

New House Decisions Near

Students Move To Be Voluntary

The goal in the population plans is to achieve an even distribution by class of students among the seven Houses, while at the same time complying as much as possible with the house preferences of the individuals involved. The general question behind most specific problems is, to what extent should individual preferences be overridden in order to achieve balanced distribution next year instead of four years from now? It must be remembered that leaving an overbalance of students in the old houses, especially in the case of upperclassmen will handicap the new houses in getting off to a good start.

Population Plans

(a) Population should be determined early enough to allow the new house memberships to hold elections at the regular time, at the end of second term, in order to allow organization, planning and possibly some social events third term.

(b) A house or houses for freshmen alone would be highly undesirable.

(c) Any regulation requiring all students to live on campus should be avoided if possible.

(d) Non-residencies on the basis of less than 21 meals per week should be available for the benefit of students living nearby. A poll of off-campus students showed a large demand for this kind of membership.

(e) The actual populating should proceed in three stages:

1) A first come, first serve sign-up list for the new houses.
2) After noting in which areas the uneven distribution lay, volunteers would be especially solicited to even them out.

3) Any marked departures from regular distribution which could not be ironed out by soliciting volunteers would have to be eliminated by requiring students in the overpopulated areas to draw lots.

(f) As an exception to the above, it is recommended that members of the class of '61 (next year's seniors) who now live

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Nov. 9 Meet To Discuss Rotation, Population

This week the front page of The California Tech is devoted to the presentation of one of the most important issues the Caltech student body will ever face—populating the three new Student Houses.

A week from Monday, on November 9, a general student body meeting will be held to discuss the various proposals.

The statistics, plans and opinions appearing here come from the interhouse committee on new Student Houses. This group and its predecessors have been at work for over a year. They have divided the general problem into two parts—methods of population and revision of rotation. The population subcommittee has also gathered some preliminary statistics.

ASCIT's ExComm and The California Tech Editorial Board also have some comments. They appear on this page and on page six.

Some important decisions are going to be made during the next few weeks. Read these proposals; talk them over; come to the meeting. It'll be worth your while.

Population Statistics

Spaces in houses—

	Designed Capacity	Maximum Capacity
Old Houses	304	374
New Houses	250	288

Total 554 662
(Small rooms in the old houses are counted as singles in figuring designed capacity.)

Students available as residents—Working with results of a poll of off-campus students and information about present house populations, the following rough estimates were made of the number of student house residents for next year who will come from each of the following sources. An attempt was made to allow for attrition due to flunkouts, etc.

Class	From present residents	From present social and non-resident members	From present Throop Club mbrs. and unaffiliated	Total
'63	85	30	28	142
'62	95	30	31	156
'61	90	5	11	106

405

There are a certain number of graduate students, generally foreign, who because of race or language difficulties would find it hard to obtain suitable off-campus rooming. These students have in the past lived in the Old Dorm, and since the Old Dorm will be torn down over the summer the Faculty Committee on Student Houses has decided to have them live in the undergraduate houses for one year, until the graduate houses are completed. The number allowed for is 42.

Finally, estimating the incoming freshmen who will live on campus at 160, we arrive at a total estimated population of 607. It will be noted that this figure is larger than the ideal population of the houses, so that our estimate does not bear out the common assumption that there will be an initial difficulty in filling up the houses.

ExComm Oppion Suggests No Rotation In Student Houses

(The Executive Committee, ASCIT's long-range policy making group presents here its views on rotation in the new Houses.)

It is apparent that the Student Houses are not perfect; it is unfortunate if we miss this opportunity not only to express satisfaction or dissatisfaction with House living, but to do something about it.

The ExComm feels that, in general, the philosophy of the Student Houses as they are now tends to kill the natural intellectual curiosity of the student and makes him feel that "neatness" (the ability to be accepted

by all people at all times) is the thing most desired, not an intense education. The freshman comes to Caltech, and rather than finding himself a part of the Institute, he is drawn into the narrow, seductive world of the Student Houses. The problem of the Houses perhaps centers on the fact that the student, without making a conscious choice, tends to adopt a pattern of living based on the existing House prejudices and traditions—a pattern which is irrelevant to the aims with which he came here.

The Houses tend to destroy

individualism and create new individuals based on house desires. Basically, those things of value, such as relations between people, are by their nature the property of individuals. The aspects of living emphasized by the House are those that are public and can be claimed as the property of the House.

There is no reason why we cannot change the old house system. The one single thing that would help all seven Houses the most with the least fundamental change would be to eliminate rotation. With seven Houses, it

Four Rotation Plans Proposed By Student House Committee

No Rotation

Under the No Rotation system the Master of Student Houses would place a reasonable cross-section of the incoming freshmen in each House, as is generally done during the first two weeks of the present system. He would determine this cross-section by reviewing the high school teachers' reports, the Institute interviewers' reports and the freshman interest sheets (revised to include more information on less formal high school activities and interests of the freshman).

PRO:

1. This program would reduce the tremendous time demand now forced upon freshmen and upperclassmen alike. This applies particularly to the "better frosh."

2. Frosh would not face the present disappointment of being rejected by their first choice House.

3. This system would tend to give the individual House a wider scope of personalities.

4. This plan would tend to reduce interhouse tension by eliminating its chief cause, competition for freshmen.

CON:

1. This system reduces the incentive to make new acquaintances.

2. Freedom of choice for the freshmen is virtually eliminated.

3. This program would eliminate rotation, which is a major source of House spirit and character.

Partial Rotation

MECHANICS

1. Rotate through three Houses only (Ex: One group through Houses 1, 2 and 3, second group through 2, 3 and 4, etc.).

2. Spend two days at each House (lunch and dinner).

3. Rotation similar to present except no rotation through all Houses.

4. Choice limited to Houses rotated through only.

PRO:

1. Holds rotation time down (i.e., less time taken from studies).

2. Ease of changing from present rotation system.

3. Less decision for "snowed" freshmen to make in selecting a student House.

4. Good compromise between no rotation and short rotation.

5. Prevents Houses from becoming too concentrated in certain types of individuals.

CON:

1. Limits choice of Houses.

2. Has all the "evils" of present rotation system.

3. Makes students feel forced into certain Houses.

4. Doesn't give student time to select House intelligently.

5. Since fewer freshmen will be rotating through each House, they will be subjected to more individual pressure from upperclassmen.

Short Rotation

The short rotation program would allow all freshmen to spend one day in each of the seven Houses. In order that the freshmen might gain a better understanding of the Student Houses they would be encouraged to arrive at Tech the Monday before frosh camp.

Short rotation would answer two very basic demands. First, it gives all the Houses a chance to show just what they are, indeed it demands this demonstration and in doing so starts each House out with a fresh burst of energy and enthusiasm to carry them through the coming year. Second, it makes new friendships mandatory. The freshmen has the opportunity to become acquainted with the Caltech spectrum of characters as he becomes familiar with the Houses. Friendships made during this period need not terminate with House boundaries and indeed this is one of the best instruments we have to build interhouse friendships.

Admittedly this program would make large time demands on everyone, frosh and upperclassmen alike. The tendency in this system would be to make a big play for the outgoing frosh, thus limiting the contact with the "quiet frosh." One must recognize this brief glimpse at the Houses would make it difficult for the frosh to see other than that the Houses wished to display.

In discussing the merits of this plan one should remember that it is essentially the status quo — with all the advantages and defects of the present system of rotation.

Long Rotation

MECHANICS

1. Rotation will last six weeks.

2. Freshmen eat in each House for one week, except for the House they start in: Week-end meals will be eaten in the House they are living in.

3. Freshmen can choose any House, but each House must keep all its freshmen who do not wish to move.

4. A House could accept up to five more than its quota by converting single to doubles. The following year such a House would have five less freshmen.

