

Dance To Spark Homecoming

Band, Queens To Highlight CHM Game

A tightly packed schedule of events will keep undergrad students, alumni and dates hopping during tomorrow night's Homecoming celebration.

At 6:15 a buffet supper in Dabney and Fleming Houses will start things off. Student House chefs promise a meal far above normal standards. Tickets will be 50 cents for undergrads and \$1.75 for their dates. Grads and alumni can get in for the \$1.75 price. Tickets are available from all House social chairmen and from ASCIT Social Chairman Ken Casey, who is in charge of the event. Tickets will also be available in the House lounges immediately before the buffet.

Transportation to the Homecoming game between Tech and Claremont-Harvey Mudd at the Rose Bowl will be up to individuals. Kick-off time is 8:00 p.m. Admission is free on student body cards, or tickets can be purchased at the game.

Here is a condensed version of the Homecoming schedule for tomorrow night:

6:15—Buffet supper in Dabney and Fleming for Techmen and dates.

8:00—Homecoming game with Claremont-Harvey Mudd at Rose Bowl.

10:30—Homecoming Dance in Dabney Hall lounge.

The Homecoming dance will attendants, who were chosen in a student body vote today, will be crowned during half-time. The Caltech band will put on a marching performance after the crowning ceremonies.

The Homecoming Queen will start immediately after the game in Dabney Hall lounge. Hal Lomen's Band will furnish music, and free refreshments will be served. Admission is free.

Techmen to Aid Earthquake Drill

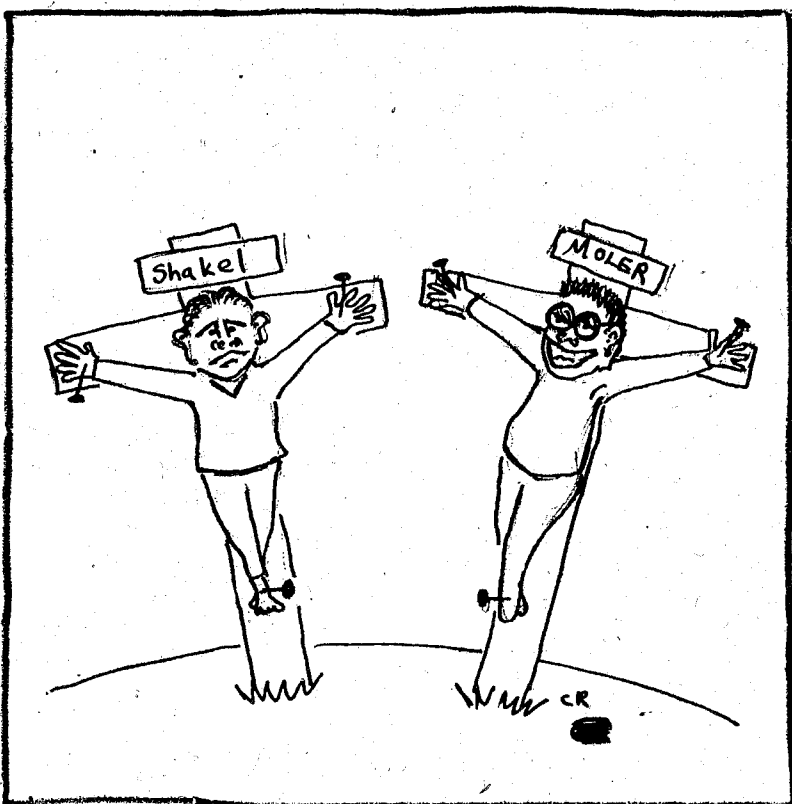
About 60 to 80 Techmen are needed to participate in a natural disaster drill Tuesday with the prime attraction being the presence of a roughly equal number of Huntington Hospital nurses.

The drill is a simulated earthquake scheduled to hit Pasadena at 12:30 with the main fault running directly through the Tournament Park field.

Civil Defense agencies, Red Cross, police and fire departments and staffs of Huntington, St. Luke's and Alta Vista Hospitals will take part in the exercises.

The Tech students will be tagged upon arrival with their disaster diagnosis and will then be transported in ambulances through Pasadena, along with the nurses who will also act as

(Continued on page 8)



"Welcome!"

Students Invited

Tech Spacemen Air Findings In Weekly JPL Conference

BY TOM TISCH

Next Tuesday Caltech will host the eighth meeting of the new Caltech-J.P.L. Space Science Research Conference when Dr. H. C. Urey will talk on the origin of the solar system.

With the inauguration of this seminar, Caltech has formally expanded into a new field. The conference came about as a result of the need of space scientists to air their findings, and of the interest of faculty and students in this new field.

Responsibility for the planning of the space conference rests with a joint Caltech-J.P.L. Committee, whose members are Albert R. Hibbs (Chm.) and Henry Richter from J.P.L. and Robert Leighton and Harrison Brown.

Conceived Over Summer

Conceived over the summer, the weekly space conference will be held throughout the school year. Primarily it will supply background information to the problems now being encountered in space research.

Such information will concern space environments, instrument imitations with regard to lifetimes and energy consumption, and other related fields.

Hopefully, it is thought that the conference may plant seeds of thought in interested people, and that as a result, answers to some of the many problems will come forth.

J.P.L. Cooperates

The conference is also an indication of the great spirit of cooperation between J.P.L. and the Caltech campus. It is hoped that an interchange of information between the two groups will shed light on some of the more difficult questions.

To date the conference has been reasonably high-level and scientific; it is hoped that the discussion can be kept in this plane, so that a maximum amount of non-trivial information can be conveyed. The discussions, though, are generalized and all faculty and students are invited to attend.

Brown Speaks

Among the recent speakers at the conference were Dr. Harrison Brown of Caltech, who spoke on **Meteorites and Their Properties**, and Eberhardt Reichtin of J.P.L. who talked on **Space Communication**.

Among the speakers scheduled for the remainder of the term are Dr. G. Kuiper of Yerkes Observatory, who will talk on characteristics and properties of the moon, and Dr. R. Richardson of Griffith Observatory who will present a lecture on the planet Mars.

Committee Grundles Along

Approximately 25 Techmen attended a general student body meeting Monday night to discuss New Student House population problems. This meeting, like the one last week, was to provide information for the IHC Committee in charge of population. The committee plans to submit final recommendations to the IHC sometime within the next two weeks.

Problems discussed Monday included comparative facilities of the two sets of Houses; grad students in the new Houses; the probability of drawing lots to fill the new Houses, and the possibility of Throop Club, or other groups, joining a single

Ernest C. Watson Retires As Dean Of Caltech Faculty

Dean Ernest Charles Watson is retiring to become scientific attache for the U.S. Embassy in India, it was announced yesterday. He will leave in January for a two-year stay at the State Department post.

