

## Annual ASCIT Charities Drive Begins Monday

ASCIT's annual Charities Drive will begin next Monday, and continue for one week until Monday, February 11. This year the charities benefiting from the Drive will be the Los Angeles County Heart Association, the Pasadena Community Chest, and the YMCA World University Service.

In order to encourage more participation this year, the Drive will be run as a contest, and the winning house will receive a faculty-served steak dinner. Each House will be assigned a number of grad students in proportion to the number of students in the House, and will be responsible for getting donations from these grad students. The prize will then be awarded to the House with the highest per capita amount collected; the assigned grad students will be included in the count.

Although the steak dinner will be from Saga, it will be an extra, and not a replacement of the Saturday evening meal. The dinner will be held Wednesday evening, February 20, and several of the more well-known faculty members will serve as waiters.

There will be a report on the progress of the drive at noon, Monday, February 11, the last day of the drive, and the final deadline for contributions will be 3:00 that afternoon.

## Bradbury Will Explain Space Age Creativity

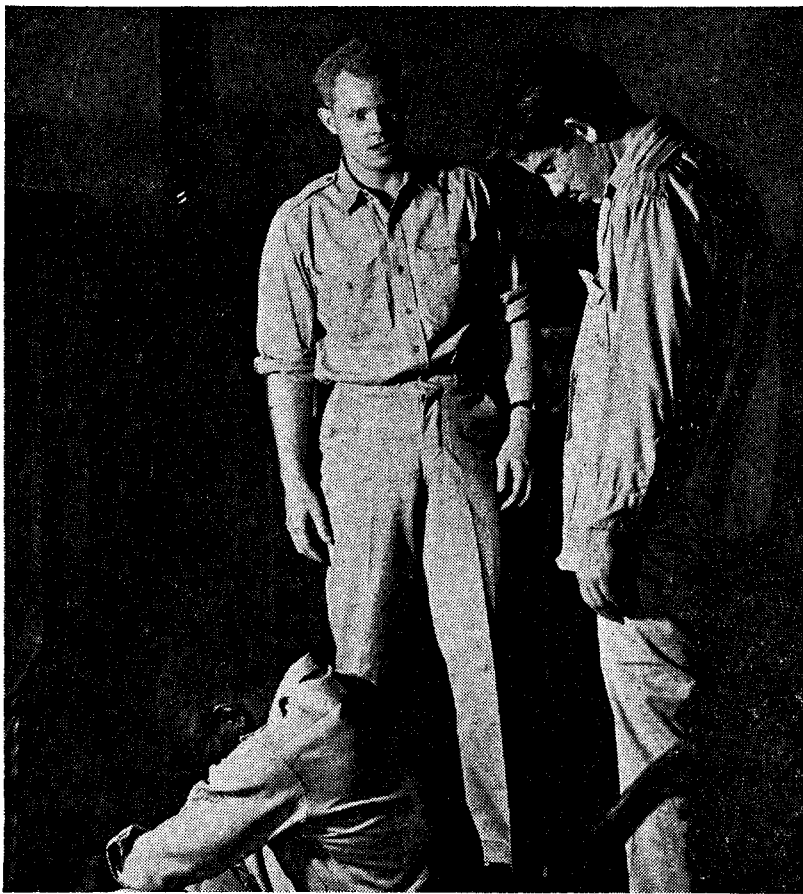
Science fiction author Ray Bradbury will be on campus next Wednesday, February 6, at 11 a.m., in Dabney Lounge, under the auspices of the ASCIT-Alumni Assembly Committee.

Ray Bradbury has been noted for many science fiction novels and short stories. His latest novel is "Something Wicked This Way Comes," and his latest short story collection is "R is for Rocket." In February, he will have a book of one-act Irish plays entitled "The Anthem Sprinters." In the coming year he will have three stories in *Playboy*, and his novel "Fahrenheit 451" is being filmed by the French director, Francois Truffaut.

Bradbury's topic at his Wednesday speech will be "Creativity in the Space Age." Bradbury writes that "That's a nice, large-sounding title, which will allow me to cram all kinds of bits and pieces into one rough-hewn box."

The ASCIT-Alumni Assembly Committee has, in co-ordination with other groups, and alone, presented among others Richard Nixon and Pat Brown, Frank Wilkinson, and a fencing exhibition. In a few weeks, Philip Mason, director of the Institute of Race Relations in London, will speak here.

**Whitlock Is  
A Madman!**



Players from the Bishop's Company act out a scene from one play in their repertoire. The Bishop's Company will present "Cry, The Beloved Country" here Saturday.

## Religion Students To Visit Caltech

On Tuesday through Friday, February 5 through February 8, the YMCA will bring eight theological students to visit the campus. The students represent a wide range of faiths and denominations, including Protestantism and Judaism. These visits, which have been held biannually in the past, are sponsored by the Danforth Foundation. The purpose of the visits is to give theological students an opportunity to become acquainted with a scientific community such as Caltech, and to give members of the Caltech community a chance to meet students of religion and to discuss ideas of common interest with them. These seminarians are all outstanding students in their schools and plan careers of active service in their faiths.

### Theologians Named

During the three days that they are here, the visiting seminarians will be living and eating in the student houses. Don Freeman, a senior at Fuller Theological Seminary, will be staying in Blacker House. He received his degree in Philosophy from Toronto University and wants to work for his Ph.D. at Oxford. Don has been on campus before, participating in discussions in the graduate houses.

## Juniors Win Travel Prizes

Richard Burgess, Joe Weis, and Frank Winkler have been announced as the three winners of the Junior Travel Prize, by the Junior Travel Prize Committee, headed by Dr. Richards. The Junior Travel Prize is an award given to a few juniors each year and is a grant of about \$1500 which is used to finance travel on a certain project.

Burgess' project is to study medical clinics in Europe, and he was awarded \$1400 to do so. Weis' grant was \$1500 to study

(Continued on page 3)

Barry Bolom, an Episcopalian, is from Church Divinity of the Pacific, where he is a senior. He received his A.B. in Religion and English from Wesleyan University. Between his freshman and sophomore years he spent over a year touring the nation working his way. Barry will be living in Blacker.

Ned Bachman, a Methodist, is in his second year at Southern California School of Theology. He received his B.A. from Syracuse in Philosophy with a minor in Greek. Page House will be Ned's host while he is on campus. Also from Southern California School of Theology is Dave Himrod, who will be staying in Fleming House. A Caltech graduate in physics, he spent two years after graduation, one in teaching for Hughes Aircraft

(Continued on page 3)

## Dr. Patch Outlines Bolivian Revolution

Bolivia is one of the few Latin American countries that has experienced a true political revolution. In his lecture to H5 this Tuesday Dr. Richard Patch of th AUFS outlined the developments that made the Bolivian revolution a real one.

There are several historical and political factors that made the revolution possible. In the 1920's there appeared in Bolivia romantic indigenous writing that extolled the cultural heritage of the native Indians from the Incas. Through these writings a concept of a national conscience and a concept of revolutionary nationalism instead of the traditional constitutional nationalism began to grow.

There ideas received concrete expression in the Chaco war of 1932-35 against Paraguay. Before Bolivia was defeated there was a great appeal to the Indian

## Apartheid, Justice Bishop's Play Topic

This Saturday at 8 p.m., the Caltech YMCA will present a dramatization of Alan Paton's book, "Cry, the Beloved Country," in Dabney Lounge. The performance will be given by the Southern California branch of the Bishop's Company. The Bishop's Company, founded in 1952 by Phyllis Beardsley Bokar and named after Methodist Bishop Gerald H. Kennedy, offers professional actors and actresses an opportunity for the donation of their services to the church. They have three sections, two of which tour and one which performs locally in the Southland; although the presentations are generally held in the chancels of churches, they are also frequently presented at colleges all over the U.S., including Berkeley, UCLA, Purdue, Princeton, Carleton et al. A performance has even been put on at San Quentin Penitentiary.

