

Aussie to Play Classic Guitar In Beckman

John Williams, a noted young guitarist, will give a concert at Beckman auditorium on January 18. To be included in the program are works by Albeniz, Bach, Dodgson, Paganini, Praetorius, and Scarlatti.

Judging by the reviews he has gotten elsewhere, the program should be well worth attending, even for Teckers. The *New York Times* gave him a rave review, commenting especially on the superb performance of Dodgson's "Partita" which was written especially for Williams.

Williams has risen rapidly to the limelight from his beginnings in Melbourne, Australia in 1941. His father who began teaching him classical guitar in 1948, was succeeded in that capacity after 1953 by the world-famous Segovia. By 1958, he had become good enough to win a prize for the outstanding pupil on any instrument at the Accademia Musicale Chigiana in Italy. Since that time he has received great acclaim wherever he plays.

He toured the Soviet Union in 1962 and Japan in 1963. Also, in 1963 he first appeared in the United States. Since then he has made regular appearances all over the United States and Europe.

Tickets to the concert, to be given at 8:30 p.m. on Saturday, January 18, at Beckman, are available from the Beckman ticket office. Prices are four, three, and two dollars, but Caltech students may buy as many as two tickets at a dollar discount.



—photo by Wayne J. Shilkret, New York

John Williams, protege of the great classical guitarist Segovia, has promised to boost student morale by singing protest songs during the sit-in at Throop Hall.

Leary Describes His LSD Religion

by Mike Henry

Timothy Leary, by his own declaration alchemist, shaman, guru, and high priest of the League for Spiritual Discovery, is making a "religious reconnaissance of Southern California." Currently on bail pending his narcotics conviction appeal, Leary was sentenced to thirty years imprisonment for possession of one half ounce of marijuana which was discovered in a raid of his sixty-room headquarters-home in Millbrook, N.Y.

Jesus had enemies too . . .

In meeting Timothy Leary one cannot help forming an opinion; he has a messianic air about him that people seem to adore (*The Realist*) or to despise (*Life*). What he is doing in Los Angeles was the subject of a press conference held downtown about three weeks ago.

Although he stated that he is not here to convert people to his religion, he is here in order to explain the League to people who have not discovered God within themselves. This is not, he emphasizes, merely those people who have not tried LSD, but includes many who take psychedelics for kicks or for any non-religious motive.

Worship explained

He described the "proper method" for taking LSD in some detail; particularly enlightening was the following example: Three rabbis approached him, seriously wishing to attempt a mystic experience with the aid of LSD. Four days were spent in verbal and meditative preparation; on the fifth day the rabbis put together a complete environment in a room ("shrine") which would be suggestive of the religious truths which they wished to ponder. That night with well-planned visual and aural stimuli (Leary read a carefully chosen passage from the Torah), the three took the drug—all three came back firmly convinced that they had conversed with—no,

mystically united with—God. The value of such a mystical experience is difficult to estimate, both for Leary (from the inside) and for you and I, who cannot claim any mysticism. Intelligent theological literature from any point of view other than Leary's cult is practically nil. Dale Smith, general manager of the "voice of integrity" (KHOF-FM) tried to put Leary down on the grounds that he violated sacred

(Continued on page 3)

Coffeehouse Fund Drive Will Begin Next Week

by Joe Rhodes

The Caltech Coffeehouse will take another step toward realization with the start of the Coffeehouse Fund Raising Drive next week. Over the past month students, faculty members, and staff personnel have worked closely together to assemble a plan for the building and operation of a Coffeehouse that will both fit the needs of everyone and follow the Institute guidelines. Helpful and useful suggestions have come from all quarters. Having passed the stage of general planning, we now have definite and detailed proposals.

The Menu

As it stands now, the Coffeehouse will be open from 8:00 p.m. until 2:00 a.m. A committee of students will be responsible for the operation of the Coffeehouse in shifts of three hours. The menu will consist of ice-cream, pastries, sandwiches, soft-drinks, and of course hot coffee. The Coffee House will run on a self-service basis, under the honor system. There will be piped-in music and occasional live enter-

Y Represented at Chicago Meeting

by David Lewin

Six Caltech undergraduates and the associate secretary of the Caltech "Y," Burton Housman, spent six days in Chicago at a national student conference on urban problems.

The participants in the National YMCA-YWCA Student Assembly held from December 27, 1966 to January 2, 1967, were: Dan Metlay, a senior physics major; Barry Lieberman, a junior in physics; Willard G. Manning, Jr., a Junior economics major; Gregory Evans, a sophomore engineering major; Jim Fishbein, a senior engineering major; and Dave Lewin, a freshman.

Respectable leadership

The twelve hundred delegates met each morning for worship services that ranged from "Happenings" to a jazz mass. After this the group broke up into sections or "colleges" of 200 delegates to hear speeches by businessmen, architects, politicians, religious leaders, and others followed by discussions. The "colleges" were divided into seminar groups of about ten delegates each for discussions and for field trips. One of the Speakers at the conference was an assistant attorney general of the United States, Roger Wilkins, nephew of the Civil Rights leader, Roy Wilkins.

Jets vs. Sharks

One afternoon was spent on an Urban Space Hunt. For this each seminar group was assigned an address in Chicago with directions how to get there, the purpose being for the delegates to explore the neighborhood and to try to see that neighborhood

from several different points of view, i.e. as a policeman, a parent, landlord, or perhaps an artist. Groups were sent to all portions of the city; delegates saw middle class areas, slums, business districts, and college campuses. Another afternoon was spent in Urban Tutorials, where the students went into neighborhoods to learn about the problems of the city. Some Tutorials were highly structured, such as the program at the Ecumenical Institute, others free-form, as at the Division Street YMCA which involved a meeting with members of various street gangs.

An evening was spent at a
(Continued on page 2)

Fred Hoyle to Solve Enigmas Of Stonehenge

Noted cosmologist and author Fred Hoyle will begin Caltech's winter lecture series in Beckman Auditorium Monday, Jan. 9, at 8:15 p.m. with a talk on the ancient civilization which built the remarkable Stonehenge structures in Great Britain.

