

Nixon Wins Over Kennedy

Dean Thomas Honored

The five-story Caltech building now known as "Engineering" is being renamed the Franklin Thomas Engineering Laboratory in memory of the former Caltech civil engineer and dean of students.

The Board of Trustees disclosed yesterday that this action has been taken in honor of Dean Thomas, who served Caltech for 39 years as professor of civil engineering and who also was chairman of the Colorado River Board of California, a charter member and vice chairman of the Metropolitan Water District and vice chairman of the Pasadena Board of City Directors.

"Dean Thomas was a man who was intensely devoted to students and brought to his teaching a spirit of high professional ideals," said Dr. Frederick C. Lindvall, chairman of Caltech's Division of Civil, Electrical, and Mechanical Engineering and Aeronautics.

"He was well known nationally as an engineer and in the local community as a professional man with nationally broad community and cultural interests. It is particularly appropriate that this engineering building be named in his honor for his many years

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3 Members Elected To Trustee Board

Three new members have been elected to the Board of Trustees, it was announced Monday by Albert B. Ruddock, Chairman of the Board.

The new trustees are Thomas V. Jones, President of Northrop Corporation, Beverly Hills; Howard B. Keck, President of The Superior Oil Company, Los Angeles; and Dr. Seeley G. Mudd of Pasadena.

Mr. Jones joined Northrop in 1953 as Assistant to the Chief Engineer. He was elected corporate Vice President for Development Planning in 1957, became Senior Vice President in 1958, President in 1959 and Chief Executive Officer in April 1960.

A Stanford graduate, magna cum laude, 1942, Mr. Jones was associated during and after World War II with the Douglas Aircraft Company as an engineer. From 1947 to 1951 he served as technical advisor to the Brazilian Air Ministry and from 1951 to 1953 was on the staff of the Rand Corporation.

Mr. Jones is a consultant to the Scientific Advisory Board of the U.S. Air Force and is active in the Navy League of the United States, the Association of the U.S. Army, and the Air Force Association. He is a member of the Board of Directors of the Los Angeles World Affairs Council, the Southern California Symphony Association and the Welfare Federation of Los Angeles.

Mr. Keck has been in the oil business since 1932, when he went to work for Superior in Midland, Texas. During World

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General Schriever discusses air force development program in Carnegie lecture series.

C. P. Snow To Visit Tech On Carnegie Program, Nov. 22-23

In an attempt to bring the world of the scientist and non-scientist together, the Carnegie Series has been bringing distinguished speakers to campus.

This year the Series will be slanted more toward the faculty in the hope that starting at the top will prove an effective policy; but, as Dr. David Elliot, who manages the talks, says, they are "for the Institute," and it is hoped students will take advantage of them. Before any guest meets in a closed seminar with those faculty members who wish to attend, a speech open to the public is always presented.

Last week Lt. General Bernard A. Schriever gave a talk at Dabney Hall on the activities of the Air Force in the "Space Age." His speech was followed by a film and question and answer period before he met with the faculty.

Just before Thanksgiving, on November 22-23, Sir C. P. Snow will be at Caltech. To see why Snow is expected to be one of the greatest contributors to the program, one must know his background. He began his career as a scientist, doing research in physics at Cambridge; he

Y Film Series

The Caltech YMCA Film Series will present "All Quiet on the Western Front" next Sunday, November 6, at 7:30 p.m. in 206 Dabney. This picture, starring Lew Ayres and Louis Wolheim, is a grim saga of war as seen through German eyes. It traces the adventures of seven young boys who enter the Imperial Army in 1914 and learn about fear, filth, and destruction in four years of combat.

earned his Ph.D. in 1930. About this time he became interested in writing and wrote his first book, a detective novel. He has tallied up a total of twelve books and one play to date. Snow also has over fifteen years of government service in England to his credit.

In his novels Snow exhibits a keen awareness of the moral dilemmas of the scientist in the Atomic Age. He holds to the interesting view that science has had a devitalizing effect upon all contemporary arts—"not because it is evil or inhuman, but simply because it has been so overwhelmingly successful."

New Psychologist:

Pre-Tech Adjustment Prevails

BY ROGER NOLL

A new psychologist, to replace the departed Dr. Kirtner, has been added to the Caltech Health Center staff — Dr. Clyde Congdon. A graduate of Illinois (BA and MA) and Vanderbilt (PhD), Dr. Congdon has had experience in student counseling at Vanderbilt and Wisconsin. His schedule calls for about three and a half days a week at the Health Center, all to be spent talking with students. The rest of Congdon's time is spent at a local clinic where he is a child psychologist.

Although he has not been at Caltech for a long enough period to draw any definite conclusions about the Institute, Congdon has noted some initial impressions. First, he is impressed by the uniformly high intellect displayed by the Caltech students he has met. He believes

By Lance Taylor

Richard Nixon soundly tromped John Kennedy in a mock election held last week among Caltech students. California's contribution to all mankind whipped his Massachusetts opponent 242 to 199 in the vote, giving him a 55-45 edge. (Eisenhower's victory margin in his 1956 landslide was only 57-43.)

Kennedy, however, recouped his losses in a faculty poll conducted at the same time, capturing a whopping 70% of the vote with a 65-27 edge over Nixon. Both polls were conducted by the ASCIT Executive Committee. (Chairman Larry Brown has the complete results.)

Other Questions

In addition to asking presidential preferences the ExComm polls included other questions having bearing on personal politics. Students were asked to state their own party preference and political activity, their parents' party and income and their option. Faculty members were asked to give their party preference and activity, and their division.

The secondary questions revealed, among other things, that party support for both candidates was strong. Nixon got 80 per cent of his votes from students claiming Republican preference, and Kennedy got 76 per cent of his support from Democrats. Both candidates received practically equal numbers of party cross-over and independent votes.

Engineers Like Nixon

Support of the candidates differed from option to option. The scientists split about evenly, with 164 supporting Nixon and 157 backing Kennedy. The engineers, however, swung student opinion toward Nixon by backing him better than two to one, 72 votes to 35.

Parental income like scientific career ambitions, had little effect on the vote. Nixon beat Kennedy about 55-45 in all four parent income divisions: \$0-5,000, \$5,000-10,000, \$10,000-20,000, and above \$20,000.

Kennedy's faculty support came from all divisions, but was strongest in the Humanities department, where he got 20 out of 23 votes cast, for an 87 per cent victory. Most Humanities teachers also claimed Democratic party affiliation, with half of them working actively in the party.

Kennedy won among the science faculty members, 27-13, and among the engineers, 17-13. Democratic faculty members showed a high degree of party activity, with 20 working for the Demo cause, while only seven professors help out the GOP. Student results were similar, with 31 Techmen actively working for Nixon, and 53 for Kennedy.

Republicans Breed Engineers

Aside from the Nixon-Kennedy tussle, the poll also gave some correlation between parents and Techmen. The most obvious is that Republicans tend to come from Republican families, by a margin of 69 to 26. Scientists split about equally, with 130 from Democratic families, and 126 from Republican.

