

New Frosh Get Money; Still Smarter

This year's freshmen are again "smarter than ever before" and are getting \$20,000 more in scholarships to help them through Tech. The total amount of scholarship money has risen from \$81,000 last year to \$102,675.

Of this year's class of freshmen, 98 hold Institute Scholarships and 143 received scholarships of some kind.

There are 192 entering freshmen, of which only two are foreign. Honors at Entrance were awarded to 18 frosh and the number of National Merit Scholars has risen from 25 to 32. California state scholarship holders rose from 30 last year to 41 this year.

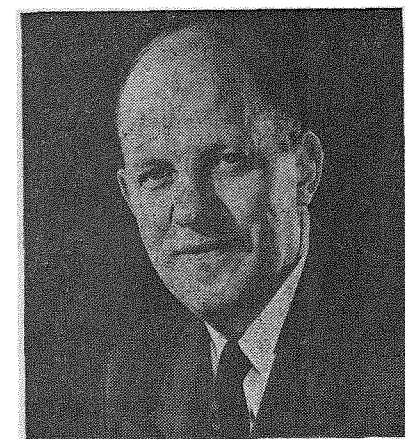
Though the frosh are smarter in the respect that they scored higher than last year's on all the College Boards except Chemistry, they are decidedly duller in that their predicted GPA is a mere 2.77, as compared with last year's frosh class average of 2.79. The specific averages were: SAT VERBAL, 688, vs. 682 last year; SAT MATH, 754, vs. 747; PHYSICS, 725, vs. 710; ADVANCED MATH, 760, vs. 761; CHEMISTRY, 718, vs. 725; and ENGLISH COMPOSITION, 655, vs. 654.

In geographical distribution the percentage of frosh from California fell off from 43% to 38% this year, but this figure is still higher than the 32% that entered with the Junior class. California supplied 75 of the frosh and New York and Washington were second and third again with 11 and 10 frosh respectively.

ACS Awards Prize to Sage

Professor Bruce H. Sage, professor of chemical engineering was recently awarded the \$1000 American Chemical Society Award in Industrial and Engineering Chemistry.

Sage, an authority on solid rocket fuels and high temperature and pressure chemistry, received his Ph.D. from Caltech

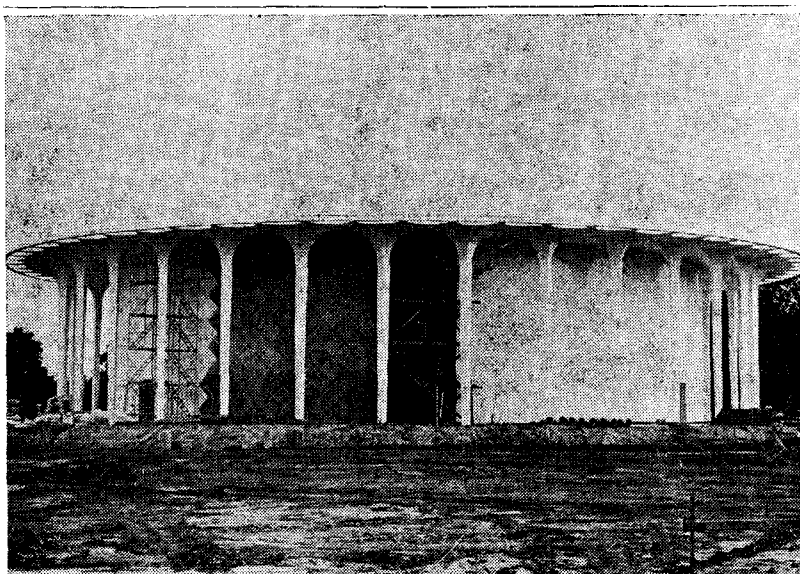


Dr. Bruce H. Sage

in 1934; the next year he joined the Caltech faculty.

Coauthor of approximately two hundred publications, he won the first ACS Award in Petroleum Chemistry in 1949. Other prizes he has received include a \$50,000 grant by the ACS in 1960, the Medal of Merit from ordnance development work during World War II, the Anthony F. Lucas Gold Medal from the American Institute of Mining and Metallurgical Engineers, and the Hickman Award from the American Rocket Society.

Frosh, Sophs Get New PE Program



—photo by Phil Liapis

Caltech's new Beckman Auditorium is expected to be completed by Christmas. Notice careful coloring of roof to match smog.

This year, for the first time, freshmen will have no choice in their physical education activities. In keeping with the decision of the faculty (voted at the end of last term), the frosh will be assigned by section to a specific sport; after five weeks, they will change to another, covering six sports in the course of the academic year. Chosen as sports which can be participated in after leaving the realm of required P.E., the list includes golf, tennis, wrestling, weight lifting, swimming and gymnastics.

Sophomores will be required to register for and attend one activity three days per week and must register for a different activity each term. Intercollegiate and Interhouse sports will be accepted for P.E. credit during the period of participation. In-

terhouse will count week for week rather than day for day in meeting the attendance requirement. Those planning on engaging in Interhouse are to register for a regular class, and tell the instructor of their intention to take Interhouse later. These and other matters will be more fully explained by the staff in a meeting of all sophomores next Wednesday at 11:00 a.m. in the gym.

Upperclass Requirements
last term must attend an extra activity for the number of days designated by the department to make up their deficiency. Likewise, both juniors and seniors must attend a sophomore activity for the requisite number of days to make up their deficiencies. This completes their obligations to the old plan of the P.E. curriculum. Henceforth it is necessary to attend a whole term to make up any failure, meaning that any failure in the freshman or sophomore cannot really be made up until the junior year.

