Volume LXXI

Pasadena, California, Thursday, December 4, 1969

Number 10

New Trustees Bring A Variety Of Talents

by Phil Neches

The Caltech Board of Trustees will shortly install four new members. Two have been associated previously with the Institute; the other two bring a range of experience in business and government. All four are distinguished within their respective fields.

Robert S. McNamara served as Secretary of Defense under Presidents Kennedy and Johnson, and currently is president of the World Bank. Previously, he was president of the Ford Motor Company. In his years at Ford and at the Department of Defense, he gained a reputation as an administrator of the first order. He pioneered cost-benefit analysis in the Defense Department.

Interestingly enough, from 1965 to 1968, McNamara, as Secretary of Defense, served as Harold Brown's boss (You all remember, of course, that Harold Brown was Secretary of the Air Force before becoming President of Caltech). So, in a way, McNamara is still Harold Brown's

Dr. Ruben F. Mettler is one of Caltech's own: he took his B.S., M.S., and Ph.D. degrees here at Caltech. Thence, he went on to work for the Ramo-Wooldrige Corporation (precursor of TRW). Dr. Mettler has worked on Vela, OGO, the descent engine for the LEM on the Apollo program, modernizing the Minuteman system, and antisubmarine warfare for the Navy.

Otis Chandler comes to the Caltech Board of Trustees from the cold, cruel world of journalism. He is publisher of the Los Angeles Times and is vice-chairman of the Board of the Times-Mirror Company. Under his guidance, the Los Angeles Times has acquired a new look and editorial policy.

Last, but far from least, the distinguished biologist and Nobel laureate George W. Beadle rejoins Caltech as a Trustee. Dr. Beadle was a member of the faculty here when Continued on Page Five



-photo by Davis

Assembly Minority Leader Jesse Unruh talks with students in Dabney House before his lecture at Beckman Auditorium.

IHC Move Proposed

Negotiations are now going on between Caltech and Immaculate Heart College about the possibility of moving the IHC campus into the Pasadena area, probably right next to Tech.

IHC has planned for a long time to move out of their present facilities in Hollywood. However, they had planned to move to the Claremont area. About one month ago, many people at IHC became concerned that the planned move to Claremont would not be in the best interests of the school. When time came for the administration at IHC to sign a contract with Claremont Colleges, the administration at IHC asked for more time. They now must make a final decision by December 12.

At the same time, administrators from IHC met with Caltech people to probe the possibility of moving to the area around Caltech. These discussions are still going on, and no real decisions have been made.

It is expected that if IHC moved to the Caltech area, they would buy some of the land which the Institute now owns between Wilson and Hill north of San Pasqual.

One major difficulty has come from the government. The federal

Unruh Talks To Tech

On November 25 and 26, Assemblyman Jesse Unruh, former Speaker of the Assembly, was at Caltech. The idea was for both Mr. Unruh and the Caltech community to learn things. It may very well have worked. There were seminars on the future of science and on pollution control.

During an Olive Walk Talk, Assemblyman Unruh made his political views known on a number of topics concerning California. So far he may be one of the most undeclared candidates since Nixon. His formal announcement will come today, but it already looks as if he will be a primary Democratic candidate for governor.

Many Problems

Unruh's talk was basically on the problems facing California, which are indeed legion. One of this major points was that it is the job of the governor to provide the push needed to solve the problems of the state. He said, "The legislature is a melting pot . . . whose solutions are often mutually repugnant to both sides.... The promulgation of ideas, the push, must come from the Executive Branch."

Unruh was critical of the Reagan administration, especially his han-

dling of educational matters. He pointed out that half of the governor's item vetoes so far have dealt with the money for higher education, which is only one-tenth of the state budget. Unruh also stated that Reagan's popularity was based on scare issues, and that he must be beaten.

We Can Work It Out

On other problems, the assemblyman stated that he felt that oil and insurance companies should not be protected from taxation. He also stated that he was inclined to think that marijuana will be legalized, and placed in a similar position to alcohol. Our prison system was also criticized, as he said that "all our present penal institutions have proven is that they can make professional criminals out of amateur ones."

His most important comment on California's problems was that "physical limitations to our problem solving capabilities do not exist.... We do not have time left to waste in solving environmental problems." It is interesting to note that the only questions Assemblyman Unruh refused to answer were those dealing with possible Democratic opponents for the governorship.

* * *

Interhouse Is Going Dry

government had given IHC the

money to build two new buildings,

apparently with the understanding

that they be built in Claremont. It

is not certain at the present time

whether the government would

transfer the funds for construction

strongly favor moving here. In fact,

they seem to have influenced the

IHC in its decision to reconsider the

Most IHC students seem to

of the two buildings at Caltech.

move to Claremont.

No California Rainy Season

by Paul Levin

Either the powers that be liked Interhouse this year or didn't care enough, because again it didn't rain. This does not mean that there was no water; it merely means that most of the time the operators knew where it was going.

Instead of flooding their courtyard with people, this year Blacker House flooded it with water. These yellow brick pavements which crossed the water led to a hall of horrors-or love, depending on how one wished to use the ambient light situation. The lounge was complete with a throne for the Wizard of Oz. on which the wizard himself, or rather a likeness of him (better known around here as Richard P. Feynman), occasionally and mysteriously appeared. The dining room was turned into a stage for the Saint Elmo's Fire Lightshow Company, a group of proven effectiveness and quality.

Dabney Eats It

Though it was the last to begin preparations, Dabney House was the first to complete them. While a few on- and off-campus trolls were working on the Dabney-Eats-It-Elephant (more about this beast later), many more people were busily preparing for the grand feast that took place at 6:45 that evening. Hoping to live up their unofficial slogan, the Darbs (with a tremendous assist from Food Service) had king crab coctail, lobster, filet mignon, potatoes au gratin, Armenian pastry, and the white and red wines to go along with the fish and meat. Believe it or not Food Service can prepare an excellent

One Neck to Give . . .

Fleming House's two performances were the most unusual events of the evening. through their play to show the inherent superi-

ority of a certain school in Pasadena. The jokes ranged from poor to awful, but enough of them were understandable to make it enjoyable for even the outsiders. The high point of each performance was an attempt to hang the playwright. During the second performance at least, this was the crowning blooper. First of all the victim's safety cable broke, but the noose broke too! I hope Fleming showered the chief

Bring on the Lions

Lloyd House set about transporting its guests back to the fabled city of Troy. Their resident artist, E. Wing Fong, was clearly at it again: the head of their Trojan Horse was superbly done. Inside one could watch gory gladiator movies or watch John Messmer dancing with himself. The House also had a very realistic oracle: nothing said was comprehensible or believable.

Page House converted itself into a haunted house for the evening. The guests were greeted as they entered by a cadaver lying in a coffin. (It is rumored that no one lasted more than thirty minutes at this job.) From there the guests entered a dark passageway filled with cobweb-like threads, a very uncomfortable sensation. After viewing some unusual lighting effects one entered the lounge where "The Answer" was performing.

The courtyard of Ricketts House was really filled with machinery. What with their fountain, a huge yellow submarine, and the wierd lighting effects, it was almost difficult for the people to get through, especially with those trick doors.

Winter came to Ruddock House this year. Their courtyard became a remarkable facsimile of a glacier and

Continued on Page Eight



Fred Friendly, former director of news for CBS and successor to Edward Murrow, replies to recent speeches by Vice President Agnew which criticized the news media. Friendly stated that television newsmen feel that they should have longer programs and better support from either the networks or a government-subsidized public t.v. system. He also defended the need for "interpretive reporting" on the part of the news media.

Clean-Air Race Plans Told

Plans were announced today for a coast-to-coast collegiate Clean Air Car Race in which new kinds of

The contest is an outgrowth and expansion of the Great Electric Car Race which was run in the fall of 1968 between electric cars built and operated by Tech students and students from M.I.T. That race was won by an electrified VW bus, owned and operated by Wally Rippel, Caltech graduate.

The Clean Air Car Race will be bigger and open to more kinds of entries. The vehicles may be designed, developed, built and paid for by any kind of organization, including commercial companies and foreign groups. However, regulations provide that only college or university students may do the actual driving.

Organizers are Dr. Richard B. Thornton, M.I.T. professor of electrical engineering, and Dr. Jerome

Shapiro, Caltech professor of applied science. They have scheduled the race for September, 1970, and lower pollution vehicles-electric, ask that all potential entrants make steam, turbine, hybrids, etc.-will themselves known by a deadline of compete over public roads between next February 28. Prospective entrants may contact either organizer. A copy of the preliminary rules and other details may be obtained from the Institute public relations office.

