

800 high school seniors see student day program

Earthquakes, smog, wind and lectures greet visiting students during day-long demonstration

Last Saturday Caltech welcomed more than 800 visitors from Southern secondary schools and junior colleges at its third annual Students' Day.

The morning was devoted to guided tours of the campus and through the various buildings where departmental exhibits and demonstrations were held. A glimpse of nuclear physics was had in a visit to the synchrotron—world's most powerful electron accelerator. The wind tunnels in the Guggenheim Aeronautical Laboratory were open for inspection and torpedo research was demonstrated in the Hydrodynamics Laboratory.

Yum!

Student visitors lunched with Caltech undergraduates in the campus Student Houses. After lunch the students were welcomed by ASCIT president John Gee. Dr. Linus Pauling addressed the students on the molecular structure of the human body.

Show jobs

Visitors attended various demonstration lectures in the afternoon. Professor George W. Housner discussed the effects of earthquakes on structures, and Professor Richard Feynman described atoms in motion. Professor H. F. Bohnenblust lectured on the Monte Carlo Method of the theory of numbers.

Professor Peter Kyropoulos spoke on knock in automotive engines, and in the chemistry field professor Gunnar Bergman gave a talk on crystal structure. Lectures and demonstrations at

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Cadet regulations explain demerits

Tech's complete AFROTC regulations were issued to all AFROTC cadets this week. The purpose of the regulations is to set a standard of performance, both on the drill field and in classes, for each cadet. The regulations define the merit and demerit system, probation, attendance to military classes, wearing and care of uniforms, and military courtesy.

The merit-demerit system is used to reward extra achievement and to penalize poor performance by the individual cadet. Each merit or demerit counts toward the cadet's final term grade.

Merits will be awarded for extra-curricular AFROTC activities and for extraordinary performance of his regular duties. Merits are given for such activities as extra-curricular drill team or band practice, and for public performance, while in uniform.

(Continued on page 5)

Campus Calendar

6:45 Frosh Basketball vs. Chapman at Chapman
7:30 Friday Evening Demonstration Lecture, 201 Bridge
8:00 Varsity Basketball vs. Chapman of Chapman
MONDAY, DEC. 15
FINALS
at Chapman

We quit

Shortly the raven will croak. In fact, he is already leering at us from that orange tree. In short, with finals coming up next week, and a glorious vacation following if we live so long, this will be the last Tech for this year.

The newspaper is still undernourished. We desperately need writers and copy readers. Those of you who have the slightest interest and are willing to put in even an hour a week are urged to see Ron Ratney some time before the next Tech comes out in January.

Model of oldest telescope given to Palomar

A full-size replica of the original Newton reflecting telescope, earliest ancestor of the 200-inch Hale Telescope on Palomar Mountain, has been presented to the Mount Wilson and Palomar Observatories by the Royal Greenwich Observatory in England, it was announced by Dr. Ira S. Bowen, observatories director.

He displayed the 10-inch high model for the first time Dec. 4th in the Athenaeum at a dinner meeting of the Institute Associates. It is an exact copy of a telescope Sir Isaac Newton presented to the Royal Society in London in March, 1672.

Newton's original had a 6 1/3 inch focal length, a magnifying power of 38 diameters and a mirror slightly more than two inches in diameter. The replica is built of wood, cardboard and metal, as was its original.

Newton's pioneering telescope is housed in the Royal Society in London. Sir Harold Spencer Jones, British Astronomer Royal, arranged for presentation of the replica to the observatories after a visit last summer. It will eventually be exhibited in the museum of Palomar Observatory, home of the world's largest

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club.

Demerits will be given for unsatisfactory performance. Penalties range from possible dismissal from AFROTC for insubordination, to one-to-three demerits for untidy uniforms or for inattention during classes.

Cadets who receive ten demerits are to be called before the Disciplinary Action Board. If he later receives a total of fifteen demerits, he may, at the discretion of the Board and the Professor of Air Science and Tactics (P. A. S. & T.) be dismissed from the Corps.

Merits and demerits may be recommended to the PAS&T by officers and non-commissioned officers of the Air Science De-

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Stefanides wins Wheaton trophy at awards banquet

Muehlberger, Goetten and Stefanides elected to all conference team

by Moose Henderson

The annual Awards Banquet came off in its usual wild form last Monday night. In true form the dinner started ten minutes late. The delay was soon forgotten when the boys saw the steaks in front of them. The statement of all the milk and butter that you can hold was taken at its face value by all. Especially by those of the pig club: Muehlberger, Ernest, Christian, Goethon. It seems that everything that went to that part of the table was never again to be seen. Oh well, the boys were full.

