

# The California Tech

Associated Students of the California Institute of Technology

Volume LXI

Pasadena, California, Thursday, January 7, 1960

Number 12

## BETTER HOUSE FOOD NEXT FALL

### New House Sign-up Begins January 18

The first phase in the colonization of the new Student Houses — the posting of sign-up lists — will begin a week from Monday, (January 18).

A sign-up list for each of the three new Houses, plus "sign-out" lists for the four present Houses, will be posted in Dr. Huttenback's office until Friday, January 22. The lists are to be signed by everybody intending to move into the new Houses next fall, including present off-campus men.

This is the first step in the population procedure outlined by the IHC committee on new Student Houses and officially accepted by the faculty committee on Student Houses late last month.

The faculty committee also accepted the student committee's controversial recommendation that freshman rotation be eliminated next year.

After the sign-up lists are completed the colonization plan calls for a two-week period in which volunteers will be solicited to iron out deviations from "ideal" House population.

If departures of more than 15 percent from the ideal distribution of classes in each House exist after this second phase, lots will be drawn to vacate membership in overpopulated Houses. This will take place, if necessary, the second week in February. Next year's senior class will not be required to participate in the lot-drawing.

From four to 12 men per class per House will have to move if the present Houses are to reach "ideal" population. The precise figures will be included on the lists.

Other population decisions made by the committee include:

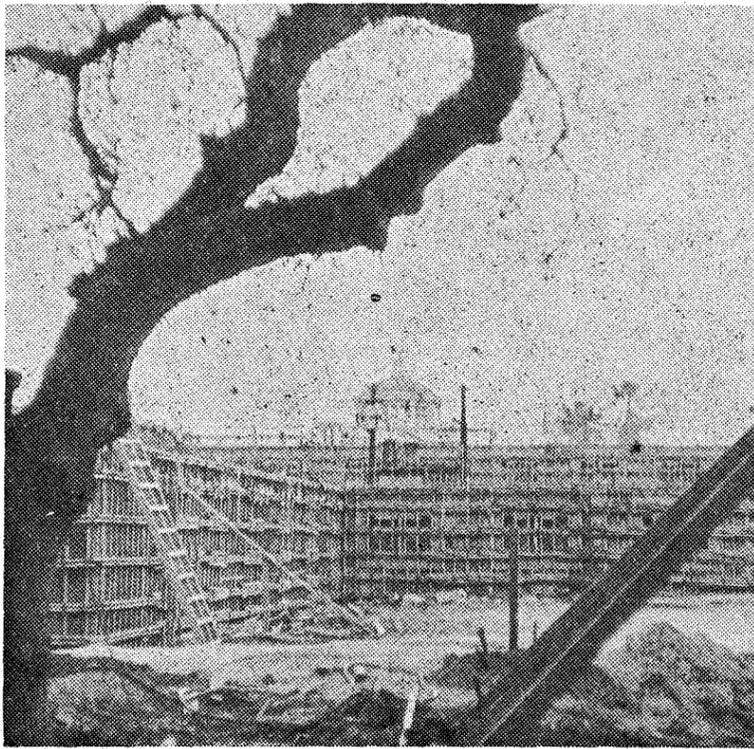
Freshman will be required to live in the Houses unless excused by the Dean. (This has been the "official" position for a number of years already.)

Only a 21-meal plan will be available to resident and non-resident House members.

Approximately 40 graduate students will be distributed among the seven Houses next year.

During third term, members of present Houses who plan to move into new Houses shall retain all privileges of their "old" House except voting in House elections. Five dollars of their third term dues will go to the old House and two dollars to the new one.

Huttenback also announced that any off-campus man who intends to move on campus next fall, but who has not informed the Student House office of this intention should do so immediately.



Construction hurries along on three new Student Houses.

### New House Plans Disclose Big Rooms, New Furniture

Larger rooms and newer furnishings will characterize the three new Student Houses which are being rushed for completion by next September. Miss Marjorie Cheney, Student House Manager, promises that the four present houses will be redecorated and refurnished to a comparable state eventually, but not by next fall.

All rooms in the new Houses will be the same size, 17½ feet long and 11 feet wide. Most of these rooms will be used as doubles, but a few (the exact number has not yet been determined)

### Chandler Gives \$400,000 For Cafeteria

Caltech has received a grant for a new dining hall to be named Harry Chandler Dining Hall. The gift of \$400,000 is from the Chandler family, the Times-Mirror Company and the Pfaffinger Foundation.

Harry Chandler, publisher of The Times, president of the Times-Mirror Company and a pioneer Southern California civic leader, was a trustee of Caltech from 1920 until his death in 1944.

"Mr. Harry Chandler was a devoted friend of the Institute during his lifetime, and his son Norman is presently a loyal member of the Board of Trustees. The Harry Chandler Dining Hall will be completed in September 1960 and will be an important and distinguished addition to our campus," Dr. DuBridge said.

The dining hall, which will have a main room with a seating capacity of 250 and four smaller

(Continued on page 5)

will be singles. Each room has one window, 6 feet wide and 4 feet high with three vertical sections, a large center pane which is fixed and two smaller side panes which open out similar to the present House windows.

Each room will have two electrical outlets near the floor at opposite sides of the room, another at the lower right of the mirror on the medicine cabinet, and other special outlets in the upper casing near the ceiling for connection to the TV and FM antennae which will be mounted on the roof. There will also be a telephone outlet in each room.

#### Fluorescent Lights

Two fluorescent light fixtures will be mounted flush in the ceiling. These lights will have two settings: bright for studying, and dimmer for ordinary use. There will be no floor lamps or desk lamps provided.

Each room will have a wash basin and closet facilities similar to those in the present houses.