The competition will consist of three parts. The first part, starting Sept. 2, will be a series of short-distance events emphasizing performance, safety, road handling, and energy consumption. The second part, beginning Sept. 9, will be a race from M.I.T. to Caltech. The third phase will consist of air pollution emission measurements to be made in California at the conclusion of the cross-country

Points will be awarded in each of the three phases of the competition. Prizes also will be awarded to the winner of each phase as well as to the over-all winner. Each entrant

Continued on Page Four

Editorial

I H C-We Want You!

Caltech is now presented with the possibility that a girls' school, Immaculate Heart College, might move into Pasadena, probably in the immediate neighborhood of Caltech.

The immediate reaction of Techers to this possibility has been one of jubilation.

However, many people are disturbed when they hear that IHC might have to buy institute land now slated for future development. These people are afraid that the future of Caltech might suffer if IHC were to move

We believe that the good that would be derived from having this girls' school next door would far outweigh the possible future effects on the

Further, we would like to point out that Caltech does legally have eminent domain over the neighboring land. This is a prerogative that Caltech has never used. However, if it were felt that the land which IHC might require would hurt the future development of Caltech, we could always apply our eminent domain in order to quickly recover the lost real estate.

We hope that this great opportunity will not be lost.

-Craig L. Sarazin

Dig That Beat

Scoops From Hallowed Hall

by Etaoin Schoredlu

Without a doubt the hottest news item of this week is the news about Immaculate Heart College. IHC, leaving their old site, were supposedly committed to moving out to join the Claremont colleges, but right now are considering a move to Pasadena instead. My sources say that the man who moved the mountain (to bring it to Mahomet?) is Institute President Harold Brown, who has several ins with the powers that be at IHC. Apparently the people at IHC now like the idea of Pasadena better than Claremont, but time is very definitely a factor, as construction must be done rapidly anyway, and it is not certain that the Federal Government, which provided funds for much of the new buildings, will approve a transfer of the site from Claremont to here in time.

If IHC should come to Pasadena, it is not certain where they would build. Some Institute sources say that we would probably sell them the Institute-owned land on the large block bounded by Wilson, San Pasqual, Del Mar, and Catalina. At the moment we own almost all of the block, and all that was slated to go in it in the future was a random building or two, for which we probably don't have the money yet. Would you let an Astrophysics building stand between Tech and IHC? Of course, the parking problem would be intensified by a factor of n around here, which is another matter entirely, but surely something could be done.

The Grape Seal

new Institute Seal, but it doesn't numbers of faculty abstained or really matter? Wrong, at least to ignored the meeting. Many physione organization here. The Book- cists and mathematicians did not, seems to be buying any of their effort to defeat the resolution. I paraphernalia with the new seal on guess we'll just have to be sure not it, although the old stock sold out to let any extra physicists in this quite rapidly.

Pity the IHC-Excomm Comcommittees over the last few weeks. For just two of the committees, Admissions Committee and Aca-

were 31 and 18 applicants, respectively. That figures to 7% of the frosh class who applied for Admissions (16). Could it be that students here are becoming more interested and active? . . . The Research Center doesn't think so. Jim Beck is worried about the lack of things doing, and wishes that anyone who has suggestions or would like to do something would get in touch with him.... For that matter, the ASCIT publications could all probably use some more help too. The Tech in particular could use a driver willing to donate an hour of time sometime Wednesday afternoon and again Thursday morning to help us get papers to and from our printer in Glendale. This is a paid position-see Moskatel or Schroeder about it.

Profs vs. Outside World

One of the things that the faculty Minority Admissions Committee is trying to do is foster better relations with Pasadena schools, and perhaps help cause junior-high and high-school students to become interested in science. One thing which is being considered to do this is a program of sending out professors to give lectures in science and math courses, their teachers willing, in local schools. Only volunteers would be sent out, of course. I suppose that the new Community Relations committee will have something to do with this

For those of you who like follow-ups, the final vote last week on the issue of expanding the size of the freshman class to 225 was So you don't think much of the 43-33 in favor. Apparently large because nobody however, leading a "last-ditch"

The ASCIT Musical may exist. mittee which had to make the Then again, it may not. If you'd student appointments to faculty like to help it exist, contact Bruce Britton in Ruddock. The show has not yet been chosen, but may well be either Finian's Rainbow or Milk demic Policies Committee, there and Honey. Time is short already.

The opinions expressed herein are solely those of the writers under whose by-line they appear. Only the upper left hand portion of this page represents the editorial opinion of the CALIFORNIA TECH and the undersigned writers. All letters received by 6:00 p.m. Monday evening will be considered for publication on a FIRST COME, FIRST SERVED basis; the CALIFORNIA TECH reserves the right to cut letters to a maximum length of 300 words if the context of the letter can be preserved. We disclaim all responsibility for errors in editing, printing, or timing of the letters received and/or printed.

Page Objects to Enrollment Increase for Next Year

Last week the faculty decided, by a 43-33 vote, to increase by 25 the size of next year's freshman class. In view of the present crowding in the houses, and the additional crowding that would result from such an increase, we consider this move to be extremely ill-advised.

We believe that this increase will result in a marked decrease in the quality of student house life. For the most part, the upperclassmen will be driven off campus, and many of the traditions and much of the flavor of student house life will

We feel certain that Page House will suffer greatly the burden of this increase in enrollment.

We are amazed that a decision of such far-reaching consequence should have been reached by such a narrow margin. It is hard to believe that the considered opinion of the entire faculty could have been determined by polling only 76 members of the faculty.

We request that this matter be brought up for another vote and that a complete polling of the faculty be taken at that time.

We have come to expect great discretion from the faculty and we are surprised to see it lacking in their recent decision to increase enrollment; we hope this matter will be remedied by a new and more complete vote.

> Sincerely yours, Fifty-four Members of Page House

Ed. Note: The names of the signers of this letter were deleted to save space. The signatures are posted in the Tech office.

See Who Wants IHC in Pasadena! Do You?

We feel that the Caltech undergraduate program could be improved by the inclusion of a broader humanities offering and a more heterogeneous student community.

A unique opportunity to accomplish this now presents itself in the possibility of the relocation of Immaculate Heart College near the Caltech campus.

A loose association of these two schools would allow a continuation of science as the primary interest of Caltech while providing the students of the Institute access to high quality programs in the Institute's Humanities Department and IHC's fine arts departments.

Exposure not only to courses but to a wide variety of art experiences and also to a large group of students deeply interested in the humanities would have a beneficial effect. A university atmosphere would be created and yet Caltech would still remain an institute dedicated to excellence in science. The quality of student life would be enhanced and yet Caltech would still admit only those who meet its high science admissions standards. As two independent schools, CIT and IHC would each be able to maintain the high quality of their specialties and yet just by being close complement each other's strengths.

We would like to see IHC move to Pasadena and hope that this opportunity does not pass because of a lack of expression of interest on the part of the Caltech community. Anything that you can do to help us in this effort will be appreciated.

-Bill Beranek R.A., Fleming -Bill Drake President, Blacker -Paul Engelking Vice President, Fleming -Ralph Grahm IHC Chairman -Stephen Horner ASCIT President -Eric Jensen President, Rickets -John Messmer President, Lloyd -Tom Miller President, Fleming -Chip Smith President, Page -Dr. Dave Smith Master of Student Houses

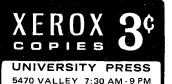
Editors' Note: This letter was also signed by Tim Tardiff, President of Ruddock, and Frank Zdybel, President of Dabney, and is whole-heartedly endorsed by your de facto editors, Paul Levin and Phil Neches.

Life at Tech Questioned; Solutions Proposed

As I sit in a dorm room at Stanford, I can't help but feel the void at which I am a student. The dynamic existence, the interest in learning, not just studying, the spectrum of activities, and the sense that you govern your own academic direction are all manisfestations of the spirit here. At Tech, I remember the frantic search for life and usual failure, the rigid course structure, and the boxing of academic interest (i.e. strict option selection).

The reasons behind this contrast

Continued on Page Six



PAT'S LIQUORS

NEAR CAL-STATE L.A.

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

> welcome to the Campus Barber Shop in Winnett Center Three Barbers to Serve You 7:45 to 5:15 Monday - Friday

catifornia 1ech

Volume LXXI

Number 10 Thursday, December 4, 1969

Published weekly during the school year except during holidays and exams by the Associated Students of the California Institute of Technology, Inc. The opinions expressed in all unsigned articles are solely those of the newspaper staff.