Old Greasy To Be Demolished

Page and Ricketts' Halloween party marked the last festive occasion that the old Greasy will see. The contract for the demolition of the cafeteria and dormitory will be let at the end of this week.

Throop Club will be razed along with the Greasy. The bricks from TC's fireplace will be saved and incorporated into the new Student Union.

Plans for the Student Union have not yet been completed. The old buildings are being demolished now because they constitute a fire hazard.

Keck Engineering Lab will be ready for occupancy during the first week of December. Right now the building is complete except for the air conditioning and other hardware.

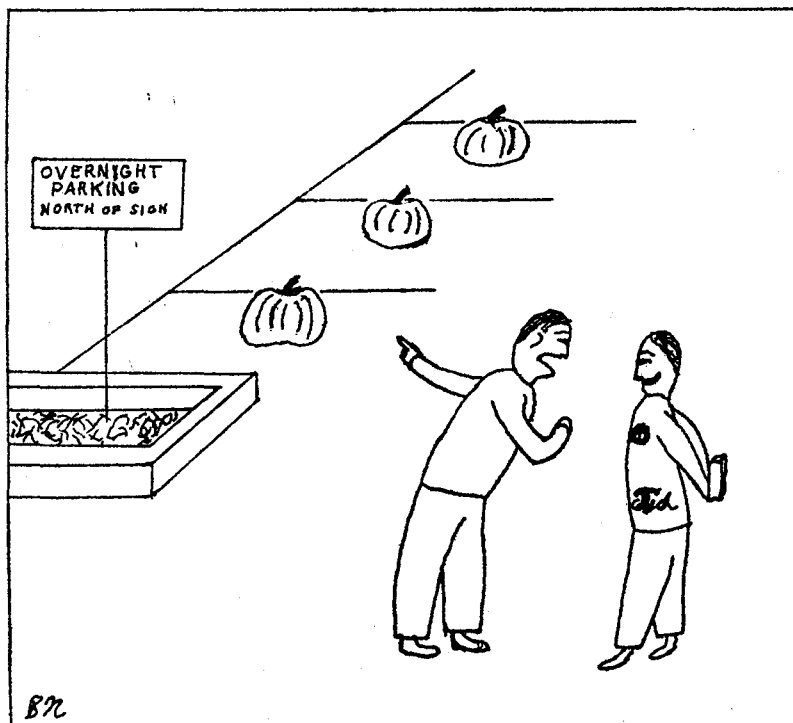
the whole Institute to be of a very high quality, and senses an invigorating atmosphere due to the intellectual atmosphere.

Congdon believes that Caltech is a great challenge in any student's life, probably the biggest hurdle any student has faced so far. But he also believes that the person who is best adjusted to the outside world will be the one best adjusted to Caltech. Congdon contends that most people who have trouble here do so because of the nature of their own personality. This view is in exception to that of Kirtner, Congdon's predecessor, who believed that the very nature of the Institute creates "pseudo-problems" or problems which trouble everyone, and are not a reflection of an individual's own psychological make-up. While Kirtner contended that a

"normal" or well-adjusted person will have just as many problems and worries as anybody else while attending Caltech, Congdon believes, from first impressions, that living at Caltech is like other situations, only more involved, in that the better adjusted a student is and the more free he is from psychological factors that might bother him in other situations, the more likely he is to adjust to Caltech and enjoy his stay here.

As to the problems of Caltech students, Congdon says that they are not materially different from student problems in other places where he has been a counselor, although study problems are much more common here than other places. Congdon says that Caltech students are more alike than the students at other colleges, and have more or less the

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Even if it is Halloween, CHANGE THEM BACK!

New Trustees Chosen

(Continued from page 1)

War II, he served as a civilian employee with the U.S. Army Engineers in Australia and New Zealand. He became President of The Superior Oil Company in January 1953.

He is a director of the City National Bank and the Gulf Interstate Gas Company, both of Houston, Texas; also of the Canadian Superior Oil Company and the Canberra Oil Company, both of Canada; and of the European Oil Marketing Corporation, Switzerland.

Mr. Keck is a member of the Los Angeles Country Club and the California Club. A former resident of Pasadena, he now lives in Bel-Air.

Dr. Mudd, well known physician and medical educator, attended Stanford University, received a B.S. in engineering at Columbia University and an M.D. from the Harvard Medical School. He has made many contributions to medical research, his principal fields of interest being cardiology and cancer. He was Dean of the University of Southern California Medical School from 1941 to 1943.

From 1931 to 1935 he was a research associate at Caltech and carried on pioneering research on the treatment of inoperable cancer with million-volt x-rays. From 1935 to 1945 he was professor of radiation therapy at Caltech and is now research associate in medical chemistry.

Dr. Mudd's father, the late Seeley S. Mudd, both served as

Caltech trustees. Dr. Mudd has been a member of the California Institute Associates since 1928. He has been a trustee of the Carnegie Institute of Washington since 1940.

Engineering Named For Thomas

of devoted service to the Institute as the first chairman of its engineering division."

In 1924 Dean Thomas was appointed chairman of Caltech's Division of Civil and Mechanical Engineering, Aeronautics and Meteorology. He became dean of students in 1944. He died in 1952 at the age of 67.

Dean Thomas came to Caltech in 1913 and started a department of civil engineering. In 1917 and again in 1920 he acted as chairman of the faculty administrative committee in the absence of the Institute president. In 1949 he was honored by his profession by election to the presidency of the American Society of Civil Engineers.

An authority on water supply, irrigation hydraulics and silt deposits, Dean Thomas also was very active in Pasadena civic and cultural affairs. He was a city director, president of the Chamber of Commerce, Community Chest and Pasadena Civic Orchestra Association. He was awarded Pasadena's Arthur Noble Medal for distinguished community service.

Travel Prize Winners Report - Poe In Europe

Every year the Junior Travel Prize Committee makes two or three awards to members of the Junior Class to enable them to indulge themselves in three months of international travel in the summer before the Senior year. The awards bring with them a monetary stipend sufficient to cover almost the entire cost of travel. The contestants are required to submit projects of their prospective journeys; on the basis of these projects and on meetings with the contestants, the committee selects those Juniors who will be able to convert the money into the most worthwhile travel experiences.

BY ROBERT POE

The theme of my trip was "European Theater." This was a good choice for me in that, as my friends will testify, my interest in drama is second (?) only to my interest in science. It was, however, a bad choice in that, although I have studied some French and German, I cannot really understand plays performed in any language other than English. And accordingly, I concentrated my theatrical study in England; my travel in other countries had little or nothing to do with my project.

The center of my travels (in time and in emphasis) was attendance at a Summer School in Shakespeare held at Stratford-on-Avon. For this six-week course the University of Birm-

ingham amassed a quite distinguished group of lecturers, including such well-known scholars as Allardyce Nicoll, M. C. Bradbrook, Kenneth Muir, and A. N. Jeffares. Each of the 12 lecturers gave a series of four lectures on a more or less central theme. Topics ranged from "Shakespeare's Contemporaries", "Theatrical Production", "The Roman Plays", to "Elizabethan Hawking and Gaming". Incidentally, the scholarly British are a delightful race: the style of lecturing ran from complete introversion to bald showmanship! And every speaker had a very apparent, if sometimes annoying, sense of humor.

