The California Tech California Institute of Technology

Pasadena, California, Thursday, February 6, 1958

Volume LIX

Jerzy Michalowski

Lunch Forum Hosts Polish Ambassador

The ambassador of the Polish People's Republic to the United States, Jerzy Michalowski, will visit the Caltech Campus next Wednesday. Present plans are for a talk before the Athenaeum Luncheon Forum, coffee hour at 4:00 in the YMCA lounge, dinner at Dabney House, and discussions afterwards in Dabney House Lounge.

Ambassador Michalowski is also Poland's permanent delegate to the United Nations. He was Under-Secretary of State in the Ministry of Education during 1954-55.

Arrangements for his visit were made by the YMCA through President DuBridge's office.

Announcements

PERSONALITY TESTS Dr. John Weir has announced that students who have not tak-

en the special series of personality inventory exams may take them at any time in 118 Throop. Weir stated that the 10% of the students who have not taken the exams can still provide valuable information for the administering psychologists.

HONOR KEYS

Applications for Honor Keys and Honor Certificates must be turned in to Gene Cordes by this Saturday, Feb. 8. Applications may be left in the "C" box in Ricketts.

Caltech Hosts Randall

BOD Formulates New By-Law Amendment



Richard H. Nolte

U. S. Policy Described As "'Failure"

In an exclusive interview Monday night, a visiting expert decried the "disastrous failure" of U.S. Middle East policy.

Richard H. Nolte, newly-arrived student of Islamic law, reported that the United States has invariably indicated to the more politically-minded Arabs that it is opposed to most of their legitimate aspirations: unity, economic development, independence.

Ike Doctrine Is "Wedge"

The Eisenhower octrine, which most of the Middle Eastern peoples interpret as a wedge driven between the unity of Arab nations; the Syrian crisis, interpreted in Middle Eastern circles as a U.S. attempt at a coup, broken up only by the USSR's intervention — these have had the effect, said Nolte, of turning the eyes of the Middle East toward the Soviet Union.

Tech's most recent representative of the American Universities Field Service, Nolte has spent the last two years in Beir-(Continued on page 5)

Two Appointees, Four Officers On **Policy Committee**

Accepting the recommendation of a special committee, the ASCIT Board of Directors voted unanimously Tuesday to place before the student body an amendment reorganizing the ASCIT government.

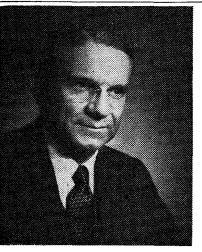
The committee, composed of Dick Kirk, Clarke Rees, Brad Efron, and Dave Leeson, submitted its recommendation at the regular Board meeting Monday night. This recommendation called for the establishment of an Executive Committee, composed of the ASCIT President, Vice-President, Secretary, and Treasurer, along with two members appointed by the above four with the approval of the BOD. It would be the duty of this committee to formulate and discuss policy and long-range plans.

Also included in the recommendation was the reorganization of the present Board offices, so as to provide more suitable titles and more evenly distributed responsibilities.

New Office

A new office, Secretary of the Board of Control, is created by the proposed amendment. This office was created to free the ASCIT Secretary from some of his more time-consuming duties in order to allow for his full participation in the Executive Committee.

The BOD accepted the committee recommendation, with the exception of one point, on Monday night. The subject was returned to committee for a recommendation on whether the two additional members of the Executive Committee should best be appointed or elected. The committee, which had met twice daily since its inception, convened briefly, and recommended that, while election was (Continued on page 5)



Clarence Randall

Essay Topic Announced

Techmen can win prizes ranging from 75 to 15 dollars by writing essays on "The Nature of Humor," for this year's McKinney Essay Contest. The length of the essays will be approximately 1200 words, and the contest is open to all undergraduates of Caltech who have not previously won first or second prizes.

The contest is sponsored by a fund set up in 1946 by the late Dr. Samuel P. McKinney of Los Angeles. His purpose was to encourage engineering and science students to learn to express themselves better.

Complete rules will be distributed tomorrow in English classes.

Around the Quad

FOWLER NAMED TO APS Dr. William A. Fowler, Professor of Physics at Tech, was elected Member of the Council of the American Physical Society at the annual meeting on Jan. 29, GEOPHYSICISTS MEET

Geophysicists from the Pacific Southwest are visiting the Caltech campus today for the kickoff of a three-day meeting.

Highlight of the meeting today is Dr. James F. Bonner's lecture on "World Population and World Food," presented at noon at the Atheneum. The conference, a regional meeting of the American Geophysical Union, has been arranged by Dr. Vito Venoni.

2-Day Visit **Planned For First Leader**

Clarence B. Randall, special adviser to President Eisenhower on foreign economic policy, will arrive on campus Monday as the first of this year's guests in the Y's Leaders of America program.

Number 15

Randall's two-day agenda provides numerous opportunities for meetings with interested students . He will begin his visit by speaking to the Econ 100 class. At noon, Monday, he will have lunch in Fleming and visit in the lounge. He will meet with grad students at the Y's Sack Lunch Club.

Meets BOD, Y Officers

Blacker will host Randall for dinner and discussion Monday. That evening he plans to meet with the ASCIT Board and the Y officers.

Tuesday, February 11, will

For more on Randall, see

pages 4 and 5.

find Randall speaking to another econ class and having lunch in Dabney. Students can meet with him personally during his office hours from 3 to 5 p.m., Tuesday afternoon. During this time he will be in the Y office.

Randall will complete his visit to the houses with dinner at Ricketts Tuesday evening. After dinner he will give an address in Dabney Hall at 7:30.

Open House Concludes Stay

An open house at the home of Dr. George Beadle will conclude Randall's stay. Everyone from the campus is invited to this informal meeting to get a last chance to visit Randall personally.

The Y's Leaders of America Program will bring several more national and international personalities to Tech this year. Financed by a donation of Dr. R. A. Millikan, this is the program's third year. Its purpose is to bring important men from government, business, religious, and other fields to visit the campus each year.

An Interview With Dean Strong Dean Discusses Tech Personalities

"Too many freshmen just don't want to work," believes Dean Foster Strong, "Even though many come here with good intentions. The Dean of Freshmen, when asked by the California Tech for his general impression of the freshman class, emphasized that many frosh tend to rely too much upon intuition and previous knowledge. As a result they are unable to translate their good intentions into effective performance.

"What Tech wants and needs most, according to the Dean, is "the guy who's going to do something. We don't care if he's an oddball or if he has ideas that are a bit different from the conventional, so long as he has plenty of drive and so long as he does something with his capacity."

In discussing the ways in which a student's personality is developed here at Caltech, Dean

Strong feels that there are few $common \ denominators \ -- \ that$ there are really as many different examples as there are students. However, he does feel that the student houses have much to do with this development, and that it would be highly desirable if every student could live in one of the houses.

Strong believes that "Some freshmen are socially inept, and they need to be drawn into participation in student activities." In this respect house social functions are good. It is up to the individual student, according to the dean to decide where to draw the line between his academic and social life.

However, he stated, there is one danger inherent in student house life. That is, the loyalty to the house may be emphasized to the detriment of loyalty to the school.

"The house system sometimes

tends to lower school spirit and to break up class group feeling. This is bad," he stated. The dean emphasized that this is a problem for the students to handle, and that the administration does not intend to step in.

Strong expressed the opinion that perhaps it would be good to make the new student houses into Freshman dorms. Under this proposal, freshman rotation would take place at the end of the first year instead of the beginning. This would have the advantage, the dean believes, of unifying the freshmen as a class and of building class spirit.

When asked what four years at Tech will do for a man, Dean Strong pointed to the end product, the graduate on the job. "He has absolute confidence in his ability, he searches for the simple solution, he has confidence in himself."

MOBILGAS JAUNT SET

Preparations for the 1958 Mobilgas Economy Run have begun. Again this year Caltech students will be riding as Official United States Automobile Club observers. The destination of the 1956 Economy Run was the Broadmor Hotel, Colorado Springs, Colorado, and in 1957 it was Sun Valley, Idaho. The destination of this year's Economy Run has not yet been announced. However, it is known that the participating cars will leave from Los Angeles on the night of April 13, two weeks before the week of Third Term mid-term examinations.

Application Forms Available

Those interested in participating should fill out the application forms available from Mrs. Toy in the Mechanical Engineering Office, room 204 Engineering. Students not yet 21 years of age must also obtain a release from their parents or guardians. Students with academic records which the Deans do not consider satisfactory will not be allowed to participate. All applications should be completed before February 15, 1958.

Jim Workman is Chief Observer this year.

THE CALIFORNIA TECH

The California Tech

Associated Collegiate Press honor rating: First Class

Editor-Bob Walsh

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 Chernow, Gene Cordes, Frank Childs, Larry Crissman, Brad Efron, Bob Eglinton, Ford Holtzman, Mike Jones, Lloyd Kamins, John Lango, Hal Morris, Bob Norton, Kirk Polson, Rolf 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.

Editorial

Amendment: A Weak Step In The Right Direction

The recent hubbub over ASCIT reorganization, which culminuated in a BOD-sponsored amendment (see pages 1 and 6), was instigated by a desire on the part of student leaders to have ASCIT perform less as a service organization and more as an organ for coordination and integration of all Caltech activities.