Juniors and seniors who intend to take P.E. this term should report to the gym with the sophomores; they will be allowed to sign up only as space is available; i.e., it is unlikely any can get into a highly limited sport such as golfing. The classes to be offered sophomores **FROSH, SOPHS GET** are advanced golf, beginning golf, tennis, weight lifting, wrestling, badminton, bowling, fencing, karate, and swimming.

These will be offered at various times, some of which remain to be set. See the P.E. office for further details.

New Rotation Scheme Begins; Frosh Pick Top Four Houses

BY RICHARD KARP
IHC Chairman

Rotation, as it is again being called for lack of a better name, is back again. This year's "new rotation" features many new procedures, most of them designed to reduce pressure on the freshmen, while at the same time retaining choice for freshmen as well as for Houses.

The major feature of rotation this year is that Houses will not be listed in order by freshmen — instead of this, freshmen will choose at least four Houses in which they would like to live. In general, the chances are almost certain that the freshman will be assigned to one of the Houses that they listed. House selection of freshmen is still retained, if not enlarged.

The summary of conduct regulations for rotation have been distributed to freshmen and

House presidents. Most of them are fairly clear.

Confusing Rule

Perhaps the main rule that leads to confusion is the one that states "After 9:30 p.m., there shall be no upperclassmen (upperclassmen includes sophomores) in a freshman's room or contacting him at his room." This rule is one rule that is meant to be interpreted literally. It is based on the principal that it is easier to leave a conversation than to get one to leave, and at the freshman's desire any conversation can continue down the hall after 9:30 p.m.

Rotation this year is being tried for the first time with seven Houses, and for the first time in four years. The three "breather" years were designed primarily to allow those who

had gone under the old system of rotation to graduate, as well as to work out a system of rotation that would work with seven Houses. The elimination of rotation with the opening of the new Houses was originally suggested in a student committee report to the Faculty Committee on Student Houses, and the Student House Committee did not approve any system of rotation again until last year.

Rules Not Poor

As a "test year," the rules of rotation will be enforced strictly this year, with possible penalties for violation by Houses ranging from a \$50 fine and possible loss of freshman choices and up. The regulations, and their "spirit," are not unreasonably strict. In general, most dis-

(Continued on page 3)

Two Faculty Honored For Research

Dr. Robert B. Leighton, Professor of Physics, and Dr. Roger W. Sperry, Hixon Professor of Psychobiology, have been elected fellows of the American Academy of Arts and Sciences during the summer.

They are among 120 so honored throughout the United States in the fields of the sciences, engineering fine arts, medicine business and government.

Dr. Leighton has devised an intriguing "Doppler effect" camera with which he has discovered, among other things, huge 40 to 50-mile high atmospheric waves on the sun that rise and fall at the rate of 1,000 miles an hour.

Dr. Sperry developed the "twin brain" technique for studying the brain's circuitry and recently confirmed with microphotographs his theory that the nerve fiber circuits in the developing brain grow, assemble and organize themselves through the use of intricate chemical codes under genetic control.

Award Dinner Honors Lacey; DuBridge Praises Service

Dr. William N. Lacey, prominent chemical engineer and Professor Emeritus at Caltech, was honored for his 46 years on the Institute faculty at a dinner held last May. Lacey has won wide recognition for his research and findings on the properties and behavior of hydrocarbons.

After serving as Dean of Graduate Studies from 1946 to 1956 and Dean of the Faculty in 1961 and 1962, he was made Professor Emeritus upon his retirement last September.

Although the dinner was arranged by several of his colleagues in chemistry and chemical engineering and was expected to be a modest affair, the Athenaeum was filled by more than 280 faculty members and alumni from every department of the Institute.

Paying tribute to Lacey, Dr. DuBridge said, "The Caltech star would be several magnitudes fainter than it is today if it were not for Will Lacey's devoted and distinguished service."

Schroll Awarded

A scroll expressing apprecia-

tion for his many contributions to research and teaching was presented to Lacey by Dr. Bruce Sage, professor of chemical engineering who has collaborated with Lacey on much of his important work.

A native of San Diego and 72 years of age, Lacey attended Stanford University. He received his Ph.D. at the University of California, Berkeley, and joined the Caltech teaching staff in 1916, becoming a full professor in 1931.

During World War II, Lacey served with a National Defense Research Committee as a supervisor of research and developed on artillery rocket ammunition at Caltech. In 1948 he was awarded the Presidential Certificate of Merit.

Among the honors Lacey has received are the Hanlon Award of the Natural Gasoline Association of America, the Lucas Medal of the American Institute of Mining and Metallurgical Engineers, and the Certificate of Appreciation of the American

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Notices

BAND BEGINS NEW SEASON

The Caltech Band will hold its first full band rehearsal at 7:30 p.m., Thursday, October 3, in Culbertson Hall. Stands are provided, and a few instruments are available for use. Anyone who can make notes on any instrument is welcome.

THE TECH NEEDS WORKERS

The California Tech needs workers in all phases of newspaper production; if you can write, draw, proofread, or just are interested, contact either J. C. Simpson, 234 Ruddock, or Don Green, Fleming. The Tech is assembled on Monday evenings, but work turned in earlier is completely welcome. Those interested and qualified can register for En 15, the journalism course taught by Edward Hutchings, Jr., editor of the alumni magazine, Engineering and Science. See him or Simpson for further details.

MEALS START SUNDAY

Meals will be served in the Student Houses starting this Sunday breakfast. Breakfast will be regular cafeteria style, lunch at 1:00 p.m. will be a dress meal, and dinner at 6:00 p.m. will be non-dress. This is an experimental change to facilitate the Freshman Visitation Program.

