# The California Institute of Technology

Volume LXI

Pasadena, California, Thursday, February 25, 1960

#### Number 19

William R. Bauer, Zaidins Win

# Norman Cousins Here Next Week

Norman Cousins, editor of the Saturday Review of Literature and commentator on contemporary affairs, will be on campus next Wednesday, Thursday, and Friday. Cousins comes to Tech as the first visitor in this year's YMCA sponsored Leaders of America program.

Cousins has received wide publicity for his stands in favor of world government and against nuclear tests, and is a leader in World Federalists and the Committee on Sane Nuclear Policy. He has sponsored programs to help victims of the Hiroshima bomb blast and Nazi medical experiments, and has made many earth-spanning trips in support of these and other causes. (For a



Norman Cousins

### Tau Beta Pi Picks 19 New Members

Nineteen men will be initiated into Caltech's chapter of Tau Beta Pi, national engineering and science honor society, Sunday. Ten of the men are seniors, eight are

Norman Cousins, editor of the resume on some of his activities, aturday Review of Literature see article on page 2.)

When Cousins arrives on campus next Wednesday, he will immediately meet with the junior English 7 classes, there to speak on the "Business of Editing a Weekly." This will be at 11 a.m. in 206 Dabney, with Barry Gordon, who is in charge of the visit, to do introductions.

Cousins will speak at noon to the Graduate-Faculty luncheon forum in the Athenaeum. His subject will be "What About Russia?", and he will draw on his experiences of a trip to Russia last summer. He will then meet with the INA at 3 p.m. in the Y lounge, and will eat dinner in Fleming at 6.

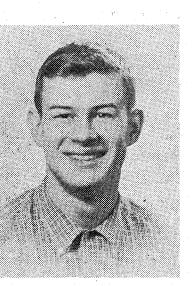
He will give the main address of his visit Wednesday evening at 8:15 in Culbertson Hall on "The Human Situation, 1960." This will be in conjunction with a panel to be moderated by Président L. A. DuBridge.. Other members of the panel will be Professors Robert Bacher, Rodman Paul, and Matthew Sands.

Cousins will give the second major address of his visit Thursday morning at 11 in Dabney Hall Lounge. He will spell out his own personal philosophy, speaking on "What Can a Man Believe?" This will be followed by lunch in Throop club.

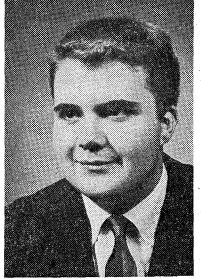
Cousins will have his first set of "office hours" at 3 p.m. Thursday in the Ricketts guest suite. These will give individual students a chance to talk to Cousins about any topic under the sun. He will go from here to 130 Church, where he will meet with Dr. Bures' psychology class. Everyone is invited.

He will have dinner in Dabney House, and then will go to Linus Pauling's home in Altadena to meet interested students. Anybody who wants to attend should see Barry Gordon in Blacker.

Friday noon, Cousins will meet with the grad-sack lunch club in the Y lounge. He will have office hours at 3 p.m., and then close out his visit with another student discussion in the Y lounge.



William R. Bauer



Clyde Zaidins

# On TV Sunday Tech Singers Depart For Olympic Concert

The Glee Club will leave tomorrow for Squaw Valley and its two scheduled appearances at the Winter Olympics.

Sunday afternoon the group will join the United States Marine Corps Band to provide the music for the closing ceremony. The show is slated for coast-tocoast television on NBC and ABC and will appear live in the Los Angeles area at 2:30 p.m. on KNXT, channel 2. It will be recorded by newsreels to be shown in many foreign countries.

The ceremony will include the lowering of the Olympic flag; the dousing of the huge Olympic lamp burning over the games since theey opeend last weekend, and the release of 10,000 balloons bearing messages of peace. THREE SONGS

The Glee club will sing three numbers, all arranged by Robert Linn of the USC music theory department: "Olympic Hymn," "Ode Triumphant" from Brahm's symphony No. 1, and an adaptation of Fred Waring's "No Man is an Island."

Also, either Saturday evening or Sunday morning the group will present a one-hour concert for visiting athletes and spectators. The tentative program will include about 20 numbers from the Glee club's regular repertoire plus vocal solos by tenor Paul Weichsel. The Glee club quartet and a clarinet trio also are slated to entertain.

The Glee club will be wearing its new black blazers and grey slacks uniforms for all appearances.

#### GO BY BUS

The group will travel by chartered bus, arriving in Reno Friday evening. The busses will be met there by the Olmpic committee and taken to Squaw Valley where the singers will be housed with other Olympic par-



ticipants during the three-day stay.

The Glee club received the invitation for the appearances through Dr. Charles Hirt, director of the USC School of Sacred Music and the musical director for the Winter Olympics. Hirt has been a supporter of the Caltech club for many years. The group had originally been scheduled to sing at his church in Hollywood on Sunday.