The proposed amendment to the By-Laws recognizes this desire, and possesses 2 points which are not disputed:

1. It creates a new committee and charges it with the responsibility to formulate policies.

2. It retains the present Board of Directors as an elected group to conduct corporation activities.

These provisions are the most important in the opinion of all those who worked on the problem, and they are sufficient improvement to merit passage of the amendment.

However, there has been much dispute over the structure and power of the new committee (to be known as the Executive Committee). Four of the provisions were not completely acceptable to all parties; in each case the Board accepted the structure which provided the least change from the present system, but offered the greatest likelihood of linking the committee's activities to the board's activities:

1. The President of the student body is to act as chairman of the Executive Committee. We feel that he will tend to relate the business of the Executive Committee to that of the Board of Directors, which will hamper the Committee's ability to deal with school-wide problems. ...However the Board felt that having a separate chairman would create a duality of responsibility in certain fields.

2. The Executive Committee has only the power to recommend policies to the Board of Directors. The actions of the Executive Committee are not final. The only apparent reason for requiring the approval of the Board is to retain as nearly as possible the present scheme. However, since it is generally agreed that the Executive Committee should have little trouble in swinging the Board to its point of view, this may not be a major point. But a perverse Board, especially during the first year, might well squash permanently the incentive of the Executive Committee.

3. Four Board members will serve on the ExComm (the new abbreviation) along with two other members. We fear that this predominance of Board members, who will have at least one other meeting a week and frequently three or four, will also tend to limit the range of discussion. It was generally agreed that the President and Vice-President were vital to the group, but many of us feel that the inclusion of the Secretary and Treasurer will unnecessarily cause the group to become less free-thinking and more closely allied to the BOD. We would have liked to have the ExComm limited to three Board members at the most, with three or four spots filled from outside the Board.

Editorial Institute Report: Inspiring; Encouraging

The Institute's annual report was released Monday, and "The Report of the President" was particularly inspiring and encouraging.

DuBridge says, in part, "We have come to the firm conclusion that our undergraduate enrollment should be allowed to increase not more than 10 percent in the next decade. . . There is an urgent need that our best students have an educational experience far ahead in quality of anything now available. . . We should, in fact, blaze wholly new trails in educational methods and achievement.

"As far as achievement tests go, our freshmen are already among the best in the country. Are there other qualities which lead to high performance in science and engineering which we should look for?

"A major policy . . . has been the inclusion of large amounts of basic science and mathematics in place of more specialized subjects. The research engineer of today and tomorrow will have to be quite at home with set theory, Boolean algebra, quantum electrodynamics, the quantum theory of metals and semi-conductors, and many other erudite matters formerly unheard of by the practical engineer."

"In some subjects students delve so deeply, so rapidly, so vigorously into their work that classes of 20 students are too large to allow for adequate discussion and questions. In chemistry we are experimenting with class sections of 10 students each."

"To help these students work to the limits of their abilities and talents requires much more than ordinary routine attention. These men demand—and receice—far more from the faculty than do ordinary students, and they are quick to see wherein they could profit by improved instructional programs. All college students "gripe," of course; but our students gripe in such searching ways that they exert as major influence on our teaching techniques."

"Even the grading system finds itself under strain. How can one justify giving D's to students who are among the best 2 or 3 percent in the country? No other subject has had such vigorous discussion in faculty meetings during the past year."

It seems "The Boss" is back at the reins again, and things are going to start happening. Already, all around the campus one can feel the rumblings as Caltech picks itself up just in time to stay in front of the tortoise.

Unfortunately the report contains little hint that the administration realizes that a thorough reappraisal of our archaic teaching methods is in order. But the report is primarily publicity, and not to be taken as the last word.

Global News

Egypt, Syria Unite

The union of Egypt and Syria into a "United Arab Republic" was anonunced last week in a statement signed by President Abbel Gamal Nasser of Egypt and Shukri al-Kuwatly of Syria. Since the cabinets of both countries have already approved of the nationally popular federation, only plebiscites in the countries involved are required to legalize the move.

Nasser will be president of the republic and head of the single political party while al-Kuwatly will be vice-president The republic will also have a common cabinet, parliament, army, and pro-Soviet foreign policy called "positive neutralism."

LETTERS

Editor, the California Tech:

Your reporter has done an excellent job, we feel, in the story on the forthcoming SCIENCE TODAY in the Jan. 30 issue of the Tech. However, I must have suffered a mental lapse which led to a regrettable oversight: Engineering is not listed as a part of the book's contents!

The longest section of all is devoted to Engineering, with chapters on WATER AND POW-ER, AERONAUTICS and COM-MUNICATION AND AUTOMA-TION. This is of course merely a tantalizing sample of what is going on in engineering today, so we are hoping soon to do a whole book covering engineering more adequately. But it is included in this volume. And the engineers were models of helpfulness. We would not want them to feel that their field has been slighted.

Mrs. E. C. Watson

Editor, the California Tech:

The amendments which would make **Big T** editor, **Big T** business manager and **California Tech** business manager into appointed offices should be defeated.

These offices carry salaries with them, and where several students are competing, it would be dangerous policy to leave their selection up to as potentially fallible a body as the BOD, or any other small student group.

Even if the Board members make the most unbiased, accurate choice they can, they will tend to select men whom they know personally. With the houses unevenly represented, it is easy to see how this can lead to empire building.

Howard Weisberg

miral Larrazabal added two civilians to his fiveman junta, appointed a thirteen-man cabinet, and promised free elections at an unspecified future time.

France Gets Aid

France asked for and received over half a billion dollars in aid from the United States, European Payments Union, and International Monetary Fund in order to help finance imports and prevent an industrial slump. France has generally had an increasing production rate, but war, high internal consumption, and a low export rate had produced a trade deficit until the surplus last December.

4. The two remaining ExComm members will be appointed by the other four. Many of us felt that this was "the last straw." Having established a committee to think independently of the Board, the proposal then arranges that the group be completely dominated by the Board.

Against the feeling that the wrong men would be chosen at an election, the following points were raised to support an election:

- (a) An election would force candidates to think very deeply about general student problems.
- (b). An election would provide an opportunity to bring discussion of these problems before the students.
- (c). An election would provide healthy constructive criticism of ASCIT policies, and thereby inject vitality into the system.
- (d). An election would give the students a more direct voice in the determination of policy.

The Board, however, voted down these objections. Although we feel that the proposal falls far short of what had been hoped, we recommend that it be adopted. It is at least a step in the right direction and worthy of a chance to prove itself.

Baghdad Pact

Secretary of State Dulles first assured the Baghdad Pact nations that the United States would give military help to any member nation suffering Red agression and then assisted in planning several economy projects and a combined military staff at the recent Pact meeting in Ankara, capital of Turkey. Though the United States is not a member of the Pact, which is composed of Great Britain, Turkey, Iraq, Iran, and Pakistan, she is on the military, economic, and political committees and is looked to for aid and a firm policy stand.

Jimenez Ousted

Perez Jimenez, the dictatorial president of Venezuela, sought sanctuary last week in the Dominican Republic after an ultimatum from a five-man military junta headed by Rear Admiral Wolfgang Larrazabal. Jimenez was forced out following two days of organized striking and rioting during which the army and navy turned against him. While the country rejoiced, Ad-

Economic Problems

The Joint Economic Committee of Congress hearings on the Economic Report appear to show that Eisenhower's belief in a business upswing due to defense contracts and the confidence of American business is unfounded. The slight impetus of government spending will be unable to offset the decline in equipment and plant spending. In addition, Eisenhower's appeal for no new price or wage increases has run smack against Walter Reuther of the United Auto Workers and his request for industry to share "excess profits" with employees, stockholders, and buyers and to grant a general wage increase.

Democrats gave the apparently dawdling Administration sixty days in which to produce results in a Pentagon shakeup and military reorganization before starting debate on the subject in Congress. The missile program also came under fire, even though the Administration's desire for more defense money has met almost unanimous approval in Congress. Many desire more concentration on limited war weapons and a broader defense base than missiles.

DuBridge Gives Report **Covers Enrollment, Research Expansion**

The need for expanded facilities for higher education in the

near future was stressed by Caltech President Lee DuBridge in his annual report to the Board of Trustees, which was released Monday. The number of young people who will reach college age in that period, he said, is staggeringly large, and may result in a doubling of college enrollments by 1972.

For Caltech, DuBridge stated, the problem is compounded because of the shortage of scientists and engineers. "Yet we have come to the firm conclusion that our undergraduate enrollment should be allowed to increase not more than ten per cent in the next decade and our graduate enrollment not more than fifty per cent," DuBridge concluded.

Reasons for Decision

DuBridge stated two reasons for Caltech's decision. First, the Institute's physical plant is still incomplete, with further expenditures required to bring its facilities up to the needs of the present faculty and student body. Second, an increase in the number of students would tend to lower the quality of the education provided to each.

Also included in the report were figures which showed that Caltech finished the year without a deficit, and a list of contributors for current operations.

All Research Covered

Research done by all of the departments during the year was covered completely. In Astronomy. Caltech's radio astronomy installation will be in operation by the end of 1958, the report said. A new project is being established to study the nuclear processes which occur in stars and the way in which these processes result in the formation of chemical elements.