After chow the would-be athletes set all training rules aside and the dinner hall was heavily smothered with cigar smoke as Dr. Clark took the gavel and got the ball rolling. For those of you concerned as to what happened in the seven mystery years of Shakespeare's life Dr. Clark has made the interesting and well-founded theory that he was a football coach. Don't laugh! His proof was most convincing.

Don Paul and Tom Fears both held the floor for a short period during which time they divulged that pro-ball isn't all fun, nor is it all work. They were, needless to say, very convincing men.

The banquet was climaxed by the different coaches introducing their teams and cursing lady luck. Those awards were as follows:

Football: Varsity—All conference awards to Eugene Muehlberger-off tackle, John Goetten-defensive guard, and Neil (Stainless) Stefanides. The coveted Wheaton trophy went to Neil Stefanides. Block "T"s were won by Jack Walker, George McDonald, John Abbott, Les Earnest, Al Johnson, Bob Christian, Dick Manley, Eugene Muehlberger, Charles Tallman, "Stainless" Stefanides, John Gee, Walt Monetre, John Goetten, Tom Janssens, Chalon Carnahan, Ed Gehle, Moose Henderson, Walt Pilant, Bruce Kaiser, Hugh Taylor, Eric Ward, "Pop" Fazio, John Kidder, Ray Grieser, Clarence Miller, and Manager John Wall.

Numerals were given in Frosh football to Irwin Maltz, Jack Hickey, Art Takide, Phil Conley, Charles Finley, Larry Whitlow, Pete Lehman, John Carey, Del McCune, Jim Okada, Walt Park-

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Local advertising rates in the California Tech will be resumed to their June, 1951, level of 90 cents per column-inch as of the beginning of the year. A special rate of 80 cents will apply to all advertisers who run more than 30 inches per month—a month being defined as four consecutive issues, and to advertisers who have already signed contracts at the 80-cent rate extending beyond January 1, 1953.

Y Asilomar plans almost all finished

The Asilomar Conference is only two and one half weeks away! It will be from Dec. 28 to Jan. 3, on the coast near Carmel at Pacific Grove; the cost is nominal, \$36.50.

So far only seventeen Techmen have registered, but there is still time to go.

Those going to Asilomar so far are Frank Dryden, Irwin Rubenstein, Ken Lunan, Wes Hershey, John Boppert, Leon Shameson, Merv Barman, Al Helgesson, Ray Orbach, Bill Sundblad, Don Barnes, Bob Wood, Bob Harvey, Paul Cramer, Dick Lawrence, Ralph Miles and Al Jensich. As yet the recipients of the Asilomar Scholarships have not been announced.

Caltech alumni under survey

A good many of you have probably heard about the alumni survey which Dr. John Weir has been conducting during the past year. For some time the Institute has wanted such a survey made in order to answer three major questions.

First of all, certain assumptions regarding the status, functions, and activities of an alumnus are made in setting up courses and procedures and generally defining the objectives of the Institute. Obviously, a survey would reveal the validity of these assumptions and presumably would lead to their correction if they proved erroneous.

Comparison needed

Secondly, how does a Tech graduate stack up against alumni

Frosh lunch club chooses officers

Last Thursday, the Freshman Lunch Club elected officers for the coming term. The new officers are Fritz Benning, president; Myron Szold, vice-president, and Bill Pervis, secretary treasurer. These three, plus a representative from each of the student houses, will form the new executive committee of the club. So far this year, Dave King has been acting as the chairman.

The meeting this noon, the last meeting of the year, will be devoted primarily to planning the program schedule for next term.

PE notice

Many may have noticed that the courses scheduled in the catalogue have included Physical Education as a three-unit course for all those that take it. This will not help the grade point average as it doesn't count either for credits of GPA. However, the old requirements still hold; i.e. you still have to pass to be allowed to register for the next term or else you must remove the deficiency.

of other colleges and universities?

Thirdly, to what extent do extra-curricular, non-academic student activities correlate with success, satisfaction, and happiness later in the Techman's life.

While Dr. Weir was working on a suitable questionnaire, the book, *They Went to College*, was published. Based on a reader survey for *Time* magazine, it analyzed the results of 9064 replies from graduates (classes of 1884 to 1947) of 1000 different col-

(Continued on Page 3)

Science in Pendulum style commented upon

By Charles M. Coffin

Dr. Coffin, professor of English at Kenyon College and dean of the Kenyon School of English, is the author of *John Donne and the New Philosophy* and recently edited the Modern Library edition *Collected Writings of John Donne*. He is visiting the Huntington Library this winter, where he is writing on seventeenth century science and poetry.