Presentations by the Bishop's Company are put on with no sets and few props; costumes are

simplified also to make the bond between audience and cast more intimate. They offer eight plays, each with a different basic theme: faith, race, temptation, understanding, juvenile delinquency, decision, "our own world," and childhood. "Cry, the Beloved Country" is about the plight of a Zulu tribesman in the Republic of South Africa whose son is imprisoned for murdering a white man who has devoted his life to the improvement of the Negro's status in South Africa; it portrays the life and situation of the South African Negro under apartheid and the injustice of the situation. One of the stars of the play is Elizabeth Officer, who plays the narrator.

After the performance, as soon as the cast can get out of costume, there will be a discussion between the cast and the audience in the lounge of Page House. This discussion will be aimed at a closer understanding by the audience of the play and its moral significance. Refreshments will be served.

Tickets, costing 75c, may be purchased at the door or from the Caltech Bookstore, the YMCA, or the News Bureau.

## Stern to Talk To Freshmen

The fourth freshman diners' club and the last meeting in the current schedule will be presenting Professor Alfred Stern next Monday at 6:30 p.m. in Chandler.

Undergraduates can transfer meals from the Student Houses by signing the sign-up sheets that will be posted. Dress is, as usual, informal.

Stern's talk is titled "History in the Light of Philosophy." He has announced that the talk will be based on his new book "Philosophy of History and the Problem of Values." The English edition of this book was published just a few weeks ago by Mouton and Company, South Gravenhage, Holland.

## Notices

### MOBILGAS RUN SIGNUP CONTINUES

Students interested in working as observers on the Mobilgas Economy Run break-ins should register in the Industrial Associates office, 113 Throop, before 4:30 p.m. tomorrow.

### ASCIT NOMINATIONS OPEN

Nominations for BOD offices, Tech editor, IHC president, and BOC secretary will be open on Monday, February 4, and will remain open until the following Monday, February 11. Nominations can be submitted at Monday's BOD meeting (9:15 p.m. in Winnett Clubroom No. 2) or in writing to Steve Green in Fleming after that date and before the deadline.

### FROSH CAMP APPLICATIONS

Applications are now open to those desiring to apply for frosh camp counselors for next year, and will close next Monday. Persons interested should submit their application to Wendell Mendell in Dabney before the deadline.

### HONOR KEY FORMS OUT

Those being considered by the Honor Key Committee are being sent personal information forms this week. Those who have not received the form and believe that they qualify may have been overlooked and are requested to submit a list of their activities to Steve Green in Fleming for consideration.

### NEW ZEALAND LECTURE

Basil Kepdemdis will give an illustrated talk on New Zealand, Wednesday night at 10:30 p.m. in the Mosher-Jorgenson lounge. This will be the third program in the weekly series given by the MJG&CS.

### BUSINESS SCHOOL DEAN TO BE ON CAMPUS

The Dean of Admission of Stanford's Graduate Business School will be on campus on Friday, February 5. Those interested in contacting him should get in touch with Dr. Clark in the Placement Office.

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## Editorials

## Togetherness

On the same ballot as the ASCIT elections will be several other propositions which will also be presented to student body vote. The most important of these is the modification of ASCIT structure to make the IHC president a member of the Board of Directors.

There has always been a serious lack of contact between these two committees, even when both were trying to do the same job, and the resulting confusion has hindered many past actions considered by both groups.

A good example of this is the present confusion over Faculty-Student Coffee Hours. Both ASCIT and the IHC have tried to put these on without consulting the other group, with the result that now neither is doing it. Yesterday's was the last for which money has been appropriated by anyone, and plans for the future are as indefinite as ever.

The presence of the IHC president on the ASCIT Board, if not eliminating such situations completely, should at least prevent a considerable number of them. In addition to this, however, there is another serious discrepancy between the two bodies. While ASCIT supposedly represents the student body, and does spend all of its money, the IHC actually is closer to the students in the Houses. Because the IHC consists of the House presidents, it is the most representative board possible, while ASCIT rarely has contact with all seven Houses in any given year. Placing the IHC president on the BOD would help eliminate this situation.

In addition, although ASCIT does have all of the student's money, the IHC has considerably more power. Because most of the spirit and functions at Tech are mostly at the House level (unfortunately!), the IHC can do more on important campus issues such as rotation than can ASCIT. On the other hand, House presidents have proved too notoriously lazy to put through programs of student interest, sponsor a social program, bring guests and singers to campus, or to perform any of the other functions ASCIT carries out.

Thus, because IHC and ASCIT are both necessary to Caltech, the problem boils down to eliminating the serious lack of communication and coordination between the two. Putting the IHC president on the ASCIT Board would go a long way toward resolving this problem.

—J. C. Simpson  
Richard Karp

## Y Forum Hears of Dilemma

Dr. Isidore Ziferstein, a practicing psychiatrist will speak at next Wednesday's YMCA Dinner Forum on "The Psychological Dilemma of the Nuclear Age." He will discuss America's apparent attempt to prepare for peace by preparing for war, and the mental mechanism which are employed by both national leaders and ordinary citizens in rationalizing this alleged inconsistency.

Ziferstein's main thesis is that everyone is presented by a seemingly insoluble dilemma caused by attempting to deal with "the unprecedented problems of the nuclear age by outmoded approaches which worked, albeit not too well, in the past, but are totally inapplicable to the present situation."

He feels that, since nations can now destroy each other utterly in an all-out nuclear war, there can be no longer a winner or loser in such a war, and consequently that no major power can now use the threat of war as an instrument of national policy.

## War Danger Increases

Because the major powers realize this, they engage in negotiations to reduce international tensions, solve the armament problem, or find peaceful solutions to their conflicts of interest. Ziferstein holds that the reason these negotiations have always resulted in stalemates is that the major powers have not relinquished the idea that nego-

(Continued on page 5)

## Letters

**Note:** The following letter was received after a response made on a postcard by the editors with reference to a NSA (National Student Association) - sponsored conference. The postcard briefly stated that the editors felt that NSA was dictatorial.

## Editors:

Your comments on a post-card are not unusual. They reflect the lack of information about US-NSA that exists on many college campuses as a result of the activities of the extreme right wing.

I am enclosing a leaflet about NSA, its structure and activities. You may feel disagreement for some of the political sentiments of American students as expressed through the National Student Congress. That is your prerogative, although I seriously doubt whether you know the substance of any of NSA's stands on any issue. But your challenge as to the nature of the structure of the Association is libelous. I would ask you to examine the portion of the leaflet devoted to describing the structure of the Association. If you can produce any evidence whatsoever that the structure of NSA is dictatorial, I will personally send you a check for \$25 and write a letter for your paper admitting that fact.

I suspect, however, as is usually the case, your charges have no empirical basis and that you will throw this letter away content with the fact that you have made your point, although you really haven't and the only people to suffer will be the other CalTech (sic) students whom you succeed in deluding.

If on the other hand you would like to offer rational criticism with some sort of specific examples of which you are aware, I would be more than happy to engage in a discussion either

through the mail or in person, at your convenience.

Thank you for your attention.

Stephen J. Robbins,  
Chairman, California,  
Nevada, Hawaii, Region  
United States National  
Student Association.

**Editor's note:** We recognize that we may be disillusioned by the activities of the extreme right wing. We may be stupid enough not to know the substance of any of NSA's stands on any issues at all, despite the fact that we can refer to some of our exchange papers that are members of NSA. We may even be stupid enough to be libelous, in which case we apologize fully.

