

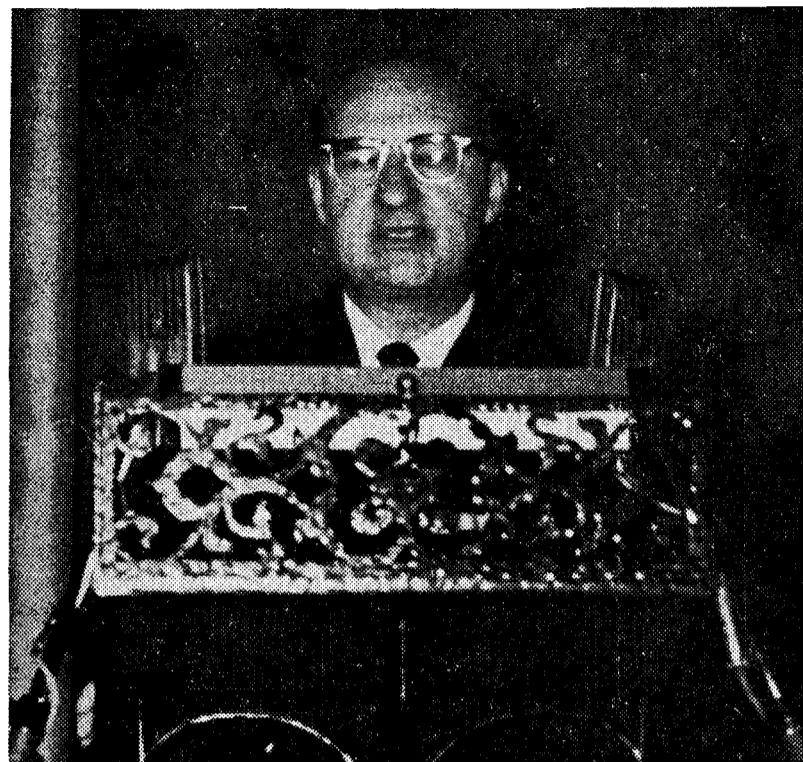
# California Tech

Associated Students of the California Institute of Technology

Volume LXII.

Pasadena, California, Thursday, October 27, 1960

Number 6



## Skousen Antagonizes With Reactionary Ideas

BY RICHARD KARP

Facing a hammer-and-sickle which adorned Culbertson Hall, W. Cleon Skousen, author of "The Naked Communist," and ex-police chief of Salt Lake City, spoke last Thursday on "The History and Function of Investigative Committees." The program was sponsored by the YMCA in an attempt to give the other side of the Pauling case.

Skousen began his talk by explaining that since the topic was rather well limited, he would like to give a little background first. This announcement was followed by 75 minutes of Skousen-biased History of the Communist Party in the U.S.S.R. (called the "Union of Socialist

Soviet Republics" by Skousen), and then 15 minutes on the history of the investigating committees of Congress. Questions followed the speech.

The main thesis of Skousen's talk appeared to be the idea that the Communist Party has not done one good deed for the western world (and the United States in particular) since they took control of Russia in 1917. Skousen endeavored to show that the Russian people were never for the government and, indeed, while Lenin didn't want his hatchet man to take over when he died, Stalin expressed the same feeling while he lay dying, evidently out of his tender feeling for the Russian people.

Skousen felt that it was the duty of the U.S. at the last U.N. meeting to make a motion that the U.S.S.R. be unseated from the United Nations Organization. This motion, he felt, would be peace-like since it is a breaking of diplomatic relations, an action which shows that the nation has stopped short of war. Skousen denied the fact that the breakage of diplomatic relations is an indication of war.

This talk was not what was expected by the Caltech students. They had come expecting some kind of defense of the Senate Internal Security Subcommittee in the Pauling case.

The majority of the people at the lecture were men and women in their 50s and 60s. The oldsters are well-known for their blind "patriotism" and this night was no exception. On the other hand, the Caltech students who were there (and in the minority) displayed the usual cynicism that the Tech student is known and loved for. It is an interesting fact that the only reason the speech got exciting at all was due to the questions asked by the Techmen, and there were NO questions at all asked by the elderly Pasadenans.

One student asked the question, "Can Mr. Skousen name three historians who would support his feelings?" Skousen: "Would you believe me if I could?" At this point the NOL's (nasty old ladies—a "Playboy"

(Continued on page 6)

## Schriever Here Friday; Moch Eyes Arms Race

### Ex-Comm Slates President Poll

A semi-Gallup poll will be passed out today by the ASCIT Executive Committee in an attempt to determine campus political sentiment. The poll, whose main question is, "Which candidate is your choice for the coming election, Nixon or Kennedy?" will be circulated among undergraduates and the faculty.

Results of the questionnaire will be tabulated by ExComm (hopefully) and presented in an early issue of the California Tech.

Besides asking presidential preferences, the undergraduate version of the poll will also include questions about parents' political party and the student's own political leanings and his option.

The faculty poll will include questions on party preference and activity, and division.

### MacLeish To Visit Caltech

Archibald MacLeish, Pulitzer Prize winning poet and author of the popular poem-play "J.B." will visit Caltech late in November.

MacLeish's visit will be the first in this year's YMCA Leaders of America program. He will be on campus November 30 to December 2.

Pulitzer prizes have been awarded MacLeish for "Conquistador" in 1933 and for "Collected Poems, 1917-1952." "J.B." which is a modern take-off on the Book of Job, is very popular at Tech; it has been presented by Y play-reading groups twice in as many years.

MacLeish's activities also extend far beyond the fields of poetry and literature. He was one of the famous group of intellectuals who worked closely with Roosevelt in the '30s. F.D.R. appointed him librarian of Congress during this period. MacLeish is very interested in many modern social, political and cultural topics.

He will be taking time out from lectures at Harvard to visit Caltech and then he complete a new play.

There is a possibility that a small reading group will be organized to read some of MacLeish's works and then discuss them with him in depth. Anyone interested, should sign up in the Y office.

BY CRAIG BALON

Air Force Lt. General Bernard A. Schriever will deliver the third lecture in the Carnegie series on science and government Friday, October 28, at 1 p.m., in 119 Kerckhoff. He will speak on "The Air Force Space Program."