The students at the school, who were drawn almost entirely from outside the British Isles with many from the U.S., were graded on a guided research paper and two seminar classes. This paper was the most ambitious I have ever attempted, and, since my Physics degree did not depend in any way upon the quality of the essay, I actually found it enjoyable.

The Living Theater

A major part of the education at Stratford-on-Avon was going to the theater. The Shakespeare Memorial Theater puts on a summer season of six plays in repertory. The directors are compelled to work with a modern proscenium stage, to which they have added an enlarged apron and a revolving platform.

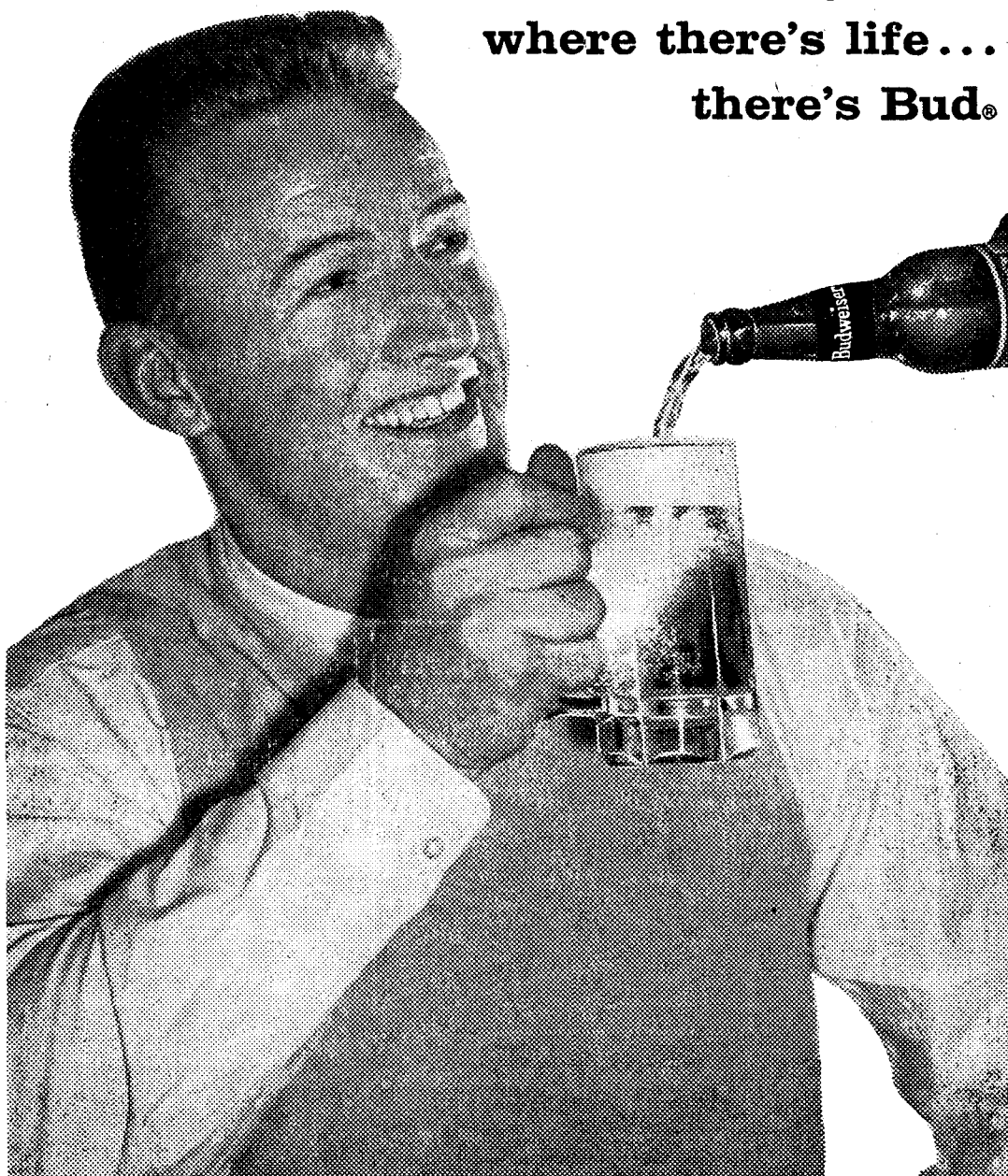
This year the Memorial Theater abandoned the star system and concentrated on developing a stock company of young actors. Despite these handicaps the directors were able to produce some very imaginative and thought-provoking interpretations. In fact, one might say that some of the plays suffered from over-elaborateness. For example, almost every one of the plays contained some post-Shakespearean insertion of homosexuality.

Much of this trouble results from the unusual status of Shakespeare in the modern British theater. It just so happens that our boy Will is still making more money in England than any other playwright. His plays are produced in professional theaters in the country every season of the year. The audiences at "Twelfth Night" has surely seen a half dozen other productions of "Twelfth Night" within memory, and the director is forced to extraordinary lengths to make his version fresh and original. Hence the homosexuality, the elaborate staging, the sight gags, and other directorial inventions. And all too often the poetry becomes incidental.

Concurrently a group of English universities presented a festival of plays by Shakespeare's contemporaries. Their open-air theater on the bank of the Avon

(Continued on page 5)

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Coleman Concert Series Presents Societa Corelli; Dabney Concert

BY DAVID HELFMAN

Last Sunday was quite a gala day for chamber string ensembles in the Pasadena area, for both the Coleman Concert series at Pasadena Playhouse and the concert in Dabney Lounge featured groups of this type. The Societa Corelli performed at the Playhouse at 3:30 and the 8:15 program here was given by the Clebanoff Strings.

The members of the Societa Corelli are possessed of great individual talent and the ability to mold their talents to fit into a larger framework, and this combination makes them almost unique. It enables them, working as a whole, to produce complete, unified sounds and yet have definite, clear delineation of separate parts where necessary, as well as producing beautiful, unambiguous tones. Using these attributes to the best possible advantage, they started the afternoon concert with three Italian works of approximately the Baroque period: the *Concerto Grosso*, Opus 6, No. 4 by Corelli, a Vivaldi *Concerto for Violin, Cello, Strings and Cembalo* in A Major, and a Tartini *A Major Concerto for Cello and Strings*, with Silvano Zuccarini, cello soloist. This is a totally Italian organization, and, as is obvious, they specialize in the music of Corelli and his contemporaries. Rightly so, for they play it beautifully and interpret it as if it were written especially for them.