We will even print your letter, as it includes the standard "It'll never see the light of day" admonition.

Our impression was that the Executive Council of NSA was empowered to take stands that were considered as binding a stand as one taken by the National Student Council. The Executive Council is made up of a small number of schools, with one or two large school representatives from each region. This appears to be at least a certain extent dictatorial, when a small group can take stands for a large group, especially when one considers that the large group is not unwieldy. If we are wrong, we sincerely apologize.

At any rate, we are willing to pay anyone at school who can prove to Mr. Robbins' satisfaction that NSA is dictatorial from the information contained in the unbiased pamphlet he enclosed the sum of \$15. We would like to offer more, but there still is the matter of the old payola.

## Star Collapses May Energize Radio Galaxy

Gravitational energy from the collapse and resulting explosion of "super supernovae," stars one to ten million times the mass of the sun, may provide the enormous amounts of energy required by "radio galaxies," Dr. William A. Fowler Caltech physicist, told the American Physical Society.

The unprecedented energy requirement of such cosmic radio sources has been an astronomical puzzle.

Fowler said that the hypothesis which he and Fred Hoyle of Cambridge University, England, are advancing is based on observations at the Caltech Radio Observatory by Drs. Per Maltby, Thomas A. Matthews and Alan Moffet. Their observations, Fowler said, showed that most "radio galaxies" come in pairs and are associated with stellar galaxies, which are island universes of billions of stars.

## Radio Galaxies

A "radio galaxy" apparently is a tremendous cloud of electrons millions of light years in diameter. The electrons, probably held captive in magnetic fields, emit radiations in the radio frequencies as they move at nearly the velocity of light in the great optically-invisible cloud. Their powerful radiations are "observed" by radio telescopes.

Fowler said he and Hoyle, who has worked with him for years investigating the nuclear processes in stars, determined mathematically that it would be impossible for thermonuclear reactions to provide sufficient energy for a "radio galaxy." The amount required would be equivalent to that of 100 billion stars.

However, they calculated that the gravitational energy of a

(Continued on Page 7)

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Richard Karp, J. C. Simpson

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Alan Hindmarsh

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Buzz Bernstein, Clem Chase, Walt Deal, Don Green, Ken Kimball, Wally Oliver, Dave Price

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Rodger Whitlock, editor

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Lee Molho, Manager

Circulation: Howard Monell

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# Debate Terms Black 'American Menace'

"Is Justice Black a menace to American Civilization?" was the proposition debated by Willmore Kendall, senior editor of the conservative *National Review* and professor of politics at L.A. State College, and Phil Kirby, editor of *Frontier Magazine*, in Dabney Lounge Thursday evening, January 24. The debate was sponsored by the Graduate Committee on Political Education and the Caltech ACLU.

Kendall maintained that Supreme Court Justice Black along with Chief Justice Warren, "errand boy Bobby Kennedy," and John Kennedy are menaces to American civilization because they seek to tear down the traditions which constitute the American civilization. In example Kendall emphasized the new interpretation of the First Amendment to the Constitution as advanced by Black. Kendall stated that Black was especially a "menace" over the other Liberal justices, Douglas and Warren, because Black is "courageous and brilliant," thus lending acceptability to his philosophy.

From 1789 to the late 1920's no Supreme Court did anything to interpret the First Amendment. But a broader interpretation of the Constitution including an "absolute" view of the First Amendment was taken by Liberal groups. This would abolish all methods of internal security, prayer in public schools, and chaplains in the armed services.

The Liberals, Kendall stated,

## YMCA Theologians

(Continued from page 1)

and the other in graduate work at USC before beginning his theological studies. While at Caltech, among other things, he served as Big T editor.

Barry Kogan who is attending both Hebrew Union College and UCLA, will be staying in Ricketts. Barry served as president of the Brotherhood U.S.A., the youth program of the Southern California region of the National Conference of Christians and Jews.

### Other Visitors

Bill Doty, a Presbyterian, is from San Francisco Theological Seminary, where he is in his senior years. He received an A.B. in Comparative Literature from the University of New Mexico, spending his junior year at the University of Free Berlin. He will live in Ruddock.

Roger Ridgeway, a member of the Disciples' Church, is a second year student at Pacific School of Religion. He received a B.S. in English from the University of California having spent his first two years at Cal Poly. Lloyd House will be his host. Burt Mack, who will be in the graduate houses, is also a senior at San Francisco Theological Seminary. He is a graduate of the Pasadena College of the Nazarene in Philosophy and Religion.

As well as the casual discussions in the Houses, the program includes a visit Thursday evening by each of the visiting students to the home of a faculty member for dinner and subsequent discussion. Caltech students are invited for these dinners and discussions, but since the number that can be accommodated is limited, there will be sign-up sheets in the houses.

## Travel Prize

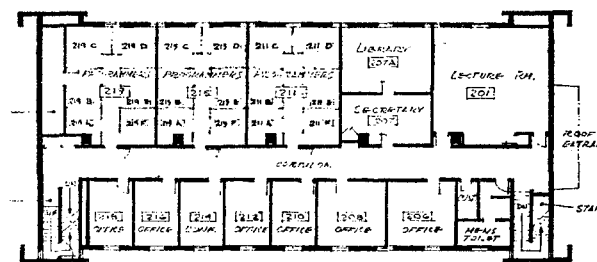
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stamp manufacture in Europe. Winkler was given \$1500 to visit the Orient and investigate the Japanese paper industry.

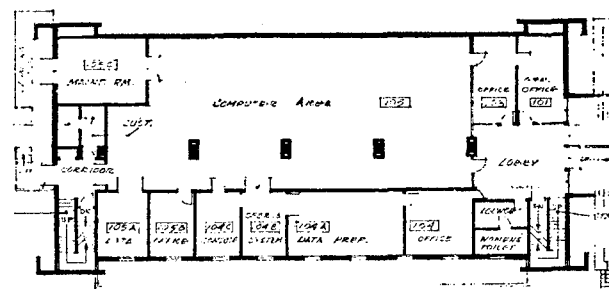
The projects are intended to provide students with an "excuse" to meet people — they are not expected to spend full time investigating them. Students become eligible for competition by being invited to participate because of high GPA. They then prepare a report on their planned "project" and submit it to the Travel Prize Committee, which then selects the winners.

Floorplans for Booth Computing Center are shown at right.

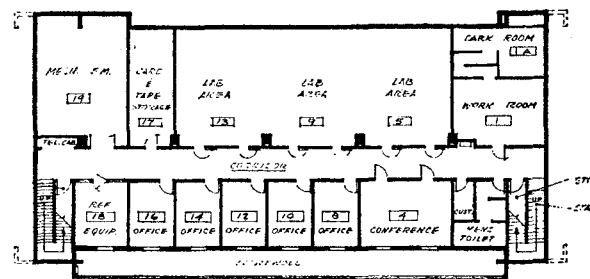
The Computing Center, which will probably be ready for occupancy next fall, will house the Institute's IBM 7090 computer which was recently put into operation at Newport Beach, in space loaned to the Institute by Autonetics, Inc. The 7090 (the Institute's third counting those at JPL) will be interconnected with data input stations at points scattered about the campus as well as with the radio observatory at Owens Valley and the seismological laboratory in Pasadena. It will have an associated 7040 for control purposes, which will also be housed in Booth. The Burroughs 220 will probably remain in Spaulding, as will the LGP 30.