5. During rotation the freshmen could not participate in interhouse athletics. Freshmen teams could be set up.

6. Interhouse Dance would be moved to the eighth week to avoid conflicts with rotation.

7. Freshmen would participate in the social events of the House through which they are rotating.

PRO:

1. Longer time permits freshmen to make a wiser choice.

2. Freshmen would see the Student Houses more nearly as they really are.

3. There would be less "high

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Tech Named All-American

The California Tech has received a fourth consecutive All-American rating from the Associated Collegiate Press, based on the issues of last year's third term. This ranks the Tech among the country's top five weeklies in schools of an enrollment under 750.

Judge Duane Andrews, former staff member of the Minneapolis Star-Tribune, summarized the evaluation of the Tech's news, feature, editoria, sports and typography: "You cover the news extensively, write it well and present it in an attractive package." There also was particular praise for "digging up bright features."

Other California four-year college papers receiving All-American awards were the UCLA Daily Bruin and the San Francisco Foghorn.



The Dave Brubeck Quartet, which will be featured Saturday night in the Pasadena Jazz Festival, includes Brubeck, piano; Paul Desmond, saxophone; Gene Wright, bass; and Joe Morello, percussion.

Astronomer Hoyle Interprets Universe In Fact and Fiction

BY LANCE TAYLOR

Fred Hoyle, Cambridge professor, popular writer and internationally famous astronomer, is at Caltech this term as Addison White Greenway visiting professor of astronomy. While here, he will work with Dr. William A. Fowler on a research project designed to substantiate his "steady-state" cosmology.

Hoyle enjoys a fame rare among scientists because of his two books, *The Nature of the Universe* and *Frontiers of Astronomy*, which popularize his own theories and relate much astronomical speculation and knowledge.

The steady-state theory was put forth some 10 years ago by a group of astronomers at Cambridge University in England, where Hoyle is Plumian professor of astronomy and experimental philosophy. It was suggest-

other 91. natural elements are formed from hydrogen has drawn Hoyle to Caltech almost every year since 1953. He and Fowler are currently engaged in a long-term theoretical-experimental investigation into the mechanisms stars use to build other elements from hydrogen. They claim to have found reactions in stars which will produce most, if not all, of the elements.

Evidence Favors Theory

According to Hoyle, the steady-state theory has already demonstrated a remarkable longevity for cosmologies by existing 10 years without facing overwhelming objections, and it shows no signs of being overthrown in the near future. He believes that present evidence is more favorable than unfavorable toward his theory.

Unlike a large percentage of scientists and students at Caltech, Hoyle claims no outstanding brilliance when he was a child. The only test he ever took first place in was the last he ever took—his final covering three years at Cambridge. He makes up for not being precocious, however, by his wide-ranging activities today.

Novels Popular

Hoyle is probably best known to Caltech students through well-thumbed copies of his novels, *Ossian's Ride* and *The Black Cloud*. Both books are some times available in Dabney Library.

He is an active hill-climber and spends much of his time hiking in the mountains of England and Ireland. This jives with his literary bent, because he does much of his writing on trains going to cities for speaking engagements and to remote places for recreation.

Finally, he has written two humanistic books, *Men and Materialism* and *A Decade of Decision*, in which he gives some predictions concerning humanity's future fate.

Hoyle believes mankind has three possibilities for the future: starvation, a sudden arrival of sensibility about the population problem, or nuclear war. Dismissing general sensibility as unlikely and starvation as fatal, he arrives at the conclusion that atomic war is the only possible avenue for human advance.

If nuclear war occurs, he says, it will destroy almost all the

population, but a few mutants or remarkably hardy non-mutants will survive. The survivors will gradually build up another large population, with unfavorable mutants dropped along the way. Another war will eventually ensue and the cycle will begin again. After enough cataclysms, enough favorable mutations will have accumulated so the survivors will be either genetically immune to radioactivity or socially intelligent enough not to have any more wars — or both. Hoyle says the first nuclear war should come within two hundred years, and the cycles should run about 500 years.

All of which is not very consoling, especially if you live in the middle of a war. But then, Hoyle's theory about our fate may become as widely accepted — or debated — as the steady-state theory. And the evidence certainly favors this.

MUN Delegate Applicants Sought

Applications from undergraduates interested in attending Model United Nations are now being received by delegation chairman Cleve Moler.

MUN will be held the third week of third term at the University of California at Berkeley. The country Caltech will be representing has not been determined.

The delegates will be selected by the Model UN Continuations Committee. Each delegate will be required to pay \$10-\$15 to help with registration and transportation costs.

No date for the closure of applications has been set, but the delegation will probably be chosen by the end of the term.

Announcements

OFF-CAMPUS POLL

The Student House offices will distribute a short post-card poll to off-campus students in the near future. Master of Student Houses Huttenback requests that the polls be filled out and returned as soon as possible.

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Concert Tickets Still On Sale

Tickets are still available for the ASCIT-sponsored Pasadena Jazz Festival slated for the Pasadena Civic Auditorium this Saturday. Curtain time is 8:30 p.m. and the tickets are priced at \$1.75, \$2.75 and \$3.75, with a 50-cent reduction on the two higher priced admissions for the Tech student body.

Until 4 p.m. Saturday, tickets will be available from the student representatives in the Houses (Al Armstrong, Blacker; Joe Donnelly, Dabney; Larry Sloss, Fleming; Stan Sajdera, Ricketts; Lon Bell, Throop), the New Bureau, the JPL Welfare and Recreation Section, and all Mutual ticket agencies. After 4 p.m. Saturday, tickets will be available at the Civic box office.

Featured at this year's Jazz Festival will be the Dave Brubeck Quartet, the Andre Previn Trio, the Arthur Lyman Quartet, and vocalist Mavis Rivers. Bill Stewart, KMPC disc jockey, will be master of ceremonies.

The Dave Brubeck Quartet features Brubeck on piano, Paul Desmond on alto sax, Gene Wright on bass, and Joe Morello on drums.

The Andre Previn Trio, whose jazz version of "My Fair Lady," on Contemporary label, is the best selling jazz album of all time, features Previn on piano

Symphony Offers Reduced Prices

Season tickets for the Los Angeles Philharmonic Orchestra's symphony concerts may now be obtained at a one-third reduction in price. The price for students and teachers is \$6.00 for the season instead of the regular \$9.00, and may be obtained from representatives in the Houses or from the news bureau.

The first of six concerts will be held November 15 at 8:20 p.m. at the Pasadena Civic Auditorium and will feature Bruno Walter, who will conduct Mozart and Bruckner.

Subsequent concerts will be held on January 1 and 17, February 24, March 30 and April 20.

PUBLIC AFFAIRS

The YMCA Public Affairs Commission will meet tonight at 7:10 in the Y lounge and reports on the Middle East will be continued by Caltech students from there.

A drummer and bass player round out the group.

The Arthur Lyman Quartet features Allen Soares at the piano, John Kramer on bass, Harold Ching on percussion and Lyman at the vibes.

Mavis Rivers, vocalist, can be heard on her recent first album, "Take a Number," released by Capitol Records. She will be supported by an instrumental group.

Folk Dancing Class Skips And Stomps

"It's fun!"

This was the loud and enthusiastic endorsement given to Caltech's new Folk Dance Club by two California Tech staffers who attended its first meeting Saturday night. About 30 Techmen and 20 girls met in Culbertson Hall and in three hours learned folk dances from Germany, Israel, Scandinavia and Ireland, as well as basic steps to other dances.

The Caltech Folk Dance Club or Folk Dance Group — "We haven't coined the name yet," says chairman Barry Gordon — is a new activity, open to all, sponsored by the YMCA. David Carta, a Caltech sophomore, is teaching the group. Dave has had extensive experience in folk dancing and teaching, and, being a Techman himself, understands problems with foot-tangling technique. Foreign folk dances are being taught almost exclusively — no square dancing is planned.

Its first meeting proved there is considerable campus interest in folk dancing; remarked Gordon, "I can see the rising tide." The majority of Saturday's group were upperclassmen, although freshmen are welcome. No previous acquaintance with folk dancing is necessary, but after the next two meetings it will be difficult for new members to catch up with the rest. "This means," concluded Gordon, "that now is the time to join."