Steel desks, probably with formica tops, will be 6 inches longer and 4 inches wider than the old wooden desks. The desks will have one center drawer and one deep file drawer. All beds will be of the sofa type, 80 inches long and without headboards. Each room will have one arm chair, of a more modern design than the present ones.

A bulletin board will be provided for each room. Bookshelves will be designed to be hung from the ceiling. They will have two shelves and a net area of 28 by 42 inches.

The windows will have draw drapes and they will be of a much better grade of material than the current ones.

Floors will be the same stained concrete as in the old Houses.

#### No Kitchenettes

Each house will be divided

### National College Food Service To Supply All Houses, Greasy

By CLEVE MOLER

Saga Foods, a national organization specializing in feeding college students, will take over the planning and preparation of meals in all seven Student Houses next fall.

This welcome announcement was made by George Green, Institute vice-president for business affairs, in an interview with the California Tech. Final approval of the change was made Monday by the Board of Trustees.

#### Room Fees Boosted

An increase of between \$160 and \$106 a year in Student House room fees was also announced by Green. The present rates of \$206 for a small double and \$259 for a single or large double will be increased to a uniform \$365, applicable to all seven Houses. (A few large singles in the new

Houses will be worth \$425 a year.)

The food costs will remain at \$520 under Saga. This will bring the total House bill to \$885 a year.

Green listed rising costs and the switch to normal occupancy as the causes of the increase. He pointed out that it is the first hike in 3 years and he hopes to leave it at the \$365 figure for at least another 3 years.

#### Saga at Redlands

Saga Foods handles the food preparation at a number of colleges around the country, including Redlands locally. Green said that he has investigated many plans for improving House food and found Saga to offer the best possibilities. "But college feeding is the worst job in the world," he cautioned. "Don't expect this plan to eliminate all complaints."

Reports from many of the colleges served by Saga indicate that both students and administration are very satisfied by the service.

Saga will also handle operation of the new Chandler Dining Hall. They will begin by replacing Mrs. Lyall's administration of the Greasy next month.

Miss Cheney will continue in her position as manager of the Student Houses. She will act as liaison between Saga, the Institute and the students.

Student waiters will also be retained next year, although it will be Saga's first non-cafeteria operation. In addition there will be opportunities for student employment by the new group.

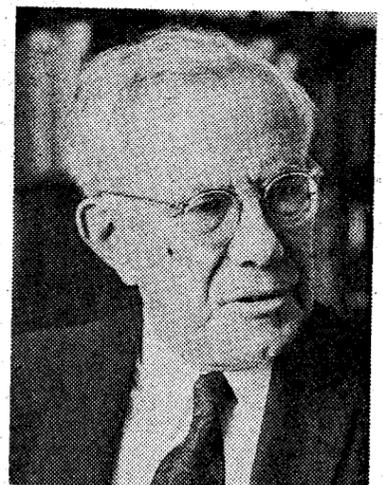
All other Institute personnel involved in the food operation will have the opportunity to go to work for Saga.

### Theologian Paul Tillich Speaks In Dabney Lounge Tonight

Dr. Paul Tillich of Harvard University will speak tonight at 7:30 in Dabney Lounge on the topic "Modern Science and the Eclipse of Religion." Dr. Tillich will have dinner in Blacker before moving to Dabney Hall.

Tillich is a University Professor at Harvard and is one of the foremost contemporary Protestant theologians. The title of University Professor at Harvard is reserved for particularly distinguished scholars who are free to pursue their studies without restriction.

Tillich was born in Prussia as the son of a Protestant minister, and has held high teaching positions at the famous universities at Berlin, Marburg, Dresden, Leipzig, and Frankfurt-am-Main. His opposition to the Nazi regime forced him to leave the country upon Hitler's rise to power. He came to America in 1933 to teach at Union Theological Seminary; when he retired



from Union in 1954, he accepted an invitation to join the faculty at Harvard Divinity School. He has written a number of important theological books, including "Systematic Theology," "The New Being," and "The Dynamics of Truth."

(More on Tillich, Page 2)

## Editorial

## Visitors And Money

Second term means two things to the California Tech and to its readers.

First of all it's the term for campus visitors. Beginning with Paul Tillich tonight the campus and hence the pages of the Tech will welcome at least one distinguished visitor a week during the next three months.

In addition to our regular guests, there will be four men from the American University Field Service (one next week), a Haynes Foundation lecturer, and a couple of the Y's Leaders of America.

All will be interesting to see, listen to and interview, so you'll be hearing a lot about them.

The most interesting of these visitors could easily be Paul Tillich, even though he'll be here only a few hours. Anybody who has ever wondered about the part religion and philosophy plays in his life should find Tillich's talk in Dabney tonight worthwhile.

And second term also brings job recruiters. To the California Tech this means miles of advertising.

These ads will be good reminders of coming interviews, since they all carry the interview dates. And they're a good way to get a first look at the company.

Besides, they provide three-quarters of our income.

## No More Lice

We were all set to carry out a big editorial campaign this term against Student House food. But, as this week's lead story shows, we've procrastinated ourselves out of a project.

This doesn't mean we are not happy—elated, in fact—about the prospects of having better food next year. We've heard good reports about Saga. We don't want to give too much of a buildup, but look for good meals next fall.

## The California Tech

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## Paul Tillich: Modern Protestant

(See "Theologian," Page 1)  
BY DON FAHNLIN

Harvard University Professor Paul Tillich is the foremost Protestant theologian. His theology is a system which relates the traditional Christian symbols to the situation of modern man. His background includes philosophy, theology, history, sociology and depth psychology.

Tillich has been given 13 honorary degrees in theology and philosophy. His Harvard title, University Professor, is, according to Time magazine, "reserved at Harvard for a small group of distinguished scholars who work on the frontiers of knowledge without restriction as to field."