## Run-Off Today For Secretary

William R. Bauer defeated Cleve Moler in the student body election last Tuesday to become the new ASCIT president. Almost 70% of the Tech undergraduates went to the polls.

Clyde Zaidins was elected vicepresident and chairman of the Board of Control, outpolling Skip Stenbit.

#### PRITCHARD VS. INGBER

The contest for ASCIT secretary will be settled today with Dave Pritchard and Les Ingber meeting in a run-off. Paul Purdom and Pete Lippman were eliminated in Tuesday's voting.

John Golden topped Art Mc-Garr for the business manager post.

Elected in uncontested races Tuesday were:

IHC President: Stan Sajdera

Treasurer: Sid Leibovich

Social Chairman: Tim Litle

Activities Manager: Dick Norman

Athletic Manager: Bob Juola

Representative-at-large: Chuck Brooke

Secretary of the Board of Control: Carl Hamilton

Running unopposed for co-editors of the California Tech were veteran Tech staff members Tom Tisch and John Todoroff. Todoroff has been in charge of the front page this year as news editor and last year he was sports editor. The team will take over the reigns from Moler

Six of the new officers, including both editors of the Tech, will be living in the new Student Houses next year.

the first issue of next term.

#### **RESOLUTIONS PASS**

е

The voters approved an amendment to the ASCIT By-laws which will remove the restriction forbidding Board of Control members from serving more than one term.

Also apprvoed was a resolution putting the Caltech undergraduate body on record opposing the loyalty oath required in the National Defense Education Act and urging the passage of the Kennedy-Clark bill or similar legislation removing the oath restriction. A copy of the resolution, together with the vote—307 pro to 109 con—will be sent to congressional leaders.

juniors and one is a grad student.

Tom Bergstresser, Phil Brooks, John Cooper, Lowell Clark, Kelvin Lee, Ronald Kunzelman, Herm Hartung, Michael Mann, Stephen Stephens and Gustav Wasel are the seniors. Ben Burke, Jerry Kasper, Sid Leibovich, Dave Loebbaka, Dick Norman, Bob Poe, Mike Ruecker and Larry Shampine are the juniors. Roy Sakaida, from the chem engineering department, is the grad student.

All seniors in the top fifth of hte class and all juniors in the top eighth of the class are considered for membership twice each year. The new members are then selected on the basis of scholarship, activities and general character.

# **AUFS Visitor Discusses Africa**

By MATT COUCH

Dr. Edwin S. Munger, member of the American Universities Field Staff currently visiting Tech, poses an interesting question about the movements for independence in the European colonies of Africa. Is it possible that the contact with the colonial powers, and the influence of the United States and other western nations, has caused the Africans to expect too much when they gain independence?

In discusing this question Munger mentions, for example, that it may not be realistic or practical for a small newly independent nation in Africa to set up a

government modeled on the United States. Though the educated African may be able to understand and participate in such a westernized plan, the low literacy rates which exist in many of the newly independent or soon to be independent nations of Africa mean that a small minority will have almost total influence over events in these countries.

Munger cites Nyasaland as a primary example of this state of affairs. There are about 36 college educated Africans in Nyasaland out of a population of several millions. This tiny minority has tremendous influence over the political attitudes and actions of the masses. Munger stresses that this situation is potentially either good or bad, depending on what sort of political attitudes this educated minority develops.

The question just mentioned is just one example of the immensely complex problems which face Africa today. Dr. Munger has a wide knowledge of African affairs and some of the problems he will discuss during his visit on campus are listed in his schedule, which follows:

Today at noon he will attend a Y graduate sack lunch at the (Continued on page 6) Announcements

#### PRE-REGISTRATION

Tomorrow is the last day of pre-registration for third term. Your adviser is waiting for you.

#### SING AND DANCE

Y folk singers meet tonight, 8:00 p.m., in Y Lounge. Y folk dancing class is Sunday, 8:00 p.m., in Culbertson.

#### **ORGAN MUSIC**

Hunter Mead will present another organ concert at his home Sunday, 8:00 p.m.

# **Corporation Officer?**

One of the problems the new ASCIT Board of Directors and, if we're lucky, the student body will soon be considering is the proposal to make the president of the Interhouse Committee a member of the BOD.

There are several reasons why the IHC president should not be made a member of the BOD.

First of all, the IHC president is not a corporation officer. He should therefore not have a seat on the corporation's Board of Directors.

The new Interhouse Committee should have a chance to become a strong, worthwhile group. Its success should not be hampered by having to work through-or even with-the ASCIT Board.

The supporters of the proposal are the people who believe that you have to go through the BOD in order to get anything done around here. In case anybody hadn't noticed, we're opposed to this whole philosophy.

ASCIT represents the students as individuals; IHC represents seven Student Houses. The only area of overlap is the social program. Putting the IHC president on the Board will do nothing towards straightening this out.

And, on top of all this, Sajdera doesn't want the damn job.