Biologists have developed a new method of determining the density and molecular weight of nucleic acids, and have bred a new strain of tomato plants which may be grown in warm climates.

Mental Disease Research Most of the research in chem-



Lee A. DuBridge

istry is devoted to the study of mental diseases which result from molecular abnormalities. The engineering department is studying the fine structure of alloys and has developed an electron X-ray microprobe which permits analysis of an areas as small as 1/50,000 of an inch.

Geologists have studied how mineral deposits were accumulated as an aid to finding more deposits: they have also done research on the causes of earthquakes. The synchrotron has made it possible for physicists to make additional experiments on unstable particles in atomic nuclei. A large new cloud chamber is also being built.

Kirk Sets **Nominations Next Week Officer Titles** Await Ballot

Nominations for all ASCIT offices will be conducted next Thursday at 11 a.m. in a corporation meeting at Culbertson Auditorium, ASCIT President Dick Kirk announced this week. Elections are scheduled for Feb. 27.

The nature and titles of the offices to be elected will be decided in Tuesday's balloting on a proposed amendment to the by-laws.

Campaigning usually includes statements in the California Tech, speeches at lunches, posters, circulated literature, and participation in the election rally.

All candidates must be nominated at Thursday's corporation meeting, unless only one candidate has been nominated for an office. In this special case the by-laws provide that nominations remain open for one week.

Statements for the California Tech must be under 100 words and must be submitted by 7 p.m., Monday, Feb. 10. Under no circumstances will statements received after this time be published. The California Tech staff will assist candidates who find difficulty expressing their ideas in the required number of words.

Nelson Riddle Signed For Winter Formal

The Crystal Ball Room of the Beverly Hills Hotel will resound with the music of Nelson Riddle and his 17-piece Capitol recording orchestra, as ASCIT First Rep, Tony Iorillo, presents the ASCIT Winter Formal Febru-

The dance, slated to begin at 9:00 sharp, will feature all of the men attending in dark tuxes, according to Iorillo, who ought to know. In order to ease the strain on the wallet, arrangements are being made with the local tux emporium for a special rate to Techmen.

In order to finance the impressive blast, bids will be sold at \$2.00 a couple, according to present plans. Bids will soon be available — best get a date early.

Police Disband Algerian Group

Jan. 28, and all documents were

seized. The president of the Paris

section was arrested at the Cite

Universitaire, traditionally a

place of sanctuary, and his room

The Ministry of the Interior,

in a communique announcing the

action, recited a list of seven

other UGEMA leaders held in

prison, some of whom have been

held without trial or formal

NSA Student Deported

police had deported the NSA

representative, who had been at-

tending the Institut des Sciences

Politiques in Paris. It was al-

leged that a speech he delivered

to the UGEMA Congress consti-

tuted a threat to the external

security of the state, and he was

informed that he could never

NSA Takes Active Role

in this problem and has endeav-

ored to keep member schools up

to date.

NSA has taken an active role

again set foot on French soil.

Two weeks earlier the French

charge for well over a year.

was searched.

French police "swooped down on the National Union of Algerian Students (UGEMA) last week," according to the international student organization.

Numerous Arrests

The Coordinating Secretariat of National Unions of Students reported the arrest of numerous UGEMA leaders and the dissolution of the organization by the French police. The Coordinating Secretariat (COSEC) was established by an international conference which included the U.S. National Student Association (NSA).

The organization was dissolved for an alleged "violation of the external security of the State." The group's headquarters were invaded by police at 6:30 a.m..

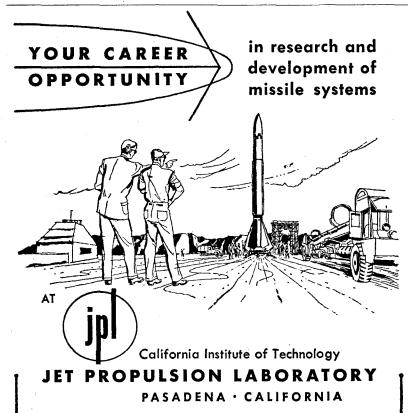
Drama Club **Plans Play** Reading

Caltech's Drama Club will have a casting and rehearsal for its reading of "What Price Glory" Sunday, February 9, at 2 p.m. in 206 Dabney. Club members are after new talent and invite anyone interested to participate.

The reading of the Maxwell Anderson dramatic comedy will be given before the Faculty Play Reading Group on Thursday night, February 20.

"What Price Glory" is the story of the men in a camp of Americans retired behind the lines in a small French town during World War I. The Captain and the First Sergeant flight for possession of the village slut, as part of their long-standing feud. Several copies of the play are on reserve in Dabney Library.

The reading will be attended by George Stephens, New York and Hollywood director, who will direct the Drama Club's next production, third term.



DuBridge, Lindvall, Brown **Discuss Human Resources**

Three participants in a national conference called by President Eisenhower's Committee on Scientists and Engineers were L. A. DuBridge, president of Caltech, Frederick C. Lindvall, chairman of Caltech's Engineering Division and president of the American Society for Engineering Education, and Harrison S. Brown, Caltech professor of geochemistry.

Held at Yale

The conference was held at Yale University last Monday and Tuesday, with the three men mass communications, labor, and taking an active part in an examination of "America's Human examine this country's competi-Resources to Meet the Scientific tive position in world science Challenge."

Dr. DuBridge was the principal speaker at the final luncheon session, where he discussed "Education in the Age of Science." Harrison Brown was the chairman of a panel discussion on "The Scientific Revolution: Challenge and Promise."

Sponsored by President

The national conference is sponsored jointly by the President's Committee and the William Benton Foundation. Its purpose is to bring together 100 key representatives of science, education, industry, government, religious and minority groups to

ary 8.

and technology.

"It'll be 'swinging'," enthused Iorillo.

"It'll cost a mint," sighed AS-CIT Treasurer Clarke Rees.



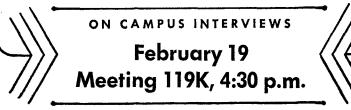
Active participation in the quest for scientific truths • Opportunity to expand your knowledge • Individual responsibility • Full utilization of your capabilities • Association with top-ranking men in field

Openings now in these fields

ELECTRONIC ENGINEERING · APPLIED PHYSICS MATHEMATICS · MECHANICAL, METALLURGICAL, AERONAUTICAL AND CHEMICAL ENGINEERING

Systems Analysis • Inertial Guidance • Computer Equipment • Instrumentation • Telemetering • Fluid Mechanics • Heat Transfer • Aerodynamics • Propellants **Materials Research**

U.S. CITIZENSHIP REQUIRED



arence B. Randall - Leader Of

Clarence Randall, currently assistant to the President in the area of Foreign Economic Policy, will be the guest of the Caltech YMCA this coming Monday and Tuesday.

Proud As Punch

Not a newcomer to our campus, as many of the older members of our community will remember, Randall delivered the commencement address to the Class of 1955. At that time the enthusiasm shown by those who met him was even greater than that expressed by Randall in the opening words of his address: "I'm just as proud as punch to be here today."

His interest in and enthusiasm about Caltech have again been restated in his willingness to give of his time to the student body here.

Randall, in his commencement address, went on to make the point that the final test of the educated man is the use to which he puts that education. If one were to apply that test to Mr. Randall one would find a man who has made a brilliant contri-

bution to his community, his state, and his country, as well as to private industry.

Phi Beta Kappa

Randall was born at Newark Valley, New York, in 1891. He graduated Phi Beta Kappa from Harvard in 1912, and received his Law degree there in 1915. His practice of law then began in Ishpeming, Michigan. From 1917 to 1919 he served as an officer in the Army, and spent a part of his time with the American forces in France.

After returning from World War I Randall reopened his law practice and continued it for six years. Then, at the age of 34, he became Assistant Vice President of the Inland Steel Company. He became a Vice President in 1930, a Director in 1935, and in 1949, President. He also served for three years as Chairman of the Board of Directors. He is presently a Director of Inland Steel, which, by the way, is the seventh largest steel producer in the nation. The company has carried out a vast and continuing expansion program over the past

RANDALL'S SCHEDULE

MONDAY

- 11:00 a.m. LECTURE, Economics 100
- 12:00 noon LUNCH, Fleming
- 3:00 p.m. DISCUSSION, Grad Sack Lunch Club, YMCA Lounge
- 6:00 p.m. DINNER, Blacker
- 9:30 p.m. MEETING, ASCIT Board of Directors, YMCA Officers, Visit Committee

TUESDAY

- 9:00 a.m. LECTURE, Economics 2
- 12:00 noon LUNCH, Dabney
- 3:00 p.m. OFFICE HOURS, YMCA Lounge
- 6:00 p.m. DINNER, Ricketts
- 7:30 p.m. ADDRESS, Dabney Hall
- 9:00 p.m. OPEN HOUSE, home of Dr. George Beadle



Feelin' blue? Need money, too? Students, we've got news for you!





twenty-five years. Randall has been instrumental in guiding this program.

Sets Example

The above paragraph, however impressive, highlights only a part of Randall's career. Even more important is the work he has done for the Government since the late 1940's. Since then he has given about half of his time to work in various government offices. After having gained knowledge and experience in his private career he has sacrificed the extension of that career to devote his time to public service. This is an example that could well be followed by the many national leaders in private enterprise who find time only to criticize the current administration.