YMCA FILM SERIES

The Caltech YMCA Film Series presents The Ladykillers on October 6th at 7:30 p.m. in Culbertson Hall. In this cops and robbers flick (Alec Guinness and Peter Sellers) the loot is not returned and the insurance premiums go up. Year (12 Films/year) tickets are \$5.00 in the Y office or at the door. Individual seats are 75c. Save \$4.00 over individual showing prices—If you get a year ticket.

Editorials

Welcome Back Frosh

As our eager frosh embark for their two day communion with nature, we would like again to assume our exalted role of telling people what's good for them.

One quick word of warning: it is far too easy to sit back at frosh camp and let the words lull you to sleep. And far too often has some Junior or Senior awakened to the fact that what he had just realized was told to him in those hours at Student Camp. So, for your own betterment as well as the sanity of the speakers, give careful attention to what is said. When you have questions be sure and resolve them there by discussing them in your student group.

After that somewhat brief departure, it is high time that the **California Tech** welcomed you to Caltech. Caltech offers you an interesting and unique experience, but it will be a rewarding experience only if you make the effort. And we are not speaking only of your studying effort.

The academic aspect of your Caltech education is, of course, the dominant one. But it not a complete one, far from it. These four years of undergraduate study will probably be the most influential in your life. So do not neglect the other facets of a mature personality.

Caltech offers a wealth of opportunities to enjoy yourself as well as contribute to your own growth. Such activities as music, athletics, journalism, debating and drama are more than adequately provided for in the Caltech community.

One more word of warning before we let you depart in peace—don't believe everything you hear about Caltech from upperclassmen. You can learn a great deal from them if you can discern what is honest and what is trash. Be patient with them—after all, one must realize, that a few years here can exact a terrible toll.

Good Luck!

—Don Green
J. C. Simpson

Libel Is Fun

Now that everyone is sitting around waiting for class to begin, we would like to spend a few lines bragging to the upperclassmen of the **Tech's** record last year, and telling the frosh more about the paper.

The **Tech** is completely uncensored and independent of the Institute faculty in a period during which the trend seems to be toward more control over college publications. Because of this position the **Tech** is ideally suited to look out for student interest, to take a strong stand on campus issues, and to be a strong factor in forming campus opinion. This has been definite **Tech** policy for the last four terms and the editors are strongly committed to continuing this practice in the coming year. We feel that a newspaper which does not offer constructive editorials and attempt to reflect student opinion is not fulfilling its duty to the school.

Last year the **Tech** played an important role in the adoption of the new rotation system (after a three year moratorium on rotation), and also figured significantly in the new two-year physical education program, which we strongly supported. The **Tech** also took stands on issues such as B&G (always), built-up beds and furniture in the new Houses, the inclusion of the IHC chairman on the ASCIT Board, and, most important, in the adoption of the by-laws which raised the **Tech** editor's salary and the paper's subscription rate. The periods between these campaigns were filled with our typical editorials, from praising such publications as the **Big T** (for coming out on time) and the **little t** (for being good), to criticizing such eminently worthy organizations as the Beavers (for being) and **Totem** (for not being).

Even such a wonderful paper as the **Tech**, however, has problems. Our biggest one (aside from the monumental debt) is the lack of a staff. We need more staff members in just about every department. The work isn't particularly hard or demanding, and you don't even have to share in the general campus hate directed at the editors. We especially need a sports editor and sports staff members. If you're interested in working a lot or a little, in any position, come down to the **Tech** office in Winnett Monday or Tuesday night, or see one of the editors either during or after frosh camp for a touch of the soft sell.

—J. C. Simpson
Don Green

Letters

Vending Machines Go Bad; Debating Begg Attention

Editors:

What the Hell is going on? The service from the vending machines is as bad as ever, or even worse. Obviously these people don't care about their Caltech concession, even though I am sure they make more profit from these machines than from many. Mouldy pies, crumbly Hershey bars, unfilled sodas, all are evidence of the not-care attitude of the company. I think that after a year of bad service and disrespect of the wishes of the students, this company should lose the concession and a better, more responsive company appointed.

Rodger Whitlock

Editors:

In 1955 the **Tech** carried in unusually large headlines the announcement that Caltech's team had been declared the outstanding men's debate team in the United States. That proud moment was the culmination of years of patient building and strengthening of a speech squad which is still a legend in Southern California. At the peak more than twenty-five Techmen were active in intercollegiate competition out of a student body even smaller than today. Once at the top, however, there is nowhere to go but down and down we went: the year before last only two students spent around ninety percent of the speech budget. That grand promise in the catalog of "an annual Caltech invitational debate tournament" hasn't been true since 1955.

Now our fortunes are again on the rise. Last year a total of eleven students participated in some intercollegiate contest and the number of contests has increased (on a smaller budget) roughly eight times. In a total of 230 man-rounds of participation, Tech accomplished a winning record of over seventy-one percent, making debate the winningest activity of the year. Because the analytical mind required of Techmen is the same substance of which winning debaters are made, we of P.K.D. look forward to an even better future.

Great things, though, require a renewal of interest on the part of the student body. Competition for the first string is a boon to speech work as to any other sport. This fall we hope to increase our squad with new freshmen not yet endowed with the "really care" attitude they

will develop later on. The squad is a young one; no one will graduate this year. The opportunity is at hand to represent Caltech with a program consistent with the sterling image of the Institute as a whole.

Speech has justifiably played a large role in the past life of many Techmen. Article II of Ascit By-Laws refers to the privilege of free admission to debate and oratorical contests. Resolution IX on Awards refers to Debate Awards even before Honors Keys. (See your **Little t**.) It can justifiably play that role again. All it requires is a little student interest.