Schriever has been the commander of the U.S. Air Force Ballistic Missile Division since 1955. His lecture will include a short film on recent space flight developments. Immediately following the lecture, the faculty seminar on arms control will convene in 168 Church.

### \* \* \* MOCH DEFINES DISARMAMENT

On Wednesday night of last week, October 19, Monsignor Jules Moch, permanent French representative on the U.N. Disarmament Commission, delivered the second lecture in the Carnegie series. He spoke at Culbertson Hall on "Why Disarmament Is Necessary, and How to Police It."

Moch is a native Frenchman, a graduate of the Ecole Polytechnique in naval engineering, who entered politics early in life. He served on the De Gaulle government during the Second World War, and was Minister of Defense from 1950 to 1951. He has been a French representative on every disarmament committee and at every disarmament conferences since the end of the war.

### DISARMAMENT NEEDED

His first topic was the necessity for disarmament, and the necessity of starting it immediately. When rapidly advancing technology has made ICBM bases undetectable, disarmament will be impossible; and in this country, this development, i.e., that of the Minuteman bases, is projected for 1963. If disarmament is not accomplished, Moch feels that even any limited war inherently will possess the possibility of universal destruction. "We, therefore, have not the right to waste time before disarming."

Moch defines two major problems in the field of disarmament, the resolution of political disagreements with the rebuilding of international confidence, and the solution of the technical problem of effecting disarmament itself. Obviously, neither

### Chamber Music Concert Sunday

The first program of the Caltech Chamber Music Series will be presented this Sunday at 8:15 p.m. in the lounge of Dabney Hall.

The Clebanoff Strings will present about one and a half hours of music. The size of this group is unusual compared to the majority of those to come in the Series; there are 16 musicians, instead of the normal three to five.

Admission is free and all are welcome.

of these can succeed alone. He holds that the way to begin on both is to ease tension by making a beginning at agreement on the technical problem of method. But, says Moch, this will not help unless the agreement provided for the establishment of a permanent international inspection organization.

The Russian position is, most basically: no inspection without disarmament. The U.S. position is the converse: no disarmament without inspection. As the great compromisers, the French propose simultaneously beginning inspection and disarmament. Moch states that these must apply to both conventional and nuclear arms. But because of its much greater danger, precedence must be given to banning nuclear warfare.

### NUCLEAR DISARMAMENT

Nuclear disarmament, Moch says, involves four different factors:

- (1) The cessation of nuclear tests;
- (2) The cessation of production of fissionable material for military purposes;

(3) The reconversion to peace-

(Continued on Page 2)

## Interhouse Scheduled

Plans are under way and social chairmen are hard at work in all seven Houses in preparation for the big Interhouse Dance on November 12. This event will be the highlight of first term and will be combined with the Alumni Association's Homecoming plans. The themes vary from the realistic to the historical to the imaginary.

Blacker House will convert its courtyard into a huge cypress swamp, complete with alligators, swamp plants, and sound effects. The lounge will be turned into a bayou fishing shack and a Dixieland band will supply music. Dabney will present a "Land of Oz" theme with the yellow brick road and Emerald Palace taken from the story and various events being acted out along the way.

Fleming's theme will be a Western one in which the lounge will be turned into a saloon and gambling hall, complete with dancing girls and a bar. Outside, various Western scenes will be enacted. Lloyd will base its Interhouse on *Alice in Wonderland*, displaying many scenes from the story, including the Tea Party, the croquet game, the Mad Hatter, and the Cheshire cat.

Ricketts, Page, and Ruddock will make one combined effort to re-enact the Trojan War. The Olive Walk will be turned into a walled city into which will come a Trojan Horse. The courtyard between Ricketts and Fleming will become a temple in which the dancing will take place.

## Moch Speaks

(Continued from Page 1)  
ful uses of present military nuclear stockpiles; and

(4) The elimination of the means of delivery on nuclear weapons.

Stopping tests, says Moch, is a ridiculous matter. It only retains a monopoly of power for the nations now possessing nuclear weapons. Furthermore, it may deny progress to certain peaceful applications of nuclear technology. As a first step in disarmament, it is useless and ineffective.

The cessation of military nuclear production is the easiest to effect and control. Military nuclear material requires a percentage content of fissionable element that is more than three times the normal maximum need in peaceful uses. Furthermore, facilities for nuclear production in quantity are quite large and difficult to conceal.

But the reconversion of present military stockpiles is the basic problem, and a far more difficult one. The only way to insure complete destruction of these stockpiles is to provide adequate inspections and con-

(Continued on page 6)

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

## SUCCESSFUL STUDENTS

**LINCOLN LABORATORY**  
has openings for a limited number of engineers, physicists and mathematicians in original research and development activities.

**LINCOLN LABORATORY**  
is an electronics research and development center established by M.I.T. in 1951.

OUR REPRESENTATIVE  
WILL BE ON CAMPUS  
OCT. 27 and 28  
CONTACT YOUR  
PLACEMENT OFFICE NOW

Research and Development

**LINCOLN LABORATORY**  
Massachusetts Institute of Technology



BOX 21 • LEXINGTON 73  
MASSACHUSETTS

## Editorial

# 4 Years Over Again?

In view of the current attitudes prevailing on campus and the trends in the Institute policies toward students, would you recommend that a friend come here for a four-year education? We, for the present, are very hesitant about giving a positive recommendation to anyone who thinks he wants to come to Caltech.

Our principal quarrel lies not with the academic instruction but with the student body attitude and the non-academic opportunities. These are, of course, related to both student and administration policies.

First we contend that an incoming freshman will encounter a lack of individual initiative that is well established in the three upper classes. Furthermore, the lack of initiative exhibited is something which can spread very quickly to an incoming class.

This lack of initiative — the will to undertake projects on one's own — is evidenced in two main sectors. One is the academic area where only a few students make any effort to do more in the course than the required homework. We question in general how many students really undertake to learn what a year's course is really supposed to teach them.