"The man thus acclaimed is also denounced by some orthodox Christian believers as not a Christian at all and possibly an outright atheist.

"Faith," according to Tillich, is not belief in God, but 'ultimate concern.' Hence an atheist is a believer, too, unless he is whol-

ly indifferent to the ultimate questions. Doubt is an inevitable part of faith. Sin is not something one commits, but a state of "estrangement" from one's true self."

If his critics say that his theology comes close to draining the meaning from all traditional Christian concepts, he replies that, for all too many Christians, those concepts lost their meaning long ago. What Tillich has been trying to do all his life is to make the Christian message meaningful for 20th century man in all his "estrangement." Tillich's greatest appeal is not to full-fledged believers but to the seekers after faith.

Paul Tillich was born in Prussia in 1886. He studied at several European universities, including the University of Berlin and the University of Breslau, where he received his Ph.D. in 1911. During World War I he served four years as a chaplain in the Germany army.

Afterward Tillich held teaching posts in several leading German universities. As an outspoken critic of Nazism he was compelled to leave Germany after the rise of Hitler, and in 1933 he came to America at the invitation of the Union Theological Seminary in New York. From 1933 to 1955, he was Professor of Philosophical Theology at Union. In 1955 he went to Harvard.

"Systematic Theology," "The Courage to Be," "Power, Love, and Justice," "The Shaking of the Foundations," and "Dynamics of Faith" are Tillich's important books in English. From his early German writings to the present his main interests have always been the boundary line between theology and philosophy and generally in the area of religion and culture. In earlier years, his interest was in the relation between religion and depth psychology. In recent years, one of his deepest interests has been in relating religion existentialism.

FOR VOUGHT VISIT TO YOUR CAMPUS — SEE BOX BELOW

## Five Vought Divisions Provide Engineers Greater Opportunity for Space-Age Advancement

Young engineers, particularly, will be interested in the broad range of opportunities present in Chance Vought's five divisions and two wholly owned subsidiaries.

For every Vought engineer, there is a division to make fullest use of his talents and to speed his personal advancement. And, of course, he is backed by the four other divisions whose balanced activities add security to his company and his future.

Vought's diversification, begun early in 1959, gears this 43-year-old aircraft firm for the opportunities of the age of space.

## AERONAUTICS DIVISION

New generations of manned aircraft and atmospheric missiles, devices for antisubmarine warfare, and many other types of weapons will take shape here.

Among this division's current contracts: a Navy order for development of an environmental protection and escape capsule for aircraft pilots. Other work includes production contracts for three versions of F8U Crusader aircraft, study contracts in submarine detection and classification, and contracts for military and commercial aircraft assemblies.

## ASTRONAUTICS DIVISION

Vought is drawing on 13 years' experience in the missile field to obtain broader responsibilities in the race for space. Concentration is on advanced vehicles for space exploration, and on ballistic and anti-ballistic missile systems.

Currently, Vought is providing the four-stage Scout research rocket and its launcher for the National Aeronautics and Space Administration. In the human factors of flight, Vought is taking the lead with its orbital flight simulator and space-oriented Cockpit Laboratory. Advanced materials research is also being pushed by this division.

## ELECTRONICS DIVISION

Vought electronics will be developed, manufactured and marketed in increasing volume. Military systems under development include antennas and related electronics, ground support electronics and antisubmarine warfare apparatus. This division is also producing actuators for the Minuteman ICBM.

## RANGE SYSTEMS DIVISION

Thirteen years' experience in remote base operation qualifies Vought for additional business in this new field. The Range Systems team will establish and operate test ranges and test equipment for missiles and space vehicles.

## RESEARCH DIVISION

In a new Research Center, scientists of this division will mine new knowledge from many fields. Basic research is planned into astronautics, undersea warfare, the life sciences (relating to human factors of flight), electrogravities and other areas. As it evolves into applied research, this advanced work will materially support other Vought divisions.

Genesys Corporation, a wholly owned subsidiary company, intensifies Vought's diversification into commercial electronics. Company emphasis is on automation, and its key personnel are engineers experienced in the fields of electronics, computers, magnetic memory, and associated electro-mechanical devices.

Vought Industries, Inc., formed late in 1959, is engaged in the design, manufacture and marketing of mobile homes, an industry with a great growth potential.

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Dallas has grown faster since 1950 than any other U.S. city. One reason is the city's wealth of entertainment and cultural centers. Another reason is the attractive cost of living.

Student engineers are invited to write for further information about new Vought activities, and how you can start your career with one of Vought's five divisions. Please address inquires to:

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AI Sign of the Leader

# Caltech Conference Ponders Bomb Tests

Feasibility of non-detectable nuclear tests and the age of the universe were among topics discussed at the western meeting of the American Physical Society, held at Caltech December 28, 29 and 30. Over 800 scientists attended and about 160 papers were presented during the three-day confab.

Non-detectable nuclear tests were discussed in papers presented Tuesday afternoon to a full house at the McKinley Junior High School Auditorium. According to Ernest A. Martinelli of the RAND Corporation, an independent research group, a one kiloton atomic explosion can be made undetectable to a seismic station more than 100 kilometers away by detonating the bomb in a large cavern several thousand feet underground. If the cavern is large enough, it will absorb the blast and not collapse enough to produce a noticeable earthquake. In other papers, Harold Brown of Lawrence Radiation Laboratory and Richard Latter of RAND stated that bombs exploded further than 621,000 miles from the earth's surface cannot be detected by ground stations and that even a radiation-monitoring satellite could not detect a 10-kiloton explosion unless it were in the vicinity.