Editors-in-Chief Ira Moskatel Managing EditorsLarry Goldman Marvin Mandelbaum Copy Editor Paul Levin Sports EditorRichard Short Feature Editor . .Phil Neches Entertainment Editors ... Nick Smith

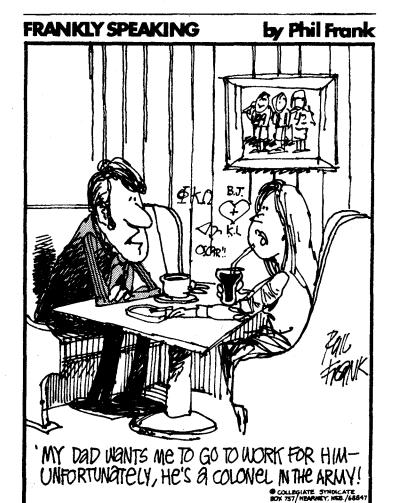
Photography: John Bean, John Fisher, Alan Stein.

Staff: D. C. Agnew, Bruce Britton Dave Dixon, Bob Dullien, Bob Geller, Roger Goodman, Henry, Jon Post, Etaoin Schroedlu Martin Smith, Brussel Sports, Mike Stefanko, Millikan Troll.

Business Manager Ed Schroeder Circulation Manager ... Metin Mangir

The California Tech Publication Offices: 1201 East California Boulevard, Pasadena, California, 91109. Represented nationally by National Educational Advertising Services, Incorporated. Printed by News-Type Service, 135 South Maryland, Glendale, California. Second class postage paid in Pasadena, California,

\$1.50 per term Subscriptions: \$4.00 per year Life subscription--\$100



The Third Wing

USA Out of CBW-At Last

Last week, President Nixon made in case of violations. the announcement that the United and since the United States has eastern half of the known universe.

The new policy announcement was based on a report by the National Security Council. Nixon also announced that the United agents from the list of things which States would use deadly or per- the United States would not use manently incapacitating chemicals first. Thus Nixon builds an image as only in reply to their use by a peacemaker, and at the same time another nation against us. Finally, he asked Congress to give final or San Francisco. He must do both approval to the 1925 Geneva accord of these things in order to try and on poison weapons.

This last must set a record which majority. could only be matched if the Senate States would no longer have an easy

ATTENTION

INTERNATIONAL STUDENTS

Call MARTIN LEWIN TRANSCARGO, INC.

2240 N. Figueroa St. Los Angeles, Calif. 90065

Specializes in

Overseas baggage shipping and Commercial shipping.

Air-Ocean-Truck Serving students for over 10 years.

Tel. 225-2347.

out as being a non-signatory nation,

There will be those who question States would dispose of its stockpile Nixon's motives for these sudden of bacteriological weapons. Even moves toward limiting warfare, but more important, future research the important thing is that the steps would be limited to immunization are being taken. Nixon's support of and safety measures. This is a major such things as the nuclear nonstep in protecting mankind from proliferation treaty, the arms limiaccidental or deliberate destruction, tation talks, and the British prosince such weapons are hard to aim, posal for an international ban on biological warfare indicate his enough of them to wipe out the wishes to avoid the possibilities involved in total war and all that it

> Nixon very carefully exempted tear gas, herbicides and riot control keeps weapons for use in Vietnam gain the active support of the weak

"Mankind already carries in its ratified the League of Nations next own hands too many of the seeds week. It means that the United of its own destruction," Nixon said. "By the examples that we set today, we hope to contribute to an atmosphere of peace and understanding between all nations."

I hope he means it.

David's Leather Works

Handmade sandals Belts and buckles. Handbags. Hats. Ceramics.

Custom-made leather garments of all kinds.

33 N. Fair Oaks, Pasadena Open Tuesday through Saturday 12-5, Friday until 9.

Wright & Logan

Registering For The Draft

To the best of our knowledge, all the information in this column is accurate at the present time. However, judgements by the courts or changes in the Regulations occur often. A counselor or lawyer should be consulted before taking any major action that will affect your Selective Service status.

REGISTRATION

Every male citizen of the United States is required by law to register in person with a local Selective Service board within five days after his 18th birthday. In general, male foreign students possessing a "student" visa do not have to register, while most other male non-citizens between the ages of 18 and 26 must register with a local board within six months after their arrival in the United States. There are important exceptions to these two generalizations that every non-citizen should check into with a draft counselor.

You may register at any local board office. When you appear at a local board to register, you will be asked to sign your name and place of residence on the Tally Sheet (SSS Form 4). A clerk will then prepare a Registration Card (SSS Form 1) which will include your date of birth, your mailing address, and your permanent address. These two addresses are very important. You will be assigned to the local board which has jurisdiction over the area in which your permanent address is located, no matter where you register. Once assigned to that particular local board, you will always "belong" to it: you can never change to another one. It is a sad but true fact that different local boards behave very differently. For

example, of the boards in Los Angeles, the Westwood board seems to be difficult to get some deferments from, the Long Beach board seems to be pretty good, and the Pasadena board seems to be fairly reasonable. It is also usually easier to get a technical occupational deferment from a board in an industrial area than it is from a board in an agricultural area. A judicious choice of permanent address can therefore prove to be extremely helpful to your future deferment plans. Any Caltech student can legally give his Caltech address or his parents' address as his permanent address or, if he should know of another local board he would prefer, he merely has to establish a residence address in that board's juridictional area and give that address as his permanent address.

The permanent address you give determines your local board asgive is used by that local board in its correspondence with you. You are required to answer correspondence the board mails you within a certain time period (usually 10 days or 30 days). If you fail to do so, you may be declared delinquent or lose your appeal rights. Students are liable to move around many times. If you once forget to notify your board of your new address, you will no longer receive the mail sent to you by your board. Selective Service mail is not forwarded. Therefore it is a good idea to give a stable address such as your parents' as your mailing address until you yourself establish a fairly stable address. Your parents can put your Selective Service mail in another envelope and mail it to you as soon as they receive it. This arrangement satisfies the law which requires you to keep your local board advised of an address through which it can correspond with you in a timely manner. If the last name of the people whose address you are using as a mailing address is different than you last name, give you mailing address as "your name" c/o "their

signment. the mailing address you

Continued on Page Seven

NEWS BRIEFS

IMPORTANT DEADLINE FOR CALI-**FORNIA STATE SCHOLARSHIPS**

The California State Scholarship and Loan Commission reminds students that the postmark deadline for filing for California State Scholarships is December 10, 1969. See Peter Miller if you have any questions about it.

SHELL GRANT FOR LECTURESHIPS

A \$5,000 grant from the Shell Oil Companies Foundation will be used for 1970 lectureships at Caltech. According to Dr. Clauser, chairman of the Division of Engineering and Applied Science, the grant will finance one or two lectureships, involving lectures open to faculty and students. Also, a general lecture at Beckman would be open to the public.

CELEBRATE HANUKKAH

Tonight, and all eight nights with candle lighting, undergrads, grads, faculty, and staff are welcome at Rodger Goodman's room, 48 Blacker, at 7:15. For more information, call ext. 2170 or 449-9910.

KUPPERMANN TO HEAD COMMITTEE DEALING WITH COMMUNITY RELATIONS

Dr. Aron Kuppermann, professor of chemical physics, will head a newlyreorganized Institute committee on reextions with the community. Dr. Harold Brown suggested that two topics of concern to the committee will be education in local schools and the quality of the environment.

OUTLOOK BRIGHTENED

The mirror of the 200 inch telescope at Mount Palomar has been rebrightened in a delicate vacuum chamber procedure. The new coating is only 1/150,000 of an inch thick, with about one-tenth of a gram of aluminum adhering to the surface of the 14.5 ton mirror. The new coat should be good for nine more years of historic star

THE MESSIAH IS COMING TO PASADENA!

Handel's "Messiah" will be performed for the thirty-third successive year this December 10th at the Pasadena Civic Auditorium one night only. Tickets are \$4, \$3, and \$2 and may be had at the Civic Auditorium Box Office, 300 E. Green St., and at all Mutual, Liberty, and Ticketron agencies.

AFRICAN EXPERT TO LECTURE AT DABNEY

Victor DuBois, an expert on Sub-Saharan Africa, will be talking in 208 Dabney from 1 to 3 p.m., Tuesday, December 9th.

LOVE NOTE

Pretty one: After rain I hear only the quiet sound of the rusting of shining armor. . .and I love you. . . .Melissa





This "patch" idweise

identifies the world's best beer drinkers!