Girls from Scripps College, P.C.C., and local high schools will attend the next Folk Dance Club Sunday night, November 1, from 7 to 10 p.m. in Culbertson Hall. Dress is informal—short-sleeve shirts and slacks — and refreshments will be served.



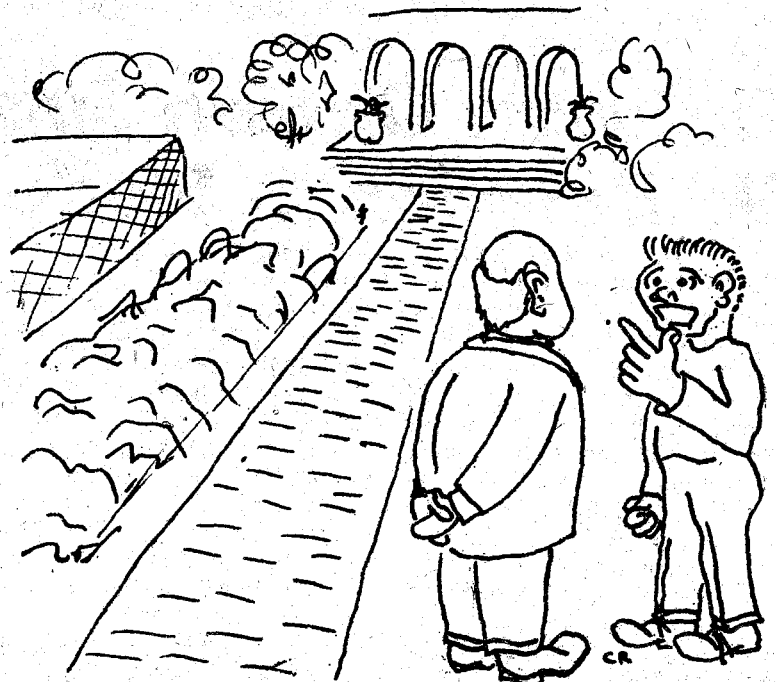
Fred Hoyle

ed by the fact that matter in the universe seems to be younger than the universe itself, and attempts to bridge the gap by postulating a continuous creation of matter. Hoyle, who was trained as a mathematician, gave theoretical respectability to the steady-state hypothesis by "deriving" it from relativity.

Hydrogen Created

The theory states that hydrogen is being continuously created in space, an atom appearing in about 4,000,000 cubic kilometers every second. The universe expands to accommodate the new hydrogen, which eventually collects to form stars and clusters of stars.

An attempt to show how the



"I've heard somebody is trying to steal the Athenaeum silverware."

BRIGHT LIGHTS... COFFEE... ...AND SHOES

by griffen



As the world gets larger and smaller at the same time, approaching the speed of light, we must realize that all is not lost. (Robert Leighton is not in reality Superman, as it has been rumored.) We must realize that there are people to help us. Those poor football players really felt bad in that fourth quarter; but that is not all, no, no. That is not all — Art Rubin is not making the key block in last week's picture. It was old, defenseless Larry Long, lying there with all his teeth gone, and looking at the world with sad, mournful eyes that spoke tragedy. But, Larry Long, there are even people who want to help you. Yes, I insist there are! Don't you realize that the waiter at the **Persian Room** of the Beverly Hills Hotel will waive the minimum if you are a student and discreetly ask how much it is? He wants to help you. Don't you know about the **Roma Garden**?? They want to help you when you're on Green St. (By the way, don't tell anybody, but Cleve Moler is going to Stanford next week end.) Oh, life can certainly be beautiful if you just take advantage of a few people. Put a couple over on them. Fan clubs from Tokyo to Moscow will mourn when they learn about Rubin's picture. It's our duty to protect those boys — Bill Benisek was forced to sleep in the infirmary four nights last week because the nurses were lonely and didn't have anybody to wake up at 6 a.m. And then when the night was over and he said be care-

ful, Brad, there is a sex maniac in the neighborhood, old, corny Brad thought that there was nobody, nobody; but the Synagogue was nearby, so he went there. all your hope in Dr. Doolittle. It's hard to understand the ways of the little people, I know, and sometimes it's frustrating when has vanished. But try to understand that Miss Cheney is not really against you. She has enormous other-world problems just like the rest of us, and somehow personality difficulties appear as Freudian desires and suppressions in the food. Just try to picture the meaning of the libido and superego expressions in the constant ham and stewed tomatoes. A greater understanding will be reached. Well, that's what we're looking for, isn't it? So Dabney parties are dull. A greater understanding—that's what we need. Krushchev has grandchildren; he couldn't be so bad. The Independents will vote Republican one of these days — then we'll have real understanding. And one day Blacker and Ricketts will have a combined exchange and Bob Koh will feel all good inside and the world will grow larger and smaller and beautiful secretaries will wander around campus giving long, hungry looks to undergraduates and Dick Feynman will go faster than the speed of light and enter the 15th century and Art Rubin will throw key blocks and Doug Shakel will be happy all the time and Lou Toth will talk to Brad Efron and there really are people, I mean.

ExComm Recommends No Rotation

(Continued from page 1)

will certainly be difficult to have the present rules unless we start rotation before school begins or extend it to a full month of seeing Houses. Even with just four Houses in the running, the bad points of rotation are easy to find. It certainly stimulates the kind of competition that the Houses can do well without. Two weeks of very difficult labor are involved for both frosh and upperclassmen, and the result of the labor is that the Houses that get their first choices end up with rather homogeneous frosh classes — the nice guys. The Houses that don't get the men that they want may be more in-

terestingly composed, but a great deal of antipathy remains toward the other Houses, and maybe even toward their own.

Right now, frosh are put into the Houses by a committee run by Dr. Huttenback before they get here. The placements are made with the help of interest sheets filled out by the frosh. To a great extent, the frosh class in each House is a diversified group, with varied interests. If the new system would just leave the Houses the way they were before rotation, there would be more intercourse between the Houses, not less. The frosh would not be made to real-

ize that they do or don't "fit."

By realizing the disadvantages and advantages of the present house system, it would be possible to create an atmosphere where the Houses would not suppress individualism and intellectual initiative — the Caltech student would be bound less to House values, and more to the ideals of Caltech. The ExComm wishes to stress the necessity of **thinking** about these issues. We feel that the student should view the issue at this stage with a broad prospective, not narrowly or dogmatically. Eventually, a plan must evolve, but philosophical thought must come first.

Omar Khayyám writes a new jingle



A jug of Wine,
A loaf of Bread
and Winston's
Filter-Blend!

Old Omar has come up with another corker of a couplet. Freely translated from the Persian:

**It's what's up front that counts
If it hasn't got it there it hasn't got it**

True, the lines don't scan. But what do you expect from a tent-maker—the perfect rhyme of "Winston tastes good like a cigarette should"?

We'll admit that something may have been lost in the translation. But when it comes to Winston, *nothing* is lost in the translation of rich, good tobacco taste. That's because up front of a pure white filter Winston has Filter-Blend—a special selection of mild fla-

vorful tobaccos specially processed for filter smoking.

Winston is *designed* to taste good. Or, as Omar puts it:

The Moving Lighter lights;
and having lit,

Flicks off. Then you draw on IT,
And bit by bit smoking pleasure mounts;

With Filter-Blend up front,
Winston's got what counts!

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BY JOHN BERRY

I haven't mentioned the necessity of using only high quality ingredients in a week or two. This is something that I have been caught by several times. ICE cannot be just any random ice from a smelly house or alley refrigerator — for "nothing absorbs odors more readily than ice in the making," to quote from at professional mixing guide. If exposed to foreign odors while being frozen, ice will absorb these odors and, as it melts, they will go into the drink. This is true of all ice—cubed, crack or shaven. But with properly made ice—crystal-clear, hard-frozen, taste free, such as you can buy at Kloeke's, purity is assured and the taste of the drink will not be contaminated.