Allen R. Sandage of Mt. Wilson and Mt. Palomar observatories, and Fred Hoyle, visiting professor of astronomy at Cal-

tech, presented papers which indicated the universe is older than previously thought. Both made calculations from the hydrogen content of certain stars, which indicate the stars are very old—Sandage's, about 24 billion years, and Hoyle's, more than 15 billion years old. To further complicate astronomy, William Fowler, Caltech professor of physics, said that different theoretical interpretations of uranium and thorium radioactive decay yield ages for the universe which differ by a factor of two — from 13 to 17 billion years or from 5 to 11 billion years.

## Folk Singers Here Monday

A folk-singing group called "The Pearls" will entertain Monday, 7:30 p.m., in Culbertson in place of the first Y film series of the term.

The group consists of Betsy Griffith, five other singers, piano, and drums. The Pearls specialize in gospel singing.

## Wierd Sounds Invade Dabney

The Elizabeth Waldo Ensemble will be featured Sunday, 8:15 p.m., in Dabney Lounge with a program of wierd music to include: "Ode to Quetzalcoatl," "Meso-American Suite," "Andean Impression," and "American Southwest."

The group consists of a violin, string bass, and several strange woodwinds and drums.

## Drama Club Meets

The Drama Club will meet at 7:30 tonight in 208 Dabney to plan second-term activities.

### Announcements

#### STUDENT BODY CARDS

Student body cards are now available at the athletic office for all graduate and undergraduate students. The delay was due to the late arrival of the cards from the printer.

## Paul Receives Award For Book

Dr. Arnold M. Paul, instructor in history for 1959-60, has received the Albert J. Beveridge Award for 1959 in recognition of his book, "Conservative Crisis and the Rule of Law: Attitudes of Bar and Bench, 1887-1895," which will be published next

year by the Cornell University Press.

The Beveridge Award is granted each year by the American Historical Association for the best manuscript on the history of the Western Hemisphere.

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# CAMPUS INTERVIEWS

THURSDAY, JANUARY 14  
FRIDAY, JANUARY 15

Appointments should be made in advance through your College Placement Office

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## Positive Bias

BY PIERRE SUNDBORG

A popular occupation for columnists at this time of year seems to be writing about the glorious events of the year just ended. For a person writing about the hi-fi business, it can be a most rewarding task, for this industry is constantly amazing in its ability to change and confound. It is rather shattering to me to consider that hi-fi didn't even exist until 12 years ago, and that it now accounts for several millions of dollars of sales annually. A truly prodigious child!

### Stereo Discs

I remember that it was less than a year ago that I went to the Los Angeles Audio Show to hear the almost new stereo discs. Most of the fans, like myself, were interested in seeing whether the stereo disc could stack up with tape for quality reproduction. It could and did, and the stereo record was the hit of the show. At the time of the show it was difficult to find stereo records in some stores. I understand that 1 in 4 LP's now sold in Los Angeles is a stereo disc.

If the stereo record was the big story of the hi-fi year, the revolution in equipment which it triggered was close behind in import. The record put stereo into the home as tape never dreamed of doing. The customers asked for, and got in huge abundance, new stereo reproducing equipment. If you want to see how large the accent on stereo has become, compare the equipment ads in a current copy of some hi-fi magazine with those of a year ago.

### Tape Cartridge

Another development of the year, which we don't see in this technical atmosphere on campus, was the tape cartridge. Caltech men don't mind threading tape through the slots and around the wheels in a tape deck, but housewives do. So, RCA and others got going on the production of little "cartridges" which contain tape. The cartridges just plug into the tape deck and play. No messing around.

My guess is that the cartridge will never get off the ground because of compatibility problems, but I'm the guy that didn't think stereo discs would ever work.

### 20,000 Tiny Traps

The other big development in the tape field during the year was the popularization of quarter-track tape, which was designed to meet the competition of records in the stereo field. Quarter-track tape plays stereo in both directions (you can light either end), giving twice as much music per dollar of tape cost. While tape still costs more than records, it's at least back in the same ballpark.

1959 saw a few critics asking why stereo records should cost \$1.00 more than monophonics. They cost no more to press, package or advertise. All recording is done in stereo, anyway, so that isn't a factor. Anyway, I trust that 1960 will be the year in which stereo record prices drop.

During the year a lot of emphasis was put on high-compliance, or acoustic suspension, loudspeakers. This was probably due to the fact that it takes two speaker systems for stereo, and a lot of people began scream-

ing for small systems. So, the small AR's, KLH's, and JBL's did right well for themselves.

1959 also featured a lot of talk about stereo multiplex broadcasting, something I talked about last time. Still, the only commercial FM multiplexing is being done in New York, and it is primarily experimental. There are a couple of stations on the West Coast which are now multiplexing, but not commercially. They're just testing. I trust that 1960 will bring us three or four

multiplex stations in L.A.

