

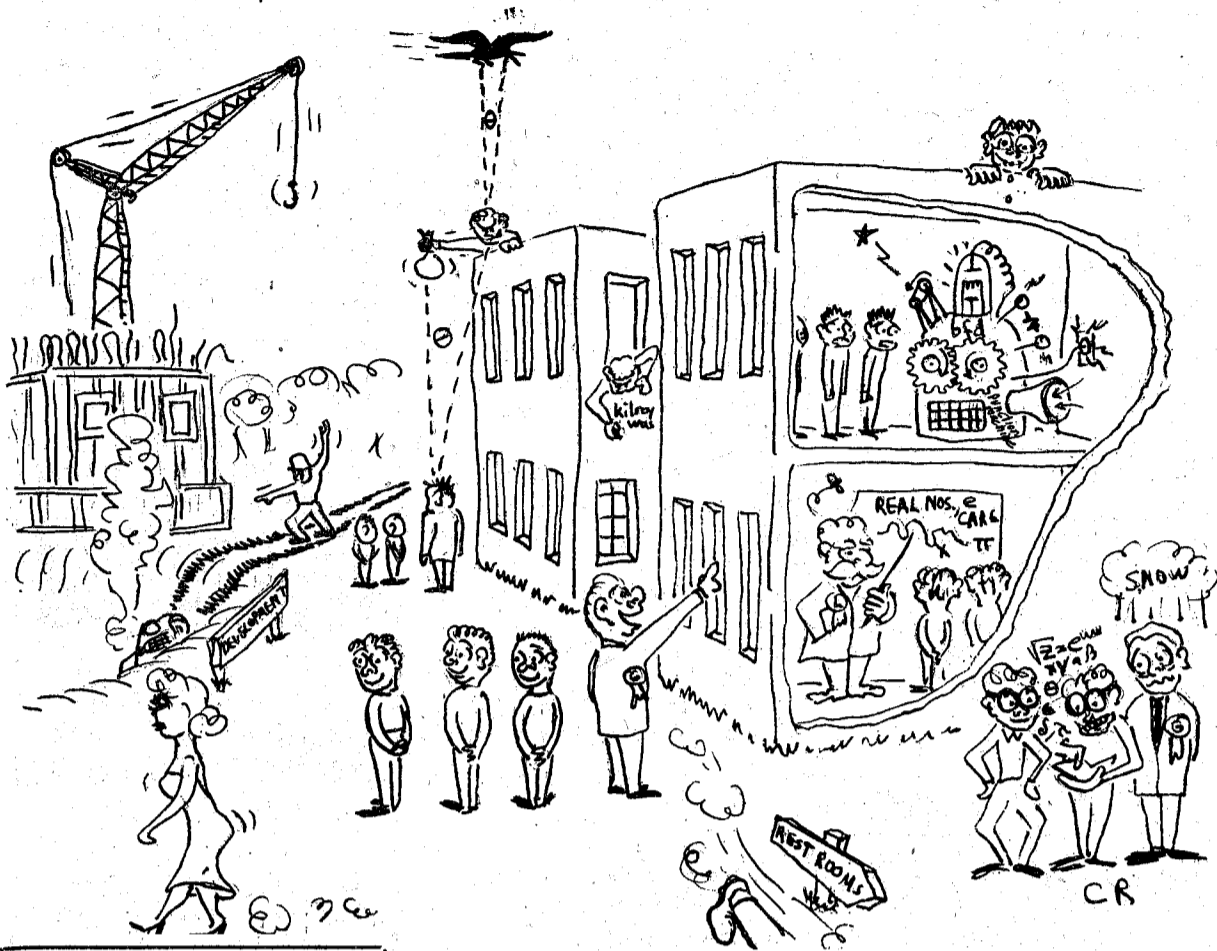
The California Tech

Associated Students of the California Institute of Technology

Volume LXI

Pasadena, California, Thursday, January 14, 1960

Number 13



Student Visitors To Hear And See Varied Programs

Caltech opens its doors Saturday to high school science students and teachers in the annual Students' Day activities. About 1,200 prep school representatives will spend the day looking at exhibits and listening to speeches designed to inform them about what goes on in the labs and classrooms here. This year's program, similar to those in previous years, was planned by Chairman Hal Stark, assisted by various members of various Institute Departments.

The tours break up at noon for lunch. Students will eat cafeteria style in the Houses, and their teachers will go to the Athenaeum. Matt Messelson of the Biology and Chemistry Divisions will speak in the Athenaeum after lunch.

At 12:50, there will be a luncheon program for students on the Athenaeum lawn. ASCIT President Tom Jovin will be master of ceremonies, and President L. A. DuBridge will be one of the speakers.

First on Saturday's agenda is registration between 8 and 9 a.m. Each visitor should report at his assigned House and pick up a name tag.

During the afternoon, there will be three relays of six one-hour lectures. Again, individual visitors can choose what they want to hear. Topic range from "The Use of Axioms in Mathematics" to "Why Humanities Study for Scientists and Engineers." There will also be a tour of the Southern California Cooperative Wind Tunnel between 3 and 5 p.m. for aeronautically inclined visitors.

Guided tours of the campus begin at 9, with each visitor choosing the one he wants to take. There will be 10 tours, and each one will stop at seven exhibits. Practically every research group in the Institute has donated at least one exhibit to the total of 70. All the tours meet in Dabney Hall Lounge about 11:30 to see the YMCA exhibit on "Student Life." Besides the Student Life display, the exhibit roster includes demonstrations on "Desalting Sea Water" and "A New Yook at Whisky."

Students' Day planners point out that the success of the affair depends on how well the student body supports it. Openings are still available for guides, operators of exhibits, and general flunkies. Anybody interested should apply to Hal Stark, S-box, Fleming.

Welcome

Copies of this week's Tech will be presented to the over 1000 high school students who will be visiting the campus on Saturday. To them we say:

Hi, Welcome to Caltech. Make yourself at home.

Most of the time, we're pretty proud of our little world. You've probably been told that this is one of the world great centers of scientific knowledge. It's probably true.