The Steady-state is kaput

The topic is a departure from Hoyle's usual concerns—the universe and how it was created. The author of many popular books on astronomy is Director of the Theoretical Institute of Astronomy at Cambridge University and a visiting associate in physics at Caltech.

The Stonehenge structures—large upright rocks surrounded by a ditch about 370 yards in circumference—were believed to have been constructed about 1800 B.C., but their functions have been a source of conjecture.

Hoyle's lecture is the first of the winter series of weekly lecture-demonstrations open to the public and free of charge. Other topics scheduled include "Problems of Scientific Research with the Dolphin," "How to Build a Virus," "Surveyor on the Moon," "The Rings of DNA" and "Changing Views of Mars."

Teckers Entertained By Parade Fantasies

The Tournament of Roses gave those Teckers who returned from Christmas vacation early a chance to escape from the drab reality of the campus to a world of fantasy portrayed in the Rose Parade.

Go north, young man

The procession, which commenced on Monday morning, featured floats whose themes ranged from a celebration of the 450th anniversary of the Reformation, to a blonde from Portland clutching a spray of red roses proclaiming Interstate

5 as the "New Oregon Trail." The two competing colleges naturally had floats in the parade. A yellow path, supported by red roses, wound around the float heralding Purdue as the Alma Mater of astronauts. Also included in the decorations was a violet stadium sporting pennants of the big 10 schools. USC's float featured Tommy Trojan riding a white horse surrounded by golden fields, and five coeds. Apparently USC's magic construction didn't quite match that
(Continued on page 3)

Notices

BRIDGE TOURNAMENT

The campus round of the Inter-collegiate Bridge Tournament will be held in Winnett Center on Friday, January 13, at 7:30 p.m. The entrance fee is \$1.00 per person and is 50% subsidized for ASCIT members. Please sign up with Myron Mandell or Paul Lee, Page House, or with Louise Hood in the Winnett office.

1967 LISCENSE FEE

may be paid today or next Wednesday in Winnett Lounge. The AAA-Automobile Club of Southern California will be handling the payments and **only cash payments can be accepted unless you are a member of the Automobile Club.** If you pay this week you may pick up your 1967 tags on Wednesday, the 11th. If you pay on the 11th, the Personnel Office will have them on the 13th.

TOTEM LIVES!

But we must have help to publish an issue second term. If having a literary magazine at Caltech is important to you, see Dick Rubinstein in Blacker House by this weekend.

IMPERIALISTIC EXPANSION!

On Wednesday, January 11, H. Russell Bintzer, Caltech's Vice President for Development, will speak at the 11:00 a.m. assembly hour. He will talk on the various directions which growth may take Caltech in the following years, but he is also quite interested in hearing comments on the subject from Caltech students. The assembly will be held in Winnett Lounge.

Editorial

How Dissenters Are Fighting Communism

Moralists and churchmen, as well as many foreign observers, are constantly pointing out the decadence of American society today. The crime rate is increasing at about 50 per cent per year, promiscuity is an established fact in many social strata, and over half the people on welfare have automobiles. Worst of all, however, the United States of America is fighting a war in Southeast Asia without informing its soldiers, its population, or the world just what its motives are.

Contrast to this the dedication, selflessness, and patriotism of the Communists. Fighting a nation with at least ten times North Vietnam's population, a country which has more troops in South Vietnam than North Vietnam has in its entire army, Ho Chi Minh quietly informed his people recently that they must expect Hanoi and Haiphong to be utterly demolished before the end of the war. To that extent are they willing to sacrifice.

Gung-Ho, Ho

We must admit that if the Communists engaged in this so-called "Cold War" are not more highly motivated than the Westerners, they are at least more **strongly** motivated. They are better organized, they have clearer goals, and, most disastrous of all for us, their system has so far proved to be much more efficient in underdeveloped nations than ours. We might militarily win the war in Vietnam, but economically, what can we offer besides Food for Peace?

Why should a thinking man (even Viceroy smokers) fight the Communists then? Their economic system isn't so bad, except that in order to use it, a totalitarian dictatorship imposes its authority in **every** Communist country. If we want to continue to write, work, or even think without regard for what the regime will "tolerate," we cannot embrace a Communist solution, no matter how well-tailored to the individual country it claims to be. Always and everywhere, in every manner and in every form, thinkers must fight for the freedom to think.

Neo-Dullesism

If we are opposed to Communism in this country, then how do we fight it? McCarthyism is pure fear—a passionate suspicion that harms more innocent people than it helps. Indeed, outlawing the Communist party and arresting all Communists is a negation of our treasured freedom of thought. Lyndon-Johnsonism, or Who-Says-the-U.S.-Can't-Be-a-World-Policeman, is as doomed to failure as the previous efforts by Louis XIV's France and Hitler's Germany to conquer the world. If protecting Vietnam means fighting in Thailand too, and then maybe Burma, then perhaps Haiti, we had better realize now that most of the world is opposed to being ruled by Americans.

No, the best way to protect liberty is to exercise it. If the populations of the underdeveloped nations of the world decide that Communism is for them, then no matter what we do they will get it. The main danger to this country, however, is that we will abdicate our freedoms in the pressures of the times. Instead of becoming increasingly concerned that the war is spreading, most people support the Presidential policy each time Johnson escalates the war. Other countries of the world, notably France, are in the process of surrendering to nationalism, and if we do too, if we refuse to examine politics with our own minds and make our own decisions and instead follow blindly the exhortations of our leaders, then we will have lost exactly what we're trying to protect.

—Michael Meo
John Middleditch

Save Our Souls

Ah, for those idyllic days after midterms when we wrote an editorial dripping with self-pity! We didn't know the meaning of misfortune back there when the only cloud in the sky was a little black patch no bigger than a man's hand. Now, as we buck the hurricane winds, as the storm lashes around us, destroying our hearth and home, as the world crumbles beneath our feet, we need help. Hoo boy, do we need help!

The **California Tech** has no copy editor. You know, the little fella that checks to see that the spelling is correct. It has no managing editor, which means that we editors-in-chief have to do all the layout work. It has no features editor, no news editor, and no photography editor. Besides, our staff is under-sized.

M & M have too much power.