The concerto grosso is a form in which separate sections of the orchestra toss melodic lines back and forth and comment upon the action of the other groups antiphonally. In this case, the work is practically a triple concerto, with two solo violins and a solo cello pitted against the main body of players, both sides doing admirably. The Vivaldi concerto, however, was much less straightforward than Corelli. It brings, at least to my mind, the thought that Vivaldi had a great talent for saying quite little but saying it beautifully. I mean no offense to any Vivaldimanics, ut since, as was mentioned in the program, Vivaldi wrote over 500 concerti of one kind or another, I sort of wish that he had condensed

his ideas a bit and written, say, only 250, with twice as much content in each. Under such conditions I might be tempted to become subject to occasional fits of Vivaldimania myself. (Is it possible that, as music and musical form progressed chronologically, ideas solidified and were made more succinct and meaningful, or am I just becoming jaded and bored of the intrinsically good ideas which have become trite through repetition and copying?) At any rate, no matter what was wrong within the music itself, the Societa handled it exquisitely, especially the canonic last movement.

In the Tartini concerto the cellist, who was rather hard to distinguish in the Vivaldi, came into his own in a grand manner. Both Mr. Zuccarini's tone and technique are first rate, the only fault being that at times he just barely misses a few notes, landing either on the flat or sharp side of them, but not enough either in magnitude or in number to detract from the compelling beauty of the work, particularly the first movement cadenza. This piece was the most recent of the three, quite playful in spots, reminding me a lot of gay Beethoven, and even, oddly enough, Brahms.

(Continued on page 5)

Civil Defense Organizations Seek Caltech Cooperation

BY MARC KAUFFMAN

Civil Defense at CIT is in a fairly wretched state. Techmen seem to have some vague idea of hiding in the steam tunnels or lower ridge if the bomb falls, but unless some sort of concerted effort is made these plans are quite useless.

Fortunately, the training and equipment is readily available, because the state and local CD organizations are very happy indeed to see people do it themselves. They are planning to show Tech people how.

FIRST AID AND RESCUE: A complete first-aid course will be offered if enough interest (more than 15 students) is shown. This will lead to Standard, Advanced, and (if you wish) Instructors cards. The instructor will be Bud Barnes of the CIT personnel department, who is a Red Cross first-aid instructor, head of the Pasadena Disaster unit, and a former member of the Sheriff's Mountain Rescue Team. The course should last 13 to 20 weeks (less if we learn fast), and is presently

scheduled for 7:30 to 9:30 p.m. on Thursdays. Leave a note for Marc Kaufman, Fleming, if interested.

RADIOLOGICAL MONITORING AND DECONTAMINATION: This course has been drastically shortened for Techmen. Classes began Saturday, October 29, and are from 10:30 to noon. The instruments and manuals are on hand now: all we need is you. See Rich Drew, Dabney, for details.

COMMUNICATIONS: The comm group will have oodles of equipment and needs operators and technicians. Operation is largely on non-amateur frequencies and a commercial license is required — fortunately this is trivial to get ("sign here"). Previous experience definitely not necessary—non-hams are very welcome. See Bill Rowe, Fleming.

CO-ORDINATION AND CONTROL: The mass of paper at the HQ will need more people than we can possibly get. See John Soule or John Trenholme, Fleming.

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Announcements

NEED PIANIST

The Glee Club has expressed a need for an assistant pianist. Interested persons, preferably freshmen or sophomores, are invited to try out. Those interested should contact Olaf Frodsham in Culbertson today.

* * *

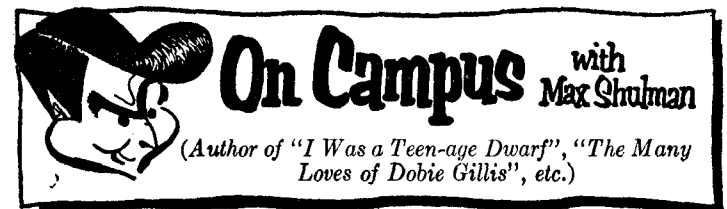
SAILING CLUB

There will be a meeting of the Caltech Sailing Club in 208 Engineering tonight at 7:30. Anybody interested in sailing for fun, sailboat racing for fun, or

sanding and painting boats for fun is invited, in fact, urged to attend. There will be an interesting talk presented entitled "Your \$4 Bargain."

IRE MEETS

The kick-off meeting of the IRE-AIEE will be held Monday, November 7 at 7:30 p.m. in 151 Sloan, featuring a discussion of "information theory and parlor games," by Dr. Solomon Golomb of JPL with an opportunity to join either the IRE or the AIEE available, too.



A MODEST PROPOSAL

A movement is afoot—a shocking, startling movement—to solve the problem of overcrowded colleges by the simple expedient of refusing admission to women at coeducational schools!

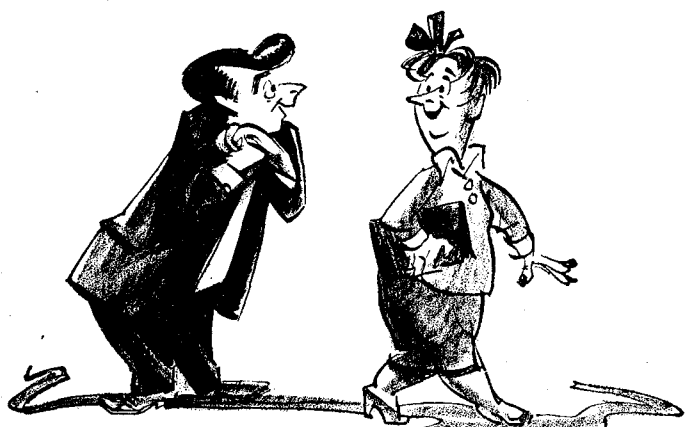
It is argued by proponents of this plan that in today's world a college education is absolutely essential for a man, while for a woman it is merely a pleasant interlude between adolescence and housewifery. There is simply not room enough for both men and women in our overburdened colleges; therefore, in all fairness, women who have far less need of a degree than men, must yield their places.

Well sir, when I heard this drastic proposal, I was so shocked that I sat right down and lit a Marlboro. I always sit right down and light a Marlboro when I am shocked. I also always sit right down and light a Marlboro when I am *not* shocked. There is no time, no condition, no mood, no estate when it isn't a source of soul-deep gratification to settle back and have a full-flavored smoke—Marlboro, the filtered cigarette with the unfiltered taste—Marlboro, the jewel of cigarettes—Marlboro, the pinnacle of the tobaccoist's art—Marlboro, my comfort, haven, and snug harbor.

Well sir, I sat smoking my Marlboro and thinking over the shocking proposal to keep women out of coed schools, and hoping fervently that another solution can be found. If the calamitous day ever comes when women are banned from coed colleges, I will gnash my teeth and rend my garments and take to my bed without supper. Like any other Marlboro man, I love women. I love the sight and sound of them, the cut of their jibs, their beauty and grace, their cunning little spitecurls, their sleek dimples, their middy blouses, their aura and effluvium. Moreover, I freely admit that when it comes to brainpower, they can give the average man cards and spades and big casino too. It would be a shame, a disgrace and a catastrophe to keep these beautiful, intelligent creatures out of college.