But we also have other forms of entertainment around here, as you'll also be told.

If you have any questions, ask them. And let us know what you think. We like to talk about ourselves.

Applications Open For Honor Keys, Camp Counselors

Honor Keys and Certificate applications should be turned in within the next three weeks.

Each applicant should list his extra-curricular activities, elective offices, club memberships, and other student body services dating from the end of second term last year, sign his name, and turn in the application to Hugh Keiffer, any House or Throop K-box.

Students who want to go to New Student Camp next year as counselors should drop a note to Tom Jovin, any House or Throop J-box, within the next two weeks.

New House Sign-Up Lists Open Monday

The first phase in the colonization of the new Student Houses—the posting of sign-up lists—will begin next Monday.

A sign-up list for each of the three new Houses, plus "sign-out" lists for the four present Houses, will be posted in the Student House office in Blacker basement until a week from tomorrow.

The lists are to be signed by everybody intending to move into the new Houses next fall, including present off-campus men.

In addition about 40 graduate students will be living in the Houses next year. Any grad student interested in occupying one of these spaces should also contact the Student House office before next Friday.

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.

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 departure 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 over-populated 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 actual figures will, in part, be determined by the number of off-campus men planning to move on campus and, therefore, only estimates can be made at the present time. It is for this purpose that the twoweek ironing-out period has been set aside.

Room and board in the Houses will be \$885 next year.

'59 Big T Out Soon -- Maybe

Last year's Big T will probably come out within the next two or three weeks, it was revealed in the BOD meeting Monday night.

Joe Tenenbaum was appointed new editor for this year.

Ravenholt Eyes U.S. Role In Asia

Southeast Asia, and in particular the influence of Communist China on this area, is the special field of study of Mr. Albert Ravenholt, current visitor at Caltech. Ravenholt is a member of America's academic foreign service, the American Universities Field Staff (AUFS).

Ravenholt might be termed a constructive critic of America's role in Southeast Asia. He compares the present southward push of China to the westward push of the United States during our great period of territorial expansion. He feels that if we are to prevent further southern expansion by China we must make substantial efforts to help democracy work in Southeast Asia. To do this, we need immediately to accelerate economic development in the area.

One immediate possibility for



ALBERT RAVENHOLT

U.S. help that Mr. Ravenholt mentioned is the vast unexploited agricultural potential of Southeast Asia. He stresses the great need for basic research into the economic and agricultural

possibilities of the moist tropical areas of this area. Also, for example, much information is needed about the cultural and psychological backgrounds of Asian peoples as an aid in understanding wants and behavior.

Mr. Ravenholt feels that there are tremendous opportunities for technologically trained Americans in Asia. He frankly added, though, that some of his very good friends in Asia have met violent deaths in Cold War battles.

Mr. Ravenholt has studied and written about Asian affairs since 1940. During World War II he was a war correspondent for United Press. He was associated with the Institute of Current World Affairs after the war and has been a member of the AUFS

(Continued on page 6)

Announcements

STUDENT SHOP

Student Shop will accept membership applications for the next week. See Keith Taylor, 21 Fleming, for forms and information.

COMPUTERS

Professor John Todd will give the Friday evening demonstration lecture this week on "The Mathematician and the Computer." He speaks at 7:30 p.m. in 201 Bridge.

ASCIT Sets Election Dates

The BOD has set the date of freshman class elections as January 26 and ASCIT elections as February 23.

Freshman interested in class offices should modestly put their names and offices desired in a note addressed to Dick Norman, N-box, Blacker, before next Thursday.

A pre-election meeting to discuss the work involved in the BOD jobs will kick-off the ASCIT election trail on February 4. Nominations will be heard at a student body meeting on February 9. If any post has only one nominee, nominations for that job will remain open through the next week.

The traditional election rally with the traditional entertainment is slated for Monday, February 22. The election will be Tuesday, February 23.

Entry fee is \$5 for presidential candidates and \$4 for candidates for all other officers.

Little t Applications Due

Applications for editor of next fall's Little t are due starting next week. Give name to Hugh Kieffer, K box, Blacker.

Editorial

"Worse Than Futile"

The Congress of the United States convened last week. They will, naturally, be considering a lot of earthshaking problems during the coming session. Sometime in the next few months, however, they will also consider an issue that should be of more than passing interest to college students—the "loyalty" provision of the National Defense Education Act.

Under Title II of this Act, which was passed in August of 1958, Federal funds are granted to accredited colleges for low-interest student loans. Almost \$300 million has been authorized for use in the program over a four-year period. Last year Caltech received over \$50,000 of this.

There are a number of unsightly strings attached to the money, however.

According to Section 1001 (f) of the Act, a student is not eligible for a Title II loan unless he (1) "has executed . . . an affidavit that he does not believe in, and is not a member of and does not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods," and (2) has taken an oath swearing allegiance to the United States and promising to defend the Constitution.

This little paragraph has touched off a minor revolt among the country's liberal universities and organizations. Seven colleges—Amherst, Antioch, Bryn Mawr, Haverford, Princeton, Reed and Swarthmore—refused to accept Title II funds. More recently Harvard, Yale and Oberlin reconsidered their position and withdrew from the program.

An attempt was made last spring by Senators Kennedy and Clark to repeal the controversial provision. But their bill was lost in the parliamentary wrangling and never really brought to a vote. It appears, however, that about half of the Senate were in favor of the move.

The Eisenhower Administration endorses removal of the section.

We've been hearing about this "storm of protest" off and on for over a year now. Our first reaction was a resounding "ekh" (Russian for "care"). We set out to write an editorial expounding this point of view.

But as we began to read the reams of material that our office seems to collect on this sort of thing, we surprised ourselves by agreeing with our fellow leaders in the academic community. "The Harvard Crimson" sent out a handy little pamphlet which made very good sense by opposing the affidavit and oath.

The principal arguments against section 1001 (f) can be summarized:

The provision is a very real slap at colleges and their students. They are, in effect, being singled out as a group who must prove their loyalty.

The affidavit is, at best, totally ineffective. Anyone actually advocating the overthrow of the Government would not hesitate to sign the statement.