ANHEUSER-BUSCH, INC. . ST. LOUIS

IMMEDIATE VENTURE CAPITAL. AVAILABLE

for new businesses

We are looking for graduate students who have sound ideas for new products or services as well as the capabilities to head up as principals new organizations to see the projects culminated.

Reply only in writing, submitting detail plans. Do not include confidential information.



25 Broadway, New York, N.Y. 10004

UNDERWRITERS AND INVESTMENT BANKERS

Henry Miller Night Comes to Beckman December 5

by Pearl Fles

The Henry Miller Odyssey, a two-hour color film biography of a "diabolically truthful man," made by Oscar winner Robert Snyder ("The Titan," "Casals") will be screened in Beckman Auditorium on Friday, December 5, at 8:30 p.m. In this remarkable film, Miller describes his childhood in Brooklyn, his adolescent years working first for his father as a tailor, then as a Western Union messenger, and the impact, after his "escape," of Paris in the thirties which spawned his books, Tropic of Cancer, Capricorn, The Air Conditioned Nightmare and the now classic Colossus of Marous si. We meet Miller's friends, Lawrence Durrell, Alfred Perles, Anais Nin, Jakob Gimpel and others. This is the singular record of a singular

For ticket information, call 793-7043 or campus extension

Ursula Hyman & Paul Levin

Susan Maynard & Benes Trus

TECH Opera Staff

in that it can be better than the

sum of its parts and even better

than its weakest link. It just boggles

the mind. This was indeed the case

when the TECH Opera Staff visited

the Dorothy Chandler Pavillion of

the Music Center to hear Mozart's

The Marriage of Figaro performed

by the New York City Opera

an orchestra concert. The orchestra

was outstanding that night. They

seemed to sense the lightheartedness

that was required for this work and

managed to convey this through

their music, even in the overture

preceding Act I. The harpsichord

Play Without Words

other operas, Figaro does not have a

very profound plot. However what

plot exists is witty and lively. The

acting left something to be desired.

While the facial expressions on the

characters were good, their bodies

were for the most part stiff and

immobile. A notable exception to

this was Anne Elgar playing Su-

sanna, who was versatile in move-

ment and form. Norman Treigle

(Figaro), too, was better than the

An opera is also a play. As most

player was especially proficient.

Among other things an opera is

An opera is an unusual art form

AND WHY NOT?

Marriage?

Company.

Dan O'Neill **BODKINS**



The Critical Ear Hot Rats Is Straight

HOT RATS: Frank Zappa; Bizarre, Warner-Reprise RS6356.

Hot Rats comes on with all the super freaky trappings--strange name, Bizarre label, weird cover art, and Frank Zappa. When you listen to the record you are inclined to check the label again. Zappa has finally produced the ultimate in bizarre sounds, Frank Zappa playing straight music (or at least as straight as Frank Zappa will ever get).

Zappa is branching out from his

girl comes out dressed as a young

boy and attempts to seduce almost

every female lead . . . (The role of

Cherubino was originally meant for

a boy soprano.) However, under

these circumstances Patricia Kern

was a moderately reasonable actor.

The scenery, lighting and costumes

Do, Re, Mi

singing. With all due respect to the

difficulties of singing English,

clearer enunciation was desirable. A

libretto was definitely helpful. The

four major singing roles, played by

Anne Elgar, Marilin Niska, Norman

Treigle, and Richard Fredricks, were

this performance left something to

be desired, the entire work was

quite enjoyable. The TECH Opera

Staff highly recommends that others

attend these performances as both

an educational and an enjoyable

Editors' Note: First of all we wish

to thank the Chandler Pavillion for

supplying us with the two comple-

mentary tickets. Secondly, if the

ticket prices seem staggering, it is

because 200 people and fourteen

semi-trailers had to be brought from

New York to make these perfor-

mances possible. Thirdly, why

Though the individual parts of

equally well performed.

The major portion of an opera is

were superb.

experience.

previous role as head mother in The Mothers of Invention. The Mothers recently disbanded saying they had served their intended purpose and they are now doing new things individually. For Frank the new things include producing on two sub-labels of Warner-Reprise,

Straight and Bizarre. This latest release from Bizarre is

quite well done, unlike the earlier Wild Man Fischer Album. Zappa has teamed up with Ian Underwood who plays piano, organ, flute, clarinet, and sax, for Hot Rats. Eight other musicians helped out with various cuts. The album is

principally instrumental. Only one cut, "Willie the Pimp," has vocals and they are short. The sound can probably be best approximated as Big Band (you know, like "Now from the lovely Under Arms in beutiful downtown Burbank, it's time to swing and sweat with Charlie Burnett"). If the drums were toned down just a touch you could probably sneak most of the

stuff into the Coconut Grove. How you'd get Zappa in is another question. It would probably be best not to announce tittles either, since "The Gumbo Variations" or "Son

of Mr. Green Genes" just doesn't give the right impression of what the music is. The album proves what has been

suspected for a long time-- Frank Zappa is really a reasonable musician. Without going into his normal droll musical humor, Zappa has come up with very entertaining music. The cuts are long, averaging over seven minutes, but not monotonous. "Willie the Pimp" borders on a rock jam session but the remaining five cuts stay pretty much clear of rock music. The heavy use of woodwinds and throwing in a few violins has put this into the class of Big Band Jazz. Incidentally, the big band sound is a moderate technical accomplishment since on some numbers there are

fans probably are hard to surprise Continued on Page Six

only three musicians. Frank Zappa

E. POWER BIGGS: Historic Organs of Italy; Columbia MS 7379

As the title implies E. Power Biggs has recorded performances on five organs in Italy built in the 15th through 19th centuries. These organs are smaller than those one normally thinks of for the performance of classical organ music. Typically they have only one manual and a rather limited number of stops which emphasize a light, singing treble. To properly present these instruments, Biggs has chosen works by Italian composers who were contemporaries of the instru-

Quite predictably the sound is not the familiar full majestic sound of a large organ. The very light orchestration makes the organ seem much closer to a piano or harpsichord than a more fully stopped organ. This is not meant to imply that the color of organ music has been lost. Indeed some of the stops are so colored that they could give a synthesizer competition. (Those who contend that Switched-On Bach is an unnatural sound for classical music should listen to these organs before deciding.) The pieces do have a more solo than orchestral quality, however. The specialized nature of the record will probably limit its appeal to those with specialized interests.

-James Henry

ARTHUR; or the Decline and Fall of the British Empire: The Kinks, Warner-Seven Arts-Reprise 6366.

"Arthur" has got to be one of the most packaged albums in history. The review copy came with an over-jacket, two photos, a letter, and four press releases. The gist of the whole thing was that "Arthur" was to be the best album of British origin of the year. They came close, but "Abbey Road" is better, and many others may yet be.

"Arthur" is actually an excellent album. It is really the score of a television show, and holds together by itself much better than either "Tommy" by the Who or the "Hair" album. It has excellent rock music and lyrics and is certainly the best thing ever by The Kinks.

"Arthur" is not a remake of Camelot. In fact, it is about a little

man named Arthur Morgan, who was named for Prince Arthur William Patrick Albert, first Duke of Connaught and Strathearn and Earl of Sussex, third child of Queen Victoria. Arthur has spent his whole life either laying carpets or being one. He is very proper and middle class, and has his little house and car. He lived through the wars and lost a son and a brother to them. In his lifetime an empire has vanished.

The album contains some very moving songs, particularly "Victoria" and "Some Mother's Son." The former is an anthem of allegiance to the Queen and Empire that stretched from "Canada to India, Australia to Cornwall." The later song is on the sadness of war, and the deaths it causes.

Don't be turned off by the pushy publicity for this album, just listen to it. I've got a feeling that if you do, you'll buy "Arthur," the second-best album out of England this year.

-Nick Smith

Penalize Pollution Continued from Page One

must participate in each of the three parts.

The transcontinental race will be separated into six legs between Cambridge, Cleveland, Chicago, St. Louis, Oklahoma City, Albuquerque, and Pasadena. Each leg will be started at a prescribed time on successive days. For each leg, each entrant will be allowed up to ten "time outs." No time out will be less than 30 minutes or more than one hour. Time outs are for activities such as charging, refueling, or making repairs. All existing traffic laws must be obeyed.

Recharging stations for electric car entries will be arranged by the race organizers in advance.

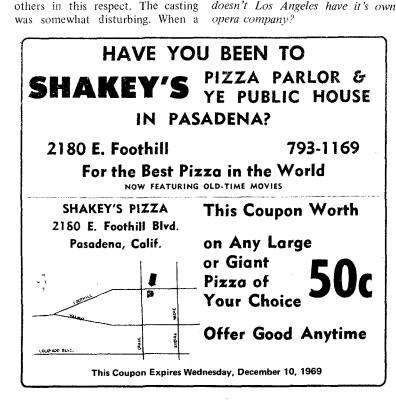
No vehicle will be barred, provided it produces less air pollution than is specified by the 1974 California standards. However, any competing vehicle that pollutes the air in towns or cities will be penalized.