I've finally found a rum drink that I can get enthusiastic about. A simple little thing, too:

THE RUM COLLINS

1 jigger Puerto Rican or Cuban Rum

1 lemon, juice of

Shake with cracked ice and pure unstrained into 10-oz. Collins glass. Fill with carbonated water, stir slightly, and serve with straws.

Most recipes call for a Gold Label rum, which is darker and more strongly flavored than a White Label rum. But I prefer the latter. I would recommend

2 ozs. of White Label in a normal strength drink, or, if you really want a pronounced rum taste and a really powerful drink, 2 jiggers. It's such a simple little drink I'm surprised I hadn't previously tried it.

There is a recently invented drink which is one of the best coolers I know, if you happen to want something unusual:

THE DERBY SPECIAL

2 ozs. Bourbon

1½ ozs. Mint Gin

Green Cherry

Ginger Ale

Put the bourbon and gin into a glass filled with crushed ice; stir well. Add ginger ale and stir again. But only slightly this time. Garnish with cherry.

The only mint gin I know of is Old Mr. Boston. But there should be no real trouble getting it.

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Populating New Houses Creates Problems

(Continued from page 1)

in one of the four old houses and do not wish to leave should not be forced to do so. It is felt that seniors would tend to have especially strong roots in their old houses, and if forced to join a new house against their wills, would contribute little to it. Many might move off campus or simply continue associating with friends in their former houses. Allowing seniors to remain in old houses if so desiring would only create a one-year imbalance.

In view of the possibility of a shortage of seniors in the new houses, all offices in the new dent, should be open to members houses, including that of President of the class of '62.

It is not known at present how many members of the class of '61 can be expected to volunteer to transfer. This recommendation will be subject to reconsideration after more information is available.

(g) A group or groups of students from off-campus should not be prevented from joining a house together. We do not endorse the view that off-campus students would be helpless without leadership from experienced former members of the old houses.

(h) "Colonization" by existing houses has been suggested as a danger. The committee feels that while students who had formerly lived in the same house would tend to move into a new house together, the lack of natural bonds would prevent any permanent attachment to the old house. One of the chief selling points of the new houses will be that groups of friends will be able to join them together. We, therefore, recommend that no attempt be made to break up groups who wish to join a new house together.

Other Problems

In case it becomes necessary to draw lots to reduce the population of an overcrowded house, should non-resident and social members be considered on an equal basis with resident members? Feeling on this issue was divided. Some felt that a non-resident who won in the drawing while a resident lost would be essentially taking the resident's room from him in an unfair manner. Others felt that the non-residents are as much a part of the house as the residents and should therefore have

an equal chance to remain in the house.

This question is of great importance, for in the event that the new houses proved unpopular among members of the old houses and if the resident members were given preference over non-residents, this would mean that almost all of the non-residents and few or none of the residents would be forced to move against their will. It has also been suggested that the new houses would in this case suffer a disadvantage from receiving as members a heavy per-

centage of former non-residents of the old houses.

"Rotation in reverse" might go on if the old houses staged organized or unorganized attempts to keep their "neat guys" from joining a new house. This would put the new houses at a disadvantage, but the question of how to prevent it has not been solved.

Should students be permitted to join one of the old houses from off-campus or switch from one old house to another? This would have the effect of greatly increasing the complication of the proceedings.

Uniform election procedures for the new houses could be set

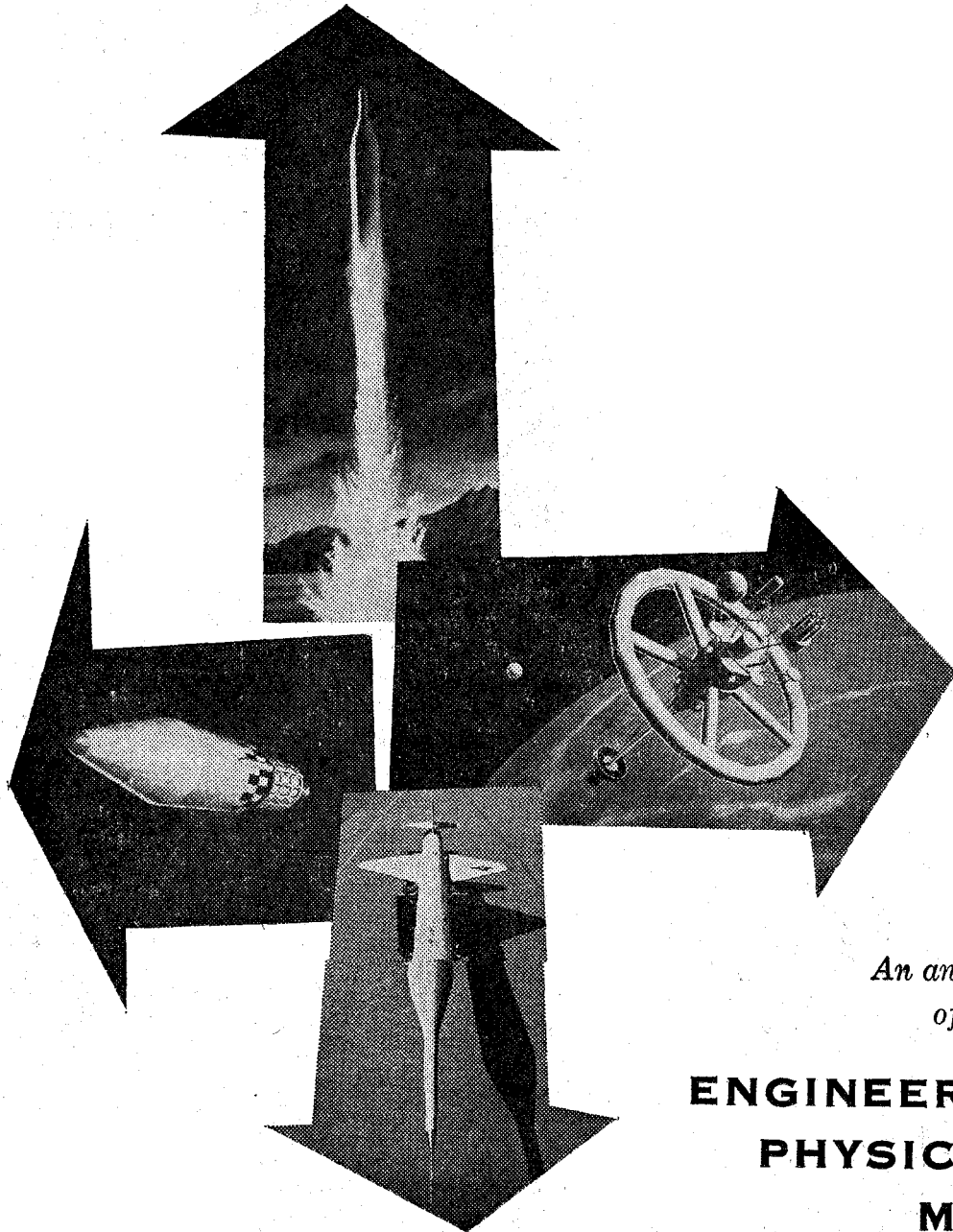
up to eliminate organizational struggles for their convenience.

Certain philosophical and practical paradoxes need to be cleared up as to students who would hold in effect a dual membership third term.

Polls

The committee will poll the present members of the houses within a few weeks to obtain information on their plans as to joining or not joining the new houses, and on their opinions on the most important problems the committee is tangling with.

Dr. Huttenback has sent questionnaires to all students not now living on campus to determine whether or not they wish to join the houses next year.



An announcement
of importance to

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Saturday, November 7, 8:15 p.m.