In order to continue providing this school with yet greater achievements of journalistic excellence, we need more reporters, more editors, and more photographers. Everyone is welcome to add English 15 (three units) to his schedule and work for the newspaper, regardless of race, color, creed, or blood type. **M&M WANT YOU!**

—Michael Meo
John Middleditch

Totem In Dire Straits; Needs Help Soon

Editors:

Last year, a group of freshmen decided they wanted Caltech to have a literary magazine. We let people know what we wanted to do, and the response was good.

Now, if **Totem** is to continue being published, we must have people who will take part of the responsibility for soliciting contributions and editing. Unless people volunteer soon, there will be no **Totem**. If having a literary magazine at Caltech is important to you, see me in Blacker House by this weekend. We have the ability: let's use it.

Dick Rubinstein

Saga Cook Seals Doom With His Own Potatoes

from an ancient California Tech

The thousand runny eggs of the cook I had borne as best I could, but when he ventured upon those greasy donuts I vowed revenge. You, who know so well the nature of my soul, will suppose, however, that I gave utterance to a threat. Oh, no. At length I would be avenged.

He had one weakness, this Saga cook: he prided himself on his knowledge of potatoes. It was with this pride that I would avenge myself.

It took me several weeks to formulate a proper plan for the revenge I meant to take against this evil man. At length I struck upon a plan so ingenious that I felt it could not fail. If it did, I feared that I, too, would be lost. It was on a cold, overcast day in March that I began the proceedings.

It must be understood that neither by word nor deed had I given the cook cause to doubt my good will. I continued to smile in his face, as was my wont, and he did not perceive that my smile now was at the thought of his impending doom.

It was about dusk one evening, during a week of powdered eggs and brown lettuce, that I encountered my friend. He accosted me with warmth and asked me how I fared.

"I have been told of a book in the library," I said, "that tells of 118 ways to cook potatoes, and I am just on my way to look at it."

California Tech

Published weekly during the school year except during holidays and exams by the Associated Students of the California Institute of Technology.

Editors: Michael Meo and John Middleditch, Editors-in-chief; Peter Balint, Sports.

Staff: Peter Balint, Kirk Benson, Steve Boone, James Cook, Dave Lewin, Les Fishbone, Danielle Clarno.

Business: Bob Berry, Manager; Circulation Managers, Ed Kelm, Mike Pollock, John Walters.

California Tech, Publication Offices: 1201 E. California Blvd., Pasadena, California, 91109. Second-class postage paid at Pasadena, California. Represented nationally by National Educational Advertising Services, Inc. Subscriptions: \$1.50 per term, \$4.00 per year. Life subscription: \$100.00. Printed by Bickley Printing Co., 25 South Fair Oaks Ave., Pasadena, Calif.

Volume LVIII, Number 12, Thursday, January 5, 1967.

More Gangland Y

(Continued from page 1)

"cultural event," in most cases a play, or in some cases, the "Second City" satirical review. Two of the plays seen were avant-garde productions: the Chicago City Players presented "Automobile Graveyard" and another group performed a play entitled "The Monkey Cage." The two plays were singular, the first being a retelling of the Christ story with Jesus as a jazz musician, and the other a tale of the nature of life and love in our present society.

Summer in the city

The theme of the conference was "a vision of the city," explored in as many aspects of its nature as possible. The politics of the city, the tempo of the city, love in the city, and the physical nature of the city, all were topics of discussion. However the major problem under consideration was the life of people in the city, especially in

the slums. The conclusion reached was that the evils of the city are symptomatic of our society and its institutions. No amount of social work can alleviate the problems in the ghettos unless steps are taken to remold the society. This was the theme of Professor Robert Theobald, keynote speaker of the assembly and a theme that ran through the minds of most of the delegates.

More Notices

WANT TO SAIL?

Join Caltech Sailing Club and sail Caltech's boats. Other fantastic opportunities like intercollegiate competition. See Larry Ruzzo, 212 Page, or Dave Hammond, 240 Page, for details.

THE COLLEGE BOARDS

You haven't really fulfilled your function in life until you've read the YD's Bulletin Board in the hall next to the **Tech** office. Do it now and often!

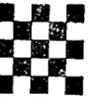
INTERVIEWING ON JANUARY 16, 1967

- Opportunities With A Future
- Dynamic Work With Good People
- Excellent Training For All Positions
- A Growing Corporation

RALSTON PURINA CO.

CHECKERBOARD SQUARE

See your placement office



TWO DELIGHTFUL ENGLISH COMEDIES

PETER SELLERS and MICHAEL CAINE

in

THE WRONG BOX

plus

RATTLE OF A SIMPLE MAN

STUDENT RATES

ESQUIRE THEATER
2670 E. Colorado
SY 3-6149 — MU 4-1774

APPLIED RESEARCH LABORATORIES, INC.

32 years of leadership in spectrochemistry
Subsidiary of Bausch & Lomb Incorporated

GLENDALE, CALIFORNIA

Offers Professional Opportunities in Instrument Systems for Materials Analysis

- ★ "Essential Activity" for Selective Service Purposes
- ★ Both Civilian and Military Applications
- ★ Technically Oriented Management
- ★ Challenging Assignments
- ★ Opportunity for Professional Growth
- ★ Company-supported Advanced Education
- ★ Profit Sharing
- ★ Other Excellent Benefits

DEGREES: BS & MS in EE, ME & Applied Physics; and MBA with any of the foregoing

Register with Your College Placement Office for

CAMPUS INTERVIEWS

18 JANUARY 1967

or you may write us direct at

P.O. Box 1710, Glendale, California 91209

Attention: C. F. Hartman, Personnel Director

More Religious Trips to LSD Never-never Land

Intelligence Report

by Bill Atwood

(Continued from page 1) scripture, but was, as nearly as I could tell, unsuccessful.

Candyboy philosophy

Leary's view of God is much like the normal Christian view. He is more extreme in that he sees God physically inside each person. Jesus, Buddha, and others he views as persons who have discovered the divinity within themselves. Previously this was only done with long study and meditation. Now, he says, we have a chemical short cut, a miraculous aid to this discovery. Taken under the proper conditions, LSD can help us read God's message to us, contained in our individual genetic code. It is the message he reads, and helps other people to read, that comes out orthodox. It consists of love thy neighbor, community living, and is much more familiar than its origins, almost to the point of being "old hat."