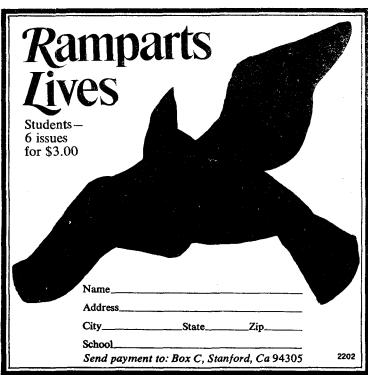
an care of the care

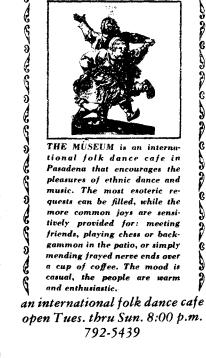
THE MUSEUM

103 SO. FAIR OAKS

PASADENA







open Tues. thru Sun. 8:00 p.m.

Wed 7:30 - English Traditional Dance

Post Office Miscellany

1201 E. California Blvd. 91109

by Nohow Noway

The power of Zip Code is Supreme. Take, for example, the case of J. Random Smith (the name has been changed to protect the innocent) of Blacker House two years ago. Participating in a contest to minimize the number of characters necessary in a mailing address, he had a friend send him a letter addressed to "S, Bl, 91109." It arrived promptly enough at 91109 and somehow was sent to Caltech. Someone mistook the second line to be "Bi," and so it was sent to biology. The office staff did not really know what to do with it; they sent it to Blacker, where a frosh dutifully deposited it in the "S" box.

This true story led many to believe that Caltech has its very own zip code, but alas, we have other bedfellows. The most routine neighbors are the Pasadena main post office, the Postmaster, General Delivery, and Post Office boxes A to Z and 1200-1999, as well as city hall.

We Are Not Alone

More interesting, though, are the members of what might be termed an educational-financial-industrial complex. Caltech must share the academic limelight with the Pasadena Unified School District and (yes!) Ambassador College. Department stores include Bullocks and F. C. Nash & Co. There are also stalwarts such as the Huntington-Sheraton Hotel and the Independent-Star News office.

Hartford may be the insurance capital of the world, but 91109 has offices of Allstate, West Coast Insurance Agency, General Insurance Corp. of Fort Worth, Houston Fire and Casualty Insurance Co., and Motors Insurance Corp. Other financial insititutions are Bank of America, Wells Fargo Bank, Mutual Savings and Loan Association, California Savings and Loan League, Wesco Financial Corp., and Marble Mortgage Co., a division of United California Bank.

The real fun begins with firms such as Endevco Corp., Bendix

United Geophysical Corp., Avon Products, Air Logistics Corp., Consolidated Electrodynamics Corp., General Motors Acceptance Corp., Bell and Howell, Burroughs Corp., Dickinson Traffic Service, and the Stuart Co. division of Atlas Chemical Industries.

As one may see, 91109 is a special zip code for receivers of large quantities of mail. Deliveries are made directly by the post office on routes that are separate from zip areas that are designated by a strictly geographical method.

Despite the thrills obtained from using very short mailing addresses, the Caltech Mail Room recommends spreading the word: "your name, your house, California Institute of Technology, 1201 E. California Blvd., Pasadena, Calif., 91109." If all else fails, be sure to remember that also within 91109 is the office of World Wide Missions.

The Dillards are difficult to describe. They are mostly a country group, with a lot of humor thrown in. They are fun to watch and to listen to. They are good at a place like the Ice House, because they had real audience rapport that is

The Dillards consist of Rodney Dillard (guitar and vocals), Mitch Dillard (bass), Fingers Webb (Mandolin?), Paul York (drums), and a banjoist whose name may or may not be Herby. Mitch called him several different things during the show.

The Dillards do both new and old songs, and do them well. The ones I like best by them are 'Someone Like You' (it's played

on the radio) and "Shady Grove." I think the Dillards have shown themselves to be one of the two best country groups around, the other being Poco. They have two new albums, one of which may not be out yet, "Copperfield" and "Wheat Straw Suite" (containing "Someone Like You"). From what I heard, these two Dillards albums will be worth buying.

Mary McCaslin was also on the show, and was quite good. Somehow she reminds me of a combination of Joan Baez and Joni Mitchell, only doing other people's songs. She did "Help" and Joni Mitchell's song, "Nathan Lafranier," both of them fantastically. On the

Continued on Page Six

THE CROSSED

HEAR THE SOUND OF MY FEET WALKING DROWN THE SOUND OF MY VOICE TALKING ... by Dan O'Neill, Glide Urban Center Publications, \$3.95.

Most of you have seen some of Dan O'Neill's work, since we carry his "Odd Bodkins" comic strip in this paper. Well, this is a whole book of "Odd Bodkins," but written and drawn as a book rather than as a collection of strips.

"Odd Bodkins" takes place in a somewhere that's half-way between here and Magic Cookie Land. Roads and oceans and celestial bodies wander about for convenience. The sun and moon have faces and talk to each other. It is the home of the only Batwinged Hamburger Snatcher and the Magic Cookie Bush. Hamburgers and oceans discuss metaphysics, and the hills are alive with the sound of "Awks."

Dan O'Neill swings rapidly back and forth between hilarious antics and serious thoughts in this book. As far as elaborate chains of thought or lack of it, it outdoes even "Pogo." Most of the book is done without color, because Dan O'Neill left it in the form of a coloring book for felt pen.

Most of the book is impossible to describe, so I won't even try. If nately, this review doesn't include you have any sense of humor at all, samples of the drawings, but I will

even a strange one (cassowary), you will like this book. If you can't scrape up the money (it's a huge book) try and get someone to give it to you for Christmas. It's worth the effort and/or money.

Just remember, the moon knows the end of the joke, and hope that God watches out for rocks.

--Nick Smith

Grooks 1 and Grooks 2 by Piet Hein, published by Doubleday, \$1.45 each in paper back.

Piet Hein is a strange man. He is a poet, scientist, designs games for Parker Brothers, and designed the odd shape for the Stockholm city center. In his spare time, he writes Grooks.

Grooks are little, aphoristic poems, accompanied by a drawing, and usually saying something about people. It is sort of a free-form, illustrated haiku. They were started by the Danish Resistance during the German occupation. Sometimes they were code, sometimes just fun. It is hard to say very much about books like these, except that they are exremely good. They are priced rather steeply, but they are probably worth the price. Unfortugive a couple of the best little

"My old clock used to tell the time and subdivide diurnity:/ but now it's lost both hands and chime and only tells eternity."

"The universe may be as great as they say./ But it wouldn't be missed if it didn't exist."

And my personal favorite, from the cover of Grooks 2 "Love while you've got love to give./ Live while you've got life to live."

-Nick Smith

New Trustees

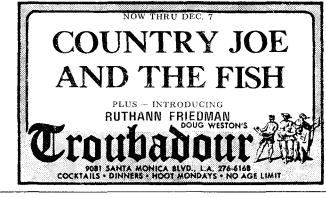
Continued from Page One

he won his Nobel Prize in 1958 for his work in the role of genes in controlling biochemical reactions in the bread mold neurospora. Dr. Beadle returns to Caltech from his position as president emiritus of the University of Chicago.

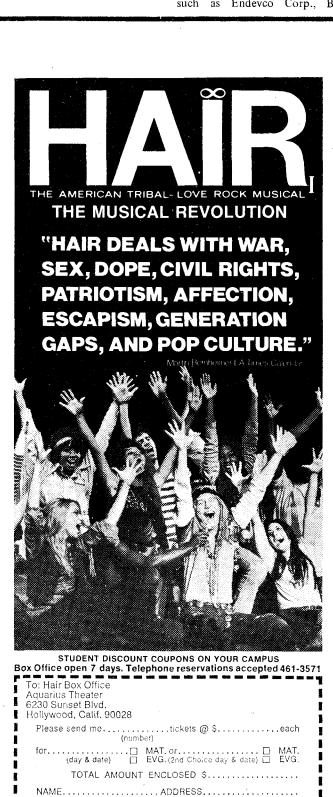
Thus, the new trustees represent an unusually diverse and talanted group of men; all have been leaders in government, journalism, science, and engineering. They are well aware of the challenges which, both in the present and the future, will be theirs to cope with.

