ASCIT Nomination Statements: See Inside Pages

Remember, Circulation Staff:

California Tech

Fold Front Page Inside This Week

Volume LXX

Pasadena, California, Thursday, February 6, 1969

Number 16



Results of ASCIT BOD Restructuring are displayed.

ASCIT History Shows Many Structure Changes

by Nick Smith

Thirty-three years ago, (one score and thirteen for all of you trite people) ASCIT was incorporated. In the ensuing years, the structure of ASCIT and its Board of Directors have changed greatly. The most recent and drastic of these changes was made this year when the offices of social chairman, activities chairman, and athletic manager were removed from the BOD. The "new" offices that replace them are the new directorships: Director of Student Life, Director of Academic Affairs, and the second Director-at-Large. As it turns out, the second at-large member of the board is one of the oldest board positions, and was only missing for a few years.

There have been some interesting board positions over the years, called things like Rally Commissioner, Business Manager, Publicity Manager, BOC Secretary, (there were two secretaries on the board) and the various Representatives - at - Large. There have almost always been nine members on the board, with only slight changes in the actual duties. The Rally Commissioner and First Representative-at-Large were in reality the Activities Chairman and Social Chairman. The Business Manager was a general overseer for all ASCIT appointments and thus wielded a great deal of theoretical power. The Publicity Manager was the liaison between the student body and the outside world. This one faded out of existence when the outside world stopped believing that Caltech was for real. The Second Representative - at -

Large was a jack-of-all-trades. and it was demanded that he be elected as a freshman. The reason for this was that it guaranteed the lower division representation on the board, not because the board wanted a dumb

I'll bet if we added those offices next year, and shifted somebody to the IHC . . .

ASCIT By-Laws Up for Vote on Thurs Ballot

The ASCIT BOD has proposed four amendments to the by-laws to be voted on February 13. They are as follows:

I. Article XIII, DUES

Change:

The corporation dues shall be twenty-two dollars (\$22.00) per year payable seven dollars and fifty cents (\$7.50) upon registration second and third terms . . .

To read:

The corporation dues shall be seven dollars (\$7.00) first term, and seven dollars and fifty cents (\$7.50) second and third terms, payable on registration . .

2. Article XIII, Section 7, Big T Assessment

Add after first sentence:

An undergraduate withdrawing before the end of third term may either receive a refund for installments paid on the subscription, or, on written request to the Business Manager of the Big T, complete payments for the remainder of the academic

(Continued on page 7)

Big Black Sambo?

S. History Blackened

Academic change occurs at Caltech in an orderly manner. This knack for doing the "radical" without violence has added H160—The Negro in American History—to the subjects of instruction this term. The course is being taught by Dr. Joseph Boskin, visiting associate professor of history from USC.

Boskin, a social historian, became interested in Black history long before it became fashionable. His two specialties, the Old South and twentieth-century social movements, have developed a deep interest in the origins of slavery and discrimination. One of his areas of research has been the Sambo figure—the slow,

indolent image of the Black man. He has studied the White's concept of Sambo and the way in which the Black man in order to survive became Sambo - using humor and jive to "painlessly" reflect prejudice back at Whites. "Humor is an index of aggression," says Boskin. He is now completing the Life and Death of

After the Watts riots in 1965, he was asked by the McCone Commission to assist in a report on urban racial violence. The report investigated the early race riots — Whites attacking Blacks in the Black community, and Whites siding with Whites—and Watts, which marked the first of the modern protest riots by

New Federal Ruling May Save Grads

About three months ago members of the Yale Law School found that the Selective Service Law did not prohibit the granting of a IS-C deferment for a secondyear graduate student who was then holding a II-S deferment.

On this basis, a second-year law student at the University of Texas filed suit in U.S. District Court in San Antonio. The suit is entitled Armandariz vs Hershey. It was filed as a "class suit" which means that

Party Line To Be First for ASCIT

by Alan Stein

A decision made Tuesday night at an ASCIT Board of Director's meeting foiled a try by a group of candidates to do something new in an ASCIT election.

For the first time in ASCIT history, a group of students attempted to run on a single ballot. This was to have been an all or nothing proposition; the voter either votes for all the candidates or rejects all of them, and votes for one of the single candidates.

The foiled team consists of Pete Wilzbach, running for president; Bill Bradley, running for social chairman; and Bruce Ault and Phil Morgan, running as a team for athletic managers. The strategy behind this choice of candidates appears to have been an intention to produce a unified slate that will win the house-oriented vote.

The team hoped that they would be listed on the ballot as one team, something in the way that two or more people run as a team for one office, with one vote of "yes" or "no' applying to all members of the team.

The BOD based its decision on the fact that ballot structure was left to the discretion of the election committee.

any ruling is a precedent for all similar cases.

On January 27, 1969, Judge Jack Roberts of the U.S. District Court found in favor of the plain-

The result of this ruling is that any second-year graduate student is entitled to a pre-induction judicial review for the purpose of obtaining a IS-C classification to the end of the current academic year. The request for this review must be filed by a lawyer.

Contact Dean Bohenblust for further information. Time is of the essence—after induction will be too late.

Commission shaped his next project on violence. He has received a grant from the government to do more work on the social origins of the revolt, "the thrust of the frustrated who have been denied entrance into society."

Black and White Interaction

Most Whites are unfamiliar with Black history, unfamiliar that the Black man has played a significant role in American history, according to Boskin. He also feels that most students are anti-historical-uncaring and unaware of the historical process, the movement and feeling to time's thread. He would like to correct misconceptions, but more than that, this ignorance of how the Black and White cultures have interacted, or separated, how they have left the young in a land torn by violence, how they have motivated the militant's hate and action, how they have shaped the Black's feeling of alienation and despair. How, for example, could Jefferson write the Declaration of Independence and still own slaves? How can Americans talk of equality and then move away when a Black family moves in next door?

He is teaching H160 from an historical and social approach to get across how these past race relations have affected the present cultural contract between Blacks and Whites. The course starts with slavery. What happened when the races came together? How was the Black man forced to respond? He thinks of history in terms of patterns.

(Continued on page 3)

Coffeehouse Pays \$500 Debt to Society, ASCIT BOD

Somewhat to its surprise, and of the year and the mug drive. much to everyone else's, the Caltech Coffeehouse moved out of physical improvements around the red Sunday when it was able to repay the \$500.00 loan ration and perhaps converting taken out with ASCIT last Octo- the back garage into a patio for ber 3, only a day later than the use this spring. "It's hard to do specified deadline. This miracle was accomplished when the Amazing Four, managers of the Coffeehouse, presented a check for that amount to ASCIT Treasurer Joe Feng at the weekly Laugh-In session of the ASCIT BOD. Simultaneously it was announced by the Four, in a restricted press conference, that plans for this year's Caltech Coffeehouse Pledge Drive are under way and mass mailings will be made soon.

"It's nice to be rid of that obligation," said Ed Schroeder, mouthpiece for the Four, "especially since business per night is falling for the sixth straight term since the Coffeehouse opened six terms ago. I'm still surprised that we managed to make it on time." The Four, Mike Stefanko, James Henry, John Batchelder, and Schroeder, hope to use the profits from the rest

if there are any, to make some the Coffeehouse, such as redecoanything in a neighborhood where property values are falling, though," sighed Schroeder. 'People just don't seem to care. Why, look at the low class of people we've got upstairs." Also in the offing are reduced prices. perhaps, although that will not be done until the Four are certain that continued falling business won't bring delayed disaster on the Coffeehouse.

Why the one day tardiness in repayment? "We had the money available several days ago, but no one asked us for it. Probably they had forgotten about it. So we decided to drop by with it."

Schroeder cautioned against over-jubilation at the success, at least temporarily, of an ASCIT project. "Remember, the credit for the Coffeehouse having done as well as it has does not go to the student body, or even parti-

(Continued on page 12)

ASCIT Nomination Statements: See Inside Pages

Remember, Circulation Staff:

alifornia Tecl

Fold Front Page Inside This Week

Volume LXX

Pasadena, California, Thursday, February 6, 1969

Number 16



Results of ASCIT BOD Restructuring are displayed.

