

# The California Tech

Associated Students of the California Institute of Technology

Volume LXI

Pasadena, California, Thursday, February 11, 1960

Number 17

## Moler, Bauer Vie For Prexy

## Glee Club Will Sing At Winter Olympics

### Disney Plans Include Tech In Final Show

The Caltech Glee Club has accepted an invitation to sing for the closing ceremonies at the 1960 Winter Olympics in Squaw Valley, Calif., at the end of this month.

The Walt Disney directed ceremony will take place on the afternoon of February 28, at which time the flag will be lowered, the Olympic lamp doused, and 10,000 balloons bearing messages of peace will be released.

Olaf Frodsham, glee club director, announced the plans and told how the Caltech Glee Club and the United States Marine Corps Band will provide the entire musical accompaniment for the spectacular closing ceremony.

Three numbers will be sung for the closing program. These are the standard "Olympic Hymn," Brahms "Ode to Triumph," and a setting from Fred Waring's arrangement of "No Man Is an Island," with narration by Bill Henry, noted radio announcer.

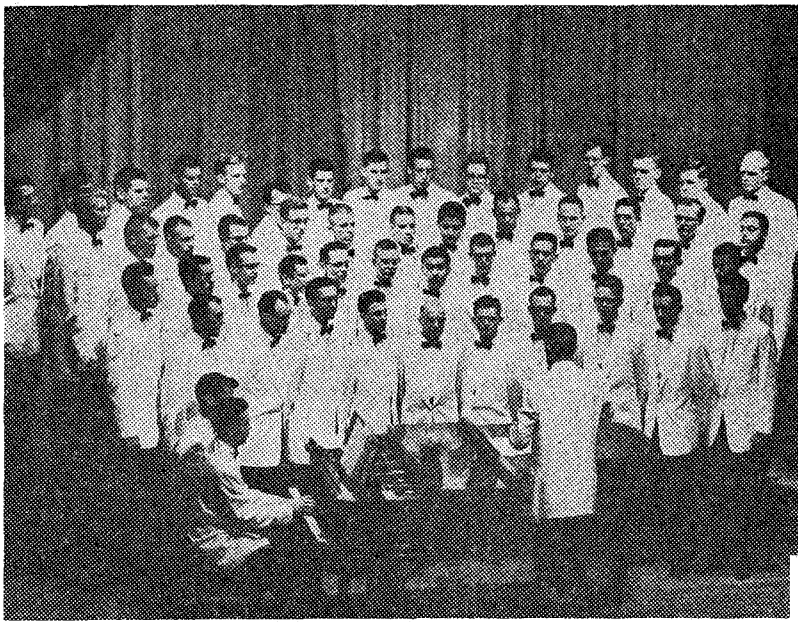
Prior to the closing ceremonies on Saturday, the Glee Club will give its normal tour concert for the entertainment of participants and spectators.

The invitation came as a complete surprise to Frodsham and institute officials. But the invitation is not unwarranted.

Dr. Charles Hirt, director of the USC School of Sacred Music, is the musical director for the Winter Olympics. He is very familiar with the Caltech Glee Club. He also knew that the group was to be free on that week end, since a performance was scheduled at his church, the Hollywood Presbyterian.

When an opening appeared for a singing group, he suggested the Caltech singers, Disney OK'd it, and the wheels were set in

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The Caltech Glee Club, scheduled to appear at the Winter Olympics at Squaw Valley, California, practices for concert.

## Barbara Ward Plans Economics Lectures

Barbara Ward, British economist, will visit the Caltech campus from February 15 to February 24.

She is being brought by the John Randolph Haynes and Dora Haynes Foundation, which each year brings a distinguished scholar to one of the Southern California colleges for a series of lectures.

Barbara Ward (Lady Jackson) was educated in England, France and Germany and received her degree from the University of Oxford. She is author of "Nature of the Western World," has been on the staff of "The Economist," and has lectured widely. She has lived and traveled in many parts of the world and now makes her home in Ghana, where her husband, Commander Sir Robert Jackson, is Chairman of the Development Commission.

Lady Jackson has surveyed world trends and feel that the rich nations of the free world are in danger of becoming too complacent. Writing in the New York Times, she said that after a decade that has ended

leaving Russia formidably in the lead in missiles, conventional arms and space research, the greatest danger to the West is that the nations grown comfortable and at ease may refuse the tough expenditures needed to close the gap and restore security.

She feels that we should help develop the less fortunate nations by using "our wealth to redeem the promise of our free society and extend its working to our fellow men who everywhere labor and look for change and growth with minds divided between penury and hope."

Lady Jackson will lecture in Dabney Lounge at 8:15 p.m., Monday, February 15, on "Poverty, Population and Saving"; Tuesday, February 16, on "Dynamism in the Rural Sector"; Monday, February 22, on "Industrialization and the Mixed Economy," and Tuesday, February 23, on "Trade, Art and Development." She will visit Professor Sweezy's economics class on Wednesday, February 17 at 9:00 a.m. and 1:00 p.m., and Professor Gilbert's economics class on February 19 at 11:00 a.m.

## Nominations Open Until Tuesday For Ten Other Student Body Posts

Cleve Moler and Bill Bauer will head the ASCIT election ballot on February 24, vying for president. Both candidates are current ASCIT officers: Moler, the editor of the California Tech and Bauer, the ASCIT secretary.

Nominations will remain open until next Tuesday for 10 other offices as a student body meeting this week produced at most one candidate for each post.

### TECH CO-EDITOR

The team of John Todoroff and Tom Tisch are running uncontested for co-editors of the California Tech. Other contests, as of Wednesday noon, are:

Vice-President: Skip Stenbit, Clyde Zaidins

Secretary: Dave Pritchard, Paul Purdom, Les Ingber, Pete Lippman

Treasurer: Sid Leibovich  
Business Manager: Art McGarr  
Athletic Manager: Bob Juola  
Activities Chairman: Dick Norman

Social Chairman: no candidate  
Representative-at-large: Chuck Brook, John Kessler

Secretary of the Board of Control: Carl Hamilton

## Seven Houses To Elect An IHC President

A president of next year's seven-house Interhouse Committee will be elected by House members in voting to be held at the same time as the ASCIT elections.

This new revision of the IHC structure is a result of a resolution passed Tuesday by the present IHC: "Members of the Student Houses (this year including those who have signed up for the new Houses) will elect at large a president of the Interhouse Committee. Voting will be held before regular House elections, and will preclude the winner from holding his House's presidency or vice-presidency."

The IHC is made up of the presidents and veeps from the Houses. Previous IHC presidents have been selected by the committee itself from its own membership.

All juniors in the Student Houses (as defined in the resolution) are eligible for the new office. Prospective candidates should submit their name to Doug MacLane in Fleming before Sunday.

### Tech Sponsors Debate Tonight

All ASCIT candidates will participate in a debate and general free-for-all on election issues tonight after dinner in Throop Club.

Tom Jovin, ASCIT president, will be master of ceremonies.

Additional nominations should be submitted in writing to ASCIT president Tom Jovin.

Candidates will speak in the Student Houses and Throop Club next Tuesday, Wednesday and Thursday. Next Thursday's issue of the California Tech will carry 100-word campaign statements from all nominees.

### RALLY FEB. 23

The election rally, directed by Frank Greenman, will be Monday, February 23, 7:30 p.m., in Culbertson.

Also on the ballot at the ASCIT election will be a proposal to amend the by-laws to permit members of the Board of Control to serve more than one term. As summarized in last week's California Tech, the chief argument in favor of the amendment is that the present one-term restriction prevents experienced members from being re-elected.

The original reason for the restriction was to allow more people a chance to work on the BOC. The question now is, whether the work of the BOC is not of such importance that the re-election of the most capable members should take precedence over giving lots of people experience.

