

The California Tech

California Institute of Technology

Volume LIX

Pasadena, California, Thursday, January 9, 1958

Number 11

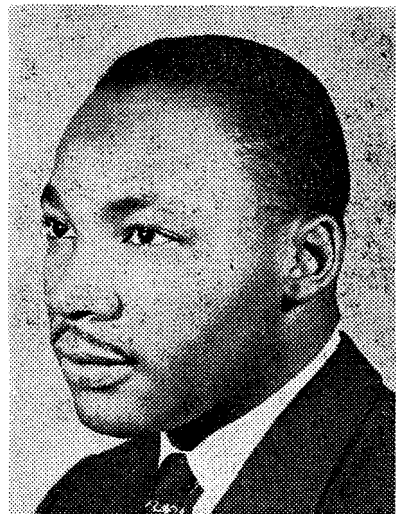
Leaders

Radhakrishnan, Reuther, Randall, King To Be Here

The YMCA has announced that this year there will be four outstanding "Leaders of America" visiting the Caltech Campus this year: Clarence B. Randall, Victor Reuther, Sarvepalli Radhakrishnan, and Martin Luther King.

From February 10 to 11, Clarence B. Randall, special advisor to President Eisenhower on foreign economic policy, will address the student body. Mr. Randall has been the Man of the Year for 1952 in the National Association of Manufacturers, and the Business Statesman of the Year for 1954 in the National Sales Executives Association. Before his present position as advisor to the president, he has been president of the Inland Steel Company, and is still chairman of its board today. From 1953 to 1954, he was Chairman of the Committee on Foreign Commerce Policy.

From February 26 to 27, Reverend Martin Luther King will speak to the student body and faculty groups. Dr. King was the leader of the negro bus boycott in Montgomery, Ala., as president of the Montgomery Improvement Association.



Martin Luther King, Jr.

Coed Confab Planned By Y

Plans for a joint student-faculty conference with Scripps College in February are being completed by the Caltech YMCA.

The conference, a variation on last year's popular retreat, will be characterized by informal discussions on a topic concerning the interrelation of art, religion, and science, and their effect on one's personal values and philosophy.

An open planning session is to be held tonight at 7:30 in the Y lounge. Anyone interested is invited to put in his two-cents' worth.

Special committees will be appointed by the Y Cabinet to plan and conduct each program. The Y office is preparing a list of those who express interest in these committees.

New Publication Aids Job Seekers

A new publication, **The Caltech Placement Guide**, was distributed to upperclassmen and graduates during Monday's registration. The 28-page booklet includes a complete list of interviews for the coming season, as well as a brief resume of each firm's activities.

The booklet was compiled and published by Dave Leeson and Bob Walsh as a reference for the job-seeking student. Extra copies are available in room 120, Throop, at no charge.

Freshmen To Open Nominations

Nominations for freshman class offices will open today, according to Freshman Class President Sid Leibovich. Freshmen are to submit their own nomination in writing to Leibovich. Nominations will remain open until next Thursday.

A freshman desiring to run for class office should write his name and the office he seeks on a standard size sheet of paper, seal it in an envelope, and place it in the "L" box in Ricketts or give it to Leibovich personally. Those nominations received before 7 p.m. Monday will be listed in the California Tech.

Class Meeting

A general freshman class meeting is scheduled for 11 a.m. next Thursday, at which time the nominations will be closed and the candidates introduced. Voting will take place Thursday, January 23, and will be by sections; the section leaders will distribute and collect the ballots for their individual sections. Ballots and tallying will be handled by the ASCIT Election Committee, headed by Reed Saunders.

Around May 10, Victor Reuther, assistant to the president of the CIO, will be on the campus. Mr. Reuther, a strong anti-communist, has always been a supporter of a strong economic and social program of democratic reform. He has been director of the educational program of the CIO in the USA and Canada since 1951. In 1949, he lost an eye in an attack on him by an unknown assailant.

Indian Leader

From April 2 to 4, Sir Sarvepalli Radhakrishnan will visit Caltech. He is at the present the vice-president of India. Previously, he has been Indian ambassador to the USSR, chairman of the Executive Council of the Indian Philosophical Congress, leader of the Indian delegation to the UNESCO and Chairman of UNESCO from 1948 to 1949, and chancellor of Delhi University.

A graduate of Oxford University, he has many Westernized ideas, is an honorary member of the Roumanian Academy of Science, holds the German medal pour le merite of 1955, and has published many books on philosophy and religion.

Techmen Spend Busy Week At Western Y Conference

Asilomar State Beach on the Monterrey peninsula was the scene of the 1957 Western YMWCA conference, which was attended by a large delegation of Techmen and featured a week of intellectual discussion, talks by speakers including Caltech's Linus Pauling, athletics and social activities.

And even for those lacking anything to say, not interested in lectures, devoid of athletic talent and uninterested in conventional social activities, there were midnight walks on the sand dunes, listening to the sea and gazing at the stars.

Count 250 Delegates

The conference was attended by about 250 men and women from western colleges, including Cal, Stanford and UCLA. The delegates, most of them Y members, soon proved themselves to be an unusually religious, politically liberal and intellectually concerned group, both by their actions and their response to numerous questionnaires.

The Caltech delegation made itself known on several fronts. They challenged and defeated U. Cal. in a makeshift soc-

cer game held along the beach and were victorious again in a rematch. They were instrumental in publishing a small conference newspaper, the CYPRESS. Also Caltech Y secretary Wes Hershey was an important force in organization of the conference.

Note Foreign Students

An attention-getting group were the 15 foreign students who, with their striking native costumes, forceful personalities and unusual perspectives on the United States, prompted much lively discussion of politics and race relations.

The topics emphasized in the talks and fireside seminars included problems of Christianity, race relations, intellectualism, war, individualism, conformity and love and marriage. A highlight of the evening talks was the appearance of Dr. Linus Pauling, who gave his views on atom bomb testing and the problems of disarmament.

Social activities included dancing and recreation each night, a beach party, the "Scenic Drive" and the New Year's Eve party.