The thing that strikes me first about *Pendulum*, and perhaps it is the most important thing, is the very existence of it; and in saying this I mean to remark my special satisfaction in the fact that the men of the Califor-

nia Institute of Technology do insist that both words and numbers have a real claim upon their minds and imaginations. Numbers and words are fundamental and complementary instruments of discovery and expression, and maybe the name of the periodical itself—if I remember correctly something about the pendulum swinging through equal arcs—intends to suggest this two-fold way we have of dealing with experience.

I ought not to worry this "conceit" too much, but it does seem to lead me into the kind of statement I should like to make about the contents of the November *Pendulum*. Even if I

(Continued on Page 4)

Secretary's report . . .

At the Board of Directors meeting this Thursday evening the subject of the AFROTC drill hour will be taken up once again. All members of the student body are encouraged to attend. As usual, the time is 7:30, the place, lower Fleming.

Instituters

Since the President of the Instituters left school last June, there have been no Instituters activities on campus. The Board of Directors is attempting to get this organization into operation once more. At this evening's Board meeting, the house Instituter chairman from last year, will be interviewed concerning their opinions of the best ways to revitalize the organization. Specifically, the question of naming a new President will be taken up.

Respectfully submitted,
George Johnston,

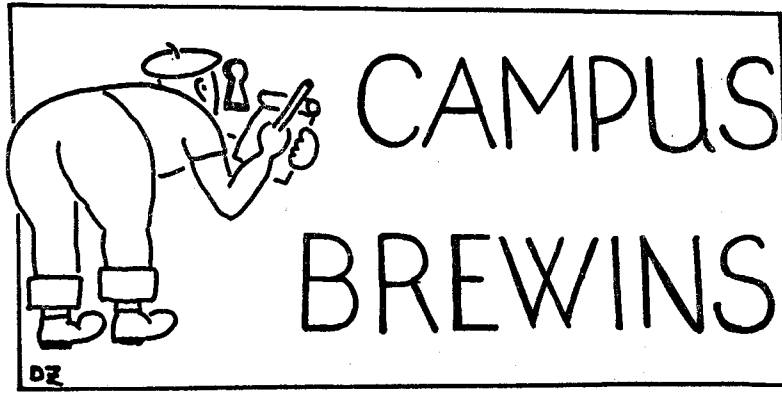
Honor system

Finals week is always a tough week for the undergraduates at Caltech. Plans for going home, finishing laboratory exercises, and the last minute obligations to meet. Yes, this week is enough to make a student slack off on studying. If studies are neglected, finals will hit hard. There have been a few men (very few) that have succumbed to copying because studies were shirked. These men will verify that the copying system doesn't pay off! By copying I included "dry labs," themes and direct copying on tests. Each one is a violation of the Honor System. Each one must be reported by you.

You are obligated to report any breach of the Honor System to one of the members of the Board. If you are in doubt about some observed action, report it to one of the Board members and let the Board decide if a violation has occurred. Don't let friendship stop you from reporting a suspected violation. If the person is guilty it is far better for him to be punished now rather than later in the business world. Don't cause unnecessary disturbance in a finals test or let anyone become disturbing. Do make sure that you and the class understands the conditions governing any given final (i.e. open or closed book, open or closed notes, time due, whether outside books may be consulted, etc.)

Remember that you are responsible for your Honor System. No violations occurred last term. If each man will do his job no violations will occur. Good luck in your finals.

Pat Fazio



Finals time

O Death, where IS thy sting?
O Grave, where IS thy victory?
I Corinthians 15:55

Fleming prexy Al Haber has been seen about the campus absorbing culture and good manners from such varied sources as Emily Post, impeccable RA Norm Bulman, and the house Bostonian influence. Seems he is trying for a Rhodes Scholarship, and the habits acquired from long years in the Fleming dining room will have to be radically changed in time for his interviews. Typical query from pure Al: "MUST I accept a drink before dinner if offered? What should I ask for?"

Interesting

Have you heard about the polyandrous affair in Fleming between Bulman, Moore, Supple, and the young schoolmarm from Ontario? Moore claims he is assisting in the house project to get Bulman married off, Bulman claims he is assisting in the house project to get Moore out on a date, while Supple pro-

vides introductions and eats the cookies received in the mail (special delivery, no less). All four appear to be enjoying themselves.