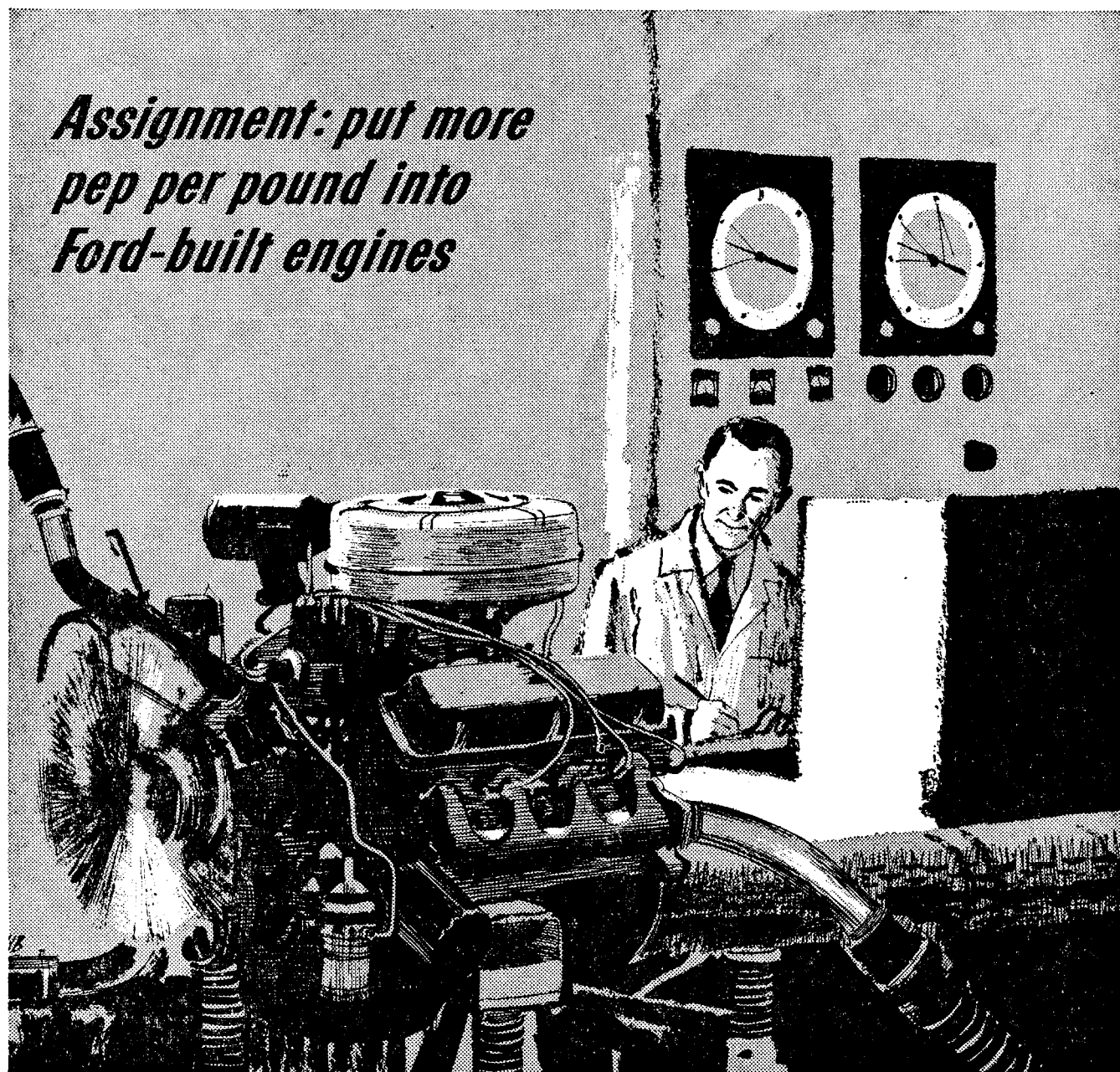
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# The Critical Ear

by  
rickerman

This week I had promised a review of the soundtrack album of "Gypsy". Unfortunately, I was unable to get a copy in time to meet the deadline for the Tech.

Instead the Ear tunes off the beaten path and invades the not too uninteresting region of humor recordings.

THE recording which has received the biggest play in recent years is "The First Family" (Cadence CLP-3060-CLP 25060) album featuring Vaughn Meader and Naomi Brassart. This record, made at the height of the Cuban Crisis (October 22 of last year), has the Kennedy Clan on the frying pan—a not too unusual position.

### **Humor Weak**

In many cases I find that the humor is more stupid than truly funny. A particular case in point is "The Malayan Ambassador," scene three of side one. This entire scene could have been eliminated without any loss whatsoever.

On the other hand, the first three scenes on side two are quite well done and constitute the best part of the entire record.

As a whole, the record bands can be divided into two types. There are the very short laugh getters which are mostly just jokes which are made funny by the situations. As an example, the following occurs on side two (The Decision):

## Patch Speaks

(Continued from page 1)

caused mass uprisings in 1946. From then until 1952 the situation was very chaotic with two presidents resigning and a military junta finally taking power. But in 1952 the army and the junta collapsed, leaving a power vacuum.

The Nationalistic Revolutionary Movement NRM which had become a political influence in the late 1940's took power. But much of the real reform and revolution was carried out by the Indians who seized arms and moved against the land owners, essentially eliminating that class from the society. The Indians ruled the areas where they lived, and now felt that they were national citizens. They were all given the vote with no qualifications.

The revolution has created many problems, mainly economic. The nationalization of the tin mines has resulted in their inefficient operation. Also the agrarian reform, the parcelization of the land, has had adverse effects, as has the decapitalization of government enterprises. These all combined to produce a hyperinflation from 1952 to 56, and the austerity imposed by the stabilization plan of 56-57 has contributed to instability. Further, there is the problem of regionalism and geographic-integration which the government is trying to solve by building roads.

Despite these economic and geographical problems, Dr. Patch feels there is reason for optimism because of the positive social and political reforms that have taken place.

Dirksen: "Well sir I think that two million is much too much, however sir, I do think that the residual benefits to be derived from this . . . would more that compensate for the initial outlay of funds."

Kennedy: "Well, Mr. Rusk, what do you think?"

—discussion for few seconds—

Dirksen: ". . . the decision is up to you . . . you are holding things up."

Kennedy: "Ev, you drive a hard bargain . . . but I'll sell you Boardwalk and Park Place for . . ."

Mort Sahl has used that phrase in one of his acts, and Bob Newhart has used it as well.

### **Comedy Trite**

The other types are the longer scenes which permit development of a theme. The sad thing is that of the four on the album, all of them degenerate into the

(Continued on page 5)

# Theory Explains Plateaus, Basins

Dr. C. Hewith, Dix, professor of geophysics, announced a new theory offering an explanation of how the great ocean basins remain virtually unchanged for billions of years and how mountains and high plateaus may be formed by being "pumped up hydraulically" by the high-pressure intrusion of molten rock beneath them.

Dix's theory is based on reflected wave patterns he obtained with sensitive depth-sounding equipment on a Mojave Desert upland at the edge of the San Bernardino Mountains in California. The waves, generated by explosions, were reflections off deep subterranean layers.