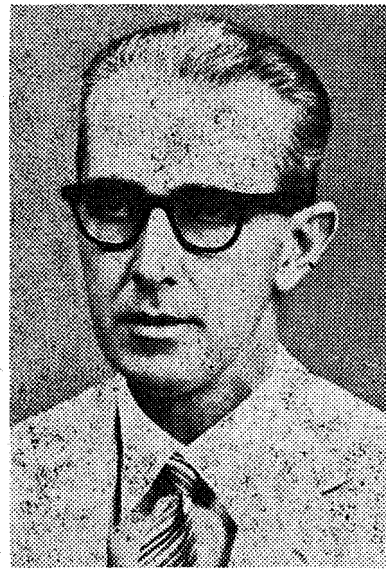
Indonesia Expert Comes to Caltech

Hanna Sees Possibility of Soviet Gain In Current Indonesian Political Crisis

by Al Carlin

"There is a very real possibility" that Indonesia will fall within the Soviet orbit. Such is the considered judgment of an expert, Dr. Willard A. Hanna, the first of this year's American University Field Staff members to visit Caltech.

While he does not expect any imminent Communist seizure of power, this thoughtful analyst, just returned from a year and a half of travel through Southeast Asia, including over a year spent in Indonesia, senses a "deteriorating drift" toward the Communists.



Willard A. Hanna

The problem as Hanna outlined it is that Indonesia has progressed little since it gained its independence in 1950. The standard of living has stood still at best; the island republic has suffered from nearly continuous political and social crises; the outlying islands have remained semi-independent of the central government. The people, led to expect peace, security, and improved conditions, have found only increasing disillusionment.

Sensing this, President Sukarno has written off democracy as unworkable in Indonesia and has come out for a "guided democracy" in which the government will be composed of all major parties, including the Communists. As a result, the Russians are gaining an increasing foothold in Indonesia while President Sukarno has become increasingly identified with Leftist elements.

Apparently in an effort to direct attention away from the country's own urgent internal problems, the president has focused attention on his demand that the Dutch leave West New Guinea. His recent confiscation of Dutch property, Hanna believes, was an effort to apply pressure to the Dutch.

What can the U.S. do about this "deteriorating drift?" Hanna believes that our best course is to be "ready and eager to help Indonesia," but to be careful not to "push ourselves on them." In addition, Americans should be willing to try to learn something from the Indonesians, especially in the area of culture. Our basic problem in trying to help them, in fact, is that unlike Japan, Indonesia is attempting to separate herself from western control and thought as a reac-

(Continued on page 6)

Around The Quad

NATO PANEL

Dr. Stanford S. Penner, Caltech professor of jet propulsion, has been reappointed to the Combustion and Propulsion Panel of the NATO Advisory Group on Aeronautical Research and Development. Dr. Frank E. Marble was reappointed as alternate member.

NACA

Caltech's Dr. Lester Lees, professor of aeronautics, has been reappointed to the Subcommittee on Fluid Mechanics of the National Advisory Committee for Aeronautics.

Tech Cagers Picked To Overpower UCR

Caltech's fighting hoopsters are favored to keep a two-game win streak alive at UCR on Friday night. Game-time is 8:30 p.m., following the freshman game, their season opener, at 6:30.

UCR will probably be "up" for the game, itching for revenge for last year's trouncing by the Beavers to end an ignominious 36 game losing streak. However, Tech's fine, fast-moving cage crew, fresh from victories over Cal-Western and Cal Baptist are picked to triumph with more speed and shooting ability.

After absorbing a beating from Cal Poly's Broncos in their first game, a slow-moving, rather mediocre affair, the Beaver five bounced back to drop Cal Western handily and then scored a comeback victory over surprisingly strong Cal Baptist. In the Cal Baptist game, Fred Newman scored 31 points, only two shy of the school record, as Tech, down eleven points with about five minutes to go, roared back to win by six.

Newman Tops

Newman, an all-SCC choice last year, has been the teams' outstanding shooter and a fine defensive player. Two Oxy transfer students, Bob Emmerling and John Stene, have sewn up the guard position.

Another fine shooter, Sonny Nelson, is handicapped by a bad knee injury but saw considerable action against Cal Baptist. Glen Converse, Dick Van Kirk and Ray Magdaleno have also contributed greatly to Tech's 2-1 season record.

Short but Fast

Tech's main problem is height, but the new coach, Gene Rock, relying on speed and accuracy, has molded a spirited team with excellent future prospects. Paz Naz and LA State figure to be the "rock" opponents with Redlands and Whittier conference favorites. Other conference opponents have not shown any real power as yet.

Opinion

The Bullpen

by Ford Holtzman

"Grades don't mean nothin"—a well worn paean at about this time. But grades do mean something, although exactly what is not quite clear.

I think everybody will agree that the person who makes a 4.3 has more on the ball than someone with a 0.0. However, it is not so easy to compare a 3.0 and a 2.5. The higher grade does indeed indicate something; it indicates many things. In fact, it indicates so very many things that it is impossible to indicate the student's intellectual capabilities on the basis of his GPA alone.

The GPA is a function of intelligence, diligence, emotional stability, personality, health, values, and—you can probably add a few more yourself. Admittedly how well you will do in a job at grad school or whatever you do is also a function of these factors, but the function varies from grad school to job to job, and at no time will it correspond with the GPA.

Time will surely show our GPA's to be at best, crude estimations of our intellectual capabilities. Yet, our lives will be significantly influenced by those silly little numbers. In the name of "objectivity" our souls are shriveled up into a single number, and our futures must rest on it.

Clearly something better is to be desired, and I think it can be found in the repudiation of our preoccupation with numbers and our willingness to speak English again. If you want to describe people with numbers, you are certainly going to have to use more than one!

Grades have another excuse for existence besides being handy soul searchers. They are also supposed to inspire the troops to strive for greater intellectual glories. But what they inspire the troops to do is, simply, to strive for better grades. In problem courses this is achieved by more efficient cranking and grinding, and in humanities courses by more efficient regurgitation of text books and lectures. Intellectual honesty, the comprehension of the meaning and the significance of a whole concept,

the formation of useful and intelligent attitudes, indeed all that we theoretically came here to learn, is side tracked in a mad scramble to work one more physics problem just in case one like it might be on the final, or to remember one more match phrase that just might ring bells in the instructor's head.

The average Techman was not lazy when he came here. If he has become lazy it is because he is sick and tired of grubbing for better grades. Rather than encouraging the students to work harder, the present grading system helps cause some to become laggards, others to become cynics, still others to become pedants, and still others to become doctors, lawyers, writers, business executives, etc.

The present grading system is not good. But what would be better? Just passing and failing would put an end to the burdensome competition between students and free them to use their time better (or worse). But how is an employer going to know whom to hire, or a grad school whom to admit?