Fall Sports Banquet Friday

The Athletic Banquet for participants in the fall sports will be held tomorrow night at 6:00 p.m. in the Page House dining room. The banquet will feature ceremonies honoring the fall sports participants, and a steak dinner. Tickets are still available from the coaches or from Bruce Ault, ASCIT Athletic Manager.







. STATE.

ues, thru Thurs Evgs. at 8.30 – \$7.50, 6.50, 5.5. Fri. at 8.30 – \$8.50, 7.50, 6.50, un. at 3.00 – \$6.50, 5.50, 4.50, and 7.30 – \$7.30, 6.50, 5.50, at at 6.30 and 10.30 – \$8.50, 7.50, 6.50. Make check or money order payable of Aquarius Theater. Please enclose a stamped, self-addressed envelope and list lternate dates.

MAIL ORDERS FILLED PROMPTLY

Life At Tech

Continued from Page Two

can in part be explained by Tech's small size and lack of coeducation, but not entirely. The student body, according to an ex-Techer, is plagued by having only four types of persons, a straight science major, a straight math major, a freak science major, and a freak math major. This classification is naturally full of exceptions, but it still governs the sense of the campus.

Small, But . . .

The small size of Tech is here to stay, coeducation is coming, but even this may not significantly improve it here if the spectrum of students and thoughts are not widened.

No matter what Techers were like in the past, new freshmen are just not getting turned-on by it here. I have observed since my first year here the large number of students that fled even though they have been able to get by here. Many are now at schools such as Stanford.

Academics at Fault It is my belief that Tech's academic system is largely responsible for the loss of this vital part of its student body. Naturally, with this segment gone, the system can more easily perpetuate itself. The system tries to hide from those that stay the realization that they can and should decide what they are interested in and what they want to get an education in. Students pay to study at this institution, it seems logical for students to decide what they want from it. It is only when they study what interests them and feel they are governing their learning process that true enjoyment of learning can occur. A rigid educational program robs the students of a part of their education, to develop the ability to learn what to learn.

How often at Tech I feel that daily life at Tech is a series of kissing-off and forced studying periods. There seems to be a repulsion from studying but not an attraction to learning. The principle exists that one should suffer through Caltech to obtain the sacred gift of a BS. This appears ridiculous to me, learning should be an enjoyable experience, not tor-

Continued on Page Seven

space filler wins!

Zappa Rats

Continued from Page Four

but he should come close with Hot Rats. His message for this album is probably an obscure sign on the cover. "Shame on you. You didn't trust Mothers.'

-James Henry

Editor's Note-For comparison here is the Warner/Reprise blurb on the same record:

"Frank Zappa, with the help of such illustrious/revolting sidemen as Captain Beefheart, Ian Underwool, Jean Luc Ponty, and Willie the Pimp, has come up with a solo album even more repellent than the last Mothers offering and Lumpy Gravy combined. Critics everywhere will very nearly wet their pants, Stravinsky will go a little grayer, and the public will get a little more paranoiac because of it, while Zappa, comfily ensconced in Laurel Canyon, will threaten to retire to a career of producing Phil Spector & The Teddy Bears singles if it doesn't make number two on the easy listening charts. Keep on doing it to our heads, Frank."

David Miller

Random Garbage Premieres

ANNOUNCING A NEW COLUMN

Intended to be a regularlyappearing feature of commentary, humor, and random garbage, probably resembling Joseph Alsop or Art Buchwald as much as the Tech resembles the L.A. Times. Random Garbage:

The Pantry is selling ordinary popcorn in black boxes which proclaim their contents to be SCREAMING YELLOW ZONKERS! Much advice on the care of zonkers is written on the box: "Tuck them in at night," "Kiss your zonkers if they get lonely and start to cry," and similar admonitions.

Somehow I find the idea of applying such a horrible name to honest popcorn repulsively fascinating, so here are a few names of that ilk for other things. Let us now call food service steaks, BOUNCING PINKISH-BROWN MANDO-FRACTERS! and B&G electric carts can be WHEEZING WHITE FROONDAMARBERS! the Feynman physics books must be PONDEROUS RED NONGROK-KERS! and Millikan Library becomes THE INELUCTABLE BLACK IMPOBLOMISH! (it seemed too gross to call anything about Millikan ponderous).

I can't stand to think up any more of these. So, in the interest of generating space filler, I present:

Advice for Perplexed Aristotelians Dear Aynn Randers,

Every day for the past week when I have locked up the house to go somewhere, I have apparently locked in someone who turns all the furniture upside down, writes obscenities on the mirror in lipstick (backwards, so I can't read them) and sets copies of The Complete Works of Thornton Wilder in odd places where they will fall on me. How can I deal with this problem in an individualistic manner?

–Bewildered

Dear Bewildered,

Before you leave check the premises.

Dear Aynn Randers,

My friends say I always make agreements I can't possibly keep. It's true, but I hate to say no to anybody. How do I solve this problem?

-Wesley Mouth Dear Wes,

Check your promises. Dear Aynn Randers,

The frammises on my GT are coming loose. They don't do anything, but they look so groovy that I hate to get rid of them. However, it will cost a lot to get them fixed, and if I leave them the way they are, I'm sure to have an accident. What can I do?

"Gran Turismo" Armstrong Dear G.T.,

Do you think I am a car mechanic? I prefer to deal with loco motives. It looks to me as though you'll just have to chuck your frammises.

Frets & Frails

Continued from Page Five

latter, she sounded almost like Joni Mitchell. She also did a social commentary song called "Windy Day at Kittyhawk," in a key she referred to as "D weird." Mary McCaslin has an album called "Goodnight Everybody," on the Barnaby label. If you dig singers like Joni Mitchell, then I suggest you give this a listen.

The other feature on the show was a comedian named Gary Davis. He was pretty good, and had the audience really on his side during his best routine, about the Ralph Williams of pornography. I've seen better comedians, but there are worse ones with their own television

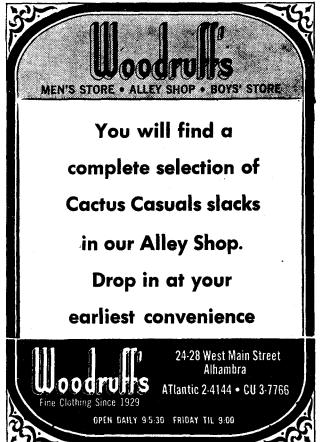
-Nick Smith





Thru Dec. 14 DONAL LEACE **RUSTY STEGALL**

KEN GREENWALD



Guibas Proposes Teaching Awards

by Leonidas J. Guibas

"Where the rewards of valor are the greatest, there you will find also the best and bravest spirits among the people."

-Thucidides

In a recent article of mine in the California Tech (October 21, 1969) expressed the opinion that a young faculty member here at Caltech finds himself in an atmosphere where all prestige and material rewards are associated with competence in research. Consequently teaching ceases to have any importance and it comes to be considered as a burden that prevents one's full-time devotion to research activities. As I believe that this situation is harmful to the quality of undergraduate education here, I proposed in that article several remedies to the present state of affairs. One of them was the establishment of awards to be given by the undergraduates to selected faculty and graduate teaching assistants for excellence in teaching.

My conviction that such awards. if properly handled, can accomplish a useful function was strengthened by discussions I have had with several of my own professors and

other faculty members. Several of them pointed out to me that they had difficulties in evaluating the effectiveness of their own teaching due to lack of feedback from the students. Now, in the process of selecting the recipients of these awards, a good deal of information will have to be collected concerning undergraduate teaching which, if then made available to the faculty, would provide exactly this needed feedback in an organized form. So these awards or prizes, besides being an expression of the appreciation of the students towards selected faculty for their efforts in teaching, would also provide a lot of practical information about concrete improvements in teaching practices.