David H. Close
Secretary, P.K.D.

Glee Club Begins Auditions; Exciting Year Anticipated

The Caltech Glee Club, one of the most active student groups on campus, has been around for almost fifty years but the club as it now stands really had its start in 1953, when Olaf Frodsham became director. At that time the Glee Club had only eight members. With Frodsham at the helm the club rapidly developed into one of the finest male choruses in America. At present the club is anticipating an exceptionally exciting year, highlighted by a proposed tour through the Midwest, including engagements in the Chicago area.

Private, painless auditions will

be held on Sunday and Monday, Sept. 29 and 30, in the Glee Club office in the Fleming basement for all undergraduate and graduate students interested in becoming new members. Tryout times are posted around campus.

The club's repertoire is varied to meet all occasions and tastes: from music of the Russian Orthodox and Hebrew liturgies, to the regular glee songs, the spirituals, and the work songs of America.

The first regular rehearsal for the new school year will be 8:15 Monday evening following the 7:15 tryouts. Both old and new men are urged to attend.

EDITORIAL POLICY

For the information of its readers, the **Tech** presents the following summary of its editorial policy:

The first signature following an editorial indicates the author of that editorial. The following signature, if any, indicates approval by the other editor. If editors sign the editorial, that editorial then represents the opinion of the **California Tech**.

In general, column writers have complete freedom as to the content of their columns. No column will be eliminated from any issue of the paper solely because of the

opinions represented in that column. Column writers represent their own opinions only and not necessarily the opinions of the **California Tech**.

The **California Tech** welcomes all letters, whether or not they agree with editorial opinion. Letters are edited (or left out) solely on the bases of space, decency, and the desire to present letter opinions in proportion to the amount of mail received. As with columns, the opinions stated in letters are not necessarily those of the **California Tech**.

Many Faculty Get Promotions

Nineteen of the faculty have been granted promotions during the summer. Although there are no new Professors, there are a number of new Associate Professors. They are Bruce C. Murray, Planetary Science; Giuseppe Attardi, M. D., Biology; Charles J. Brokaw, Biology; Robert S. Edgar, Biology; Robert A. Huttenback, History; Toshi Kubota, Aeronautics; and Milton Lees, Mathematics.

New Senior Research Fellows are Hans G. E. Kobrak, Physics; David Morris, Radio Astronomy; W. G. Frasher, Engineering; J. Owen Malloy, Physics; and John N. Bahcall, Physics.

Promoted to the position of Assistant Professor are there: Fred E. C. Culick, Jet Propulsion; Din-Yu Hsieh, Engineering

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The second best sophisticated muckraking in the world appears weekly in the CALIFORNIA TECH.

Four Faculty Members Die During Summer Months

Caltech lost several of its most distinguished staff members over a three-month period this summer. Dr. Howard J. Lucas, professor emeritus of organic chemistry, succumbed June 22 at Huntington Memorial Hospital of a heart ailment.

Retiring in 1955 after 42 years as an instructor, Lucas pioneered the pattern for modern elementary chemistry textbooks with his **Organic Chemistry**. He was one of the first scientists to apply knowledge about the electron to this subject.

Mr. Robert L. Minckler, chairman of Caltech's Board of Trustees, died of a sudden heart attack August 6 while on vacation in Banff, Alberta, Canada.

Plans Drawn For Library

Afer approximately five years of waiting, plans have finally been produced for the Millikan Library. A model has been constructed and is now on display in B & G. The building will be somewhat longer in the east-west axis than the north-south axis. Between the Library and Throop Hall there will be a shallow reflecting pond, which will be bisected by a shallow arched bridge (the Du-Bridge). In the western half of the pond there will be a small circular pavilion connected with the main building by a glass walled corridor. This pavilion, which for some strange reason resembles the Beckman Auditorium, will be used for meetings by the Board of Trustees. The Library proper will be ten stories high with curtain walls on the north and south sides. The east and west walls will be windowless.

Working plans are now being drawn up, and it is expected that ground will be broken in about one year. It will be located in the eucalyptus grove between Crellin and West Bridge. Being ten stories high it will probably be the tallest building in Pasadena.

Frosh Rotate

(Continued from page 1)

cussions and actions can be condoned (other than such items as spending money on a freshman, which has few exceptions) if they are done with the positive support and on the request of the freshman concerned. Freshmen should remember that they are required to take their meals in the House to which they have been assigned for that day.

The system for assigning freshmen to Houses is also fairly complex this year. The reason for that is to guarantee that as many freshmen as possible get into one of the Houses that they select. The complete system is detailed in a five page memorandum from last year's IHC (Interhouse Committee) to the Faculty Committee on Student Houses. This memorandum considers possibilities (such as the selection procedure being bogged down in a complete circle) that are considered fairly unlikely in an attempt to handle all cases for the benefit of the freshman.

As has been intimated, the success or failure of rotation this year will be the deciding factor in whether it is retained. As of the date this article was written, there have been no serious violations of rotation regulations or their spirit discovered.

Minckler joined the California Institute Associates in 1948 and became a member of the Board of Trustees in 1954. He had been Board Chairman since 1961, and was a senior member of the National Industrial Conference Board, a vice president and director of the California State Chamber of Commerce, and president of the World Affairs Council of Los Angeles.

A member of the Mount Wilson and Palomar Observatories staff for 42 years, Dr. Seth B. Nicholson fell prey to cancer July 2 at Queen of Angels Hospital. Nicholson is credited with the discovery of the ninth through the twelfth of Jupiter's satellites.