Many reporters raised questions concerning the dangers of taking LSD. Leary is inclined to say that if you give it to "any old person" there is at most a small risk, and practically none if any reasonable forethought is given. This flatly denies the reports which filtered out from UCLA a couple of months ago. He answers psychiatrists with, "Talk to a mortician, he'll tell you everybody's dead—you fellows only see the results of bad trips"—which he estimates as being exceedingly rare, percentage-wise.

The source

Many questioners were looking for facts concerning the extent of LSD use today. Some of Leary's statistics were astounding: he quoted an L.A.P.D. captain who had arrested a man credited with consistently turning out more than a million doses per month (that's right here in River City, folks, and only one source.)

Timothy Leary is deadly serious about the new religion (he'd better be, he gets thirty years if the courts don't believe it.) He and his followers (whom he refuses to call followers) are suing the government for the right to import (sacramental only) LSD and marijuana, just as Catholic priests and Jewish rabbis imported wine during prohibition. In this writer's opinion he actually has a good chance: 1.) Despite splashy headlines to the contrary, Leary can divorce himself from the rampant abuses of his sacraments, and his religion (when isolated) is as orthodox, if not as well organized, as the most orthodox religions around. 2.) The U.S. Supreme Court has been very favorable to any religious practice which does not actively damage the common good. The problem for him will be clear cut: show that his religious use of the drugs (which he is absolutely free to define) is externally (i.e. socially) harmless.

Want to find out more? Don't take LSD, just go to the annual religious celebrations Jan. 18, 19, and 20. Advertisements will presumably be forthcoming.

(Offering a variety of folk dancing, coffee drinking, and chess playing, The Museum, a coffeehouse located off Fair Oaks on Dayton Street, in Pasadena, attracts a wide spectrum of interesting people. The one-room dance-hall's success at simulating an avant-garde atmosphere might be of interest to people attempting to establish our own Caltech Coffeehouse—ed.)

The decorum is simple: plain painted walls sprinkled with foreign posters are its few decorations. Straight-backed wooden chairs (very few of which match) surround spool-type tables

Student Shop Saws Timbers

Buried in the depths of Winnett Student Center is that nerve center of the Caltech campus, the student shop. Herein reside the woodworking and metalworking machines that members of the shop use to build shelves, tables, and, when ambitious, carburetors.

The facilities of the shop are available for use only to the members of the shop, the so-called Committeemen. They may work on most any type of monstrosity at most any hour of the day. In the shop are many tools, both hand and power; moreover, new tools are purchased as members require them.

Only students who expect to do serious work will really benefit from membership, for there are certain responsibilities that accrue to the Committeemen. When necessary, prospective members learn the fundamentals of shop safety and tool use. The use of power machines requires some familiarity with them.



located next to the walls. At the entrance of the Museum a small bar provides exotic foods from the Mediterranean area and a large coffee-maker supplies free coffee for all the guests.

The atmosphere of the Museum is Bohemian. The eccentric and non "run-of-the-mill" tastes, which are naturally displayed by the establishment, appeal to people who are themselves liberal. Unfortunately, many of the clientele are not quite genuine; they are young and rebellious and show society their disquiet by frequenting the Museum in an attempt to be "different." Aside from this faction most of the patrons are genuine and very interesting to talk with. Many foreigners are frequently present, adding an international flavor to the surroundings.

For one dollar, a person can spend an entire evening at the Museum. It requires work to be bored there, for even if the visitor does not dance, he finds chess games to play, people to meet (especially of the opposite sex), interesting music to hear, and fascinating dances to watch. Its one drawback is that its newness wears off after a while. Yet, the first few visits to the Museum are very enjoyable and are an experience well worth the entrance charge.

More Putrid Petals From Pasadena

(Continued from page 1) of Purdue: as borne out by the final score of 14-13 against the Trojans.

We bite better

Another type of float was the State centennial. A good example was from Indiana, celebrating "150 Years of Progress" with a large white 12-toothed gear (inferior to the famed Caltech gear, with 23 teeth). The real attraction, however, was a group of four brunettes and a blonde.

Perhaps the most widely varied float was "Around the World in 80 Days." That float, sponsored by the Farmers Insurance Group, released balloons, carried a pink elephant, and displayed Sonny and Cher.

Just wear a smile

An amazing amount of time was expended just preparing the floats. It took five 17-hour days, for instance, just to cover the Kodak float "America the Beautiful" with flowers. The float featured flower "photographs" of scenic America. Once again the

Serbs, Croats, And Slovenes To Ride Again

The Caltech delegation to the Model United Nations, representing Yugoslavia, will not have a membership on either the Security Council or the Economic and Social Council, it was learned recently. The choosing of Caltech to represent Yugoslavia represents a vote of confidence in the delegation, but exclusion from the Security Council and ECOSOC reduces its role in the annual conference, scheduled for some time in May.

Yugoslavia was third in popularity of choice, with 13 schools requesting it. In cases of conflict, the Secretariat of the Model United Nations awards countries on the basis of the school's past performance at the MUN and its past representation. Countries that Caltech has had in the past include Albania, Kenya, and Jordan.

The half-dozen or so delegates must begin writing resolutions shortly to submit to the Secretariat. Meetings are on Sunday afternoons.

One Potato

(Continued from page 2) us go."

"But you have a cough, and it is damp in the stacks of the library."

"My cough—ugh! ugh!—it is nothing. Come, let us go."

"As you wish," I said.

(Continued on page 4)

Two Locations

at the ICE HOUSE (S)

<p>GLENDALE 234 S. Brand Reservations Phone 245-5043</p>	<p>PASADENA 24 N. Mentor Reservations Phone MU 1-9942</p>
--	---

FOLK MUSIC and COMEDY
Twice the Music Double the Fun

NITTY GRITTY DIRT BAND
HEARTS & FLOWERS
Visit our new gourmet restaurant and cocktail lounge —
THE COACHING STOP

BYRON & HOWARD
BROWN & SHELTON
FATS JOHNSON
Mon. Jan. 9 only:
Bocker Large & the Black Grass



We're coming soon. For job details and date, consult your Placement Office, now.