ASCIT History Shows Many Structure Changes

by Nick Smith

Thirty-three years ago, (one score and thirteen for all of you trite people) ASCIT was incorporated. In the ensuing years, the structure of ASCIT and its Board of Directors have changed greatly. The most recent and drastic of these changes was made this year when the offices of social chairman, activities chairman, and athletic manager were removed from the BOD. The "new" offices that replace them are the new directorships: Director of Student Life, Director of Academic Affairs, and the second Director-at-Large. As it turns out, the second at-large member of the board is one of the oldest board positions, and was only missing for a few vears.

There have been some interesting board positions over the years, called things like Rally Commissioner, Business Manager, Publicity Manager, BOC Secretary, (there were two secretaries on the board) and the various Representatives - at - Large. There have almost always been nine members on the board, with only slight changes in the actual duties. The Rally Commissioner and First Representative-at-Large were in reality the Activities Chairman and Social Chairman. The Business Manager was a general overseer for all ASCIT appointments and thus wielded a great deal of theoretical power. The Publicity Manager was the liaison between the student body and the outside world. This one faded out of existence when the outside world stopped believing that Caltech was for real. The Second Representative - at -

Large was a jack-of-all-trades, and it was demanded that he be elected as a freshman. The reason for this was that it guaranteed the lower division representation on the board, not because the board wanted a dumb

I'll bet if we added those offices next year, and shifted somebody to the IHC . . .

ASCIT By-Laws Up for Vote on Thurs Ballot

The ASCIT BOD has proposed four amendments to the by-laws to be voted on February 13. They are as follows:

Article XIII, Section DUES

Change:

The corporation dues shall be twenty-two dollars (\$22.00) per year payable seven dollars and fifty cents (\$7.50) upon registration second and third terms . . .

To read:

The corporation dues shall be seven dollars (\$7.00) first term, and seven dollars and fifty cents (\$7.50) second and third terms, payable on registration . .

2. Article XIII, Section 7, Big T Assessment

Add after first sentence:

An undergraduate withdrawing before the end of third term may either receive a refund for installments paid on the subscription, or, on written request to the Business Manager of the Big T, complete payments for the remainder of the academic

(Continued on page 7)

Big Black Sambo?

S. History Blackened

Academic change occurs at Caltech in an orderly manner. This knack for doing the "radical" without violence has added H160—The Negro in American History—to the subjects of instruction this term. The course is being taught by Dr. Joseph Boskin, visiting associate professor of history from USC.

Boskin, a social historian, became interested in Black history long before it became fashionable. His two specialties, the Old South and twentieth-century social movements, have developed a deep interest in the origins of slavery and discrimination. One of his areas of research has been the Sambo figure—the slow, indolent image of the Black man. He has studied the White's concept of Sambo and the way in which the Black man in order to survive became Sambo - using humor and jive to "painlessly" reflect prejudice back at Whites. "Humor is an index of aggression," says Boskin. He is now completing the Life and Death of

After the Watts riots in 1965, he was asked by the McCone Commission to assist in a report on urban racial violence. The report investigated the early race riots — Whites attacking Blacks in the Black community, and Whites siding with Whites-and Watts, which marked the first of the modern protest riots by

New Federal Ruling May Save Grads

About three months ago members of the Yale Law School found that the Selective Service Law did not prohibit the granting of a IS-C deferment for a secondyear graduate student who was then holding a II-S deferment.

On this basis, a second-year law student at the University of Texas filed suit in U.S. District Court in San Antonio. The suit is entitled Armandariz vs Hershey. It was filed as a "class suit" which means that

Party Line To Be First for ASCIT

by Alan Stein

A decision made Tuesday night at an ASCIT Board of Director's meeting foiled a try by a group of candidates to do something new in an ASCIT election.

For the first time in ASCIT history, a group of students attempted to run on a single ballot. This was to have been an all or nothing proposition; the voter either votes for all the candidates or rejects all of them, and votes for one of the single candidates.

The foiled team consists of Pete Wilzbach, running for president; Bill Bradley, running for social chairman; and Bruce Ault and Phil Morgan, running as a team for athletic managers. The strategy behind this choice of candidates appears to have been an intention to produce a unified slate that will win the house-oriented vote.

The team hoped that they would be listed on the ballot as one team, something in the way that two or more people run as a team for one office, with one vote of "yes" or "no' applying to all members of the team.

The BOD based its decision on the fact that ballot structure was left to the discretion of the election committee.

any ruling is a precedent for all similar cases.

On January 27, 1969, Judge Jack Roberts of the U.S. District Court found in favor of the plain-

The result of this ruling is that any second-year graduate student is entitled to a pre-induction judicial review for the purpose of obtaining a IS-C classification to the end of the current academic year. The request for this review must be filed by a lawver.

Contact Dean Bohenblust for further information. Time is of the essence—after induction will be too late.

Commission shaped his next project on violence. He has received a grant from the government to do more work on the social origins of the revolt, "the thrust of the frustrated who have been denied entrance into society."

Black and White Interaction

Most Whites are unfamiliar with Black history, unfamiliar that the Black man has played a significant role in American history, according to Boskin. He also feels that most students are anti-historical-uncaring and unaware of the historical process. the movement and feeling to time's thread. He would like to correct misconceptions, but more than that, this ignorance of how the Black and White cultures have interacted, or separated, how they have left the young in a land torn by violence, how they have motivated the militant's hate and action, how they have shaped the Black's feeling of alienation and despair. How, for example, could Jefferson write the Declaration of Independence and still own slaves? How can Americans talk of equality and then move away when a Black family moves in next door?

He is teaching H160 from an historical and social approach to get across how these past race relations have affected the present cultural contract between Blacks and Whites. The course starts with slavery. What happened when the races came together? How was the Black man forced to respond? He thinks of history in terms of patterns. (Continued on page 3)

Coffeehouse Pays \$500 Debt to Society, ASCIT BOD

Somewhat to its surprise, and of the year and the mug drive, much to everyone else's, the Caltech Coffeehouse moved out of the red Sunday when it was ber 3, only a day later than the use this spring. "It's hard to do specified deadline. This miracle was accomplished when the Amazing Four, managers of the Coffeehouse, presented a check for that amount to ASCIT Treasurer Joe Feng at the weekly Laugh-In session of the ASCIT BOD. Simultaneously it was announced by the Four, in a restricted press conference, that plans for this year's Caltech Coffeehouse Pledge Drive are under way and mass mailings will be made soon.

"It's nice to be rid of that obligation," said Ed Schroeder, mouthpiece for the Four, "especially since business per night is falling for the sixth straight term since the Coffeehouse opened six terms ago. I'm still surprised that we managed to make it on time." The Four, Mike Stefanko, James Henry, John Batchelder, and Schroeder, hope to use the profits from the rest

if there are any, to make some physical improvements around the Coffeehouse, such as redecoable to repay the \$500.00 loan ration and perhaps converting taken out with ASCIT last Octo- the back garage into a patio for anything in a neighborhood where property values are falling, though," sighed Schroeder. 'People just don't seem to care. Why, look at the low class of people we've got upstairs." Also in the offing are reduced prices, perhaps, although that will not be done until the Four are certain that continued falling business won't bring delayed disaster on the Coffeehouse.

Why the one day tardiness in repayment? "We had the money available several days ago, but no one asked us for it. Probably they had forgotten about it. So we decided to drop by with it."

Schroeder cautioned against over-jubilation at the success, at least temporarily, of an ASCIT project. "Remember, the credit for the Coffeehouse having done as well as it has does not go to the student body, or even parti-

(Continued on page 12)

Editorial

The Tech Tickets

President — Stephen Horner (1st choice); William Hocker (2nd choice)

Vice President — Peter Szolovits Secretary — Derry Hornbuckle Treasurer — Leonidas Guibas

Dir .Acad. Aff. — Berto Kaufman Dir. Student Life — Marc Aaronson Dir. at Large — Gary Stormo, Glen Spain

IHC Chairman — Charles Creasy Activities Chairman — James C. Fuhrman Social Chairman — No acceptable candiate

Athletic Manager — Thomas Hedges

BOC Secretary — Bob Fisher

Tech Editors — Ira Moskatel & Craig Sarazin (team)

Alan Stein

The following are our endorsements for ASCIT offices:

President: Stephen Horner Vice-president: Peter Szolovits Secretary: Derry Hornbuckle

Treasurer: No choice—both appear to be well qualified.