I think the job can best be done by having each instructor write a brief report about the

progress of each student in his class. And then too, he should indicate whether the student has passed or failed in order to determine whether the student should be required to take the course over and to determine whether he has accumulated the proper number of units for graduation.

These reports could be as long and as detailed as the instructor pleases. If an instructor knows a great deal about a student that might be of interest to an employer or a grad school, he should write a long report. On the other hand, if there is noth-

ing at all out of the ordinary about a student, the instructor need not be required to write a report at all. By introducing this measure of flexibility into the grading system, the instructors would not be required to judge the students on insufficient evidence as they are now.

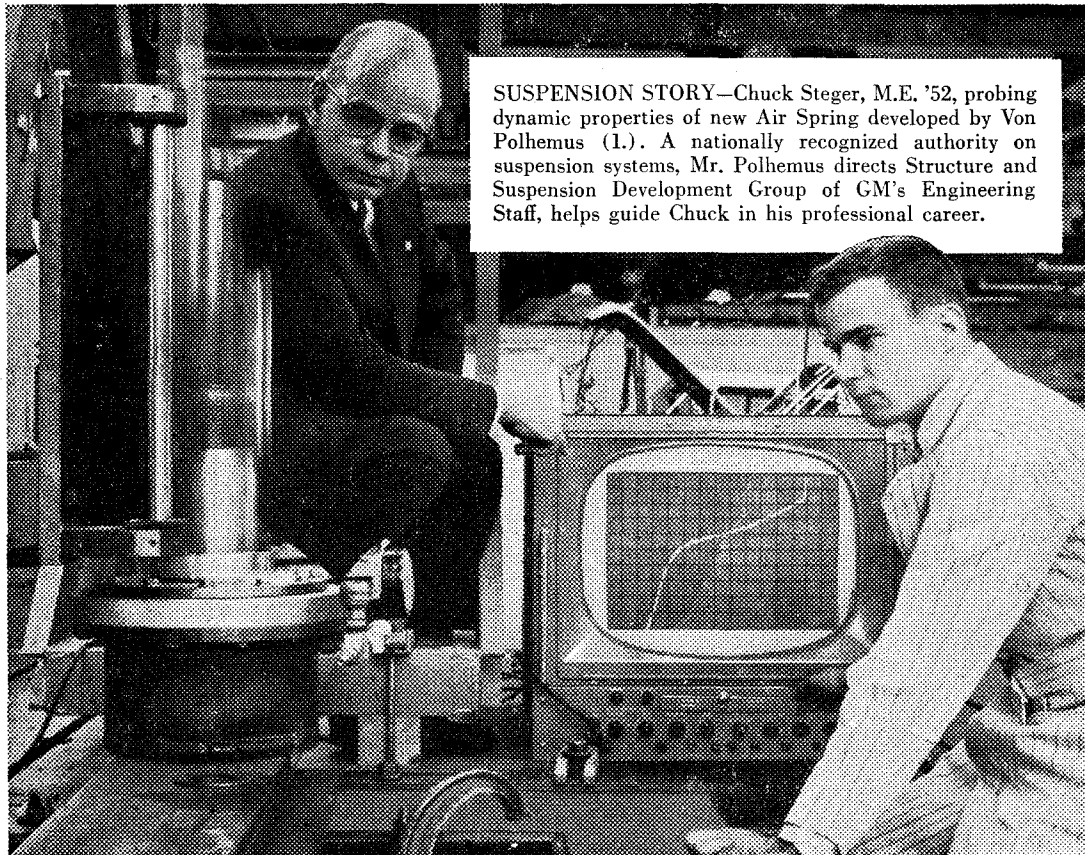
Furthermore, the instructors would be able to judge the student's intellectual potentialities in a more meaningful and descriptive way — they could untangle all the factors that influence the GPA and judge the student from several points of view. Under this system of reports the troops would truly be encouraged to learn about the whole subject, and not just how to squeeze out a few more points on the tests.

It might be argued that this system of reports would introduce some subjectivity on the part of the instructors into the

grading system. In humanities courses there is, of course, an unavoidable subjectivity no matter what system of grading you use. In problem courses it is true that some subjectivity would be introduced where there is none now. But I for one would prefer a little subjectivity to stupidity—the stupidity of equating the student's grasp of the subject with his ability to cool a few tests.



SUSPENSION STORY—Chuck Steger, M.E. '52, probing dynamic properties of new Air Spring developed by Von Polhemus (L.). A nationally recognized authority on suspension systems, Mr. Polhemus directs Structure and Suspension Development Group of GM's Engineering Staff, helps guide Chuck in his professional career.



Fisher's
RESTAURANT
and
COFFEE SHOP
3589 E. Colorado St.
A Tech Favorite
Since 1947
Open 7:00 a.m. to 1:00 p.m.
7 Days a Week

We Highly Recommend
CARL'S
CALTECH
BARBERS
Friendly Personalized
Service
California Near Lake

STATION WAGON
SHOE REPAIR
All types of Shoe Repair
Complete Selection of
U.S. Keds
920 E. California, near Lake
SY 2-9787
Bring this ad with you for
repair discount — save 10%

Because engineering is a profession at GM —we offer you a career—not a job

ONE REASON engineering standards at General Motors are so high is that GM recognizes engineering as a profession. And the men who engineer the many different products made by General Motors are respected for the profession they practice.

That is why, when you are invited to join General Motors as an engineer, you don't simply take a job—you start a career.

It is a career that is rewarding both professionally and financially—starting on your first day of association with General Motors at any one of its 35 divisions and 126 plants in 70 cities and 19 states.

During your early days at GM, for example, you work with a senior engineer who guides your career along professional lines.

You are also actively encouraged to pursue your education towards an advanced degree. For we at General Motors recognize that, in doing so, you will become more valuable to us and the engineering profession.

You are given the opportunity to obtain professional recognition through participation in engineering society forums, presentation of technical papers, winning of patents and other recognition of your accomplishments.

And you are also encouraged to take an active role in your community's affairs—because a truly professional man is a good citizen as well as a good engineer.

All this is for a reason—and a good one.

Many of the men who will fill the key positions at GM in the future are the young engineers joining GM today. This is not theory, it is fact. For 14 of our 33 Vice-Presidents are engineers, 23 of our 42 Division General Managers are engineers, too.

Today we are looking for young engineers—such as you—who may fill these positions tomorrow. The rewards—both professional and financial—are substantial. If you feel you have the ability, write us. It could be the most important letter of your life.