Also the voters must consider a resolution putting the Caltech undergraduate student body on record as opposing the loyalty oath required in the National Defense Education Act and urging the passage of the Kennedy-Clark bill. If a majority favor the resolution, a copy of it, together with the number of pro-and-con votes, will be sent to congressional leaders.

## Winter Dance Set For Beverly Hilton

The ASCIT Winter Dance will be held in the Codoro Room of the Beverly Hilton Hotel Saturday, February 20, at 9:00 p.m. Music will be provided by Hal Loman's band; as to other entertainment, hope springs eternal in Ken Casey's breast.

Dress for the dance will be semi-formal, and the cost per couple will be \$0.00.

## Letter To The Editor

## Thomas (Cat) Haunts Houses

Editor, The California Tech:

This communication contains important matters about a new part-time resident of the Student Houses, whose name is Thomas.

Thomas, a rather hairy orange and white ex-tomcat, is also a part-time resident at 1371 San Pasqual St., Pasadena. I, his nominal owner, believe that he is privileged to live wherever he damn pleases, but would like it on record that, in case of emergency, he does have another home (phone SY. 6-2124), which is prepared to pay vet bills or provide decent burial.



For your information, Thomas is a native of Washington, D.C. He was presented to the undersigned in 1954 by an Army col-

onel who found him as an infant on the grounds of the Soldiers' Home. The colonel claimed he was a female. On bathing the beast in the washbowl, I discovered the truth: hence the name. In 1956 he moved, via Slick Airways, to Houston, Texas, where he learned to kill rattlesnakes. In 1959 he came here by air. Corporations paid both bills.

Even as cats go, Thomas is an independent thinker. Caution is in order if anyone wants to bathe him: he is quite capable of

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Editorial

New Houses

This week we are seeing the beginnings of a project Caltech has been looking forward to for many years—the organization of three new Student Houses.

It's very encouraging to see the enthusiasm with which new House members are attacking the problems that are facing them. Barely hours after the memberships of the new Houses were determined, efforts were being made to get things under-way.

But in the frenzy to be first with the best House, these organizers must be sure not to overlook a few less-tangible questions than officers and constitutions.

What should a Student House be for? First, it's a place for students to eat and sleep. But then what? Does academic activity come next? If it does, how can a House best be made a place conducive to learning?

President DuBridge, speaking in Ricketts Monday night, again brought up a point that we've heard him make several times. The Student Houses are ideally suited to play a very real part in a Tech man's education. DuBridge, and many others, believe that the Houses are not now living up to their potential in this area.

Is he right? What can be done in the new Houses, and in the old ones, to make them better places not only to study, but also where, as DuBridge says, "the spark of learning might be lit," instead of extinguished.

New House members seem to be assuming that they want a House organization and government basically the same as that of the present Houses. Once we have decided what a House is for, then we have to ask if the traditional House organizations are suitable to the purposes we've set forth.

One of the first aims of the new organizers seems to be to write a constitution. Is this necessary? Blacker House hasn't had a constitution for 30 years, and none of the other Houses really pay much attention to theirs.

Are the Upperclass Committees effective or even useful? If not, what, if anything, should take their place?

How are Interhouse athletics going to be handled next year?

These are the types of questions that should be discussed before, and during, the struggle for House office.

—cm

Beaver Basketball

Last Saturday night we had nothing better to do, so we went to the Caltech-Pomona basketball game. The games have been far better than average all year, but Saturday's pair were the best we've seen.

The frosh team looked great. Bopp, Perlman, Barker, Anderson and Fischer are the basis for what is undoubtedly the best frosh squad to represent this school in years. (And here's hoping that they'll be representing us for another three.)

The varsity team was no disappointment, either. They played good, tight ball and deserved their victory.

As the scores (80-75 and 71-70) indicate, both Pomona teams supplied good competition, too.

Even the refereeing was an improvement over the miserable jobs we've seen in a couple of other recent games.

An outstanding addition to all of Tech's games has been Sajdera and the band. They add a real professional touch to the proceedings.

All in all, it was an evening well spent.

Administration Opposes Disclaimer Affidavit; Two California Congressmen Take Stands

On January 25, the ASCIT Board of Directors passed a resolution condemning the disclaimer oath of the National Defense Education Act. A letter explaining this action was sent to United States Senators and Representatives and to several members of the Caltech administration. They were asked to make a statement of their stand on the issue.

So far the following replies have been received:

DR. L. A. DU BRIDGE

"My own opinion is in full agreement with the statement adopted by your Board. I believe that the requirement of a belief affidavit (as distinct from the loyalty oath) is unnecessary, detrimental, and carries an improper implication that students are more likely than others to be disloyal.

"The California Institute of Technology, as a member of the Association of American Universities, has joined in endorsing the statement of the President of the United States, and many others, that his provision should be deleted from the National Defense Education Act, as provided, for example, in the Kennedy-Clark Bill.

"The question as to whether personal opinions of members of the administration and faculty should result in the Institute's declining to receive and administer loan funds under the NDEA has been carefully considered. After discussion, the Board of Trustees voted that the Institute should not decline to accept and administer federal loan funds, thereby depriving students of these loan funds, since some students who need the money might have no objection to signing the required affidavit. The administration and Trustees feel that this is a matter for each student to decide for himself, and that the Institute should impose no barrier to its students in securing federal loan funds under the conditions required by the Congress. However, an important reason why this decision could be taken was that private funds are available to the students of the California Institute for those who prefer not to sign the affidavit. The Institute has followed the traditional policy of leaving autonomy in the hands of the students, and of giving each student the option of receiving a loan from the Federal Government under favorable terms, for which he must sign an affidavit, or of receiving a private loan for which no loyalty oath or affidavit is required.

"Although I hope the present affidavit requirement is deleted, I think we should all realize that when Congress makes available subsidies to individuals, groups, or institutions, we should not be surprised if the Congress also attaches provisions to such subsidies which may frequently be distasteful to many people. When the Congress is dispensing public money, it feels that it has the right to attach conditions upon those who benefit from such moneys. This is one reason why educational institutions have regarded further federal subsidies with apprehension, and many are proceeding with great caution in advocating or approving additional federal support of education."

Sincerely  
L. A. DuBridge

MR. PAUL C. EATON,  
DEAN OF STUDENTS

"Your letter of 26 January, 1960, carrying the resolution on the disclaimer affidavit required in section 1001(f) of the National Defense Education Act of 1958 passed by the Board of Directors of ASCIT asks for a statement of my 'stand on this issue.'"

"In my opinion this requirement is selective, discrimina-

tory, and meaningless, and it should therefore be removed. Pending such removal, however, I do not feel that the California Institute would be justified in depriving accessibility to these funds to such students as have no reluctance to execute the affidavit."

Very truly yours  
P. C. Eaton  
(Continued on page 4)

Jovin Takes A Look At ASCIT's Future

BY TOM JOVIN  
ASCIT President

The purpose of this article is not to recapitulate a year of ASCIT operation but to provide some basis for future thinking. Particularly at this point of undergraduate history, we are faced with the necessity of carefully defining what might be termed a "philosophy of student activity."

Upon assuming office in 1959, I had the following objectives in mind for my period of administration:

- (1) Streamline the operation of greater emphasis on over-all the ASCIT machine, placing efficiency and individual effort.
- (2) Reduce formality of meetings and in general make ASCIT more approachable.
- (3) Enlarge the scope of student concern and action, particularly with regard to national

and international affairs and the educational process at Caltech.

In retrospect, the past year of ASCIT government has to some extent achieved these desired ends. Undeniably, though, problems remain and will even gain in complexity as a greater percentage of the student body resides on campus.