IHC Chairman: Charles Creasy Dir. Student Life: Marc Aaronson Dir. Academic Affairs: Jerry Feinberg

Director-at-Large: 1.) Gary Stormo 2.) No Choice

BOC Secretary: Bob Fisher Activities Chairman: No Choice Social Chairman: William Bradley Athletic Manager: (Team) Morgan-Ault Tech Editor: (Team) Moskatel-Sarazin

Jim Cooper

President - Bill Hocker Vice President — Peter Szolovits Secretary — Derry Hornbuckle Treasurer — Leonidas Guibas

Dir. Acad. Aff. — Jerry Feinberg (1st choice); Berto Kaufman

(2nd choice)

Dir. Student Life — Marc Aaronson

Dir. At Large — Francis Clark, Gary Stormo

IHC Chairman -- Charles Creasy Activities Chairman — Jim Fuhrman

Social Chairman — No acceptable candidate

Athletic Manager - No opinion BOC Secretary — Bob Fisher

Tech Editors — Ira Moskatel & Craig Sarazin (team)

David Lewin

Letters

Peace Corps Recruiters Arriving Monday for Talks

I hope this letter will serve as an introduction, and also tell you that the Peace Corps will be on campus the week of February 10th, 1969.

An excellent opportunity will be available to you to find out what the Peace Corps is all about: where volunteers work, what the many types of jobs are what you with your particular skill, education, and background, can do. We would like to crack some of the stereotypes you may have about the Peace Corps: not all volunteers rough it, nor is all the work to be done in grass or adobe villages.

Maybe a break in your educational pattern is what you need to find out if what you are doing, and what you are studying is what you want to do for the rest of your life. I know you have asked yourself questions like: Does my education thus far have merit? Is it worth going to school from kindergarten to Ph.D. with out a break? Come by and let's talk about how we can be relevent to you, and what you want to do later in life. Come for a chat, information, or for a cup of coffee, and se if the Peace Corps is a meaningful thing to do in today's changing world. I feel that there are ways

in which we can relate to one an-

If by chance you miss us while we are on campus, please feel free to get further information from Pat Davis, YMCA, Winnett Center.

Sincerely yours, Francisco Garcia

We'll be around campus—on the Olive Walk, at the undergraduate houses, and at the Y. Monday, February 10th to Thursday, February 13th, 1969.

Tuesday---

4:30 p.m.—Film—"One Step at a Time." Written and produced by volunteers, it describes three phases of Peace Corps work in Brasil: health, sanitation, and an architecture project. Club, Room I.

5:30 p.m.—Some time set aside for discussion and whatever. Coffee. Winnett Club Room I. Thursday-

10:00 a.m.—Test, Winnett Club Room I.

2:00 p.m.—Test, Winnett Club Room I.

4:00 p.m.—Test, Winnett Club Room I.

Thursday evening at 8:00 p.m. a party at Pat Davis' house, wine and cheese, and soft drinks, all are welcome, see you there: 175 S. Chester, Pasadena. 796-2330.

Director Acad. Affairs Jerry Feinberg

appreciate the education being offered here as few others can. Because of this, though, I can see many ways in which our education can be improved, also as few others can.

Experiments have been conducted in seminar-style teaching, usually in conjunction with ounge type casses. Having been a member of Dr. Dean's infamous Ma 5 seminar class last year,

Notices

This year's first issue of Totem the campus literary magazine, will appear in the near future, after arduous months of preparation. Next Monday, February 10, at 9:30 PM in the Coffeehouse, the Editorial Board will be reveiwing contributions and deciding upon material for publication. All those interested are invited to attend. Also, anyone offering photography or artwork is welcome.

DARKROOM

A limited number of memberships in the student darkroom are now available. Keys may be obtained from Fred Klein, 49 Dabney House. Memberships dues are \$1.50 per term.

A INTERESTED, E MATH CLUB

Tonight, 2/6, the math Club presents Dr. Hirsh Cohen, visiting associate in applied math. Dr. Cohen, on leave from IBM, will talk "Mathematic\$ for the Million\$," 9:30 P.M. in the math lounge (3rd floor, Sloan) plus refreshments

ASCIT ELECTIONS

Vote for someone extraneous, he has all the qualities of the BOD.

SAVE STAR TREK!

Come to the second annual meeting of the Save Star Trek Committee, in Clubroom 1, Winnett Center, on Friday at 7:30 p.m. A protest march is being planned; come and help out.

After 2½ years at Tech, I can I know the strong advantages as well as the disadvantages of a seminar. But my conclusion is that the seminar taught class can be a tremendous improvement over the traditional lecture system. As Director of Academic Affairs, I will try hard to expand this mode of teaching.

> A second improvement can be made by offering more interdisciplinary courses. As one who straddles two science fields, I know how rough it can be having interests which don't quite fit with any option. As Director of Academic Affairs, I will do my best to encourage more joint offerings in fields like biochemistry, astrogeology, and mathematical physics at the undergraduate level. The availability of double majors should be expanded concurrent with a lowering of individual option requirements in such cases.

> The third improvement which I envision is the development of an upperclass research program. Other schools offer an honors research elective in which a student can work either individually or with a professor of choice. How such a program could be worked at Tech is a decision for the students to make. But the program should be develop-

The Director of Academic Affairs will probably wrangle him-(Continued on page 4)

Treasurer Steve Patt

It goes without saying, I think, that many students this year have begun to feel that ASCIT is drifting further and further away from them. The attempt to abolish mandatory ASCIT dues is a clear manifestation of that feeling. Students feel that they are not "getting their money's worth" out of ASCIT. I am running for the office of Treasurer because I am one such student, and because I feel that things do not need to remain as they are.

Trying to make ASCIT relevant to more and more students, as opposed to making it more and more relevant for a few students, is not going to be an easy job. Far too often the generation of new ideas is hampered by ties to the past. I am not bound by such ties, however, and because of this I feel that I can be an asset to next year's BOD.

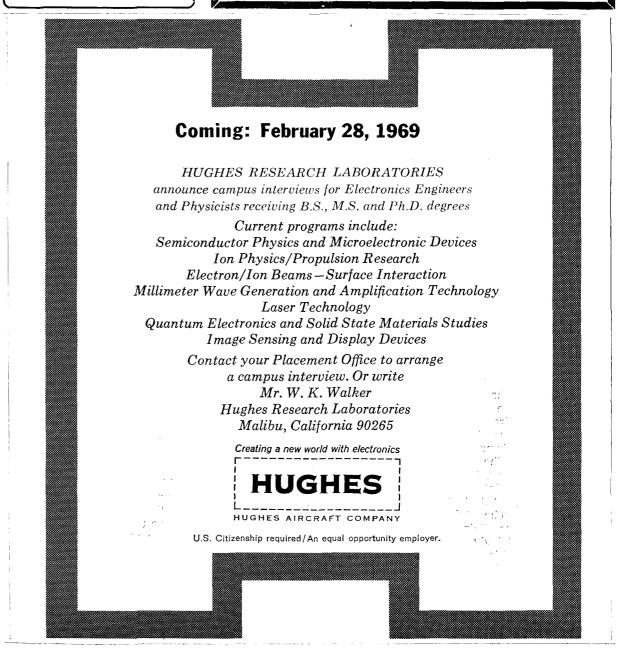
So far I have given no indication of why I specifically want to be ASCIT Treasurer-why not President? Basically, I feel that finance is where my talents lie, and it is the way in which I can contribute the most to ASCIT. Right now, I am not for abolishing dues, raising dues, lowering dues, or anything else. But I am for a thorough study of the status of ASCIT dues as well as of the questionable class dues and for giving these matters a fuller debate

(Continued on page 12)

Mia Farrow in Roman Polanski's ROSEMARY'S BABY

Jane Fonda in BARBARELLA

starts Feb. 19 THE BROTHERHOOD **ESQUIRE THEATRE** 2670 E. Colorado SY 3-6149 — MU 4-1774



Athletic Man. Tom Hedges

At Tech athletics are in a is ample opportunity to be a strange position. Although there member of an athletic squad. the attendance at games is normally extremely low. Some try to excuse this by saying our teams never win, but they do win; this year's great bonfire after the UCSD game shows the kind of results that student body interest can and will bring.