He has spent the past 40 years at Caltech, and the last 14 as dean of the faculty. He is credited with attracting top members of the faculty, stimulating research and helping to develop the present curriculum.

It is fitting to express," said Caltech president L. A. DuBridge, "on behalf of the administration, faculty and trustees the great debt of gratitude which the Institute owes to Dean Watson for his devoted service over the past 40 years."

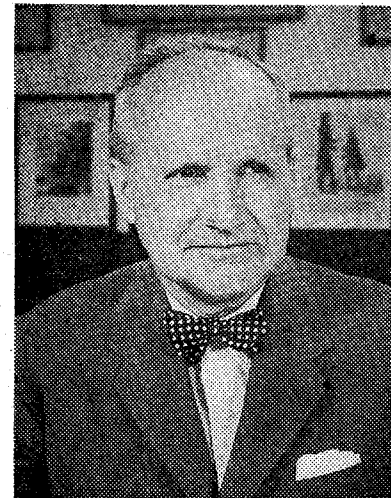
"He has been a dedicated and effective servant of Caltech. No one on the faculty is more admired as an individual, or is more respected for his part in bringing Caltech to its present position of leadership. As dean of the faculty, he has never compromised with the highest quality requirements for faculty members, yet has dealt gently and understandingly with all faculty members on their personal and professional problems."

"He will be sorely missed, but his friends join in wishing him every success in the new and important task he has undertaken. He will be an ideal representative of the U.S. scientific community abroad."

Dean Watson was born in 1892 at Sullivan, Illinois. He graduated from Lafayette College in 1914, and did graduate work at the University of Chicago. Dr. R. A. Millikan asked him to come to Throop College of Technology in 1919, one year before the name was changed to California Institute of Tech-

nology.

He started here as Assistant Professor of Physics, and supervised and helped plan the Norman Bridge Physics Laboratory. When Dr. Millikan retired, he became acting chairman of Cal-



tech's Division of Physics, Astrophysics, Mathematics and Electrical Engineering.

During World War II he was administrative director of Caltech's rocket project, which employed 4000 people and did \$80 million of work for the Navy in rocket research, development and manufacture. He was made dean of the faculty in 1945.

Frosh, Sophs Given A Week

Due to inaction on the part of the frosh and/or sophs, the outcome of the Mudeo is still uncertain, according to Stan Sajdera, head judge. Unless photographic evidence of Sorensen in the mud pit is brought to Sajdera within a week from this publication date, he will accept such evidence from the seniors and award the contest to them.

House.

The only controversial subject involved drawing lots. Unanswered questions include: Should present non-resident members who want resident status be the first to be subjected to drawings; should next year's seniors take part in a drawing; should porters and Filipinos in the old Houses draw to go into the new?

Concerning graduate students and facilities, committee members authoritatively stated that a few grads will be included in the new Houses for the first year or so, and that planned facilities in the new Houses are

about the same as the ones in the old ones — with planned improvements.

Everybody agreed that groups joining the new Houses would create no specific imbalance of classes.

Committee members stated repeatedly that the New Student House Poll, which was passed out this week, may help underline the most serious problems connected with the new Houses.

The committee hopes to have its final recommendations involving both population and rotation ready to be published in the next issue of The Tech (two days before the next issue of the Tech (two days before Thanksgiving).

The Big Game

Tomorrow night is our Homecoming football game. It's also the last game of the season. Homecoming is not a very big thing at Caltech. Neither, this year at least, has been football.

But tomorrow night we have a chance to win—probably the best chance we've had all year. Despite their difficulties, including the lack of support they've received, the team's in surprisingly good spirits. They'd like to win one for a change.

It'll also be the last game for the seniors on the squad. Men like Holland, Hartung, Gotschall, Siegel, Hood, Cooper, Rubin and Long are good football players. They deserve some thanks.

We don't expect a Big Ten rooting section, just as we don't expect Big Ten style football, but let's give our team a needed boost by going to the game. It's not such a bad way to spend a part of an evening. Besides, the Queen will be crowned at halftime.

That's tomorrow night, 8 p.m., in the Rose Bowl.

New York

We spent the better part of last week in New York City, attending the annual convention of the Associated Collegiate Press and doing a little sightseeing.

The convention was not the most valuable thing we've ever seen, but parts of it were fairly interesting. There were over 1100 people there—about two-thirds from college newspapers and the rest from yearbooks and magazines. Most of the delegates were from the South or from New York itself. One women's school in Mississippi sent ten delegates.

We proved to ourselves one thing we've always claimed. Caltech has a damn good paper. Most of the schools with under-1000 enrollment put out bi-weeklies or monthlies. And very few of the weeklies were over four pages. Our typography and make-up were far better than most. We run more advertising, but get much less money from student body and school sources.

There was a lot of discussion about college papers taking stands on national issues, but we supported our have-fun-with-the-paper-too philosophy. Maybe we're wrong, but we'll keep it up until somebody complains.

Letters To The Editor

Editor, the California Tech

Doug Shakel's "Engineering and Science" article on the Student Houses has provoked a great deal of well-deserved protest. Unfortunately, it tends more to betray its author's ignorance than to illuminate his subject.

As a member of Throop, I am naturally sorry to see the club passed over in a single sentence. If Shakel were really interested in a last look at the old order, he might have taken a little more time with the one House which is definitely in its last year. This action makes it evident that, although secretary of the IHC, he knows little and cares less about one-third of the undergraduate body.

The author's narrow, provincial viewpoint is even more apparent, however, in his treatment of the resident Houses. I have several good friends in Fleming, none of whom are "bohunks," "slovenly," "sacrili-

ous," or "obscene." Neither are Blacermen always "barefoot and unshaven." The discussion of Ricketts, insofar as it is true at all, represents a situation which has disappeared. For that matter, Shakel does not even give a true or complete picture of the best features of his own house.

Shakel has selected a few superficial details about each House and unsuccessfully attempted to generalize from these. There is material for thought in the points he makes. But I would suggest that, before again attempting to analyze the Student Houses critically in a nationally circulated magazine, Shakel make a deeper, more honest study of the elements of house character.

GARY CHAMNESS

(Editor's Note: Shakel's monumental work appears in the November issue of the E & S, available in the bookstores.)

Opinion

Plan Offered To Combat Communism

BY LARRY McCOMBS

I read with interest the article concerning the House Un-American Activities Committee which you ran recently but was very surprised to find that the authors had shown so little original thought in their comments. While criticizing the committee for enforcing conformity with its ideas, the authors merely conformed to the ideas and charges spread by other groups and individuals. I think that the problem here is worthy of somewhat deeper consideration than that.