Considerable controversy has always raged over the actual and intended functions of the various ASCIT committees. In particular, the Board of Directors faces periodic charges of assuming excessive importance and responsibility. This may, in fact, be true. Yet the experience gained in two years of office has led me to believe that the delegation of responsibility — with regard to administrative duties — is an extremely difficult matter at Caltech. Justi-

(Continued on page 3)

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Appointments for interviews on Wednesday, February 17, can be arranged through the Student Placement Center.

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### The California Tech

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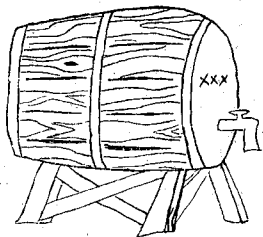
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# BrEw/Ly



BY JOHN BERRY

This last summer I worked with a research fellow in Biology who made good home-brew beer. I sampled the product from three different batches, and they were all three much better than the average of California brands.

Naturally I inquired about how he had gotten started and, lo and behold, it was by asking that same question of a research fellow he'd worked for as an undergraduate. Back in the mists of antiquity and/or iniquity someone wrote a paper, entitled, "The Compleat Brewer." And L was allowed to make a copy of my boss' copy.

Since homebrew is a folk art which is spreading only slowly, despite its obvious practicality, I conclude that this is because so little is generally known of it. And so I can do a service to collegiate humanity, and a disservice to brewers, by running a series of columns on the fine art of do-it-yourself brewing. Forthwith therefore, to-wit:

## THE COMPLEAT BREWER (PART I)

N.b., either making it or drinking it has got to be a hobby, or it is too damn much work.

Equipment — The following

gear is required of the compleat brewer: (Except you may eliminate the crock if you can keep the family out of the bath tub that long).

Cost	Item
\$5.00	8-gallon earthenware crock
1.50	beer hydrometer
.30	5 feet of siphon hose
4.00	beer capper
1.25	bottle filler (optional)
<b>Ingredients</b>	
\$ .75	5 lbs. corn sugar (alternately regular sugar; not as satisfactory) 100-lb. bag will cut this cost in half.
.85	3-lb can of hops flavored <b>Blue Ribbon</b> Malt. ("Berg's Malt and Acme Malt in my experience have not proven satisfactory.)
.04	Yeast: Fleishmann's dry pack
.40	1 gross bottle caps

(Brewfly's note: The first 8 gallons cost \$15.59, which is a price that is very competitive with a pony keg of good beer, Michelob for instance. Any batch after that gives you 8 gallons for \$2.04, which price speaks for itself as a bargain.)

Next Week: Part II

# Jovin And ASCIT

(Continued from page 2)

ably so, it might be added, since virtually all Caltech students demic responsibility at some time or the other.

It is necessary, then, to make a clear distinction between administrative and "deliberative" offices. The one implies execution of policy, the second determination of the same. Hence the duties of BOD officers are clearly defined and should be discharged primarily **outside** of meetings. The weekly sessions should serve as opportunities to elicit and voice student sentiments and demands in order to pass them on to the proper quarters. The Executive Committee and Educational Policies Committee, free from administrative preoccupations, are additional organs of student opinion and action.

The above sketch assumes two preconditions: (a) the elected officers are able and willing to work, and (b) the student body at large is ready and willing to supply the interest and participation in its corporate affairs.

I do not wish to dismiss the latter point with a wave of the hand and a muttered apathy. Our students are not necessarily apathetic, but are in the main caught in the time-consuming whirlwind of Caltech-centered activity. The issue at hand is then whether student outlook and concern can be more profitably reoriented.

Recent excursions into the realms of the loyalty oath controversy and (soon) overseas assistance are, perhaps, steps in the right direction. But unless ideas are freely discussed and

acted upon, we shall remain suspended in a vacuum. Somehow it appeared enormously incongruous to me for the BOD to feel the necessity of passing the following resolution (by a vote of 3-2-4!) on January 25—night of the NDEA disclaimer oath discussion: **RESOLVED**, That the Board of Directors has the right, under the By-Laws, to issue public statements on any matter of policy which it deems proper (speaking only as a Board, not for the student body)." To deny elected representatives the right to act upon informed conviction is to subvert the intent of responsible government. Yet students at this meeting vigorously defended the proposition that the BOD must never make policy statements since it could not be assumed of majority support on controversial issues!

Last year, I claimed that ASCIT could never find any justification in the fact of its existence. Its value derives solely from how effectively it tenders to certain physical needs of students and, more importantly, how well it stimulates their concern in vital areas of factual and non-factual (see Al Green's editorial in the February 2 Y's Beaver) truth.

In conclusion, let me urge that students carefully evaluate the candidates in the forthcoming election not merely on the basis of superficial appearance and aptitude, but also with regard to conviction and purpose. And on a less somber note, let me thank my fellow officers and innumerable fellow students for their aid and support over the past year.

# Visiting Prof Allen To Offer Huntington Culture Course

BY ARAM MEKJIAN

LITERATURE AND ART

The former chairman of the English Department of Williams College, Dr. Robert Allen, will offer a course next term in "Literature and Art in England during the Eighteenth Century." An invitation by Hallet Smith and the proximity of the resources of the Huntington Library brought Allen to Caltech as a visiting professor at the beginning of the 59-60 year. Although English Literature, as expressed in the eighteenth century, is his specialty, this type, of course, will be new to him.

The main purpose of the course, which will be offered to about 10 seniors, is to see how literature and art were related in the minds of writers and artists. Beginning with a quick look at the visible background of the people for whom eighteenth century poems plays and novels were written, it will then consider the relation between these physical objects and the literature which was read during this "Age of Rationalism." Finally, the aesthetic theory behind any existing relationships

of this sort will be carefully analyzed.

The primary reason for the choice of the eighteenth century over other great ages of literature and art is Allen's competence in this particular period—he has written one book and several articles concerned with the era. Secondly, the relation between the arts during this period is more visible than at other times; the artists and poets of the century were conscious of the relationship between the "sister arts," and expressed it in their works.

(Continued on page 8)

## The whole is equal to the sum of its parts

(But some of its parts are more equal than others!)



Even Euclid had to admit...

## It's what's up front that counts

Euclid proved that a straight line is the shortest distance between two points. And if you'll walk a straight line to the nearest pack of Winstons, you'll find it the shortest distance to a really enjoyable smoke. It's the tobacco up front that makes

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Question Period

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

by griffen



The wind rustles joyfully merry song of spring; Robin through the trees, singing a Redbreast patiently waits for his prey, Willy Worm, to appear early in the dewy morning so that he can destroy him, picking his soft body to shreds with his powerful bill; Alan Tobias lies on his enormous hand-carved double bed in the Presidential Suite contemplating the beautiful annihilation of the Italian nation as embodied in the greasy, swarthy, foul Arturo Rubino.

Meanwhile, the impoverished, struggling immigrant's son had taken a dime from his Bank of America Christmas Plan and called the beautiful, sensuous Melinda Lee, little knowing of her torrid affair with his hated rival. Still believing her innocence preserved, he made a date to go to his favorite night spot, quiet, romantic El Monte Legion Stadium, followed by the checkered tablecloths and low-burning candles of Roma Gardens. He would woo her with soft music and the stimulating effects of his native dishes. He would show his love how wonderful life could be . . .

And the scene shifts to insville, where all the cats are jump-in' and jivin' to Jerry Lee and Fabian and Paul Anka and the boys and the music is loud and really swingin' and Dick Clark is handin' out free advice between numbers and Rubino is in heaven with his little teen angel . . . yes, yes, reality exists; yes, yes, and the skirts are flip-flappin' and the white bucks are clip-cloppin' . . . endsville . . . clopsville . . . swishville . . .