I am running for ASCIT Athletic Manager on a platform of developing more interest and support for our varsity teams. The only logical result of this will be better teams—giving the guys supporting the teams something to really cheer about.

I am a Freshman at Ruddock house. Presently I am a member of the Frosh Basketball team, playing center. My other activities at Tech include the ARP Smog Computer Correlation Group, the Radio Club, the YR's, and the Computer Club.

Finally I wish to state that my motives for running are only those of being ASCIT Athletic Manager, and improving sports at Tech. I paid my own filing fee, and I am not trying to get anyone elected ASCIT President. Furthermore if I am elected I shall serve out my term regardless of the outcome of any other races in the elec-Thomas Hedges

Director Acad. Affairs Director Acad. Affairs Jeff Ross

of Academic Affairs was just initiated this year. Thus, since no precedent was set by anyone defining what the office entails, I will state what I hope to accomplish if elected:

First of all, Tech has an inadequate humanities program. For example, only three courses are offered in psychology, and these are only one-term electives. As Director of Academic Affairs, I would attempt to increase the number of psychology courses offered, and, if necessary, also improve their quality. Of course, psychology is not the only field here that needs improvement, but it is a good example of the inadequacy of the humanities department. Also concerning humanities, the freshman electives in this area are too restricted. Courses in political science, anthropology, philosophy, and psychology should be offered along with the others.

Another problem is that the number of units given in many courses an Tech do not correspond to the number of hours per week required by the course. This is particularly true of labs. For example, physics labs offer only two units for work required outside of class, but both fresh-

Joke about ASCIT Presidential Candidates over a pizza at ROMA GARDENS — 1120 E. Green

Specialize in Italian Food —Beer and Imported Wines Spaghetti Special Tuesday — \$1.00

For Quick Service Call 449-1948 Open Daily 5-12 p.m.; Fri. & Sat. 5 p.m.-2 a.m.; Sun. 5-9 p.m.

The ASCIT office of Director men and sophomores agree that their labs take much more time. I think that the number of units offered for certain courses should be studied and a more appropriate number of units be given

> Aside from the courses themselves, the teaching here should be improved. For a school the size of Tech, there is no reason the teaching cannot be more personal. I believe this would not only help the students learn, but would also help improve the professor's teaching. With more personal contact he would understand better the problems of students, and what he could do to assist them.

These are some of the major problems I believe exist at Tech, and what I would do to remedy them. As Director of Academic Affairs, I would attempt to initiate these long-range reforms. As a member of the ASCIT research project executive board and my house Excomm, I believe I have had the necessary experience to become a member of the BOD.

Jeff Ross

Berto Kaufman

The office of director for academic affairs is new: the first person to hold that office cannot but determine, in large measure, its function and meaning. I feel that the D.A.A. must be a sort of lobbyist for better education. He must know whom to see about what, and whom he is likely to persuade by what kind of arguments. During the first term, working in and around ASCIT, I have picked up what I feel is a fair working knowledge of just that nature. This is how I would like to put it to

The Curriculum Committee at one time came up with a program for a unified undergraduate-graduate education, leading to a combined B.S.-Ph.D. or B.S. and engineer's degree. This would provide greater flexibility in both undergraduate (less specialized) and graduate (more specialized) phases for those involved in the program. I have already consulted Dr. Huttenback, Dean of Students-elect, and Dr. Bohnenblust, Dean of Graduate Studies, and both reacted favorably. According to Dean Bohnenblust, the program could

lead to substantial shortening of the time required for a degree. Whether technical undergraduate status (concurrent with graduate status) until both degrees are awarded would result in extension of II-S deferment is not made clear by the 1967 Selective Service Act, and would probably be at the discretion of the local

I would support any move allowing greater flexibility in course of study. I feel that, though guidance from the faculty is vital ultimate responsibility for the quality of one's academic work is as much his own as his responsibility for his behavior. It is very possible that many or most students would, after consulting with their faculty advisors, chose essentially the same course open to them now despite any offered special programs. It is also possible that most students would behave honorably even if there were no officially adopted Honor System. The point in each case is that recognition of the responsibility of the individual encourages assumption of that responsibility.

To that end, here are some of the proposals I shall make if elected: and extended pass/fail system: an exchange of intern program at some other university or at some laboratory. Brookhaven, say, for a term or a year; elemination of options and substitution of self-planned programs, with faculty guidance, as above; and increased opportunity for undergraduate research, involving academic credit and possibly outside funding. Several faculty members have declared themselves in favor of these programs, including Deanelect Huttenback. I think some or all can be obtained, at least on an experimental basis.

Some other ideas, relating more to the learning process directly than to formal course of study, include: guided-study courses; seminar-courses like Dr. Dean's Math 5 (though its results are as yet equivocal); a tutorial system involving graduate students on an approximately one/three basis; sensitivity-group interaction to increase mutual awareness of students and faculty members (now being tried in a genetics course to most interesting effect). Experimentation in better teaching methods could be carried ou systematically through the University Teaching Development Research Program, for which ASCIT has requested \$10,950 from the office of education. This money could be used to look into programmed instruc-

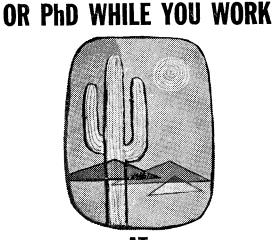
(Continued on page 12)

Activ. Chm. Wm. Earl

During the past six months, ASCIT activities have been few indeed. If elected, I hope to reverse this situation to the extent that student interest warrants. In particular, I hope to encourage the further appearance on campus of innovative artists like those of the San Francisco Mime Troupe. Promises I cannot make, except that I will try to carry out the wishes of the student body in arranging activities.

William J. Earl

EARN YOUR MASTER'S DEGREE



AT MOTOROLA IN GOLORFUL PHOENIX

Motorola offers the student at the BS or MS level an opportunity to advance his career and education concurrently. Work and achieve a Master's or PhD Degree in an environment of constant challenge and tremendous growth.

THE ENGINEERING TRAINING PROGRAM Open to BS or MS graduates in Electrical Engineering, Chemical Engineering or Physics with a B average or better. While pursuing an MS or PhD degree at Arizona State Uni-

versity each trainee is placed in a rotational program cov ering four engineering activities at Motorola. THE MARKETING TRAINING PROGRAM

Open to BS graduates in Electrical Engineering or Physics with a B-average or better. Marketing trainees may work toward an MBA or an MS or PhD degree. Rotational assignments are in the marketing area.

> Dave Metz will be interviewing for Motorla, on campus **FEBRUARY 7, 1969**

Direct Placement at all Degree Levels for . . .

 ■ Electrical Engineers
 ■ Organic & Physical Chemists
 ■ Physicists
 ■ Chemical Engineers
 ■ Metallurgists in Research and Development, Quality Control, Marketing, and Production.

If you are unavailable for an interview at this time write directly to: Director of College Relations, Motorola Inc., Semiconductor Products Division, 5005 East McDowell, Phoenix, Arizona 85008.



Black History At Tech

(Continued from page 1)

How are such patterns perpetuated today?—for example, the breakdown of family stability in the Black community.

Students are finding H160 interesting, and gaining a greater appreciation for the role of myths and the Black man's blight. Slavery was practiced all over the world for centuries, but why did it become equated with

CLASSIFIED

FOR SALE

3-month old 40 watt AM-FM stereo receiver \$85, Large Speakers \$30 each, Garrard turntable \$35, Sony tape deck \$65, Headphones \$10. 839-2216.

FOR RENT

Private retreat on hillside. 5 minutes away. Full apartment, comfortably furnished, including utilities, for studious single student or couple, in exchange for limited housework and gardening in your own spare time. 681-

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

PAT'S LIQUORS AND DELICATESSEN

SY 6-6761 1072 E. Colorado Open to midnight daily, 1 a.m. Fri. & Sat. Keg Beer Party Supplies Blackness only in U.S.?