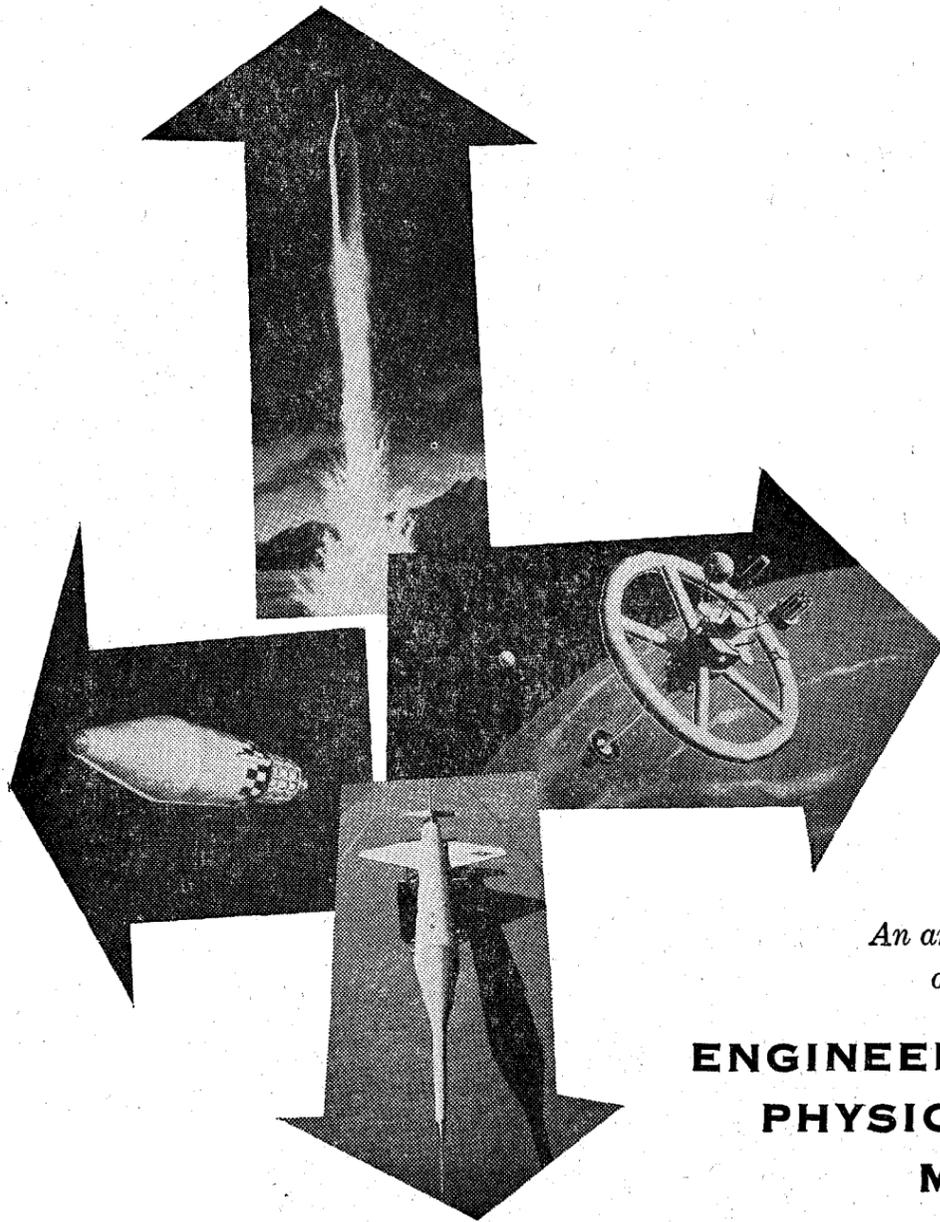
### Audio Show

1960 should be a banner year, too. One of the big events of the year, and probably the one most enjoyable to this writer, will be the annual Los Angeles Audio Show. It will be at the Pan Pacific Auditorium from January 13 through 17. For anyone who either wants to learn more about hi-fi or likes to collect reams of propaganda sheets, this is a must event.

This will be the first year that the show will be held at the Pan Pacific, and the move from the over-crowded hotels should be a big improvement. I understand that each exhibitor will have a soundproof booth, another big amelioration (look it up) over past years. I'll mention the show again next week, but now is the time to start planning. Remember, January 13 through 17, Pan Pacific Auditorium.

Another thing, I'm looking forward to in this year is the in-

roduction by Dynakit of an FM tuner kit. I don't have any information on the kit except that it will cost about \$70. Audio Associates has a goodly number of them on order, and expects delivery momentarily. If you're thinking of getting a higher-priced FM tuner, it will probably pay to wait for this one. If it's as good as the rest of the Dynakit line, it'll be real competition for the Sherwood and Fisher products.



An announcement  
of importance to

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# Fifth Column

BY BRAD EFRON

*Overheard in Statistics Class: "... and thus the methods of statistical analysis offer incontrovertible evidence that Mendel altered his experimental results to fit a preconceived theoretical model. ..."*

Scene: an Augustinian monastery in Southern Germany. It is midnight as a lonely figure works slowly through the rows of pea-plants.

MENDEL: (singing softly to self) ... oh, weed out the bad ones, water the good ones, and don't mess with mister in between ... da dum, de dum. ... into the mutant bag with you and you and you and you ...

VOICE: 'evening, Brother Mendel.

MENDEL: (aside) Jiggs-it's the bishop!

BISHOP: Still puttering with those damn peas, Gregor? It's long past sandman time.

MENDEL: Monks may work from sun to sun, but Abbot's work is never done.

BISHOP: Har, har, har—pretty rich. Wait'll I tell the boys at the next council. By the way, what do you have in that bag?

MENDEL: Which bag?

BISHOP: The one marked "Star-News."

MENDEL: Oh, just a few sprigs to brighten my cell. I feel I get added dramatic effect by breaking up the stone motif.

BISHOP: Mind if I take a closer look? (He rummages through bag.)

MENDEL: Really no reason for you to dirty your hands on a few scrawny pea-plants, sir. As I say, just a little something to ...

BISHOP: Drop it, Mendel—the game's up.

MENDEL: Game? What Game?

BISHOP: The game we at Religion Central have chosen to call "the Case of the Uncanny Pea Plants." It's all over, Gregor—I'm afraid our statisticians have had their eye on you for a long, long while.

MENDEL ((blubbering)): One more chance sir, just one more chance ...

BISHOP: That's what you said after the RentReligionCard affair, too. Wasn't your motto in that one: "Sin Now, Repent When Convention?" Irony, Mendel, irony. You're way past due on the convenient monthly penence.