Melinda Lee smiled a big come-on to the naive Arturo and he gasped slightly at the impossibilities that he fleetingly envisioned. Oh, love is grand, but he dared not touch her for fear of breaking the spell. The music started again and the dancers whirled across the floor and Rubino grew dizzy from the excitement and the thought of what was to come. He perspired heavily as he led her out the door and into the fresh night air. Standing there in the parking lot under the star-filled sky, Rubino realized the greater meaning of the universe . . . truth and justice and the right of the common man to attain happiness all become known to him in an instant of revelation. He looked deeply into Melinda's eyes. He knew that she knew that he knew. There was communication between them; mankind would rejoice from this union . . . He bent toward her, enveloping her frail body in his gentle arms. He could feel her

warm breath against his lips . . . his heart was pounding in his ears . . . his life flashed before him . . .

He felt a firm tap on his right shoulder. As he turned, he turned, he caught the full force of a large heavy object across the side of his head — he saw Tobias standing next to Melinda Lee; she was kissing him passionately. Then he fell to the ground and the feet were kicking him and the chains were breaking his bones and there were so many feet and so many chains and the blood was coming into his mouth and the night closed in . . .

Next week: Will Rubino live? Will Justice find Melinda Lee? Will Tobias be drafted?

## Administration, Congressmen On Loyalty Oaths

(Continued from page 2)

THOMAS H. KUCHEL  
U.S. SENATE

Thank you for your letter of January 26, advising me of the position of your Board of Directors with regard to the loyalty and allegiance requirements of the National Defense Education Act.

As you no doubt know, a measure to repeal this provision was debated at length in the Senate last year. I voted for repeal, but the final action was to recommit the bill to the Labor and Public Welfare Committee for further study.

Senator Kennedy recently introduced a new bill, S. 2929, and, when it comes up for action on the Senate floor, I will continue to support the proposal to repeal this section. I am glad to have heard from your organization on the matter.

With best wishes,

Sincerely yours  
Thomas H. Kuchel

H. ALLEN SMITH  
HOUSE OF REPRESENTATIVES

Upon my return to Washington, I have read your letter of January 26, wherein you request a statement of my stand on the disclaimer affidavit required in the National Defense Education Act.

Although I am not so naive as to think that these loyalty oath provisions are the salvation of Americanism, I do feel that they are at least a "link in the chain to preserve America." I, for one, am willing to take a loyalty oath any time, at any place. It is difficult for me to see how students can be appropriately instructed in patriotism if our own schools and teachers criticize and oppose these provisions. I am concerned that so many fine institutions and individuals have lent their prestige to the movement backing repeal of the loyalty oath provision.

Very truly yours  
H. Allen Smith

GEORGE GREEN,  
VICE-PRESIDENT FOR  
BUSINESS AFFAIRS

"I appreciate receiving your letter of January 26, 1960, transmitting the ASCIT resolution regarding the disclaimer affidavit. The student officers' action is certainly a sound one and you are to be congratulated.

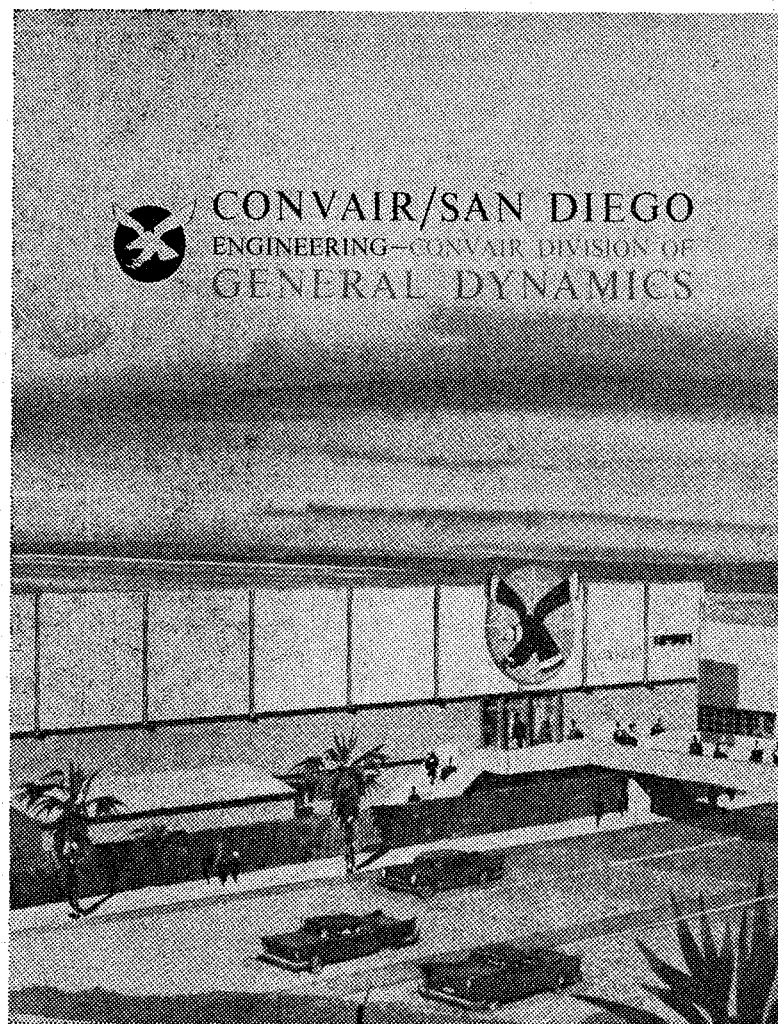
"President DuBridge, in his reply to you on January 29, 1960, very clearly sets forth the Institute's position on this matter and all of us are in agreement with the action taken by the Board of Trustees."

Very truly yours  
G. W. Green

Edwin Pearl Presents  
SISTER BESSIE GRIFFIN  
and  
The GOSPEL PEARLS  
plus  
Rakhel Hadass

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### INTERVIEWS AT CALTECH

Monday & Tuesday, February 15 & 16

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# AUFS Expert Lawrence Olson Discusses Contemporary Japan

BY MATT COUCH

Reflecting on the recent reports from Japan about left wing students participating in various riots, demonstrations, public urinations, and so forth, Lawrence Olson, visiting member of the American Universities Field Staff, stresses the view that the only chance these students have to "sow their intellectual wild oats" is in college.

He explains that the burgeoning population of Japan and the consequent pressure of competition for jobs makes it almost imperative that graduating students conform to the usually conservative views of businessmen who offer the jobs. As a result, expression of liberal and radical views is mostly confined to the college years. This accounts for the somewhat over-zealous political actions of many Japanese students.

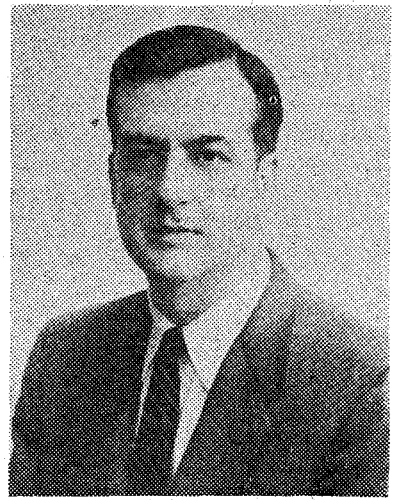
Olson describes the average Japanese as industrious, alert, thrifty, and friendly, though he adds that they are often inclined to repress their feelings about many matters.

The current economic trend in Japan, states Olson, tends to favor the national interests of the country over those of the manufacturers and businessmen. For example, the Japanese government is trying to control that old bugaboo of producing inexpensive copies of foreign products. Another example of an economic policy which favors the Japanese national interest is the idea of setting quotas on certain exports. This is entirely voluntary at present.

Olson suggests that Japanese economic growth might be better advanced by more thorough application of modern business techniques. Instead of manufacturing products which are in di-

rect competition with those of the domestic producers in foreign countries. Japanese businessmen could seek new possibilities for products. Further growth of Japanese trade could be fostered by more extensive analysis of foreign markets and the application of modern advertising techniques.