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Tickets will be available

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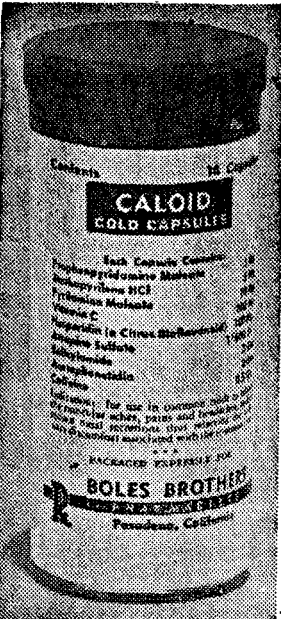
PROJECTS—Current major projects include the Navy POLARIS Fleet Ballistic Missile; the DISCOVERER program; MIDAS and SAMOS; Air Force Q-5 and X-7 and the Army KINGFISHER. PROJECT MIDAS is an early warning infrared system against ballistic missile attacks, based on the use of satellites. PROJECT SAMOS is designed for the development of an advanced satellite reconnaissance system. DISCOVERER, MIDAS and SAMOS are programs of the Advanced Research Projects Agency under the direction of the Air Force Ballistic Missile Division with Lockheed as systems manager.

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Jovin & Rony: 80 Days Around The World

Tom Jovin continues his trip around the world on a DuPont Travel Prize.

BY TOM JOVIN

We arrive at Haneda airport, outside of Tokyo, on June 22, after a long, long flight from Hawaii. Traveling companions always tend to be interesting and this time was no exception. I had the opportunity of speaking with a beautiful Japanese girl who had gone to school with the future Empress of Japan, as well as putting up with the ramblings of an insufferable ass of a poli sci instructor from Ohio. The moral of the experience is: avoid American tourists like the plague!

To attempt a description or definition of Japan would be a sacrilege on my part. My brief stay there was, however, a fitting introduction into the ways of the Orient, for "the twain" do meet in Tokyo, the city of 8½ million, as perhaps nowhere else in the world.

My activities during the few days in Japan were those of an unabashed tourist and in true form, I went stumbling (physically and linguistically) about Tokyo and the nearby countryside. In particular, I recall a day in the town of Myanoshita, where I put up at a typical Japanese inn. At these places, one checks his shoes at the door, divests himself of all Western clothes and dons the incomparably comfortable kimono.

Universal Language

A dip in the Japanese bath—a pool of scalding water—tones the skin, and then, one squats on the floor and consumes a meal exquisitely served up by a charming Japanese girl who knows no English. Really care! This is solid comfort and bliss to the tune of 1000 yen a day (for the interested mathematicians, the conversion factor is 360 to 1). Memories of the Student Houses fade into happy oblivion.

But suddenly faint feelings of guilt creep into my consciousness. I am not playing the part of an enthusiastic tourist. I am not taking pictures, visiting temples, writing books on Oriental philosophy. Above all what will the Scholarship Committee think?

"Ohio"

The next two days were spent in traveling on the Tokaido electric train line — operated on split-second timing — to the Izu Peninsula. Here I talked with road workers, truck drivers, just some of the very industrious population one finds in Japan. By this time, I could say just slightly more than "arigato" (thank you) and "ohio" (good morning). And I could perceive the basic truth which only travel can reveal: that people everywhere, regardless of how they dress and what they eat and what language they speak, have the same fundamental concerns and problems. And with this

realization I left Japan, carrying with me memories of many pleasurable experiences and the expectation that the future would bring me back.

But my passport had a brand new visa, one for Nationalist China and I was anxious to compare notes with General Chiang-kai-shek. More on that next week.

I managed to appease my misgivings somewhat in Tokyo. The incredible downtown shopping center, Ginza, offered me much opportunity to constructively utilize some of my travel money. I also succumbed to the tourist fever and boarded a Pigeon Tour Bus. With a beautiful guide giving explanation along the way, we passed from the Imperial Palace to Tokyo State University (12,000 students) avoiding a group of Socialist workers striking against the Liberal-Democrat government — and paying a brief visit to the famed Kodokan judo center. A view of the area where in 1923, 35,000 people were killed in an earthquake and subsequent fires, gave some insight into the whys of the traditional four fears: those of fire, thunder earthquake and father.

* * *

Pete Pony spent last summer in Europe with the other DuPont prize.

BY PETE RONY

Last summer I was fortunate enough to be able to travel through Europe as a Du Pont Travel Fellow. Equipped with a letter of introduction, a youth hostel card, an Eurailpass, some Traveler's checks, a roll of toilet paper, and miscellaneous luggage, I set out to investigate the water conditions in some of the more underdeveloped regions of a rapidly industrializing Europe. In particular, these were the rural southern areas of Portugal, Spain and Italy. France, included among my initial plans, was not visited on account of a language problem.

Realizing that the water and sanitation problem was one of considerable magnitude and wide scope, I decided to pick a facet which would not get me bogged down in a maze of complexity. Contrary to impressions held by some (jokingly, I hope), my aim was not to stick my nose into the sewage disposal systems in an attempt to derive significant information. My final objectives were to find out if (1) water and sanitation facilities were available to the rural population, and (2) the portability of and the extent of chemical and bacteriological control maintained over them.

World Health Organization


These objectives were developed partially at the suggestion of officials in the World Health Organization, who are currently making plans to undertake a similar but more extensive survey throughout Europe and the Mediterranean region. Such an investigation, I was told, would

provide pertinent and valuable information which would enable the WHO to make plans toward a more comprehensive discussions with sanitation officials and first-hand investigation in Portugal.

Country Lacks Funds

The situation in Portugal illustrates the difficulties imposed upon a country which lacks adequate funds to finance public works projects. At present, three million inhabitants in communities ranging between 100 to 2000 in population have old water supplies, normally only public water fountains or 25 meter wells which are rarely controlled or checked. There are an additional one and one-half million people living in communities under 100 inhabitants which have insufficient or even bad water supplies, as well as deplorable mental sanitation program.

To give you an indication of



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the conditions as I found them, I will summarize some of my observations as the result of dismeans for sewage disposal. This means that fifty per cent of the population of Portugal consumes water of poor or even dangerous quality and is without proper sewage facilities.

The Portuguese water works and sanitation officials are extremely concerned about the situation and have presently succeeded in bringing a law before the Parliament. If enacted, this law will mean that thirty per cent more of the population will eventually be supplied with piped water. The program would take over eighteen years to fulfill, at the cost of 2.6 billion escudos, which amounts to about \$100,000,000, a relatively small sum by American standards for the amount of benefits it will provide.

Asian Problem Same

This is just the situation in one country, but it is indicative

of the problems present throughout the world, particularly in Asia. A conservative estimate indicates that fifty per cent of the world's population still drinks unhealthy water, being dependent upon water holes, shallow wells, and other inadequate sources of water supply, often polluted by human wastes. In fact, certain experts believe that in many Asian countries the sickness rate could be halved by protecting water supplies and providing proper facilities for the disposal of wastes.

This emphasizes the importance of sending loans or direct aid and skilled technicians to direct their utilization to underdeveloped areas. With our mutual best interests in mind, we should make all efforts to give people a chance to help themselves to a longer and healthier life. It is a major step toward the attainment of peace and security.

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Editorial

Rotation, Pro:

The ExComm and other opponents of rotation have based most of their arguments on one assumption—that the Student Houses stifle a Techman's individualism and intellectual growth. (see "ExComm", p. one.) This assumption is NOT TRUE.

Two of the present Houses participate actively in rotation; they go after the "neat" frosh and tend to disregard intellectual considerations. The other two Houses are not as interested in rotation; they end up keeping a larger percentage of the men originally assigned to them.

If the ExComm's arguments are valid, we would expect to find the latter two Houses getting better grades, having fewer flunkouts, participating in more interhouse activities and, in general, contributing more to the intellectual and cultural life of the campus. This is not the case. If anything, the reverse is true.

In addition, if we accept the anti-rotation arguments, we would expect to find all off-campus men at the top of their class, with no motivational problems and with dozens of friends from many different interest groups.

The ExComm claims that Student House living is "a pattern irrelevant to the aims with which" a man comes to Tech. They will have to be the first to admit that more than a few frosh were planning, before they even heard of the Student Houses, to devote at least part of their lives to something other than science.