The program is administered by the colleges themselves, who, in addition, must match every nine dollars of Federal funds with one of their own. A college must, therefore, require an oath and affidavit in return for its own money.

The section does nothing to further the aims of the bill to "strengthen the national defense . . . through programs designed to stimulate" education.

It is a dangerous precedent for future legislation.

In short, it is useless, discriminatory and poorly written. Even its constitutionality is questionable.

One of the chief arguments used by Senators opposing the Kennedy-Clark bill was that, as far as they knew, students were in favor of the loyalty provision. Formal student protest has, until recently, been virtually nonexistent.

Caltech is an important school. We can do more than we think by making our stand known to our representatives in Washington.

—cm

BOC To Hold Honor System Series

The Honor System, its interpretation and ramifications, will be the subject of a series of four open meetings of the Board of Control. Each of the meetings will be preceded by an interpretive article in the California Tech by a Board member.

Tonight's meeting will consider tests. It will be held after dinner in Blacker House.

BY BILL HOWARD

This is the first in a series of articles by members of the Board of Control, a series intended to acquaint the student body with the present Board and its policies. Four separate topics will be considered: tests, stealing, plagiarism, and master keys. This first article will deal with tests.

One problem which arises in class tests is insuring that everyone has an equal amount of time in which to work the test. Some, being naturally fast workers, can finish the exam with time to spare. Others may continue for a significant amount of time over that allotted. To

avoid this difficulty, we suggest that you arrive early for tests, thus enabling your instructor to give directions or corrections without subtracting from tests time. Plan to finish promptly. Not to stop when the specified time is up is taking unfair advantage of your fellow students.

The take-home test also involves the time problem. This type of test is both a compliment and a great convenience to the student, who is trusted sufficiently to be permitted to take the test at a convenient place and time. He is, nevertheless, expected to use only those materials specified and to hold strictly to the time allotted.

A question has arisen concerning the time spent on a test which has been interrupted by some disturbance. Should an emergency reduce your working time, you still must not exceed the time limit. However, you may draw a sharp, distinct line and continue to work, indicating clearly that work done below the line was completed after

the end of the test. Later the instructor may take into consideration your handicap. It is apparent that this should not be used except in an emergency, since the instructor cannot easily assign credit if exams are taken on this somewhat indefinite time basis.

Both unproctored class and take-home tests are likely to remain a part of our school's education system, and they represent valuable trusts in us. It is your responsibility to regard them as a privilege and to accept them in a responsible manner.

Letter To The Editor**Trapped In CMC Stands**

Editor, California Tech:

Recently at the Caltech-Claremont basketball game, I witnessed one of the most repulsive sights ever. Far worse than either the poor basketball or the even poorer referees was the job done by Caltech yell leader, Don Schildkraut.

With one point separating the two teams, midway through the second half, he chose to give the following yell (by himself, as the band and spectators crawled

under the stands):

We're from Tech,
No one could be prouder!
If you don't believe us,
We'll yell a little louder.
(Repeated three times)

I am reasonably enthusiastic about Caltech's teams and I will do more than my part in supporting them at their games. But this yell — in fact all of Schildkraut's antics — can only be described as juvenile.

EMBARRASSED

DINAH WASHINGTON

THE QUEEN OF SONG

DAVE BRUBECK QUARTET

FEATURING PAUL DESMOND

the 3 SOUNDS

Friday, January 22
8:30 p.m.

Pasadena Civic Aud.

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PERSONAL ON CAMPUS INTERVIEWS

Wednesday, Thursday, Friday, February 3, 4, 5

We urge you to make an appointment to meet our representative through your placement office. If you cannot do so, please write to

C. C. LaVene

Staff Assistant to VP Engineering

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The California Tech

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

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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, The California Tech, 1291 East California Blvd., Pasadena, California.

BRIGHT LIGHTS . . . COFFEE AND SHOES

by griffen



It may be one of those wonderful rainy winter nights and the water is drip, drip, dripping on your window sill and you are preparing yourself for the first blind date of the term. You whistle a happy tune, as the song goes, imagining how bad your date will be; however, this softens the effect when you meet her, she is usually beyond softening.

What will you do with this scag?? What does the rainy winter night hold for miserable you? What is your destiny in the smaller world; how can you resist oblivion? When you get there and she is bad and she asks you what terrific, enlivening beautiful scintillating thing you are going to do on this romantic night and you can't even look at the blob of flesh that occupies the seat of the same car; that breathes the same air as you . . . But there is a solution: you will increase your prestige, but will not be committed to take the girl out again. Unbelievable? Pack your wallet with several different currencies of stable economies and go and see Hollywood . . . Sunset Boulevard . . . the Strip . . . Bright Lights . . . Show her the world, but don't give it to her.

On Sunset Blvd., next to the restaurant called Dino's, there is a small place where one can drink large quantities of beer

College Pres Speaks Saucer

Dr. John Hopkins, Ph.D., a college president and a leading researcher on flying saucers, unidentified flying objects and life on other planets, will give a lecture on the subjects in Pasadena Thursday evening, January 14. The lecture is open to the public.

President of Williams College, founded in Berkeley, Calif., in 1918, Hopkins will speak on "Exploration Research Into Interplanetary Understanding," at 8 p.m. in Odd Fellows Hall, 175 N. Los Robles Ave., Pasadena.

The result of data gathered from all corners of the globe, the lecture will deal particularly with the educational and religious aspects of the flying saucer field.

Dr. Hopkins is a member of Phi Beta Kappa, honorary scholastic fraternity, and Phi Sigma Iota, honorary romance language fraternity.

He also is Northern California Vice-President of Understanding, an international organization devoted to bettering understanding between people of this earth and those who are not of this earth.

Additional offices held by the speaker include the manager-ship of Rocklyn Farms and the posts of vice-president and secretary of Hopkins Properties.

Dr. Hopkins became interested in flying saucers in 1953 and since that time has studied the field intensely.