George Orwell, in his famous *Animal Farm*, has suggested an analogy which may be extended for the purposes of this discussion. You will recall that the animals on the farm had tired of the oppressive and exploitative rule of the humans who did little useful work but absorbed all the profits, and so the animals drove the humans from the farm and set up *Animal Farm*. But it wasn't long before the pigs, the smartest of the animals, began to take over the privileges formerly enjoyed by the humans, and soon they were living in the house and running the farm under the slogan, "All Animals are equal, but some are more equal than others."

Nearby Farms

Now let us extend Mr. Orwell's analogy a bit to look at

the situation on the nearby farms. Here the humans still ran the farms, but through the years the animals had come to have more and more voice in the affairs of the farm. They had gained the right to refuse to work if they were not happy with things, and in the election of the farm's managing committee they had an equal voice with the humans.

Through the years, many rules had grown up to protect the rights of both humans and animals.

Pigs Taking Over

But the inhabitants of *Animal Farm*, perhaps goaded by the desire of the pigs for more power, had decided in all sincerity that they had a duty to free all animals from human rule. So they sent some of their own animals to live on the other farms, and they converted many of the native animals to their own ideas. Because it would obviously be a perfect world once the humans were gone, they felt it was worth a few sacrifices to reach that world. If the stupid animals on other farms refused to co-operate in overthrowing the humans—apparently in their ignorance preferring humans to pigs—it would be necessary to use force or deceit or any other convenient method.

So the *Animal Farm* expanded and grew—now co-operating with the humans, now violently fighting them, as the cause of animalism prompted—until

it encompassed one-half of the country. Many of the humans and animals on other farms, who felt that the rule of the pigs was a step backward instead of a step forward, began to try to take steps to halt the agents of *Animal Farm* from working within their borders. But every time they were caught, the animalists squealed long and loudly about their rights. Somehow no one seemed to notice that these were the very rights which the animalists intended to replace with the *Animal Farm* slogan.

'Traitors'

Well, let's leave the rest of the analogy, as the text books says, as an exercise for the reader, and come back to the real world. We certainly need to protect the rights of the Communist. At the same time we have to realize that the Communist has forsworn some of the duties which accompany those rights. He has forsworn the duty to try to solve all disputes by legal means. In the words of Lenin, even more the hero of Communists since the dethroning of Stalin, "The party which under the rule of the bourgeois . . . does not carry on systematic, all-sided, illegal work in spite of the laws of the bourgeois and of the bourgeois parliaments is a party of traitors and scoundrels."

In a situation where a citizen
(Continued on page 8)

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Mrs. Lyall, 'Doc' Haines To Exchange Vows Nov. 24

Mrs. Florence Lyall was feted recently at a dinner given by Miss Marjorie Cheney in honor of the forthcoming November 24 wedding of Mrs. Lyall to Dr. Floyd Haines. Dr. Haines and Mrs. Lyall had previously announced their engagement and set the date of the wedding.

Mrs. Lyall has been head of the Graduate Dormitories and the Institute Cafeteria for the past nine years. Previously, she made her home in Detroit,


Mich. Dr. Haines (reverently known as "Doc" to all athletes) is the school trainer and team physician.

Mrs. Lyall was quite beautiful in a brown taffeta dress; the hostess, Miss Cheney, was attired in a light beige sheath, which flared slightly at the bottom.

Dr. Haines and Mrs. Lyall will make their home on Del Mar Ave. at the present residence of Doc Haines, after a honeymoon trip to La Jolla.

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Announcements

FOLK DANCE

Caltech folk dance group meets Sunday from 7 until 10 p.m. in Culbertson Hall. Dancers need no previous experience.

PRE-REGISTRATION

Pre-registration will be the three school days next week. Your adviser is watching you.

PUBLIC AFFAIRS

The Y Public Affairs Commission will hold an open meeting today at 12:30 in Dabney lounge for all interested. There will also be a meeting in the Y lounge at 7:15 to discuss the campus visits of African nationalist leaders.

PLACEMENT MEETING

Dr. Donald S. Clark, Director of Placements, will hold a general discussion of placement problems and interview procedure. This meeting will be on Tuesday, December 1 — Room 206, Dabney Hall, starting at 7:15 p.m. This meeting is open to students at all levels.

UR Quartet Set Sunday Concerts

The Feld Quartet, quartet-in-residence at the University of Redlands, will present a chamber music concert Sunday evening at 8:15 in Dabney lounge.

The group will play Beethoven's quartet in C minor, opus 18, number 4; four sonnets for soprano and string quartet by Elinor Remick Warren, and quartet in D major, opus 44, by Mendelssohn.

Y Finance Drive Ends Tomorrow

Today and tomorrow Y Finance Drive solicitors will be striving to see successfully all students. According to treasurer Robert Nason, this year's drive has two purposes: to finance the Y and to inform students about the programs and various activities. Solicitors can return their cards to the chairman or the Y office.

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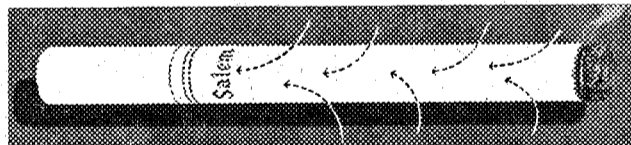
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**BRIGHT LIGHTS...
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by griffen



Theseus entered the temple and placed his sacrifice of a white bull-calf on the altar. He sprinkled lamentations to Poseidon, the horse-god, who rumbles in the caverns beneath the sea. After giving his offering, he looked for a sign, and turning his head upward, he saw an eagle circle and dip its left wing. His journey could only be good.

It was at this time that I realized that the life we were leading was meaningless and full of desires that could never be realized. It was obvious that none of the women in our camp had the things that we all wanted: an understanding without hypocrisy and the attitude that would fulfill our thirst. As the candidates for the queen that would reign over all of us came past me, one by one, I could see and hear the crowd at stadium cheering her with a hopeless fervor; although she was queen, she was not queen over each one of them — she was not for them individually, but only for a mass; a huge, shapeless thing that really had no heart, and the mass was nothing to her but a means.

I talked to them because they were immodest and smiled at everyone and I wanted to know why they wanted to rule over us, even if it were only for the games. But they were no more than smiles to me, as to everyone, and they would never fulfill the desire of anyone because we were the huge and shapeless and just a means and as soon as the games were over they would race back to Samos, from whence they came, and it would be just another year. So I searched my heart for an answer, and looking to Apollo for a sign, I felt nothing.

It was then that I saw that there was no answer with the women. They would always be the same and we would always try to find the quencher of our lust while our work went undone. We would always look, but it would be hard to find for most of us. The answer lay all around me in my friends. How far must one look for a member of the fifth row in Attica, land of gentlemen, or in hungry Sparta to the northeast (on our crude maps) or in Thebes or Macedonia to the

north. Stout fellows all! And good friends. If we could only change our customs to include them in our daily lives as more than just acquaintances and share with them our troubles and joys alike. When battle came we could go together to fight the enemy and honor each companionship. How easy life would be.