However, it is always wise in time of fair weather to prepare for foul. What if the advocates of keeping women out of college begin to gather strength? We who abhor this fiendish plan must be ready with a substitute... and it just so happens I have one—and a mighty ingenious little plan it is, if I say so myself.

Granted that classroom seats are in short supply, and granted that men need degrees more than women, it is still not necessary to bar women from college. Let them go to college but—here is the beauty part of my plan—*don't let them go to class!*



I love the sight and sound of them...

This solution, it seems to me, answers every requirement. It releases hundreds of thousands of classroom seats to needy males. At the same time, it does not deprive women of the rich and varied benefits of campus life. They can join sororities, shoot pool at the Union, build bonfires for Homecoming games, pour at the Dean's tea, plait daisies in their hair, organize drag races, sculpt in ice, hook rugs, walk their cheetahs, play Monopoly, find love—in short, they can do anything except go to class.

Tell the truth, girls: Is that bad?

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* * *

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Letters

Football Article 'Unjustly Harsh'

Dear "Sports Staff":

The football article in last week's paper was unjustly harsh to both the members of the football team and its coaches, besides being based on misconceptions and false rumors. It was obvious that the writer or writers, who are hiding behind the misnomer of "Sports Staff," did not look into the matter to get the true facts, but merely spouted off on a subject they knew little or nothing about.

To point out some of their false assumptions, how many 160-pound linemen do Redlands, Whittier, and Oxy have playing for them, let alone the "big-time" schools. Also how many times do we practice to 7:30 at night? Never!

We don't know how many of the "Sports Staff" have played football but if they had, they would know you can't learn the "fundamentals" overnight. It is

something that takes practice, and since the greater majority of us never played in high school, while the other teams in the league are composed mainly of experienced high school players, this would account for our seeming lack of the knowledge of the "fundamentals" as compared with our opponents.

The statement about a well-coached player protecting himself against injuries is also misleading. Does this mean that a well-coached player can protect himself against an elbow in the face or a clip from behind?

It was also stated that the coaches have a defeatist attitude. We would like to know what evidence this statement is based on. It is obvious that the "Sports Staff" has not witnessed very many, if any, practices and had a chance to see the coaches in action.

The article also criticized the coaches for their attire at the football games. What difference does this make in a team's playing? Does the "Sports Staff" want them to wear tuxedos, sweat pants, or just what?

We feel that no constructive criticism can be derived from an article of this kind with such an ill-informed and misdirected approach.

Members of the Varsity Football Team

Tadaroff, Taylor Hit Bigger Time!

The Caltech YMCA today appointed its new cabinet. Present members are:

Bob Nason, Barry Gorden, Paul Purdom, Eli Shernow, Carl Rovainen, Stan Klein.

Don Fahnlne, Dave Benson,

Bent Huld, Hal Harrison, Steve Hechler, Dwain Reed, Kip Thorne.

John Toderoff, Dick Robertson, Lance Taylor, Dick D'Ari,

Joe Heller, Barry McCoy, Bob Heath.

Students Called 'Defeatist'

Editor the California Tech:

I personally have never read a less authoritative, more absurd, or more grossly unfair evaluation of a football team or any aspects thereof, than the article which appeared on these pages last week.

The article is saturated with self-contradictions, erroneous assertions, and false observations. For instance, consider this paradox: "We have plenty of talented football players . . . They don't know how to block, how to tackle, or how to run." It is obvious that a man who can neither block, tackle, or run can hardly be described as a football player, much less a talented one, and that a talented one who cannot block, tackle, or run could hardly be an asset to any team.

It is a gross misrepresentation of the circumstances to even imply that our coaches attempt to coach their Caltech

team in the same manner as they would instruct UCLA or the New York Giants. On the contrary, our coaches have exhibited, in so far as I can see, extreme patience and, from expediency, have taken more time with the less-experienced players in order that a full team could be fielded. I would take this opportunity to inform those who are unaware of the situation that, just as "you can lead a horse to water, but you cannot make him drink" so you can prepare a player for a game, but you cannot make him win it.

I would brand as absurd the criticism of our coaches for wearing sport clothes and smoking at the games. This custom is not the exception as asserted by the Sports Staff, but rather the rule as evidenced week after week in the fall on many of the college gridirons of the country.



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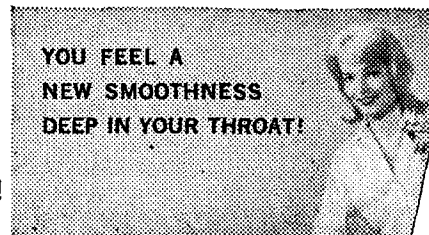
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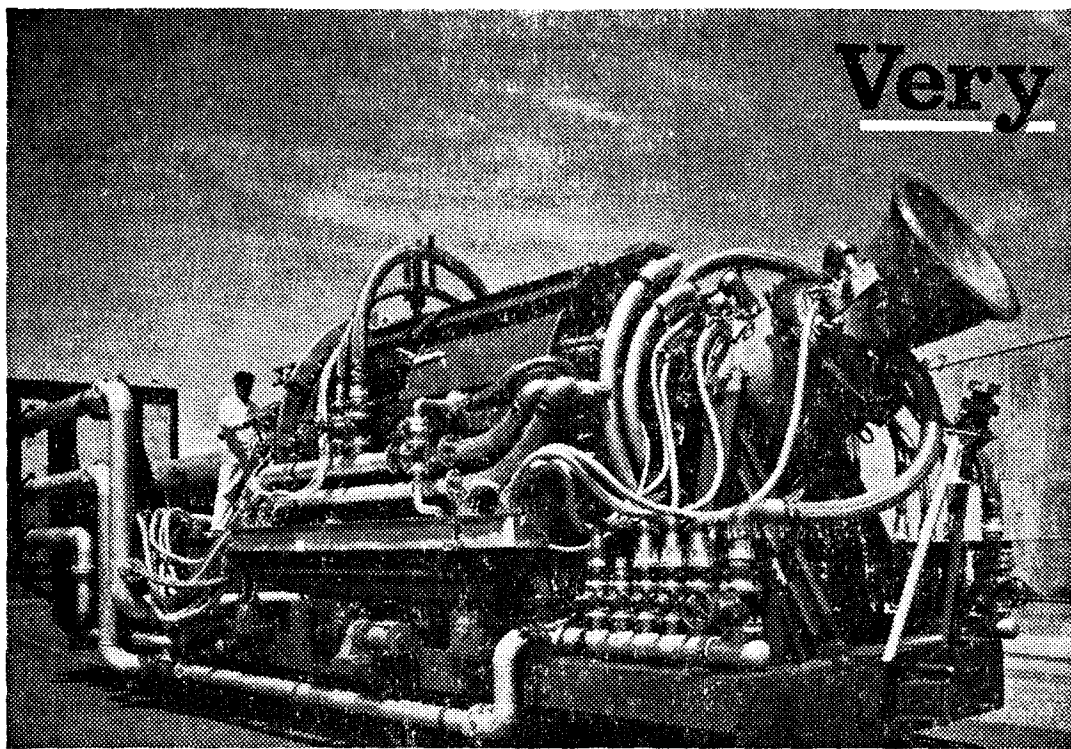
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Question Period



Tory IIA is the first of a series of test reactors being developed under the Lawrence Radiation Laboratory's nuclear ramjet program.

