of science to man — your friend, my friend, everybody's friends — that stalwart and mighty light signal system at the street crosswalk. We have here a gift to man, which makes it possible for him to tame the mighty iron monster, the automobile, in order that he may safely complete his journey to this fine establishment. But—have you ever considered the daily happenings that occur here, i.e., life's many little chapters, all ready for appearance in Mary Worth??

Now, the reason for this little (?) note is to make known certain processes that occur at the side of our stalwart friend (not Mary Worth) — Procedure as outlined in the pedestrian handbook is to proceed with firm step up to side of Mighty Manfred, firmly push button, and wait for 30 seconds.

The situations that occur can be categorized as follows:

(a) After pushing button, 30 seconds later a green "walk" lite comes on telling you that it is now, thanx to Mighty Manfred's benevolence, possible to safely cross — or

(b) At +29 seconds, typical eager beaver type comes running up and pushes button—one (1) second later, lite changes—he crosses rapidly with a glance over his shoulder at you as much as to say—"Well, why didn't you try this, Stupid?"

(c) At +5 seconds, big-hearted fellow comes along and pushes button. At +10 seconds, another big-hearted fellow arrives, but this time he is helping both of you poor fellows standing lost at the curb — again at +15 seconds, nice man comes up on other side, he too pushes button — But at +29, our hero in item (b) arrives again and saves the day for all.

(d) Then there is the intellectual—he puffs on his pipe (no doubt he breaks open Viceroy's for use as pipe tobacco since he is a thinking man) and trustingly comes to the crosswalk full well that his fellowman has

already utilized his faculties for making the red bulb go off and the green bulb come on.

(e) The athletic-type jay walker comes running up to curb—with hardly a glance — proceeds to cross street dodging traffic with great ease, no doubt in preparation for a grueling workout by HZM.

(f) The Casper Milquetoast, with nary a car in sight, pushes button — and waits — at +29 seconds, 10 cars (at least) come along—they stop—he crosses. Ah, yes! The law is on his side.

And last, and most disheartening—

(g) It is raining and trusty friend, Mighty Manfred doesn't work.

In summation, Dear Editor, although I inhabit the 3rd sub-basement of one unnamed engineering building like all grad students do (don't they), I can still perceive in bright sunshine the facts of life as they occur at yon signal crossing. If one were a psychology major, suspect that one could find enuff material there by watching Freddy (Manfred is too formal a title for a friend) and observing the behavior of man to make a fine thesis. Too bad man isn't mechanical — could then use subject for an engineering thesis.

Signed
A. Non E. Mouse

Techmen Urged To Visit Research Labs, Ask Questions

BY ROGER NOLL

Every year at new student camp Dr. DuBridge spends a good half-hour telling the incoming Techmen about all the advantages they will harvest from attending Caltech. One specific advantage, probably the most important one he mentions, is that the new student will be so close to so many top-notch scientists, and so close to some of the best research being done. DuBridge's statements are nothing new to most of the new students—many of them picked Caltech for that very reason.

But when the Techman-to-be becomes a fullfledged Techman, he seems to forget DuBridge's speech. Few of us follow the advice given at camp by visiting labs, talking to people about their fields, and getting to know members of the faculty. This is really quite amazing, since we are actually ignoring a wonderful opportunity to learn first hand the life that many of us will live when we receive our final degrees.

Most faculty members enjoy talking to students, and are more than willing to explain fully the projects they are undertaking, or their feelings on campus, or beyond campus, issues. Every division has more than an ample number of people who are easily accessible, especially the math, biology and humanities departments.

With all this talent available, then, why do so many of us sit on our hands? One reason might be that we are too bashful to walk in on some unsuspecting scientist. The only cure for this is to take the fatal plunge and do it once — the reception you get will probably be more than warm enough to break this barrier.

Another reason is that deep down inside students are afraid they might appear ridiculous by asking stupid questions. This is a very common feeling among many people, and a very unfortunate one. No one wants to

appear stupid. On the other hand, no one on campus expects even a Caltech student to grasp the principles of the most advanced thinking the first time he becomes acquainted with them. And no one on campus will ever answer a student's query by telling the student that his question was stupid. It is impossible for anyone to walk into a totally foreign lab and not ask relatively simple questions, including the most intelligent person around.