A heart attack at the City of Hope Medical Center claimed Dr. Morgan Ward, professor of mathematics. Noted for his work in number theory, Ward received his Ph. D. from Caltech in 1928, and then joined the faculty. He was a member of the American Mathematical Society and the Mathematical Association of America.

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By Steve Schwartz

What Went on This Summer

Summer is a good time for entertainment in L.A. Hollywood Bowl, Greek Theater, and countless other outdoor stages are playing. Some kind of summer optimism gets into the local "little theaters" and they go into business again. The UCLA Theater Group — which is the only reliably good theater in town — is at work in its borrowed lecture hall. Nobody in his right mind would stay here in summer, of course; but if you have to, there are plenty of things to do.

At least one film of real importance appeared this summer, and that's **Viridiana** made by a director named Bunuel in, of all places, Spain. **Viridiana** herself is a woman who wants to do good, and the moral, typical of the "new wave," is that you can't. Depressing or not, the theme is large enough to build a work of art on, and I'm tempted to say that **Viridiana** does it justice. Symbolism, particularly, is used with skill, neither obscurely nor heavily-handedly; a choice example is in a scene where a pack of beggars are wolfing food at a banquet table, and the cutting room throws in the briefest glimpse of Leonardo's **Last Supper**. The sound track, which usually contributes nothing even in good movies, makes good use of Bach and Handel. The climactic scene is an awesome witches' sabbath: a dreadful revelation of man's rotten insides, all the more dreadful because Bunuel makes you believe it. Yet the result is not depressing after all; one feels he has learned something of importance.

Other Films

This Sporting Life, a British film by Lindsay Anderson, was something of a disappointment. Regardless of good reviews, it's just more of the self-pitying Midlands Gothic the British are grinding out these days. The central figure is a hulking rugby

player, and you might say the film is about dentistry — he spends all his time getting his teeth knocked out. It is among the goriest and gloomiest movies I've run across. And while we're talking about international films, I saw something called **King Kong Meets Godzilla** which was made (no kidding) in Japan. It's the worst movie I've ever seen that didn't have John Wayne in it.

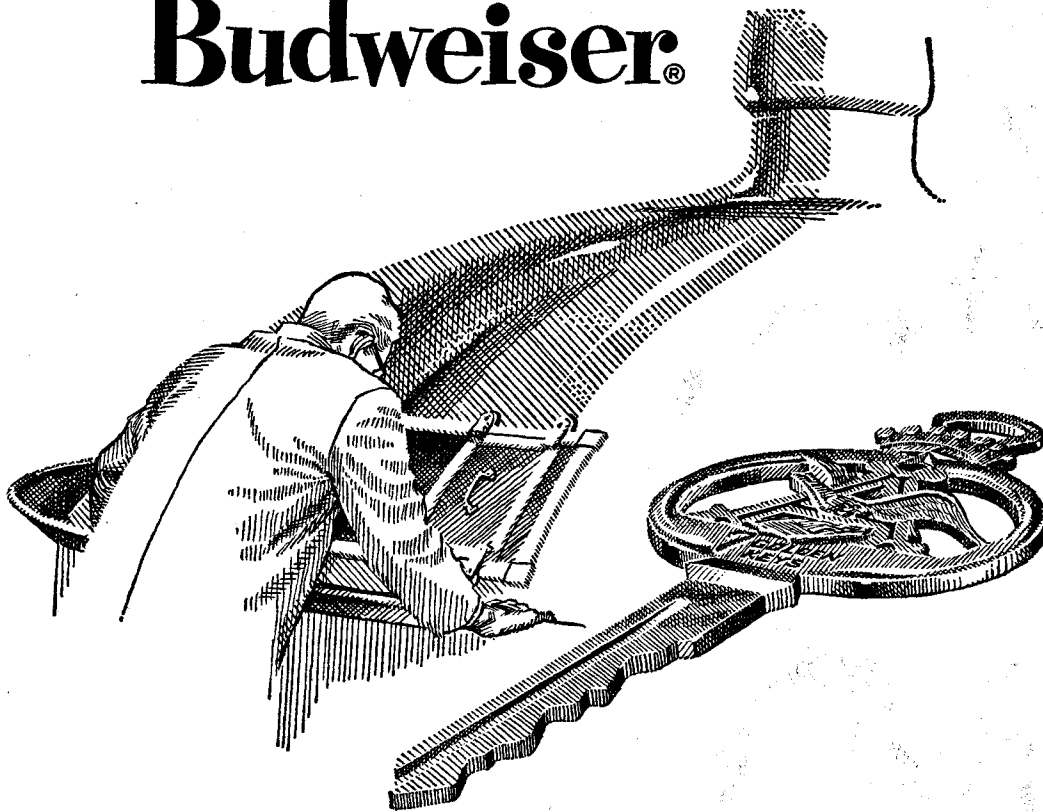
Something interesting along another line was a performance of **The Marriage of Figaro** in English, down at Laguna Beach. I'd never heard opera in English before, but now I'm sold on it. It's true that the familiar arias sound strange in translation, but when people tell me that English "is not a poetic language" and consequently can't sound well when sung, I'm inclined to disbelieve. After all, **The Messiah** sounds pretty good. It may be that it's hard to make a good opera translation; a good one, of course, must not only be poetic, but also preserve the nuances of the original, which were mated, syllable by syllable, to the score. But on the other hand, the gain in comprehension is worth the effort. Mozart opera can be monumentally dull in Italian; the arias are pleasant, but the recitatives send you to dreamland in short order. Now in English one can follow the intricacies of the plot, and even laugh at the jokes. And to one's surprise, opera seems no longer to be an esoteric kind of music, but rather (as I think it should) a kind of theater. I've heard that on some occasions, lacking a good translation, operas have been sung with the arias in the original language and the "connecting tissue" in friendly old English, so one can understand. That seems like a good idea.