Randall believes that there exists no "they" who conduct the affairs of our government. Rather, it is the duty of every able person to set aside some part of his life to give service to his community, his state, or his federal government.

In 1948, putting into practice his convictions, Randall became the first Steel Consultant to the E. C. A. in Paris. From 1951 to 1957 he served on the Department of Commerce's Advisory Council.

Visits Turkey

In 1953 and in 1956 he led the Special U. S. Mission to Turkey, to help determine U.S. policy toward that country. He can look with pride on the fact that Turkey has a sound basis for future economic and industrial development, and that she is our staunchest ally in an otherwise troubled Middle East.

From 1953 to 1954 he served as Chairman of the Commission on Foreign Economic Policy. And in 1954 he became Consultant to the President in the field of Foreign Economic Policy. In 1956 he assumed the offices which he presently holds, Special Assistant to the President in the area of Foreign Economic Policy, and Chairman of the Council on Foreign Economic Policy.

Active Writer

While being extremely active in the fields of industrial management and economic policy,

(Continued on page 5)





MOST POPULAR GAME that ever went to college-that's Sticklers! Just write a simple riddle and a two-word rhyming answer. For example: What's a big cat shot full of holes? (Answer: peppered leopard.) Both words must have the same number of syllables-bleak freak, fluent truant, vinery finery. Send Sticklers, with your name, address, college and class to Happy-Joe-Lucky, Box 67A, Mt. Vernon, N. Y. Don't do drawings! We'll pay \$25 for every Stickler we use in our ads-and for hundreds that never see print. While you're Stickling, light up a *light* smoke-light up a Lucky. You'll say it's the best-tasting cigarette you ever smoked!



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%

LIGHT UP A <u>light</u> SMOKE-LIGHT UP A LUCKY! Product of The American Tobacco Company-"Tobacco is our middle name"

Clarence Randall

(Continued from page 4) Randall has found time to study and reflect on the values which underlie our contemporary industrial society. His books reflect a range of problems to which he has made valuable contributions.

His novel, "A Creed for Free Enterprise," discusses with the force of Randall's sincere convictions such subjects as the influence of labor unions in our society, the position of the businessman in support of his form of enterprise, major requirements that should be considered in hiring college graduates and how they should be trained to assume positions of leadership, and some suggestions on how to keep thinking while worrying about the daily problems of business.

Opposes Communism

"A Foreign Economic Policy for the United States," was a result of the time he spent as consultant to Paul Hoffman at the time of the founding of the Marshall Plan. Originally, the book was given as a series of lectures at the University of Chicago in 1954. It outlines the paths our economic policy and that of other free nations must follow in order to successfully compete with, and eventually overcome, the Communist doctrine. He describes the forces of liberalization of trade and currency exchange which will work in the favor of the West, and how these forces are opposed within our society. His other books include: "Civil Liberties and Industrial Conflict," "Freedom's Faith," and "Over My Shoulder."

"Man of the Year"

Among the awards which have been bestowed on Randall are: National Association of Manufacturers "Man of the Year" for 1952; American Iron and Steel Institute Honorary Citation awarded in 1952 for "conspicuous and courageous service to the steel industry and broadly to all private enterprise in this country in a time of severe stress": National Sales Executives "Business Statesman of the Year" 1954; Freedoms Foundation Awards for each of the ar-

ticles "Free Enterprise Is Not A Hunting License," "Freedom's Faith"; and "The American Pharisee"; Tau Kappa Alpha "Speaker of the Year Award," 1952. Universities that have awarded him honorary degrees include: Northeastern, University of Michigan, Brown, Dartmouth, Harvard, Northwestern, and Amherst College.

As indicated by his letters, Randall will arrive on our campus ready to submit his ideas to a scrubbing by the minds of any students who wish to talk with him. The students, in turn, will find his ideas extremely thoughtful, well founded, and defended by one of the most articulate of our national business leaders.

Elsewhere in this paper appears the schedule of Randall's appearances on the campus. Each student should certainly be able to find at least one time when he can meet with this important business and government leader and learn of some of his valuable and thought provoking ideas. His speech on Tuesday evening, though not a formal address, should prove to be one of the highlights of the cultural opportunities offered throughout the year on our campus. Attending this address and meeting Randall personally will be more than worth the small effort required.

The Elliott Manufacturing Co. 532A Cornell Drive Arcadia, California

PRODUCT RELEASE **BULLETIN:**

Craig T. Elliott,

President and Chief Engineer Patricia C. Elliott,

Vice-president in charge of production

Product release date: 11:22 p.m., 2 Feb. 1958.

Product Title: Kevin Covington Elliott

Connections: Standard Male Size and weight: 21 inches long, 7 lb., 12 oz.

General description: Cute as a bug's ear!

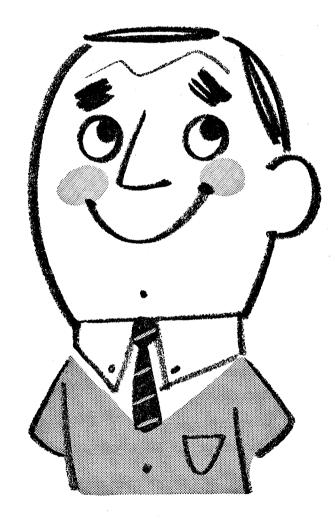
Manufacturer's note: Product must be seen and heard to be fully appreciated. Viewing: 9:00 a.m. to 11:00 p.m. at manufacturer's home office after 23 Feb. 1958.

(Ed. note: Congrats, C. T.)

SENIORS AND GRADUATE STUDENTS IN ENGINEERING



Photo by Robert McCullough Clarence B. Randall



ARAB POLICY (Continued from page 1) ut, observing and reporting on

Middle East cultural, social, economic and political developments. He has studied at Yale and Oxford and served in the Navy.

"If we were to learn from our past failures to endorse the constructive Arab aspirations, I believe our losses could be regained," he stated. "But as long as public ignorance and apathy reign, as long as the State Department suppresses imaginative measures to avoid the criticism of the American people, the spectacular success of the Russian Middle East policies will continue."

AMENDMENT

(Continued from page 1) desirable, it would be safer to make the position appointive for the first year, after which the Executive Committee will reconsider the question.

The amendment (see text on page 6) will now be placed before the student body at an election to be held next Tuesday. In recommending this amendment to the student body, the Board of Directors felt that this plan would answer the objections raised last week by the sponsors of the revision petition.

Ever meet a trusting soul?

The Douglas Aircraft Company **INVITES YOU TO ON-CAMPUS INTERVIEWS**

February 17, 18, 19

Find out about the interesting positions, assistance in furthering your education and outstanding promotion opportunities with the world's largest manufacturer of aircraft and missiles. Get facts on living conditions, research facilities and opportunities to advance professionally at the various Douglas locations.

Reserve your career decision until you have talked with the Douglas representative. It may be the most important interview of your life.

SEE YOUR DIRECTOR OF PLACEMENT FOR YOUR INTERVIEW APPOINTMENT

"You can't go wrong looking for a job these days," he assures you. "Opportunities are great all over. All the good companies have about the same to offer."

Do they? A lot of not-so-trusting souls think otherwise. They suspect that some companies have much more to offer than others, and they want to find out which those are.

We'll help. We want to tell you how much the Bell Telephone Companies offer in the way of advancement opportunities, training, pay and benefits, professional associates and working conditions. No matter what your educational background-the arts, the sciences, business or engineering -make a date to talk with a Bell interviewer when he visits your campus. You can also get information about the careers these companies offer by reading the Bell Telephone booklet on file in your Placement Office, or by writing for "Challenge and Opportunity" to:

> **College Employment Supervisor** American Telephone and Telegraph Company 195 Broadway, New York 7, N.Y.



ASCIT NOTICES Secretary's Report Proposed A

The major discussion at last Monday's Board meeting was the proposed amendment to the ASCIT By-Laws as submitted by an ASCIT committee. The amendment was generally accepted with one exception. That exception was the question of whether the new Executive Committee should have the two members who are not Board members elected or appointed. The proponents of election stated that these two members should be elected so that they would feel a closer responsibility toward the students, and also so that they would be on a more nearly equal basis with the other members of the Committee.

Disadvantages in electing these people that were brought up were the fact that an elction, held in third term, would not have much appeal after all the elections of second term, and holding another election after House elections would have a bad effect on the House elections. Also, appointment of the officers might bring into ASCIT some qualified people who would not otherwise be active in ASCIT affairs.

Finally, it was decided that this point should be more fully discussed in the committee.

Tuesday noon the committee reported to the Board that their recommendation was that the two members of the Executive Committee be appointed, but that next term the Executive Committee (if one exists) should consider this question to a fuller extent.

The Board accepted this recommendation and the proposed amendment will be put to a student vote on Tuesday, February 11.

> Michael Godfrey ASCIT Secretary

Description of ASCIT Offices

The reorganization of ASCIT would alter the duties of the officers of the student body. These officers must have the background, experience and talent necessary to conduct the activities of their offices and the programs of the student body.

The duties and the necessary qualifications of the officers under the new system would be:

The President

The president represents the student body and coordinates the activities conducted by them.

He should have a broad background in student affairs and the abiilty to work with many people on many subjects coordinating student activities.