# **Cousins:** Talker

The keynote speaker at last November's Associated Collegiate Press convention in New York was a man named Norman Cousins. The same Mr. Cousins arrives on campus in six days for a visit as a YMCA Leader of America.

Cousins has so many titles and accomplishments after his name that it took over 13 minutes to introduce him at the ACP convention. After the marathon tribute, Cousins' first words were, "Now's a good time to be buried." It was the best thing he said all afternoon.

From what we've seen, Cousins' approach to any problem can best be described as emotional. His plea for an Age of World Law brought the convention-with the exception of a few cynical representatives from technical schools-to a standing ovation.

He has some controversial ideas which he presents in an unusual (for Caltech) way; he's worth going to see.

-cm

## Letter To The Editor Chaos Continues

#### Editor, The California Tech

Your paper on the Chaostron by Cadwallader, et al., brings to mind some recent research I did together with C. Beatty and R. von Krafft-Ebing of this institute on the determination of the structure of the DNA molecule. Several hundred thousands tinkertoy models of the sugar, purine, and pyrimidine groups of which the DNA molecule is known to be composed were constructed, using the bond lengths and angles given by Pauling and Corey (1956). These were placed in a large room together with six random chimpanzees ordered from Rand Corporation as suggested in Maloney's monograph on "Inflexible Logic.

In the course of four months innumerable structures were  $\frac{1}{3}$ built and rejected by the apes until one especially large tinkertoy model suddenly began to copy itself at a furious rate, taking apart the chimpanzees and laboratory fixtures when it had run out of prefabricated structural elements. My colleagues immediately rushed it to the crystallography laboratory where we obtained extensive x-ray diffraction data now in press. Unfortunately, the model has stopped reproducing, sterilized, we believe, by the x-rays, and it may be months before further results can be obtained.

Yours sincerely JOHN VENN

## **Cousins: Editor, Traveler, Liberal** treatment of scars resulting from has made many trips all over

#### BY LANCE TAYLOR

Norman Cousns, advocate of world peace, decrier of atom bomb tests, and peripatetic editor of the "Saturday Review of Literature," will be on campus next week as this year's first visitor in the YMCA Leaders of America program. He will be here Wednesday through Friday, March 2-4.

Cousins comes with four speeches planned: "The Business of Editing a Weekly," Wednesday at 11; "What About Russia?" Wednesday noon; "The Human Situation, 1960," Wednesday at 8:15, and "What Can a Man Believe?" Thursday at 11. Each one deals with some phase of his incredibly wide rang of interests.

His knowledge of weekly publications comes from the Saturday Review, which he has edited since 1939. During his regime, and especially in recent years, the magazine has expanded from a literary weekly to widely circulated journal dealing with ideas, arts, and Norman Cousins' opinions on practically everything.

#### SOUNDING BOARD

...

The Review serves him not only as a magazine to edit, but as a sounding board for reader criticism and a testing ground for many of his ideas. Several of his books have grown from editorials written for the magazine, and he has used it to publicize many of his crusades, like the one that brought score of "Hiroshima maidens" to the U.S. for the atom bomb explosion.

Cousins is one of many Americans who have crossed the Iron Curtain recently to try to answer the question, "What About Russia?" Cousins was there last summer, when he visited in the Soviet Union under the American-Soviet cultural exchange program. He spoke (the first American to do so) to the Presidium of the Soviet Peace Committee. He also lectured to the Soviet Writer's Union and the Academy of Social Science, and spent the best part of the summer touring the provinces. His "Saturday Review" editorials on the trip counselled peaceful competition between the U.S. and the Russians.

#### WORLD FEDERALIST

Probably Cousins' chief concern is "The Human Situation, 1960," and he has spent most of his creative life trying to better the conditions all over Planet Sol No. 3. Along this line, he is an exponent of complete disarmament and better cooperation among the nations. Ever since the San Francisco Conference, he has wanted to expand the United Nations to a world federal government. He is, in fact, honorary president of United World Federalists, and is co-chairman of the highly vocal National Committee for Sane Nuclear Policy.

As a widely quoted analyst of contemporary history, Cousins

the world since the war to assay and remedy the human condition. Two of his nine trips to the Far East provided the basis for "Who Speaks for Man," a book-length plea for "the end of the age of anarchy and the beginning of the age of world law." A series of trips to Eastern Europe were to arrange for an American visit on the part of 38 Polish women victims of Nazi medical experimentation.

Cousins has also written books titled, "In God We Trust," which deals with the philosophies and religious beliefe of the Founding Fathers; and "Talks With Nehru," about the Premier's (and Cousins') ideas about the rise of democracy in India.

#### WORLD RELIGIONS

"What Can Man Believe," Cousins' last official speech on campus will be about his own religious philosophy. Here he will probably stress his beliefs in the similarity of all the important world religions and the brotherhood of man. ("Who Speaks for Man?" includes one longish chapter of quotations from the prophets of practically every widespread and viable faith in existence.)