Difficulties

Unfortunately there are serious difficulties in making such prizes fair and objective so a great deal of attention must be paid to the selection mechanism. After extensive consultation with the Educational Policies Committee, I settled on the selection process described

First of all a maximum of five prizes should be awarded annually

Continued on Page Seven



Wright & Logan

Continued from Page Three

name" or else the mailman may not deliver your mail there. Those who gave their mailing address as the same as their permanent address to avoid any possible slip-up by Selective Service in assigning the local board. They should wait until after they have received a Classification Questionnaire from their local board and have returned it and then notify the board of a change of mailing address to the stable

THE CLASSIFICATION QUESTION

Within several weeks after you have registered, your local board will send you a Classification Questionnaire (SSS Form 100), which you must fill out and send back to the board before ten days have elapsed since the date it was mailed or given to you. If it is given to you when you register, take it home to fill it out. In the Questionnaire, you are asked for information on a wide variety of topics: occupation, education, physical condition, dependents, etc. The information you furnish will be used by your board to determine which, it any, deferments or exemptions you may be eligible for. If you should omit some information on your Questionnaire and later try to submit similar information in order to get a deferment or exemption often your local board will refuse to believe you. This is particularly true for those claiming conscientious objector status, hardship deferments, or medical deferments. It is therefore very important to give yourself the benefit of the doubt on any question in the Questionnaire. For instance, the strict interpretation of conscientious objection implied in the Questionnaire causes most registrants to consider themselves ineligible for conscientious objector (C.O.) status. They are unaware of the Supreme Court's Seeger decision, which declared that belief in a Supreme Being is not required in order to claim C.O. status, and a recent Massachussetts court decision (in U.S. vs. Sissons,), which stated that individuals who are merely opposed to the war in Vietnam may still be classified as C.O.'s. A prominent L.A. draft attorney feels that any prospective registrant who is concerned enough about the draft to seek advice should claim to be a C.O., since the registrant is likely to be firmly committed to conscientious objection by the time he graduates from college but will have a hard time getting recognized unless he claimed to be a C.O. on his Questionnaire. Similarly, in the medical section of the Questionnaire, you should list every ailment you have had or now have, no matter how trivial it seems. If you have very convincing medical records, attach them. Otherwise add a note stating that you will send the records later. Every question on the

1758 E. Colorado

449-9705

SPECIAL SHOW! Wed., Dec. 10 Only

Miss Scarlett O'Hara, the rawest, risque-est comedian in Pasadena, will be featured. Come and try to outwit her. The audience participates in this act. Another Hi Life act for broad-minded 21-year-olds. Admission free upon presentation of a Caltech I.D.

Ouestionnaire should be answered just as carefully.

Before you return the Questionnaire to your board, get a Xerox copy of it. Then send the Questionnaire Certified Mail, Return Receipt Requested. When you get the receipt back, attach it to your copy. Follow the same procedure with all correspondence to your draft board. Then the burden of proof is on them to show that you did not mail something. Make sure your Selective Service number is on all your correspondence with the boardso at they will correctly place your correspondence in your file. Keep everything your board sends you. Avoid phoning your board, since you won't be able to prove what was said. Write, instead.

The next column will be on student deferments. We strongly advise anyone who has not yet requested a II-S student deferment to wait and read the column before doing so, since the II-S deferment is the most dangerous deferment you

Trustees Hear Student **Views At Palm Springs Meeting**

The Caltech Board of Trustees held its annual meeting during the weekend of October 31 to November 2 at the Smoke Tree Ranch in Palm Springs. Most of the trustees were in attendance, as well as other members of the Caltech community invited to participate. The latter group included some administrators, deans, chairmen of divisions, other faculty, undergrads Stephen Horner, Peter Szolovits, Bob Fisher, and Jim Beck, and grad students Richard Nielsen, James Pearson, and Kostia Bergman.

The two Friday sessions dealt with the topics "What do we want Caltech to be like 10-20-30 years from now?" and "Governance and decision making at the Institute."

After a business session Saturday morning that was open only to the trustees, there were three more panel discussions on "Interaction with the community," "Potential campus disruptions," and "The Caltech Experience: Undergraduate and graduate teaching, research, life, and financial support.'

In the sessions no real decisions were made. Rather, the weekend was a chance for greatly-needed interchange of ideas between all segments of the Caltech community. The most valuable outcome was the beginning of understanding of the cooperation necessary to maintain and improve Caltech's quality.



lighting ceremony on the mall between Throop and Millikan at 5:00 p.m. Monday, Dec. 10. The Glee Club will sing.



Beavers Maintain Perfect Record

by Richard Short

The Caltech football team regained the consistency in its record that it lost last year by defeating the University of California at San Diego. The Beavers finished the 1969 season with a "perfect" record of eight non-victories in as many

The Claremont-Harvey Mudd junior varsity demolished Tech 34 to 0 in the last game of this year in Tournament Park last Friday. C-HM scored 7 points in the opening period, 13 in the second quarter, and they added 14 more in the fourth period.

The winners gained 317 yards passing, including a 44 yard touchdown pass. They compiled 23 first downs and gained 194 yards on the ground. One of their touchdowns came on a 45 yard return of an intercepted pass.

The Caltech offense declined considerably from its performance of the previous game. The Beavers gained 65 yards rushing and just 35 yards passing. They had 9 first

SPROTS MENU by Brussel Sports

TECH Vegetable Editor

Thursday, December 4: VARSITY WRESTLING, at Azuza Pacific, 7:30 Friday, December 5 BASKETBALL at L.A. Baptist, Varsity at 8:30, frosh at 6:30 — Saturday, December 6: SWIMMING, Cal State Fullerton here at 11 a.m. — WRESTLING vs. U.C.S.D. here at 1 p.m. -- FENCING, Caltech, Pomona, San Diego State, UCSB at Cal State L.A., 1 p.m. — BASKETBALL at So. Calif. College, varsity at 8:30 p.m.; frosh at 6:30 -- Tuesday, December 9: JV BASKETBALL vs. Cal Baptist, here, 6:30; Varsity at 8:30Wednesday, December 10: WREST-LING vs. Pasadena College, here, 4:30.

FALL SPORTS BANQUET Friday, December 5, 1969

See your house athletic manager or Bruce Ault in Page for more details and tickets.

Azusa Pacific Tonight With Last Loss

by Richard Short

The Caltech Varsity Wrestling Team will have its first dual match of the season tonight at Azusa Pacific College at 7:30 p.m. The Beaver grapplers will have six returning lettermen and an excess of relatively inexperienced wrestlers to choose from for the other four weight classes.

Senior Alan Beagle, in the 190 pound weight class, heads the list of returning lettermen. Beagle took sixth in the nation last year in the NAIA (National Association of Intercollegiate Athletics) tournament and should do better this

Other veterans on the squad include Bruce Johnson in the heavyweight class, Dennis Cox at 177, Randy Lewis at 142, and Mark Morris at 118. In addition, senior Derry Hornbuckle, the only four year man besides Beagle, will be wrestling in the 126 pound class. Hornbuckle placed second in the conference tournament last year.

Possible varsity men in the other weight classes are Dave Collier at 134, Gary Zieve at 150, Doug Wood at 158, and Keith Harris in the 168 pound class.

It is not at all certain that the above wrestlers will be the top men in their weight classes. There is a lot of competition in nearly all ten of the weight classes.

Life at Tech **Continued from Page Six**

O.K., enough, what can be done, you say. Many don't know, another illustration of the rigid system perpetuating itself. From other schools I have visited, there first needs to be the abolishment of option choosing at the end of the first year. The rule is a hindrance to learning what to learn and a stifling of academic pursuits. Alternates vary from at least having until your junior year to decide (as at Stanford) to adopting the program at the University of Mass. There you take what you want for four

Beaver Grapplers Face Harriers Finish Season

The Caltech cross country team lost its final meet of the season to U. C. San Diego 23-33 Thursday, November 20, on the tough, rolling U.C.S.D. home course in La Jolla.

San Diego's King and Twombly took first and second, with Tech's tight finishing trio of Higgins, Smith, and Pope taking third, fourth, and sixth, respectively. Tardiff and Almquist completed Caltech's scoring.

The loss gave the cross country team a final record in dual meets of three wins and six losses. The team finished fifth in the S.C.I.A.C. and 8th in the N.A.I.A. regional meet.

Prospects Good for Next Year

The team loses only one member to graduation this year. Dave Hermeyer, who would as soon run a marathon as a mile, has survived AM 95 and other obstacles and is looking for a diploma more than a new pair of Adidas. Two juniors are still running, Martin Smith and Tim Tardiff, who disagree sharply on whether the course should be longer or shorter. Ratchford Higgins has held up the sophomore banner alone this year, but doing quite a

Three frosh round out the top seven Caltech harriers. Gary Pope has been out front as often as not. Charles Almquist and Dan Reichel have also adapted quite well to four and five mile races. Another freshman, Dave Evans, was running quite well until sidelined by an injury at midseason.

years and near the end of the fourth year present to an academic committee what you have taken and what and why you should receive a degree in what you have chosen.

The rigidity of requirements within options is also bad. Shouldn't I be the one to decide what I need to know to engage in a certain field. It might be said that one doesn't know until he has gotten into the subject what is needed. Then my answer is that one should discuss with persons within the field what they feel is necessary and then the student should decide what is pertinent to himself.