Good eats!

Criticism of the food served in the student houses has been shown to be completely undeserved by misunderstanding of its purpose. Its value for satisfying animal craving may be debatable, but as to its effect on the inner man, there can be no argument. While partaking of this spiritual ambrosia, Dave Workman suddenly rose seven feet in the air and announced, "Ah feels the spirit," then fell rigid as the proverbial ramrod into the arms of four sympathetic souls who deposited him in the fireplace. That Caltech food is the cause is clearly shown by the comment of several maidens who were present, which was, "But such things never happen at Scripps."

Bleed for the lady, Ambrose

Although feeling that withdrawal rather than a deposit was in order, Bob Easton went to bleed for the blood bank Monday. After shedding his last drop, two (2) nurses supported him over to the table of goodies, rather than the usual one, repeatedly asking whether he felt

(Continued on Page 3)



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California Tech

Published every Thursday during the college year except during examinations and holiday periods.

California Institute of Technology
1201 East California Street, Pasadena, Cal.
Subscription rates: \$1.50 per year.
Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.
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LETTERS

During the recent "Y" drive, when you were requested to contribute, you probably thought to yourself, "Well, the Y is a good thing, therefore I should support it." So did we in past years. Certainly it performs several useful functions. We also feel that its Executive Secretary discharges his business efficiently.

We do not believe, however, that the money collected is utilized in an effective manner, nor do we like the method used in collecting this money.

On the Y's published "Interpretation Sheet" is listed a total annual budget of \$11,230. Above this appears fifteen expense items of unspecified magnitude, headed by "two full-time salaries." We do not particularly care what these salaries amount to exactly. The important thing is that no matter how you add it up, the cost of two full-time annual salaries knocks a very large hole in eleven thousand dollars. Relatively, there is not much left for the other fourteen items on the budget.

ASCIT, the Beavers . . . these and other campus organizations perform many useful services, yet none require even one, let alone two, full-time employees.

Another unspecified expense is "Y residence upkeep." This is

(Continued on Page 3)

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SEC'S AT TECH

By Bernie Schweitzer and Tom Taussig

Right in the center of the main floor of Throop Hall, there is an office little frequented by the student body of the Institute. The sign on the door reads non-academic personnel. This week's choice comes from among the half dozen or so girls behind this door.

Her name is Joan (pronounced Jo-Ann) Keyes. As part of her job, Joan assists in wage and salary research, and does security clearances. She is also in charge of job classifications and the cardex.

Joan was born and raised in Evanston, Illinois. She was graduated from Northwestern University in June of 1951, and came out here for the summer. Miss Keyes then went back to Evanston for a year, to become of all things, a kindergarten teacher. This summer, it was back to Pasadena for Joan, and a job at Tech.

In her spare time Joan likes



to knit, and she is also a rabid bridge player. Ever loyal to her home town, Joan is a Chicago White Sox fan.

Active in campus affairs, Joan worked on the recent blood bank drive. It is she we can thank for the excellent publicity the campaign received.

ALUMNI SURVEY

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leges.

'Time' questionnaire used

The availability of the Time questionnaire was a lucky break. By using their survey direct comparisons with the alumni from other schools could be made, a comparison which ordinarily wouldn't have been available. Secondly, the questionnaire was well planned by experts in the field, and was designed to facilitate filling out and coding. Thirdly, considerable time and money needed to develop a Tech survey would obviously be saved by using the Time questionnaire.

Naturally, some of the questions do not apply to Tech graduates. Others are not important to the purposes of the survey. Nevertheless, it does answer the questions that the Institute is curious about.

Varied questions

The questions range from those on philosophy, civic relations, politics, literature and science all the way to those on details of the alumnus' domestic life. "Have you any children?" "Do you plan to have any children in the future?" "Have you read B. F.'s Daughter, The Vixens, Prince of Foxes?" Do you consider yourself successful?"

CAMPUS BREWINS

(Continued from page 2)

all right. They were set at ease by a good Samaritan who informed them, "Don't worry, he always looks that way." Just another example of, "If you can't say something nice, be nasty as hell."

Tsk

The well-stained crying towel goes this week to Bill Gardner, and our congratulations to his girl who last week got pinned—to someone else. Moral (in the words of the famous Irish philosopher, Patty O'Rourke): "La Donna e Mobile!"*

Last Saturday, the Ricketts "Men of Distinction" gave an excellent lesson in the gentle art of crew racing to an eager to learn Fleming team. The Ricketts team has been careful not to break training—not one drop of water has been seen going down its collective throat.