For all his activities, Cousins has receieved an impressive sheaf of awards, including 13 degrees. President honorary Eisenhower, commenting on the 1956 Wayne State University

(Continued on page 6)

**GREAT ARRANGEMENT:** You...the hi-fi...and cold, golden Budweiser. Around the campus, too, where there's life...





## The California Tech

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

#### **Editorial Board**

**Cleve Moler, Editor** John Todoroff, News Editor nce Taylor, Assistant News Editor Roger Noll, Sports Editor Marty Carnoy, Feature Editor Lance

#### **Editorial Staff**

Tom Tisch, Ken Larsen, Geary Younce, Rapid Robert Walsh Bob Koh, Matt Couch, Lee Molho, John G. Price Photos: Dick Thompson, Harvey, ASCIT Photo

#### **Business Staff**

Neil Sheeley, Bill Mock, Managers Circulation: Pete Metcalf, Doug Smith

Member of The Associated Collegiate Press Second Class postage paid at Pasadena, California, Printed by Bickley Printing Co. Represented nationally by National Advertising Service, Inc. Subscriptions: \$1.00 per term, \$2.50 per year. Write: Circulation Manager, The California Tech, 1201 East California Blvd, Pasadena, California.

#### AFTER INTERHOUSE SING, IT'S

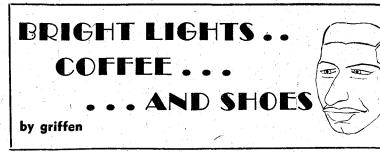
#### ROMA GARDENS - 1120 E. Green

For Quick Service Call SY 2-9748 Open Daily 5-12 P.M.; Fri. & Sat. 5 P.M.-2 A.M.; Sun. 5-9 P.M.

#### Will Deliver Orders for More Than 3 Pizza

KING OF BEERS + ANHEUSER - BUSCH, INC. + ST. LOUIS + NEWARK - LOS ANGELES + MIAMI + TAMPA





Whatever the VIII Winter Olympics are doing as far as internation competition goes, only slightly overshadows the Games' wonderful air of commercialism and degenerating society. Before the ordinay commoner learns the tricks of cheating the Olympic Committee, he is hard pressed for a place to sit down between events. Wherever there are places, there is the unavoidable guard asking for a mysterious pass; in the California and Nevada Centers on either side of the skating oval, the ordinary spectator can pick his way through discarded paper cups and hot dog wrappers to a cozy seat in the center of a milling crowd. However, the events are all there for the Valley Ticket holder to see, and there really is a clear view for everyone of all skiing events. Unfortunately, figure skating and hockey games (except for practice sessions and consolation rounds) are all scheduled in the Blythe Arena which requires a \$15 (midweek) or \$25 (weekend) ticket.

A man without any of these problems is big Murray Moler of UPI. Murray is covering the figure skating events for United Press and has to get up every morning to watch countless skaters go through their patterns. After the rough morning in the Arena, Moler returns to his chair in the UPI room, whips out a large corona-corona and has one of the secretaries sit on his lap while he calls around to "run down leads." In order to see Moler, I had to get past the usual armed guard that stands at any interesting door. Of course, by this time, I was a seasoned veteran of the Games; I threatened the guard with immediate dismissal from his post if he didn't let me through at once. The cowering man had no choice. I stepped through the UPI door and surprised Moler making a play for a blonde in a ski outfit with one arm while talking to the IBM computer center about the relative ages of the girl competitors. His poor son.

Later, I walked into the Squaw Valley Inn for the daily meeting of Western States Degenerates, Inc., in the crowded bar. Pushing my way through the throngs, I noticed that most of the people were drinking various alcoholic beverages to loosen their muscles after a long, hard day of drinking. One girl approached me and asked me if I had seen Gail. I told her that Gail had left and that I was supposed to give her a ride to her hotel. Unfortunately, the girl (whatever her name was, beautiful thing) was staying in the Inn itself, and she made it quite clear that no ride was necessary.

It is certainly lucrative for the common man to watch the upper strata of society behave. It makes him feel that Capitalism really is the system and that there is hope for the United States despite the fact that we may be behind in number of missiles. It also, in this case, clearly focuses the interest of these people in the Olympic Spirit. (It's too bad that some of the athletes can't take part in all this fun and frolic, but those lost souls that know no English never seem to have the right pass to get by the right person.

However, all in all, the Olympics prove to be a good deal. The daily tickets are not so expensive, considering what is offered, and after learning the ropes, it is even possible to see events in the Arena without a special ticket. The six o'clock hockey game, for instance, is usually so poorly attended that anybody can go in to see it. Furthermore, the scenery and skiing is fabulous. Contrary to early reports, it is very easy to find places to stay in towns like Truckee and Tahoe City and environs for reasonable prices if you don't care where you sleep. The hotel and motel owners made a big mistake in trying to squeeze all kinds of ridiculous money out of the tourists, and, as a result. the number of spectators is far below capacity most days. Even if you may feel out of place in your levis and motorcycle boots and the waitresses won't serve you because you look like the busboy and the girls laugh at you when you give them the glad hand, it's still worth the trip.