Secondly, lack of initiative is evidenced in the social-cultural undertakings of our fellow students. Again, with the exception of a few enterprising individuals, large numbers of the populace are unwilling to take it upon themselves to get out and see the world. Few enough are willing to get out and see the world when it arrives here, a la Carnegie Series.

Second we contend that there is a lack of competition in those areas of endeavor other than academic. Those people with initiative who run for offices, go out for sports, serve on committees, and so forth are not challenged and as a result probably will not develop in these areas in accordance with their potential. There is a job for everyone with no real competition involved.

This lack of competition is further evidenced in cultural undertakings including politics, Y affairs, music, and so forth. It takes a good deal of looking on the part of a lone student to find somebody (another student) on campus who can contribute significantly toward his non-academic development.

Particularly, we think that a large number of students come here, not with a great burning desire to do scientific research but because they are "just interested" in science. For them, the scientific education alone should be but a part of their overall education.

Why is lack of initiative and competition in non-academic areas an important question? It is important because the present lack of a broad base for student growth and learning means that a student's decision to come to Tech is for most of the students, an irrevocable assignation of their soul to science, alone.

The presence of the Carnegie Series this fall is mute testimony to the fact that "well-rounded scientists" are needed, and that the faculty preoccupation with the pure scientist is often misleading, and at least should be tempered with an understanding of the non-academic role in the "education" of the student.

If we can do something to work out a better student attitude and create a more lively and inhabitable atmosphere at Tech — starting with the problems mentioned — we'd be much more inclined to back the school in every respect. —tt

# 562 PROGRAMS, PROJECTS & STUDIES AT HUGHES

## THE DIVERSITY OF ELECTRONICS

### ACTIVITY AT HUGHES PROVIDES AN IDEAL ENVIRONMENT FOR THE GRADUATING ENGINEER OR PHYSICIST. THESE ACTIVITIES INCLUDE:

- Polaris Guidance Development
- Army/Navy Computer Systems
- Space Ferry
- Fixed Array Antennas
- Fire Control Radar Systems
- Pulsed Doppler Radar and Anti-Submarine Warfare
- Naval Tactical Display Systems
- 3-Dimensional Radar
- Air-to-Air Missiles
- Space Propulsion Systems
- Tunnel Diodes
- Infrared Devices
- Satellite Active Repeater Development
- Wide Band Scanning Antenna Feed Systems
- Microwave Antennas and Radomes
- Guidance and Navigation Computers
- Satellite Communication Systems
- Satellite Reconnaissance Drone
- World-Wide Communications Networks
- Command Control and Information Processing
- Micro-Electronics
- Linear Accelerators
- Gamma Rays
- Nuclear Fission
- Remote Handling Devices
- Photoconductive Materials
- Electroluminescence
- Solid State Display Devices
- Terminal Communications
- Line-of-Sight UHF and VHF Relay Systems
- Air Traffic Regulation and Landing System
- Pincushion Radar
- Logi-Scale General Purpose Computer
- Radar Closed Loop Tester
- Missile-Range Ship Instrumentation
- Precision Trajectory Measurement System
- Space Vehicle Subsystems
- Telemetering Systems
- Radiation Sources, Detection, Handling Equipment and Effects Analysis
- Inertial Missile Guidance Systems
- Machine Tool Controls
- Microwave Tubes
- Transistors and Diodes
- Rectifiers
- Thermal and Magnetic Relays
- Crystal Filters
- Digital Components and Devices
- Plasma Physics Research

### ELECTRICAL ENGINEERS AND PHYSICISTS B.S., M.S. or Ph.D. (Mid-Year and June Graduates)

Members of our staff will conduct  
**CAMPUS INTERVIEWS**

**November 14 and 15**

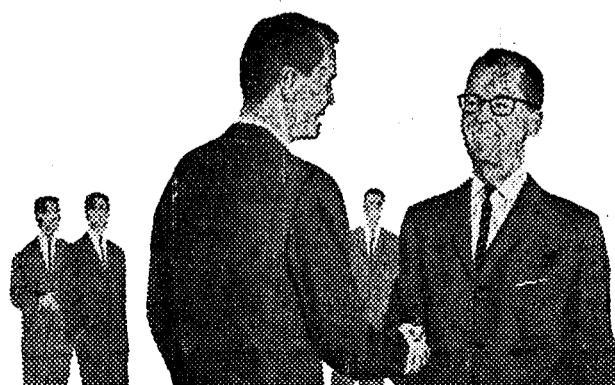
Find out more about the wide range of programs, unique Professional Register, advanced educational programs and relocation allowances offered by Hughes.

For interview appointment or informational literature consult your College Placement Director. Or write Hughes College Placement Office, P.O. Box 90515, Los Angeles 45, California.

CREATING A NEW WORLD WITH ELECTRONICS

**HUGHES**

**HUGHES AIRCRAFT COMPANY**  
Culver City, El Segundo, Fullerton,  
Malibu, Newport Beach, Oceanside,  
Los Angeles, Calif.; Tucson, Arizona



**Letters****Writers Berate Skousen**

Gentlemen:

In the October 6 issue of the California Tech, you blasted the speech given by Dr. Pauling the week before as being full of statements that were made for the sole purpose of arousing the audience's emotions, and which he backed up with no facts. You also asked that the YMCA present the entire picture of this issue, and not just Pauling's side. I will have to agree with you that, although Pauling's speech began on an objective note, it soon degenerated into a mass of emotion raising statements. Although you did not say anything to the effect that if the other side of the Pauling case were presented, his arguments would be picked apart by the presentation of facts and sensible reasoning, I seemed to get that impression from your editorial.

Now, the other side of the argument has been presented (?), and I sincerely hope that the Tech had reporters present at the lecture. If Pauling's speech was emotional, what was this? For almost two hours Mr. Skou-

sen cited the wrongdoings of the Communists in the past 43 years. His sole effort was to portray the Communists as the lowest forms of life on the face of this earth. I am sure that everyone present at this lecture realized that the Communist government has an immense record of wrongdoings before they entered the hall. It is obvious that the only reason the Communists were portrayed in this light was to arouse the emotions of the audience to the extent that it believed that Communism has to be defeated, no matter what the cost in loss of civil liberties may be.