Hi school senior—rah!

Unbeknown to many, we were honored last Saturday with a visit from a leading scientific * Boor!

brain. Graciously leaving his multitudinous duties as a high school senior, he condescended to inform the EE department that the Analogue Computer was giving the wrong answers. The men of the EE department, always eager for advice and correction, have shown their gratitude by suspending same youth, inverted, with spread legs. He makes the damndest Jacob's Ladder you ever saw.

Bogdanovic—get with it!



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LETTERS

(Continued from Page 2)

understood to be justified on the grounds that the Y residence is used as a meeting place. It is not understood why the Y needs a separate establishment, when other organizations find it convenient to meet on campus. What is wrong with Dabney Hall Lounge, for instance?

Now let us consider the method of extraction. It is known that a list is kept in the Y office of who contributes to the Y and who does not, together with the amounts of such contributions. We believe that no matter what supposed reasons are given for doing this, information about whether or not you gave, and how much, is NOBODY ELSE'S

BUSINESS BUT YOUR OWN.

The practice of having a white card marked with each person's name should be done away with. It is not necessary to have such a record for those who make cash donations. We may assume that those who want to be billed are fully capable of writing their names on previously blank cards.

In addition, it is our opinion that the function of the collector is, if necessary, to provide information to the individual, not to cram it down his throat, including the amount he is expected to give.

We believe, then, that there is too much coercion and social pressure used in raising money for the Y; and that once collected, this money is not being used effectively. Certainly the Y is a going organization; but we don't want it to leave with our cash.

LES EARNEST
X Anonymously I
Anonymousful II

To the Editor:

Thank you for the opportunity to make a brief reply to Les' objections to the operation of the "Y's" Finance Drive and expenditure of funds.

May I first apologize to anyone who felt offended in the so-

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PROGRAM

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attending Washington University on an individually arranged schedule. A Master of Science Degree should be obtained within a maximum of two calendar years. Under this arrangement it will be possible for a candidate to earn approximately 85% of a normal year's salary and to attend the university during regular semesters while working toward his advanced degree.

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Compensation will be commensurate with the individual's ability and experience. Compensation growth will be on the same basis as the full time members of the engineering staff. In addition, the candidate will be eligible for all other benefits accruing to full time employees.

TUITION

Tuition covering the required number of units necessary to obtain an advanced degree will be paid by McDonnell Aircraft Corporation.

SELECTION OF CANDIDATES

Candidates will be selected by officials of McDonnell Aircraft Corporation and Washington University.

DATES FOR APPLYING

January, 1953, graduates should make informal applications prior to January 10, 1953. McDonnell Aircraft Corporation will then forward formal applications which should be returned by January 20, 1953, accompanied by up to date grade transcripts. Selections will be made during the month of February. June, 1953, graduates should make informal application no later than March 15, 1953.

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MODEL OF TELESCOPE

(Continued from Page 1)

est reflecting telescope—the 200-inch Hale.

Newton built his first telescope when he was 26 years old. He replaced the lenses used in previous refracting telescopes with a concave mirror to bring light to a focus. This eliminated the chromatic aberration or blurring caused by different wavelengths of light arriving at slightly different focuses when lenses were used.

In a discussion of optics, Dean E. C. Watson traced the lineage of the telescope to the discovery of spectacles in Italy in the 13th century. Later Hans Lippershey combined two lenses to form the first refracting telescope. The combination of a convex and concave lens created an

instrument, today called a "terrestrial telescope," produced an erect image suitable for viewing distant objects on the earth. Another version of the refracting telescope used two convex lenses, which produced an inverted image but the field of vision was much larger. This type is frequently referred to as the "astronomical telescope."

The mirror of Newton's telescope, only a bit more than two inches in diameter, was too small to compete successfully with the existing refracting-type instruments. The first reflecting telescope to be used for serious astronomical work was built by John Hadley in 1722 and had a mirror about six inches in diameter. This compared favorably in both magnification and resolving power with the larg-

SCIENCE IN STYLE

(Continued from Page 1)

were unacquainted with the facts, I think that I might have guessed that *Pendulum* was written by men who have a very special love for the "numbers." There is, for instance, in the over-large provision of short pieces in prose and the inclusion only, of verse of extreme formality and brevity, just a suggestion of the scientist's delight in the efficient, the extraordinarily economical, and the discrete. Then, again, in another class, there are pieces indicative of a penchant for exploiting the aspect of art which touches so closely upon the congenial abstract and technological, where

est refracting telescopes then in existence.