Groping in Blackness

For all their interest, however, students did not initiate the plan for H160. The loss of Robert Woodbury from the history department last year prompted the faculty to decide to offer courses by visiting professors. There were several interested in a Black history course. Dr. Robert Rosenstone, assistant professor of history, suggested Boskin, and the faculty unanimously agreed. It was just "one of those ideas floating around," Rosenstone.

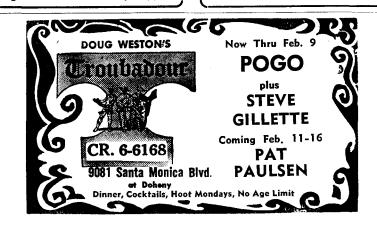
Boskin has "floated" in well. He is very involved in history and its effects on today's events, and can communicate that link. He is intense about the Black experience, part of the new social awareness distinctly conscious of the evolution of problems. Black protest goes back at least a hundred years, and "Black power" to mid-nineteenth century, according to Boskin.

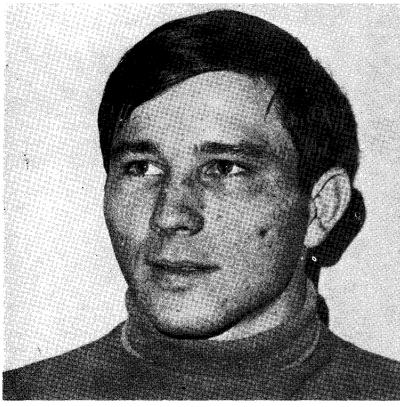
Black history has been stiffled and avoided until now, and it's encouraging to see Caltech helping to correct the situation.

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





Alan Beagle

ASCIT President Alan Beagle

As ASCIT President I would attempt to evolve a student government which would serve the average Tecker whose interests are not pointed in a specific direction. A summary of my plat-

Academic Reform leading towards a more tutorial system through the ARC. Also the coordination with the administration for course credit for classes taken at nearby colleges, and the establishment of a transportation system to these colleges.

Closer ASCIT-IHC coordination and cooperation through the establishment of joint IHC and executive committee meetings.

A more effective ASCIT social program which implies definite long range planning and coordination between the Social Council (now virtually non-existent) and the house social chairmen. Connected with this are better communications with other colleges involving sensitivity conferences, student exchanges, and interesting events at these other colleges.

The successful initiation of Harold Brown.

Continued improvement with ASCIT funds of the Coffeehouse. An election involving the suit-

ability of continuing to define the research project as the ASCIT

Research Project.

The establishment of a viable Athletic Council to coordinate undergraduate athletics at all levels with the physical education department. This coordination scarcely exists at the present.

I do not consider ASCIT at present as a corporation achieving its potential in service to the Tecker, especially considering the size of the undergraduate student body. As President, I would attempt to achieve this potential through the initiation of my programs.

Alan Beagle

More Patt

(Continued from page 2)

than was allowed this year. This, then, is my general philosophy. I feel that I can serve ASCIT capably as its Treasurer, and I feel that I can help in the effort to make ASCIT more relevant to all the students. For these reasons, I ask you for vour vote.

Soc. Bradley

If the Wilzbach slate gets elected, some changes in the ASCIT social program should be forthcoming. With money previously spent on the Research Project (\$1000) we could hold a Twilight Buffet on the Olive Walk between Firestone and Winnett. Two years ago we had one and a Chad and Jeremy concert afterwards. Steve Heisler will be working on a name group for a concert and we may pull this off next fall.

As Interhouse social chairman, I would propose and attempt to sponsor more Houserun activities for the whole campus. These are social events like the Party-Parties held in Culbertson, coordinated by one HOUSE yet sponsored by and participated in by all. Ideally, each House would take its turn at running a campus-wide event, the money coming from all interested Houses and ASCIT.

Among the events of this size would be renting a yacht for a REAL party; spending a winter weekend in the mountains ie, "Snow Weekend"; commandeering a beach for a beach party complete with band, bonfire, etc. Sound grandiose? It's possible if each House kicks in for the expenses and if someone is willing to organize it.

Bill Bradley

U.S. NAVAL CIVIL ENGINEERING LAB RECRUITING REPRESENTATIVE

FROM

Port Huememe, California (Where you ski in the morning and surf in the afternoon) is

interviewing engineering grads with BS, MS, PhD DEGREES

> CIVIL, ELECTRICAL, or MECHANICAL

also

any grads interested in a career in **OPERATIONS RESEARCH**

12 February 1969

Interview appointments and info at your placement office. All positions are in the Federal Career Civil Service-an Equal Opportunity Employer.

IHC Chm. C. Creasy

I am a candidate for Interhouse Committee (IHC) Chairman. The ASCIT By-Laws treat the duties and responsibilities of the office somewhat trivially: (a) chairing the Honor Point Committee, (b) calling and presiding over IHC meetings, and (c) responsibility for liaison between the various Houses and ASCIT.

The first of these duties is not difficult at all, since the accumulation of honor points is more or less objectively measurable. Presiding over the IHC, however, is not so easy and requires several important attributes. The ability to deal effectively with the sev-Houses' representatives sometimes violent and nearly always biased but usually sincere is essential! I think I could handle the task as well as anyone. (My experience in mediating gang fights when I was a kid back in Beaumont, Texas, might be useful.)

Another must is an awareness of and a senitivity to the dominating mood of the Houses' members during times of crisis, semicrisis, or any other significant decision-making in the IHC. If elected, I intend to establish channels where they don't exist and, where they already exist, to cultivate channels which facilitate such awareness and sensitivity.

It will also be necessary for the new IHC Chairman to establish a working relationship with the administration through the new Master of Student Houses. From my point of view, it is unfortunate that Dr. Huttenback is leaving that post since I feel that, if elected, I could use my present relationship with him as an excellent base for establishing a positive, effective working association with the Master.

In my estimation the most important task of our next IHC Chairman will be smoothing the liaison between the House members-the students-and ASCIT, their student government. I believe that when the sentiment of the ASCIT membership is expressed at the polls next week, ASCIT will emerge as a body more responsive to that sentiment. If it does not so emerge, then I'm convinced that ASCIT won't survive the year in its present form. In either case I can see an important role for the Chairman of the Interhouse Committee. It is a role which I am ready, willing, and able to portray. In my efforts I request your vote, your support, and your confidence

Charles J. Creasy Jr.



William Hocker

ASCIT President Bill Hocker

So you might ask, "Why are you running for ASCIT President and what do you plan to do if elected?" I have had to ask myself several questions about Caltech and about myself in considering the possibility of being ASCIT President: perhaps the answers I've believed for my own questions will answer your questions.

First, consider Caltech: what is it like? What are the needs of Caltech students? Right now, Caltech appears very fragmented in its intrinsic goodness or badness to a given individual; if you group together people who have some things in common, you get all sorts of groups:

1. People who find Caltech a

rewarding academic experience. 2. People who find Caltech a rewarding personal experience.

3. People who finda Caltech a negative experience, either from a personal or academic viewpoint.

4. The happy.

5. The sad.

6. The frustrated.

7. Those who are satisfied with their social lives.

8. Those who are not satisfied with their social lives.

9. The "activists."

10. The "nonactivists."

. . . and more . . . any combina-

The above listed groupings occure in any environment-in the

SKI BOOTS REPAIRED



DICK NOVIS

HAROLD NOVIS

NOVIS SHOE STORE

CROSBY SQUARE SHOES FOR MEN **TENNIS SHOES**

> 1216 EAST COLORADO BLVD. PASADENA, CALIFORNIA SYcamore 6-4971

CAREER OPENINGS-100% FREE

THE NEW BREED

Fortune Magazine recently concluded that America's executive talent—from recent college grads thru top level management—is changing jobs at a record shattering pace.

Over 400 major corporations are now relying on our services to seek, screen and recommend top flight MGMT., ENGINEERING, SALES and MARKETING talent. Career openings from 8.000 to 80,000—Trainees thru Presidents. If you are among these millions of "restless" executives with a good "track record" but are stymied by a mediocre work environment and opportunity to move ahead—drop us your resume—or better vet call for a confidential appointment. There is no obligation—we are 100% employer retained.