### **Dix's Theory Ducky**

Their patterns indicate the presence of groups of discontinuities in the earth's crust under the highland at various depths down to 22 miles and perhaps below. "The most natural conclusion is that the discontinuities mark the presence of subterranean sills," said Dix. The data indicated to Dix that sills were intruded to produce a layering something like a multiple-

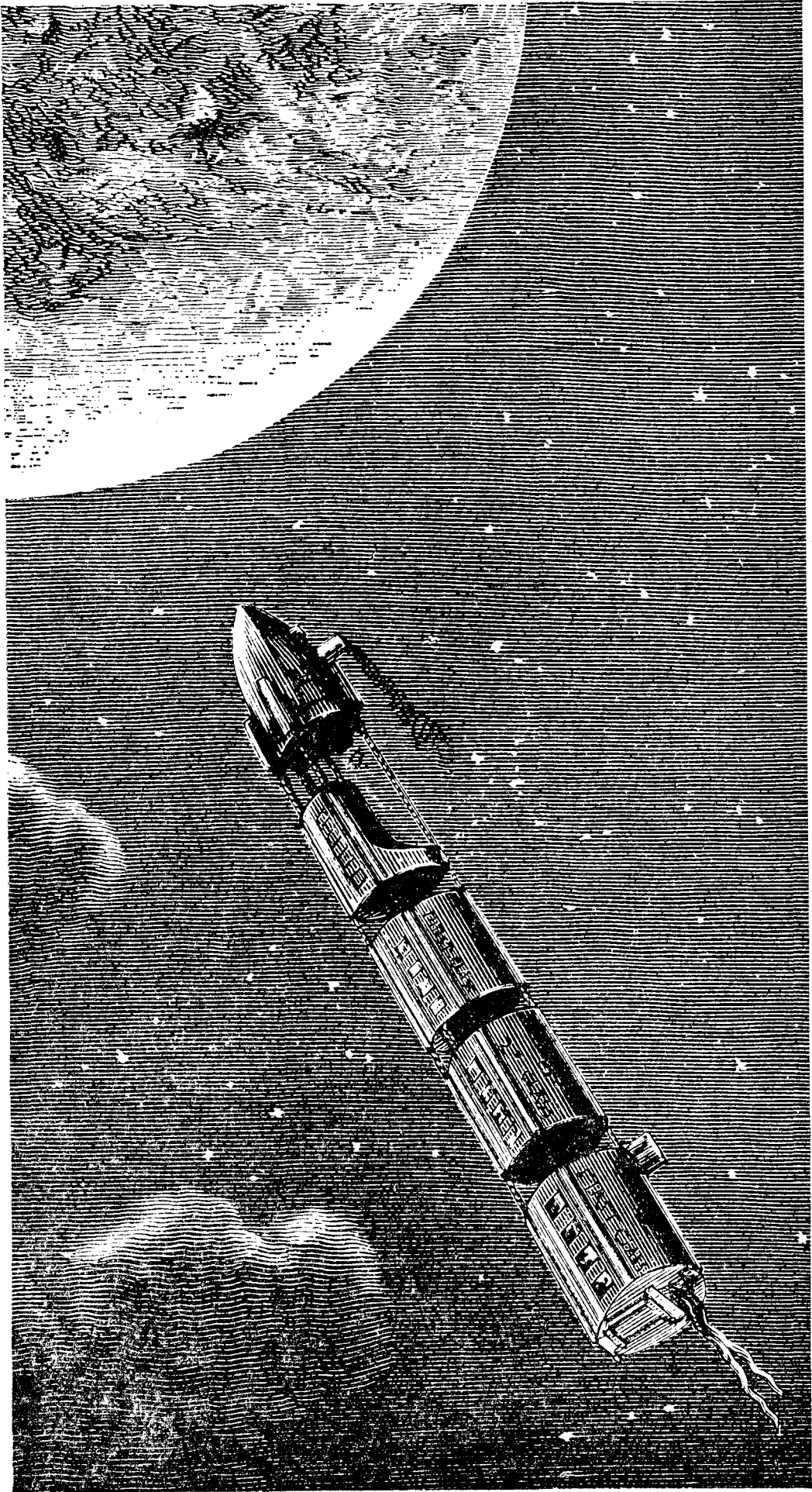
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## LITTLE MAN ON CAMPUS

by Dick Bibler



"BETTER NOT BOTHER HIM— HE'S TRYIN' TA STUDY FOR A TEST TOMORROW"

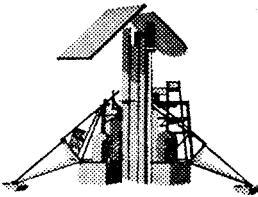


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continued from pg. 1



# From Other Campuses

## by Richara Karp

When did Dean O'Reagan die? And if he did die, how many times? Was he buried before or after his death? These and other world-shaking problems were confused by the *Varsity News* of the University of Detroit. On an issue marked number five and dated Friday, January 11, there is no mention of the death of Dean O'Reagan. But there is a 500 word eulogy entitled "His Legacy." The editorial concludes: "In the March of 1961 Dean O'Reagan fell ill and went to Jennings Memorial Hospital where he was an out-patient until last month.

"He was hospitalized Dec. 30, at the age of 70, for 'an anemic condition.'

"His funeral was yesterday." All is well and good if matters were left here. Dean O'Reagan's funeral was on January 10, and he presumably died before that. However the issue of the *News* dated Tuesday, January 18, and numbered as number 24 has a five column head reading "Dean O'Reagan Dies." The story begins "William B. O'Reagan, dean of evening division of C & F College, died yesterday morning in Jennings Memorial Hospital..." Now, his death date is fixed for the first time as January 17.

So, we have the following conclusion: Dean O'Reagan died on January 17. His funeral was January 10. A newspaper eulogy

was written on January 11. Well, that's show biz!

### Goof!

The Chicago *Maroon* notes that "Einstein was a physicist. He even wrote books about music. He did not, however, direct Eisenstein's two films—"Alexander Nevsky" or "Ivan IV" as reported in last Thursday's *Maroon*."

### God Strikes Back

Every month the *Tech* gets a copy of the *Le Tourneau College Now*, published by Le Tourneau College in Longview, Texas. The president of the college is evidently R. G. LeTourneau. The vice-president, or some other assorted officers, are other LeTourneaus. The masthead notes that "LeTourneau college is a Christian, coeducational, technical and liberal arts college..."

Evidently the school, once big, now has trouble. The following is taken from "A Prayer Request":

"On more than one occasion during the remarkable business career of Mr. R. G. LeTourneau, (Continued on page 7)

## Nuclear Problem

(Continued from page 2)

tations should be conducted from a position of strength. The result, he says, is that, "in spite of sixteen years of intensive negotiations, armaments are multiplying, tensions are increasing, and the danger of war becomes more acute."

Ziferstein believes that a fundamental reorientation of attitudes is necessary to resolve this dilemma. Nations must stop using conferences as another instrument in the cold war and accept the fact that threatening war is no longer feasible. International conferences should "throw off the character of bargaining sessions and assume the character of joint consultations to which the representatives of all nations bring their best thought-out contributions to the common task of preventing war and assuring peace."

### Preventative Mechanisms

There are three psychological mechanisms, according to Ziferstein, which stand in the way in such a solution. The first, denial, enables many to avoid realizing the full scope of the danger of nuclear annihilation. The second, inertia, binds nations to outmoded techniques and stands in

the way of new and creative thought. The last, apathy, is caused by a person's feeling of helplessness "when confronted with the seemingly inexorable forces that are pushing all nations on the road to war."

Ziferstein's solution to the problem is the realization that everyone is not puny and helpless. He states: "Overcoming the mechanism of denial, inertia and apathy can free the energies of thousands, perhaps millions of people, to think and act creatively for peace. Former President Dwight D. Eisenhower expressed his conviction most eloquently when he said, 'I like to think that people, in the long run, are going to do more to promote peace than our governments. Indeed, I think that people want peace so much that governments had better get out of the way and let them have it.'"

## The Critical Ear

(Continued from page 4)

usual overplayed stupid sort of "comedy" which becomes intolerable after one listening. Only selected spots are really funny (such as Mrs. K stumbling into the shower plus JFK during The Tour—or Nasser ordering pas-trami in the Economy Lunch).