His college at Berkeley, while still a four-year liberal arts institution, has of late entered the field of metaphysical teachings, offering instruction in many of the advanced concepts of the flying saucer and occult fields.

and listen to low-brow rock 'n' roll; just think of the idea: checkered table cloths, heavy-beat guitars strumming wildly, the beer making your head spin in fantasies—your date becomes Brigitte Bardot; you love her, you adore her . . . the music becomes louder and louder . . . you become more daring and ask her to leave this ratty establishment and go and have some pizza at M'goo's, where you can also look at wonderful nymphettes, singing in their glorious innocence, and you can watch Hollywood High School parade by and drink more beer and your date not only becomes beautiful, but now you need her; you cannot stand just watching all those refreshing 14-year-olds driving you to insanity with their pubertic breasts having in song . . . you must either have this creature sitting across the tomato-and-cheese-covered table from you or rid yourself of her forever.

Naturally, you decide on the latter alternative; even in your drunkenness you cannot stand the idea of having your ancient, honored name linked with her nouveaux-riche, sweat-stained heritage . . . you take her home, telling her as an after thought that you love her, but your respect for her prevents you from showing this love in any way but words and distant admiration . . . But now the evening is young; you are young; the rain drip, drips on your custom Italian shoes; you walk up Calhenga from Hollywood Blvd. to the Tailspin. The guard checks your I.D. at the door and you step into the half-darkness . . . the smoke . . . blaring music . . . girls dancing . . . yours for the taking . . . the evening is complete, or will be with a few more Kroner or Marks or Swiss Franks or Dollars, if you insist.

*—Ed. note: At this point the typewriter fell in Carnoy's lap.

Church Digs New Medium

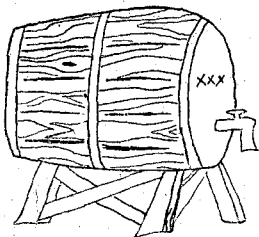
World-famous medium, Brenda Crenshaw, will give a lecture-demonstration at the Pasadena Science of Mind Church, Friday night, January 15.

The evening of "Clairaudience" and "Clairvoyance" demonstrations is sponsored by the Parapsychology Department of the church at 1164 N. Lake Ave., Pasadena, which will start at 8 p.m.

The church's parapsychology department was formed several months ago for the purpose of investigating psychic phenomena, such as Extrasensory Perception, Clairvoyance, Clairaudience, Psychokinesis, Psychometry.

According to Dr. Robert H. Frey, minister, any person experiencing one or more of these phenomena is cordially invited to contact the church at MUr-ray 1-9133.

Parapsychology lectures are held twice a month.



BY JOHN BERRY

Most liqueur-base drinks are almost exclusively popular with the ladies. But here is a drink which, in my experience at house parties, is equally (and very) popular with both sexes:

THE GRASSHOPPER

- 1 part Creme de Menthe (green)
- 1 part Creme de Cacao (white)
- 1 part Cream

The BaR/Ly

Shake well with ice and strain into cocktail glass.

There is a modification of this drink which is currently gaining more and more popularity:

THE CUCUMBER

- 1 part Cognac (or other brandy)
- 1 part Creme de Menthe (green)
- 1 part Creme de Cacao (white)
- 1 part Cream

Shake well with ice and strain into glass.

The addition of brandy cuts the sweetness of the Grasshopper and gives an added body to the drink. Thereby it makes

the Cucumber much more a general drink and much less a specifically dessert drink.

These two drinks are made, and well made, at Le Bayou (if you catch the right bartender). But I think that you will find them popular enough with your various girl friends, and yourself as well, to warrant learning them.

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All filter cigarettes are divided into two parts, and...



"Weni, widi, Winston!" Thus did Caesar (a notoriously poor speller) hail the discovery of Filter-Blend—light, mild tobaccos specially selected and specially processed for filter smoking.

He knew that a pure white filter alone is not enough. To be a *complete* filter cigarette, it must have Filter-Blend up front. And only Winston's got it!

That's why Caesar would never accept another brand even when it was offered *gratis*. In fact, history

tells us he'd glower at the extended pack and sneer, "*Et tu, Brute?*"

In a stirring peroration to his legions, Caesar put it this way: "For the Numeral I filter cigarette—for the best-tasting filter cigarette—for the noblest filter cigarette of all—smoke Winston!"

"Winston tastes good like a cigarette should!"

P.S. to bachelors. If you're lucky enough to find a gal who'll keep you in Winstons, Caesar!

Beaver Cagers Drop Claremont, Lose To Redlands; Pomona Next

Favored Redlands utilized their overall height to put together a last period burst that pushed the league-leading Bulldogs to a 76-60 win over a tenacious Beaver cage squad Tuesday.

The surprising Beavers, after bagging their second conference win in five years in their loop opener, now hold a 1-1 record with fifth place Pomona furnishing the competition Friday at Claremont.

Sparkling Fred Newman, despite a dogged job of guarding by Redlands guard Dick Eiles, hit on 13 of 28 field goals attempts and three charity tosses for a game high of 29 points. Len Maley again grabbed the runner-up slot with 10 points.

Quickly jumping off to a slim lead, the losers held their advantage until 10:12 minutes were left in the first half. A spurt by the victors pushed the intermission reading to 31-26. Good rebounding by the Caltech quintet, led by sophomore forward Roger Noll, was the prime reason for the close score.

The pace quickened in the third quarter and the closest the Beavers could get was at 46-42 when Newman hit on three twisting jump shots. Putting ace scorer Jack Schroeder back in the game, Redlands continually hit for short buckets and widened the margin, scoring 18 points in the last 5½ minutes to cinch the win.

BEAVERS TOP STAGS

In a game last Saturday night, the Beavers turned back Claremont-Harvey Mudd on the Stags' home court, 62-57. The local varsity was paced by outstanding performances from two senior stars, Fred Newman and Len Maley. Maley played a great floor game, both on offense and defense, and contributed 14 points to the cause. Newman

led the scoring parade for both teams, tanking 22.

The Beavers were never behind by more than a point, but neither could they muster much of a lead themselves. After Claremont grabbed the lead at 4-3 at the beginning, the Beavers pulled five points ahead at 9-4 on the strength of two baskets by Larry Brown. The Beavers maintained a lead of from five to 10 points for the rest of the first half, finishing the first 20 minutes of play with a 29-19 advantage.