It is strange that I had not seen it before. If we had not been raised to think in terms of lowly women, with their deceptive veils and their intrigues and petty misgivings, how much happier we would all be. Our lives would be orderly and honorable, as all good men's lives should be. Instead of electing a Queen of the Games, we should elect a King of the Games. How must better we would choose him. We would base our decision not only his physical beauty, but on his skill in wrestling and the long race and his charm and wit and ability with the lyre. And we would know him and it wouldn't be just another year because he wouldn't go back to Samos and would be each of ours individually...

But we must all face our fates; the gods have ruled it thus.

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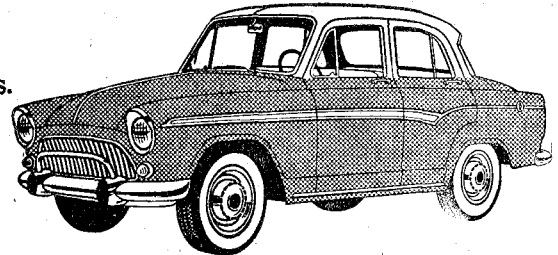
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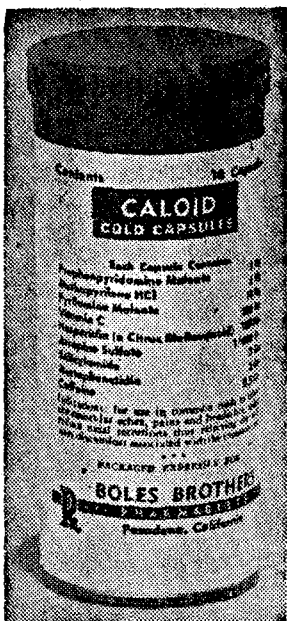
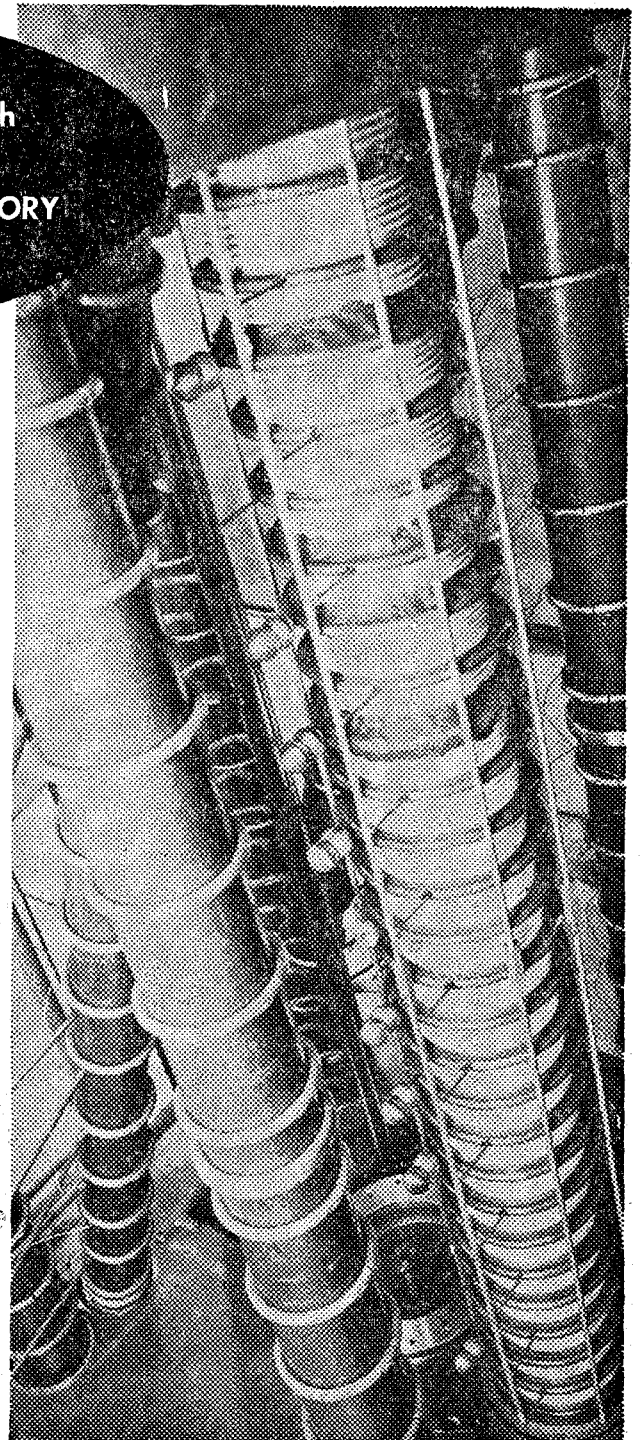
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Positive Bias

Random Comments On Many Things

BY PIERRE SUNDBORG

Well, with the Interhouse over and Moler returned, things settle back to normal, and Positive Bias stages a comeback. Speaking of **Das Interhaus**, congratulations to Gordy Long for the fine job on the sound system in the Ricketts courtyard. This marked the first time stereo was used for Interhouse, and I hope it will set a precedent. For those who wondered about the equipment: a Shure stereo cartridge drove two Dynakit preamps and two Mark III amplifiers. These drove the right and left speaker systems.

A matrixing circuit connected to the output of these two amplifiers put a sum signal into a third Dynakit preamp-amplifier combination, which drove a third speaker in the center of the courtyard. This last speaker was used to fill up the hole-in-the-middle between the two outside speakers. The result was a lot of good sound.

* * *

For the FM fans, here's a complete listing of the FM stations in the area. It contains a few stations not listed in the **Times**, and is arranged in order to frequency, which appears to make a little more sense than alphabetical order.

- 88.1 KLON—Long Beach
- 88.7 KXLU—L.A.
- 88.9 KSPC—Claremont
- 89.3 KPCS—Pasadena
- 89.9 KORW—Santa Monica
- 90.7 KPFFK—L.A.
- 91.5 KUSC—L.A.
- 91.9 KVCR—San Bernardino
- 92.3 KFAC—L.A.
- 93.1 KNX—L.A.
- 93.9 KPOL—L.A.
- 94.3 KVFM—San Fernando
- 94.7 KRHM—L.A.
- 95.5 KABC—L.A.
- 96.3 KRKD—L.A.
- 96.7 KWIZ—Santa Ana
- 97.1 KFMU—L.A.
- 97.5 KDUO—Riverside
- 97.9 KNOB—Long Beach
- 98.3 KDWC—West Covina
- 98.7 KCBH—L.A.
- 99.5 KHOF—L. A.
- 99.9 KFMW—San Bernardino
- 100.3 KMLA—L.A.
- 100.7 KFMB—San Diego
- 101.1 KHJ—L.A.
- 101.9 KUTE—Glendale
- 102.3 KFOX—L.A.
- 103.5 KGLA—L.A.
- 104.5 KBIQ—L.A.
- 105.1 KBCA—L.A.
- 105.9 KBMS—L.A.
- 107.5 KBBI—L.A.