MENDEL: Wait! I tell you my theory is correct! What does the public know about statistics? A couple lousy beans too tall, some seeds that don't wrinkle quite enough, and right away they start talking. You know what they say, Mr. Bishop? I'll tell you what they say ... "psssst—have you heard? Mendel's slipping—his theory don't work like it used to. Maybe that Lamarck isn't so dumb after all ..."

BISHOP: So you felt justified in pulling a fix?

MENDEL: Not a fix—just a little added dramatic interest. Some pea-plants have lots of personality, the public loves them like a rich tither. Others, well, need I remind you that the church has considerable cash invested in this abbey.

BISHOP: You've had your say, Mendel, come along quietly.

MENDEL: No! I didn't sweat blood over these lousy weeds just to quit before payola time. Listen Bishop, this stuff's comers — textbook royalties, grog endorsements, little pea-plants in every home from here to Tannu Tuva. It could be "good-bye vows of poverty" ... for both of us.

BISHOP: Which ones do I pull up?

## Ravenholt To Discuss China

Albert Ravenholt, American Universities Field Staff expert on Southeast Asia, will be on campus next Monday, Tuesday and Wednesday for a series of speeches and informal discussions on Communist and Nationalist China.

Ravenholt has studied and written about Asia since 1940 and has spent a total of seven years in the area. He served throughout World War II as a correspondent in China, Burma, India, Indochina, and the Philippines, and afterwards spent two years

observing first-hand the Communist revolution in China.

Since 1948 Ravenholt has written for the Chicago Daily News Foreign Service, through which his articles have been syndicated to numerous daily newspapers in the United States and Canada. He has also written for Foreign Affairs, and The Reporter magazines.

Other AUFS men to visit Caltech this term will be Richard Patch from Bolivia, Lawrence Olson from Japan, and Edwin Munger from Africa.

## Grad Student Dies In LA Mountains

A bio-chemistry grad student, Konrad Hubele, was found dead in his car on Angeles Crest highway last week. He is thought to have frozen to death, having apparently become unconscious from an overdose of an experimental remedy for multiple sclerosis which he was known to have been administering to himself.

Hubele was a native of Germany. He did his undergraduate work in chemistry at UCLA, received a master's degree from Caltech, and was working for a Ph.D. under Dr. Carl Niemann, professor of organic chemistry. Hubele had been granted a one-year leave of absence last October because of his multiple sclerosis.

## Stanley Discusses Communication

Edward Stanley, director of public affairs for the National Broadcasting Company, spoke on the subject "Modern Man—the Creature of Modern Communications" Tuesday night in Dabney Lounge.

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## New 'Greasy'

(Continued from page 1)

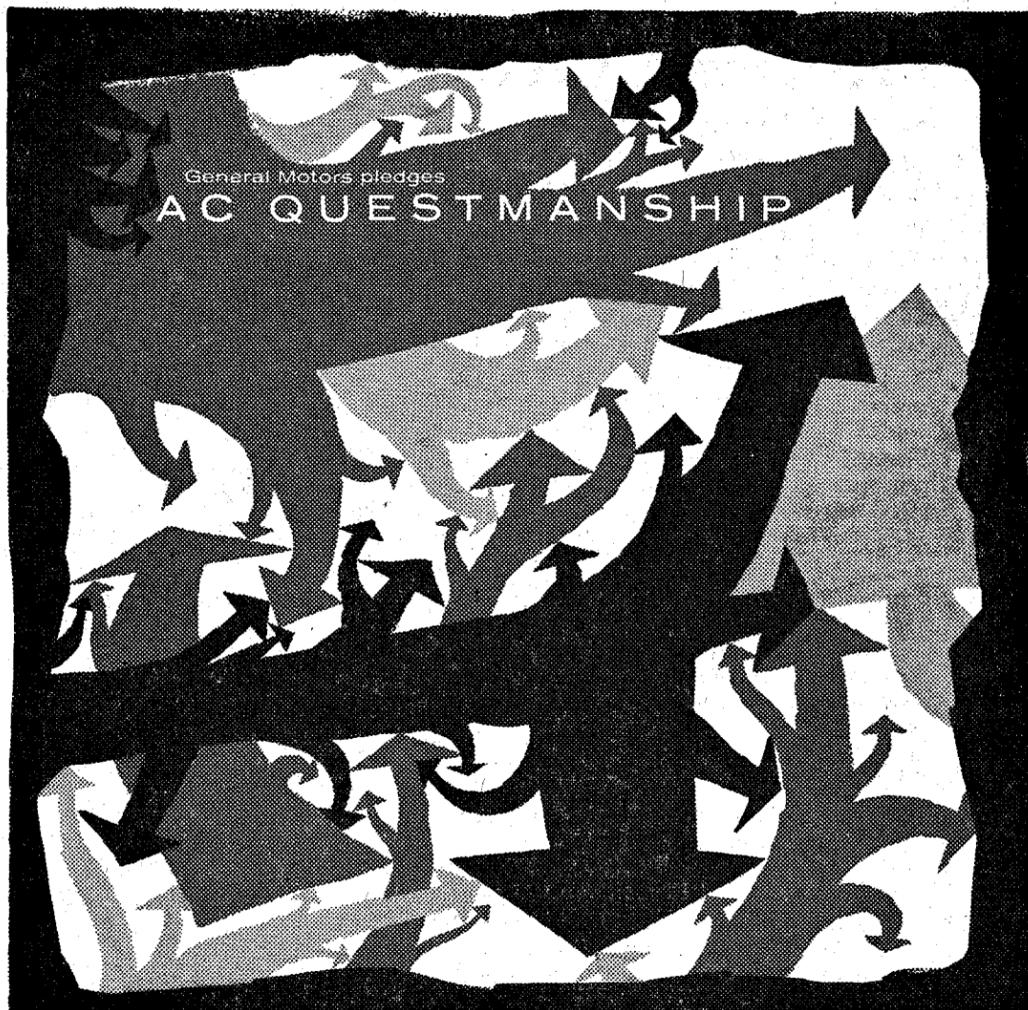
rooms each seating 30 diners, will replace the 60-year-old Greasy. The new building will be built alongside the three new Student Houses.