All this arouses one big question. Can the few facts that Dr. Pauling presented be argued against with logic and facts? If so, I would strongly urge the YMCA to invite someone to the campus who could do so. If not, I feel that it would be better to let them stand undisputed than to fight them with emotionalism.

Al Tyrrell

Editor, California Tech:

Naturally I was disappointed

when Thursday night's YMCA speaker, W. Cleon Skousen, gave a one-sided review of United States-Russia relations instead of a talk on investigative committees, as advertised. However, it did provide me with an example of the lack of maturity of some Cal Tech undergrads. The speaker appeared foolish, but he more than met his match in the students here. Their private conversations annoyed those around them. From their smiles and smirks during the talk, I imagined these geniuses of a few history courses to be preparing questions which would adroitly show the audience how limited the speaker's viewpoint was. Apparently all their energy was expended in waving their arms furiously about and jumping to their feet, for the questions fell far short of the mark. I would advise these students to review their qualifications in the field of history, and to phrase their questions in a spirit of humility which will do justice to the superior intelligence they wish others to realize they have.

Robert Hecht  
Graduate student**Tech Sits In  
For Trujillo**

Caltech will represent the Dominican Republic at the Eleventh Annual College Model United Nations, to be held in April in Eugene, Oregon.

For the third straight year, Techmen will represent one of the most controversial countries in the world, following Japan and Israel with Dictator Trujillo's right-wing government. The Dominican Republic, while not an important country in itself, will be the focal point of much hot debate as a result of the Organization of American States' recent condemnation of her policies. The United States, after several years of non-committal attitude, has recently joined the South American countries in placing a trade embargo on Trujillo. This OAS stand should cause lots of action at MUN.

The Caltech delegation will consist of from six to eight members, to be chosen later this term. Delegation co-chairmen are Roger Noll and Francis Wilson.

**Frosh Reveal  
Inhibitions**

BY DAN ENTINGH

A poll was recently conducted among the frosh at MIT and CIT. The poll consisted of a single question: "If you graduate from this school after four years, which half of the class will you be in?"

Careful research indicated that 95 per cent of the MIT frosh will graduate in the upper half of their class. Seventy per cent of the Caltech freshmen will be in the lower half of their class after four years.

The poll illustrates one of two things: Caltech is the roughest school in the world, and MIT frosh are the brainiest frosh in existence. Actually the poll proves only that 45 per cent of MIT men are liars, while no more than 20 per cent of Caltech men lie consistently.

However, 140 Caltech freshmen can't be wrong; the faculty will undoubtedly find a way to put 70 per cent in the lower half of the class.

## ENGINEERS PHYSICISTS MATHEMATICIANS

The Electronic Equipment Division of Litton Systems, Inc., with laboratories in the Beverly Hills, Woodland Hills, and Canoga Park suburbs of Los Angeles, and in Waltham, Massachusetts, has positions available now for Ph.D., M.S., and experienced B.S. candidates in these fields:

**INERTIAL GUIDANCE AND CONTROL  
TACTICAL DATA PROCESSING SYSTEMS  
COMPUTER AND CONTROL SYSTEMS  
TECHNICAL SUPPORT ENGINEERING  
ADVANCED COMMUNICATION TECHNIQUES**

**Areas of endeavor include:**

ADVANCED CIRCUIT DESIGN	INFORMATION THEORY
SERVOMECHANISMS	FIELD ENGINEERING
MICROMINIATURIZATION	MAGNETICS
SYSTEMS ENGINEERING	PLATING INVESTIGATIONS
ELECTROMECHANICAL DEVELOPMENT	MATERIALS AND PROCESSES DEVELOPMENT
COMPUTER PROGRAMMING	MATHEMATICAL ANALYSIS
PRODUCT ENGINEERING	LOGIC DESIGN
ENGINEERING WRITING	SYSTEMS ANALYSIS
SOLID STATE INVESTIGATIONS	DIGITAL AND ANALOG CIRCUITRY
ELECTRONIC PACKAGING	SYSTEM CHECK-OUT
	PRODUCTION TEST

**A limited number of Litton Study-Work Fellowships are available to B.S. graduates of high academic achievement.**

**Interviews will be conducted by visiting members of our Research and Engineering Staff. See your Placement Office now for an appointment.**

**INTERVIEW DATE ON THIS CAMPUS:****November 3, 1960**

**LITTON SYSTEMS, INC.  
Electronic Equipment Division  
Beverly Hills, California**

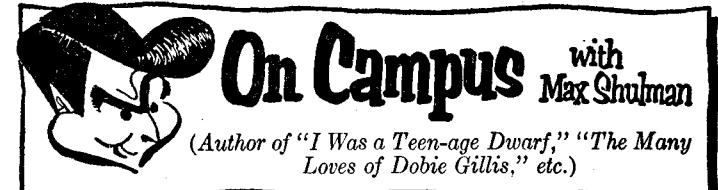
**Diner's Club Meets Tonight**

Tonight at 6:30 the Diner's Club gets off to a flying start at the Chandler Dining Hall with what promises to be an extremely lively and interesting debate on the presidential election. Dr. Sweezy and Dr. Thomson, economists from Cal Tech and Claremont Men's College, respectively, will exchange blows on the economic issues of the current campaign.

Dr. Sweezy will present the liberal attitude and Dr. Thomson

will counter with the conservative. Rebuttals and questions from the audience will follow.

The Diner's Club is to be a weekly event run by the YMCA which will bring interesting speakers to our campus during those wasted hours, 6:30 to 7:45. A break at 7:30 will allow people with other engagements to leave. The program is to be held in Chandler where a meal card will enable one to receive a free meal for this event.

**THE PARTY WEEKEND: ITS CAUSE AND CURE**

With the season of party weekends almost upon us, my mail of late has been flooded with queries from young inmates of women's colleges wishing to know how one conducts one's self when one has invited a young gentleman for a weekend, so let us today take up this burning issue.

Well, my dear girls, the first thing to remember is that your young gentleman is far from home and frightened. Put him at his ease. You might, for instance, surprise him by having his mother sitting in a rocker on the station platform when he gets off the train.