A Better Way

Some courses at Tech are known as killers. This needn't be so. Why can't there be student help sessions with maybe five students and one leader. The leader could be either an undergrad who has already taken the course or who is doing well in it. He could be given credit for a catch-all course like "Teaching and the learning process." Periodically, these leaders could report to the lecturer on how well the material is being covered. After all, in the end isn't it the responsibility of the lecturer to try and make the material learned, not just covered.

Finally, it seems essential to have ourses responsive to student interest. When a group of students want a course and a teacher is willing to supervise it, then it should be done. N w three are all sorts of delays. Really, isn't this desire the essence of learning.

Inconclusive

This article was in no way meant to be a conclusive report on Tech. For this reason, I am asking all students who sense what Tech could be like or at least realize that something is wrong to come to the Coffeehouse at ten o'clock this Monday night. If you can't attend but want to know what's happening, just leave an address and name in the D box in Lloyd.

Knowledge won't make you free, but freedom just might make you knowledgeable.

-Dennis Di Bartolomeo

Guibas on Teaching Awards

to faculty members and a maximum of three to greaduate teaching assistants. The exact number of prizes to be given each year will be determined by the selection committee. All prizes will carry equal status. The above numbers are a compromise between the necessity to keep the number of prizes small in order to make them of some value to their recipients and the difficulties inherent in such a selection. The exact form of the be largely left up to the individual awards is not yet certain. Probably committee; on the other hand, all a medal for faculty members and a their meetings should be open to medal accompanied by a monetary award for graduate teaching assistants would be appropriate.

The selection of the recipients will be made by a five-man committee to be appointed by the EPC at the end of first term. This committee, early second term will take a poll of undergraduates. In this poll, after the purpose and nature of the awards has been adequately explained, students will be asked to nominate two faculty and one teaching assistant, who he has had as teachers or research advisors during the past three terms, as candidates for the excellence in teaching awards. Besides other relevant information, he would be awards.

It is hoped that this poll will bring the number of candidates the selection committee will have to consider down to reasonable limits. The committee will then start considering individual candidates and try to obtain further and more concrete information about them, probably by interviewing students. By the end of second term it should make a final selection of the recipients of the awards. I believe the exact selection process should anyone interested. The prizes be awarded in a ceremony early third term.

Hypothetical

Here I would like to emphasize that all the above represents a hypothetical situation; they are not facts. Since I am working on making the teaching awards a reality I thought it appropriate at this stage to request the opinions of the student body at large. So far I have received a great deal of encouragement from the people I have talked to, both students and faculty. I would appreciate your comments and opinions on the idea of teaching awards per se, as well as suggestions or alterations concerning also asked to justify his nominations the specific selection mechanism I by giving reasons why he thinks have proposed. Please write, or see, those persons ought to receive the Leonidas Guibas in 204 Ruddock House, campus ext. 2229.

Shh...piro H. Agnew

by David L. Wilson

Generally reliable sources have reported that Spiro H. Agnew (the H. stands for Household) visited the Cal Tech campus last weekend. His Air Fierce Two jet podium arrived complete with 250 microphones, 25 speechwriters, 50 newsmen, and one metronome for timing gestures. The crowd of forgotten Americans on hand to greet him included Arnold Bankman, Robert Lackmahaira. Ronald Ragman, and other little

CLASSIFIED

PART TIME EMPLOYMENT \$70.00 weekly Ten openings available

Mature students needed to interview persons who have expressed an interest in enrolling in our selfimprovement course. Choose your own working hours during evenings or weekends.

Thought Dynamics.

For appointment and further information call Mr. Condie. Phone 213-682-3441.

EARN MONEY WHILE AT **COLLEGE!**

Wanted-campus representative for large tour operator specializing in student/faculty trips and charters, etc. Please phone (213) 272-8423 for details.

HAWAII- Join the student invasion of Hawaii the summer of 1970. Included is a car, voyage on a schooner, all airfare, 5 islands, \$269 includes everything but meals. Write Don Gardiner, Box 533, Aromas, Cal. 95004.

HI LIFE 1758 E. Colorado 449-9705

Best bottomless entertainment in Pasadena. Admittance restricted to those 21 vears of age.

The \$1.00 door charge will be waived upon presentation of a CIT undergraduate, graduate, alumnae, faculty, or employee identification and receipt of a special semester

Continuous shows 12 noon to 2

Lunch Shows 12:00-3:00. Monday night all-strip bottomless contest, 9 p.m.

Now featuring:



Rindy is a winner of many beauty contests, such as Miss S. S. Catalina, Miss U.S.S. Holister, Miss U.S.S. Galveston, and Miss Shutterbug, entered the Miss California pageant, and has never lost a go-go contest she has entered, including L.A., Hollywood, and Miss A-Go-Go California contests. Five feet of blonde dynamite!

known and little thought of common folk.

In Spiro's latest attempt to reach the silent majority, he continued to practice what they preach, and said nothing during his visit. He spent 45 minutes in silent meditation with the local SFA (Silence for Agnew) chapter at CIT.

The SFA recently protested a Fred Friendly speech on martini walk so quietly that no one even noticed them. An SFA spokesman, who carried a "What's so Friendly about Fred?" sign at the protest, termed the Friendly march one of the most successful of the newlyformed SFA group: "Why only one or two guys broke rank and whispered during our demonstration." The march progressed peacefully from the Milkman Library to Troop Hall between 2 and 3 in the morning before the Friendly speech. The spokesman, who requested I keep quiet about his name, claimed a majority of Cal Tech students and faculty were present. All wore sneakers, and most walked the entire distance on tip-toe.

Agnew arrived, amid sounds of

silence at CIT, to praise the SFA. In his remarks he said that support such as theirs "... could lead to a growth of the silent majority in our great country which could culminate in a Silent America. Just think of the impact on Hanoi of 200 million Americans quietly listening to the President on their TV's and then staying tuned for Heidi or the Jets instead of instant analysis."

His audience sat in rapt attention, and the only noise was that of flipping dictionary pages as some attempted to keep up with his fast-flowing, two-syllable words.

Agnew referred to Cal Tech as a hot-bed of liberalism. (Don't use your dictionary for this word. For the most recent definition of liberal, refer to Attorney General Mitchell.) Despite the radicalized nature of the campus, Agnew pointed to SFA as . indication of the coming wave of silence in America."

In his closing remarks he referred to the great love of the American people for their President: "Everyone I talk to says he prays daily for our President's health.'

This Space for Dawdling

Interhouse Dance

Continued from Page Seven

the house itself became a ski lodge. The most impressive decoration was a HUGE moose head hanging over the roaring fireplace.

An Elephant Where?

The Dabney House Elephant did not disappear once Interhouse was over, it just started moving. At about 10 p.m. on Sunday it magically appeared in the middle of California Blvd. While it resided there its ownership changed in favor of Wes Munsil. By the time he got to it to claim it, the Pasadena Police had found it too. They aided Munsil's party in moving it off the street and eventually left. It was then transported to Ruddock, where it remained until the next evening.

At that time it was loaded aboard a pickup truck and seven people rode with it to Sierra Madre where it was unload from the front yard of Munsil's gin friend's home. The police soon caught up with the merry band of Techers and, not willing to mention anything as unbelievable as a huge green elephant, had to let them go. That girl certainly must have been surprised the next morning! Maybe the decorations should be named or wheels next year.

Think selfishly about your own career before you decide on one with Du Pont.

Be selfish. But be honest. You've put in a lot of tough years

to get your degree. Your allegiance lies with a professional discipline. Why, then, must you decide now to plight your trust to a company for life? Don't. Join a company

enrichment at Du Pont. This comes from being handed a ball and being expected to run with it. From working with top people, from growing in a company where the opportunities are always wide open and the projects are often way out. Many have found professional

Many have found career

fulfillment and have built a very full, varied and happy life as "Du Ponters." Others have found, after working

at Du Pont, that their professional interest lay in teaching, in further study or in an industry that offered even wider scope in their particular discipline. All of these men left Du Pont far better qualified professionally than when they came.

So talk to the Du Pont recruiter. If he offers you something, think of it as a professional challenge, not a proposal of marriage.

Du Pont Company Room 6685 Wilmington, DE 19898 Please send me the booklets ☐ Chemical Engineers at Du Pont ☐ Mechanical Engineers at Du Pont☐ Engineers at Du Pont Accounting, Data Systems, Marketing, Production Name University_ Degree. Graduation Date Address. City An Equal Opportunity Employer (M/F) **College Relations**



Rindy Martin