Chandler contributed much to

Caltech's growth. He was one of the persons instrumental in bringing to Caltech from the University of Chicago Nobel laureate Robert A. Millikan to serve as president of the Institute's executive council. He also helped organize the Caltech Associates, an organization which has inten-

sively supported the Institute, financially and otherwise.

The Harry Chandler Dining Hall is the latest project to be financed in Caltech's \$19,500,000 development program. Two more undergraduate houses, now nearing completion, remain unfi-



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# The California Tech SPORTS



## Beaver Chips

By Noll and Koh

### Confidence And Victories — Two New Friends

There has been a change in Caltech sports this year. Not an obvious, earthshaking change, but still one of great importance. It all started last spring when the swimming team won both the varsity and freshmen conference titles quite handily. Since then, for the first time in a long while, there is an actual optimism about the outcome of sports events.

With the exception of the football team, every Caltech squad this year has expected to do well; and, surprisingly enough, every Caltech team except the football team has done well.

The water polo team, which suffered tremendously from the graduation of All-Conference goalie Don Wiburg, actually played above their ability to finish third in the conference. No Techmen were named to the first team All-Conference; only two made the second team. Yet the team was third best.

The soccer team did not win a lot of games; they didn't even win a majority of them. But in every game they played well and hard, and not once were they actually drubbed. The Western NCAA champions, the University of San Francisco, only beat them by five goals, as did powerful California. And strong UCLA, who took their second game with Tech a bit too lightly, went down to defeat to the J.V.'s.

But the best example of this new spirit in Caltech athletics was the cross-country team, which finished second in the SCIAC behind the running of five sophomores. Bob Juola, second man on the team all year, summed up the new spirit when he said, at the first of the year before the first meet, "We're damn good—we might even beat Oxy." We ask you, how many track teams in Caltech history have honestly felt they could whip Occidental, a perennial national powerhouse?

What has been the result of this new spirit? Discounting football, Caltech teams have had as good, or better, seasons as those of any school in the conference except Occidental — better than Whittier, better than Redlands, about equal to Pomona, although the Beavers hold a slight edge. Even with football records included, only Oxy and Pomona have had better years, over all, than Caltech.

Certainly all of this improvement cannot be due to a better spirit — during the past year we have had some good athletes. Still, without this spirit, these past two terms would have been typically miserable.

### Basketball Team Displays Same Spirit

This term we have still another team with spirit. The Caltech basketball team expects, and expects sincerely, to win at least two-thirds of its games this year and finish no worse than third in the conference. And the funny thing is, they just might do it. If the Beavers can get off to a good start this first week after vacation, it might provide them with the impetus to do very well.

Saturday night the Beavers start their league campaign at Claremont. This game could well be the most important game for the team all year. A victory probably will mean that the Beavers will win between 10 to 15 games this year; a loss might well lead to another season such as last year's, when the Beavers ended up with two wins in 19 games.

Now the point of this whole treatise—a large, shouting contingent from Caltech could very easily be the difference in the game. Don't let anyone tell you that it doesn't make any difference for whom the crowd is cheering — it makes a whale of a difference. The much-publicized home court advantage is due to more than the baskets and floors, which are pretty well standardized for most gyms.

More important from a spectator point of view, the basketball team is a good squad in a good athletic year, and will probably win. Even the most cynical Techmen among us, if they stop and think a minute, will probably admit that it IS fun to back a winner, to see your "boys" thump a cross-town rival. Sure, its high schoolish; but, then, so are a lot of other enjoyable, satisfying things.

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The *Realist*, Dept. C, 225 Lafayette St., New York 12, N.Y.

## Cagers Face Important Games

The Caltech basketball team reopens this season's campaign this week with three important games scheduled during the next five days.

This afternoon the Beavers journey eastward to tangle with La Verne in a game scheduled to begin at 4:15 p.m. La Verne's record on the season is 2-8, with one of the victories over SCIAC member, Claremont-Harvey Mudd, and the other over weak Upland, relies almost completely on one forward and the center for their strength, both offensive and defensive. If Caltech can contain these two players, the Beavers should overcome La Verne's home court advantage and walk away with the win.

Saturday night the local var-

sity meets Claremont-Harvey Mudd in the season's first conference test. The CMC Stags have lost to most everyone this year, including Riverside and Cal Western, and should not be as tough as La Verne. According to sources at Pomona, however, the Stag team is really "up" for Caltech, and should the Beavers be caught napping, Claremont might surprise them.

The first conference game to be played at home is scheduled for next Tuesday night at 8 p.m.

again Redlands University. The Bulldogs, though not as tough as last year, are still a strong team and should give the Beavers plenty of trouble. One of their forwards, Schroeder, is averaging close to 25 points per game, and the rest of the team is solid and dangerous.

The Beavers are in good shape for all three games, as nearly all the injuries that plagued the Beavers, probably costing them the Riverside game, are healed

(Continued on page 7)

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**Interhouse**

**Solid, Experienced Seniors Make Blacker Tennis Pick**

Dabney, defending Interhouse champion, holds a slim margin over second-place Fleming in the current Interhouse standings, revised to include first-term results.