He must be a representative who can maintain the prestige of the student body. He must be able to understand people and their opinions and to consider all these things in arriving at decisions.

The Vice-President

The vice-president's main job

As a member of the Executive Committee he, like the vice-president and secretary, should have experience in student activities and the desire to guide the overall policies of the student body.

The Business Manager

The business manager supervises the ASCIT office and the publications. He is also responsible for releasing undergraduate publicity. A background in publications is helpful in conducting this job, but an interest in student body activities and the ability to carry them out is more important.

The Athletic Manager

The athletic manager recommends athletes for awards, presents the awards dinners, and buys all awards. He should have some familiarity with the undergraduate athletic program.

The Activities Chairman

Since the activities chairman is responsible for coordinating many of the ASCIT functions such as rallies, cheerleaders, the band, etc., he must be able to work with people. He must have an understanding of student body opinion to present assemblies as well as fulfill the other duties of his office.

Proposed Amendment SUPPORTING STATEMENT

The basis for the proposed amendment was the realization by the Board of Directors that there were a good number of defects in the present operation of the ASCIT government. It was felt that many of these defects stem from the fact that there was no group which concerned itself with overall policies or long-range problems. This condition has brought about lack of coordination and inefficiency in providing services for the student body.

It was also realized that the duties of each office, having expanded over the years, were as-

signed in a most haphazard way.

It is for these two major reasons that the Board has drawn up its present proposal. This

is admitted to be a conservative step in that the basic structure of the ASCIT is changed in only a few respects. This approach has the advantage of more or less retaining the present organization which has in the past provided services to the student body. It is hoped that the changes that have been made will allow the ASCIT to work from its present foundation to a more aware and capable position.

This proposal should, then, help to provide the overall ASCIT government with a more nearly uniform and clearly thought out set of policies. This will clearly help the ASCIT to provide services for the students and will enhance its position with respect to the outside world.

TEXT OF AMENDMENT

The following amendment to the corporation by-laws was proposed by the Board of Directors on Tuesday, Feb. 3. Balloting will be conducted Tuesday, Feb. 11. A corporation meeting has been called by the President for 12:30 p.m., Tuesday in the Board of Directors' Room:

1. Revision of Article IV "Officers":

Sec. 1. GENERAL OFFICERS. The General Officers of this corporation shall be a President, a Vice-President, a Secretary, a Treasurer, an Athletic Manager, a Business Manager, an Activities Commissioner, a Social Commissioner, and a Representative-at-Large.

Sec. 2. DUTIES OF THE PRESIDENT. The President shall be the official representative of the corporation, and he shall preside at its meetings. He shall be chairman of the Board of Directors, the Executive Committee and a member of the Athletic Council. He shall have ultimate responsibility for the proper observance of all responsibilities delegated to members of the Board of Directors, the Executive Committee or any committee thereof.

Sec. 3. DUTIES OF THE VICE-PRESIDENT. The Vice-President shall, during absences of the President, assume the duties of that office. He shall be a member of the Board of Directors and the Executive Committee. He shall act as chairman, without vote, of the Board of Control. He shall assist the President in coordinating the policies and activities of the Associated Students. His primary responsibility shall be to insure the continuance of the Honor System as a vital force among the students.

Sec. 4. DUTIES OF THE SECRETARY. The Secretary shall, during the absence of the President and Vice-President, assume the duties of the President. The Secretary shall keep a record of the proceedings of the meetings of the Corporation, and the Board of Directors and the Executive Committee. He shall post, or otherwise make public, copies of the record of each meeting within three days subsequent to that meeting. He shall post notice of all meetings of the corporation in which legislation is to be acted upon or discussed, together with a complete statement of such legislation, at least seven (7) days previous to the meeting. He shall be responsible for the publication early in the term of each Board of Directors of a Statement of Policy as outlined in Article V, Sec. 4 of these By-Laws. He shall maintain a current file of the minutes of all the meetings of committees responsible to the Board of Directors, and all committees and organizations having interests common to those of the Board of Directors. He shall receive the reports of elections from the Election Committee Chairman. Sec. 5. DUTIES OF THE TREASURER. The Treasurer shall receive all money belonging to the corporation and shall deposit it to the credit of the corporation in such bank or banks as the Board of Directors shall determine. He shall keep a full account of money expended and received, and shall make a report of such account once a month at a regular meeting of the Board of Directors, and at such time as the Board of Directors may desire . He shall be a member of the Board of Directors and the Executive Committee. At the end of each fiscal year, the Treasurer shall have the books of the corporation audited. The Treasurer at the close of each school year shall have the books checked by the new Treasurer. Sec. 6. DUTIES OF THE BUSINESS MAN-AGER. The Business Manager shall be a member of the Board of Directors. He shall report once each month to the Board of Directors upon the current status of the publications of the corporation. He shall have direct charge of the corporation offices and all corporation property. He shall be responsible for the issuance of official news releases concerning corporation. He shall be chairman of the Honor Point Committee.

Sec. 7. DUTIES OF THE ATHLETIC MAN-AGER. The Athletic Commissioner shall be a member of the Board of Directors and a member of the Athletic Council. He shall be a member of the Honor Point Committee. He shall have charge of all athletic award banquets and assemblies and shall present recommendations for awards and procure all awards for the corporation authorized by the Board of Directors. He shall recommend for the approval of the Board by the Board of Directors as provided in Article XIV. Each spring term the Athletic Manager shall recommend fo rthe approval of the Board of Directors a chairman of the Instituters. He shall appoint two members of the corporation to the Athletic Council.

Sec. 8. DUTIES OF THE ACTIVITIES COM-MISSIONER. The Activities Commissioner shall be a member of the Board of Directors. He shall organize and present assemblies beneficial to the corporation. The head Yell Leader, the Dance Class, Model UN, Band and other such groups concerned with the programs and activities of the Associated Students will report to the Activities Commissioner unless otherwise provided for. He shall be a member of the Honor Point Committee.

Sec. 9. DUTIES OF THE SOCIAL COMMIS-SIONER. The Social Commissioner shall be a member of the Board of Directors. He shall organize the social program of the Associated Students. He shall be responsible for organizing the Annual Homecoming Event.

Sec. 10. DUTIES OF THE REPRESENTA-TIVE AT LARGE. The Representative at Large shall be a member of the Board of Directors. He shall be responsible for conducting the Red Cross Blood Drive and the Consolidated Charities Drive. He shall be responsible for such duties as may be determined by the Board of Directors.

Sec. 11. DUTIES OF THE YELL LEADER. The Yell Leader shall be responsible for organizing all athletic rallies. He shall be responsible for organizing yelling at all athletic contests. He shall be appointed by the Board of Directors each spring term and shall appoint, upon the approval of the Board of Directors, such assistant Yell Leaders as he deems necessary.

is to maintain the vitality of the honor system. His chairmanship of the BOC requires that he be able to understand people and their reactions.

As a member of the Executive Committee he must have a broad interest in student affairs.

The Secretary

The secretary's technical duty is to keep minutes; however his main responsibility would be to consider the problems of the student body and suggest action on these problems. He should be aware of the programs of the student body so that he can be an active member of the Executive Committee.

The Treasurer

The treasurer is responsible for ASCIT's financial condition.

The Social Chairman

The social chairman's main duty is to conduct the social program of ASCIT. This office demands imagination as well as the willingness to work. He would conduct Homecoming which requires the ability to coordinate several people working on different phases of that event. **The Representative-at-Large**

The representative-at-large is elected from the freshman class and should be a person who can get things done as well as consider the programs of the student body.

2. Revision of Article IV "Officers":

Sec. 10. YELL LEADER

(a) DUTIES

(b) APPOINTMENT. The Head Yell Leader shall be appointed at the beginning of the third term by the Board of Directors. The assistant yell leaders shall be appointed by the Head Yell Leader with the approval of the Board of Directors.

3. Revision of Article XV "Publications": A. THE "CALIFORNIA TECH"

Sec. 6. APPOINTMENT. The Business Manager of the "California Tech" shall be appointed by the Board of Directors at the beginning of third term.

B. THE "BIG T"

Sec. 6. APPOINTMENT. The Editor and Business Manager of the "Big T" shall be appointed by the Board of Directors at the beginning of third term.

(Continued on page 10)

Page Seven

Pit and Paddock

by Larry Crissman

We got back into the old grind last weekend and wound up at Kraus Motors here in Pasadena scrounging material on Porsches. The sales manager was most cooperative and even wheeled out his personal convertible for us to photograph.

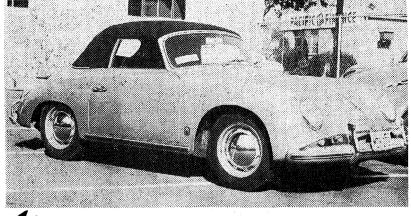
It seems that the designers of this German masterpiece had a bit too much of that good brew that is available in Europe. When it came to designing the exhaust system they made the pipes come out the bumpers a la Detroit. To the enthusiast this is a crying shame, but it will probably sell cars. A really good-looking hard top optional for \$225 is available on the new models.

The steering on the Porsche is even quicker than on most sports cars, requiring only 2.2 turns lock to lock.

Good news for those worried about servicing is the new standard crankshaft on the Super engine. The old roller bearing shaft was an engineering masterpiece, but repair bills mounted like the Jupiter C when any work was done on it. Other mechanical improvements include Zenith carbs and a better clutch.