Considering the events of World War II, one can easily



Lawrence Olson

understand the very sensitive attitude of Japan toward cold war politics. At present, Japan is a close member of the United States' political sphere in international relations. Olson sees Japan as most desirous of reducing this dependence on the U.S., but feels that what Japan is striving for is political isolation. That is, Japan would not contemplate moving into the Communist sphere unless forced by severe economic pressures.

Olson makes an interesting and rather ironical comment about the 1960 attitude of the residents of Hiroshima and Nagasaki toward the World War II atomic bombings. It seems that the residents of Nagasaki feel that Hiroshima gets the most publicity when the bombings are mentioned. They want equal mention. Olson stresses, though, that the underlying terror of the Japanese regarding atomic war has not lessened much in 15 years.

Olson will end his Caltech visit next Wednesday, February 17. The schedule of his remaining campus activities follows:

This afternoon, at 2:45 p.m., he will attend a Westridge School

current events class, speaking on "The New Life in Japan." This evening he will have dinner at the home of Dr. and Mrs. Milton Plesset.

Olson will spend the week end in Santa Barbara. He will return to Pasadena Monday afternoon. Monday evening he has scheduled a YMCA-sponsored graduate dinner and discussion.

Tuesday, Olson will attend the 11 a.m. H 5 class in 206 Dabney, discussing "Japan — Foreign Policy Issues." He will have lunch with the H 5 staff and dinner at the home of Dr. and Mrs. Peter Fay. At 8 p.m. he will speak to the H 124 class on "Can Japan Maintain a Democratic System?"

Next Wednesday Olson will attend the Geology Club box lunch at noon in 151 Arms. Wednesday evening he will have dinner at the home of Dr. and Mrs. F. C. Lindvall.

Olson is staying in Ricketts House guest suite.

## IRE/AIEE To Meet Next Tuesday

The Joint Student Branch of Tech's IRE/AIEE is meeting next Tuesday, February 16, in 155 Arms.

Double-Es and other curious people are invited to hear Mr. R. W. Rutishauser discuss "The Digital-Analog Computer." This system is said to combine the accuracy of digital computers with the operation ease of analog machines. Rutishauser is a Tech graduate now working for Litton Industries.

## Cat . . .

(Continued from page 1) climbing straight up a tile wall and lacerating the hell out of any people in the way. He is fond of bulldozers and contemptuous of traffic. He will probably someday get mashed by a truck on San Pasqual Street.

If this, or injury, should happen, I would appreciate being notified, because he is one of the few remaining holdouts against the World of Conformity (whether or not a bum), and for this deserves respect.

Very truly yours,  
Lawrence Fleming

## Nerves, Computers Related

Today marks the end of a four-day conference on Cerebral Systems and Computer Logic sponsored jointly by Caltech and the Rockefeller Foundation. Topics which the conference has covered are Vision and Pattern Recognition, Audition and Phonetic Recognition, and the Physiology

of Neurons, Models of the Neuron and Neural Circuits.

Today's session, though closed to students, is open to members of the faculty and Industrial Associate companies, and will include a summary of the previous discussions.

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## \$800,000 Grant

# National Health Institutes Aid Psychobiologists

The Caltech psychobiology program has received an \$800,000 boost from the National Institutes of Health for a seven-year project in brain research.

Dr. Robert W. Sperry, chief investigator of the project and Hixon professor of psychobiology, announced that \$823,449 sum will be used to continue studies of brain mechanisms and the biological basis of mind and behavior.

An important recent achievement of the psychobiology group has been the development of the twin-brain preparation. This involves permanent separation by delicate surgery under a microscope of right and left hemispheres of the brain. After the operation, each brain-half a complete mirror-image of the other, continues its regular function and the animals are indistinguishable from normal in all ordinary circumstances.

However, through the use of special training methods by which one side of the brain can be trained independently of the other, it has been possible to show that each of the twin hemispheres thereafter retains its own separate learning and memory processes. Neither hemisphere of the brain knows what the other is doing.

A twin-brain monkey, for example, can't remember with one half anything learned by the other half. Conflicting habits can be trained concurrently through the separate eyes with no interference. Similar separation and absence of transfer applies to habits learned with right and left hands.

Other work of the group is aimed at analyzing the neural basis of the conditioned reflex (which for half a century has persistently resisted explanation); seeking to learn whether fears and neuroses can be implanted in one hemisphere leaving the other normal; and attempting to localize memory traces in the brain.

Earlier work by Dr. Sperry was largely responsible for overthrow of the plasticity doctrine of central nervous organization that prevailed through the 1920s and '30s. This theory held that the function of nerves or muscles inactivated by disease or injuries could be readily restored by surgical substitution of remaining healthy nerves or mus-

cles. However, Dr. Sperry's experiments showed that the nervous systems of all species contain a large background of built-in inherited organization that is relatively fixed and resistant to any radical readjustment as, for example, that often demanded by surgical transplantation of nerves, muscles or sense organs.

His studies are known also for demonstrating that the cells and fiber units of the brain possess an extremely elaborate chemical specificity, and that this is of paramount importance in the development patterning of the brain pathways.

This led to a new view of the nervous system described by Dr. Sperry in which the nerve networks of each species are believed to be determined by biochemical, gene-controlled processes during growth of the embryo. By way of illustration, he said that in embryonic growth each spot on the skin develops a unique chemical makeup which in turn stamps a specific chemical flavor upon its nerve endings. This chemistry spreads along the nerve fibers into the spinal cord and brain and regulates the central hookups that permit us to distinguish different points in the skin and to locate them accurately.

## Glee Club

(Continued from page 1)

motion.

Special musical arrangements of the program numbers are being done especially for the Caltech Glee Club by Robert Lynn; a special rehearsal, for which Dr. Hirt will fly down from Squaw Valley, is planned for Sunday, February 21.

Travel arrangements are not yet complete, but tentatively the group will leave Caltech on Friday, February 26, rehearse at Squaw Valley on the 27th, sing for the closing program on the 28th, and return to Pasadena.

The closing ceremonies will be covered by all TV networks, and international newsreel coverage is also planned. Approximately \$128,000 has been spent on the acoustical system for the entertainment.

## Interview Sked

Thurs., 11—North American.

Fri., 12—NAA, Ingersoll-Rand Argonne.

Mon., 15—Bell Helicopter, Li brascope, Pan-American Petroleum, Convair/San Diego

Tues., 16—Convair/San Diego, GE, Mitre, Army Missile, Sperry-Rand.

Wed., 17—Martin / Denver, Electro-Optical, Allis-Chalmers, JPL.

Thurs., 18—JPL, Telemeter Magnetics, Borg - Warner, Neff, Los Alamos Lab.

## Announcements

### MODERN ART

Tom Leavitt, head of the Pasadena Art Museum, will speak in 206 Dabney Thursday night at 7:30. His talk, "Current Trends in American Painting," will be about appreciation of modern art.

### CHAMBER MUSIC

The McKay Ensemble will give a chamber music concert Sunday night at 8:15 in the Dabney Hall Lounge.

### PRE-REGISTRATION

Pre-registration will be the last part of next week. Filling out cards is fun.

### YMCA PLANS

The YMCA Folk dancing class meets Sunday at 7:00 p.m. in Culbertson Hall. The Folk Singing groups meet on Wednesday and Thursday evenings.

### BIG Ts

Copies of the 1959 edition of the Big T are still available from Craig Brosi, 53 Blacker, and in the book store.