Drugs Sundries Cosmetics Tobaccos CALIFORNIA REXALL PHARMACY 555 S. Lake SY 2-3156 Breakfast Lunch Dinner

BrEw/Ly

#### **CAPPING:**

Good capping is very important to retain carbonation. Therefore, have a good capper and use elebow grease. Caps should be well dimpled after the capping operation. I would recommend that the caps be soaked, despite the cap-maker's claims to the contrary.

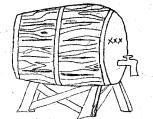
#### AGING:

Beer should be aged at least three weeks before it is really palatable. The principle reason home brew has a bad name for taste in many circles is that it is seldom allowed to age. Some impatient and hardy brewers don't even get around to bottles. Others who have brewed for years have yet to taste an aged bottle of brew.

Stubbies require less aging than quarts. Stubbies taste fairly decent in 10 days. Quarts, however, still taste pretty green in three weeks. Aging proceeds best at a temvperature of 60to 70 degrees F. Lower temperatures inhibit the process. Higher tempeeratures may lead to explosive reactions which are somewhat distasteful to the fastidious brewed and/or his irate wife or other roommate.

#### CONSUMPTION:

On the surface it may seem somewhat ridiculous to include an operation that you have all been proficient in since you were old enough to bend an elbow, but all the effort put into brewing a tasty beer will be wasted unless you hark to this section. Home brew will have a very well developed sediment layer



in the bottom of the bottle. This won't bother you if you keep the bottle upright in storage and pour only once from a bottle. The cleear beer should be decanted off the murky sediment on the bottom. Quarts are best decanted into a pitcher, whereas, stubbles will pour into a mug very nicely.

Icing down the crock for four to six hours just before bottling will lessen this sediment layer, but cannot get rid of all of it since some fermentation must go on in the bottle to carbonate.

#### **ADDITIONAL REMARKS:**

These directions are the jumping-off spot for budding brewers. After you master the basic procedure, then you can take off in any and all variations you desire.

One obvious variation is to put more hops in. This you can do by almost-boiling hops leaves and straining the fluid into the crock. But warning: don't use aluminumware; it'll ruin the whole mixture.

I've been told of a home brew shop in L<sub>4</sub>A., the Abco Equipment Co., where you can't buy equipment without buying a lot of advice. This is fine if you like advice. Their address is 706 South San Pedro. There are two places in the same block which are called Abco—one of them isn't the right place.

Different yeasts produce different beers. The reader might well experiment along these lines



THE CALIFORNIA TECH

# Frosh Lose Last Tilt To Whittier

The Caltech freshmen basketball team, suffering from the loss of injured Tom Anderson, bowed to league champs Whittier, 70-51.

The Beaevers stayed close to the Poets all the way through the game, but, with five minutes left to play, ran out of gas, allowing Whittier to score 16 straight points.

The final score belies the closeness of the game, as, with seven minutes left, Caltech actually led by four points.

In a meeting before the game, Tom Bopp was elected captain of this year's frosh. Bopp, the team's most consistant scorer and player, has a fine future in Caltech basketball. He will be a welecome addition to Gene Rock's varsity squad next year, along with guards Dave Barker and Anderson, forwards Pete Fischer, Bruce Chesboro and Les Les Tomley, and center Mike Perlman.

The final season record of the frosh in league play was seven wins and three losses, good enough for second place. On the season, the Beavers were 12-4. These records are the best of any frosh team in recent years, although last year's frosh record of 6-2 in non-conference play was slightly better than the 5-2 record of this year's frosh.

# Whittier Drubs Beavers As Newman Sets Record

Caltech's senior basketballers a rather rough farewell last Friday, dumping the Beavers 94-56. It was the last game for seniors Ron Arps, Dave Blakemore, Mel Holland, Len Maley and Fred Newman, all of whom started the game.

Newman closed out his career in fine style, tanking 34 points to set a new school record, breaking the mark of 33 set by a fellow named Newman three years ago along with Fred Anson and Mike Conley. The output cinched Newman first spot in the SCIAC scoring race, giving him an overall average of better than 23 points pere game.

The first five minutes of the game saw the Beavers keep up Whittier's torrid scoring pace, but the Beavers soon slowed down, allowing Whittier to pile up a near-insurmountable 56-30 halftime lead. The second half saw the Poets slow the pace, yet win going away.

This year's varsity managed to turn in the best season of any Caltech basketball squad since the championship team of 1954. The Beavers finished fourth in the SCIAC, as predicted, but with

Whittier's powerful Poets bid a worse than expected league record of three wins and seven losses. Outside of conference play, the Beavers won three while losing five, bringing the

(Continued on page 5)

# The California Tech Swimmers Split First Two Tests

split its first two meets of the year, dumping Santa Monica JC 62-34 on Friday, and then losing to UCLA 54-42 on Saturday. The frosh also lost to UCLA, 72-24.