Of course, party records all suffer from one great misfortune. They cannot be perennially funny, and after a few listenings, the great majority are no longer worth digging out of the pile for playing. For my money, Vaughn Meader is strictly for borrowing. For a good buying record, try "At The Drop of a Hat" with Michael Flanders and Donald Swann (Angel 35797-S35797).

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## Computer Aids Visual Research

Studies of visual perception in the nervous system in unusual detail and depth are underway here with a new biological computer system that not only records data but also controls the experiment and analyzes the results.

"Because it works at optimum speeds, with human beings the computer system tends to keep researchers at optimum tempo, thus stimulating creativity," Dr. Gilbert D. McCann, Jr., director of the Computer Center, said today. His group developed the computer system.

"Cutting the data-processing time from weeks to minutes and even to seconds enables us to obtain results so quickly that almost immediately after finishing one experiment, we can determine which ones to try next," added McCann.

"Heretofore, we sometimes had to wait weeks after finishing an experiment to get the data that enabled us to decide which way to turn. This was because the measured responses of the nervous system are so complex and variable that they can not be interpreted nor properly analyzed without a large-scale computer."

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# SPORTS

## La Verne Edges Past Beavers, 76-70

BY DENNIS McCREARY

In a close game Saturday night, Caltech bowed to LaVerne 76-70. In a not so close preliminary, the freshman also lost by a score of 71-42.

The Techmen began in grand fashion by jumping off to a six to nothing lead after three minutes of play; by the middle of the first half they had extended it to 21-12. At this stage of the game, the Beaver's offense was working very well and their percentage from the floor was high. Conversely, La Verne's offense was cold and their defense was ineffective so they sent in the second platoon. La Verne began a full court press to harass the Techmen as they took the ball down court. The La Verne defense and offense began to improve and the Techmen's offense began to drag so that by the end of the first half, La Verne had tied the score at 35-35.

After the half-time break, the game resumed with La Verne jumping off to a six point lead. After a slow start, Tech began to fight back and soon the score was tied up at 53 all. From

then on the game was nip and tuck all the way although La Verne never lost the lead. Often, Caltech would tie the score, only to have La Verne score two points in the clutch to put them back ahead. Finally with the last 60 seconds ticking away, La Verne went into a stall to protect their 72-70 lead. The Beavers began to press for the ball and finally gained possession with about 30 seconds left. Time out was immediately called and the Techmen huddled together to decide on a play. Finally they picked one that had worked just a few minutes before and brought the ball down court. However, this time the play was rushed and the shot was missed. La Verne got the ball out of bounds and from there on controlled the last 20 seconds of the game as the Techmen fouled twice while trying to get the ball. With a one and one free-throw situation, La Verne made all four freethrows and won, 76-70.

The scoring was pretty well balanced for both teams, and both had several men in double figures. Caltech was led in scor-

ing by forwards Joe Weis and Dick Burgess with 17 and 15 points respectively.

Perhaps a note of interest. During the frosh prelim, Gary Dahlman managed to draw the first technical foul of the season called against the crowd. It seems the referee, who was somewhat rotund, didn't appreciate it when Gary called him "Homer." When said incident occurred, the ref started to walk away, stopped and thought a second, and then turned around and pointed at Dahlman and said, "Caltech man — technical foul!" Total cost to the frosh — one point and possession of the ball.

Next Saturday the Caltech Beavers meet the league leading Whittier Poets at Caltech and the following Tuesday Caltech travels to Occidental to meet the second place Oxy Tigers. Both games start at 8:00 and should provide plenty of excitement for all.

**Chem E's  
Are Bitchin'!**



—photo by Ken Brown

Ricketts' Bill Rosenberg forces Lloyd's Al Gillespie to hurry his pass in recent interhouse football game. Ricketts won the game.

## Scurves Top IH Football

As of last Tuesday, Ricketts seemed sure to win the interhouse football competition with a perfect record for the second year in a row. Fleming had taken a decisive lead over Ruddock and Lloyd to clinch the race for second place.

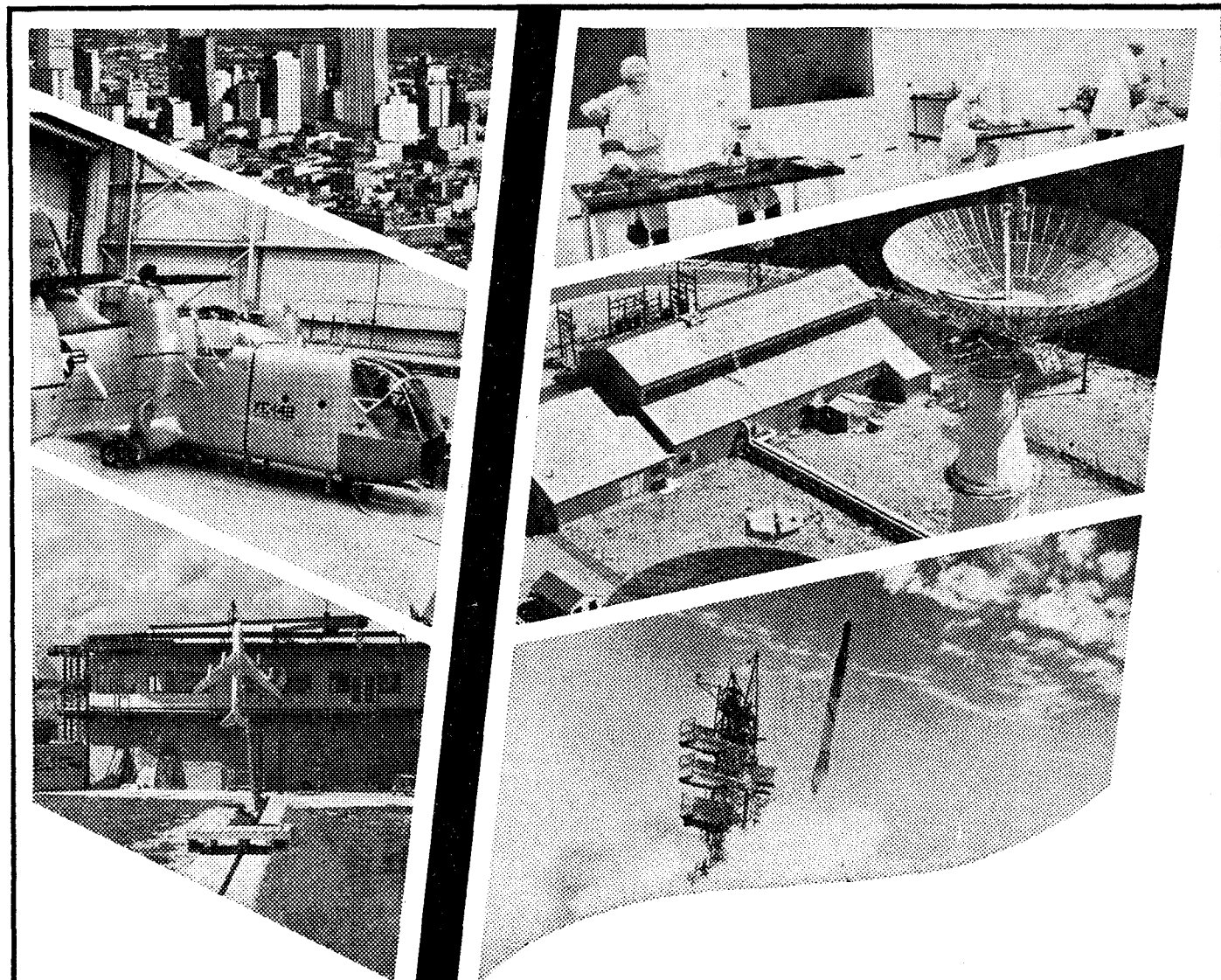
Marty Hoffman maintained steady and accurate passing to his two ends Carlos Johnson and Les Tomley to bring victories over Page and Lloyd. Rickett's offense looked in top form in the game against Dabney, as their pass receivers managed to get into the open on almost every play. Ricketts played its last game against Ruddock yesterday.