A reactor for ramjet propulsion must operate at high power levels yet be of minimum size and mass. Its design must consider the very high pressure drop across its length, the stress loads due to flight maneuvering, and the extremely

high radiation flux level which itself leads to severe heat transfer and radiation damage problems. Because the operating temperature exceeds that at which most conventional structural materials fail, the core itself consists of bundled tubes of sintered uranium and beryllium oxide fabricated with central holes for continuous air passage.

Very unusual

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ON NOVEMBER 18

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Societa Corelli

(Continued from page 3)

In the second half of the program, the pianist, Mirella Zuccharini (who had done up until then an excellent job of accompanying, making the piano sound blend completely and purely into the string tone, yet still being heard), performed the solo part in the Bach D Minor *Concerto for Piano and Strings*. This piece still shows evidence of the concerto grosso form: the piano is an adjunct to the orchestra, as well as being the solo instrument. In the second movement, the piano does seem to rise above its former co-participation, and comments broadly on the mood and melodic ideas, but it rejoins the orchestra in the third movement once again, now in a frenzy of dynamic activity which surges to a full, rich climax. As before, both the playing and the communion among the members of the ensemble were of a singular character.

The last piece programmed was the *St. Paul's Suite*, by Gustav Holst, which is in the style of English folk music, the latest movement actually utilizing two folk tunes, the Dargason and Greensleeves. This is quite romantic in temperament, but classic in style and very popular in mood. It can only be classified as exuberant and charming, but I feel that the spirit engendered by this piece as the finale to the program was rather out of keeping with the rest. However, the audience reacted very warmly, and who am I to argue with the masses? At any rate, things were put back on an even keel for me by the performance of two encores, one by Bonporti, the other Corelli.

It is terrifically hard to review two concerts of almost exactly the same sort at the same time, for one is sure to suffer in comparison with the other. It is for this reason that I will withhold my review of the Dabney concert until next week.

Psychologist

(Continued from Page 1)

same problems—studies and social life.

Congdon also says that Caltech students have a tendency to come to him as a last resort, i.e., when they have already decided to leave school, but are seeing him just to make sure. This, it seems to us, is unfortunate, for a psychologist could be of much more use to students when they are confused and undecided than when they have already reached a decision, but merely feel an obligation to make a last check.

A psychologist can be of real value to students, especially on a campus such as this one.

A discussion with someone who knows something about people and how they react can be worth while. Congdon believes in his field — he says he is certain that psychology does help people — and has a sincere interest in students. As was his predecessor, Congdon will be a valuable asset to the campus.

Poe Discusses Shakespearian Theatre

(Continued from Page 2)

lent itself to informal, simple presentations, and the drama students were by no means insensitive to the literary qualities of the works. Perhaps the highlight of the season was the Cambridge Marlowe Society's poetic rendition of "Doctor Faustus."

I also spent a fair amount of time at the theater in London. The cheapest seats (i.e., mine) averaged 70 cents and were available on a couple of days' notice. I saw several Broadway musicals (not very well performed) and some fine new English plays.

As for theater elsewhere in

Europe, I saw only the Abbey Theater's fine performance of "The Quare Fella" in Dublin, a new Francoise Sagan play and an old Bertolt Brecht play (neither of which I understood) in Paris, and two operas in Rome. In general, I would say that the level of acting and staging in Europe is about on a par with our own, but the prices of seats are substantially lower. (Note: a similar combination of price and quality can be found in the Caltech Drama Club.) (The preceding was an unpaid political announcement.)

BUMMING AROUND

Perhaps some of you are wondering what I was doing when

I was away from the theatrical world. Well, I suppose my main efforts were devoted to being as little American as possible. And, I'm afraid to say, this was quite an exhilarating experience: to the extent I was successful, I had a ball. I did my best to speak the local language, eat the local food, live in the least pretentious places, and travel with the rest of the mob. It seems to be true that the less money you spend in Europe, the more fun you'll have. Of course, you have to see the sights and buy some of the bargains and collect your mail at American Express and take an occasional plane trip. But for the rest,

live in third-class hotels and student dorms, eat in small restaurants, hitch-hike, and avoid Americans like the plague—and you'll have as glorious a time in Europe as I did.

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SPORTS

Beavers Score First; Edged Out By Poets

The tough Whittier Poets proved to be too much for the Caltech Beavers Saturday, as Ken Gregory snagged 13 passes for a new national record in leading the Poets to a 56-12 victory.

The Beavers drew first blood as Jim Morrow intercepted a Whittier pass and raced to the Poet's 22. Ten plays later Frank Marshall passed to John Arndt for the score.

A blocked kick set up the first Whittier score, and an intercepted pass gave the Poets a 15-to-6 lead at the half. Long passes to Ken Gregory set up two more scores as Whittier obtained a comfortable 29-6 half-time lead.

The Beavers made the final score of the game as Frank Marshall piloted a 67-yard drive to pay dirt. John Arndt caught an eight-yard pass for the score.

Ken Gregory's feat overshadowed John Arndt's fine performance of catching 10 passes, just one short of the old national record. This performance was recorded against two of the finest defensive backs in the league. As the Beaver's most dangerous pass receiver, Arndt has been double and triple teamed in the past few games, but has been catching more passes than ever.

After the fine showing in the Whittier game, Caltech must be rated as a favorite in this Sat-

urday's La Verne game. Dave Barker will be back in service after injuring his back in the Cal Western game, and three new defensive aaks, Geary Younce, Ed Evans, and Bob Juola, will add greatly to Caltech's speed and should be of great help in pass defense. The Beavers will possess a real dangerous attack with two fine quarterbacks, several fast halfbacks, two strong fullbacks, and John Arndt.

Waterpoloists Clobber Redlands 13-9; Edged Out By UCLA 7-6

By TOM TISCH

The Caltech Varsity Waterpolo team, lead by Forward Bob Ruby, trounced Redlands 13-9 last Tuesday in a league game held at Redlands. This was the third consecutive league victory for the Beavers, giving them a 3-0 record, first place in the Conference at this time.

The Redlands victory came on the heels of a hard-fought game which saw visiting UCLA sneak past the Techmen 7-6 last Friday in Alumni pool.

In the Redlands game, the victorious Beavers led 3-1 at the first quarter, 7-1 at the half, and then coasted to their 13-9 win. Bruce Chesebro contributed 3 markers and Fred Hameetman and Gary Mitchell popped in two apiece for the remainder of the Beaver tallies.

The remainder of the starting team at Redlands consisted of Marshall Buck at goal, and Tom Tisch, Gary Tibbetts and Roger Bland in the court. Russ Russell saw considerable action at guard, and Mickey Newton managed to get in a few well-played minutes.