Larger and larger reflecting instruments were built through the years, culminating in size and light-gathering power in the 100-inch Hooker telescope on Mount Wilson and the Caltech-ground and polished 200-inch Hale, now in operation on Palomar Mountain.

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the artists themselves have disclosed—and not well enough, I should say—the influence upon them of the mathematicians and physicists.

Fiction vs. fact

Of pieces of the first kind, it must be said that human experiences—and there is clear evidence that writers like Davies, Berg, Lee, and Howell have a zest for it—need more elbow room than they have given it, more space in which to show itself off for what it is. Davies' "Impulse" is an example of a story that could well come into its proper tragic life in something more generous than the Reader's Digest version he has given. Vickman's "Londoners East" is moving in the right direction, toward the realization

of character in proportion and dramatic relation. Writings in the other class—those, I suppose, which comply with the Foreword's "valuable combination of artistic inclination and technical knowledge"—occasionally make me a bit uneasy. Of three of these, Cochran's "Design," Vickman's "Lettrisme," and Bodeen's "Mobile Sculpture," the last, in my judgment, is the most successful.

What price "Lettrisme"?

Vickman's "new philosophy," is, of course, the *piece de resistance* of the November issue of *Pendulum*. It is bound to call up, I should think, Sidney's old question: "What may words say? or what may words not say?"—and the expertness of a parody of this piece, which I understand has enjoyed considerable circulation in a "sister" publication, points rather clearly to one line that an answer might take. The author angles for encouragement to continue his scenario in a later issue of *Pendulum*, but I suggest that he give us instead a thorough-going criticism of this "new philosophy from Paris." It is here that an Institute writer like Vickman, who must know his "numbers," the space-time theories from which so much of this sort of technology and art purports to derive, can be of excellent service to everyone; and it would not be irrelevant to such an effort if it were to examine such aesthetic assumptions as *Lettrisme* appears to make about "the beauty of the sonority of letters" and the "delivery" of words from all "past significance," and the implications for both science and art of the sensibility—already shudderingly proximate—which hankers for the time when birds will be compared with airplanes and life will borrow its colors from Technicolor.


"The Pit and the Pendulum"

Unfortunately, there is not space for a word about every contribution. I feel that "Epilogue" especially merits comment. Let me just say at the end that the kind of activity represented in *Pendulum* deserves commendation and support. College literary magazines often—perhaps usually—disturb some of their readers with their irregularities, but I should not suppose that anything they do would be so upsetting, finally, as the discovery of nuclear secrets and exploding galaxies. They simply show how far and in what ways young men will search with language to know themselves and to find out how they fit into the scheme of things. And that is good. I have two hopes, one that *Pendulum* will go right on; the other, that the editors of *Pit* can be lured "out of their holes" to add their talent to *Pendulum*. It's just possible, I dare say, that they are known well enough right now and that the names of some of them already appear among the contributors and staff of *Pendulum*.

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University of Nebraska

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Soccer team loses in last play to UCLA penalty

After nineteen straight games without defeat—a rather dubious “roughing” penalty in the last 30 seconds of play on a darkened field, gave UCLA a 3-2 victory over Caltech.

Tech comes from behind

The game was a credit to the locals even in defeat, for playing without the services of some injured key personnel, they fought back from a two to nothing deficit with only five minutes to go in the game, and with the score tied were pressing the attack when the rather unfortunate penalty occurred. In spite of the defeat Tech will hold on to the Tettley Trophy, emblematic of Soccer supremacy, for another year.

Seniors star

Again playing brilliant games for Tech were goalie Don Emerson, Forwards Bob Wood and Swaroop Bhanjdeo and in fact the entire team. Tech scores were by Captain Bob Wood and Renee Gutierrez, while Paul Norton, Kenan Awni, and Eddie Otero scored for UCLA.

Line-up

G—Don Emerson; LF—Don Hunt; RF—Phil Butes; LH—Perry Unrtangs; CH—Ernest Ophuls; RH—Moe Lerner; LW—Bob Wood; LI—Swaroop Bhanjdeo; CF—Renee Gutierrez; RI—Davy Myllis; RU—Mel Smith.



Ingelis in command!

Over the wall

By John Wall

For all my readers I have a Christmas present; no opinions this week.

A very Merry Christmas and sober New Year to you all from the sports staff!