The most important factor that keeps students from visit-

ing faculty members is that "attitude" that prevails which places a stigma on sincere interest or on spending more time than is absolutely necessary on education. This is really quite natural, since (1) people don't like pressure, and (2) academically Caltech is high pressure. Thus, students rebel against the academics, and stay away from that which bothers them.

Even if the traditional Caltech attitude were justified (we won't argue that here), visiting faculty position that he must constantly demonstrate his intelligence, or

(Continued on page 4)

California Tech

Published weekly during the school year by the Associated Students of the California Institute of Technology, Incorporated.

Editors

Tom Tisch, John Todoroff

Editorial Staff

Roger Noll & Lance Taylor, Feature Editors

Matt Couch, News Editor

Lee Molho, Makeups Editor

Gary Chamness, Martin Carnoy, Bob Koh, Ken Larson, Pete Metcalf,

John G. Price, Dave Pritchard, Pete Rony, Geary Younce

Photos: Dick Thompson

Business Staff

Cleve Moler, Manager

Harold Thomas & Warren White, Circulation

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, \$2.50 per year. Write: Circulation Manager,

CINEMA LIMITED

presents

The Pasadena Film Festival

April 30
Animal Farm (Great Britain), colored—Based on Orwell's book.
The Hunters (U.S.), color—Robert Flaherty Award 1958

May 14
Alexander Nevsky (Russia)
The Moor's Pavane (United States), color

May 21
The Captain From Koepenick (Germany), color—Winner of six international awards 1957
City of Gold (Canada)—Award at Cannes Festival 1957

June 11
Seven Samurai (Japan)—Lion of St. Mark, Venice Film Festival
A Chairy Tale (Canada)—Venice Film Festival 1957

June 25
Volpone (France)—Ben Johnson's classic
From Renoir to Uicasso (France)—Venice Film Festival 1950

Pasadena City College Auditorium

1570 E. Colorado

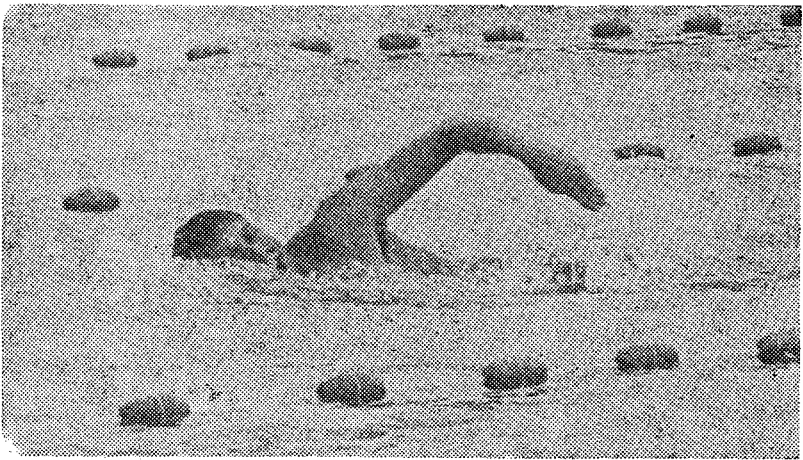
Saturday evening performances, 8:30 p.m.

Special faculty and student subscriptions — \$4.00

Individual tickets — \$1.00

Tickets available at Caltech Bookstore or at the door.

SPORTS



Gary Tibbetts, sparkplug of Tech swim team, strokes his way through 440 yd. freestyle.

Tibbetts Sparks Swim Victory Over Arizona

The Caltech varsity swimming team extended their season duel meet record to 8 and 3 as they eventually defeated two non-league opponents, San Fernando State and the University of Arizona, last week. The scores of the meets were 79 to 16 and 59 to 35, respectively.

The outstanding swimmer in the meet with Arizona was Gary Tibbetts, who broke his school record in the 220-yard freestyle by 1.2 seconds with a time of 2:15.1.