After a rocky start, the Darbs pulled a mild surprise in coping the swimming meet to move out in front with 60 points. Fleming, winners of Interhouse cross-country, tied for second in the swimming with Throop to place in the runner-up spot. Blacker and Ricketts rounded out the field in the swimming meet with fourth and fifth places.

Current Interhouse standings are:

Dabney .....	60
Fleming .....	57½
Ricketts .....	50
Throop .....	23½
Blacker .....	23

Next sport on the Interhouse scene will be tennis. Blacker

looms as the favorite with a quartet of senior Interhouse veterans in Bob Thompson, Tom Jovin, Al Hales and Neil Sheeley.

Dabney, last year's victor, has second singles winner John Bard back along with Marty Carnoy. Throop, always an unknown quantity, sports the talents of Dave Owen and Roy Plant, number one and two men on the North Hollywood High squad last season, along with fellow frosh Spike Curtis.

Versatile John Walsh, whose first singles triumph led perennially strong Ricketts to a second-place finish last year, is again favored in the number one spot. However, the Rowdies lack depth.

**Froshballers Win Two Straight**

The Caltech freshman basketball squad grabbed two quick wins in their opening games at the end of last term. After whipping the Riverside junior varsity, 68-53, the little Beavers hosted the L.A. Pacific varsity, beating them more easily than the score indicates, 59-48.

The frosh demonstrated fine depth and a well-balanced attack. Coach Ed Preisler has found himself in the happy position of having at least 10 men who have the ability to play well. This allows the Beavers to have rather liberal substitution, for the first time in many years.

Several players have looked good in the first two games. Center Mike Perleman has averaged close to 20 points a game, and forwards Pete Fischer and Tom Bopp have demonstrated good scoring skill with excellent rebounding. Perleman has also

**Sailors Fifth At Newport; Matthews Western President**

Light wind proved Caltech's undoing as the Beaver sailors dropped to sixth in the Pacific Coast Intercollegiate Yachting Championships on December 19 and 20. In addition to Caltech, the University of California, the University of California at Santa Barbara, Stanford, Orange Coast College, Occidental, and Pomona-C Claremont participated in the meet held at the Newport Harbor Yacht Club.

Led by skippers Tom Bowman and Lowell Clark, the Beavers were close to the leaders on Saturday, and were only two points behind the eventual winners, Orange Coast College. Clark got a first in the B division while Bowman got a second and two thirds in the A division.

Sunday was a different day, and Caltech moved out of contention and dropped to the sixth spot. Dick Ward of Stanford was by far the best sailor at the meet and easily won the individual championship. Caltech's Keith Matthews was elected President of the Pacific Coast Intercollegiate Yacht Racing Association, which includes, in addition to the schools which participated in the championships, Washington, College of the Puget Sound, the University of British Columbia, and Cal Poly at San Dimas.

**Cage Games To Be Free**

There will be no charge for any of the home Caltech basketball games this season, it was announced by Athletic Director H. Z. Musselman. All spectators, including non-Caltech people, will be admitted free.

League games away from home will be free for Tech students if they present a stub attached to their student body cards at the gate. The stubs are only needed at games away from home.

Non-league contests played away from home will have some admission price, according to the desires of the home school. Most schools charge students 50 cents.

**Basketball--**

(Continued From Page 6)

All-Conference guard Fred Newman has recovered from his broken rib and is gunning accurately again.

Starting guard Larry Brown, who suffered from a twisted ankle earlier in the season, is now in top shape.

Letterman Dave Blakemore is still suffering from his sprained ankle, but it is improving with every practice.

Guard John Arndt, who had to sit out the Riverside game with the flu, is now all right.

All in all, the Beavers are ready for their foes, and plan to win at least two of the three games coming up. With luck, they could win all three, and spend the first week of the conference season perched atop the standings.

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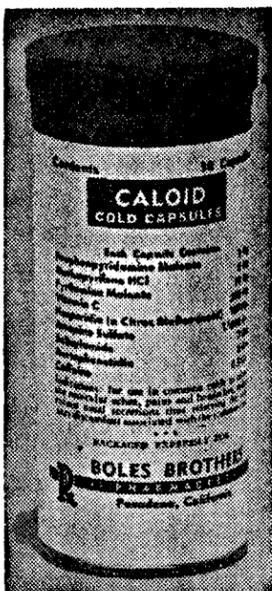
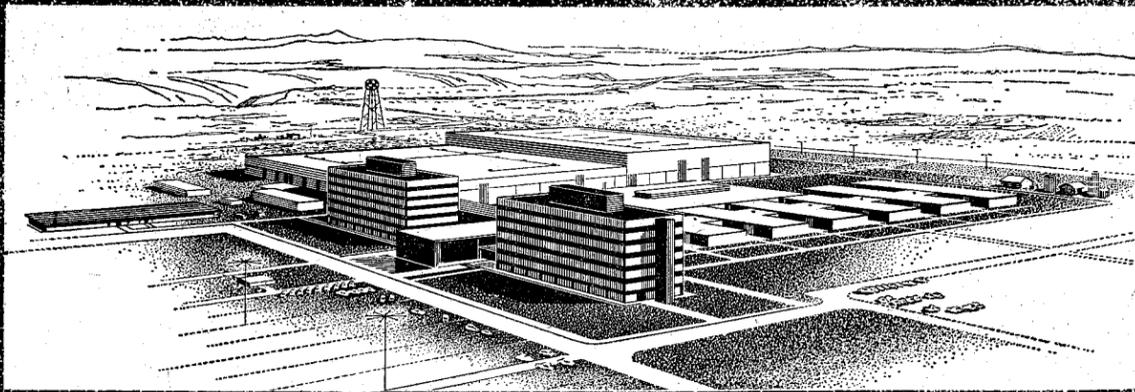
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