As in every other game thus far, the Beavers had trouble jelling during the first few minutes of the second half. A defensive lag by Caltech, coupled with a Claremont hot streak, pulled the score even with about 12 minutes to play. At this point Beaver hopes sagged when starting center Ron Arps fouled out, leaving a big hole in the Caltech rebounding attack.

But the Beavers managed to keep one to three points ahead until, with seven minutes to play, CHM pulled ahead by a single counter on a field goal by Bob Sunshine. The lead was shortlived, however, as Beaver forward Roger Noll sank an easy layup only seconds later to put Caltech in the lead for keeps.

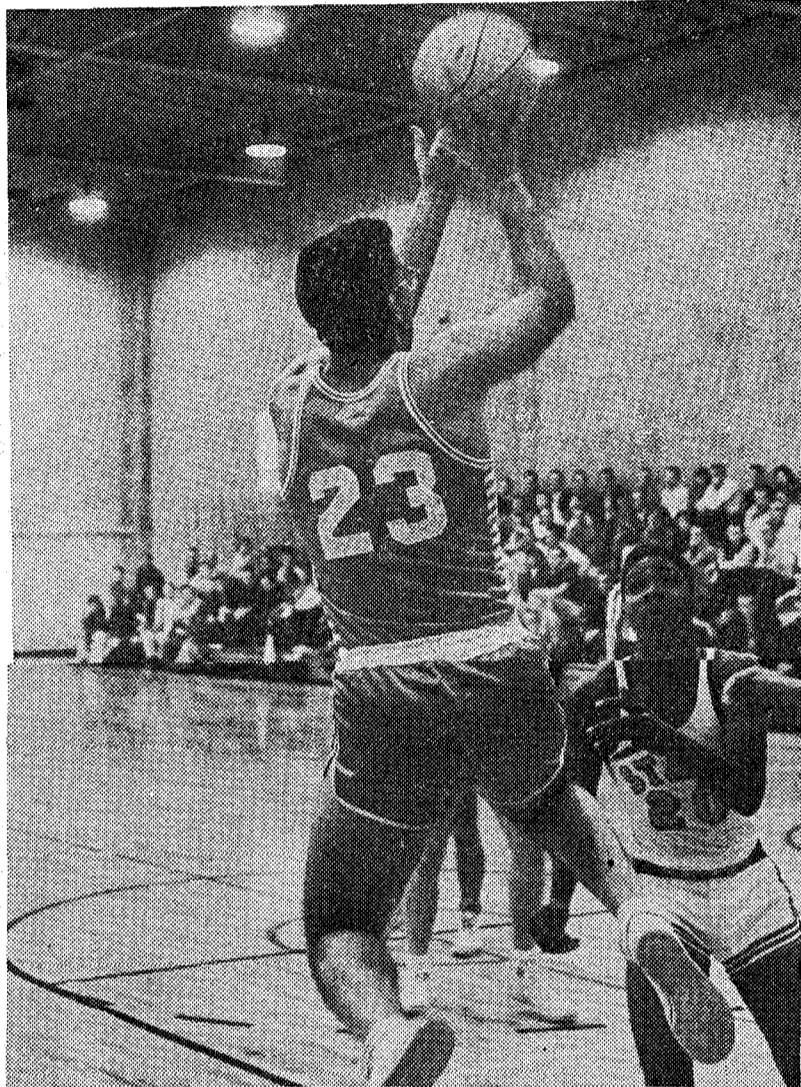
The game remained close until the last minute, when Maley and Newman each sank two free throws to ice the game.

LA VERNE BEATEN

The La Verne Leopards invaded Caltech last Thursday in a vain attempt to extend their win streak over the Beavers to cover seven years. But, again, Fred Newman proved the downfall of the La Verne defense, as the Caltech guard gunned for 24 points.

(Continued on page 5)

The California Tech SPORTS



The Beavers' leading scorer, No. 23, Fred Newman, hits a fade away jump shot in last week's Claremont game. Beavers won, 62-57.

Newman Nabs 4th All-League

Fabulous Fred Newman, only five-sport letterman in recent Caltech history, has won his fourth All-Conference first string award in as many sports.

Previously holding all-conference berths in football, basketball and baseball, the super-versatile Newman, also a stalwart of the track team last season, was named on the soccer all-league team recently. This season was the first time Newman has played soccer for the Beavers.

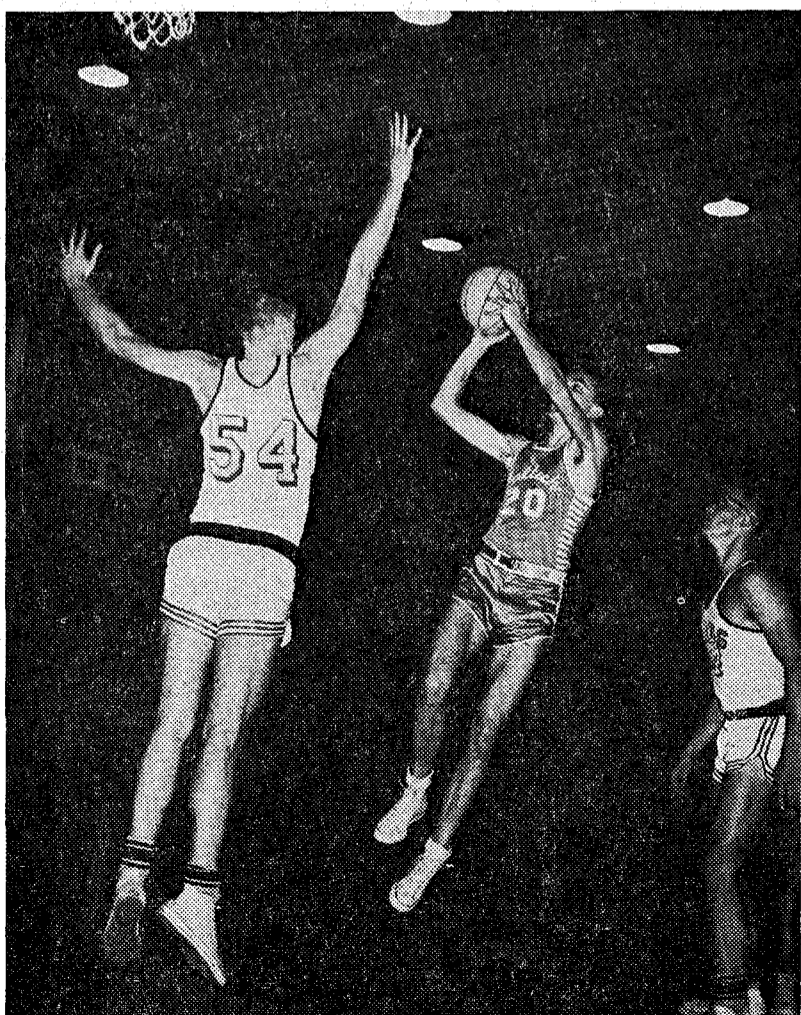
Also honored with a similar position was grad student Ellis Cumberbatch, high scorer for the Beavers' past campaign. Joel Kwok, standout forward, was passed over by the coaches since he was previously All-League at California-Berkeley in his undergraduate days.