June graduates!
A General Motors Representative will be on hand to answer questions about job opportunities with GM.
January 13, 14

GM positions now available in these fields:
MECHANICAL ENGINEERING • ELECTRICAL ENGINEERING
INDUSTRIAL ENGINEERING • METALLURGICAL ENGINEERING
AERONAUTICAL ENGINEERING • CHEMICAL ENGINEERING
CERAMIC ENGINEERING • MATHEMATICS
INDUSTRIAL DESIGN • PHYSICS • CHEMISTRY

GENERAL MOTORS CORPORATION
Personnel Staff, Detroit 2, Michigan



LOOKING FOR A GOOD-FITTING JOB?

Ready to debut as a practicing engineer? Then here's a suggestion. Whatever your engineering specialty, see what Vought offers to men with your training. See how Vought can help you find the field you're cut out for. See how your whole career benefits when you start with the right job. SEE THE VOUGHT REPRESENTATIVE IN YOUR PLACEMENT OFFICE

JANUARY 14

CHANCE VOUGHT AIRCRAFT
INCORPORATED - DALLAS, TEXAS

Global News

The California Tech

Associated Collegiate Press honor rating: First Class

Editor—Bob Walsh

EDITORIAL BOARD

Steve Emanuel (Executive), Dave Leeson (Executive), Mike Milder (News), Howard Weisberg (Feature), Jim Wilkinson (Sports)

ASSISTANT EDITORS

Cleve Moler (Copy), Dave Nissen (Epicure), Dave Singmaster (Sports), John Torodoff (News)

REPORTERS

Bob Blandford, Bill Bauer, Al Carlin, Ken Casey, Eli Chornow, Gene Cordes, Frank Childs, Larry Crisman, Brad Efron, Bob Eglinton, Ford Holtzman, Mike Jones, Lloyd Kamins, John Lango, Hal Morris, Bob Norton, Kirk Polson, Kirk Richter, Dave Spencer, Louis Stansby, Phil Thacher, Lance Wallace, Joel Yellin, Wallace Yerbovsky

Art—Bruce Allesina, Ted Bate

Photography—ASCIT Photo

Business Manager—Dave Leeson

Circulation Manager—Eldridge Moores

Entered as second-class matter November 22, 1947, at the post-office in Pasadena, California, under the act of March 3, 1879.

FRENCH CAMEROONS

French Defense Minister Jacques Chalan-Delmas sent troops to help quell a Communist-led revolt in the Cameroons before the situation developed into another Algeria. The Cameroons is now a French trusteeship. The rebels are fighting for their independence, while blindly following their magnetic Red leaders.

VENEZUELA

Venezuela's President and dictator General Perez Jimenez who has been in power since a coup d'etat in 1948 successfully stifled a haphazard New Year's revolt. The uprising started at Marcaay and the riots spread to the capital, Caracas. Most of the army remained loyal and there were few casualties.

ISRAEL

David Ben-Gurion, leader of Israel's Socialist Labor party (Mapai), dissolved his cabinet when two members refused to resign after revealing a plan for procuring arms from West Germany. Ben-Gurion got a new cabinet and an agreement to maintain secrecy on state security

matters, but made no progress on the arms problem.

CONGRESS

The 85th Congress returned for its second session Tuesday with the Democrats controlling the Senate 50-46 and the House 230-200. The Democrats are questioning Ike's leadership as well.

Press secretary Hagerty says that the budget is balanced, though defense spending is up two billion dollars from a previous 38 billion while taxes are to be unchanged. The budget is still one of the major issues facing Congress.

Other important issues:

The administration wants more sharing of atomic secrets with friendly nations.

Ike has asked for a five-year extension of the reciprocal trade agreement which allows him to lower our tariffs for countries which do the same for us.

Many Congressmen desire a general military shake-up and perhaps a single chief-of-staff.

The administration wants an increase in foreign aid spending of one billion dollars over last year's 3.3 billion. They are try-

ing to meet Russia's offers of loans and technicians to underdeveloped areas.

The Democrats hope to stop an economic fall. (Unemployment insurance claims for December were the largest in twenty years.)

The administration wants lower farm supports. This is opposed, naturally, by a bi-partisan farm area bloc.

The administration also is asking for one billion dollars to be used in education over the next four years. The money will go for more college teachers, encouragement of math and science, and scholarships for bright students.

FOREIGN POLICY

United States policy towards Russia's request for a summit peace conference remains unsettled. Both Dulles and Eisenhower feel that little can be accomplished and tend to place more trust on our missile bases. The present NATO representative's meeting will coordinate replies to Bulgarian and compromise U.S. desires for progress at lower levels with British and

French hopes for a summit conference.

Britain is also urging the U.S. and others to join her and give economic aid to Communist threatened countries.

GAVIN

James M. Gavin, head of the Army's research and development program resigned because he could do more work from the outside than from the inside. Lyndon Johnson, chairman of the Senate Preparedness Committee is going to investigate to see if government tactics and interference forced Gavin out.



SUCCESSFUL STUDENTS

in Physics, Mathematics, and Electrical Engineering are asked to join the Lincoln Laboratory scientists and engineers whose ideas have contributed to new concepts in the field of electronic air defense.

- Heavy Radars
- Memory Devices
- Transistorized Digital Computers
- Scatter Communications
- Solid State
- AEW (air-borne early warning)
- SAGE (semi-automatic ground environment)
- Systems Analysis

Jan. 13 and 14

Senior Lincoln Laboratory technical staff members will be on campus. Appointments may be made with the Placement Office.

RESEARCH AND DEVELOPMENT



MIT
LINCOLN LABORATORY
Box 21, Lexington, Mass.



PENN R. POST received his B.S. in engineering from U.C.L.A. in 1956. He is now in the second year of General Electric's Technical Marketing Program, in the Company's General Purpose Motor Department.

"In a growing industry, there's room for me to grow"

"Here at General Electric," says Penn R. Post, 24-year-old marketing trainee, "you hear a lot of talk about the future—even as far ahead as 1978. In fact, I've discovered that planning ahead for America's needs 10 and 20 years from now is characteristic of the electrical industry. And, what's important to me, General Electric's long-range planning takes my future into account. I'm now on my fourth assignment in the Company's Technical Marketing Program—all planned steps in my development.