NTERNATIONAL EXECUTIVE SEARCH AGENCY

4282 Wilshire Blvd.

100% Free OPEN TUES. NITE 'TIL 9:00

933-9551

what kind of overall impressions do I get of the place? I feel that Caltech has a brilliant first impression of success and hopeful future based on the possibilities of human imagination . . . and then there are very dark (Continued on page 9)

context of Caltech, however,

MATHEMATICIANS PHYSICISTS ELECTRICAL ENGINEERS

LINCOLN LABORATORY has openings for a limited number of engineers, physicists and

mathematicians.

LINCOLN LABORATORY, a research center of the Massachusetts Institute of Technology, is engaged in research and development in advanced electronics, with emphasis on applications to national defense and space exploration.

A LABORATORY REPRESENTATIVE WILL INTERVIEW APPLICANTS

FEBRUARY 14

CONSULT THE CAMPUS PLACEMENT OFFICE IN ADVANCE

LINCOLN LABORATORY

Massachusetts Institute of Technology



BOX 21 • LEXINGTON MASSACHUSETTS 02173



Vice Pres. P. Szolovits

ASCIT is, in name at least, the Associated Students of Caltech. In fact, it is a small group of elected student leaders who determine the course in which student activities and student activism is to proceed. To some of you, this may be deplorable because you feel that you have no voice in the affairs of your student government. My only answer can be that you are right. If you are not willing to go out and devote the time and effort needed to plan and participate in activities, then you will have no influence on ASCIT activities. I do not mean this as a criticism of all Teckers. Some of us are here with the specific purpose of receiving the type of education glowingly described in the Catalog. If that is your goal, you will probably learn more physics and math than I will, and you will look to ASCIT as an organization to provide you

(Continued on page 9)

IHC Chairman Ralph Graham

The position of IHC Chairman is an important position, but it is more likely than not that the average student will not even know whether the chairman is doing a good job, since most of the work is done in coordinating the houses' activities (scheduled or spontaneous). I think this is as it should be since there are other committees for ever other possible thing you can imagine.

Athletics is usually the major topic at most IHC meetings. The question of player eligibility for Interhouse sports is one that I would like to see re-evaluated. As it now stands, according to Mr. Emery, the Athletic Department has a veto on IHC decisions because some players are given P.E. credit. The actual amount of restriction, however, seems to be much wider than that reason would cover. For Discobolus, I hope to prevent forfeits from becoming significant in determining the yearly winner. This might be done by not requiring the eligiblity lists to be in until Monday following

The position of IHC Chairman the contest. Naturally, the athles an important position, but it managers could still check with Mr. Nerrie before the weekverage student will not even

In the very open area of social events it still remains to be seen whether or not there will be any candidates. If there are not, I hope that some sort of coalition of house social chairmen and committee members will be able to produce a few exchanges at the start of next school year.

In closing let me say that I want to serve on the BOD, I want to be IHC Chairman, and most importantly, I think I can do a good job.

Ralph Graham

Act. Chm. Fuhrman

I firmly believe that as activities chairman it would be my duty to see that every student at Caltech has the chance to get his \$22 in ASCIT dues worth of ACTIVITIES and CLUBS that he is interested in. I feel that presently this is not possible. Some ways of improving this sad situation might be to renew such activities as Wednesday Assemblies and Coffeehours with speakers who would be interesting to you. Possibly, even something like the popular Frosh Dinner Forum, with speakers like Ray Bradbury, Richard Feynman, Murray Gell-Mann, and others, could be reborn, but only if you want to see it reborn!

The activities chairman now sits on the IHC because of recent by-law changes and can therefore be more responsive to ideas for new activities originating on the grass-roots level in the houses. Also, by working with the IHC, he can make more students more fully aware of the nature of upcoming activities. By exerting pressure through the IHC, by working with the ASCIT Social Chairman, he can perhaps get houses to include campus-wide ASCIT activities on their social calendars. (Possibly house calendars could become social / activities calendars. Note that the two types of events are not mutually exclusive, so the

(Continued on page 8)

ASCIT President
Stephen Horner

In the past year ASCIT's policy has centered about essentially outward - looking activities. In may be established for

Stephen Horner

outward - looking activities. In the administration of these activities, ASCIT has suffered grave difficulties with communication. My energies will be focussed on the solution of these difficulties.

Of primary importance in the coming year will be communica-

Of primary importance in the coming year will be communication with the Institute's new administration — specifically Dr. Harold Brown. It is vital that Caltech's president be aware of the needs and aspirations of the student body, as I have seen through my contact with Dr. Du-Bridge.

In this the president is not alone—ASCIT particularly must remain in tight communication with its members, and its members should be kept aware of ASCIT's activities. In my experience as UCC, freshman section leader, and House President, I have had experience in keeping the channels of communication open. There are old channels that can be used more effectively: the California Tech, for example, as a link with the Undergraduate students, to be supplemented by a greater personal

involvement on the part of ASCIT's officers. New channels may be established for liaison with the Graduate Student Council, especially important at times when a concerted effort from all the students can result in decisive action.

In a school like Tech, faculty-student communication can be an invaluable resource. As a result of my efforts, my house has established freshman-upperclass-faculty discussion groups to help make this possible. As ASCIT president I would continue in this direction.

The trustees' lack of contact with the undergraduate student body is infamous. In discussions with Henry Dreyfuss and Bill Zisch, (two of the more active members of the Board), we have worked out tentative proposals to establish ties between these two groups.

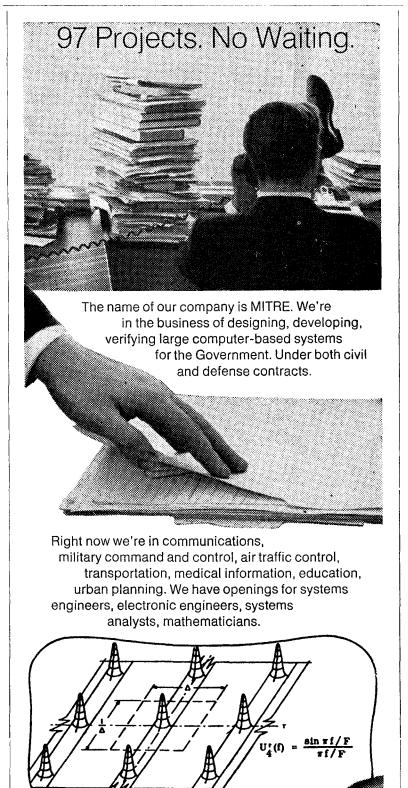
Although there already exist administrative committees at Caltech on which the students are represented, these opportunities are insufficiently exploited, owing to communication roadblocks. The minutes of these meetings should be compiled, and summaries made available in the Tech.

The need for better communication with girl's schools is obvious. A helpful step would be the publication of a calendar of activities at girl's schools in the L.A. area. Coordination of an ASCIT tutoring program for girls at neighboring schools would be a vehicle for increased contactand might be welcomed by schools such as Occidental, where girls have expressed an interest in receiving help in their statistics course. Innovative lowpressure events in the ASCIT social program will be equally ben-

Finally, contact with the world outside Caltech is educational and desirable. Working in conjunction with the YMCA I have been involved in bringing influential and interesting people to campus. A S C I T's traditional Wednesday programs have been neglected. Entertainment (rock bands, The Committee), could be enlivening to that eleven o'clook recess.

With my plans for ASCIT's future development and my past administrative experience as House President and Director of Freshman Camp, I feel well-qualified to serve the Caltech community.

Stephen Horner



INTERVIEWS WILL BE CONDUCTED

SIGN UP NOW AT THE PLACEMENT OFFICE

Feb. 12

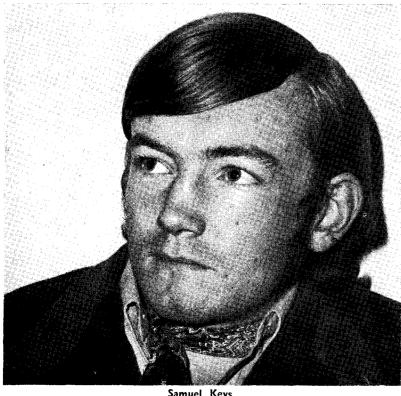
An Equal Opportunity Employer

Or write for more information: Mr. L.J. Glinos, College Relations Coordi-

nator, The MITRE Corporation, 4000 Middlesex Turnpike, Bedford, Mass.