Frosh Drop Two

The Caltech freshman basketball team, after winning two games before the holidays, dropped two league contests the past week.

Last Saturday the Claremont-Harvey Mudd freshmen out-hustled the little Beavers for a 58-54 win. Although the Beavers looked like much the better team, they displayed a puzzling lack of hustle and desire, and allowed the much shorter Claremont frosh to rebound and outshoot them.

The game was close throughout, with the winners finally pulling ahead for keeps with about four minutes remaining. Claremont scored several baskets during the last quarter of the game that were complete gifts from a stoic Caltech defense. In many instances the aver defenders didn't even bother to raise their hands to fend against the stagbabe. The next frosh game will be other 6:30 warm-up affair with mona frosh, preceding the vary game tomorrow night at mona.



Hustling Caltech forward No. 20, Len Maley, fires a jump shot over the outstretched arms of Claremont defender. Pictured are the two top scorers for the Stags, No. 54 Buss and No. 34 Sunshine.

Coming January 25, 26

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Interhouse Race Tightens In Discobolus

Fleming and Ricketts, holders of the trophy for the first time this year, face off in the next Discobolus challenge. The winner of the contest will take first place in the standings. The Rowdies won their first challenge with a decisive 15-7 water polo win over Blacker last week.

The high-scoring game, in which all but one of the starting varsity squad saw action, was featured by Bob Ruby's six goals which paced the winners. Also prominent for Ricketts were Don Voet, Tom Tisch, John Walsh, Dave Nissen and Gary Turner.

Gary Tibbetts and Roger Bland, varsity forwards, together with Bob Thompson spearheaded the outmanned Blacker offense.

Fleming, currently in last place in the standings, challenged the Rowdies in basketball Tuesday. The point standings are now:

- Dabney 4
- Throop 4
- Blacker 4
- Ricketts 3
- Fleming 1

Baseball, Other Spring Sports Start Practice

Workouts for most spring sports are beginning, at least unofficially.

Varsity and frosh baseball hopefuls, many of whom began workouts on their own at the first of the term, will have their first official meeting next Monday at 4 p.m. in the chalk talk room in Scott Brown Gymnasium. Coach Ed Preisler intends to begin serious workouts immediately in the hopes of developing a real championship contender with his talented, senior-laden squad.

Although the official call has not yet been made, track team members are encouraged to begin their conditioning as soon as possible, as the first intercollegiate meet is but six weeks away.

The swimming team with a varsity and a frosh league championship to defend, has begun unofficial workouts. With another SCIAC trophy waiting to be picked up, many key swimmers have been working hard on their own to get in shape.

Basketball -

(Continued from page 4)

The first half of the game was played on even terms all the way, with neither team gaining much of a lead. At the end of the half, the Beavers were a nose in front, 24-22.

As usual, the beginning of the second half looked like the dawn of doom for the Beavers. In the first five minutes of the half, La Verne outscored the Beavers 14-1, pulling ahead by the score of 36-25. The ice-cold Beavers, who made less than 22 per cent of their shots in the entire game, fought back persistently, and finally, with seven minutes left to play, gained the lead at 42-31. The lead changed hands with every score for the next five minutes, until Newman put the Beavers in front to stay, 51-50, with a jump shot from behind the key. The last two minutes saw La Verne struggle frantically to get the ball, and subsequently commit several fouls. The Beavers finished with a 59-52 advantage.

Positive Bias

BY PIERRE SUNDBORG

The big news of this week is the Hi-Fi Show, so here's some pertinent poop and a few impertinent comments.

The big push is apparently going to be on stereo, as the show is properly titled: The 1960 Los Angeles Stereo Music Hi-Fidelity Show, Wow! It is sponsored, as it has been for the last five years, by the Institute of



High Fidelity Manufacturers. To help defray expenses of construction, electricity, printing and so forth, they are charging \$1.00 for admission, a bargain at twice the price.

One of the undesirable aspects of past shows has been the long wait in line at the ticket booth. A suggestion: on the way to the show, stop off at Audio Associates and pick up your tickets. No waiting around, dad.

BWALA, YOU'RE THERE

The show will be in the Pan-Pacific Auditorium, which is at 7600 W. Beverly Blvd. To get there, take the Hollywood Freeway to the Silver Lake Blvd. off-ramp. Turn left at the bottom of the ramp and drive about four blocks. With luck you'll be on Beverly Boulevard, which you then follow for 32 blocks and, bwala, you're there.

It's a big building on the south side of the street, hard to miss. There's lots of parking space available, as the auditorium is on the grounds of the old Hollywood Stars' ball park.

Show hours are: Wednesday, Thursday and Friday, 4 p.m. to 11 p.m.; Saturday, 11 a.m. to 11 p.m.; Sunday, 11 a.m. to 7 p.m. The show's ads promise continuous entertainment, probably a small ensemble which will demonstrate live versus recorded music. Audio Fidelity had this type of demonstration last year, and it was my favorite part of the show.