* * *

The above-mentioned Glong has been amazing most of us with his new speaker system. It consists of Jim Lansing's new 8-inch high-compliance speaker in a small ducted-port enclosure. The bookshelf-size enclosure measures 20 inches by 14 inches by 12 inches. That little box puts out the cleanest, most fundamental bass I have heard from a small enclosure, and I mean including the AR systems. Seventy dollars will pay for the speaker and buy the plywood for the cabinet.

If you're looking for a low-cost speaker system, but insist on clean sound and small size, be sure to consider this one. The people at Audio Associates are really happy about it, and will be delighted to let you hear one.

* * *

I have a few further observations on the Heathkit FM-4 tuner discussed a few weeks ago. First, it is stable. With the AFC on, it really locks onto the

stations, even while warming up.

Second, it is better than the Eico HFT-90. I finally got a chance to compare the two. On strong stations, they sounded identical. On weaker stations, the Heathkit did a superior job of bringing in the audio without distortion or background noise. Coupled with the fact that the Heath sells for \$9 less than the Eico, there is little doubt in my mind which is the better.

Third, the little FM-4 appears to be just as good as the big,

expensive PT-1, at least for Los Angeles listening. Perhaps in weaker signal areas the PT-1 would go ahead, but in L.A. there is absolutely no difference between the two, except \$55 and an AM section.

* * *

Well, kiddies, Christmas time is coming up, and it's time to start worrying about gifts for the old folks at home and for your favorite columnists. Here are a few recommendations you might consider for the hi-fi conscious on your list:

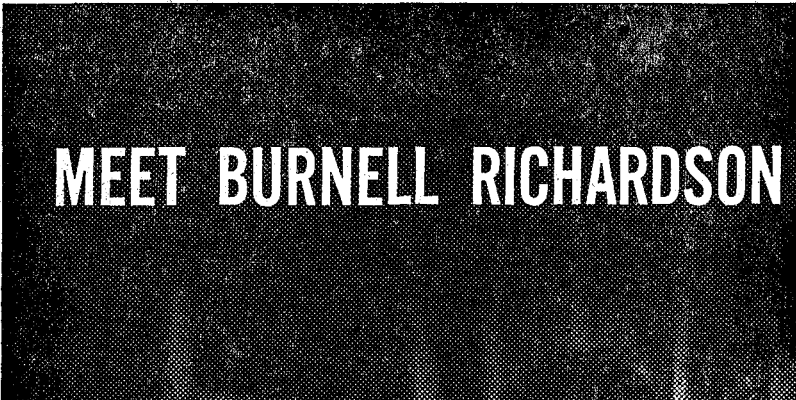
1) For the high brow: Capitol SAL-8385, "The Orchestra," Stokowski. Still my favorite classic, and beautifully packaged to make a tremendous gift. Costs about \$7 regularly, but Record Center may sell it for less.

2) For the low brow: Columbia CL-934, "Ellington at Newport." Although three years old, still the best jazz record in my collection. This record captured that exciting moment in jazz when Paul Gonsalves played 27 consecutive sax choruses, and

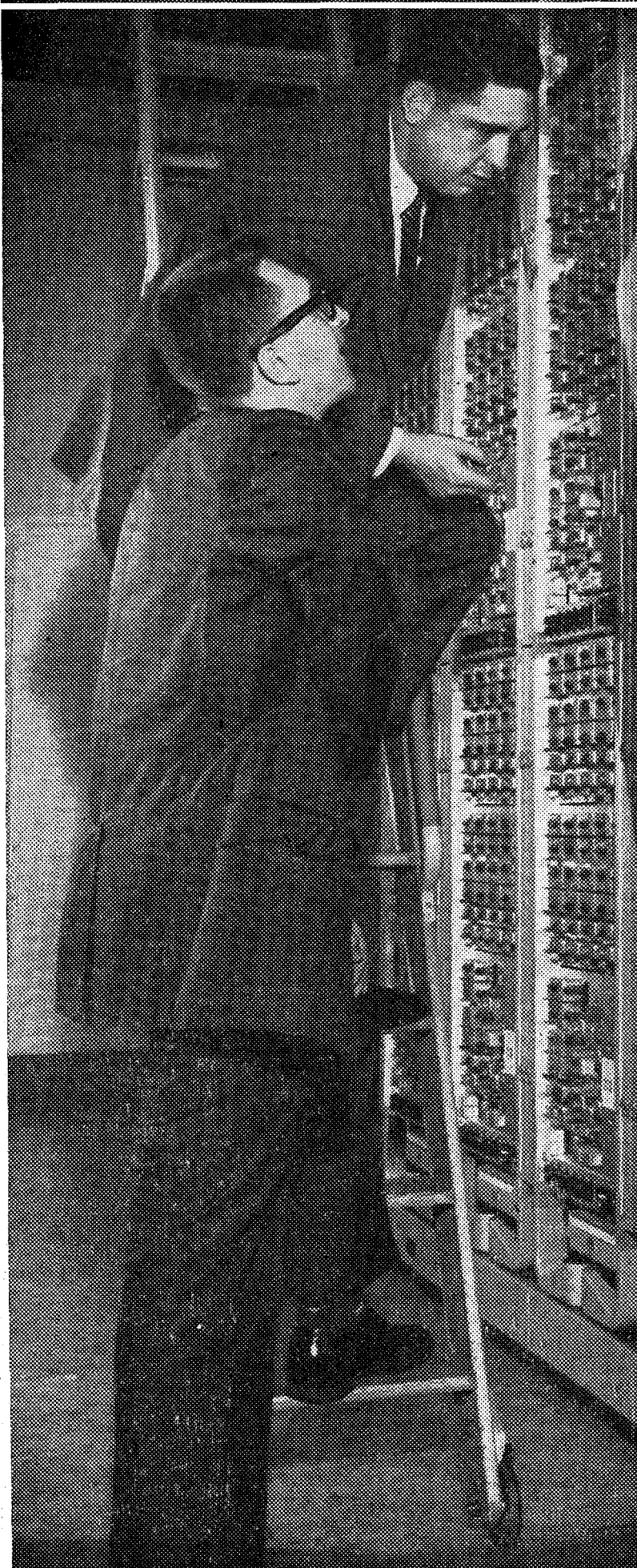
had the wet fans at Newport dancing in the aisles. A "must" record.