If the freshmen are arbitrarily assigned to Houses, will they be given the opportunity to choose their own roommates? What about the upperclassmen and frosh who, before registration, have made friends in the new class? Will they have the chance to live with whom they want?

If groups of friends from different classes are not given the chance to live together on campus, then they will move off. Off-campus cliques and fraternity-type groups will be formed. This is not necessarily bad, but there is no reason why the same opportunity can not be given on-campus. (This is not a "scare" argument; it happens in other schools and is happening to one of our Houses that is not too active in rotation.)

The Student Houses are a very real and valuable part of our existence at Caltech. Rotation, and its various consequences, is the essential distinction between the Houses and the dormitories found at other schools.

Sure, "philosophical thought must come first," but this thought must be based on valid assumptions and a practical plan, based on the rights and needs of individuals, must be the result. —cm

Condolences

The President of the University of California slapped stiff controls on student body governments at all of the University's campuses last week. (UCLA, Berkeley, and Riverside are included.)

President Kerr's directive rewrote the student government constitutions to give the chief officer at each campus primary responsibility for the conduct of student affairs. In addition, any amendments to these constitutions are now subject to the approval of the campus administrative officers.

The directive states that student body Executive Committee may not speak on off-campus political, religious, economic, international and other issues. The only student organization which may take stands on off-campus issues is the newspaper as long as "it is made clear in doing so the views of the University or of student government is not represented."

Of course all we can do is sympathize with the ASUC and with **The Daily Californian** who are protesting the action. But we can remain thankful that our administration places a little more faith in the Caltech student body. —cm

Brass Tacks

By TOM JOVIN
ASCIT President

Two weeks ago, I presented a rough sketch of the organizational structure of ASCIT and its related bodies. At this time, I would like to present a philosophy of student body activity in general, while attempting to indicate how the existing mechanisms of its government might be best utilized.

My primary contention is that the function of ASCIT must always be to provide the student body with the means of carrying out its expressed desires. Concurrently, it should serve to stimulate new ideas and appropriate action.

This concept implies a dual responsibility: the elected officers must be prepared to carry out their expressed duties, but at the same time, students at large must take the initiative in promoting constructive change and providing constructive criticism.

My experience with ASCIT over the past two years leads me to the same conclusion many people hold: that student government at Tech has tended to be singularly out of touch with reality and singularly ineffective in dealing with issues as they come up.

A great part of the problem stems from the fact that the Board of Directors and other committees have operated in a physical and mental vacuum. The endless succession of trivia in BOD minutes is ample indication of this.

Yet I would like to humbly

suggest that we are moving into a new phase of ASCIT activity, one emphasizing informality and effectiveness. The meetings the BOD has been holding in the House lounges have certainly proven to be sources of much inspiration to the officers and, we hope, students as well. And at this time, I would like to express our collective thanks to the House members for the warm reception they have given us. Two important truths emerge:

a) matters of administrative business tend to be disposed of outside the meetings, as they should,

b) students are interested in new proposals and improvements, particularly if they feel they will be acted upon. The California Tech has been very helpful in this regard.

What are, then, some of the plans and questions under consideration? Here are a few:

New Student Houses: this issue of The Tech features the result of much thought on this topic. Needless to say, it is of paramount importance that students take this unique opportunity to look back in retrospect and plan ahead.

Overseas Assistance Programs: an idea gathering momentum is that ASCIT could profit greatly from scrapping its present Charities Drive in favor of a program by which students might participate directly in carrying out projects of assistance in underdeveloped parts of the world.

More on this will appear shortly, but the essence of the idea is that voluntary contributions of funds, supplies and effort would be channeled into effective aid for areas such as Hong Kong and Laos.

Bigger and Better Athletic Programs: pending action by the Athletic Council, a new sports classification will be set up to accommodate activities such as sailing and skiing, and to encourage new intercollegiate programs at Tech. The Badminton Club is a good example of ideas which make our school a distinct, if specialized, athletic power. A night P.E. program at the gymnasium may not be too long in the offing.

A New Open Forum: not entirely a job of resurrection, this proposal implies setting up a speaker program, perhaps on a joint ASCIT-YMCA basis, to regularly provide the campus with prominent men in the fields of political and social thought. The primary criterium would be the accepted authority — not controversial character — of the speaker.

Radio Broadcasting: if present consultations turn out favorably, it will be feasible to establish a joint Caltech-PCC student broadcasting facility utilizing an existing FM station at PCC. Possibilities here are unlimited.

These are but a few ideas and do not comprise an exhaustive list of possibilities. The expectation on the part of the ASCIT officers is that students will recall sincerity, the greatest reward one can gain from holding office here at Tech lies not in accumulating more "empire" material, but in seeing ideas develop into fruitful activity. The potential is there.

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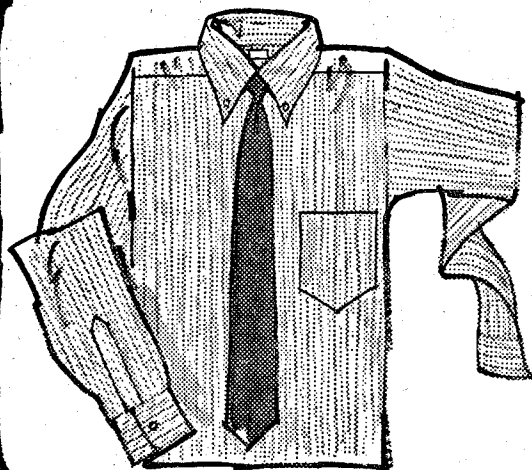
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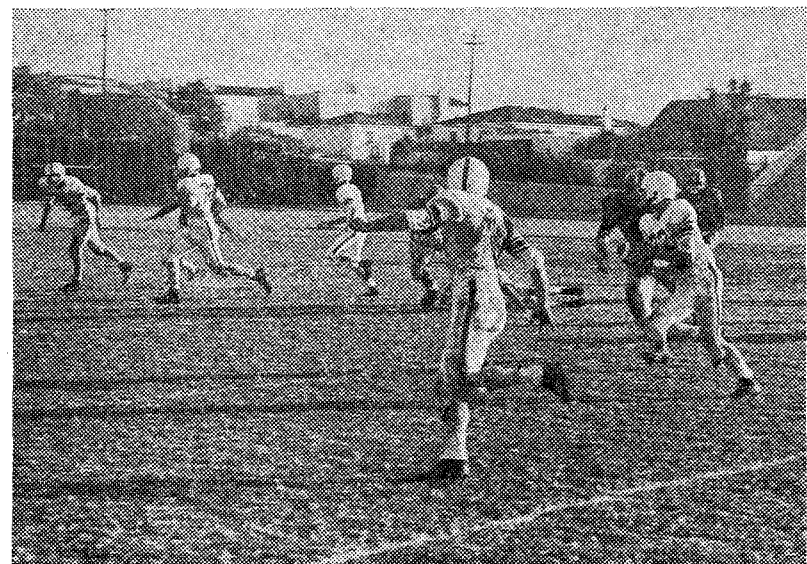
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The California Tech SPORTS



Beaver quarterback Mel Holland keeps ball on run around left end, with Lee Hood ready for pitchout. Notice excellent downfield blocking by Caltech forward wall, unfortunately one of the few times such blocking materialized.

Gridmen Lose Another; Powerful Whittier Next

BY PETE METCALF

Caltech football stock reached a new low Saturday, as Cal Western University defeated the Beavers soundly, 38-12. Prospects for tomorrow's game with defending conference champs, Whittier, are not good, as the weak Caltech defense allowed the Westerners to complete three touchdown passes in the final quarter.

For the first three quarters, the Beavers played their finest game of the season. After punting the ball deep into Cal Western territory in the early minutes of the game, Caltech blocked a quick kick and recovered the ball in the end zone to go ahead for the first time this season. Two plays later, the Westerners came back with a 58-yard touchdown pass and evened the score. A Cal Western fumble on their own 12-yard line set up an eight-yard touchdown pass to Lee Hood for Caltech's second T.D. A 55-yard touchdown pass by CWU evened the score and a conversion put them ahead at the half.