"I'm pretty confident about the electrical future, too. For one thing, America's use of electricity has been doubling every ten years. And it will increase even faster as our population grows another 65 million by 1978—and as research and development lead to new electrical products that help people live better. The way I look at it, the technical, manufacturing and marketing resources of large companies like

General Electric are important factors in the growth of the electrical industry. And in a growing industry, there's room for me to grow."

Young people like Penn Post are an important part of General Electric's plans to meet the opportunities and challenges of the electrical future. Each of our 29,000 college-graduate employees is given opportunities for training and a climate for self-development that help him to achieve his fullest capabilities. For General Electric believes that the progress of any industry—and of the nation—depends on the progress of the people in it.

Progress Is Our Most Important Product



CALTECH
PRESCRIPTION
PHARMACY

Prompt Free Motor
Delivery

CALTECH VITAMINS
Caltech Genuine Wheat
Germ Cereal

CALOID COLD CAPS
NEW, EFFECTIVE REMEDY

Imported & Domestic
Wines - Liquors - Champagne

Breakfast, Lunch, Dinner
SERVED DAILY

Corner California & Lake

Classical Music

Heard From The Wings

by Joel Yellin

Last Thursday and Friday at the Philharmonic, and again on Sunday here in Pasadena, the Los Angeles Philharmonic Orchestra performed an all Brahms program under guest conductor Bernard Haitink. Appearing as soloist was violin virtuoso Yehudi Menuhin. Mr. Haitink, who I understand made his American debut Thursday night, showed himself to be a mature interpreter of this difficult music.

First on the bill was the Tragic Overture, a work requiring careful handling, especially in the numerous entrances of the brass. Too many of these entrances blared out roughly, and Mr. Haitink seemed a little nervous, lacking a certain degree of control.

* * *

PROGRAMMED NEXT was the Brahms Violin Concerto. Though Mr. Menuhin's tone left something to be desired, his performance was solid otherwise. The accompaniment was sympathetic but not superior, always excepting Bert Gassman's flawless execution of the oboe solo in the second movement. On the whole, it was a satisfying performance, though it was not quite moving.

After intermission, Mr. Haitink returned to conduct the Fourth Symphony, and provided the high point of Thursday's program. The whole piece, and especially the second movement, was given an interpretation which showed a fine depth of musical understanding.

With each succeeding performance, the orchestra's popularity seems to grow without limit. It is impossible to give too much credit to the influence of Mr. Edvard van Beinum, the Philharmonic's new conductor, in this trend. His acceptance of the Los Angeles position marks a turning point in the musical history of the Los Angeles area. If you appreciate orchestral music and have neglected to hear the Philharmonic since the advent of van Beinum, you have missed a wonderful experience.

* * *

MY RECORD DEALER tells me that Capitol Classics and RCA Red Seal will go up in price from \$3.98 to \$4.98 early this

year. However, RCA will offer a Record Club similar to that of Columbia. The initial purchase will be the nine Beethoven symphonies, recorded by Toscanini, all for \$4.98!

* * *

YOU MAY RECALL my mentioning Artur Rubenstein's recordings of the five Beethoven concerti for RCA. Previously, I mentioned the Fourth. Last week I bought the E-flat "Emperor" and discovered another fine performance in it. My one objection is that the sound is much too erratic. The range of volume requires continual fiddling with controls, and is somewhat of an annoyance.



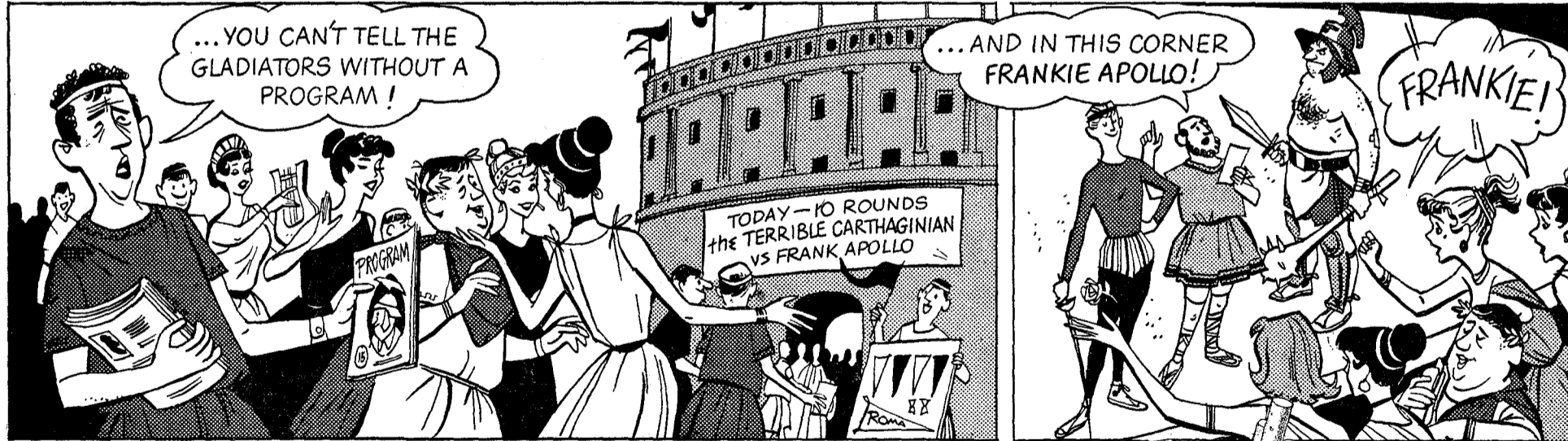
**FOR A CHALLENGING JOB
WITH GROWTH POTENTIAL
IN A LEADING OIL COMPANY..**

Keep Us In Mind

If your field is geophysics, geology or physics, we'd like to discuss your job opportunities at Pan American Petroleum Corporation. Our representative, Mr. P. H. Garrison, Geophysical Supervisor, will be at California Institute of Technology on Thursday, January 9, 1958. You may contact Dr. Donald S. Clark, Director of Placements, to arrange an interview.

**PAN AMERICAN
Petroleum Corporation**

SUPER-WINSTON PRODUCTIONS PRESENTS **ROMAN IN THE GLOAMING** THE HEART-WARMING STORY OF A SIMPLE GLADIATOR



AND A NEW CRUSH-PROOF BOX, TOO - LIKE WOW!

R. J. REYNOLDS TOBACCO CO. WINSTON-SALEM, N. C.

Blacker Takes Trophy Lead

With the completion of the first term's Interhouse sports program, Blacker and Ricketts emerged as "top dogs" in the trophy competition.