AVOID WEEK ENDS

Now, a few observations and suggestions. Saturday and Sunday are good days to avoid, for two reasons. First, those are the days on which all the uneducated trolls who work for a living will go, accompanied by

their wives and kids. The mob scene this creates makes any constructive listening and looking virtually impossible. Secondly, the exhibitors are tired by the week end, and they are probably going to run true to form by being out of handout sheets by then.

So, avoid the last two days of the show if you can. I recommend a mass exodus from classes either this afternoon or Friday. Don't try to get there at 5 p.m., though, as traffic on the freeway and on Beverly is really tough. Be an early bird and eat at the show (there will be food stands this year), or wait until after you have munched at the Houses.

ASK QUESTIONS

Don't be afraid to ask questions of the exhibitors. I've found that an effective technique in getting the man-behind-the-booth to open up is to make some technical observation about his equipment. For example, in the Dynakit room say something like, "I'm delighted to see that you modified your stereo

cartridge along the lines I suggested in my letter of last year." This will amaze the little man, and from then on, you're a member of the In Group.

If you want to find out what amplifiers are good, don't spend too much time in the booths displaying amplifiers. Instead, go to the booths of the loudspeaker and turntable people. They want their products to sound as good as possible, and will see the best amplifying equipment they know of. So, if the JBL folks use Marantz amplifiers, you will know that Marantz is good.

I've said enough. Next week I'll be busy evaluating the show. I hope that you can find time to join me at the Pan-Pacific in seeing what's new in the business. As the man with the bass voice says, "Don't goof this one, dad. Make the scene."

Do so.

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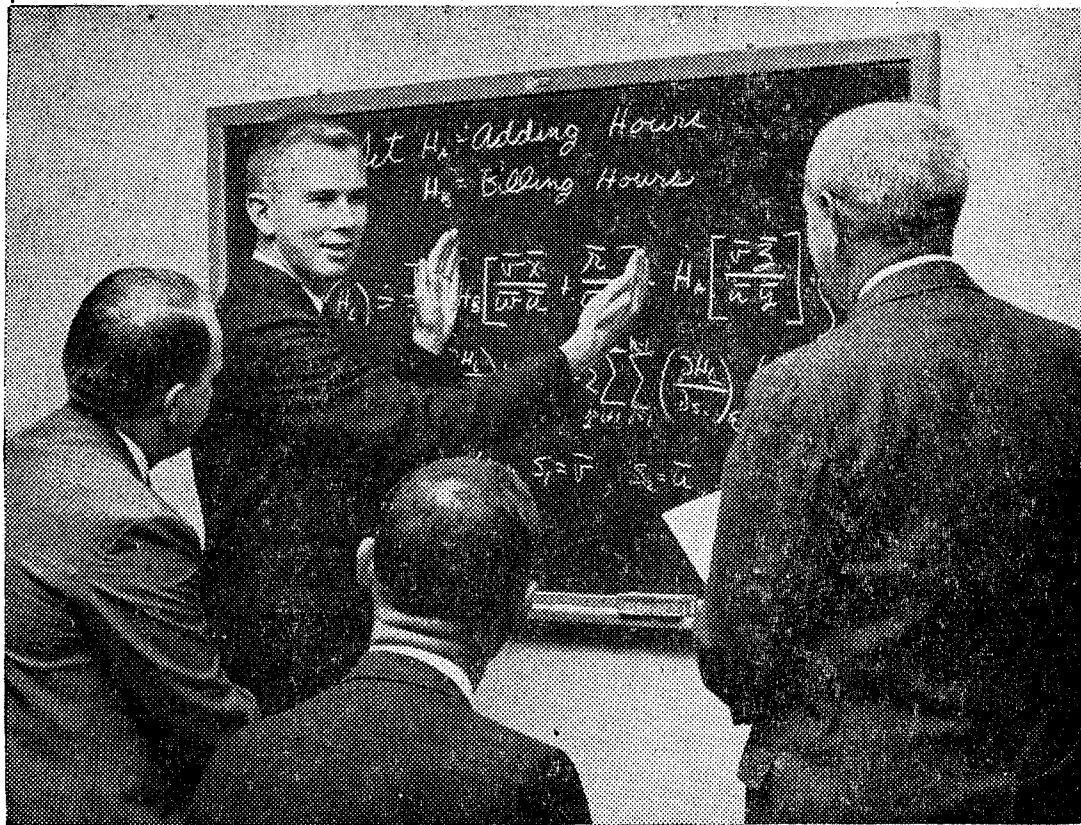
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A Campus-to-Career Case History



Ken Murphy meets with Revenue Accounting people to discuss a new statistical formula. This will be used to proportion the billing time spent on interstate and intrastate Long Distance calls.

He's making math and telephones add up to a fine business career

During his senior year in college, math major Kendall T. Murphy had job interviews with several firms, but none of them appealed to him. "I wasn't interested in doing pure mathematics," he says. "I wanted to apply math and statistics to everyday business problems and have management responsibilities, too."

At a professor's suggestion, Ken talked with a Bell System representative and was "surprised to learn how many practical applications statistics had in telephone company operations." The thorough and varied training program and opportunities to advance as a member of management also impressed him.

Ken joined the Pacific Telephone and Telegraph Company at Sacramento, Cali-

fornia, in June, 1956. Two years of rotational training familiarized him with company equipment, services and commercial procedures. Then he was assigned to the Chief Statistician's Office in San Francisco.

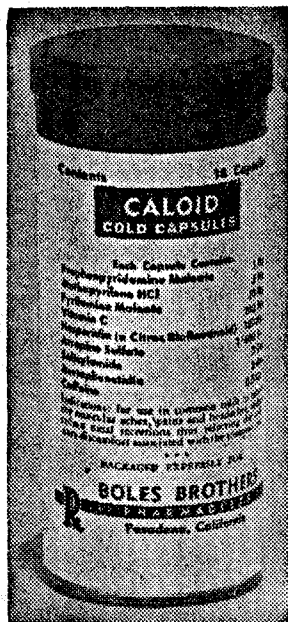
Today, as a Staff Statistician, Ken is applying his math background to a variety of statistical studies dealing with: rates and revenue, inventory and obsolescence of equipment, customer opinion, personnel administration, quality control and auditing.