The freestyle and medley relay teams turned in their best times of the season, probably the fastest by any conference team this year.

The time of 4:16.2 recorded by the medley relay teams is 1.6 seconds under the record set by Caltech in the conference championship meet last year. Swimming unofficially, the freestyle relay team posted a time of 3:48.5.

The meet with San Fernando

Dabney Racks Rickets In Football Win

Dabney defeated Ricketts, 14-2, last Friday to take a commanding lead in the Interhouse Trophy race, over the remainder of the Houses. Standouts in the game for Dabney were Steve Munson, Dean Gerber and Dave Osias.

The game, which saw Ricketts held to a lone safety, was marred by a head injury to John Bard, suffered in a collision with Ed Evans.

In other games, Fleming defeated Blacker, 20-13, in a hard-fought game last Monday. Tom Anderson, frosh flash for Fleming, sparked the victory from the tailback spot.

In the most recent contest, Throop was downed by Ricketts, 19-2.

Discobolus action saw Dabney forge ahead with an unexpected win over Ricketts in cross-country. Dabney garnered 13 points to Rickett's 8, as Dave Osias and Dean Gerber ran first and second, leaving Art McGarr to third.

turned into a rout, as Caltech succeeded in capturing 17 of the 20 possible first and second places.

FROSH TEAM

The freshmen will attempt to set school records in two events as they join the varsity in a duel meet at Pomona tomorrow. In practice, Larry Daubek has come within .4 of a second of the school record of 5:12.8 in the 440-yard freestyle. The 400-yard freestyle relay team is capable of lowering the time of 3:53.3 set last year by Turner, Howard, Russell and Mitchell.

With the possibility of Jim Kummer and Jeff Peters joining the team and adding needed strength in the diving and breaststroke events, the frosh should be in top form for their league showdown at Occidental in two weeks.

Netmen Top Pomona, Gain Third Place

Caltech's tennis team defeated Pomona, 5-4, on the loser's home courts last Monday. Outstanding performances were turned in by Dick Hess, in beating Bob Barnes, Pomona's top man, 8-6, 6-2, and by Ced Jones, who defeated Pomona's undefeated Mike Rodi in third singles.

Carl Morris downed his man, 1-6, 6-9, 6-4, in a grueling three-hour match. Steve Hechler took fifth singles, 4-6, 6-2, 6-2, giving Caltech an impressive 4-2 score in the singles events.

Dick Hess and Francis Wilson won third doubles, 8-6, 6-2; Jones and Morris lost the first doubles, 6-2, 7-5, while Dave Butterfield and Dave Zimmerman fought for three sets before dropping second doubles.

The match marks Caltech's step into the league's upper division — and Pomona's step into the lower. Caltech will meet Pomona again at Tournament Park this season; in the meantime the pressure remains on the netmen as they await next Saturday's match against Whittier.

The frosh team lost 6-3 at Pomona, but put up a stronger fight than the score indicates. Though they lost five singles matches, four of these went three sets, and they took two doubles matches.

Rogers

(Continued from page 1)
my purpose?" and "What am I striving for?" on the basis of his therapy work in listening to countless clients attempting answers, under an atmosphere of freedom to answer as they wished. He expressed his answer in a quote from Soren Kierkegaard — "to be that self which one truly is."

WHAT ONE IS NOT

He also tried to show how a patient might reach this answer. First, according to Rogers, there is a defining of what a person is not. This may take the form of recognizing that a fear of being accepted by other people is merely a facade behind which one is hiding rather than the fear actually being part of the person.

Then there may be a moving away from some compelling image that society is telling a person he "ought to be," such as replacing an attitude of "I have to be good" with "I want to be good."

As a further illustration of what one might wish to move away from, Rogers quoted a summary of a survey of student values in the United States: "The main over-all effect of higher education upon student values is to bring about general acceptance of a body of standards and attitudes characteristic of college-bred men and women in the American community . . . The impact of the college experience is . . . to socialize the individual, to refine, polish, or 'shape up' his values so that he can fit comfortably into the ranks of American college alumni."