## ENGINEERS MATHEMATICIANS PHYSICISTS Ph.D., M.S., B.S.

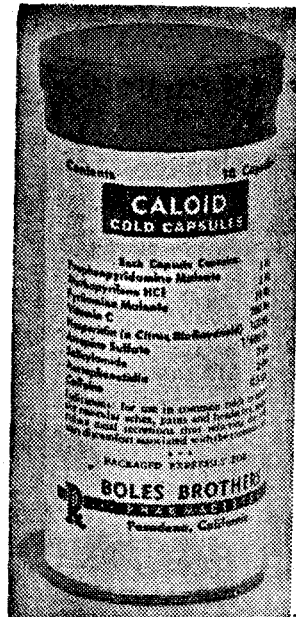
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Fifth Column

# Fifth Article In BOC Series Gives Typical Cases

BY BRAD EFRON

Letters have been pouring into the Fifth Column, expressing disappointment over the recent BOC series in the California Tech:

Dear Mr. V:

I have written Pope John, Mr. Nixon, and my section leader. Now I turn to you in desperation. What's with this BOC krap in the paper? Let's have more real cases and less talk, talk, talk.

I think your columns are in poor taste.

Yours  
Parapalegic

By happy coincidence, Parapaleg, your letter has arrived simultaneously with my discovering a cache of recent BOC cases (in a hollow tree stump by the Olive Walk). Respect for the privacy of the individuals involved precludes publishing the majority of them at this time, but perhaps I can satisfy your healthy curiosity with the following tid-bits:

CASE 112-31-6001A,  
NOVEMBER 3, 1959

Doug MacL— (incidentally, a House president at the time) was observed using harsh language on an institute employee who had inadvertently cut him down with a sidewalk cleaning machine.

Fortunately, an alert BOC member was on hand. A quick blast of his pea-whistle summoned the entire Board, who began the hearing immediately. Three minutes later the defendant was found guilty of Poor Attitude and expelled from school (with full loss of student shop privileges).

In fairness to Mr. MacL, it was decided to postpone administering the punishment until he was ejected from the sidewalk cleaner. This had not yet occurred as we went to press.

CASE 475-38-5491,  
NOVEMBER 6, 1959

Acting on information gained through its paid stoolies, BOC members converged on the West Bridge basement men's toilet. Cowering inside, apparently asleep, was Doug Sha—. A careful survey of the premises re-

vealed this small (but definitely legible) motto on the north wall: "Really care about loyalty oaths."

It was pointed out that the inscription was in pencil, while Sha— was carrying only a large box of crayons. However, in cases for Siding With The Public, only one vote is required to convict. A unique punishment was soon arrived upon (it later went on to win the punishment-of-the-week award): Sha— will spend six months of each year for the next 10 years living in Fleming House. During these periods he will wear a large sign labeled "Bohunk," and bring his parents and sweetheart to every meal.

CASE 921-39-9552M,  
NOVEMBER 9, 1959

Dav Kub— was brought before the Board, meeting for conveni-

ence in the Pentagon. On the previous Tuesday, November 5, Kub— had been observed skulking about a newly completed office building in Pasadena. Later that evening the entire building disappeared, leaving only the office equipment strewn about the sidewalk.

Arriving at Kub—'s apartment, Pasadena police found a cornice secured under the bed. Becoming suspicious, they decided to await the occupant's return to the room. Fifteen minutes later, Kub— unsuspectingly entered, carrying an Own-Your-Own Apartment and an Orange Julius stand. A stern talking-to by the officer in charge seemed to accomplish little, and the case was turned over to the BOC.

Hours before the Pentagon meeting, Kub— was found guilty

and expelled from Caltech. During the meeting, however, an attempt was made to convince the defendant that he was fully exonerated. He should not discover the actual situation until his "graduation."

## Arts, Crafts Show Set For Mid-March

All Caltech personnel have been invited to participate in the Caltech Arts, Crafts and Hobby Show on March 16, 17 and 18. Displays of paintings, sculptures, leather work, photography, metal work, stamp collections or any other interesting hobby will be accepted from faculty, employees and students.

Show chairman R. E. Barnes announced that entry forms much be submitted to the Personnel Office by March 10.

Displays will be assembled on March 15. The event is sponsored by the Personnel Office and the Women's Club, with the Woman's Club supplying refreshments during the show.

## Two Geologists Leave Tech

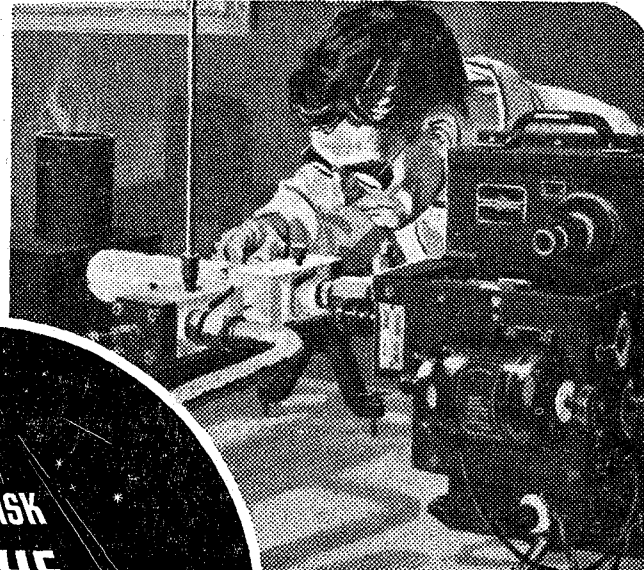
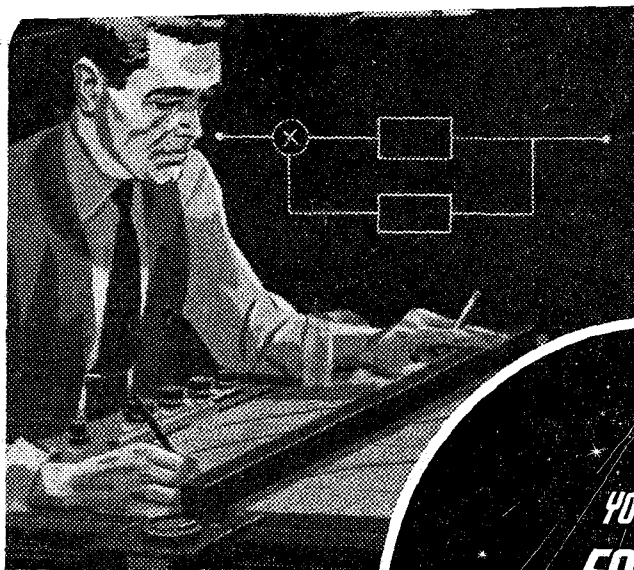
The resignations of two of the senior members of the Geology Division faculty have been accepted recently. Dr. Ian Campbell, Professor of Geology and Executive Officer of the Division of the Geological Sciences, has been absent from the Institute on a year's leave of absence. He submitted his permanent res-

(Continued on page 8)



Doc Jahns

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## Chess Club Swings Along

The Caltech Chess Club sprang into existence last week with a pulsating, action-packed meeting. When all five potential members had been crowded into the room, two vital issues were debated. As a result, it was determined to have weekly chess sessions on Friday evenings in Ricketts dining room and to try to establish a rating system.

Current ratings are as follows: Stolarsky 1050, Slobko 1005, Despain 1000, Hirst 1000, Walshovich 945. The next session will be tomorrow night. Beginners are invited, but experts are discouraged — they might win.

## ...THE EXPLORATION OF SPACE

Since its inception nearly 23 years ago, the Jet Propulsion Laboratory has given the free world its first tactical guided missile system, its first earth satellite, and its first lunar probe.

In the future, under the direction of the National Aeronautics and Space Administration, pioneering on the space frontier will advance at an accelerated rate.

The preliminary instrument explorations that have already been made only seem to define how much there is yet to be learned. During the next few years, payloads will become larger, trajectories will become more precise, and distances covered will become greater. Inspections

will be made of the moon and the planets and of the vast distances of interplanetary space; hard and soft landings will be made in preparation for the time when man at last sets foot on new worlds.

In this program, the task of JPL is to gather new information for a better understanding of the World and Universe.