ON CAMPUS,





ASCIT President Sam Keys

Doing the following things will help me gain the most votes.

- 1. Comment on how wonderful posters and buttons are in a campaign. (After all it worked for Richard Nixon.)
- 2. Worry about important campus problems like the Communist Menace, integration, and
- 3. Don't wonder where the 22 dollars you pay ASSCIT each year goes.
- 4. Study very hard and go to all your classes because there is nothing more important to you than science.
- 5. Realize the importance of experience. (Why not start a draft LBJ for president movement?)
- 6. Think that if ASSCIT makes the world better it will get B&G off your back.
- 7. Think that ASSCIT should either carry the white man's burden or be abolished. (After all there's nothing in between.)
- 8.. Believe that trollish but obviously brilliant people like you must make the best officers. 9. Spell ASSCIT A*-S-C-IT.
- 10. Burn your California Tech because this is in such bad Sam Keys

Director Stud. Life Marc Aaronson

The Director of Student Life a newly created office which will place a large amount of responsibility on whoever is elected to it, for this person will be setting precedents to be followed for many terms. The holder of this office will require initiative, ability, and ideas. I believe I possess and have already exhibited these qualities to some extent through working on the Ascit Presidential Staff, the Board of Directors of the Ascit Research Project, the California Tech, and the Faculty-Student Relations Committee. From this experience I have gained a good insight into the workings of student government and the administration. I strongly feel that life at Caltech could and should be greatly improved, and I desire to be elected Director of Student Life to work towards this goal.

The office of Director of Student Life is presently ill-defined. The By-laws amendment passed last term merely states, "The Director of Student Life shall be a member of the Board of Directors. He shall work with the Activities Chairman, Social Chairman, and Athletic Manager to coordinate their activities." One of the primary jobs of the Director, then, will be to act as a direct link between ASCIT and the IHC. I believe this will necessitate his attendance at all 1HC meetings. I definitely believe that ASCIT should sponsor more and superior athletic and social events. I will particularly work towards re-establishing Wednesday eleven o'clock ASCIT Assemblies.

Most Teckers will agree that

their greatest complaint with campus life is the abnormality of living in an all male atmosphere. I have spent the past several weeks in setting up the Caltech-Scripps exchange, about which most Caltech students have already heard. This exchange involves sending fifty or more Caltech students to Scripps for several days, where they will live in the dorms and attend classes. Similarly, an equal number of Scripps students will come to Tech, live in our houses, and attend our classes during the same period. I feel that such an exchange could be effected every term, and I have already received letters from other girl's colleges expressing interest in this type of program. As Director of Student Life I would be in a much stronger position for carrying out such exchanges effectively.

I believe that greater interaction and understanding is needed between the students and the faculty and administration of Caltech. One solution to this problem might be to set up nightly bull sessions with students and interested faculty members or administrators participating. These could be held in the student houses under the direction of a "Bull Session Committee."

If you as a Caltech student are dissatisfied with life on campus and wish to see an improvement made in your school's atmosphere, then I sympathize with you for I hold a similar feeling. If elected as Director of Student Life I will do the utmost to ameliorate all our lives here at Marc Aaronson

Secretary BOC Robert Fisher

the Tech discussing the Board's stand on points such as the li-

brary, the EE stockroom,

R.F.'ing in a room—along with

More than this though, I think

members of the BOC themselves

sould be responsive to the reas-

onable feelings of the whole stu-

dent body-both in and out of

case meetings. As Secretary of

the Board of Control this is the

kind of member I would attempt

Robert S. Fisher

an invitation to respond

wouldn't seem out of line.

Ever since I heard a rather traditional speech at Freshman camp on the honor system, I've been bothered by the dual image of the Board of Control. It appeares to be thought of as both a defender of the honor system, and a "knock-in-the-night" judicial body. A year on the board has convinced me that the honor code works. My question is whether it could work without the aura of fear and suspicion surrounding the BOC. I tend to think it could, and in fact could even work better. Mentioning that I'm on the Board during conversations about the honor system at times seemed to have the same effect as flashing a badge at a pot party. Suddenly everyone was afraid they were going to be screwed for something they had said.

It's my belief that the honor code should not be laid down solely by precedent, but also by the current feelings of the student body at large. If 99% of the school refuses to turn in a roommate for inadvertantly taking 15 seconds over on a 1-hour physics quiz, then I maintain that the Board should be made aware of this fact and should keep it in mind when considering a case. It's hard for the BOC to keep up to date with the actual feelings on the honor system if everyone is afraid to talk over a questionable issue with the members-especially in ret-

Perhaps one way to open up communication is for the Board to talk over some of their general policy decisions, and personal thoughts on the Honor Code. Of course, these remarks would in no way be of a nature which would lead back to any individuals who had been involved in a case. I think this aspect of secrecy should be maintained as strcitly as is possible. But, for example, an occasional word in

California Tech

Published weekly during the school year except during holidays and exams by the Associated Students of the California Institute of Technology. The opinions contained herein are solely those of the newspaper staff.

Editors: Dave Lewin, Alan Stein, Jim Cooper, Editors - in - Chief; Craig Sarazin, Managing; Ira Moskatel, Copy; Dave Dixon, Sports.

Roger Goodman, Tom Carroll, Charles Creasy, Mark Boule, Joanie Weber, David Linker, Bob Dullien, Larry Westerman, Bob Nnstein, Mike Farber, Bob Geller, Carroll Boswell, Berto Kaufman, Ed Mike Stefanko Martin Smith, T. M. Apostol, I. Random Falk R., Nick Smith, Marc Aaronson, John Healy, Kevin Savage, Con E. Staisey, Graham Berry, D. C Agnew

Photographers: Stephen Dashiell, John Bean, Paul Levin.

Business: Jeff Hecht, Manager; Metin Mangir, Circulation Manager; Art Selly, Staff; Bob Curtis, FIRED.

Typist: Flora Boyer

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 LXX, Number 16, Thursday, February 6, 1969.



Tech Editor FlemingTeam

LOOK AT THE REST

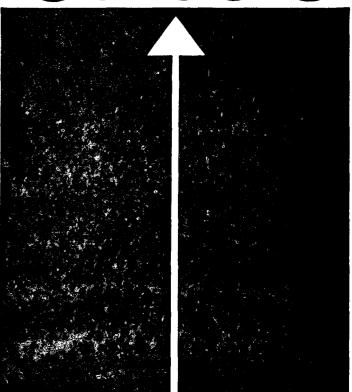
OF THIS PAPER, DAMMIT!

O

STRENGTH IN NUMBERS

R. Abarbanel, M. Abramson, B. A., W. Anderson, Billy Beck, B. Cox, J. Crawford, Dave Dobrin, B. Earl, G. Fowlkes, Ken Higgins, R. Hjelte, S. Hoelke, J. Jacky, P. Johnson, M. Jolley, L. Lomeli, P.. Morand, J. Segrave, S. Sheffield, D. Smith, B. Spencer, M. Teener, et al.

Martin Marietta



Engineers:

- Aeronautical
- Electrical
- Electronic
- Mechanical
- Civil

Interviews at campus placement office on Friday, Feb. 14

Martin Marietta Corporation is interviewing for career positions in major, long-term Research, Development and Production Programs. Opportunities exist in the technologies associated with Space Exploration, Advanced Electronics and Communications Systems, Missile Systems, and High Strength Materials.

Martin Marietta has major facilities in: Baltimore, Maryland; Denver, Colorado; Orlando, Florida; Wheeling, Illinois.

If you are unable to schedule an interview, please send your resume to:

> DIRECTOR COLLEGE RELATIONS AEROSPACE GROUP DEPT. 142 MARTIN MARIETTA CORPORATION FRIENDSHIP INTERNATIONAL AIRPORT MARYLAND 21240

MARTIN MARIETTA

An Equal Opportunity Employer

Athletic Manager Ault-Morgan Team

The team of Bruce Ault and Phil Morgan is running for ASCIT athletic manager. This statement will probably not cause great enthusiasm, nor will it increase the interest in this office. However, this is a job we want to do, an office we wish to hold. Athletics at Caltech are definitely on the move. Where? We're not sure, nor is anyone. However, with our increasingly dynamic coaching staff there is an excellent chance that sports are on the rise. Not only do we want to be a part of that rise, but we want to help in whatever way possible. The position of the ASCIT athletic manager is one which will enable us to work with the athletic department for the continuing development of sports at Caltech. Equally important is the position of the athletic manager as a voting member of the IHC. From the IHC comes the best contact with the students, the student houses, and interhouse sports. We will try to serve each of these areas through the office of athletic manager and the IHC.