P.S. Come on down and help us out next year. The sports staff needs more writers, photographers, columnists and even editors. You don't have to be able to spell for our staff. See you in the Tech office Monday of next year.

X-country team third in SCIC

Coach Pilkington's runners wound up a very successful season last Saturday by placing third in the Conference Meet. The harriers defeated Pomona and Redlands and lost to Oxy and Whittier. The Poets in winning took the first four places with Russ Bonham the shoe-in victor. Oxy took the next three, Fidler having squeezed into fifth spot. Tech was led by Dave Crawther, who took fourteenth, and was followed by a host of Orange and White. Gardener, Van Walkley, and Ames were right together. LaTourette and Patraw came in ahead of some Sagehens and that proved to be the victory. Marshall and Cramer also ran good races, defeating several Redlands runners.

Lewis fifth

The freshman team also copped third, easing by Whittier and narrowly losing to Pomona whom they beat earlier in the season. Lewis led Tech by taking a good fifth and was followed by Anderson, Lindstrom, Witteborn and Plambeck. Oxy took first on the superb running of Emmerling. The Frosh wound up with a 3-1 record.

Prospects

Prospects for next year look very good with all but LaTourette returning. The freshmen will bolster the squad greatly.

Probation lasts until the end of the term following that of the offense. At this time the cadet will be given the opportunity before the Disciplinary Action Board to show why his probation should be lifted.

(Continued on Page 6)

CADET REGULATIONS

(Continued from Page 1)

of the band, drill team, or glee department staff, and also by cadet officers.

A cadet may be placed on probation for academic or disciplinary reasons. Academically, to avoid probation, the cadet must maintain a GPA sufficient to insure his graduation at the completion of his Air Science training. He must also have received a 1.9 or better in his Air Science courses during the previous term. When a cadet receives ten demerits, he is placed on probation.

Cagers blast Pomona, Chapman in "R" tourney

Caltech surprised the conference by coping the Redlands basketball tourney Consolation Championship last Saturday. Tech defeated Pomona in the finals, 48-41, to bring a trophy home. Also falling to the Shymen was Chapman by a 44-42 score. Tech entered the consolation bracket by losing to Whittier, 61-39, at the start of the tournament.

Anson, Tyler out

Playing without the services of either Fred Anson or Jim Tyler for much of the tourney, Tech relied on the scoring of Rol Moody and Howard Shanks. Anson had flu and a charley horse; Tyler an infected foot. They played the first game which saw Anson scoring 20 and Tyler 14. Whittier however was hot and racked up an early lead which was never headed. Chambers fouled out at the half.

Beat Chapman

Shanks was the star of the second game while bucketing 14. Moody and Britt were also in the double figure. Tech took an early lead which built up to fifteen points at one time. Chapman put on a last quarter rally which fell short of the mark. Chambers fouled out in the third quarter.

Beat Pomona

Nip-and-tuck all the way in the finals, the cagers pulled ahead with Madsen leading the way. Shanks and Moody again scored above ten and the returning Tyler potted 14. Chambers had three fouls and scored eight from the floor. Pasadena Nazarene took the championship by beating Redlands, 51-42 in the finals. Whittier defeated Oxy, 60-54, for third place.

Tech will meet La Verne this Tuesday and Chapman on Friday.

Caught? Ride!

If you do get caught in an avalanche, ski out from under it, don't try to "ride" it or race it. If you get buried in one, there isn't much that you can do, but if you see someone buried you should first probe the spot where he was last seen with your pole (the blunt end), as a slide rarely moves anyone more than a few feet or buries a person over 4 or 5 feet. If this gets no results, mark the spot and get help. Even an injured person can survive for a long time while buried in snow.

Aspen

For those going to Aspen, Colo., this Christmas, major improvements have been made on Ruthie's Run and Dipsy Doodle, the two most popular trails. Dipsy Doodle has been cleared of brush and graded between the Sundeck and Tourtelotte Park, eliminating many bad pitches and bottlenecks. The bugaboo of Ruthie's, the Point of No Return, has been bulldozed out of existence. This is the greatest improvement as the only way to negotiate this spot before was: schuss it and risk your life, jump it and risk your life, take off your skis and walk, or take some other trail.

Tennis!

The Caltech varsity and frosh tennis teams will start workouts at the beginning of the second term.

All men who hope to make these squads should see Coach Lamb of the tennis courts January 6 after 3:00 pm. Workouts will start on that day.