The results, listed below, are tentative pending approval of the Interhouse Committee's proposal to make all sports worth twenty-five points. These results are based on fifteen points for swimming and cross country.

Interhouse Standings

	Prev.	Swim.	Tot.
Blacker	30	9	39
Ricketts	32	6	38
Throop	28	3	31
Fleming	14	15	29
Dabney	16	12	28

Basketball Schedule

VARSITY

Fri.	Jan. 10	8:00 p.m.	Caltech at Riverside
Wed.	Jan. 15	8:00 p.m.	Pomona at Caltech
Fri.	Jan. 17	8:00 p.m.	Occidental at Caltech
Sat.	Jan. 18	8:00 p.m.	Caltech at LaVerne
Tue.	Jan. 21	4:15 p.m.	Caltech at Nazarenes
Sat.	Jan. 25	8:00 p.m.	Caltech at Redland
Tue.	Jan. 28	4:15 p.m.	LA State at Caltech
Sat.	Feb. 1	8:00 p.m.	Redlands at Caltech
Fri.	Feb. 7	8:00 p.m.	Caltech at Whittier
Sat.	Feb. 8	8:00 p.m.	Caltech at LA State
Tue.	Feb. 11	8:00 p.m.	Caltech at Occidental
Fri.	Feb. 14	8:00 p.m.	Caltech at Pomona
Sat.	Feb. 15	8:00 p.m.	Caltech at Cal Poly
Tue.	Feb. 18	4:15 p.m.	Nazarenes at Caltech
Fri.	Feb. 21	8:00 p.m.	Whittier at Caltech
Sat.	Feb. 22	8:00 p.m.	UC, Riverside at Caltech

FROSH

6:30 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
4:15 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
6:30 p.m.
4:15 p.m.
6:30 p.m.
6:30 p.m.

Muraoka Leads Red to IH Swim Victory

Fleming pulled out a surprise upset victory in interhouse swimming.

Ken Muraoka, Fleming's Hawaiian terror, breezed to firsts in the 50-yard free and the 50-yard breast and anchored the record-breaking 200-yard relay.

Fleming took firsts in every event except the 50-yard back, where they took second, third and fifth to compensate. With this as a firm start, the boys from Fleming went on to pile up the astounding total of 63 points out of a total of 135 possible.

Sailing Club Places Eighth

The Caltech Sailing Club represented Caltech at the Pacific Coast Intercollegiate Sailing Championships at Newport Harbor last December 21 and 22. Representing Tech were Doug McLane and Tom Gunckel in "A" division and Dave Ackley and George Logemann in "B" division. The meet, consisting of a complete round-robin, was under the auspices of the Pacific Coast Intercollegiate Yacht Racing Association.

The end of the first day's races found Tech in eighth place, followed by only two other teams. Sailing in Lehman 10 dinghies with fiberglass hulls and aluminum masts and spars, the seamen improved on Saturday's results to finish seventh.

The final results were Occidental 175, Stanford 174, Washington 171, Orange Coast 158, Santa Barbara 128, Menlo 97, Caltech 88, Claremont 87, U. of California 86, Harbor J. C. 85.

RESULTS

Medley relay — 1, Fleming, 43.6 (Wright, Wilhelmy, Hughes); 2, Dabney; 3, Ricketts; 4, Blacker.

50-yard free — 1, Muraoka (F) 27.; 2, McLane (F); 3-tie, Tibbitts (B) and Pisani (B); 5-tie, Christman (D) and Ruecker (R).

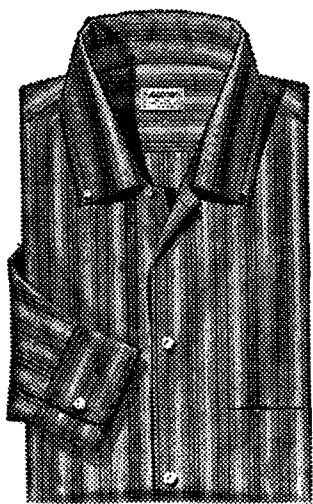
Diving — 1, Phelan (F); 2, Ruecker (R); 3, Stark (T); 4, Byrne (F).

100-yard free — 1, McLane (F); 1:05.0; 2, Pisani (B); 3, Hughes (F); 4, Tibbitts (B); 5, Christman (D).

50-yard back — 1, Rubin (T) 36.1; 2, Wilhelmy (F); 3, Kipping (F); 4, Dinwiddie (B); 5, Wright (F).

50-yard breast — 1, Muraoka (F) 34.1; 2, Lange (D); 3, Widess (D); 4, Wilhelmy (F); 5, Brooks (R); New record set in trials by Muraoka (F) 33.4.

200-yard relay — 1, Fleming, 1:52.9 (new record) (McLane, Muraoka, Hughes, Wright); 2, Dabney; 3, Blacker; 4, Ricketts.



Examine our eye-catching Arrow Trimway

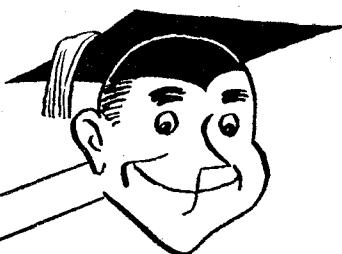
Come and see our wide, colorful selection of Arrow Trimway shirts. All are smartly styled, all are in the newest plaids and stripes. The sooner you come the more you'll have to choose from, so don't delay.



PASADENA
141 E. Colorado Street
SY 6-0351

EE
ME

Graduate Engineers



DON'T STICK YOUR NECK OUT!

...until you see the
**AC-GENERAL MOTORS
REPRESENTATIVE**

on your campus
January 13, 14

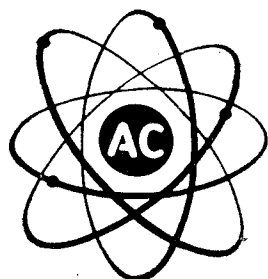
Your Future depends upon Permanent Security. GM's continuous, long-range Design and Development Program in all fields of engineering and manufacturing . . . GM's policy of decentralization . . . GM's facilities . . . GM's working conditions . . . GM's wage advantages . . . create individual opportunity for advancement and permanent security.

It is why we repeat "Don't Stick Your Neck Out" until you see the AC representative.