"We do these things because of the unquenchable curiosity of Man. The scientist is continually asking himself questions and then setting out to find the answers. In the course of getting these answers, he has provided practical benefits to man that have sometimes surprised even the scientist."  
"Who can tell what we will find when we get to the planets?"

Who, at this present time, can predict what potential benefits to man exist in this enterprise? No one can say with any accuracy what we will find as we fly farther away from the earth, first with instruments, then with man. It seems to me that we are obligated to do these things, as human beings."  
DR. W. H. PICKERING, Director, JPL

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# Beavers Aim To Cinch Fourth Place Tomorrow

Tomorrow night the Caltech basketball team will try to cinch fourth place in the SCIAC when they play host to Claremont-Harvey Mudd. The Beavers beat the Stags by five points earlier in the season.

Present SCIAC standings show Caltech tied for fourth place with Pomona with a 2-5 conference record, one game ahead of the last-place Claremont crew. Since Pomona and Claremont finish their seasons by playing the top three teams in the league, it is doubtful that they will win any more games, thus giving the Beavers sole posses-

## Frosh Drop Pomona, Aim For Claremont

Pomona was the latest conference victim of the fast-moving Caltech freshman cage squad by an 80-75 count Saturday on the Beaver court. The high-scoring contest was never in doubt as the winners were never behind, with the closest margin at five points in the waning minutes of the game.

Holding an over-all 9-2 mark, the frosh are now 5-2 in league action. Claremont-Harvey Mudd and Cal Poly at Pomona furnish the opposition Friday and Saturday, respectively, in away games. CHM, losers to Pomona twice in loop play, dropped the little Beavers by four points in their only previous meeting in the first conference tilt of the season.

Pete Fischer pumped in 24 points to pace the offense in the Pomona game, the year's top output by a frosh. Connecting for 18 markers in the first half, Fischer couldn't find the range after intermission. The slack was taken up by big Tom Bopp who flipped 13 points through the cords in the final half.

Controlling both boards, the frosh jumped off to a comfortable 42-31 halftime lead, but missed free throws and slowed down off the board in the second

## Sailors Second In Series Meet

The Caltech Sailing Club finished second in a field of five Sunday in a regatta at the Los Angeles Yacht Club. The Beavers defeated Orange Coast J.C. for the first time this year.

Tom Bowman was easily the best skipper at the meet, winning every race in his division. Lowell Clark was the other Beaver skipper.

San Diego College, a new member of the Southern Series—the group of sailing teams to which Caltech belongs — won the regatta with 29 points. The Beavers had 25; Orange Coast, 25; Pomona-Claremont, 23, and Santa Barbara, 18. Caltech was awarded second place on the basis of the fact that they had more first places than Orange Coast.

The next Southern Series regatta will be on February 28, at Newport Beach.

sion of fourth spot if they beat Claremont.

During the past week, the Beavers managed to break even, grabbing an important one-point victory from Pomona on Saturday, then dropping an 80-62 decision to a hot-shooting Cal Western team on Tuesday.

**CAL WESTERN**

A spectacular individual performance by Fred Newman, who scored 32 points, against Cal Western was not enough, as the visitors from San Diego shot a fantastic 65 per cent from the field to down the local varsity. One Cal Western guard, insult-

ingly short at 5'6", tanked nine field goals in a row without a miss, all jump shots from at least 15 feet away.

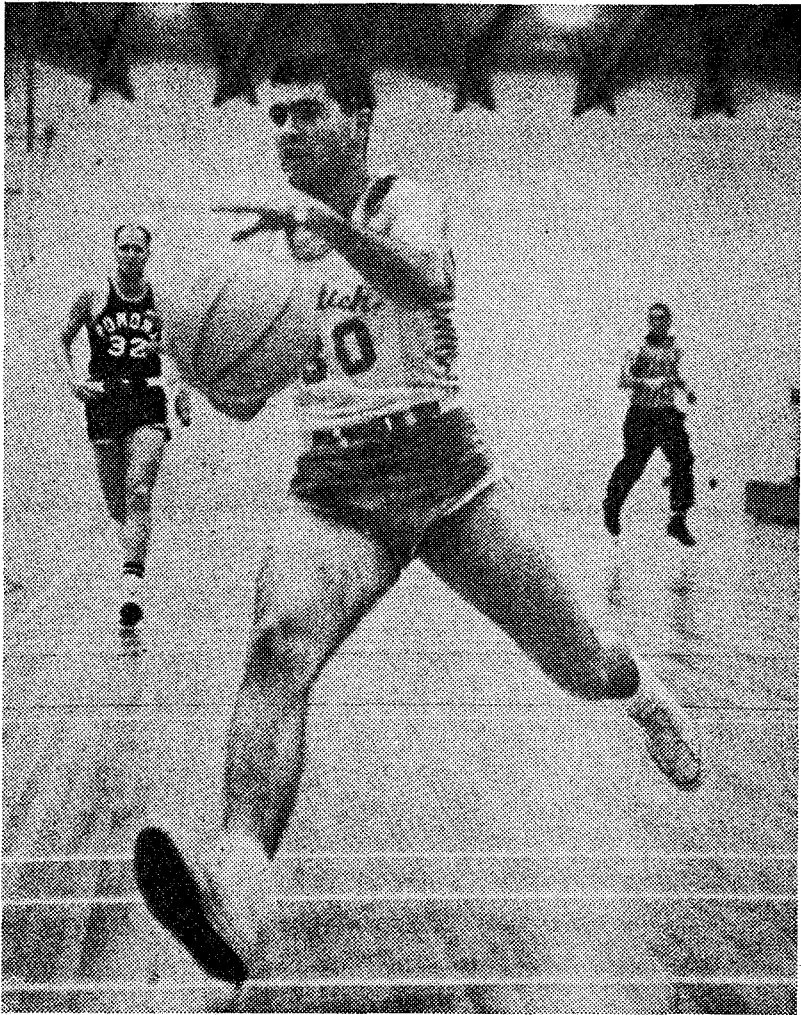
The Beavers stayed even with Cal Western for the first third of the game, but then with about eight minutes left in the half, the Beavers hit a cold streak, allowing the visitors to quickly amass a 10-point lead. At the end of the half the score was 36-24 with Caltech behind. The Beavers missed 13 out of 17 free throws in the first half to account for the Cal Western lead.

In the second half, Cal Western gradually stretched their lead to the winning margin, with the score holding at about a 15-point difference for most of the half. The Beavers never made a serious threat at catching up.

**POMONA**

The Caltech basketball team won a thrilling, squeak-through game Saturday from Pomona, 71-70. The Beavers, behind nearly the entire game, finally pulled

(Continued on page 8)



Dean Gerber, dependable sophomore guard, goes in for lay-up against Pomona. Tech won, 71-70.

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# Krischke Wins Tight Race For '63 President

Ron Krischke was elected frosh class president over Henry Abarbanel Thursday in the final class election this term. Lee Samuelson was elected to the Board of Control over Larry Rabinowitz.

Frosh officers elected in previous votes include Arthur Robinson, vice-president; Warren White, secretary; Jim Sagawa, treasurer, and Lee Samuelson, Board of Control membership.

Frosh officers named in the recent elections will serve until the end of the year.



Ron Krischke

# Pasadena Unit of Understanding Hears of Flight In Space-Craft

Reinhold Schmidt, the Bakersfield grain buyer who reports he has taken several excursions aboard a spacecraft from the Planet Saturn, is scheduled to lecture in Pasadena Thursday night, February 11, if he returns in time from a flight to the Great Pyramid of Gizeh in Egypt.

The speaker, who made nationwide news in November, 1957, with his first extra-terrestrial contact, near Kearny, Neb., will address the Pasadena Unit of Understanding on the topic: "My Recent Trips in Spacecraft." The lecture is slated to begin at 8 p.m. in Odd Fellows Hall, 175 N. Los Robles Ave., Pasadena. It is open to the public on a donation basis.