3) For the record collector: An ESL Dust Bug, the ultimate in record cleaners. \$5.50, but worth its weight in gold.

4) For the man who has a Dust Bag: a large bottle of ethylene glycol, which is apparently the fluid to use on the brush. It's practically free when bought as glycol, and you can add blue food coloring to make it look like the \$1.50-per-ounce stuff ESL sells.



MEET BURNELL RICHARDSON AND DICK MASLOWSKI



They're transmission engineers with Michigan Bell Telephone Company in Detroit. Burnell graduated from Western Michigan in 1951 with a B.S. in Physics, spent four years in the Navy, then joined the telephone company. His present work is with carrier systems, as they relate to Direct Distance Dialing facilities.

Dick got his B.S.E.E. degree from Michigan in 1956 and came straight to Michigan Bell. He is currently engineering and administering a program to utilize new, transistorized repeater (amplifier) equipment.

Both men are well qualified to answer a question you might well be asking yourself: "What's in telephone company engineering for me?"



SAYS DICK:

"There's an interesting day's work for you every day. You really have to use your engineering training and you're always working with new developments. Every time Bell Laboratories designs a new and more efficient piece of equipment, you are challenged to incorporate it in our system effectively and economically. For example, I have been working on projects utilizing a newly developed voice frequency amplifier. It's a plug-in type—transistorized—and consumes only two watts, so it has lots of advantages. But I have to figure out where and how it can be used in our sprawling network to provide new and improved service. Technological developments like this really put spice in the job."



SAYS BURNELL:

"Training helps, too—and you get the best. Through an interdepartmental training program, you learn how company-wide operations dovetail. You also get a broad background by rotation of assignments. I'm now working with carrier systems, but previously worked on repeater (amplifier) projects as Dick is doing now. Most important, I think you always learn 'practical engineering.' You constantly search for the solution that will be most economical in the long run."

There's more, of course—but you can get the whole story from the Bell interviewer. He'll be visiting your campus before long. Be sure to sit down and talk with him.

BELL TELEPHONE COMPANIES



The California Tech SPORTS

Beaver Chips

By Noll and Koh

Footballers Want Homecoming Win

Tomorrow night is the last reckoning for this year's edition of Caltech football, as the Beaver gridders engage Claremont-Harvey Mudd in the annual homecoming tilt. Although most quarters are somewhat skeptical about the Beavers' chances, it is the opinion of this department that Caltech has a good chance to emerge victorious for the following reasons: (1) Claremont will not be "up" for the Beavers—to them the game is just a fight for the cellar birth in the SCIAC. (2) Caltech should have high morale, for, besides it being the homecoming game, without exception the Beaver football players feel they have not played as well as they could have this year. (3) The players are correct in assuming they haven't done as well as possible, and with initiative and determination, which the team should have, the players should live up to their abilities.

This will be the last college game for several of the seniors, including many of the key players. Quarterback Mel Holland has done a good job at quarterback this year, displaying all the qualities necessary for this position. Lineman Carl Gotschall has been tremendous in moving down the opposition, and it will be a great injustice if he is not named to the SCIAC all-conference team. If Gotsch's spirit were transmitted to the whole team, the Beavers would not now be winless.

Two fine running backs will suit up for the last time: Jerry Siegel and Lee Hood. Siegel has played some fine games this year, including his good showing in the Oxy game last week. Hood, who probably will not play due to injuries, has been a fine halfback for two years now, combining good speed with more than adequate trickiness.

Interhouse Sports Problem

Among the problems that will evolve with the addition of three new Student Houses is the somewhat perplexing question of what to do with interhouse sports. Anyone who has participated in an interhouse sport knows the many difficulties already involved, difficulties that will only be magnified by the addition of two more teams. (Throop will not participate any longer.) First of all, there is not enough room for team practice now in most sports, especially football, softball, swimming and tennis. Fitting a soccer team and five softball teams onto the two TP baseball diamonds is already impractical, and adding two more teams will be totally impossible.

A second problem is the time involved to complete the various sports. With seven teams competing in football and basketball during third term, about three weeks will be required to complete the regular season schedule in each sport. With the necessary two weeks' practice before the league games start, this means that 10 weeks of an 11-week term will contain some interhouse sports program. Even the most avid interhouse sports fan will agree that games the week finals are not practical.

Of course, these problems are not insurmountable, and should not be taken to infer that there should be no program. However, some revamping is obviously necessary.

A possible plan would be to cut the number of interhouse sports to six, two for each term. Only one sport which requires two-team competition between the House should be included each term, with the other sport being something that is a seven-team meet. The meet events, such as track, swimming and tennis, require less time to run off, and would thus leave a little time each term free from interhouse sports. A possible schedule would include softball and track first term, football and tennis second term, and basketball and swimming third term.

There are no really sharp solutions to the space problem, for there just isn't enough room on campus to accommodate everyone. However, about a block and a half north of the school on Cordova there is a public park with a good-sized playing field. Last year some discobolus games were played there when the space problem was extremely acute. A possible solution would be to have practices, or even games, at this spot. Another possibility would be to let each team practice only two days a week.

Certainly there are better solutions than those above. If you have some pet ideas, there are all kinds of people to talk to, among them the members of the New Student House Committee, the athletic department, the House athletic managers and the California Tech sports staff; they'll all be glad to argue with you!

Winless Techmen Hungry For Homecoming Victory

A somewhat unfortunate Caltech football season winds up tomorrow night as the Beaver varsity hosts Claremont-Harvey Mudd at the Rose Bowl in this year's homecoming tilt. The game begins at 8 p.m.

Although sporting a poor record this year, Claremont has shown more strength against common foes than have the Beavers as the Stags have played close games with Pomona and Riverside. It just might be another long night for the Techmen; however the spirit of Homecoming and the dread of a winless season might spur the local football squad out of the doldrums. (For more on homecoming, see "Beaver Chips.")

Oxy Thumps Beavers

Two tremendous Occidental tailbacks, Pete Tunney and Jerry Yim, and a weird spread formation by the Tigers completely baffled Tech's football team as the local varsity was routed, 75-14 in a game played Friday at the Occidental field. The Beavers were never in the game, as Oxy scored a quick touchdown during the first two minutes of the game, and continued to score throughout the contest with disheartening regularity.

The first Beaver score came early in the second period, with the score 20-0 for Oxy, on a spectacular 60-yard pass and run from Mel Holland to end Herman Hartung.



End Herm Hartung strains for pass which has slipped through defender's hands in game with Oxy. Hartung scored one touchdown on a 60-yard pass from Mel Holland.