Art at the Museum

Summer being the silly season, the L.A. County Museum presented an exhibit of "pop" art.

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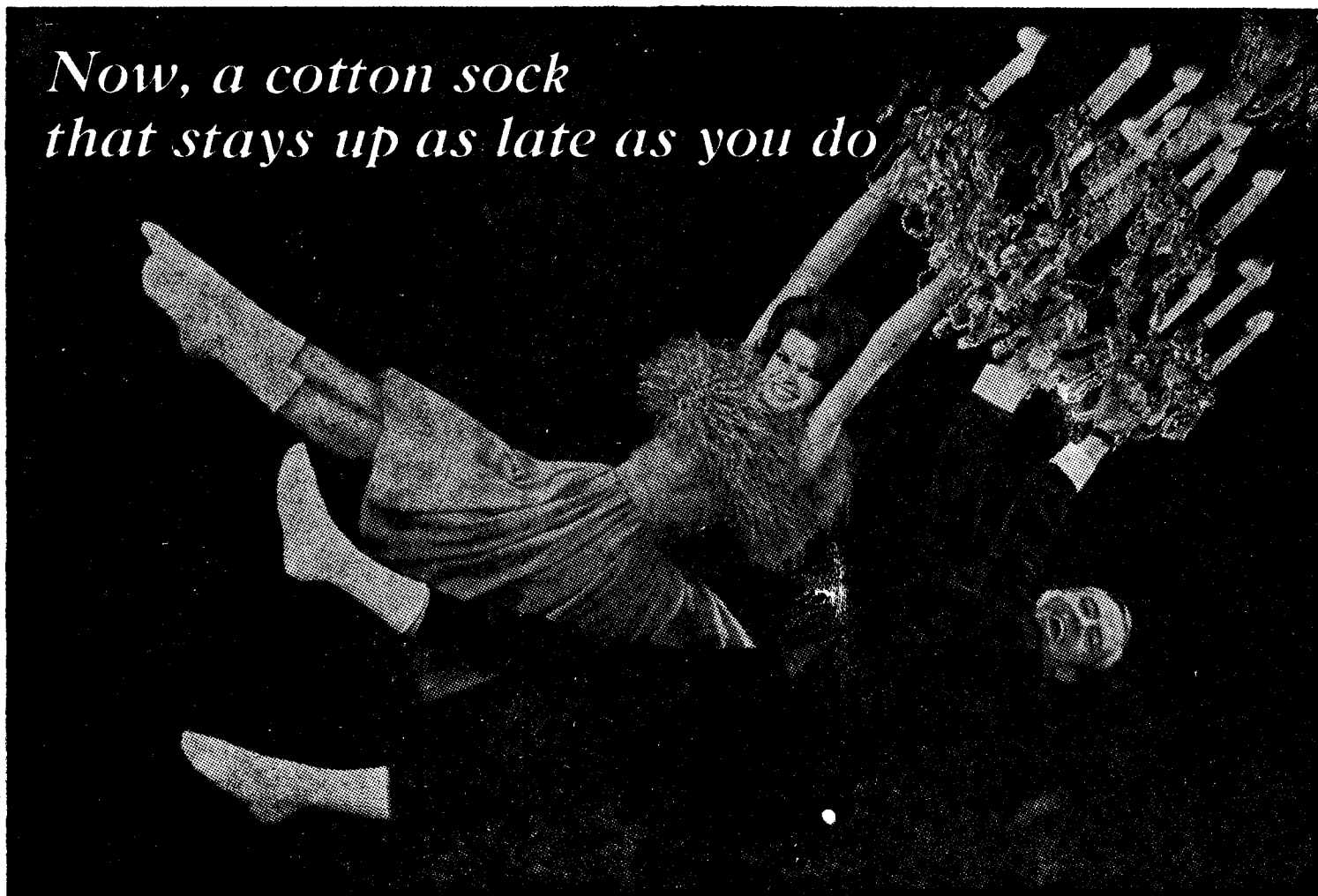


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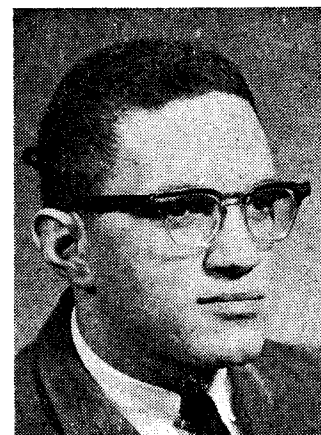


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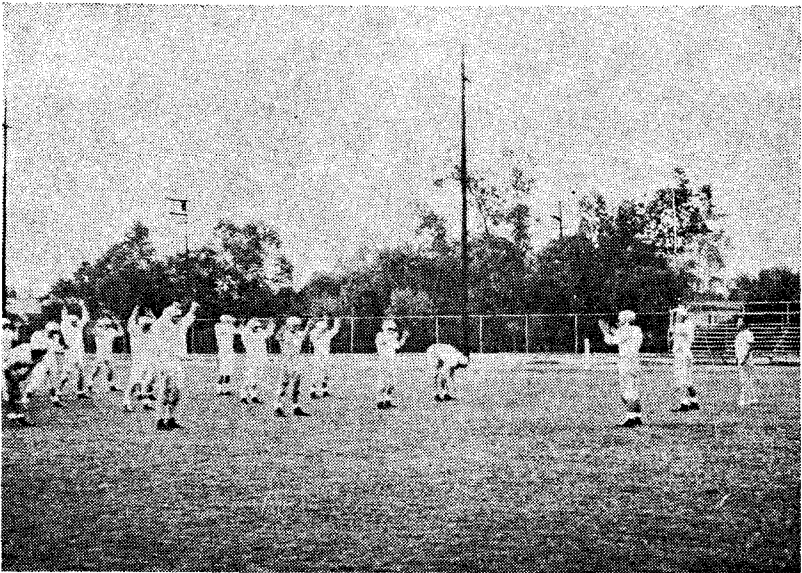
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Silverwood's

SPORTS



—photo by Phil Liapis
Tech's young eager footballers practice calisthenics in preparation for tough schedule.