CHALLENGING OPPORTUNITIES IN

- Avionics
- Inertial Systems
- Computers
- Missile Guidance
- Jet Engine Fuel Controls

Please contact your Placement Director today to arrange for interviews with AC-General Motors recruiting representative



AC SPARK PLUG
GENERAL MOTORS CORPORATION
MILWAUKEE 2, WIS.

THE ELECTRONICS DIVISION
FLINT 2, MICH.

Ricketts Nabs First Term Lead for Rating Trophy

The Athletic Department and the Interhouse Committee announced the first quarter's var-

sity rating points for football, soccer, and water polo.

Dabney and Ricketts cleaned up in football, with Fleming dead last. Ricketts and Fleming took the lion's share of points in soccer, splitting them almost equally. Water polo was dominated by Fleming, with Ricketts garnering enough points to hold a strong first in the overall ratings.

With cross-country uoints yet to be awarded the standings are:

Ricketts	109
Fleming	94
Dabney	85
Blacker	55
Throop	52

REAL ITALIAN ATMOSPHERE

ORIGINAL

Little Tony's

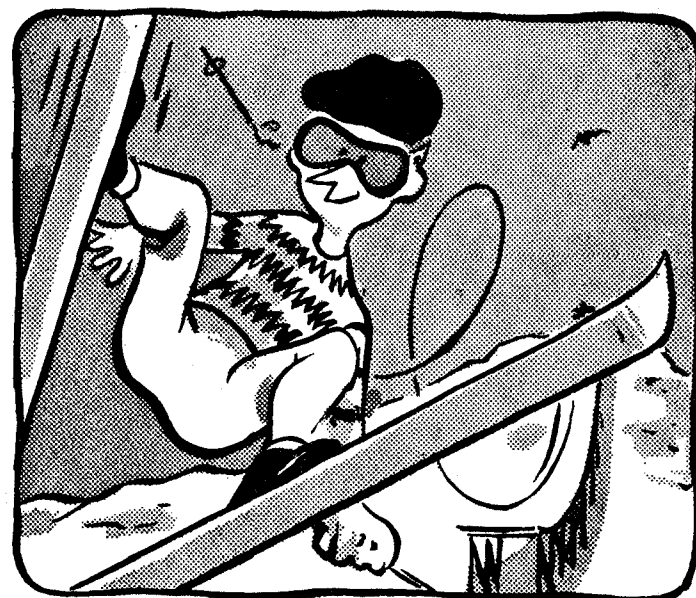
ITALIAN RESTAURANT

2254-56 E. Colorado Street

SY 3-1340

Pizza Spaghetti Cocktails

New . . . Parking in Rear



DO SPEED AND SPACE EXCITE YOU?

You can be a career speed merchant if you're an engineer. You may make speed history, if you choose Chance Vought, whose Crusader fighter has set three national records. Ask about exciting assignments on our 1,000-plus-mph Regulus II missile and on other projects programmed for our 3,800-mph wind tunnel.

OUR REPRESENTATIVE WILL BE IN YOUR PLACEMENT OFFICE

JANUARY 14

CHANCE
VOUGHT AIRCRAFT
INCORPORATED - DALLAS, TEXAS

Campus Brewins

Florida U. Here We Come

Beak is in mourning over the people who our fair reinstatement committee gave the boot. It is going to be tough to write a sheet like this without such old favorites as Kelly, Bell, Gilson, Jansen and many others. Beak has it from good authority that they are going to set up a Caltech outpost at the U. of Miami in Florida.

Christmas Cheer

Vacation is an excellent time to sit around and get stinking dead drunk.

Frisco Fun

Messrs. Carmichael and Gilson toolled up to S. F. The only coherent thing that Beak can get out of them is that they were kicked out of four bars in four blocks but that they did find enough that would cater to their young ages to make things worthwhile. Women, liquor and money flowed rather freely and they want to go back and do it again.

Snow Slows

Beak was trying to set a land record from the east to Caltech by car. This try was done in a 52 Caddy with a leaky muffler. Things were going great until Queamado, New Mexico when

snow began to fall at the rate of an inch every twenty minutes.

Beak is starting a recommending operation like Duncan Hines. First on the list is Queamado. Only bar in town is closed and there isn't a telephone within 50 miles. Just a great place for pseudo poets and guitar players who want to find seclusion.

Santa Ana Moves

N. Velinty came to the line in his beat-to-hell '50 Ford for a drag with D. Antshultz in his newly created '49 Plymouth with a very hot powder-blue paint job. The flag dropped on the Arden Road Strip and away went these two drag strip kings. End results were one totaled '49 Plymouth and three stitches in D. Tucker's eye. Tucker was riding shot gun for the blue bomb.

The BIG Men

Hal Yura and his lady killing friend of great fame, Marv, were looking for a great time where they could find some women that were "sophisticated." Well, word spread around the countryside of a real great party with just such women. These big men decided to crash and see what they could do for themselves. When they got in, both of them were delighted. Wow! What bitchen

HANNA

(Continued from page 1)

tion to her former colonial role.

While Hanna is not overjoyed by the size of American economic aid (The Russians have offered, but not thus far delivered, twenty times as much), he says that he is much encouraged by the increased awareness, interest, and knowledge of Southeast Asia which he has found on this trip to America as compared with what he found here three years ago.

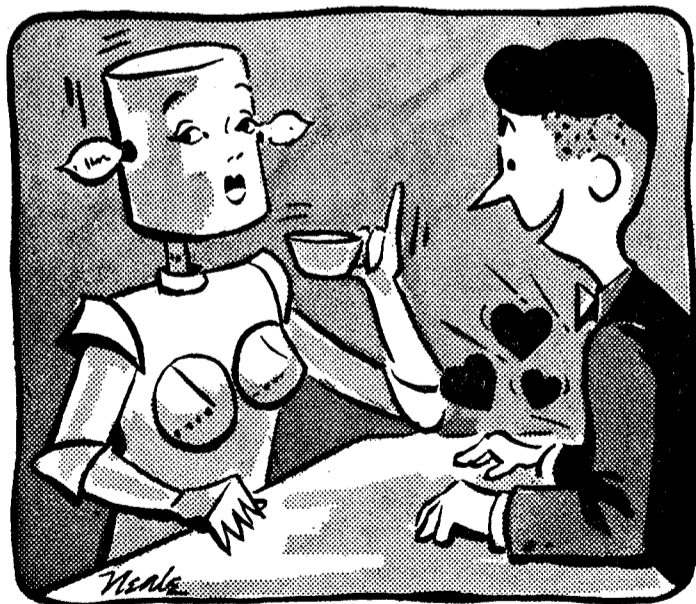
Hanna has been interested in this area of the globe since 1932, when he went to China for four years as a teacher. Later, he returned to what is apparently his primary interest; during the war he served in the Navy, landing on Okinawa with the occupation forces, becoming Chief of the Military Government Office of Education and Cultural Affairs. From 1947 to 1954 he held senior posts in the U.S. Government information program, including a year in the Philippines, a year in Japan and five years as Chief Public Affairs Officer in

Indonesia.