"This is a big, fast-growing business," says Ken, "and I feel I'm helping it operate more efficiently every day. That's a mighty satisfying way to put my college education to work."

Ken Murphy got his B.A. in Mathematics from the University of California's Santa Barbara College in 1956. He's one of many young men building interesting careers in the Bell Telephone Companies. There could be one for you, too. Be sure to talk it over with the Bell interviewer when he visits your campus.



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Interview Sked

THURS., 14—BS, MS, Ph.D./Ch, ChE; BS, MS/ME — MONSANTO CHEMICAL CO., St. Louis, Mo. Jrs./ChE; 1st yr. Grad/Ch for summer work.

THURS., 14—BS, MS/EE, ChE, ME, Metallurgy—KAISER ALUMINUM & CHEMICAL CO., Oakland, Calif.

THURS., 14 — BSup/Ch, EE, ME, Ph., Ma — INTERNATIONAL BUSINESS MACHINES — RESEARCH & DEVELOPMENTAL LABORATORIES, San Jose, Calif., and eastern locations. Jrs. up/Ch, EE, Ma, ME, Ph. for summer work.

THURS., 14; FRI., 15—BSup/EE, Ph. — INTERNATIONAL TELEPHONE & TELEGRAPH CORPORATION — Interviews for all divisions and associate companies.

THURS., 14; FRI., 15 — BS, MS, Ph.D./Ae, ChE, ES, Ph., ME (including Metallurgy, Jet Propulsion, Nuclear) — PRATT & WHITNEY AIRCRAFT, East Hartford, Conn. Interviews will also be representing recently formed Missiles & Spaces Systems Division.

FRI., 15 — BS, MS, Ph.D./EE, Ph. — VARIAN ASSOCIATES, Palo Alto, Calif.

FRI., 15—BS, MS, Ph.D./EE, Geoph, Ph, Ch, Ae — SPACE TECHNOLOGY LABORATORIES — FLORIDA FACILITY, Patrick Air Force Base, Florida —Grad students above options for summer work.

MON., 18—BSup/Ae, ChE, CE, EE, ME, Met. — CURTISS-WRIGHT CORPORATION — Wright Aeronautical Division, Wood-Ridge, N.J., and Santa Barbara Division.

MON., 18 — BS/ChE; Ph.D./Ch, Ph—MINNESOTA MINING AND MANUFACTURING CO., St. Paul, Minn. BS/ChE; Grad students/Ch, Ph for summer work.

MON., 18—BS, MS, Ph.D./EE, Ma, ME, Ph—NATIONAL BUREAU OF STANDARDS, Boulder, Colo.

MON., 18; TUES., 19—BS, MS, Ph.D./Ae, EE, ME; MS, Ph.D./Ph; Ph.D./Ch, Met. — HONEYWELL Headquarters, Minneapolis, Minn. Grads/EE, Ph for summer work.

TUES., 19 — BS/EE — FARRINGTON MANUFACTURING CO., Needham Heights, Mass. Jrs. up/EE for summer work.

TUES, 19 — BS, MS, Ph.D./EE —LENKURT ELECTRIC CO., INC., San Carlos, Calif.

TUES., 19—BS/CE, EE — U.S. COAST & GEODETIC SURVEY —Interviewer from L.A. District Office.

TUES., 19; WED., 20—BSup/

Ch, ChE, CE, EE, ME — STANDARD OIL COMPANY OF CALIFORNIA & CALIFORNIA RESEARCH, Interviewers from San Francisco Offices.

WED., 20 — BS/EE, ME, Ph—APPLIED RESEARCH LABORATORIES, INC., Glendale, Calif.

WED., 20—BS, MS/Ch, ChE, ME — COLGATE-PALMOLIVE CO., Berkeley, Calif. BS, MS/Ch, ChE, ME for summer work.

WED., 20—BS/ChE, ME — J. O. ROSS ENGINEERING — DIVISION MIDLAND-ROSS CORP., Los Angeles, Calif. BS/ME for summer work.

Thorne, Jefferson To Hit Big Time

Kip Thorne and Dave Jefferson, West Coast senior champion debaters, will lecture the YMCA Public Affairs Commission on the Supreme Court next Wednesday at 7:30 p.m. in the Y Lounge.

Aid Urged For Asia

(Continued from page 1) since 1950. He returned to China during 1948 and observed and analyzed the Communist takeover of the main land. He made trips to Southeast Asia in 1951, 1952-53, 1955-56, and 1958-59. During his most recent Asian visit he concentrated on the Philippines, taking frequent trips to Hong Kong to seek information on events in China.

As a member of the American Universities Field Staff, Mr. Ravenholt is presently visiting the 11 colleges which sponsor the visitation program. After he leaves Caltech, his immediate plans are to visit Harvard and Dartmouth. His schedule here at Tech (he arrived last Monday, January 11, and will leave next Wednesday, January 20), includes numerous undergraduate, graduate, and faculty functions. So far this week he has visited several history and economics

classes, spoken at luncheon forums and at dinners, and made side trips to the Biltmore Hotel and a Westridge school current events class.

Tomorrow morning, Mr. Ravenholt will attend Econ 100 classes at 8 a.m. and 11 a.m. in 101 Dabney. Following the Y Undergrad lunch and dinner at the home of Dr. and Mrs. Norman Horowitz, Ravenholt will leave to spend the week end in Santa Barbara.

Monday, he will attend a YMCA-sponsored graduate dinner and discussion.

Tuesday, Ravenholt will attend H-5 at 11 a.m. in 206 Dabney and has scheduled lunch with the H-5 staff. At 8 p.m. he will attend H 124 in 206 Dabney

Wednesday, the AUFS visitor will eat lunch with the Geology Club in 151 Arms. Dinner with Dr. and Mrs. Robert Bacher will conclude his visit.

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