Next, what kind of corsage should you send your young gentleman? Well, my beloved maidens, orchids are always acceptable. So, indeed, are phlox and delphinium. In fact, most any flora will serve. Do try, however, to avoid carnivorous plants.

If you find, my esteemed fillies, that your local florist has run out of stock, do not be dismayed. Make a corsage out of paper. But pick good, stiff, durable paper—twenty dollar bills, for example.

Remember at all times, my fond wenches, to show your young gentleman courtesy and consideration. Open doors for him, walk on the traffic side of the path, assist him to the punch bowl, zip his parka, light his Marlboros. (What, you ask, if he doesn't smoke Marlboros? Ridiculous, my precious nymphs! Of course, he smokes Marlboros! Don't you? Don't I? Doesn't everybody who knows a hawk from a handsaw? What other cigarette gives you such a lot to like? Such easy-drawing filtration? Such unfiltered taste? Such soft pack or flip-top box? No other, my sweet minxes, no other. Marlboro stands alone, and any man worthy of you, my estimable damsels, is bound to be a Marlboro man.)



If you will follow the simple instructions stated above, my good lasses, you will find that you have turned your young gentleman into a fast and fervent admirer. There is nothing quite like a party weekend to promote romance. I am in mind of a party weekend some years ago at Miss Pomfritt's Seminary for well-born females in West Linotype, Ohio. Serafina Sigafos, a sophomore at this institution, majoring in napkin folding, sent an invitation to a young man named Fafnir Valve, a junior at the Joyce Kilmer School of Forestry, majoring in sap and boles. Serafina had been ape for Fafnir since high school, but Fafnir preferred a girl named Gelia Fleshwound, the high school drum majorette who once threw a baton so high she impaled a southbound mallard.

Anyhow, Serafina sent an invitation to Fafnir, and he came, and she showered him with kindness and cuff links, and then he went away, and Serafina sat anxiously by the mailbox, wondering whether she would ever hear from him again. Sure enough, two weeks later she got a letter: "Dear Serafina, Can you let me have fifty bucks? Yours, Fafnir."

Whimpering with ecstasy, she ran to the bank and withdrew the money and mailed it to him. From then on, she got the same request every week, and as a result, she became very well acquainted with Ralph T. Involute, teller of the West Linotype Bank and Trust Co., and their friendship ripened into love, and today they are happily married and live in Stamen, Oregon, where Ralph is in the extruded molasses game and Serafina is a hydrant.

Every weekend is a party weekend with Marlboros—or Marlboro's unfiltered companion cigarette—mild, flavorful Philip Morris. Try the newest Philip Morris—the sensational king-size Commander. Have a Commander—welcome aboard!

# Scripps Hall Parties Prove 'Entertaining'

BY ROGER NOLL

A hardy group of Caltech students made the long trek to Claremont last Saturday to witness the Scripps Hall Parties. All who went were impressed, not by the quality of the parties, but by the simple-minded crudeness of what passes for men on the Associated Colleges campus.

The Hall Parties consist of four shows, one by each of the dormitories at Scripps. This year's over-all topic was New York, with each dorm picking a certain part of New York for their specific theme. Dorsey's show and decorations depicted a mission on the Bowery. Browning picked Ellis Island, New York's port of entry, as their theme. Grace Scripps depicted Coney Island, while Toll portrayed Auntie Mame, although no one would ever know it after watching their shows.

Toll put on the best skit, even though they didn't follow the theme. The show was a fairly well-written play about a college man's farewell party before he departs for school. The dialogue, when heard above the hi-fi in the next room and the clever remarks by CMC boys in the audience, was well done. The show had good continuity, and the talent even had talent.

Dorsey was the only other dorm to have any sort of continuity to their production. Portraying a crusading missionary, Brother Amas, the Dorseys produced a corny but effective satire. This was the funniest of the shows (of the shows that were meant to be funny).

Grace Scripps had a loosely integrated talent show, with two singing groups and some dancers. The talent was hidden in the first singing group and sparse in the second, but the dancers, aside from being able to draw continuous wolf calls from the CMC crowd, had some dancing ability. The dance was obviously perpetrated to tease the imaginations of the Claremont boys, and the CMCers' reaction indicated that it did just that. It was amazing that the dancers could keep a straight face.

Browning's show was divided into two parts: the first was a competent but very long imitation of Marlene Dietrich, and the second was a confusing musical number by some girls portraying immigrants just landed on Ellis Island. This show, too, was perpetrated to draw comment from the CMCers, and it succeeded.

The whole affair demonstrated two wellknown facts: (1) Scripps girls are not only human,

**SKILLED HELP WANTED**  
Part Time  
**Physics Dept.**  
1 Lab Assistant  
1 Electronics Technician  
See Tom Harvey, 12 East Bridge

**THE CAMPUS BARBER SHOP**  
New Location:  
South End of T-4  
ALL HAIRCUTS  
\$1.50  
Two Barbers to Serve You

but worth the long drive to Claremont, and (2) it is too bad they waste so much of their time on the slobbs from CMC. While the Hall Parties were not works of art, they served the purpose of impressing the Claremont boys, which is, after all, their purpose. The Scrippies acted in a manner that Claremont would define as sophisticated, and the CMCers went away happy.

Unfortunately, the CMCers aren't worth the effort. Their psuedo-sophistication and quasi-dirty catcalls during the show were sophomoric, if not downright crude.

All in all, the whole affair made one feel glad, possibly for the first time, that he was from Caltech.

## 4 Point Disarmament Plan

trol. At this point the U.S. and Russian views diverge. The Russians want disarmament before inspection, while the U.S. demands that inspection shall be at least concurrent with disarmament.

### THE FRENCH PROPOSAL

According to Moch, the French view is that the key to the whole question rests which the elimination of the vehicles for delivering nuclear weapons: satellites, missiles and launching installations, ships, planes, and submarines. Since at the present stage of technology, these must be rather large or exposed facilities, detection and control would now be rather easy to establish, then and only then proceeding stepwise to the other factors. But within a few years, advancing technology will have made a mockery of this solution, too, and the case for disarmament is likely to rest for-

ever unsolved, until war should wipe out a major portion of our civilization.