AMERICAN AIRLINES

AN EQUAL OPPORTUNITY EMPLOYER • A PLANS FOR PROGRESS COMPANY

EDITORIAL POLICY

For the information of its readers, the Tech presents the following summary of its editorial policy:

The first signature following an editorial indicates the author of that editorial. The following signature, if any, indicates approval by the other editor. If both editors sign the editorial, that editorial then represents the opinion of the California Tech.

In general, column writers have complete freedom as to the content of their columns. No column will be eliminated from any issue of the paper solely because of the opinions represented in that

column. Column writers represent their own opinions only and not necessarily the opinions of the California Tech.

The California Tech welcomes all letters, whether or not they agree with editorial opinion. All letters must be signed, but the author's name may be withheld from publication on request. Letters are edited (or left out) solely on the bases of space, decency, and the desire to present letter opinions in proportion to the amount of mail received. As with columns, the opinions stated in letters are not necessarily those of the California Tech.

Editorial

Totem Lives--or Does It?

The burden for making last year's **Totem** such a success fell on the Freshman class, which constituted its entire editorial staff. Unless this year's Freshman class picks up some of the burden from this year's sophomores (the late, lamented Stonum and Alfin, for example), Totem will return to a state of limbo. As a matter of fact, we think the freshman class this year, while probably more "well-rounded" than any previous class in memory, is participating in a significantly fewer number of extracurricular activities than its predecessors. It's too bad.

—Michael Meo
John Middleditch



by Boone

Last month's show at the Pasadena Ice House left something to be desired, whether you were looking for music or comedy. The first performer, Paul Sikes, is supposed to be a stand-up comic. His face looks as if he had just read his own obituary, which is good enough starting material for telling sick jokes, but when he opened his mouth he turned out to be a standup

lead balloon. I can't remember a single line of his act, but then I don't remember laughing at any of them either.

Sykes certainly was an easy act to follow, but I wasn't overly impressed by Moffit and Davies, the two folksingers who next took the stage. They look like Mutt and Jeff with guitars, except that Jeff has the mustache and looks like a Yale dropout (as my date so aptly put it). They are supposedly "recording artists," but I've never heard of them before and doubt if I will again; they're a sort of third-string Simon and Garfunkel and will probably never make it out of the bush leagues.

Old favorite gets boring

For bush-leaguers they're not bad, though; what they need most of all is some original material and style. Unfortunately, they should drop one of the songs they do best from their repertoire, at least when playing at the Ice House. It is "Last Night I was Thinking," a favorite with every group that hits Pasadena. Go to the Ice House a half-dozen times and you'll know it by heart.

The third attraction, and by far the best, was Pat Paulsen, comedian and folk singer (sort of—he didn't do much serious singing). His forte is telling long, involved stories about the songs he is about to sing. The stories don't go anyplace much, and

(Continued on page 6)

Tell-tale Infrared Radiation Found In Center of Galaxy

Eric E. Becklin, Caltech grad student, has observed the center of the Milky Way Galaxy for the first time in the infrared. He reported to the 123rd meeting of the American Astronomical Society at UCLA that the infrared radiation was observed in a concentrated area of the galaxy's nucleus about 30 light years in diameter and presumably emanates from approximately 30 million stars.

Archer has portable radio

The infrared radiation coincides in position with Sagittarius-A, which is one of the strongest radio sources in the sky and is located in the constellation of Sagittarius.

Intervening dust clouds absorb optical wave lengths, but infrared waves are ten times longer and can penetrate dust clouds. The infrared waves that Becklin observed were 2.2 microns in size. The dust between Sagittarius-A and the earth reduces the brightness of light by a factor of 10 billion but only cuts infrared intensity by a factor of ten, Becklin estimated.

The ubiquitous Neugebauer

Becklin did his work under the

supervision of Dr. Gerry Neugebauer, associate professor of physics and staff associate of the Mt. Wilson and Palomar Observatories. He made his observations with a special infrared detector used with three different telescopes to obtain a variation in detail: the 24-inch and 60-inch at Mt. Wilson and the 200-inch at Palomar.

The size and brightness of the Milky Way's central concentration of stars is similar to that found in the hub of the neighboring spiral galaxy of Andromeda, Becklin pointed out.

Y Fund Drive Reaches Goal; Nets \$3150

Caltech students took advantage of the Federal Income Tax deduction for donations to charity in the recent YMCA Student Finance Drive. Undergrads contributed about \$2350 of this and grads chipped in the remainder. Some 80% of the on-campus undergrads contributed, averaging \$5.25 each.

Fund Drive Directors Jim Fishbein and Burt Housman were ably and effectively assisted in the Houses by Greg Lutz, John Bennett, Bill Mitchell, Les Fishbone and Greg Evans, and by many grads who eagerly scurried from door to door in the labs for their friend (and Yours) the Y.

More Mug Band

(Continued from page 1)

drive will be successful if everyone accepts it as a personal responsibility. This will be our Coffeehouse. We must support it now by donating what we can and later by using its facilities. Our Coffeehouse is almost a reality. It is up to each of us to make it so.

Shenanigans exposed!

As for the date of completion, the timetable remains within the proposed 60-90 days. The first step toward converting Prufrock House, the zoning variance review, will not be held until January 26th. Therefore, no actual work can begin on the house until the 27th at the earliest. The time between now and when the contractors finish with the house will not, however, be wasted.

The Institute has provided chairs but students will have to build the tables from the ends of large electric-cable spools. This should keep us busy until the basic remodeling of Prufrock is completed. Right now we also need more members of our three committees: finance and publicity, decorations, and construction. If any student or faculty member would like to work on one of these committees contact Joe Rhodes in Blacker House or at ext. 2155.

Dabney Will Host Coppin Ensemble

The Coppin Ensemble will present a chamber music concert in the lounge of the Dabney Hall of the Humanities on Sunday, Jan. 15, at 8:15 p.m. The ensemble has John Coppin and David Margetts on violin, Ross Beckstead on viola, Margaret Coppin on cello, and Marie Coppin Emerson on piano. They will play "Serenade, Op. 8, Trio in D," by Beethoven, "Piano Quintet," by Bloch, and "Piano Quartet in C minor," by Brahms. They are a very accomplished group and it would be worth the loss of some of a Sunday evening's snacking to see them.