The Beavers managed a second touchdown in the fourth quarter by virtue of a 35-yard pass to Jim Morris, which carried the ball into scoring position. Three plays later fullback Jerry Siegel plunged over for the score. Siegel also scored two more points on the conversion attempt.

The Occidental offense was, if not the best, the weirdest seen this year. The Tigers used

a distorted single wing, with both sides of the line, from guard to end, split 20 yards from the center, leaving the center, the tailback and the halfback all alone in the center of the field. Caltech tried to stop this attack by spreading the line out across the field with about five-yard split between linemen. This provided the Oxy runners with ready-made holes.

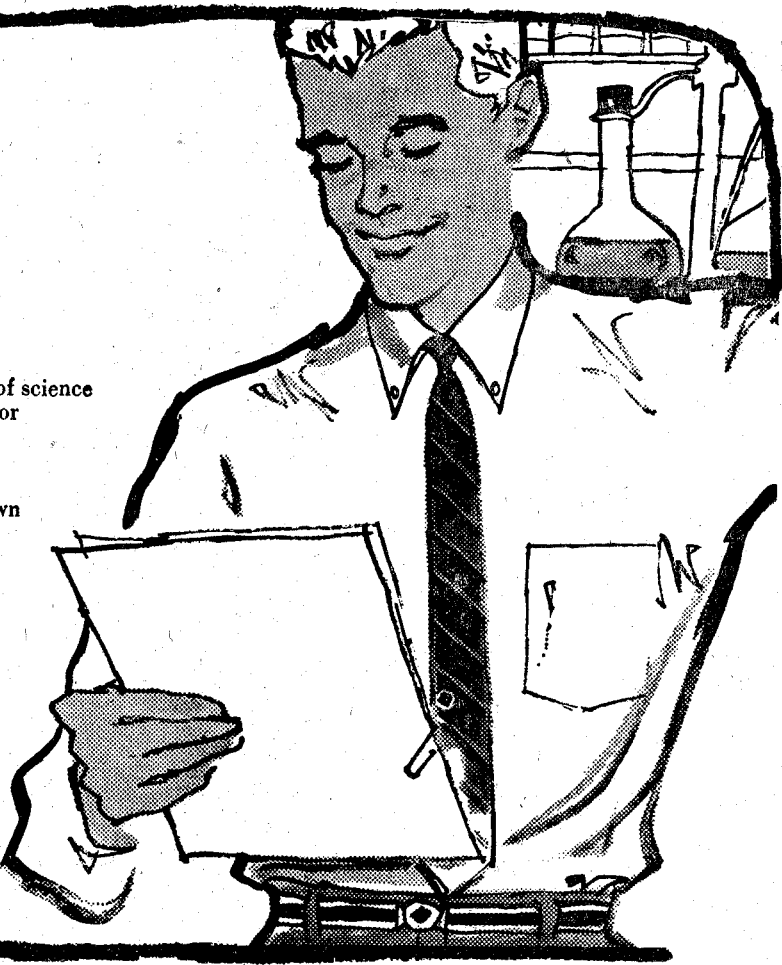
(Continued on page 7)

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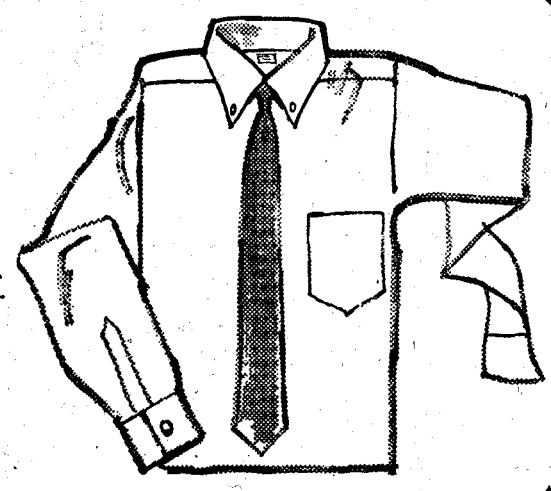
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Cross Country Squad Remains Undefeated



Sophomore Dick Tuft has placed first in every cross-country meet this year.

The varsity cross-country team ran its victory string to three straight last Friday by downing Claremont - Harvey Mudd. The Stags only brought four men, so were forced to forfeit, but the local varsity would have won under any circumstances as they swept six of the first eight places.

Sophomore Dick Tuft and Bob Juoela again were the mainstays of the team, with Tuft winning in the time of 15:18, and Juoela finishing third. Another sophomore, Rich Harris, finished fourth.

Tomorrow the Beavers defend their undefeated mark against Redlands at Redlands. The Bulldogs have at least one top-notch runner in Rich Ward, who might cause Tuft and Co. some trouble.

Frosh Lose

In spite of a first-place finish by Pat Early, the Beaverbabe cross-country team dropped a dual match to the Claremont-Harvey Mudd frosh, 22-33.

CFSAFST Hits Big Time

The Caltech Faculty, Staff, Alumni and Friends Soccer Team will put its unbeaten record on the line Saturday morning when they meet the Caltech varsity in TP.

The Senile Seven Plus Four, under the leadership of Rapid Robert Huttenback, have an unblemished 5-0 record. Of course, all five victories have been at the expense of the junior varsity, but Coach Huttenback feels his "old men" should not be underrated.

The Caltech varsity have a 3-2-2 record, but due to the CFSAFST's unique schedule, no comparative scores on which prognosticators might base predictions are available.

Promoter Huttenback promises an interesting game for Saturday morning at 10 on the TP soccer field.

Water Poloists Hit Skids, Drop Two Close Ones

Los Angeles State, on the strength of a third-quarter rally, grabbed a hard-fought 9-7 victory over the Beaver water polo team at Rosemead High School Tuesday.

Bob Ruby, who whipped in six goals in 19 shots, staged a one-man scoring surge in the fourth period, but his three goals weren't enough to catch the State team. Roger Bland, again seeing limited action, scored the only other Caltech goal in the second quarter.

The three State forwards each netted a pair of goals to spread the attack with four goals in the third stanza and two in the final quarter, assuring the win.

Looking forward to conference play, the Beavers host ever-dangerous Pomona, currently holding the conference lead, tomorrow, and Oxy next Tuesday with second place hanging in the balance.

Claremont Drops Beavers
Caltech dropped into a tie for

third place in the SCIAC last Friday night as CHM beat them, 6-2. The Beavers had defeated the Stags previously this season, 8-3.

Caltech went ahead early in the first quarter and maintained this lead until the brilliant ball handling of the CHM team proved too much and the Stags went ahead to stay early in the second quarter. Morse from Claremont-Harvey Mudd and Gary Tibbetts from Caltech looked especially good in the game. Caltech was hampered by sharpshooter Bob Ruby's absence for much of the game due to a bad cold.