The balance of Moch's speech, and his answers to the six questions posed in the question and answer period that followed, deal primarily with the actual

attempts so far at solving the disarmament problems. The French proposal is, in brief: beginning with a few inspections, primarily of the centers from which nuclear weapons could be delivered, and the agreement to make useless the existing systems for delivering them; then gradually progressing to more

(Continued on page 6)

## California Tech

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

### Editors

Tom Tisch, John Todoroff

### Managing Editors

Lance Taylor and Roger Noll

### Editorial Staff

Larry Gershwin, Barry Petersen, Dan Entingh, David Helfman, Butch Lungershausen, Bob Greenwald, Chuck Leonard, Bill Meisel, Richard Karp

### Business Staff

Cleve Moler, Manager

Circulation Manager: Howard Monell  
The California Tech, 1201 East California Blvd., Pasadena, California.

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, \$3.00 per year. Write: Circulation Manager.



## ENGINEERS ...SCIENTISTS

You are cordially invited to attend a private interview with a Special Representative of Lockheed Missiles and Space Division. Objective: to pursue mutual interests by examining the almost limitless fields of endeavor being investigated at Lockheed.

Lockheed Missiles and Space Division in Sunnyvale and Palo Alto, California, on the very beautiful San Francisco Peninsula, is constantly probing all the sciences related to missiles and space projects. These cover the complete spectrum—from human engineering through celestial mechanics—providing a fascinating challenge to those whose interests lay beyond the ordinary day-to-day job.

Lockheed is the systems manager for the Navy POLARIS FBM, and the Air Force DISCOVERER, MIDAS and SAMOS satellite programs, involving some of the nation's most important and sophisticated programs. As one of the largest organizations of its kind, Lockheed Missiles and Space Division is able to provide the finest technical equipment available; for example, the Sunnyvale facility houses one of the most modern computing centers in the world. And every opportunity is given members of the technical

staff to participate in the initiation of advanced technological developments.

Further, Lockheed strongly encourages continuing education and advanced degree work, maintaining two programs in their support. Lockheed's Tuition Reimbursement Program remits seventy-five percent of the tuition for approved courses taken by professional and technical people who are working full time. The Graduate Study Program permits selected engineers and scientists of outstanding scholarship and professional potential to obtain advanced degrees at company expense while employed on research assignments.

### SPECIAL CAMPUS INTERVIEWS will be held NOV. 7

See your placement office for details

U.S. citizenship or existing Department of Defense industrial security clearance required.

**Lockheed**

MISSILES AND SPACE DIVISION

SUNNYVALE, PALO ALTO, VAN NUYS, SANTA CRUZ, SANTA MARIA, CALIF. • CAPE CANAVERAL, FLA. • HAWAII

# SPORTS

## Football Fortunes Sink; Coaches Responsible

BY THE SPORTS STAFF

Caltech football seems to have hit a new low, judging from the scores of this year's games. The team has been far from spectacular, in spite of spectacular performances by some individuals. It is hard to find a reason for this rather perplexing problem, for the most often-repeated reasons aren't really valid.

**Good Players**

First, it's not because we don't have good football players — John Arndt, Ed Cline, Jack Arnold and Dave Barker are as good as any players in the league — they could play for Whittier or Redlands, and maybe for some big-time schools. We have plenty of talented players.

Second, we do not have too little time to practice. Pomona and Claremont have exactly the same practice schedule, and Oxy and Whittier practice very little more. And lately, with the team practicing as late as 7:30 at night, we are probably practicing more than anybody else.

Third, it is not because we have such a rigorous academic schedule. Although no one will deny that Caltech is difficult, Caltech students are enough smarter that, in proportion, it isn't that much more difficult to them. Because they do not have the same ability, Pomona and Claremont students study just as hard as we do.

Fourth, it is not because the team doesn't care about winning. With the exception of a couple of giggly linemen, the team wants to win very badly. They don't like being the perennial doormat of the Southwest.

**Coaches' Fault**

These facts lead us to one conclusion — that the trouble with the football team lies somewhere outside the football team itself. In fact, the trouble lies in the coaching.

It becomes evident when watching Caltech play that the coaching staff has not done the job they could have done. Caltech players lack a knowledge of the so-called fundamentals of football. They don't know how to block, how to tackle, or how to run. Our two principal coaches have spent all of their careers, prior to coming to Caltech, coaching players who already knew the rudiments of the game. At Caltech, however, they are faced with many players who have never played before, players who do not have the slightest notion of how to play football. These players cannot be coached in the same manner that UCLA and the New York Giants are coached.

One of the results of not knowing the fundamentals of football, aside from winning games, is that you are much more prone to injury. A well-coached football player knows how to protect himself, and the long list of injuries suffered this year is mute testimony to the ability of our team in this area.

**Defeatist Attitude**

It also seems that the coaching staff has a defeatist attitude about football fortunes; they seem not to care whether the

team wins or not. This is disastrous. Finally, it seems only icing on the cake that the Caltech football coach should sit in front of the bench at the games, smoking cigarettes and wearing sport clothes, something that just isn't done by football coaches.

Something should be done about the present status of football at Caltech. No one wants to lose, and lose badly, to every opponent. Either we should take the sport seriously enough so as to produce a reasonable team, or we should discontinue it. The present attitude of the student body toward football, and the way the players have been injured so much this year, indicate that a change is in order.

## Tech Racks Pomona 18-7 and CHM 8-4 In League Waterpolo

The Caltech Varsity Water Polo Team blasted off on the winning trail over the weekend by dumping Claremont-Harvey Mudd, 8-4, Friday in a hard-fought contest, and then completely smashing Pomona, 18-7, in a run-away game that saw Caltech set a new Caltech high team score for league play.

This was the first time that Pomona had been beaten in league play in about three years, and it was the first time in five years that the Webmen had been able to turn the trick on the Sagehens.

Fred Hameetman, Oxy transfer, led the Emerymen with six goals. Bruce Chesebro got five for the victors and Bob Ruby tallied three. Roger Bland chalked up two goals and Gary Tibbets and Gary Mitchell each got one goal.

Russ Russell and Tom Tisch were responsible for holding down Pomona forwards and did an effective job.