According to Sports Cars Illustrated, the 1600 Speedster goes from 0 to 60 in 13.3 seconds and has a top speed of 98.1 mph. The Super coupe has a time of 12.4 0-60 and a 107.6 mph top end.

The latest prices quoted were from \$3215 for a Speedster 1600 to \$6215 for the Convertible Carrera. The coupes sell for about \$500 dollars more than the Speedsters, and the Convertibles are about 200 dollars more. You can't find a more roadable and reliable dual purpose sports car than a Porsche.



The New Porsche is a German masterpiece.

But You Don't Understand ...

Gayer, in the Garden Grove News, Garden Grove, California.

Rah, Rah, Atom Splitter-Dr. Lee DuBridge, president of the California Institute of Technology, has issued a plea to America to give prize science students the same acclaim they now reserve for football heroes and beauty queens.

On behalf of organized American football and beauty queen watchers, I protest that Dr. Du-Bridge has not thought this thing out carefully. It is hard to stand around a stuffy old laboratory saying, "Rah for young Easterly, the atomic physicist! Esterly's all right!"

It doesn't work out that way. One must have competition, crowds, school colors, razzmatazz and jazz, chrysanthemums and stadiums. It's got to have zing. But it can be worked out, with

a little ingenuity. We start out right up there in the Rose Bowl, which is close to Caltech, and have our first inter-school science clash there. Here's how it goes. We invite

another science school . . . MIT would be a smasher for an open-

From "A Gayer Note" by Dixon er . . . and we pick a team of scientists from each school.

There are 11 men on a footbal lteam, five in basketball, nine in baseball, so we'll use a seven man team. There must be some dignity to the competition, so we'll dress them in white (Caltech) and Navy blue (MIT) smocks, with the school letters rampant across the back.

There will be a cyclotron at each end of the field, and at a given signal, an atom will be thrown into play. One team, the one winning the toss, will get first crack at the atom.

They will rush it to their cyclotron and try to split it. Once the atom has been put into play, however, it is fair for the opposing team members, who will be armed with electronic brains, bunsen burners and sodium acetyl salicylate, to steal the atom. . .

There will be girl scientists, dressed in revealing plastic synthetics produced in their own labs, leading the cheers on the sidelines. . .

Before I go on, how does all this strike you so far, Dr. Du-Bridge?

Campus Brewins

New EE 1 and 4 Primer

"Dick and Bill are watching a 10,714-kva 376-cps 7,500.1-kw 13.8-kv 2-phase 3,600,023-rpm 9-hp 69-pole antisynchronous D.C. explosion-proof turboalternating grundle used for flushing toilets in the head. Spot is watching too. See it go!"

Robbie Ronged

The trolls around this place are so socially backwards that Beak was getting desperate. Suddenly a plan struck his enlightened brain. The next hurdle was to find a good straight man. Beak thought for a minute and another bolt of lightning struck him. The best straight man was Robbie Snaildork. "Robbie," said Beak, "you know that girl that gave you the flush for the last four times in a row."

"Yes," Robbie knew.

"Well she has been going, off and on with a Marine down at Dago lately and every week end when he sees her he asks her for a date on the next weekend and by the time you get around to calling her she is all booked up. Why don't you try calling her up early and beat this Marine to the punch."

"Good idea," says Robbie, "I think I'll call her up right now." Beak grabbed a water glass and stuck it up against the wall so as not to miss the conversation. Down goes the dime in Bell's slot-machine and a soft voice says "Hello."

"Hello," says Robbie, "This is Robbie Snaildork."

"Who?"

You know Robbie Snaildork, God's gift to women and all that sort of rot."

"Oh!"

"Well I want to give you the benefit of going out with such a sterling lad as myself.'

"Well, Robbie, I'd love to, but first I think I ought to tell you something. Are you braced or sitting down?"

"Yes

"Well I'm engaged and I thought you ought to know."

There was a long silence.

"Oh well, that's nice, ah, good bye." Click.

Gentlemen and Goldfish

"Oh, guess what, Gertrude, now don't tell a soul, but I heard that those awful Darbs had a goldfish crew race. Those bad boys lined up in teams of five with ten ounces of water and two goldfish per mug and had a race. Alley four won by a barf. I wonder what this younger generation is coming to."

Don't Clutch

A few nights ago the Phlems went down to the catacombs and had a contest to see which alley would get the Austin Trophy. This contest was rather unique in that in order to train for the event you had to increase the size of your bladder. A random size block of ice (696cc) was placed on a wire screen mesh and the members of the alley formed into teams of twelve. At the sound of the gong the first member of the team stepped up to the block of ice assigned to his alley, and began to melt the ice. Everything worked out fine, except a few people are very modest and just can't perform when the pressure is on.



Menthod Tresh



*** menthol fresh** * rich tobacco taste * modern filter, too Perfect Spring days are all too few ... but you can always enjoy a Salem Cigarette ... and a Salem refreshes your taste just as Spring refreshes you. Yes, the freshest taste in cigarettes flows through Salem's pure white filter. Rich tobacco taste with a new surprise softness. That's Salem ... You'll love 'em !

Smoke Salem...Smoke Refreshed

Heard From The Wings

by Joel Yellin

Currently on stage at the Pasadena Playhouse is "Inherit the Wind," an adaptation of the famous Scopes trial of Tennessee. The plot concerns the attempt to imprison a high school teacher for reading Darwin to his class.

In real life three famous personalities were involved in the trial: H. L. Mencken who reported it; Clarence Darrow, the defense attorney; and William Jennings Bryan, the prosecutor. The authors, Jerome Lawrence and Robert E. Lee, have made their own interpretation of the proceedings; in essence, they have created a defense of the right to think.

Taking the role of defense attorney is Sidney Blackmer, a prominent figure on the Broadway stage for many, many years. His performance is beautifully done; the whole production revolves about him. Without him, the inadequacy of most of the other actors would become blatantly apparent; with him, "Inherit the Wind" is a must.

Wendell Holmes as the prosecutor lacks charm. He is convincing only when Mr. Blackmer is on stage to aid him. Alvy Moore is quite inadequate as the sardonic reporter. There is no life in his lines; they drip like nonsensical poison.

Lisa Browning as the defendent's girl and the daughter of the complaining Reverend, is pitifully tight on stage, as is Ray Hamphill as the defendent. Neither manages to convey the impression of emotional feelings. They merely seem uncomfortably tense. The Reverend, done by Richard Beebe, was quite satisfying, and Mary Adams was adequate as the prosecutor's wife.

Notwithstanding all the failings of the supporting characters, Sidney Blackmer makes "Inherit the Wind" an event which you will regret missing.

Take note that Capitol, too, has joined the ranks of record clubs, making an offer similar to that of Columbia. If you are undecided which club to join, this writer suggests RCA. The music is more varied than Columbia's and probably better performed than Capitol's.

UNITED ARTISTS "Don't Go Near Water" and "Happy Road" Discount card at box office



By Bob Blandford

Today for better or for worse many scientists find that their advice is solicited by their friends and by the public on matters such as H-bomb testing.

This is because their friends expect that "scientists" will have an informed and reasonable opinion on such subjects. Of course this is not necessarily so. A scientist needs to do almost as much research to have a valid opinion on a subject outside his domain as a lavman.

What, Me Worry?

Nontheless, if scientists feel responsibility for their civilization it seems that they should attempt to become expertly informed in fields where the public is inclined to take their opinon as truth. A lot of scientists will say that it is none of their business, and that they will just concentrate on their field of study and leave that stuff to their more ambitious colleagues. Although I think this view is reprehensible, discussion of values doesn't belong in this particular article.

Some of the fields which a scientist might be expected to have special knowledge are the following: H-bomb testing, extrasensory perception, satellites, and atmospheric phenomena like aurora borealis, rainbows, and halos around the moon. For H-bomb testing the available literature is tremendous. The Caltech YMCA is going to have a discussion on the subject this evening at the training table.

Atmospheric phenomena are well covered in a book published



by Dover, Light and Color in the Open Air. In it professor Minnaert discusses subjects like: inverted mirages over the ocean, will-o-thewisps, streaks of light seen when squinting at a streetlamp, and the green flash of light often seen at ocean sunsets. Surely a scientist should understand what is going on when he sees things like this in the world around him and should be able to explain them to people who ask him about them instead of shrugging his shoulders and saying, "I don't know."

Extra-Sensory Perception

There is probably more wild-eyed discussion about extra-sensory perception than about any other single topic. Often in conversations one hears that the experiments of Dr. Rhine at Duke have conclusively proved that extra-sensory perception exists. Indeed this is claimed by Dr. Rhine.

But because criticism of any popular idea is always rather "down-beat" most people ,scientists included, are not acquainted with the criticisms of Dr. Rhine's work. And surely this is a field which the "objective" scientist should know a lot about so that he can maintain an air of clarity about the subject.

In a book recently published by Dover, Fads and Fallacies in the Name of Science, Martin Gardner devotes a chapter to Dh. Rhine's experiments. Many valid criticisms with which scientists should be acquainted will be evident from the following quotes.

"The most damaging fact against Rhine is that, with very few exceptions, the only experimenters who have confirmed his findings are men who share his strong belief in psychic phenomena.-Rhine attributes this to the fact that the attitude of the experimenter has a marked influence on the subject."