TOWARD CHANGING

What does Rogers see his clients moving toward? First, he says, "Clients seem to move toward more openly being a process, a fluidity, a changing. They are not disturbed to find that they are not the same from day to day, that they do not always hold the same feelings toward a given experience or person, that they are not always consistent."

Further, they are able to look at themselves and accept rather than reject the feelings that they are willing and able to communicate these feelings to others and to accept and emphasize with the feelings of the other person as well.

They move toward confidence and trust in their thoughts. "Einstein seems to have been unusually oblivious to the fact that good physicists did not think his kind of thoughts. Rather than drawing back because of his inadequate academic preparation in physics, he simply moved toward being Einstein, toward thinking his own thoughts, toward being as truly and deeply himself as he could."

Lab Visits


be on the defensive against members should not be swept away in its wrath. To visit a faculty member is more than strictly educational in a classroom sense; it is a truly enjoyable pastime.

Faculty members can provide approaches to problems, any problems, that are, if not more valuable, at least different, than those provided by students.

All in all, DuBridge is right when he says that a major advantage of attending Caltech is that there are some pretty interesting people doing some pretty interesting things.

BRIGHT LIGHTS .. COFFEE AND SHOES

by griffen



It's amazing. This campus is conservative. I can never get over it. Theoretically, the majority of undergrads are Democrats, or shall I say, Liberals, in political thought. But that's not really true, either. If all the college students in the country were grouped in a hall, Caltech would have to sit on the right side. Only relative to the masses is the Techman a Liberal, and even so, in name only. So the undergrad finds himself in the temporary position of being liberalized; a few years out of college and he will even be to the right of the masses.

Give the Techman the chance to be radical. I mean an obvious chance like picketing Woolworth's. He won't do it. Ask him a question like, "Who Is Fideel Castro?" Being a faithful reader of *Time*, the Techman will have the proper answer at his fingertips. The Techman is security conscious; he feels the pressure of the directionless society, and instead of trying to do something about it, to scream in protest, he retires into the directionless shell that society provides for the conservative.

The Techman is smart. He is very smart. But he is also rather disinterested. He isn't concerned with the outside world to the point of involving himself in it; most of the time he isn't concerned enough with what's going on right in his own back yard to get involved in it. I'm not speaking of the struggling student who needs every minute to study. There are countless who have time to care but don't. They talk of involvement but dismiss it as unnecessary. They conserve themselves for nothingness at a time when they are without responsibilities. Well, care, care, care.

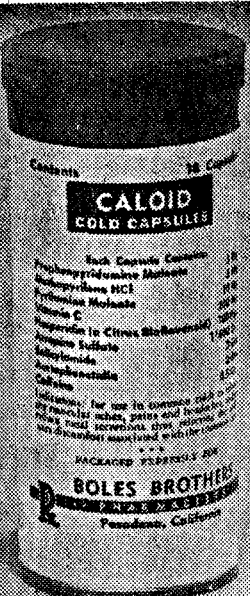
So it isn't just the students. The whole area reeks of conservatism. You may get mad at girls from Westridge who aren't too tolerant even though they try, and at Pasadena Republicanism. But do something about it. Get more than mad—

Drugs Sundries Cosmetics Tobaccos

CALIFORNIA REXALL PHARMACY

555 S. Lake SY 2-3156

Breakfast Lunch Dinner



A FIRST FOR COLDS GRIPPE FLU HAY FEVER HEAD-ACHE

Thousands Have Taken Caloids With Excellent Results

Guaranteed Satisfactory or your money back

New Improved — Trial Size 98c
Reg. Size \$1.49 Family Pkg. \$3.49
Professional Size \$6.25

Different and Effective - Ask for CALOIDS

555 South Lake 882 E. California Blvd.

act.
Look around campus and you'll see some very non-conservative clothes; however, that again is nothing but the typical Caltech laziness in action. The rest of the world thinks we are non-conformists; radicals; beatniks sometimes . . . we really fool them.

LOST— Paul Wides. Last seen playing "spud" in Dabney courtyard.

FOUND — A genuine "beatnik." All culture-minded students are invited to bring their cameras to the Greasy.

WANTED—A baby sitter. See Mrs. F. Aadland, Hollywood.