The Beavers showed fine strength and depth against Santa Monica in the friendly confines of Alumni pool. Led by Gary Tibbetts, who grabbed first in the 440- and 220-yard free styles, and Gary Turner, who won the backstroke and the individual medly, the outcome was never in doubt after the Beavers overcame their initial handicap of

The Caltech swimming team losing the first event, the medly relay. Marshall Buck also grabbed two first places, winning the 200-yard fly and the butterfly.

> The Beavers did not have as much luck against UCLA, however. The Bruin meet was in doubt until the final relay, the winner of which was the winner of the meet. The freestyle relay was won by UCLA by a tenth of a second.

> Grabbing first for the Beavers were Tibbetts in the 440 and 220, Turner in the backstroke and Buck in the breaststroke.

... staffed by graduates of virtually every engineering school in the United States...



# **Beavers Finish Second** Three-way Trackfest

ished second in a three-way meet held at Tournament Park last Saturday. Cal Poly of Pomona won with 82 points, Caltech had 69, and third place LaVerne managed 11.

Several Beavers turned in fine performances, but lack of depth cost the local varsity first place.

Because the scoring system in a three-way meet involves giving points for more places in etch event, the fact that LaVerne was in the meet, even though they scored but 11 points, cost Caltech the victory.

Had dual meet scoring been used, the score would have been 63-61 in favor of Cal Poly before men Saam, Dash, Early, Lindsy the last relay Because by then the meet had already been decided, Coach Bert LaBrucherie elected not to run his best relay team, and the Beavers lost by a narrow margin. Had the Beavers used their number one team,

The Caltech track team fin- they probably would have won the relay, which would have given them first place in a dual meet.

> Top individual performances for Caltech were turned in by Ed Cline, who pole vaulted 12 feet, Dick Klett, who won the 100 and 220 yard dashes in times of 10.2 and 22.6, and Lannes Purnell, who heaved the javelin 192' 11"

Dick Tuft also won his event, the half mile, in 204.9, as did Tom Kiel win his, the 440, in 51.1.

The frosh team showed surprising strength in licking Cal Poly's frosh, 68-37. Winning ten of the fourteen events, freshand others turned in good formances. Next week, the tracksters will be idle since some of the team have entered the district AAU meet at East Los Angeles Junior College.

**ENGINEERING SENIORS!** Your future is unlimited in LOS ANGELES The City of the Future CIVIL ELECTRICAL MECHANICAL SANITARY **POWER SALES** 

Engineers are needed in these fields for the challenging work of planning, designing, building, and operating one of the largest electric and water systems in the world. Arrange with your Placement Office to talk with our engineering representatives, who will be on campus

> March 7 CITY OF LOS ANGELES Department of Water & Power

## Personal Interviews ON CAMPUS

# CONVAIR / FORT WORTH

P. O. Box 748-N6

A Division of

GENERAL DYNAMICS

Friday, March 4

### **Basketball**

(Continued from page 4) over-all season record to 6-12. \*

Hopes for next year's varsity are strong, even though five solid seniors graduated.

Several players who didn't play much this year could well prove to be fine ballplyaers before they graduate. Center Jim Scull just might win a job on the starting five next year if he continues to improve at the present rate. Guard John Arndt, although not seeing much action this year, is a competent, consistant ball player who will definitely play next year. Forward Gerry Clough, also, is bound to regain his old form.

Also returning will be four, men who saw a lot of action this year, guards Bill Ripka and Larry Brown, forwards Dean Gerber and Roger Noll.

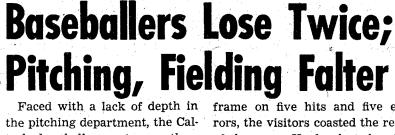
Up from the frosh will be at least six good men, including Tom Bopp, who could have played first string on the varsity this year.



This is the B-52. Advanced as it may be, this airplane has one thing in common with the first wargalleys of ancient Egypt...and with the air and space vehicles of the future. Someone must chart its course. Someone must *navigate* it.

For certain young men this presents a career of real executive opportunity. Here, perhaps you will have the chance to master a profession full of meaning, excitement and rewards...as a Navigator in the U.S. Air Force.

To qualify for Navigator training as an Aviation Cadet you must be an American citizen between 19 and 26½-single, healthy and intelligent. A high school diploma is required, but some college is highly desirable. Successful completion of the training program leads to a commission as a Second Lieutenant...and your Navigator wings.



the pitching department, the Caltech baseball squad was thoroughly whipped in its first two exhibition starts.

San Fernando State easily won the opener last Saturday 17-3 with a 10-run outburst in the sixth inning, sewing up the triumph. Marty Kaplan, senior veteran, started the contest and was replaced by Don Nisewanger in the third. The pair held the victors to a 4-3 lead until the fateful sixth, when Bill Palke, who entered the game in the sixth, was bombed for the clinching runs.