Fleming has secured second place by beating Ruddock 41-19 and Lloyd 26-19. Fleming's offense has steadily been growing stronger, as scores have increased from 14 in the first game against Dabney, to 41 in the last game, against Ruddock. On Tuesday, the Flems faced Page which hasn't won a game.

Lloyd has an edge on third place over the Ruddock team. Lloyd's schedule is complete now, with a 3-2-1 record. Ruddock has a 3-2-0 record, but faces first place Ricketts in the final game. Unless there is an upset, Ruddock will get fourth place. Lloyd captured third place in a close game with Ruddock on Monday by winning 21-13. Ruddock suffered this crucial defeat as Al Gillespie effectively threw short passes through a loose Ruddock defense. Ruddock offense remained strong, as long passes that were very nearly completed threatened the narrow Lloyd lead.

Blacker and Dabney will play off for fifth and sixth place this week. Both teams have lost to Ricketts, Lloyd, Ruddock, and Fleming, and both have beaten Page. However, the Dabney offense has proved itself more consistent by accumulating six touchdowns over the season as opposed to Blacker's two. Blacker's hope rests on the John Diebel to Bill Tyler combination that led them to their first victory of the season over Page.

(Continued on page 8)



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**CAMPUS INTERVIEWS**

FEBRUARY 13, 1963



# grad rattles

BY JOHN KING

The sinewed hand, brush delicately suspended between thumb and forefinger, is poised; an idea takes form, the muscles of the hand tighten, the brush moves, reaching . . . suddenly . . . roaring down the hall come Mahmoud Khairy, Nazeer Ahmed, and Dinshaw Patel, belly dancing, chanting, clapping, and bowling delicate artist aside, proceed to create their own markedly original artform, the psarumph. Truly a memorable evening. I refer, of course, to the great outpouring of talent which constituted the vibrant M-J painting party, where amidst walls hung with newsprint, and embarrassment of paints and brushes, every well-bodied male and female present gave expression to their deepest passions, loftiest ideals . . . and most superficial frustrations. Greatest Hidden Talent award went to Jake Brentjes for his study "Portrait of the minotaur as Jake Brentjes."

## Marriage in the News

Married students get scant attention in the local press, though, of course, they do have their compensations, and I thought it only fair to remedy this injustice. This not intended to breed envy among the single members of the graduate community but I am unable to resist mentioning that while we bachelors were eating at the Greasy or in the kitchens Monday night, Bob and Marilyn Huskey were dining luxuriously on a culinary masterpiece, warmed over lasagna. Yes, these married students certainly do lead the

## More Campuses

(Continued from page 5)

God has marvelously intervened in a time of financial crisis. Such a crisis exists again . . .

"This request is not an appeal for money either for the college or the business. It is a specific prayer request for Mr. LeTourneau's construction equipment business. It is our conviction that if the many thousands of readers of the *Now* will join together in earnest prayer for him and the finances of the business, the Lord will once more intervene . . ."

Sounds like a prayer not for money but for credit! Maybe the problem is that the tax people will find the second set of books (no libel intended). Incidentally, those interested in hearing from a true Christian university can receive the *Now* free upon request to P. O. Box 2307, Longview, Texas.

## Us Dictatorial?

At Stanford, the *Daily* reports a new clash between administration and students. The administration claims that a stand taken by the ASSU (Associated Students, Stanford University) supporting the Pacifica foundation in its fight against the Senate Internal Security Subcommittee could not be taken. The administration of Stanford has declared the ASSU could not take stands on any controversial issues unless the stand was first approved by the administration. ASSU, quite logically feels that it has the right to take stands freely, subject to no administration pressure. More about this in the future.

Also at Stanford, a team of 11 boys defeated a team of 11 girls in a time contest. The contest: putting-on girdles and nylons. The men's team, although inexperienced, evidently won through zeal and enthusiasm.

good life.

## Princeton Speaks

If you have nothing better to do, you might talk to John Klineberg, "Aerodynamic scientist" as he puts it. Elevated thinker, he. Went to Princeton. Ask him about it, makes him feel good to talk about it; you know how it is, a little status symbol to hang on to for dear life. Well, we all have our weaknesses. Really, talk to him, he gets lonely. So little ivy out here you know.

A mighty power will soon be unleashed when the Hoops (basketball) league gathers steam. At this writing, M-J has defeated Keck in a close but rather ragged contest. The feared Braunfinks and Marksinks are as yet untested in tournament play. Their public relations work has been exceedingly effective however. Big talk and no action.

## USSR Delegation On Air Pollution Spends Day at Tech

A Russian delegation of air pollution experts visited Caltech last week, and spent a day visiting the Health Engineering Department. The delegation is in exchange for the mission which the United States sent to the USSR a few months ago and is presently touring the U. S. gathering information and progress reports on smog and air pollution research.

The team, consisting of four Russian scientists and accompanied by three American escorts, arrived here Thursday, January 24. They first visited the physics labs, where Dr. Goetz gave them a demonstration of his research in aerosol supplies and interactions of gases, and then proceeded to Keck for a round table discussion on air pollution problems. After dining in the Athenaeum as guests of the Institute, the group then returned to their hotel at about 9:00.

## ROTC Drill Team Enters Sunshine City Competition

The Caltech AFROTC drill team will compete in the Sunshine City Drill Competition at Davis-Montham AFB near Tucson, Arizona, February 8 to 10. The team, commanded by Doug Abe, will compete with over forty drill teams of all branches of the service.

Returning drill members in-

clude drill team sergeant Chuck Leonard, and squad leaders Jack Comly, Barry Dinius, Steve Hall, Lee Neidengard, Dee Payne, Gerry Parker, George Repasy, and Dallas Meggitt. New members include Grant Blackinton, Mike Costellos, Stu Davey, Gordon Myers, Lee Myers, Leon Wallace, George William and John Yavorsky.

Last year the team took fifth place out of nineteen entrants in its class. Other teams will include detachments from the University of Hawaii, Washington State University, Florida State University, and the University of Colorado.

At the time of the competition, Davis-Montham AFB will host the Aerospace and Arizona Days Exhibit which will include demonstrations by the "Thunderbird" and "Four Horseman" aerial teams, World War I "dog-fights" and exhibits of aircraft and missiles.

## Radio Galaxies

(Continued from page 2)

star far larger than any yet observed could yield the vast amount of energy required. Fowler suggested the possibility of such a star forming in the spherical nucleus of a galaxy, where large gas clouds might be attracted to each other by gravity and condense into a super-star.

The gravitational force of such a super-star could be great enough to cause its collapse in-

(Continued on page 8)

## BEYOND THE PLANE OF THE ECLIPTIC...

Whether in the forefront of space exploration or in bionics research, Lockheed Missiles & Space Company's almost limitless fields of endeavor offer a challenging choice to graduate engineers and scientists. Lockheed's location on the beautiful San Francisco Peninsula, its outstanding facilities, its sophisticated programs, its excellent employee benefits, among many other advantages, have all contributed to the Company's position as a leader in the aerospace industry.



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## Blacker House Attempts New Record In Piano Destruction

The Reduction Study Group of the California Institute of Technology will reduce three pianos Saturday, February 2, in the Blacker courtyard at 2:00 in the afternoon.