"Dr. Rhine has not found a single subject capable of demonstrating ESP to sceptical scientists at other universities. Naturally he has explanations for this-"

A lot of bull sessions can be brought down to earth by a book like this.

Mathematician John B. Jackson, like many other mathematicians, engineers and physicists, came to IBM directly from graduate school. Today, an Applied Science Representative, he réviews his progress and tells how he uses his math background in a new field.

What's it like to be with

First of all, what does an Applied Science Representative do? In John Jackson's own words, "I work constantly with key executives of the many and varied customers served by IBM in the territory for which I am responsible, advising them on the use of their electronic data processing machines. I consult with these customers, analyze their scientific and technical problems for solution with IBM machines. Occasionally, I write papers and give talks and demonstrations on electronic computing. All in all, it's pretty fascinating ... " In other words, he is a full-fledged computing expert, a consultant . . . and a very important person in this coming age of automation through electronics.

A consulting sales job

During the three years that John Jackson has spent with IBM as an Applied Science Representative, he has guided innumerable customers to new and better



ways of doing things with electronic computers. For example, a leading aircraft manufacturer wanted to experiment with a radically different design for a nuclear reactor. Although the basic format had been established, the project still required many months of toil with mathematical equations. The **Consulting with top executives** aircraft people decided that they couldn't afford to wait that long, so they called on IBM. After consultation with top executives, John Jackson helped to map out a computer program that saved the organization over 100 days of pencilchewing arithmetic. Later, for this same company, he organized the establishment of computer systems for aircraft performance predictions and for data reduction of wind tunnel tests. At the same time, he worked with this company's own employees, training them in the use of IBM equipment. He remains in touch with this customer to assist with new studies and problems as they develop.

considering mathematical research. But he liked the excitement and diversification of business and industry, and he wanted to use his mathematical background in that area. It was not until he was interviewed by

IBM that he became aware of this new field for mathematicians. A few months later, he began his career as an Applied Science trainee.

John Jackson has progressed rapidly since he joined the Company. He's now the Washington representative operating with one of IBM's key Divisions,



Mapping out a computer program

Military Products, in the Washington, D. C., office. With his wife Katherine, daughter Lisa, and John, Jr., he enjoys life in the nation's capital.



Interesting and challenging responsibilities, plus the knowledge that he is making a substantial contribution in a rapidly expanding area of IBM that is important to the Company and to the nation. assure John Jackson that he is moving along

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**

A new field for the mathematician—IBM computers

Why did John Jackson decide to join IBM? Today, he is exercising his mathematical know-how in a field that was practically unheard of ten years ago. Even now, this kind of work may be news to you. It was to him a few years back when he was an undergraduate at the University of Colorado. At that time, he was



Discussing a mathematics problem

a road of real future opportunities.

This profile is just one example of what it's like to be with IBM. There are excellent opportunities for wellqualified college men in Research, Development, Manufacturing, Sales and Applied Science. Why not ask your College Placement Director when IBM will next interview on your campus? Or, for information about how your degree will fit you for an IBM career, just write or call the manager of the nearest IBM office:

IBM Corp. 645 No. Brand Blvd. Glendale 3, Calif.



DATA PROCESSING . ELECTRIC TYPEWRITERS . MILITARY PRODUCTS SPECIAL ENGINEERING PRODUCTS . SUPPLIES . TIME EQUIPMENT

In PAC Pool

A meet with the Los Angeles

Athletic Club opens Caltech's

1958 swimming season this Fri-

day night at 8 p.m. at the Pasa-

dena Athletic Club's pool, 425 E.

Green St. The meet will be high-

lighted by a co-featured contest

between the female swimmers

from LACC and PAC. The races

will be run in alternate fashion,

LACC has one of the more

oustanding teams in the nation,

but they will not be up to full

strength due to other commit-

Keith Brown and Dave Mitch-

ell, a sophomore, will lead the

Beavers in the freestyle races,

where LACC is expected to be

especially strong, while Don

Owings and Gerhard Klose will

compete in the breast-stroke and

Bob Blandford and Paul Widess

have been designated to swim

with the gals leading off.

ments.

the butterfly.

Opinion

Natators Will <u>Or</u> Meet LAAC

AS I SEE IT by Dick Van Kirk

Reflections of a one-armed typist . . . In spite of the fact that they've been losing games right and left, you can't help but admire the Caltech varsity basketball team for the way they play the game. With probably the shortest team in the nation, the Beavers have to concede offensive rebound strength in order to concentrate on stopping fast break attacks by the opposing team. But on the defensive boards their position, timing, and teamwork is hard to beat.

Another facet of their game that is a joy to see is the way they scramble for loose balls, steal passes, slap the ball away from bigger men, and in general outhustle the opposing team all over the court. It's just too bad that the opposing team scores so many

Pct.

.800

.750

.667

.250

.000

points by outreaching our defenders. So far their hustle has kept them in the game, but they haven't been able to overcome completely the height deficits they invariably face.

In every game at least ten points are scored on Caltech just because of the height differential. But for a really exciting team, its hard to top the hustling Beaver five. Laughed at by other schools because of their relative inexperience, Coach Gene Rock's boys just go out and play all the harder. Fred Newman keeps on making shots you can't believe; Bob Emmerling always manages to be where a loose ball is; Glenn Converse and John Stene rebound with the best of them, and Sonny Nelson limps up and down the court and keeps throwing the ball through the hoop.

As I've said, it's an exciting team. Come to one of their games and I guarantee you won't be able to sit still for very long before you, too, get excited about the way this team plays ball.

For perfect fit... famous ARROW Mitoga[®] tailoring

Exclusive Mitoga[®] tailoring is made to order for a young man's "build". Has plenty of room for action. Yet fits trimly because it tapers to follow your contours from collar to cuff to waist. This Glen is a fine example. At your Arrow retailer's, \$5.00. Cluett, Peabody & Co., Inc.

Throop, Ricketts Tie For IH Tennis First

Throop and Ricketts played to a first place tie at 29 points each last weekend, in one of the most closely contested interhouse tennis tournaments in years.

First singles produced a tight battle between Clint Frasier of Ricketts and Joel Yellin of Throop. Yellin rallied from 1-4 to defeat

UR Humbles Tech 85-70

Last Saturday the University of Redlands gained undisputed lead in the SCC at the expense of Caltech's cagers with an 85-70 victory, Playing at the Scott Brown Gym, the Bulldogs came on with a rush late in the first quarter to open up a fifteen point lead and then held on to squelch Tech's rallies, and preserve their winning margin.

Led by Fred Newman and Sonny Nelson, who scored 31 and 21 points, respectively, Tech jumped to a quick lead after the opening whistle and held for two-thirds of the first quarter. Then Redlands put on their spurt and led at halftime 50-37. The second half was almost dead even with the Bulldogs scoring 35 to Tech's 33.

'Individual	statistics	to	date:

Player	G	FG	FTA	FT	Pct.	Pts.	
Newman							
Emmerling1	1	45	20	11	55	101	
Stene1	.1	36	19	11	58	83	
Converse1							
Nelson							
Van Kirk1	.0	- 7	21	12	57	26	
Magdaleno	8	3	1	1	100	7	
Team1	1	233	201	125		594	
Opponents1	.1	299	216	134		-732	

Frasier 7-5, and then played to an 11-1 victory over Noltimier of Blacker. In his last match Frasier was extended to 7-5 by Hoelter, leaving Yellin in the lead with 33 games. Frasier was second with 28; Hoelter came in third with 22; Wallace of Fleming was fourth at 20; and Noltimier finished last with 17.

Second singles was completely dominated by Phil Reynolds of Ricketts, who collected 33 wins. Behind him were Hales, Blacker, Hechler, Dabney, and Hachtel, Throop, all with 25. John Wright of Fleming finished last with 12.

Third singles was equally dominated by Lohman of Dabney with 34. Second were Marr, Ricketts, and Antoniak, Throop, at 26. Tenn, Fleming, was next with 21 and Lindman, Blacker, finished with 13.

In the doubles, Blacker's team of Teal-Zimmerman took first place honors. They were followed by Fleming's Weaver-Schwartz, Throop's Stack-Rusin, Rickett's Banta-Huse, and the Toth-Siegel team of Dabney.

The final score showed Ricketts and Throop tied at 29 each for a total of 13½ trophy points, followed by Dabney with 24 points for 9 points credit, Blacker, 20, for 6 points, and Fleming last with 18, for 3 trophy points.



Caltech's basketball team goes on the road this weekend, meeting Whittier on Friday and L. A. State on Saturday.

It will be the first contest this season against the Poets and a rematch from an exciting overtime thriller with L. A. State; both games scheduled at 8 p.m.

The poets are fast shaping into the conference "rock" predicted by preseason observers. In their SCC opener they were upended by Pomona-Claremont, but have since come back to dump Oxy and Redlands. They also have an impressive victory over Pasadena Nazarene to their credit.

Led by tall, high-scoring center, John Ogle, the Whittier casaba-men have a strong, wellbalanced team. Their starting guards hit consistently from the outside and forward Bill Harmon is a team-scoring leader. Statistics and comparative scores establish Whittier as a heavy favorite to win, but the final outcome is very much in doubt.