According to Schmidt, his friends from Saturn promised him a trip early in 1960 to view an ancient spaceship that they have told him is buried beneath the oldest pyramid in Egypt. As of February 1, the promised trip had not yet taken place.

If Schmidt is unable to appear and tell of his successful completion of the adventurous excursion, Daniel W. Fry, El Monte missile expert and National President of Understanding, will be the substitute speaker.

And if the Egyptian trip has not yet taken place, Schmidt will lecture on another recent contact with his outer space friends in which he was escorted to a huge mother ship high above the surface of the earth.

Schmidt also took a trip by spacecraft to the North Pole during 1958. On that occasion he

stated he saw Russian submarines at work mapping the ocean floor in order to build underwater bases from which they could fire missiles to any part of the world without warning. This observation has since been confirmed by U.S. and Canadian Navy reports.

# Culture Course

(Continued from page 3)

The reading in the course will consist of works in which the association among the arts is pronounced and definite. Material will include poems by Dryden (though he is pre-1700), Pope, Thomson, Collins, and Blake and two novels. Naturally, students will be asked to do some critical writing. Supplementing the reading, slides dealing with painting and architecture will be shown. Most important for this part of the program is the Huntington Art Gallery. The gallery offers an opportunity for students to study the graphic arts, particularly in the field of portrait painting.

# Basketball

(Continued from page 7)

it out of the fire, just barely, in the last minute of play.

Behind at the half, 43-38, the Beavers spent almost the entire game trailing the Sagehens by from five to eight points. The local varsity played a smooth game on offense, but could not jell on defense, allowing Pomona to maintain their early game lead.

Then, with about two minutes left to play, the Beavers scored two quick baskets, by Bill Ripka and Fred Newman, to pull within one point of the visitors. Pomona, however, began an effective stall for over a minute, until, with 36 seconds left on the clock, Newman stole the ball. The Beavers' Larry Brown then sank a long set shot to put the Caltech crew ahead by the final score.

Pomona almost took the game back at the end, however. With eight seconds left to play, center Ron Arps grabbed an errant Pomona shot, then turned to call time out. The referee, watching Arps' feet instead of his time eling and gave the ball to Po-out gesture, called Arps for trav-mona. Arps then dropped the

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**"HAPPY ANNIVERSARY"**  
David Niven  
Mitzi Gaynor

# Geologists

(Continued From Page 6)

ignation in January and is now State Mineralogist and Chief of the California Division of Mines.

Soon after the announcement of Dr. Campbell's resignation it was revealed that Dr. Richard H. Jahns, Professor of Geology, had also resigned from the faculty. "Dick" Jahns graduated from Caltech in 1935, and earned his Ph. D. in 1943. He joined the faculty in 1946 and rose to the post of full professor in 1949.

He is Chairman of the Faculty Commission on Physical Education and member of the Committees on Freshman Admissions, Graduate Study, and Student Houses. As a member of the Committee on Freshman Admissions he has interviewed many prospective Caltech freshmen.

Dr. Jahns leaves Caltech in order to become the head of the Department of Earth Sciences of the Pennsylvania State University. He will direct Penn State's Departments of Geology, Geophysics and Geochemistry, and Mineralogy, all of which are ranked among the best in their fields.

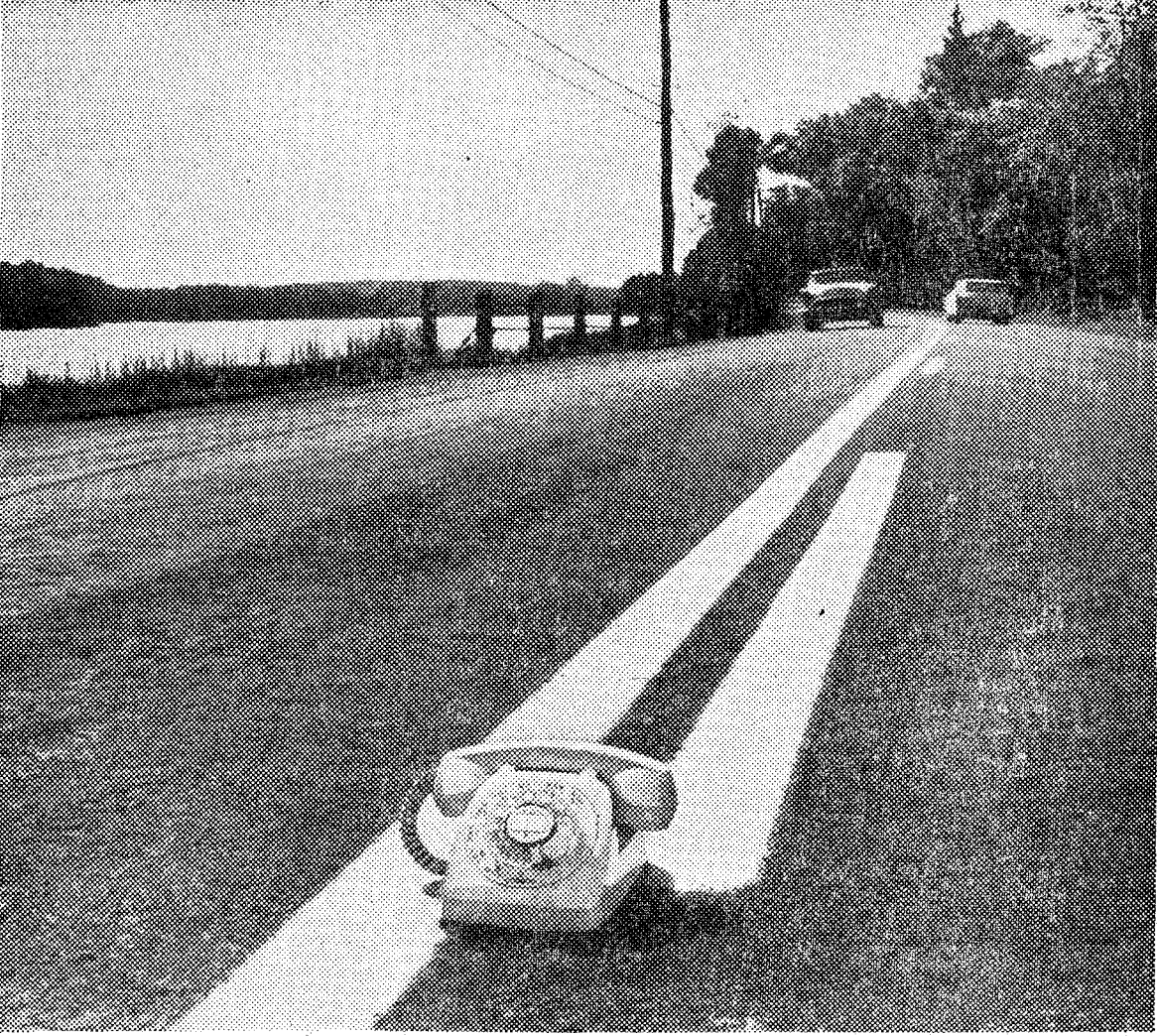
# Engineers Plan Students' Day

If you'd like a free dinner, drop in on IRE Students' Day, Tuesday, March 1. In addition to the dinner, the day will feature speakers and exhibits covering all phases of IRE activity.

The program starts at 12:30 p.m. and will continue through the evening, with dinner at 6:30 (non-student house).

Anyone interested may attend, but "pre-registration" is required before Friday, February 19. Further information and registration blanks may be obtained from Dr. D. G. Dow (Spalding), or from Sam Ginzburg or Ron Kunzleman (Throop Club EEs).

More information can be obtained at the IRE meeting on Tuesday, February 16.



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