**FROSH VICTORY**

The Frosh, after dropping

their two starters to Claremont and Orange Coast, got in the winning column by dumping Pomona in their game last Tuesday. McCammon got five goals and Seib got one goal to pace the Tech frosh to their 6-5 victory over Pomona. This, too,

was the first time in several years that a Pomona frosh team has been beaten in league play.

Tomorrow, the Caltech varsity and freshmen take on UCLA in a 4 p.m. game at Caltech. Redlands and Oxy are away from home league games next week.

## Final Softball Results

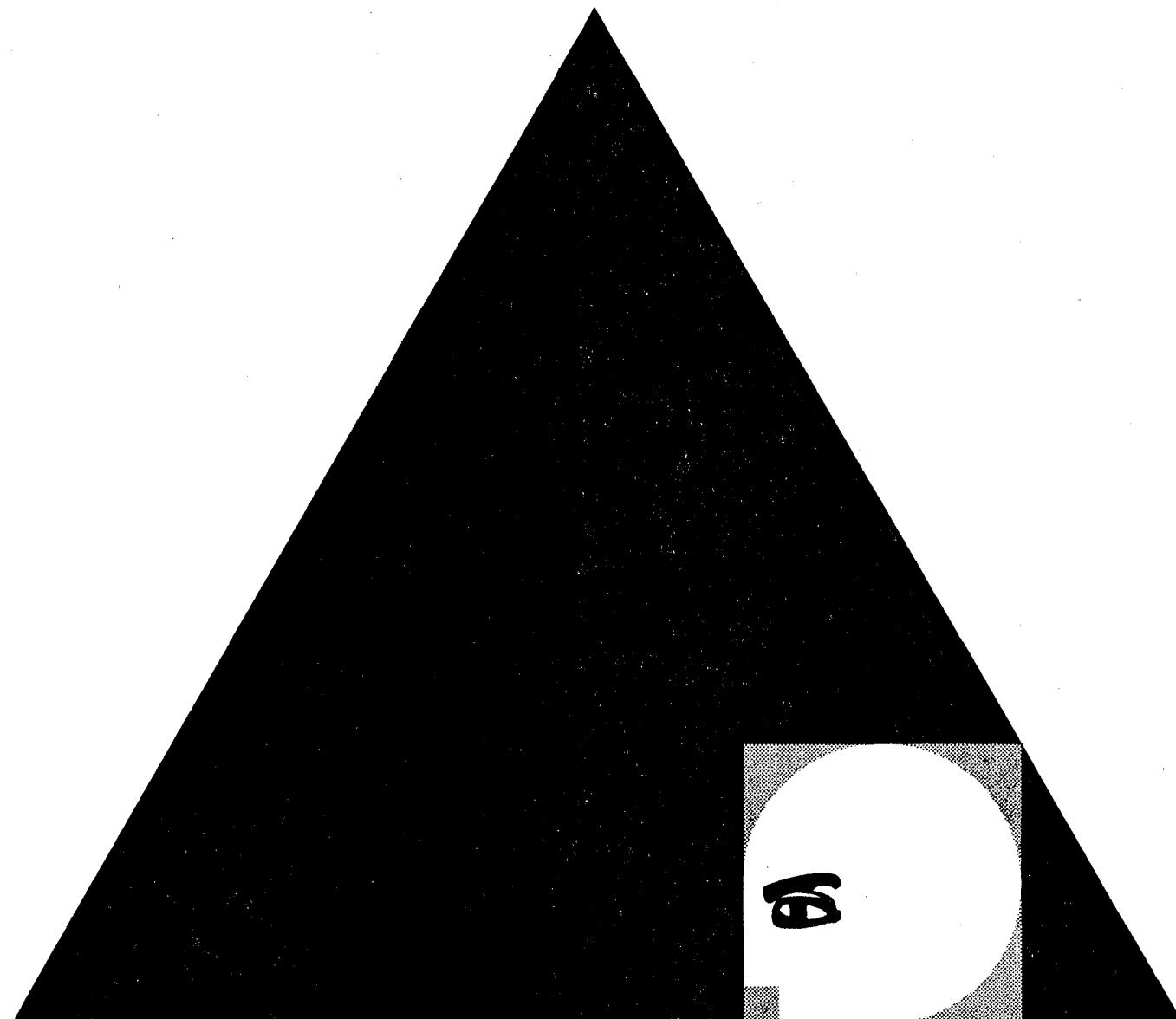
Place	House	Won	Lost	Tied	Pct.	Trophy Pts.
Tie:						
1st	Dabney	4	1	1	750	19½
1st	Ricketts	3	0	3	750	19½
Tie:						
3rd	Fleming	3	2	1	583½	13½
3rd	Ruddock	3	2	1	583½	13½
5th	Page	3	3	0	500	9
6th	Floyd	1	4	1	250	6
7th	Blacker	0	5	1	83½	3

Your Activity Card May Bring a Free Pizza From

### ROMA GARDENS

1120 E. Green

Call SY 2-9748 for Speedy delivery service  
**15% OFF TO ALL TECHMEN**



## TOP TALENT GOES MARTIN

The Denver Division of The Martin Company is engaged in the research and development of this nation's foremost defense system, the ICBM Titan. This and other exciting space projects attracts those persons who seek a creative environment where professional advancement is rapid. Here also is an environment that is unexcelled for fine living, winter sports and summer recreation. Join with Martin and enjoy the advantages of "Colorful Colorado" while you advance yourself into the top talent categories.

*Martin requires talent at all levels, bachelor, masters or doctorate degrees in each of the following fields: ELECTRICAL/ELECTRONIC, AERONAUTICAL, MECHANICAL, CIVIL, PHYSICS and MATHEMATICS*

**MARTIN**  
DENVER DIVISION

*The Martin Representative will be on campus, Oct. 28th, Ph.D. interviews only.*

## Freshmen Smashed

As in other years the CIT frosh teams, lacking experience, have been unable to make a good start against more highly trained teams.

The frosh water polo team lost its first two meets, 32-1, against Orange Coast and 15-0 against CMC.