Two Potato

(Continued from page 3)

He threw his arm around my shoulder and as we walked toward the library we conversed. I wanted to find out certain things about this ill-born man before I consummated my plan. Masquerading as a friend of this gnome, I plied and prodded him with questions on subjects that I feared I already had far too much knowledge.

"Tell me," I said, "how does one get to be a cook with a big organization like Saga?"

(Continued on page 5)

Epsilon Given By Esso For Research Here

The Esso Education Foundation has given Caltech some \$9,000 in grants for the 1966-67 academic year with the bulk of the grant, \$5,000, going to the Division of Chemistry and Chemical Engineering "to further excellence in its graduate training and research or in undergraduate teaching."

The remaining sum of \$4,000 was split evenly between the Division of Geological Sciences and the department of mechanical engineering. The Esso foundation will give some 2.58 megabucks this academic year to more than 300 American colleges, universities and professional education associations.

PAT'S LIQUORS AND DELICATESSEN
1072 E. Colorado SY 6-6761
Open to midnight daily,
1 a.m. Fri. & Sat.
Keg Beer Party Supplies

A&H DISCOUNT RECORDS
SPECIAL SCHOOL DISCOUNTS
ALL ALBUMS ARE SEALED AND GUARANTEED AGAINST DEFECTS
A&H DISCOUNT RECORDS
1766 E. Colorado Blvd. — Pasadena
SHOP DAILY 10-6 MON. & FRI. EVENINGS TO 9 SY 6-7436

50c | 50c
This coupon entitles bearer to an additional 50 cent discount off our already discounted prices on all long-playing albums priced at \$2.00 or more. (Excludes special sale items.)
(Expires January 19.)
50c | 50c

FLICK GUIDE

ACADEMY
1003 E. Colorado 796-3191
Admission: \$2.00 (\$1.50 before 5:00) w Fox student card.*
Friday and Saturday:
Follow Me Boys — 12:15, 4:30, 8:45
Around the World Under the Sea — 2:35, 6:47, 11:00

COLORADO
2586 E. Colorado 796-9704
Admission: \$1.00 for students
Friday:
Namu the Killer Whale — 9:00
Khartoum — 6:45, 10:45
Saturday:
Namu — 8:45
Khartoum — 6:30, 10:15

CROWN
129 N. Raymond 796-3131
Admission: \$1.25 w Statewide student card, \$1.50 without.
Friday and Saturday:
The Professionals — 9:03
What Did You Do in the War, Daddy? — 6:45, 11:00

ESQUIRE
2670 E. Colorado 793-6149
Admission: \$1.50 for students
Friday:
Rattle of the Simple Man — 8:50
The Wrong Box — 7:00, 10:26

Saturday:
Rattle of the Simple Man — 2:30, 5:50, 9:24
The Wrong Box — 4:05, 7:33, 10:59

STATE
770 E. Colorado 792-7139
Friday
The Russians Are Coming! The Russians Are Coming! — 8:57
Hotel Paradiso — 7:00, 11:07
Saturday:
Matinees shown, but times unavailable.

UNITED ARTISTS
606 E. Colorado 681-6577
Admission: \$1.50 w United Artists student card. \$1.75 w out.
Fantastic Voyage — 7:33, 9:44

UPTOWN
2316 E. Colorado 793-4330
Admission: \$1.25 w Uptown student card,** \$1.50 w out
Friday:
The Fortune Cookie — 8:45
Boy Did I Get a Wrong Number — 7:00, 10:40
Saturday:
The Fortune Cookie — 3:00, 6:45, 10:30
Boy Did I Get a Wrong Number — 1:15, 5:00, 8:55

*If you are bereft of a Fox student card, one can be bought, included in an admission price of \$2.00. Good for six months.
**An Uptown student card can be purchased under following plan — first night: admission plus card, \$1.50; second night: admission, free; following nights: admission, \$1.25.

STUDENTS, if you need HELP in fulfilling your language requirement— inquire about tutoring services at BERLITZ, THE LANGUAGE CENTER
170 South Lake Ave.
Pasadena SY 5-5888

A Is For Ampex

Where Opportunity Never Stops

Ampex Looks For The Inquisitive Mind.
Men with good minds are not particularly hard to find. But men with good inquisitive minds — having a knack for exploring new and untried areas, unhindered by convention — are at a premium.
Ampex is fortunate to have many inquisitive men, but we're always looking for more. If you fit the description, you'll be interested in meeting with our Technical Recruiter.

Campus Interviews
JANUARY 10
Mechanical Engineers
Electrical Engineers
Industrial Engineers

Interviews will be conducted in conjunction with your placement office. Please contact the placement office to arrange an interview time convenient for you.

AMPEX
2655 Bay Road Redwood City, California
Ampex Is An Equal Opportunity Employer

TECH Sports

Beagle Is Wrestler of the Week

In order to acquaint the campus with the wrestling team, the Sports Page will include each week a story on one outstanding member of the team.

This week's wrestler is **Allen Beagle**, who wrestles in the 177 lb. class.

Beagle hails from Sacramento, California, and is now a member of Ricketts House. Although only a freshman, he has already

ampy proved his athletic prowess. In the three meets Caltech has had so far, he has pinned every man he has met. Of Beagle's talents Coach Gutman has said, "He potentially could be the most outstanding wrestler Caltech has ever had."



Not only is Beagle outstanding in wrestling, but he was also a fine football player. He played tackle and end for the varsity and earned the "Most Outstanding Freshman Lineman" award for his play.

Allen Beagle is a fine example of the type of athlete who can come from Caltech. He is a competitor and perfectionist in his athletic endeavors.

Rugby Team Starts Rolling

The Caltech rugby team started off its season with a bang by getting to the semi-finals in a 28-team tournament at San Fernando Valley State College on December 10. The games were with only seven men to a side and with short games, but they really proved the strength of the team against tough competition.