Finally, in 1954, he joined AUFS because it "permitted me to spend 75 percent of my time observing and watching instead of 75 percent of my time on administrative details." He enjoys his current schedule, which is to spend alternate one and a half year periods in Southeast Asia and the United States.

Caltech students will have numerous opportunities to hear this frank, stimulating observer during the coming week. On Monday, January 13, he will speak on "A Muckraker's Indonesia" before the Undergraduate Lunch Club at the training table. He will attempt to describe the current internal situation in Indonesia as seen through the eyes of a personal friend, a crusading Indonesian journalist who has exposed much of the corruption in the current regime.

On Tuesday, January 14, he will talk on Indonesia's "Crisis in Foreign Relations" before the History 5, 11:00 a.m. audience in 206 Dabney. All interested students are invited to hear this lecture.



DO MECHANICAL BRAINS INTRIGUE YOU?

Do these intellectual vamps arouse your engineering instincts? Then why go on ogling? Especially if you're an electronics or mechanical major! Plan to enjoy the company of the best mechanical computers. Create your own electronic brains for missile guidance. Find out what's ahead at Chance Vought in this fast-growing field.

OUR REPRESENTATIVE WILL BE IN YOUR PLACEMENT OFFICE
JANUARY 14



Pit and Paddock

By Larry Crissman

Some of you have been complaining that we haven't been covering the more potent machinery, so we hunted up a buddy with a 57 Corvette while we were home. He took us along on one of his nightly trips.

The car we tested was a 57 hardtop with a 245 hp, 4.6 liter mill. It was equipped with a three-speed gear box and positraction. We carefully selected a little traveled highway that is seldom patrolled by the men in blue, marked out a quarter-mile strip, and got to work.

women and What a great party it was. Marv and Hal couldn't be torn away.

Beak understands that they just couldn't believe that Dave Leeson was chaperon at the party which was being given by his 16-year-old little sister for her young friends. This little incidence reinforces Beak's belief of Hal's great parties, women and lady killing friends as not quite being what they sound like.

We got to the 60 mph mark, in first gear, in 7 seconds flat. You are actually pushed back in the seat by the acceleration. If there is one thing that the Corvette has, it's torque. Second gear takes you to 100 mph, and third is good for another 30 mph.

The ratios in the three-speed box are not as close as is desirable, but the four-speed box is ideal for the engine. Chevrolet has done a tremendous job on this gearbox.

We ran our quarter mile in just under 17 seconds with two passengers and a bad start. We decided that we had been making so much noise that the local minions would soon arrive, so we continued down the road at an indicated 135 mph, without trying to better our quarter-mile mark.

The car was remarkably smooth and steady at what was actually about 125 mph. The rear wheels can be broken away quite easily, but a true four wheel drift is a bit more difficult. We figured that we might live a

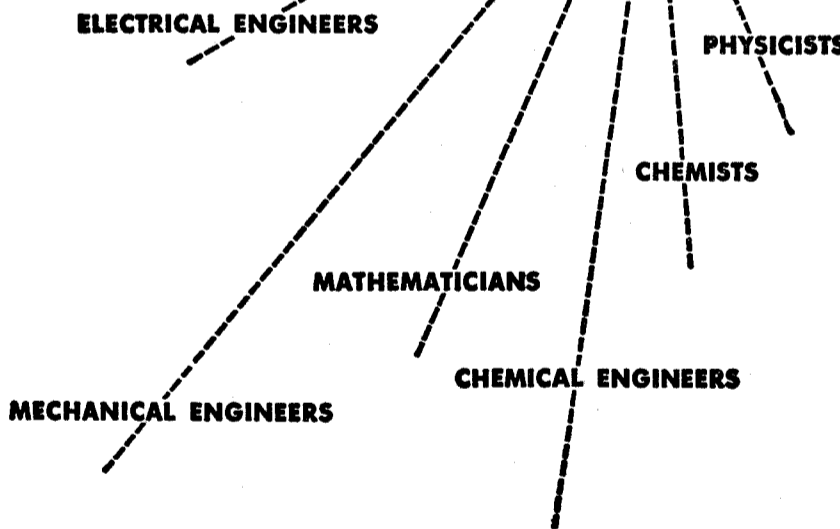
little longer if we would slow down for the tight corners.

The 58 Corvette is mechanically the same as the 57, but the dashboard has been completely redesigned. This was a needed improvement; the new dash is much better. Dollar for dollar it is impossible to get more sports car than the Corvette. The one that we tested sold new for 3,186 monies. You can't ask for a better bargain than that!

UNITED ARTISTS
INVISIBLE BOY
and
DECISION AGAINST TIME
Discount card at box office

Welcome!
CAMPUS BARBER SHOP
in the Old Dorm
Hours: 8-5:30 Price: \$1.50
Phone Ext. 567
Two Barbers Every Day

MEASURE the scientific environment at UCRL



THE CHALLENGE Current projects at UCRL are at the very frontier of nuclear research. Assignments are fresh and stimulating at all levels. Here one calls upon his creative imagination — as well as his ability — to help solve fundamental problems in nuclear science.

ASSOCIATES Men noted for outstanding accomplishments in your field are on the UCRL staff. Many of them have contributed pioneer achievements in the nuclear field. You share their pioneering knowledge — and have their encouragement — at UCRL.

FACILITIES Generally considered unmatched in the field, UCRL facilities give project workers access to all the latest instruments of research — from high-speed

digital computers, water boiler reactors, particle accelerators, to facilities in nuclear magnetic resonance-electron spin resonance.

ATMOSPHERE UCRL is directed by scientists and engineers. Here you'll find the right "climate" for work and advancement, encouragement for initiative. And you'll enjoy the opportunity to work in the San Francisco Bay Area.

A UCRL staff member will visit your campus
JANUARY 27, 28
to give you complete details on future opportunities at UCRL. Contact Placement Office now for appointment.



UNIVERSITY OF CALIFORNIA RADIATION LABORATORY
Livermore, California