Football Practice Begins; Tough Schedule Ahead

Fall football practice began nearly two weeks ago, on Monday, September 16. Despite a few late arrivals and a few "golden boys" who have yet to return, the fall turnout was quite encouraging, with twenty to twenty-five men appearing for night practice the first week.

Practice this year has followed a tougher schedule than in the past. In addition to the daily double practices on weekdays, the weekends were also livened up with additional drills.

The coaching staff remains intact from last year—with head coach Bert La Brucherie, assistant coach Shelby Calhoun, and frosh coach Keith Jensen. In addition to this gleesome threesome, a spectre from Caltech's football past—Dick Van Kirk—has returned to haunt Tournament Park. Rounding out this formidable list is basketball coach Ed Priesler, trainer Paul Barthel and the "sawbones", Doc Alley.

The squad looks forward to a difficult, but interesting season, including a "road game" at the University of Santa Clara. This year's team is led by fifteen returning lettermen and several stalwarts of last year's frosh team.

This year's backfield is high-

lighted by fullback Jon Evans, halfbacks Barry Dinius and Lee Peterson, and quarterbacks Bob Lieberman and Bob Christie.

The end position is well filled by returnees Steve Hall, Art Johnson, Thor Hanson, and Leon Thomsen. Tackles include letterman Dave Hewitt and Tom DeKlyen as well as frosh Judson Palmer and Dave Posner. Although losing two fine senior guards last year, Truman Seely and George Soulee, that position is adequately filled by senior Tony Dahlen, juniors Guy Jackson and Dave Stofa, and sophomore Andy "Body Beautiful" Kampe. At center are senior letterman Charles Vinsonhaler and sophomore Lee Myers.

The 1963 schedule follows:

Fri. Oct. 11	UCR at Rose Bowl
Sat. Oct. 19	Caltech at Pomona
Sat. Oct. 25	La Verne at Rose Bowl
Sat. Nov. 2	Caltech at Univ. of Santa Clara
Fri. Nov. 8	Cal Lutheran at Rose Bowl
Fri. Nov. 15	Caltech at Occidental
Fri. Nov. 22	CHM at Rose Bowl

Fencing Added To Physical Education

BY WALLY YERBOVSKY

One of the latest additions to the P.E. curriculum, the Caltech Fencing Club could be a valuable place to invest a few of the proverbial (and, some insist, entirely mythical) thirty hours of "free time" you have each week. The sport has changed somewhat since the days of D'Artagnan — modern fencing is more closely related to chess than to the movie variety of swordplay — and the rescuing of fair damsels plays an unfortunately small part in it. There are, however, still some competitive outlets. In addition to fencing within the club, the AFLA (Amateur Fencers' League of America, a division of the AAU) holds about

thirty events in the L.A. area each year for both individuals and teams. Many of these are classified so that you are competing only with fencers of your own caliber. Caltech also hopes to have an intercollegiate team starting sometime this year which would hold matches with existing teams at UCLA, USC, Valley, El Camino, Pomona, and several other schools.

The class meets at least twice a week and is instructed by Mr. Delmar Calvert. Calvert, graduate of a school for fencing masters in Europe, taught for

several years in the French Foreign Legion before coming to this country and was decorated by the French government for his work there. He has recently opened his own school in L.A. and is considered by many to be the best instructor in the area.

Sophs, juniors, seniors, and grads are also welcome, incidentally. Anyone with previous experience is more than welcome. PE credit is available for all but the frosh, and there is no charge to students for instruction.

Tech Offers New Kickbacks

Student who obtain ads for publication in the **California Tech** from local businesses will henceforth be entitled to a fifteen percent commission, about 21c per column inch, payable from Richard Karp, business manager. The purpose of this plan is to increase the number of local ads in the **California Tech**, and thus the margin above bankruptcy the paper operates on.

Those interested should see Karp to obtain blank contracts, identification, and other necessary items, as well as any other details.

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Extra slim with the new dropped front pockets.
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AT YOUR FAVORITE SOFT GOODS EMPORIUM

On Campus with Max Shulman
(By the Author of "Rally Round the Flag, Boys!" and, "Barefoot Boy With Cheek.")

THE DEAN YOU SAVE MAY BE YOUR OWN

Colleges are complicated and bewildering places, filled with complicated and bewildering people. Today let us examine one of the most complicated and bewildering—yet fetching and lovable—of all campus figures. I refer, of course, to the dean of students.

Policeman and confessor, shepherd and seer, warden and oracle, proconsul and pal—the dean of students is all of these. How, then, can we understand him? Well sir, perhaps the best way is to take an average day in the life of an average dean. Here, for example, is what happened last Thursday to Dean Killjoy N. Damper of the Duluth College of Belles Lettres and Pemmican.

At 6 a.m. he woke, dressed, lit a Marlboro, and went up on the roof of his house to remove the statue of the Founder which had been placed there during the night by high-spirited undergraduates.