The object of the Study Group is to encourage undergraduate investigation of the fundamental structure of the upright piano. Reduction consists of dismantling the instrument to such a state that it can be passed through a 20 cm. aperture in the shortest possible time. The reduction will follow the rules and regulations of the RSGCIT. Each piano will be reduced by six members of RSGCIT. The unofficial record is now held by the Darby College of Technology in England with a time of 14 minutes. It is hoped that one of the teams will set a new official record Saturday.

Use of hand tools is unre-

stricted except for a 7 kg. weight limit on each tool. The entire operation is to be performed in a six meter square.

Persons interested in further information about RSGCIT should contact the Study Group at its temporary headquarters in Blacker House.

Schools around the world will be challenged by the Study Group should the performance Saturday turn out to be satisfactory.

## ROTC Detachment Gains New Officers

In several changes in the AFROTC detachment staff, Captain Stephenson's replacement as Director of Education has been assigned, and Captain Donald L. Sterns has arrived at Caltech to assume the duties of Commandant of Cadets.

Captain Stephenson's replacement will be Major William R. Knight, who is presently serving in Japan. Captain Knight has a MS degree in Industrial Engineering and Management, and has been an instructor at both Northrup Aeronautical Institute and Chanute Air Force Base in Illinois. In addition he is a command pilot with 25 years of civilian and military flying experience.

Captain Sterns, the new Commandant of Cadets has been transferred here from Fort McArthur. He has his B.A. and M.S. degrees, with a major in geology. In addition, he has been awarded the Air Force Commendation Medal for his previous work on Air Force projects.

## Geology Theory

(Continued from page 4)

deck sandwich. The sills seemed to occur in groups, each member of a given group being a few thousand feet thick. They were nearly horizontal.

The mechanism of sill formation is at least partially understood. The geophysicist explained that sills are likely to occur in this manner:

Molten rock rises from great depths under high pressure through a near vertical fissure, which it forces open in seeking an outlet. The molten material will rise vertically to a level where the vertical pressure on the surrounding rocks is not great enough to prevent the fluid from cracking the rock and spreading out in the horizontal crack, forming a fluid layer which will extend in some cases for great distances, depending upon the amount of fluid available. This material later will solidify to form a sill.

## More Galaxies

(Continued from page 7)

ward, Fowler said. The enormous heat thus generated — in the billions of degrees — would result in a titanic explosion that could eject massive quantities of electrons from the galaxy into extragalactic space, creating a "radio galaxy."

## BOD Considers Editor's Salary

The raising of the salary of the **California Tech** editor, submission applications for frosh camp counselors, nominations for ASCIT offices, plans for the Winter Formal, paying for coffee hours, and informing people about honor key applications were the topics discussed at last Monday's BOD meeting.

J. C. Simpson proposed to the Board that the **Tech** editor's salary be raised from the present \$200 to \$300, the same as the **Big T** editor receives. Simpson stated that the increase might attract more qualified candidates and the new salary

would not be out of line with other schools. He also noted that the **Tech** editor does as much as the **Big T** editor.

The Winter Formal will be held on March 2 in the Ballroom of the Green Hotel.

There was some discussion on poor participation in the last two coffee hours. No one seems to feel that the IHC has sent out the letter inviting the faculty, and there have not been many announcements in the Houses. The BOD voted to pay for the last three coffee hours and to make a special effort to get attendance at the next coffee hour.

## IH Football

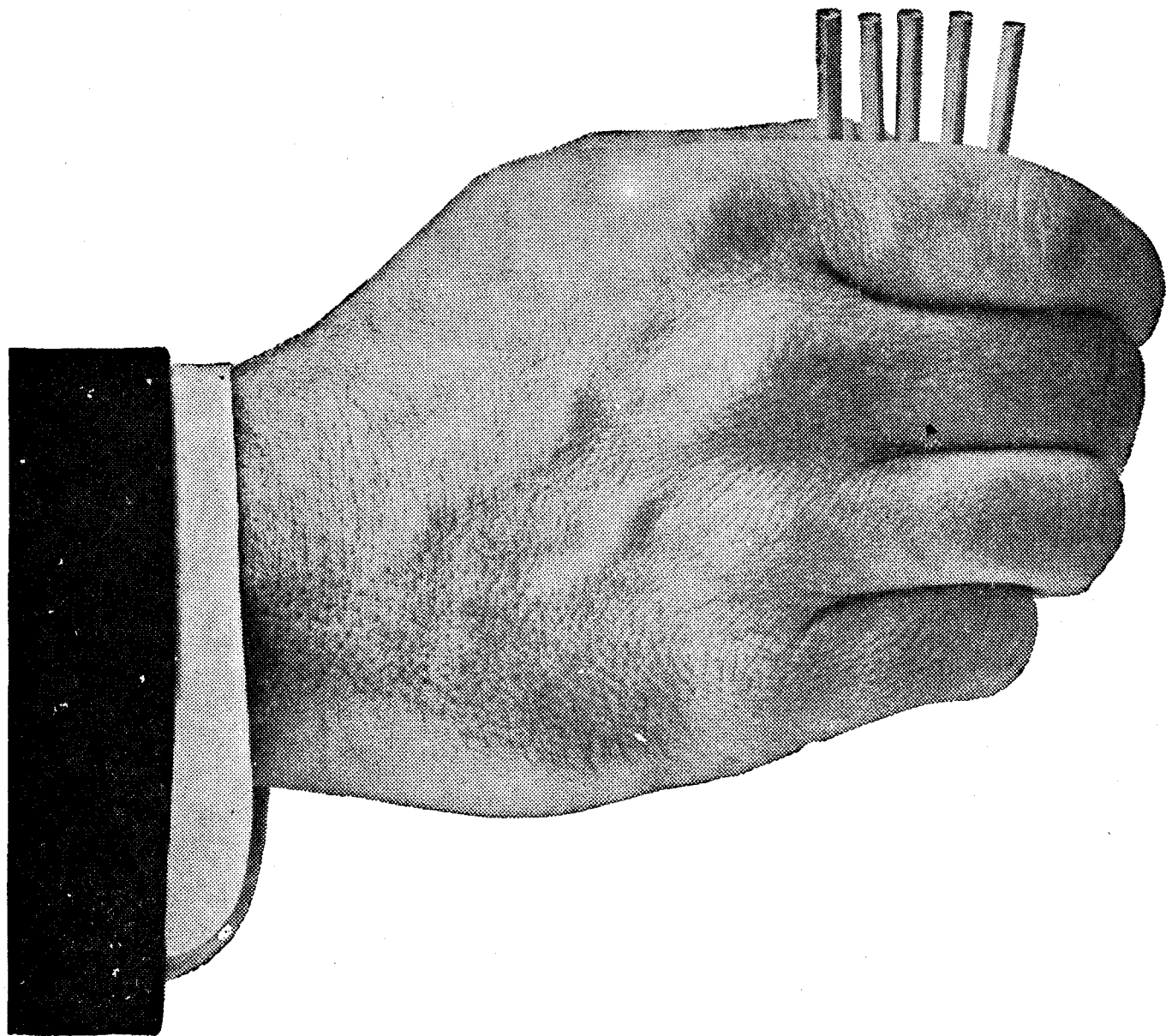
(Continued from page 6)

Page will take last place, losing to a confident Fleming team. Page tied Lloyd, but lost its four other games. Page's defense has been stronger than the offense, proving harder to be scored upon than either Blacker or Dabney's defense.


The standings (as of Tuesday afternoon):

	Won	Lost	Tie
Ricketts	5	0	0
Fleming	5	1	0
Lloyd	3	2	1
Ruddock	3	2	0
Dabney	1	4	0
Blacker	1	4	0
Page	0	5	1

## How not to come out on the short end



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