Large amounts of credit for previous good showings must be given to Marshall Buck, the Caltech Goalie. To date, he has been better than any of the opposing goalies, and his continued improvement could make him the best goalie in the league. Marsh made 11 saves in the UCLA game, and a number of saves in the Redlands game, even though he was playing with an injured hand.

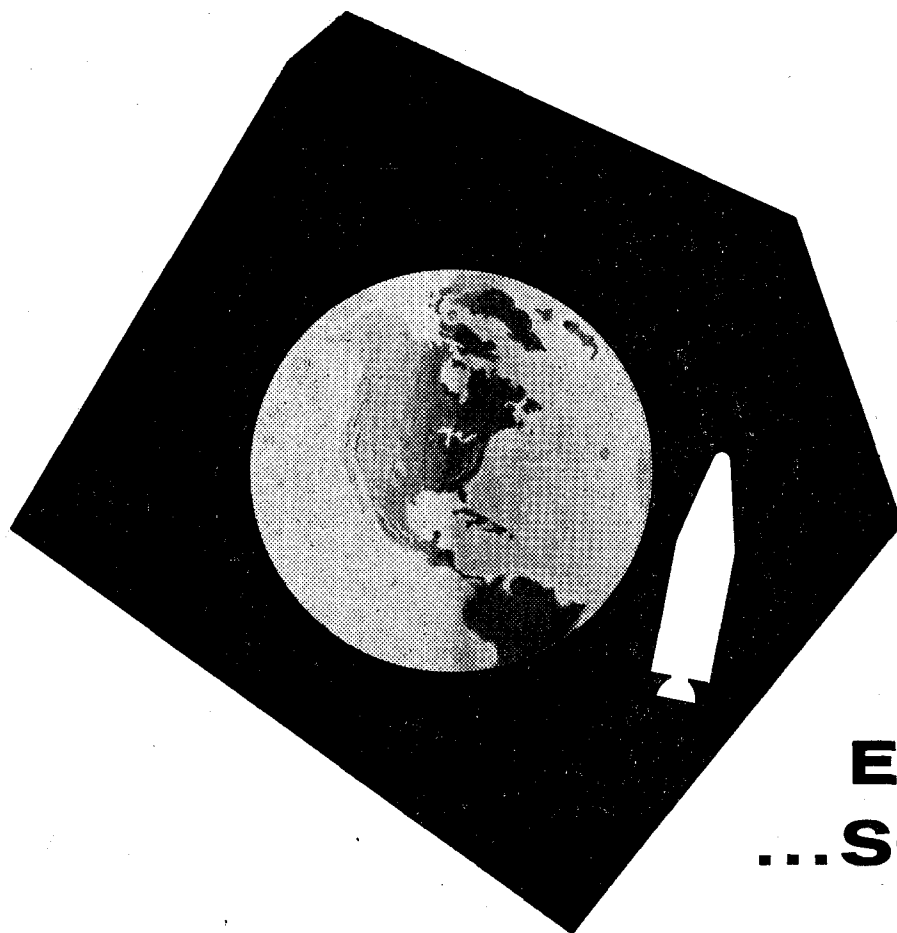
In the forecourt, Bob Ruby continues to lead the Beaver at-

tack with an impressive .357 average. The experience he has picked up in the last three years shows in his careful placement of shots and excellent timing.

Bruce Chesebro has improved considerably since the beginning of the season, and it should not be long before he will be one of the top scorers in the league.

Fred Hameetman, the Oxy transfer student, has been a great deal of help to the Tech team. In spite of a recurring shoulder injury, he has been able to score consistently, and do excellent defensive work.

In the back court, Russ Russell, Roger Bland, Gary Tibbetts have been doing good work. With help from the other members of the team they have been able to effectively bottle up opposing offenses.



ENGINEERS ...SCIENTISTS

Tech Harriers Topple Poets

BY RICH HARRIS

The varsity cross-country team, although feeling the loss of their captain and top runner, Dick Tuft, improved on last year's best team effort as they trounced Whittier, 21-36.

Sophomore Pat Earley ran 48 seconds faster than his previous best time for this three-mile course for an excellent 15:32 and first place.

Freshman Ed Lee brightened the frosh 33-22 loss to their Whittier counterparts by taking first place over the two-mile course in 10:53.7.

Improvements of varsity team members over last year's times has been impressive, and the team stands a very good chance of sweeping through their dual meets undefeated. Next contest for both frosh and varsity will come tomorrow afternoon against Pomona over the hilly Mt. Sac course.

Other places for the Caltech varsity were Richard Harris, second in 15:46; Marshall Johnson, junior transfer, fifth; veteran Bob Juola, sixth; Al Whitlesey, seventh; and Norman Reitz, ninth. Also contributing to the team were Larry Weaver, fifth; Bob Sorenson, eighth; Jacques Calma, ninth; Dennis Holt, 10th; and Jim Hoel, 11th.

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Soccermen Ease By Pomona Team 4-3

After suffering a one to one tie with Redlands the week before, the Caltech soccer team won its first league match of the year as it defeated Pomona last Saturday by a score of four to three, thus keeping alive a 13-month streak of six home games without a defeat.

Coach Lee Andrews commented that the team played its finest 70 minutes of the year; unfortunately a soccer game lasts 90 minutes; fortunately this game did not last longer. At the end of the first half, the Techmen were leading two to nothing by virtue of the scrambling feet of Joel Kwok, Gary Osterberg, Bill Dowd, and Jerry Davis. By the middle of the

second half George Argyropoulos had added two more goals, and Tech led four to nothing. Perhaps the shock was too much, or perhaps the smog really was worse on the Tech side of the field; in any case, Caltech stopped running and Pomona began scoring, and continued to score. Time ran out before they could tie the score.

Next Saturday Caltech plays another home game against Biola College. If the team can improve its shooting and if the defense can learn to be less erratic, it should win the majority of its remaining games.

Meanwhile the junior varsity team traveled to UCLA and was overpowered by the Bruin's junior monsters by a score of three to nothing.

Football Letter

(Continued from page 4)

The statement that "the coaching staff has a defeatist attitude about football fortunes, they do not care whether they win or not", is also untrue. They most certainly do want to win, but may I interject this sidelight, which is perhaps unintelligible to those who are non-athletes: Athletics builds character; the most important aspect is not whether you win, but how you play the game, for it is this aspect of athletics which aggrandizes character. I know that our coaches realize this sidelight of football, and I believe that it is unfair to them to construe their sanction of it as a lack of desire to win. Furthermore, what is the attitude of our glorious, spirited (ugh) student body toward the football team?

As far as I have seen, the majority of the student body has no spirit at all. The outcome of the weekend's contests interest them only slightly, if at all. A certain percentage of those who do profess an interest are only concerned with maintenance of our losing record.