The frosh football team has also lost its first two games, losing 58-0 to Occidental and 47-6 to Pomona. The team, captained by Liebermann, DeKlyen, and Walters, should have a better chance in its next game with Redlands on Saturday.

The frosh cross-country team

## Moch Again

(Continued from page 4)

complete disarmament. The Soviets, at Geneva last June and again a few days ago at the U.N., proposed their variant of this plan. It included, not neutralization, but complete destruction of the delivery systems, combined with the immediate destruction of all military bases on foreign soil. The West found this plan too radical. Moch found this too radical. Moch maintains that the French proposal is the only one that will ever be acceptable to both sides.

### POLITICAL PROBLEMS

Moch emphasized two political problems that will have to be solved before a workable agreement can be made. First, Communist China must be recognized as a major world power to be included in any agreement. Second, agreement can only be reached if it is first formulated by just those nations who are at present major powers. Then,

does not have its first meet until tomorrow when they run against Whittier in one of their few home meets of the season. With Lee, Weaver, Nason, Sorenson, and Holt leading the team around the two-mile course, Caltech is expected to have a good chance of repeating last year's victory over Whittier's runners.

## Skousen

(Continued from page 1) team) decided that they should get into the act and cheered Skousen on by yelling "Answer him!" "Yes or no?" Without, of course, giving the questioner a chance to explain himself Skousen's question was eventually answered: "No, I would not believe you, but your case would be about a million times stronger than it is now." Of course, Skousen jumped at the opportunity by announcing that since the young man would not be convinced what use would there be in naming the historians? The reaction to this was somewhat mixed: Hissing from the first four rows (Techmen), applause from the rest of the hall (guess who?).

and only then, it must be approved and signed by all nations at large.

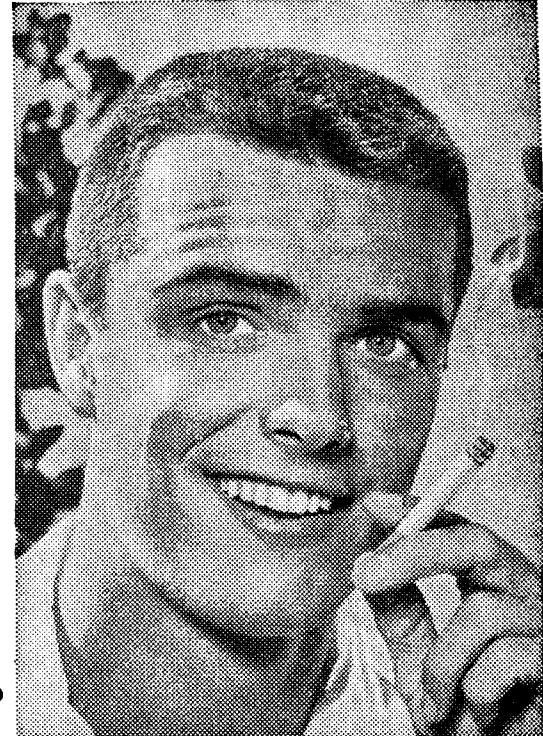
Moch's closing remark was in answer to a question about the chances of an agreement before the point of no return comes. He said, "I am not a prophet. It is difficult enough for me to understand what is happening today; so that I never ask myself what will happen in one year, or in 10 years." A great wave of applause followed.



Tried  
Regular  
Filter  
Cigarettes?

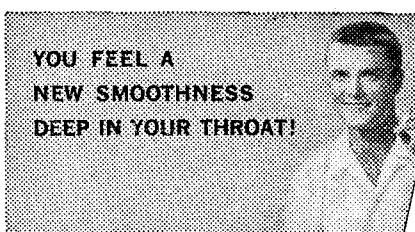


Tried  
Other  
Menthol  
Cigarettes?



**NOW! Come Up...All The Way Up  
to the MENTHOL MAGIC  
of KOOL!**

When your taste tells you  
it's time for a change,  
remember: Only Kool—  
no regular filter cigarette,  
no other menthol cigarette—  
gives you real Menthol Magic!



©1960, BROWN & WILLIAMSON TOBACCO CORPORATION  THE MARK OF QUALITY IN TOBACCO PRODUCTS

## PIONEERING IN WORLDWIDE COMMUNICATION VIA SATELLITES

### PROJECT

## ECHO

On August 12th, 1960, JPL scientists at Goldstone, California, radioed the world's first transcontinental microwave message to be relayed by a passive, artificial earth satellite. This satellite was the 100 ft. plastic balloon Echo I orbiting around the Earth at an altitude of 1,000 miles. A pre-recorded statement by President Eisenhower was received 2,300 miles away by scientists of the Bell Telephone Laboratories at Holmdel, New Jersey, as clearly as any telephone call, in a fraction of a second. Later in the course of the Echo experiment, the scientists at Goldstone and Holmdel conducted 2-way voice communication off the balloon satellite, Goldstone transmitting at 2,390 megacycles and Holmdel at 960 megacycles. This successful experiment opens up vast new fields of development for worldwide communication and is typical of many pioneering achievements of the Jet Propulsion Laboratory.

**TRANSMISSION**  
This 85 foot antenna,  
7 miles from the reception  
facility, has recently been  
put in operation to transmit  
signals to U.S. spacecraft.

**RECEPTION**  
The 85 foot parabolic  
antenna at Goldstone,  
California built in 1958 and  
used in tracking and recording  
telemetry from U.S. spacecraft.

Plan Your Future with the Leader in Space Science

OPPORTUNITIES FOR GRADUATE STUDENTS IN THESE FIELDS:  
INFRA-RED • OPTICS • MICROWAVE • SERVOMECHANISMS  
COMPUTERS • LIQUID AND SOLID PROPULSION • STRUCTURES  
CHEMISTRY • INSTRUMENTATION • MATHEMATICS  
SOLID STATE PHYSICS • ENGINEERING MECHANICS  
TRANSISTOR CIRCUITRY

CALIFORNIA INSTITUTE OF TECHNOLOGY  
JET PROPULSION LABORATORY  
A Research Facility operated for the National Aeronautics and Space Administration  
PASADENA, CALIFORNIA

ON CAMPUS INTERVIEWS

NOVEMBER 3