SCC Standings

based on results of games

played through 2-3-58.

Redlands 4

Pom.-Clar. 3

Whittier 2

Occidental 1

Caltech 0

Team

Brown.

Standings given below are

Coach Webb Emery has pick-

ed two sophomores, Doug Dun-

ham and Gerald Wilhelmy, to

represent the Beavers in the

backstroke, Dunham will also

lead off the medley relay, follow-

ed by Owings, Blandford, and

WL

1

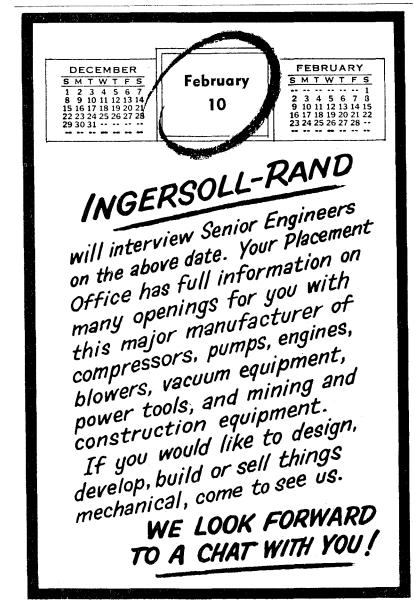
1

1

3

Bob Laemale will be Tech's prime defensive target on Saturday at L. A. State. Laemale scored 26 points to lead the Diablos to a thrilling overtime victory when the teams last met. The victory was slightly tainted when Dick Van Kirk's elbow was dislocated during the extra period and L. A. State swept down to score before the play was halted.

In this game the two teams were never separated by more than two or three points as they fought to a 47-47 deadlock. There is no reason to believe that Saturday's game will be any less exciting.



For perfect fit



DOTTED LINES : ORDINARY SHIFT SOLID LINES : MITOGA SHIFT

See why you and Mitoga[®] are made for each other

Any style shirt sits perfectly—fits perfectly when it's tailored the famous Arrow Mitoga[@] way. It's not only tapered to your body lines. It's tailored for *action*, too. See why ... stop by today.



P A S A D E N A 141 E. Colorado Street SY 6-0351

Page Ten

THE CALIFORNIA TECH

Text Of Proposed Amendment

(Continued from page 6)

4. Revision of Article V:

ARTICLE V A. THE BOARD OF DIRECTORS

Sec. 1. MEMBERSHIP. The Board of Directors shall consist of the General Officers of the Corporation. No person shall at one time hold more than one office which will entitle him to a seat on the Board of Directors or Executive Committee.

Sec. 2. DUTIES. The Board of Directors shall require all officers of the corporation to comply with its provisions. It shall exercise all other powers in connection with affairs of the corporation not delegated to other persons or agencies or reserved for the corporation itself.

(a) It shall have the sole power to authorize expenditures.

(b) It shall have the power to make awards and appointments as provided in these by-laws.

the beginning of each fiscal year to control all expenditures for the year.

(d) It shall during the first week of the college year or such time that is most appropriate, appoint Freshman Class Officers who shall occupy their offices for the first term. These officers shall consist of a President, a Vice-President, a Secretary, a Treasurer, an Athletic Manager, and two members of the Board of Control who shall represent their class on that Board for the term.

(e) It shall have the power to cancel a student event if that event, in its opinion, conflicts with an event which was previously scheduled with its Secretary.

Sec. 3. MEETINGS. Meetings of the Board of Directors shall be held at least once a week, at the call of the President, or of

(c) It shall adopt a budget at any two members of the Board of Directors. Ordinarily six (6) members shall constitute a quorum. However, if at any time more than three (3) of the general offices are vacant, unanimous attendance shall suffice.

ARTICLE V B. THE EXECUTIVE COMMITTEE

Sec. 1. THE EXECUTIVE COMITTEE

(a) PURPOSE. The purpose of the Executive Committee shall be to recognize, investigate, and discuss the long range and immediate problems of the Corporation, making use of qualified people both within and outside the Board of Directors in doing so. To submit recommendations on these problems to the Board of Directors. To assist the President in coordinating the activities of the Board of Directors.

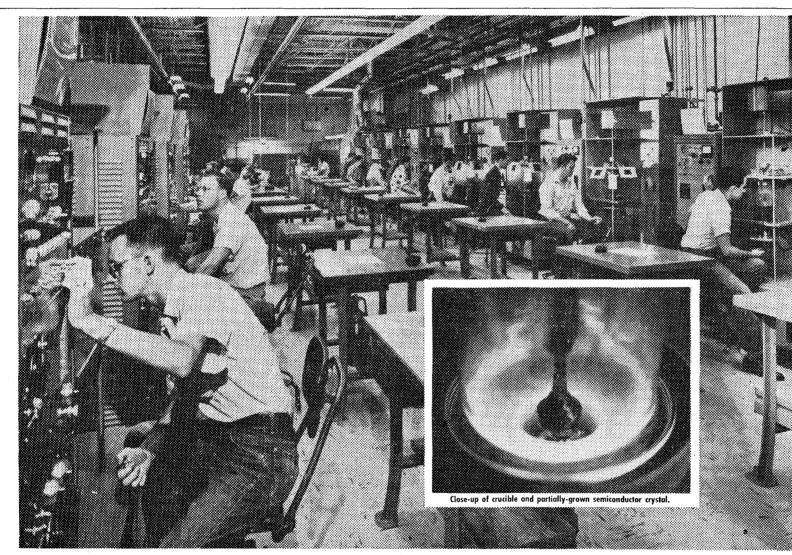
(b) MEMBERSHIP. The Executive Committee shall consist

of the President, Vice-President, Secretary, and Treasurer of the corporation, and two members appointed by the above four men with the approval of the Board of Directors. The appointees shall not be members of the incumbent Board of Directors. They shall be appointed for one year terms, vacancies being filled in the same manner as the original appointments. The President shall be chairman of the committee. The Secretary of the corporation shall serve as committee secretary.

Executive Committee shall have the power to authorize sub-committees responsible to itself. for the investigation and discussion of Corporation problems.

(d) The Executive Committee shall have the power to interpret the By-Laws.

will meet at least once a week and at the request of the President or any two members of the Executive Committee.



'hot house' for growing crystals! ... from plum-size up to 8-in. diameter, largest ever grown

(c) SUB-COMMITTEES. The

(e) The Executive Committee



In a special run-off election held last Thursday, Hugh Kieffer defeated Ken Casev for the office of Freshman Class President. The winner replaces the incumbent, Sid Leibovich, for the remainder of the school year.

5. Revision of Article VI:

Article VI Sec. 3:

Delete "Secretary of the corporation" and add "Secretary of the Board of Control."

Sec. 4 c Delete "of the Board"

Sec. 4 9

Delete "of the corporation"

Article VI Sec. 1:

Delete "Publicity Manager, a First Representative at Large, Yell Leader, Second Representative at Large, Rally Commissioner, Business Manager of California Tech, Editor of the Big T, Business Manager of the Big T" and add "Activities Commissioner, Social Commissioner and Secretary of the Board of Directors."

Sec. 1 D — Delete

Sec. 4:

Add "Except for the Secretary of the Board of Control who will be elected by secret ballot in the general Student Body elections."

Sec. 5: D

Delete First Representative at Large and add "Social Commissioner."

Sec. 5: E

Delete "Second Representative at Large" and add "Representative at Large."

6. Revision of Article VI:

Article VI Sec. 5

Delete Sec. 5 Article VI and add "Social Committee."

There shall be a Social Committee appointed by the Social Commissioner with the approval of the Board of Directors. This committee, with the Social Commissioner as chairman, shall help carry out and plan the Corporation's social program.

7. Revision of Article VII:

Article VII Sec. 4 Delete "beginning of each fiscal year" and add "end of each fiscal year."

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

This, the world's longest line of crystal "pullers," is typical of advanced engineering-in-action in which you are invited to share at Texas Instruments... largest producer of silicon transistors and a major source for germanium transistors as well as silicon diodes and rectifiers...with many engineering "firsts" in semiconductors.

At TI, you will push out beyond existing limitations - in research, development, design, and manufacture - into new concepts and new products ... into vital fields such as electronics, semiconductor behavior, infrared optics, missile control, high speed data reduction, and many others. This pioneering approach has been so successful that Texas Instruments has grown 20-fold in the last 10 years to a current \$70 million volume...a growth accelerated by recognition of individual achievement ... a growth you can share.

openings

SEMICONDUCTORS AND OTHER COMPONENTS --Transistors, diodes, rectifiers, resistors, and panel instruments.

ELECTRONIC AND ELECTROMECHANICAL **APPARATUS** – Radar, sonar, infrared, navigation, magnetics, telemetering, communications, computers, transformers.

RESEARCH – Semiconductor materials and devices, noise, surface, ferromagnetics, infrared optics, microwaves, magnetics, radiation damage, high speed data reduction, etc.

MANUFACTURING -- Production, planning, purchasing, cost analysis, etc.

come and grow with us

Hitch your wagon to the Texas star... work at a plant within the city but away from downtown traffic ... live within 15 minutes of your work or your play - year-around recreational, amusement and cultural activities. A Texas Instrument representative will be on the campus in a few days to give you more details. You may contact the placement office or write -