Welcome to


THE CAMPUS BARBER SHOP

Near the Coffee Shop

ALL HAIRCUTS \$1.50

Two Barbers to Serve You

ANNOUNCING



AIR FORCE OFFICER TRAINING SCHOOL FOR COLLEGE GRADUATES

Three-month course leads to a commission as a Second Lieutenant. If you are graduating this June, you may be eligible for admission to the new Air Force Officer Training School. Successful completion of the three-month course wins you a commission, and a head-start on a bright, rewarding future in the Aerospace Age.

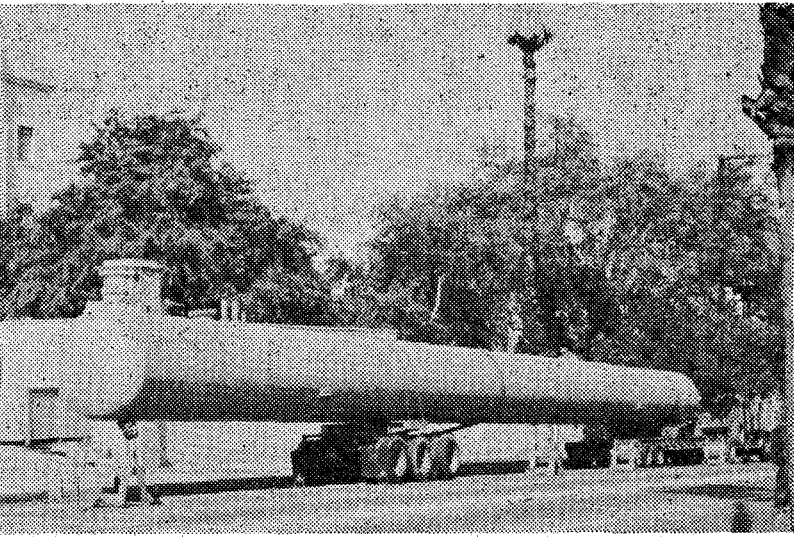
The School is open to men and women college graduates with certain technological and administrative skills. If you are selected for the School, you will receive Staff Sergeant pay while a trainee. Graduated officers may later apply for advanced training and graduate study at government expense. Male officers may also apply for flight training as pilots or navigators.

For the career-minded young officer, the Air Force way of life can be stimulating, exciting and full of meaning. He will be serving himself, his family and his nation. This is the Aerospace Age. It is a time when a career in Air Force blue has so much to offer the young man or woman who qualifies.

The Air Force is seeking only a select group of college graduates for admission into Officer Training School. However, we'd be happy to send detailed information to any senior who is interested. Just write: Officer Training School Information, Dept. SCL04, Box 7608, Washington 4, D.C.

There's a place for tomorrow's leaders on the Aerospace Team.

U.S. Air Force



Horizontal Polaris Silo Planted

A 3,390-cubic-capacity pressure tank, which will be used to store nitrogen and carbon dioxide gas for use in operation of Tech's soon-to-arrive 10,000,000-volt accelerator, was installed at the new Sloan Laboratory on Tuesday morning. The new accelerator is due about June 1.

The tank was moved into position with two large cranes—with capacities of 50 tons and 65 tons. Traffic on California Blvd. was blocked for several hours during the installation.

The pressure tank is 110 feet long, 6.5 feet in diameter, and weighs 37 tons. It was built 20

years ago for use by the City of Long Beach in storing natural gas and originally cost \$15,000. It was purchased by the Institute for \$5,000 second-hand.

The function of the nitrogen and carbon dioxide gas in the new accelerator will be to reduce sparking during operation.

Curriculum

(Continued from page 1)

ciples of Engineering Materials, will be more detailed and theoretical than the similar course now offered, ME 3. PM 15, Behavior of Solids Laboratory, will be the lab course designed to cover the material presented in PM 5abc.

In addition to the above-noted courses which are to be discontinued, ME 115abc, ME 124abc, PM 110abc, Hy 2ab, and PM 101, will no longer be taught at the Institute.