The Beavers fared no better Tuesday when Cal Poly bombed their way to a 13-0 shutout on the TP diamond.

Grabbing six runs in the first

frame on five hits and five errors, the visitors coasted the rest of the way. Kaplan lasted until the fourth inning and Palke finished the contest.

Only seven of the Poly runs were earned as the Beaver defense committed eight bobbles. Buzz Merrill, Skip Stenbit and Hern Hartung connected for two hits apiece with Don Nisewanger collecting the other single.

Stenbit rapped a double for the only Caltech extra-base hit to load the bases in the sixth inning, but a fly-out to center field ended the lone Beaver scoring opportunity.

The next exhibition game is scheduled for Saturday with Westmont providing the opposition.



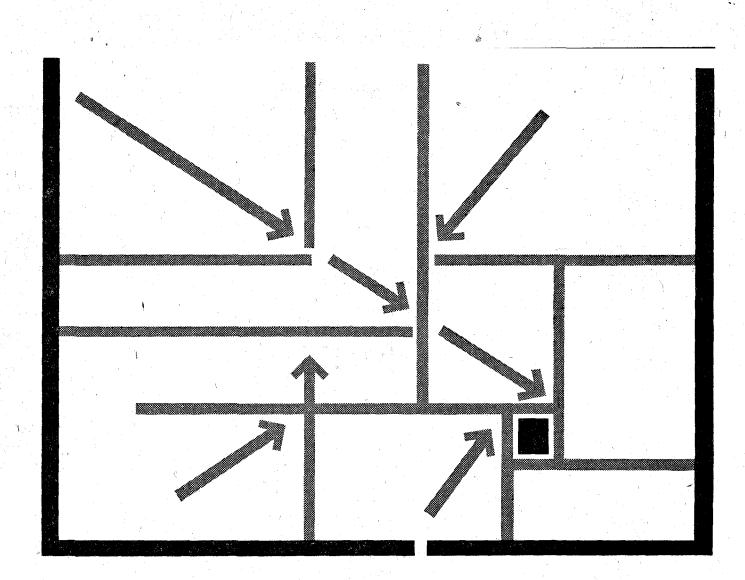
#### **Ping Pong And Pool Players Last Chance**

The California Tech Ping Pong & Pool Tournament gets under way next week. This will be your last opportunity to enter, as entry deadline is tomorrow.

Several people have signed up for both divisions, yet there are still not enough to make a really interesting tourney. Those interested in either ping pong or pool are strongly urged to enter. A demonstrated excellence in either event is by all means not necssary for entrance—as a matter of fact, none of the real experts have entered the meet as yet. Seeing that the purpose is not to find the school's best ping pong and pool players, but to provide a little fun for the people who enjoy the sports, there is no real reason for not entering. Put entry blanks in "Z" box of any house.

#### OFFICIAL ENTRY BLANK PING PONG & POOL TOURNAMENT

•	I wish to enter the (circle one or )	pool	division.	
. / S 1 -	Campus address		······	
•	Name	 		



## How to shrink a giant computer

Electronic computers do big jobs-250,000,000 calculations a day, for instance, in tracking earth satellites.

If you think you have what it takes to measure up to the Aviation Cadet Program for Navigator training, see your local Air Force Recruiter. Or clip and mail this coupon.

There's a place for tomorrow's

leaders on the Aerospace Team.

The computer's already gargantuan capacity is being increased at IBM as our scientists and engineers probe deep into the mysteries of such fields as cryogenics, magnetics and microwaves. Utilizing many of their findings, we are simultaneously working to shrink the giant computers of today down to Tom Thumb size.

The improvement of our products and methods is an area to which IBM has devoted a great deal of time and work. This effort has resulted in a steady, planned growth, which in turn has created excellent career opportunities for persons of widely diverse skills and talents in research, engineering, programming and manufacturing.

A person like yourself, for instance.

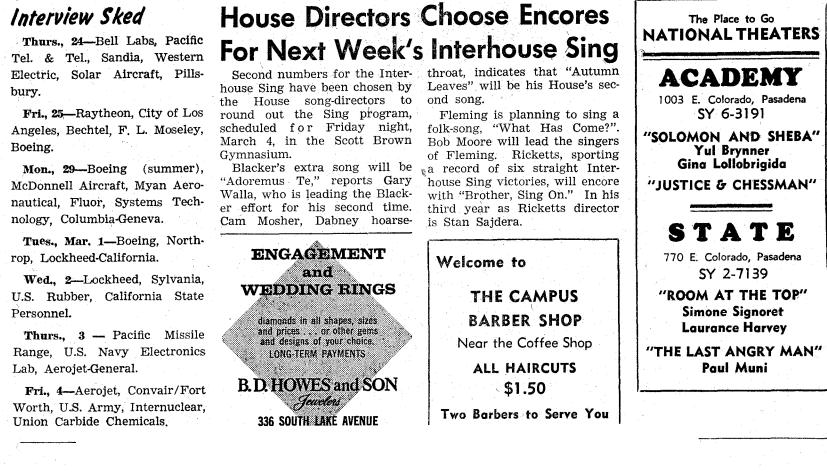
<sup>19</sup> You are invited to contact your College Placement Division to find out when our interviewers will next visit your campus. Or write to the Director of Recruitment, Dept. 872, IBM Corporation, 590 Madison Avenue, New York 22, New York.