The team is now practicing in preparation for their regular season which starts against Loyola on January 21. Captain and coach Mike O'Sullivan is confident that the team will have a fine season. The team has plenty of players for a team, but if more people come out there will be an opportunity to form a second string, which could also play games. So any graduate or undergraduate who is looking for some excitement is encouraged to come to a practice on Wednesday or Friday afternoon on the athletic field.

Hoopsters Test Mettle Today

The Caltech basketball team finished pre-season play last term with a loss to a strong Biola team 86-91. This ran the Beavers' record to 2-2.

Biola, with three junior transfers in the lineup, boasted a tall front line averaging 6' 5". The Beavers were outmanned on the boards, but trailed by only four at half-time. Biola went ahead by ten points on a fourth quarter splurge only to have their lead cut again by a Caltech full court press. In the end, Biola hung on to win by five. Jim Pearson, looking like his old self, was the star of the game, but

his 26 points weren't enough to turn the tide.

The coming of 1967, brings fresh hopes to the team. Newcomers Don Blair, a two-year letterman, John Frazzini, star of the freshman team two years ago, and 6' 5" Cliff Tedder should strengthen the woefully weak bench. Caltech had only seven players in the first four games. The muscle and height provided by Frazzini and Tedder should help to alleviate the lack of rebounding strength that was become painfully obvious in the two losses.

A player to watch is Tom Bick-

nell, who has been a pleasant surprise to the coaching staff. Only a freshman, he has played a great deal in the games. He has all the attributes, including poise, necessary to become a really fine player.

The Pomona Sagehens invade Caltech today to open SCIAC conference play. Boasting all-league guard Ron Voake, Pomona is a darkhorse to take the always tough SCIAC. The outcome of the game should give clues to the Beavers' fortune in 1967. Game time is 8:30. Saturday Tech travels to Azusa-Pacific to play a non-conference game.

Flems Win IH Swimming Once Again

As expected, Fleming rather easily dominated the Interhouse swimming title. As there was no contest for first place, the real fight was for second. Ruddock, Dabney, and Page were all within four points of each other. After the first four there was a sharp drop-off, with Lloyd, Blacker, and Ricketts finishing in that order with very few points.

Fleming won easily by taking three individual firsts, a first in a relay, and having great depth in each event. Ralph Kimbrell took firsts in the 50 and 100 yard freestyle races, just as he did last year. Although his times of 25.8 and 1:01.1 were slightly worse than last year's, he was not seriously challenged. Tom Miller won the 50 yard butterfly in 29.5, while the Flems won the freestyle relay in 1:50.0.

Ruddock eased into second place behind Jim McWilliams' first in the 50 yd. backstroke and the record-breaking medley relay team. The team of McWilliams, Erno Daniel, Van Stoecker, and Bill Butterworth set a new Interhouse record with a great 2:05.3.

Dabney edged out Page for third by half a point, which is just revenge for Page edging Dabney by half a point last year. Their main strength was in diving, where Johnson, Lutz, and Hartstein took the first three places. Page had one first, John Healy's 32.7 in the 50 yard breaststroke.

With the conclusion of first term's sports, standings are as follows: Fleming-104, Page-80, Dabney-72, Ruddock-64, Ricketts-56, Lloyd-40, and Blacker-32. The next sport is tennis, coming up.

Three Potato

(Continued from page 4)
 "The secret is to cut costs," he said. "The food must be inexpensive."
 "Surely you're joking," I said. "Our meal this afternoon was nothing if not a luxury."
 "Ha," he said. "It was creamed gopher."
 "Impossible! And yesterday?"
 "Fried rat."
 "Remarkable." I exclaimed,
 (Continued on page 6)

WOULDN'T YOU RATHER BE WITH NO. 1?

If you want a career that really gives you room to grow, we have a suggestion. Start with the No. 1 family of companies:

Humble Oil & Refining Company--Provides more petroleum energy to this nation than any other domestic oil company—literally No. 1—America's Leading Energy Company.

Enjay Chemical Company--One of the 10 largest chemical companies in the United States. As part of an industry marked by rapid growth, Enjay offers unusually strong advancement opportunities.

Esso Production Research Company-- Analysis and design work for drilling and production of natural gas and liquids, reservoir engineering using computers.

Esso Research and Engineering Company-- Basic and exploratory research and development of products and processes, engineering research and process design, mathematical research.

Start with any of the No. 1 family of companies and we'll help you grow—with frequent evaluations... development programs... encouragement to gain professional recognition—because that's the way we grew to be No. 1.

We need people in practically all disciplines, because our work includes oil and gas exploration and production; research; and manufacturing, transportation and marketing of petroleum and petrochemical products—as well as the management of all these operations.

There is almost no limit to the opportunities we offer—at every degree level. So go ahead... have a look at No. 1. See us on campus.

THESE ARE PLANS FOR PROGRESS COMPANIES AND EQUAL OPPORTUNITY EMPLOYERS.

... Four.

(Continued from page 5)

but inside myself I was raging. The world would best be rid of this monster.

"Ugh! ugh!" he coughed, when we started down the circular staircase. "It's damp in here. How far is it to this book you spoke of?"

"Just up ahead," I said. "But tell me more."

"Surely," he said. "Do you think the turkey you get is expensive? He! He!—it's papier-mache. And the stuffing is made from carbon paper. Ugh! ugh! ugh! . . ."

My poor friend's coughing echoed hollowly in the deserted corridor. "It is nothing," he said at last. "How much farther?"

"Just up ahead," I said. "Give me your hands and I'll guide you." I took his outstretched hands and clasped them together with a pair of handcuffs.

"It is nothing," I said, as he jerked back in surprise. "Just to help. Pray tell me more."

"Of course," he said. "Some days I don't feed the students at all—he! he!—I use mass hypnosis to make them believe there is food on their plates."

"No!"

"Yes!" In spite of the darkness, I could see the wild glint in the cook's eyes as our feet stirred up the dust on the floor. "He! he! he!" he laughed, "and that's not all. The vegetables are plastic! The meat comes from experimental animals in biology . . ."

"No!" I said, and my disgust must have shown in my voice, for the cook became suddenly apprehensive.