Everyone should report in good condition as every man on both squads will be expected to run the mile under six minutes.

JOHN LAMB,
Tennis coach.

800 HIGH SCHOOL SENIORS

(Continued from Page 1)

so were held on high voltage, liquid air and the photoelasticity technique of aeronautical research. Other speakers told of the development of the telescope and the career of a biologist. In the Humanities Division Caltech and UCLA debated the Proposition: Resolved, That the Congress of the United States should enact a compulsory fair employment practices law.

Interview Schedule

MON., JAN. 12—Food Machinery and Chemical Corp. Group meeting 4:15 pm. Mudd. Film to be shown.

TUES., JAN. 13—BS, MS, PhD/ME, ChE, Interviews. Food Machinery & Chemical Corp. San Jose, Calif.

Standard Oil of Calif. All degrees and options.

THURS., JAN. 15 and FRI., JAN. 16—Pratt & Whitney Aircraft, East Hartford, Conn. Information regarding interviews later.

MON., JAN. 10—Westinghouse Electric Corp. Group meeting 4:15 pm. 109 Mudd.

MON., JAN. 20 and TUES., JAN. 20—BS, MS, PhD/Ae, ME, CE, EE; MS, PhD/Ph Ma. Chance Vought Aircraft. (Division of United Aircraft Corp.) Dallas, Texas.

WED., JAN. 21—BS, MS/PPH, ME, ChE. The Flour Corp., Ltd. Research and Development—electronics, acoustics and vibration. Positions in Los Angeles area.

THURS., JAN. 22 and FRI., JAN. 23—BS, MS, PhD/ME, EE, ChE, Ph. Westinghouse Electric Corp. Interviews.

MON., JAN. 26—BS, MS/ME; BS/EE, CE. ngersoll Rand Co., New York City. MEs for Design, Research and Development; EEs and CEs for Sales Engineering.

WED., JAN. 28, and THURS., JAN. 29—North American Aviation, Inc., Downey, Calif. Information regarding interviews later.

THURS., JAN. 29 AND FRI., JAN. 30—Interviews will be for all Divisions—Research and Development Engineering, Sales, Manufacturing Engineering, Customer Engineering and Applied Science.

FRI., JAN. 30—MS, PhD/Ph, Ch (Organic & Physical)—The B. F. Goodrich Co. Research Center, Brecksville, Ohio.

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STEFANIDES WINS

(Continued from Page 1)

er, Barry Raleigh, Van Bluemel, Paul Lindfors, Steve Nathan-Slefannicles Wins WHEATON son, Al Tzeroff, Dick Small, Jim Snyder, Bruce Rickborn, Dan Brannies, Kyle Bayes, Collis Holaday, and Manager Dave King.

Water Polo: Varsity—Morgan Ogilvie, John Bush, Norm Ellett, Ed Bryan, Bob Lynam, Frank Wallace, Jim Wyman, Bob Smith and Manager Earl Jacobs.

Frosh—Jim Ball, Bill Sundblad, Fritz Trapnell, Bill Davis,

Ron Dettling, Dick Holst and John Harding.

The outstanding player award in Soccer this year was presented to three fellows—Don Emerson, Bob Wood and Swaroop Bhanjdeo. The "T" awards have not yet been granted in Soccer and cross country.

The banquet was over at the amazing hour of 9:40 so the once athletes and now confirmed snakes got home in good time with full stomachs and new jokes.

LETTERS

(Continued from Page 4)

licitation, for I feel the good will that can be obtained through the contact with the drive is actually more important than the funds secured. It is desired that each solicitor can answer questions and explain the function of the "Y" and its program, but the value-judgment is the students, and coercion is not the collector's aim. The use of cards is to enable each person to be solicited once and once only, and to be used to help audit the drive is an almost essential business practice. Any volunteer solicitation requires careful and efficient organization whether it is the "Y," the Community Chest, the Red Cross, or the Institute itself. Differing from many other drives, the cards of individual student contributors

are thrown away shortly after the completion of the drive, and no record of individual contributions is kept.

The use of funds, which totals \$11,230, and of which undergraduates contributed almost \$1,300 this fall, is decided by a board of faculty, alumni, and students. They draw up the budget and are responsible for raising the major share of the budget as well as its effective use. Any student desiring information on any part of the "Y" budget need only request it at the "Y" office and should feel free to do so.

CADET REGULATIONS

(Continued from Page 5)

tion may be removed. If he does not remove his probation at this time, the cadet may be dismissed from the AFROTC by the PAS&T.

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