The third quarter was much of the same. The only serious Cal Western threat was stopped by Mel Holland's interception of a pass in the Beaver end zone.

Beaver Thinlads Meet Poets Friday

The Caltech cross-country squad journeys to Whittier tomorrow at 4 p.m. to engage the Poets in the first meet of the season. The Beavers, loaded with talent, should win handily.

The squad includes returning captain Wes Shanks, juniors Pete Lippman and Tom Kiel, and sophomores Richy Harris, Bob Juola, Art McGarr, Dick Tuft and Al Whittlesey.

The team has been training hard, and has turned in some great times in practice. Tuft and Juola, mainstays of last year's frosh championship team, have looked even better than they did last season and should become mainstays of this year's varsity.

Soccer Team Ties Redlands In Overtime

A last-minute goal by Redlands nullified a strong second half push by the Caltech booters and deadlocked last Thursday's conference soccer game, 3-3.

After two over-time periods of ten and five minutes, the game was still tied and finally was called because of darkness.

Redlands jumped off to a 2-0 advantage before halftime, completely dominating the play.

Fred Newman kicked in the first Beaver goal after halftime on a short kick.

Joel Kwok, chem grad student, smashed in the tying goal and Ellis Cumberback made the third Caltech score.

Caltech, completely turning the pattern of the game in the second half, blew several scoring chances on a missed penalty kick and short kicks near the goal.

Gary Osterback, frosh stand-out, again turned in a competent job at goalie, plugging up a previous weak spot. Another frosh starter is Lynn Garner, on the defensive alignment.

Neither team made any other long drive.

Disaster Strikes

Unfortunately, the fourth quarter marked a complete Caltech collapse. Cal Western scored four times: on a 70-yard pass, on a 35-yard pass, on a 25-yard pass, and a 90-yard run. Flooding the secondary with receivers, Cal Western often had two men for each defender. Only the absence of regular quarterback Bob Eshback kept the defeat from being worse as many potential touchdown passes fell incomplete.

Caltech is going to have to improve tremendously to make a good showing against the Whittier Poets tomorrow evening at the Rose Bowl. Whittier has shown great strength in previous games and is expected to repeat as conference champions. On this basis of past performance Caltech is not expected to have much of a chance.

Frosh Creamed Again

Meanwhile, the frosh lost 66-25 to Pomona. In a game also marked by a weak Caltech secondary, the frosh showed signs of a powerful passing offense as quarterback Dave Barker played an outstanding game, completing a touchdown pass to Chuck Ryavec and a 60-yard pass to Carlos Johnson, which set up another frosh score. Ryavec also played a fine game, scoring on a kick-off return and an intercepted pass in addition to his pass from Barker.

Next week the little Beavers host Redlands, a team which is also expected to become conference frosh champs.

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Beaver Chips

By Noll and Koh

Orchids for the Board

The proposal for a new sports classification cleared its first important barrier last Monday night when the ASCIT BOD considered its action of last week, and voted to make a concrete recommendation to the Athletic Council. The recommendation, which can be found in the latest edition of the BOD minutes, states that (a) there is a need for a new classification of sports which would include teams that are not operated on the same basis as the present varsity sports, such as sailing and skiing, and (b) a new classification of sports would provide a solid basis for expanding the athletic activities of Caltech by providing, among other things, some incentive for student participation. In light of these two reasons, the BOD concluded, it is recommended that the Athletic Council consider the possibility of including a new sports classification.

Certainly the BOD has done as much as it is able to do by making this recommendation. If the sports program is altered this year by the Athletic Council, the only people we have to thank are the Board members; as far as we can see they have taken a positive action which is in the general interest of the student body, and should be given their due thanks.

Ho Hum Dept.

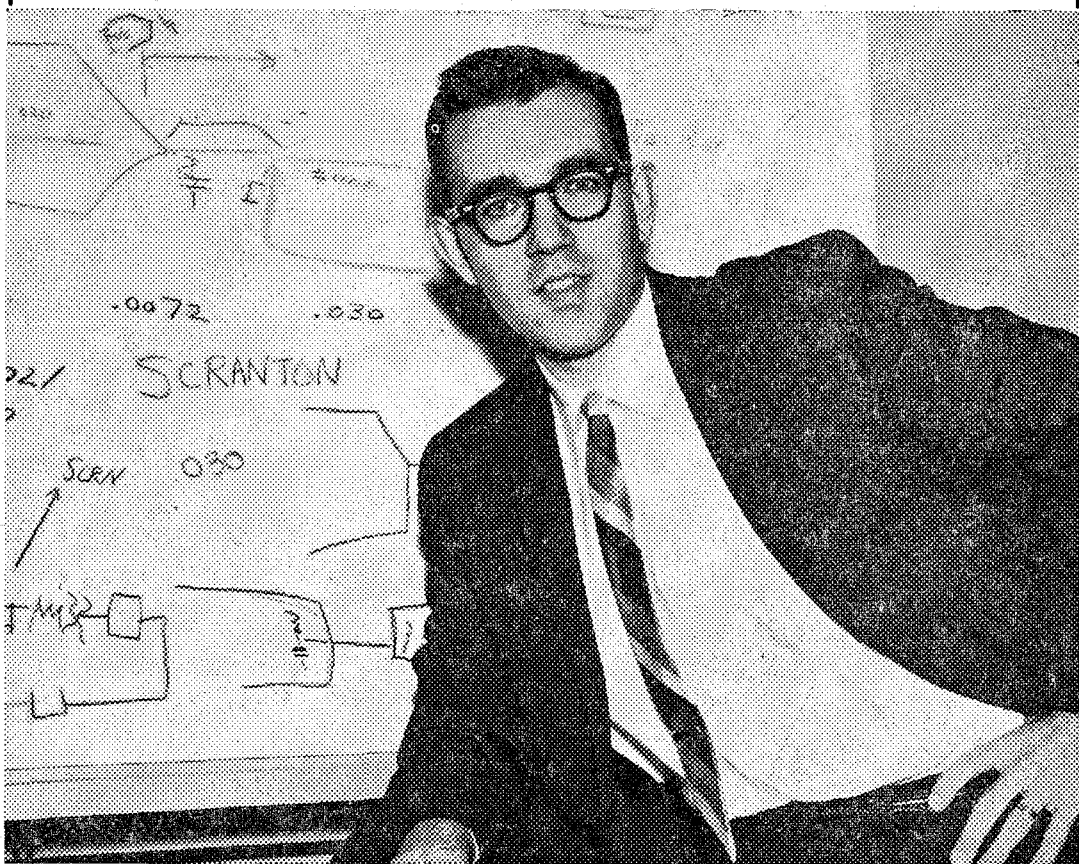
Sports Editor, The California Tech

There was a mistake in the caption of the picture in last week's sport section. It was Larry Long, not myself, who is making the "key block." I am also in the picture however, in the background sitting on my butt.

ARTHUR RUBIN

Ed. Note: Sorry, Art. Hope we both do better in the future!

A Campus-to-Career Case History



**"I found I could be an engineer
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William M. Stiffler majored in mechanical engineering at Penn State University—but he also liked economics. "I wanted to apply engineering and economics in business," he says, "and have some administrative responsibilities."

Bill got his B.S. degree in June, 1956, and went to work with the Bell Telephone Company of Pennsylvania at Harrisburg. During his first two years, he gained on-the-job experience in all departments of the company. Since June, 1958, he's been working on transmission engineering projects.

Today, Bill is getting the blend of engineering and practical business-engineering he wanted. "The economic aspects of each project are just as important as the

technical aspects," he says. "The greatest challenge lies in finding the best solution to each problem in terms of costs, present and future needs, and new technological developments.