At 7 a.m. he lit a Marlboro and walked briskly to the campus. (The Dean had not been driving his car since it had been placed on the roof of the girls dormitory by high-spirited undergraduates.)

At 7:45 a.m. he arrived on campus, lit a Marlboro and climbed the bell tower to remove his secretary who had been placed there during the night by high-spirited undergraduates.

At 8 a.m. he reached his office, lit a Marlboro, and met with E. Pluribus Ewbank, editor of the student newspaper. Young Ewbank had been writing a series of editorials urging the United States to annex Canada. When the editorials had evoked no response, he had taken matters into his own hands. Accompanied by his society editor and two proofreaders, he had gone over the border and conquered Manitoba. With great patience and several Marlboro Cigarettes, the Dean persuaded young Ewbank to give Manitoba back. Young Ewbank, however, insisted on keeping Winnipeg.

At 9 a.m. the Dean lit a Marlboro and met with Robert Penn Sigafos, president of the local Sigma Chi chapter, who came to report that the Deke house had been put on top of the Sigma Chi house during the night by high-spirited undergraduates.

At 10 a.m. the Dean lit a Marlboro and went to umpire an intramural softball game on the roof of the law school where the campus baseball diamond had been placed during the night by high-spirited undergraduates.

At 12 noon the Dean had a luncheon meeting with the prexy, the bursar, and the registrar, at the bottom of the campus swimming pool where the faculty dining room had been placed during the night by high-spirited undergraduates. Marlbors were passed after luncheon, but not lighted, owing to dampness.

At 2 p.m., back in his office, the Dean lit a Marlboro and received the Canadian Minister of War who said unless young Ewbank gave back Winnipeg, the Canadian army would march against the U.S. immediately. Young Ewbank was summoned and agreed to give back Winnipeg if he could have Moose Jaw. The Canadian Minister of War at first refused, but finally consented after young Ewbank placed him on the roof of the metallurgy building.

At 3 p.m. the Dean lit a Marlboro and met with a delegation from the student council who came to present him with a set of matched luggage in honor of his fifty years' service as dean of students. The Dean promptly packed the luggage with all his clothing and fled to Utica, New York, where he is now in the aluminum siding game.

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The makers of Marlboro, who sponsor this column, don't claim that Marlboro is the dean of filter cigarettes—but it's sure at the head of the class. Settle back with a Marlboro and see what a lot you get to like!

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More Audience

(Continued from page 4)

Lots of people are upset about pop art; they claim that a six-foot-high portrait of a Campbell's Soup can just isn't art. The basic idea of the new style, as I understand it, is to portray and comment upon the mass-things of our present day. In the middle ages, for instance, each person found himself in a highly religion-oriented society, and consequently medieval art was preoccupied with religion. Today our world is dominated by the mass media — advertising, television, mass-production — forces whose outstanding property is their tendency to make us all into indistinguishable, interchangeable, consuming cogs. Naturally we can expect artists, particularly, to ignore the mass-things, and so, pretty much, they have. It would be surprising, however, if the artists could ignore even this environment forever, and so it seems that pop art is a reasonable development. The artist, after all, doesn't have to simply depict a soup can; he can tell you whether he loves it or hates it. These were the notions I had in mind when I went to see "Six Painters and the Ob-

ject," and I was a bit disappointed. Looking at Andy Warhol's soup can picture did make me think of a supermarket, but like so what? Some of the collages by Robert Rauschenberg were impressive, but not really in the pop art style; while without exception the more distinctly pop art canvases (slices of pie, bull's-eye targets, comic-strip panels) left me cold. Still, I haven't given up hope. It very often happens, after all, that the innovators of a new style won't be very good at it, as, for instance, Kyd wasn't such a good Elizabethan playwright and Gluck not such a good composer of opera. The really good portraits of soup cans may still be coming.

WELCOME TO

The Campus Barber Shop

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Tech Associates Announce Four New Directors

Dr. Simon Ramo, of Ramo-Wooldridge Corporation, announced the election of four new directors to the California Institute Associates.

They are George W. Downs, vice-president of the Applied Physics Corporation located in Monrovia; William Scripps Kellogg, a trustee and the Manager of the La Jolla Beach and Tennis Club; Herbert Speth, vice-president of the Pasadena main office of the Bank of America; and John Robert White, a partner in the firm of Price Waterhouse & Company.

The California Institute Associates are a group of public-spirited citizens who were incorporated in 1926 as a non-profit organization devoted to promoting the interests of Caltech.

Lacey Honored

(Continued from page 1)

Petroleum Institute.

He is a member of the American Chemical Society, the American Institute of Chemical Engineers, and the American Society for Engineering Education. In June, 1960, Governor Brown appointed him a member of the California State Board of Registration for Civil and Professional Engineers.

More Promotions

(Continued from page 2)

Science; Jerome Lee Shapiro, Applied Science; Ronald H. Wilens, Materials Science; D. L. Anderson, Geophysics; C. D. Babcock, Aeronautics; and Richard Seagrave, Chemical Engineering.

Five professors are on one year leaves of absence. These are Fred Anson, on a Guggenheim fellowship at the University of Brussels; James F. Bonner, Eastman Visiting Professor in Oxford University; C. Hewitt Dix, research scholar on the faculty of science in the University of Japan (Fulbright Fellow); Thomas Lauritsen with a NSF senior postdoctoral research fellowship in the Institute for Theoretical Physics of Copenhagen; and Jurg Waser, on a Guggenheim Fellowship to study European chemistry education methods, especially in Switzerland.



Some of our stockholders work at night

Communist workers must find it very hard to understand that an American can be an *employee* and also an *owner* of the business.

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