A new course, EE 5 — Introductory Electronics — will be offered as a sophomore elective. EE 2a will be changed to an electrical circuits and instrumentation laboratory and the electromechanical energy conversion portion of the EE 2 laboratory will be known as EE 4. EE 103abc will be enlarged and changed to EE 101abc. EE 104 will cover two terms and will be numbered EE 106ab. EE 102, Electromechanical Devices, will be reduced to one term and be called EE 107, Principles of Feedback Control. EE 115abc will be enlarged to 9 units per term. EE 18, EE 19, EE 40, EE 120, EE 121, EE 124, and EE 160 will no longer be offered.

Two new courses will be added in civil engineering. C 123 will be entitled Dynamics of Structures; CE 124 will be called Special Problems in Structures.

CE 12, CE 14abc, CE 20, CE 112, CE 122, and CE 126 will no longer be offered at Caltech.

Any further information that might be desired concerning these changes in the engineering curriculum can be obtained from members of the engineering faculty, and, more particularly, your adviser.

WANTED!
June Graduate
Engineering or Math

Start part-time now
Starting Salary \$5,000
plus
Up to \$5,000 additional bonuses

Estimator for Concrete Contractor
"B" average
We train

UP 0-6706 EX 8-6838

Announcements

APPLY NOW FOR BIG T JOB
Applications for Editor and Business Manager of the Big T are opening now. The Editor's job pays \$175. Submit names to John Golden, Dabney.

DEADLINES NEAR FOR APPOINTIVE OFFICES
Next week is the last time for applications for Chairman of Students' Day and Head Yell Leader to be turned in. Yell in the direction of the ASCIT Board of Directors.

ELECTION CHAIRMAN APPOINTED
Dave Turner was appointed Chairman of the ASCIT Election Committee.

FREE RADIOGRAM SERVICE CONTINUES
Your message can hit the airwaves to anywhere in the U.S. via the Caltech Amateur Radio Club. Drop your 30-or-less words in the X-box, Blacker, or Lower Throop, for transmission the same day.

INDIAN LEADERS TO VISIT NEXT WEEK
Two prominent political leaders of India will visit the campus next Wednesday, April 27. Mr. and Mrs. Acharya and J. B. Kripalani, Socialists and subscribers to the passive-resistance movement initiated by Gandhi, are currently active in the Indian Parliament. Mr. Kripalani will speak Wednesday on "India and China Today" at 7:30 p.m. in Dabney Lounge.

ENGAGEMENT and WEDDING RINGS
diamonds in all shapes, sizes and prices... or other gems and designs of your choice.
LONG TERM PAYMENTS

B.D. HOWES and SON
Jewelers
336 SOUTH LAKE AVENUE

The Place to Go
NATIONAL THEATERS

ACADEMY
1003 E. Colorado, Pasadena
SY 6-3191

"SUDDENLY, LAST SUMMER"
Elizabeth Taylor
Montgomery Clift
Katherine Hepburn

S T A T E
770 E. Colorado, Pasadena
SY 2-7139

"ROOM AT THE TOP"
Simone Signoret
Laurance Harvey

"THE DIARY OF ANNE FRANK"
Millie Perkins

1 2 3 4 5 6

B R L T R A N S L A T I O N

Bringing new knowledge to eager finger tips

Braille has opened up bright new worlds for thousands and thousands of blind persons. However, the difficulty of translating printed material into this complex "touch language" has limited the number and variety of publications.

To make more Braille material available, a method of transcribing the printed word into Braille *automatically* has been developed by IBM scientists in cooperation with the American Printing House for the Blind.

The text, in punched card form, is processed by a high-speed IBM electronic computer. The computer can translate a 300-page book into its equivalent Braille in less than an hour.

It takes all kinds of talents to develop computer systems that can handle complex jobs like this. Expanding computer applications at IBM have created opportunities in research, engineering, programming and manufacturing. Perhaps one of these IBM careers is the "future" you've been looking for.

IBM

You are invited to contact your College Placement Officer to find out when our interviewers will next visit your campus. Or write to Manager of Technical Employment, Dept. 874, IBM Corporation, 590 Madison Avenue, New York 22, New York.