"Another thing I like is that I get full job-responsibility. For example, I recently completed plans for carrier systems between Scranton and four other communities which will bring Direct Distance Dialing to customers there. The transmission phase of the project involved almost a half-million dollars—and it was 'my baby' from terminal to terminal.

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Poloists Lead League, Play Tough Pomona

On the strength of a strong 8-3 triumph over Claremont-Harvey Mudd last Friday, the Caltech water polo team is currently atop the SCIAC standings with a perfect 2-0 record.

The Stags put up a tough first-half stand with the score 4-3 at intermission, but faded in the final half. Bob Ruby, leading Beaver scorer with 15 goals in loop and exhibition play, dumped in three scoring shots in the second quarter to keep the winners in the game and tacked on a final goal in the fourth period.

Roger Bland, junior letterman, accounted for a pair of goals with Russ Russell and Gary Tibbetts collecting one score apiece.

Showing top form on defense was Tom Tisch.

With conquests of Redlands and CHM under their belts, the Beavers motor to Pomona Friday in hopes of keeping their

conference record unblemished against the favorites for the league title.

Long Beach Tough

Last Tuesday, powerful Long Beach State had no trouble subduing the host Caltech squad by an overwhelming 16-2 margin. The victors, who easily handled USC earlier in the season, piled up an 8-0 advantage at the end of the first quarter and promptly benched their first string.

Ruby tallied the initial Beaver goal midway through the second quarter when his shot glanced off the goalie's hand.

Bland added the final score in the fourth quarter off the visitors' reserve unit.

Dic Dickinson, huge forward, and Howard Terry led the Long Beach team with three goals apiece.

Four Rotation Plans Proposed

(Continued from page 1) "pressuring" by upperclassmen.

4. Freshmen would really get a chance to meet a cross-section of the upperclassmen.

CON:

1. There exists the possibility of long periods of "high pressuring" of the so-called "neat" freshmen.

2. First term interhouse athletic and social programs will be complicated.

3. Freshmen may be left up in the air too long.

4. Houses might tend to chase away some of the freshmen that begin with them in order to make room for "neat" frosh from other Houses.

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Interhouse

Ricketts Leads Interhouse Trophy Dash

Ricketts jumped to an early lead in the Interhouse Sports Trophy dash with strong finishes in both softball and cross-country. By downing Fleming 4-1 in the last softball game, the Scurvs finished the season with three victories, no defeats and one tie to nose out Dabney by half a game. Fleming drew first blood in the game by grabbing a run in the first inning, but Ricketts took the lead back in the second, and behind the pitching of frosh John Kessler were never headed.

In cross-country, Fleming House, behind the running of Neil Richardson, Bill Weihoffen and Ron Lawler, won first place going away, while Ricketts barely edged Dabney for second spot. Blacker and Throop did not field teams.

Present standings:

Ricketts	45
Fleming	40
Dabney	35
Blacker	10
Throop	5

● Bowling

In a match played last Monday night, Dabney kept the Interhouse Bowling Trophy by downing Throop Club, 2257 pins to 2116. Larry Brown and Jerry Siegel led the victors by each rolling 472 series. John Arndt, Skip Stenbit and John Bard were also on the winning team.

Top performance of the night was turned in by Throop's captain, Jerry Jantschen, with a 491 series. Howard Kabaow garnered high game awards with a 188 score in the second game.

With Monday night's victory, Dabney kept alive a streak of bowling wins extending back to second term last year. Dabney has possessed the bowling trophy since February when they captured it from Throop.

Pete Lippman

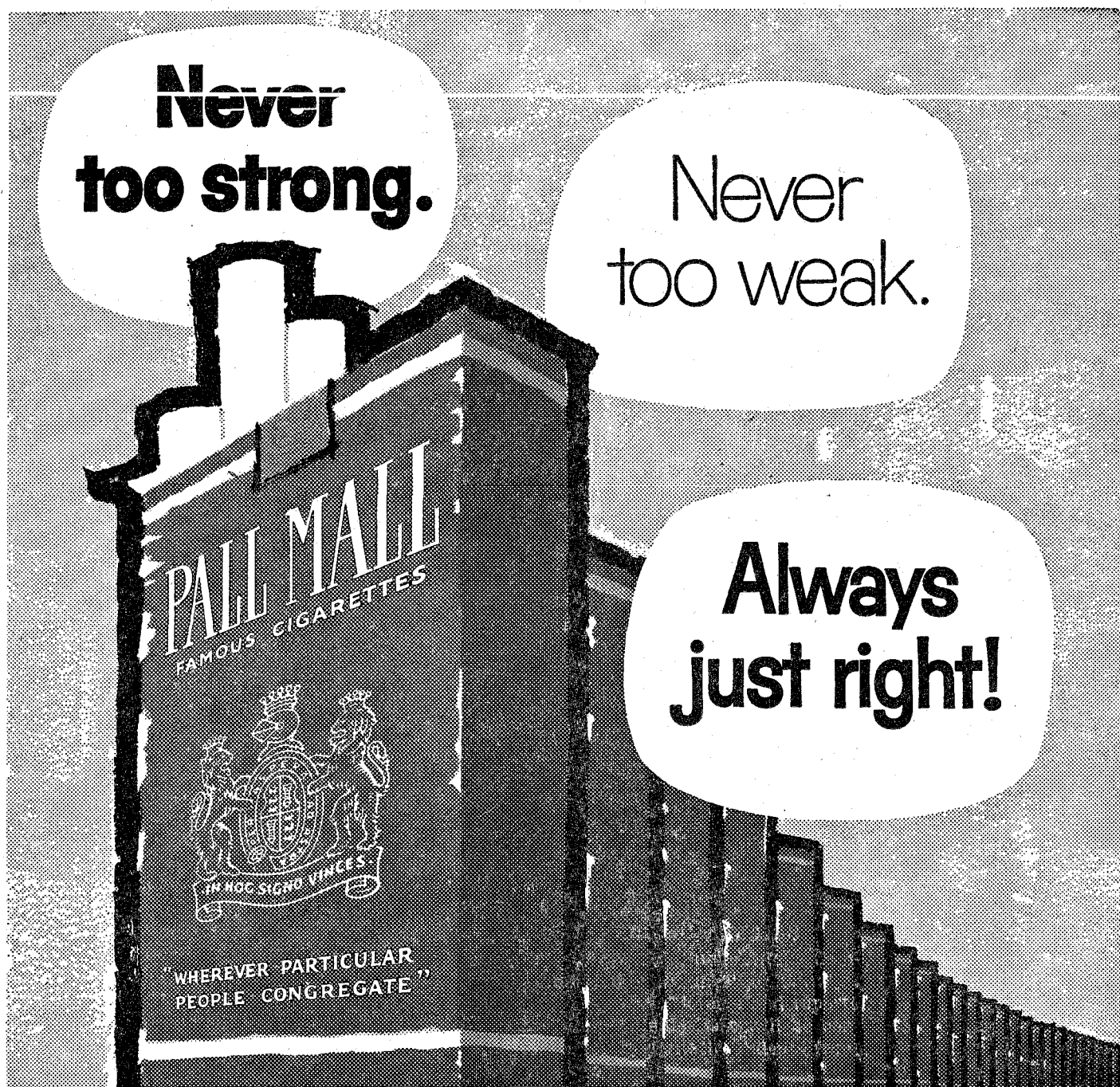
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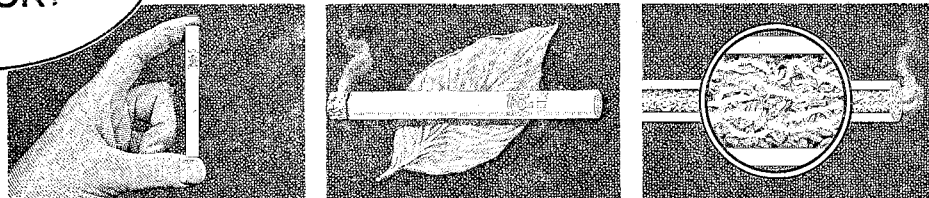
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