"Where are you taking me?" he demanded. "No one has ever come as far back as this corner of the library. Where is the book?"

"Yes, the book!" I cried, and tied him quickly to a corner book shelf. As I began to pile books in front of him he must have gotten a glimpse of my scheme.

"What are you doing?" he asked, and began to tremble.

I made no reply, but continued piling the books and cementing them in place.

"What are you using for mortar?" he quaked, fearful now for his life.

"Your own mashed potatoes," I answered. "They're better than library paste."

"Fool!" he cried in bitterness, "They are library paste. But you'll never get away with this. Someone will—ugh! ugh!—find me here."

"You know better than that. These are the History 2 reserve books, and there hasn't been a student here for years."

I picked up a copy of the California Constitution and blew the layered varves of dust off it. Throwing it on the pile, I knew that these ancient volumes were finally being put to good use. I

even found a stack of long-forgotten graphics books. I added them to the growing mound of books and the wall grew taller and taller.

The cook was silent as I piled up more and more books, and when there was just a silver of space left he let loose a high bitter wail. This continued for some minutes and then he burst into insane laughter.

"This is a joke!" he said. "Yes, an excellent jest—he! he! he!—we will have many a rich laugh over it in the dining room—he! he!—over our gopher . . ."

"The book!"

"Yes," he said, "the book. But—ugh! ugh!—it is getting late and they will be looking for us. Let us be gone! I have so much to tell you about the food—he! he!—about the vacuum cleaners I empty into the pie—he! he!—about the three-legged birds—he! he!—banana peels . . ."

"Let us be gone."

"For the Love of God, Montessorini!"

I sealed the small remaining crack with my Diner's Club card and left the cook behind me to die. I went to the Greasy and bought some potato chips.

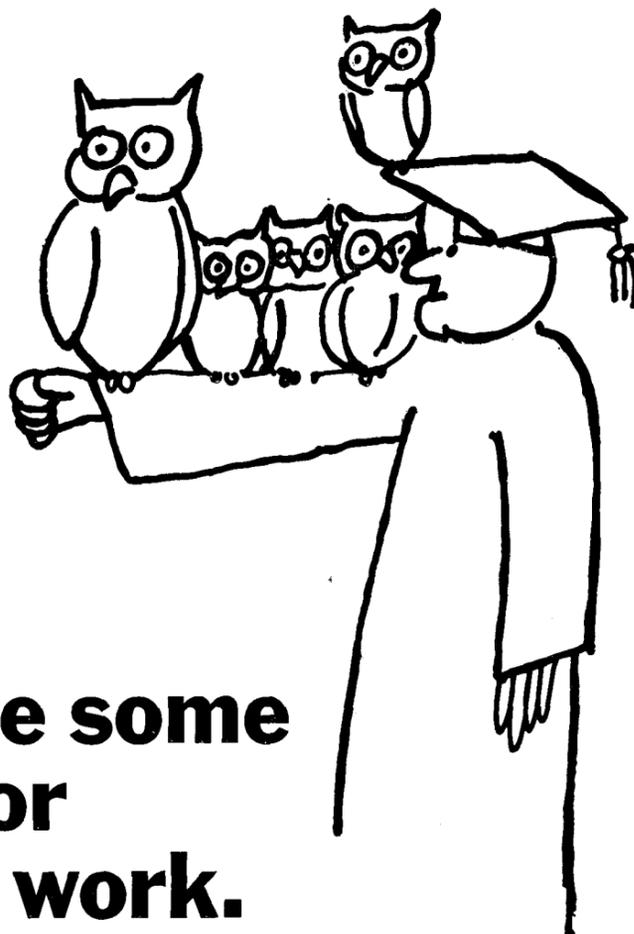
Ice House Blues

somehow he never really got around to singing many songs, but the way he tells the introductions is hilarious. He is the only comedian I have ever seen who uses visual sound effects, but that is the only way to describe his pacing up and down the stage and his use of his hands.

If any of these three are at the Ice House again, I recommend skipping Sykes, and seeing Moffitt and Davies if you have nothing else to do, but don't miss Paulsen.

MASTER'S CANDIDATES:

You had a pretty good reason for going on for your Master's.



Now here are some good ones for putting it to work.

For putting it to work with IBM. Reasons such as:

IBM is THE leader in THE major growth industry: information handling and control. Doesn't it stand to reason you can grow farthest with an exciting, continually growing company?

You'll be advanced as far and as fast as your talents and ambitions allow. That's why you

went on for your advanced degree, isn't it? To make the most of your potential?

You can choose from six major career areas with IBM: Computer Applications, Programming, Finance and Administration, Research and Development, Manufacturing or Marketing.

Yes, we *would* like to talk with you. You may be the bright, look-ahead kind of person we're looking for. And we could be the exciting kind of company you're looking for. So . . .

Whatever your immediate commitments, whatever your area of study, sign up now for an on-campus interview with IBM, January 17-18.

If, for some reason, you aren't able to arrange an interview, drop us a line. Write to: Manager of College Recruiting, IBM Corporation, 3424 Wilshire Boulevard, Los Angeles, California. IBM is an Equal Opportunity Employer.

*We cordially invite
California Tech
students and faculty
members to bank with us.*

*Complete banking services
including:*

Automobile Financing
Bank-By-Mail
Certificate of Deposit
Checking Accounts
(Bookkeeping by electronic automation)
Collateral Loans
Drive-In Banking
Escrows
Foreign Banking
Letters of Credit
Home Modernization Loans
Life Insurance Loans
Money Orders
Night Depository
Personal Loans
Real Estate Loans
Safe Deposit Boxes
Savings Accounts
Travelers Checks
Trust Services
U. S. Bonds

*Auto Banking Center at Colorado
and Catalina Office, 1010 East
Colorado and Citizens Commercial
Trust & Savings Bank of Pasadena,
hours: 9 to 4:30 daily; 9 to 6 Fridays*

PASADENA
Head Office: Colorado and Marengo
Colorado and Catalina Office: 1010 E. Colorado

LA CANADA
La Canada Office: Foothill and Beulah

**Citizens
Commercial Trust
& Savings Bank
of Pasadena**

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION
MEMBER FEDERAL RESERVE SYSTEM