I believe that the underlying cause of our poor showing in football this year and in past years, is a "negative" attitude. Whether or not you subscribe to Norman Vincent Peale's "power of positive thinking", I think you will have to consent that it is virtually impossible to accomplish any task if you approach the task with a negative or defeatist attitude. This is precisely the attitude which some Caltech football players carry into a football game. The reason for the players' negative approach is the total defeatist attitude of the student body, their fellow students. What is needed is not a change in coach-

Tech Loses Sailing Contest

Lack of experience took its toll last Sunday when the Caltech sailing team was beaten by four of its five competitors in a Southern Series Regatta held at Santa Barbara. Orange Coast College, consistently racing the best sailors in the association, won the regatta by taking five first places in the six races. Subsequent order of finish: UC at Santa Barbara, Occidental, Cal Poly, Caltech, and San Diego State. Pomona and UC at Berkeley did not show.

Dan Marks and Hal Stark, team members who skippered this regatta, also raced with Bob Moore at Balboa Yacht Club on October 16. This, too, was a Southern Series Regatta in which Tech placed fourth out of seven. Tech is now tied for fourth in the over-all standings of the ICYRA '60-'61 Southern Series.

More Letter

ing, a change in the length of practice, or a change in the attire of the coaches at the games, but rather a radical transformation of the attitude of the student body and the players from a negative to a positive one. Once this transformation is successfully accomplished, then and only then can we start to win football games.

Bob Liebermann

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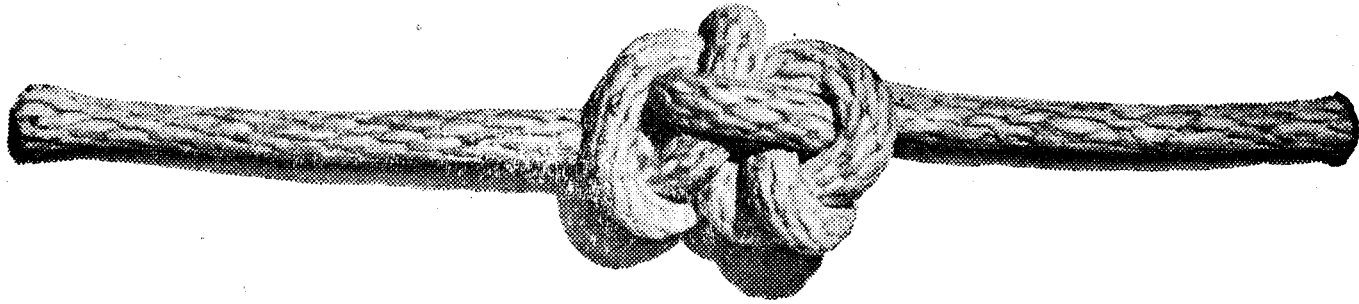
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Final Parking Rules Set For Remainder Of Year

The Campus Parking Rules, which have been in a constant state of flux since the middle of last spring, were settled for the time being with an agreement worked out between the Institute and the Interhouse Committee.

While the majority of the parking rules will remain unchanged, these alterations were made:

(1) Resident students will be permitted to park in any of the unrestricted parking areas during the weekends (Friday night through Sunday afternoon, any time).

(2) Twenty-four special decals will be issued the Interhouse Committee for assignment of three to each of the seven Houses and three to ASCIT. These will permit the holders to park in any of the unrestricted parking areas from 2 a.m. to 5 a.m. on any day.

(3) Eighty-three parking spaces will be set aside in the northwest section of the Chester Avenue parking lot for the resident students' use only. If an excessive vacancy factor is experienced, say 25 per cent or more, during the work-day hours of 8 a.m. to 5 p.m., the decision

to restrict this area may be reviewed with eye toward discontinuing the limitation.

Among the most important of the rules to remain unchanged are the following:

(1) Overnight parking is allowed only in the designated areas in West Chester and Southwest T.P.—with the exceptions noted above.

(2) Daytime parking will be on a first-come, first-serve basis in the remainder of the Institute assigned areas, and on the streets in accordance with City of Pasadena regulations.

It is hoped that people who seldom use their cars will keep them out of the way in the back of T.P., leaving the Chester (Keck) lot for the use of frequent drivers. Furthermore, members of the old Houses are encouraged to park in T.P., since Chester Avenue lot is more accessible for members of the new Houses, and at best equidistant with T.P. from the old four.

Sweezy, Thompson Clash On Campaign Economics

BY CHUCK LEONARD

At a YMCA-sponsored Upper-class Dinner Club meeting last Thursday, Caltech's professor of economics Alan Sweezy debated the merits of the economic programs of the Democrats v. those of the Republicans with Claremont's Proctor Thompson. The dinner was quite well attended, many lowerclassmen also being present. Approximately 60 men participated in the question period following the speaker's statements.

Sweezy opened the program with an analysis of the Liberal program. According to Sweezy, both candidates are agreed on fundamentals (e.g., the value of Social Security, the role of the government in depressions), but differed only in degree. Several points he made were the differences of opinion of Kennedy and Nixon on the farm problem, the need for economic growth, its ill effects on the wage-price spiral, and the need for more gov-

ernment spending through greater spending.

Countering Sweezy was Claremont Graduate School's Proctor Thompson, representing the Conservative viewpoint. Observed Thompson, the growth of the economy will decrease the need for government regulation and intervention by increasing the competition in the market.

Some more specific points of disagreement between the two parties, as seen by the speakers, included:

(1) Republicans favor flexible Federal Reserve interest rates, to fluctuate with market conditions; Democrats favor "easy money" policies.

(2) Nixon would allow the President's fact-finding board to make non-binding recommendations to both parties in a labor dispute; Kennedy would give the President much greater power to deal with strikes, including the power to seize factories.

(3) Thompson favors Federal

aid to education only in low per-capita-income states, while Sweezy favored aid to all states.

The questions asked of the speakers brought up many further points of conflict as well as of agreement. The evils of land monopoly in the federal highway program, in the soil bank program, and in the land reclamation projects of the federal government were agreed upon by both speakers. A further common ground was their opinions on the values of free trade — both held that it should be achieved gradually.

The consensus of opinion following the debate acknowledged its value to the new voters on campus for this election. It was an informative and well-appreciated analysis of those vital issues of our nation that will be decided in the coming years, and in the coming election.

Tech To Be Dominican Republic

The Caltech delegation to the Eleventh Annual Model United Nations, this year representing the Dominican Republic, will be chosen before the end of the term. The delegation will consist of from six to eight members, according to delegation co-chairmen Roger Noll and Francis Wilson.

The session will take place the second week of April at the University of Oregon in Eugene. The delegates will be divided into separate committees dealing with specific topic of world-wide concern, and then will conclude the session with a General Assembly meeting. Such topics as the admission of Red China to the UN., the control of nuclear weapons development, and the international control of outer space along with several new topics such as the Congo crisis and the embargo placed by the Organization of American States on the Dominican Republic.

Any undergraduate who is interested in attending Model UN should apply to Sid Liebovich (Lloyd), Cleve Moler (Lloyd), Roger Noll (Page), or Francis Wilson (Page) as soon as possible. Deadline for application is Friday, November 10. Delegates will be chosen on the basis of previous experience, interest in the UN, and reasons they have for wanting to go. The final delegation will be announced about Thanksgiving.

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