Pomona meets the Beavers here tomorrow and are highly favored to win. Pomona has had little trouble in their drive to retain their league championship this year.

Next Tuesday sees an Oxy-Caltech rematch. Oxy won the first match two weeks ago by a decisive margin, but Caltech hopes to even the score.

Beaver Soccer Squad Shutout Riverside, 4-0

Reversing an earlier 3-2 loss, the Caltech soccer team took its third straight win with a 4-0 shutout over UC at Riverside. The triumph put the Beavers, now holding a 3-2-2 record, solidly in third place with games with second-place Redlands and conference-leader UCLA coming up.

Ellis Cumberback, again leading the offense, booted home a pair of goals to ice the win. For the second consecutive game, a defensive error handed Caltech a "gift" goal as the Riverside fullback kicked in the first goal. Cumberback added a short kick to make the half-time score 2-0.

Riverside put their forwards back on defense in a desperate attempt to halt the pressing Beaver offense but Fred Newman quickly tallied the third goal.

Cumberback finished the scoring when he tapped a short blocked kick past the charging goalie into the back of the goal.

The Caltech offense, dominating play, missed several more scoring opportunities when shots hit the goal standards and bounced back.

Tonight at 7:30, Redlands hosts the Beavers in a night-time game. Prospects look good for the Caltech team to travel to San Francisco over Thanksgiving vacation to take on the University of San Francisco, recently elected NCAA soccer champs. USF pounded out a decisive win last year in a holiday contest.

Football - -

(Continued from page 6)

The weakest spot in the Caltech defense, however, was the tackling. On nearly every play, some Beaver would miss an easy tackle either on or behind the line of scrimmage.

Frosh Uphold Tradition

A heavy, slow, yet extremely deep Claremont-Harvey Mudd frosh team obliterated the Caltech freshmen last Saturday, 54-12. This brought the total number of points scored against the Beaverbabs to 303 in five games.

The Beaverbabs scored on a 60-yard run by Chuck Ryavec, and on a three-yard keeper by quarterback Ron Krischke.

Before the game, the Caltech freshmen elected Jack Arnold and Truman Seeley co-captains for the season, and both justified the choice of playing outstanding games against the Stags.

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McCombs Suggests "New Way Of Life"

(Continued from page 2)

refuses to carry out some of his duties, society usually finds it necessary to curtail some of his rights, much as it hates to do so. When a citizen refuses to respect the right of ownership of others — i.e., he steals — society finds it necessary to curtail his rights of freedom by putting him in jail. As demonstrated in Russia, China, and throughout the Communist world, and most recently in Kerala and Tibet, the Communists have no tolerance for non-Communist ideas once they gain power. Therefore, we are faced with the tricky problem of a non-tolerant individual in a tolerant society — or more correctly, a non-tolerant culture existing beside a more-tolerant culture.

HUAC Not the Answer

It seems clear to me that the HUAC is no answer to the problem. Outlawing Communism or trying to expose it does not destroy its ideology. And yet, allowing Communist Party members to continue to attempt to advance the cause of the USSR within our borders doesn't seem very wise, either. If you talk to a few persons, as I have done this summer, from Asia, Africa and South America, you will probably wind up with the same cold chills I have. It is highly conceivable that long before 1984 America could be standing alone against a largely Communist world. At that point, the existence of a well-organized network of agents committed to the advancement of Communism inside our nation seems a bit risky. In other words, the argument that we will lose our freedoms by taking away from the Communists seems to double back on itself when extended into the future. We'll lose them anyway.

It seems to me that there is no chance of satisfying the masses with the status quo. People are determined to have a better world, and many are willing to die for that purpose. The Communists propose that by eliminating the money-grubbing capitalists we will achieve a world where all can share alike and build a paradise on earth. Unfortunately, as the USSR has so beautifully demonstrated, once the greedy capitalists are gone we have to deal with greedy commissars or dictators. The real problem is human nature.

If we could change human nature — build hate-free and greed-free men — there would be no need to kill anyone. "If everybody cared enough, and everybody shared enough, wouldn't everybody have enough?" Then the economic system would be irrelevant. It wouldn't make any difference whether we lived under capitalism or socialism, so long as everyone were unselfish.

But no one has ever claimed that human nature could be changed — or have they? It seems that religions have for centuries claimed that God can change human nature. Like most cynical Tech agnostics I laughed at that and simply said — "Look at the Christians! They haven't changed much."

Christianity in Practice

But this summer I have seen Christianity in practice. I have seen former leaders of the Mau Mau working with white settlers from Kenya; I have seen men with 25 and 30 years' experience as revolutionaries and Communists working with the capitalists whom they used to fight; I

have seen Japanese and Filipinos, Dutch and Indonesians, Germans and French, British and Indians, all working together to build a new world based on the revolutionary principle that human nature can change.

Most convincing of all, I have felt it work inside myself. The motives and goals of my life have been completely changed. I have decided to let God run my life, and here found it a completely practical — and incidentally, exhilarating — way to live.

Decide to Act

The world will be won by those who decide to fight for it. The Communists decided long ago, and they have won half of it already. But I think that the most reactionary man in the world is the man who wants to see the world different, but is unwilling to be different himself. That's why I've decided to take

the drastic step of trying to live my life by absolute moral standards.

This summer I've seen the history of the world being changed by leaders and by common clods like you and I who are making the same decision.

Khrushchev has predicted that Eisenhower's grandchildren will be living in a Communist America. I am betting my life that Mr. K's grandchildren will be revolutionary Christians living in a world in which men have learned to deal with hate, fear, and greed and to work together under God.

Earthquake Drill

(Continued from page 1)

volunteer victims, to one of the three hospitals for treatment.

The drill will end at 2 p.m. with coffee and doughnuts served to the volunteers and nurses. Attempts are being made to hold a special event, such as a dance or dinner with attendance limited to only the nurses and Tech volunteers.

On-campus students can sign up on lists in the Student House lounges, while off-campus students can sign up with Safety Engineer Charles Easeley in Lower Throop or with Bob Koh in Blacker.

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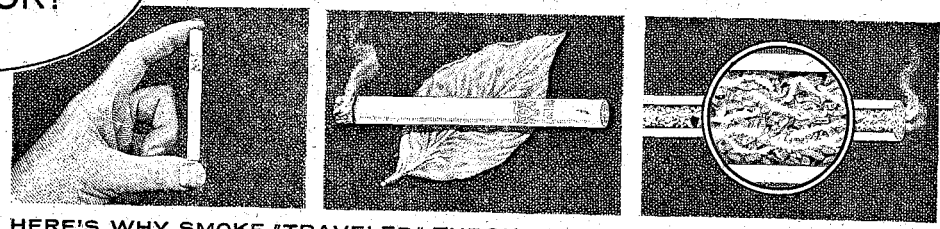
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