4

IBM Salutes Engineers' Week-February 21-27

#### THE CALIFORNIA TECH

#### Thursday, February 25, 1960



#### Engineersi

**Scientists!** 

WÉRE LOOKING

VARD

MEETING

AUFS Reports From Africa

(Continued from page 1) YMCA lounge. This evening Munger will dine at the home of Dr. and Mrs. L. A. DuBridge.

Friday morning he will attend the 8 and 11 a.m. Econ 100 classes in 101 Dabney, speaking on, "The American Metals Case in Northern Rhodesia." He will speak to the Y undergrad lunch on, "Inside Afrikaner Nationalism." He will have dinner at the home of Professor and Mrs. Horace Gilbert. He will spend the weekend in Santa Barbara.

Returning from Santa Barbara on Monday, Munger will speak to the Council on Foreign Relations at the Biltmore Hotel in L.A., topic, "The Explosion of Nationalism in Africa."

Next Tuesday, Munger will attend the 11 a.m. H 5 class in 206 Dabney, speaking on, "Political Evolution and Revolution in Africa." He will have luncheon with the H 5 staff at the Athenaeum. At 8 p.m. he will attend the H 124 session in 205 Dabney. On next Wednesday, (March 2) his last day at Tech, Munger will lunch with the Geology Lunch Club in 151 Arms. At 4 p.m. he will attend an Humanities Faculty Seminar in 208 Dabney. He will have dinner in the Student Houses, followed by a YMCA Public Affairs panel discussion in Dabney Lounge.

Biographical articles on Munger have appeared in "The Economist" and "Jack and Jill."

### Libraries Report New Schedules

Dabney and the General Libraries are now open on a new schedule, it was reported today. The libraries will be open on evenings from 7:30 to 10:30 p.m., on Saturdays from 9 a.m. to noon, and on Sundays from 2 to 5 p.m.

The General Library is open additionally from 1 to 5 p.m. on Saturdays.

## Cousins

(Continued from page 2) Award in Education, called Cousins "a distinguished editor who stands as a symbol of America's creative, crusading, sensitive mind."

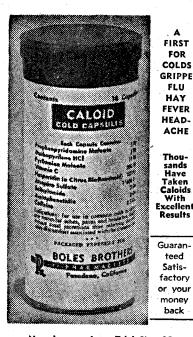
In addition to his set speeches, Cousins will be available for long periods of student discussion and conversation (see schedule on front page). Committee members in charge of his visit point out he is articulate and a master of fifth-level rebuttals. He's worth seeing — especially if you don't agree with him.

Last year we had the pleasure of meeting many engineering and science seniors during our visit to the campus. As a result of our discussions, a gratifying number chose to join our company. We'll be back on the dates below, and this notice is *your* invitation to come in and see us.

If you're interested in joining a company that's

Research projects at Boeing include celestial mechanics, solid state physics, nuclear and plasma physics, advanced propulsion systems, and space flight.

Expanding programs offer exceptional career opportunities to holders of B.S., M.S. and Ph.D. degrees in aeronautical, mechanical, civil (structures), electrical-electronic and welding engineering, and in engineering mechanics, engineering physics as well as in mathematics and physics. At Boeing you'll work in a small group where individual ability and initiative get plenty of visibility. You'll enjoy many other advantages, including an opportunity to take graduate studies at company expense to help you get ahead faster.



New Improved — Trial Size 98c Reg. Size \$1.49 Family Pkg. \$3.49 Professional Size \$6.25 Different and Effective - Ask for CALOIDS 555 South Lake 882 E. California Blvd. a leader in fields-with-a-future, you'll be interested in the advantages Boeing can offer you. Boeing is in volume production of Bomarc, the nation's longest range defense missile, and is a prime contractor on Minuteman, an advanced solid-propellant intercontinental ballistic missile system.

Boeing is also the nation's foremost designer and builder of multi-jet aircraft. Production includes eight-jet B-52G missile bombers, KC-135 jet transport-tankers and the famous Boeing 707 jet airliner.

We hope you'll arrange an interview through your Placement Office. We're looking forward to meeting you.

FRIDAY, FEBRUARY 26 MONDAY, FEBRUARY 29

TUESDAY, MARCH 1

ES ES Æ S NEF

Seattle • Wichita • Cape Canaveral, Florida