We are running on a slate with Pete Wilzbach and Bill Bradley. This should be emphasized, since we share many opinions on the needs and goals of the students at Caltech. Even more, we share the enthusiasm and the desire to hold our respective offices and to fulfill them as the students here desire. We urge you, when voting, to remember all of these

candidates as a slate.

The coaching staff, the athletic department, and our outgoing athletic managers, Lonnie Martin and Tom Burton, have all set guidelines for athletics at Caltech to follow. We would like to, and will try to follow these guidelines to the greatest advantage of Caltech athletics.

B. Ault P. Morgan

Dir. Stud. Life Langill

I am running for the office of cause I want to win-this may seem like a novel approach, but it's true. I'm not running for any grand and glorious cause-I'm sorry to say that I can't change Tech into another Peyton Place. However, I feel that I will do a good job if elected. I fully understand the duties of this office, but I'm running for it anyway. I realize that the office of Director of Student Life entails some grunge work, but I'm ready to meet it. The freedom and flexibility of this office appeal to me, for it will allow me to work on any worthwhile project encompassing student life. I can't promise a harlot in every house, but who can say what mystical, inconceivable things will happen if you vote LAN-GILL. Remember—A vote for LANGILL is incredible.

Langill

By-Law Changes

(Continued from page 1)
year and receive a copy of the Big T.

(Eds. Note: Any undergraduate who does not explicitly request to complete payments will automatically receive a refund for the payments previously made).

3. **Add** the following section to Article XIII:

Section 8. Class Dues

Class officers shall have the power to levy class dues, not to exceed two dollars (\$2.00) for the academic year for the sophomore class and the junior class, and not to exceed five dollars (\$5.00) for the academic year for the senior class. Notification of the raising of class funds shall be made by at least three class officers jointly in writing to the California Tech and the student accounts office. The freshman section leaders may levy not more than one dollar (\$1.00) for the academic year by agreement of two-thirds of the section leaders. Notification of such dues must be made jointly in writing by all concerning section leaders to both the California Tech and the student accounts office.

4. Article XVI, Part C, the little t, Section 2.

Change:

The litle t shall be published each year by one or more editors and a business manager to be appointed by the Board of Directors at the beginning of third term . . .

To read:

The little t shall be published each year by one or more editors and a business manager to be appointed by the Board of Directors before the end of second term . . .



Peter Wilzbach

ASCIT President Pete Wilzbach

By now, many of you may have already seen some of the posters, buttons, pens, pencils, and God-knows-what that I've been dumping all over campus. The reason for all this is, of course, to get me elected, but there is also a reason why I I want to get elected. That is to have the chance to unify the student body once again. Presently, the campus is split up into two groups, those working on the Research Project, and those who know nothing about it. As a result, ASCIT has been primarily concerned with the Research Project, and the affairs of a majority of the students have been neglected. What I would like to propose, therefore, is the creation of a new office and elected member, Director of the Research Project, who will co-ordinate the activities of the

project and have a vote on the ASCIT board. This will leave the rest of the ASCIT officers free to take care of their own duties and obligations.

In an attempt to get together a group of officers who can work together and ably represent the affairs of all students, I am running together with a slate of well-qualified candidates, who would like to work with me in trying to better our student government. These candidates are the following: Bill Bradley for Social Chairman, Steve Heisler for Activities Chairman, and the team of Bruce Ault and Phil Morgan for Athletic Managers. Together, we feel that we can do our best in not only unifying the campus, but also in bringing about new interest and participation in the ASCIT government.

Peter Wilzbach

Secretary Derry Hornbuckle

Since I seem to be running unopposed, I'll take the opportunity for some general philosophiing about life at Caltech. As I see it, the purpose of ASCIT is to help Caltech students realize potentials in all areas. This includes academic and social activities, athletics, and also interpersonal relations and community awareness.

Regarding academics I think far too many students leave Caltech disillusioned with science. Partly, they are weary of solving problems—doing well means doing the prescribed problems, imaginitive thinking is optional and unrewarded, and not getting the right answer means a math mistake. I think in all courses the student should be able to arrange independent study, giving evidence regularly of his progress. Labs should emphasize learning by doing and should be graded pass-fail. I strongly favor an honors program and the opportunity to do research.

I think house social programs could be improved greatly by cooperation among the houses — the ASCIT social chairman, in his position on the IHC, should be given lots of encouragement, cooperation, and the necessary funds to accomplish this.

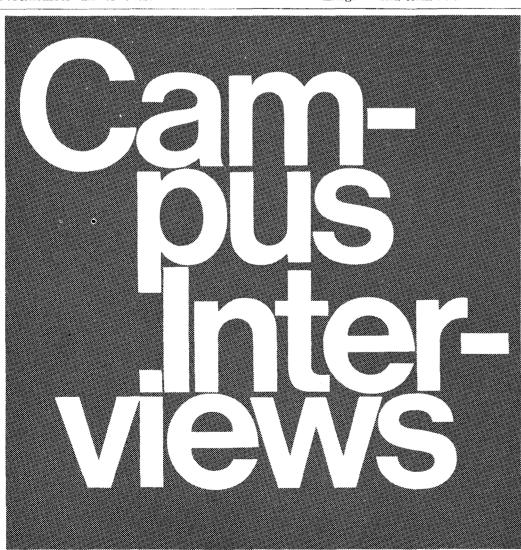
Athletics can be a rewarding part of life at Caltech; I think there should be better publicity of what facilities are available when, and notices about preseason and off-season practices for newcomers to a sport.

I'm very enthusiastic about the Y's Journey/Encounter programs and house sensitivity conferences. I've heard the Caltech student body described as "for the most part, walking corpses"; I hope such experiences will emphasize and improve interpersonal relations.

I think the research center can be an important instrument in developing awareness of social and community problems, besides offering academic and social possibilities. I was enormously impressed by the variety of interests and the enthusiasm brought to Caltech last summer by the thirty SRA's. I hope some of this feeling will be revived as more SRA's arrive for new projects, and I support the efforts of the research center.

Finally, as to my qualifications to be ASCIT Secretary: I've had experience as ExComm Secretary and Junior Class Secretary. As editor of the Little t I've met lots of people and shown some imagination and endurance (besides which, I know the By-Laws backwards after proofreading them three times). I was on the organizing committee of the Journey/Encounter program, a member of the Activities Committee and the Coffeehouse Committee.

Derry Hornbuckle



Divisions of Hughes Aircraft Company will be conducting interviews on campus: February 28

Please see your Placement Director for details

Creating a new world with electronics

HUGHES

HUGHES AIRCRAFT COMPANY

An equal opportunity employer

HoopstersLoseTwo; Sports Power Ducks Lose Frosh Win With Pool

Hopes for a league win darkener further this week as Tech lost twice again, to California Baptist 90-66 and to Redlands

Hosting Cal Baptist on Tuesday, the Beavers combined poor free throw shooting (56%) with an even worse field goal record (31%). The poor floor performance must be attributed to the fact that three-quarters of the shots were from outside as Tech once again proved its inability to handle the zone defense in the first half by making only 27%, but improving in the second half against the man-forman. The game was lost, however, at the free throw line, converting 14 of 25 as CBC hit 26 of 34; and on the boards, being outrebounded 61-44 as the taller Cal Baptist players got numerous tips and second shots. Scoring was balanced with forward Ault leading with 17 and guards Fox and Carrie contributing 15 and 14 respectively. Heinz led all rebounders with 10.

On Friday, the Beavers chose to have their poorest performance of the season against the second weakest team in the league. Redlands held but a slight advantage in rebounding and Tech produced a fair defensive effort but hit only 21% from the field, with an inexcuseable 16% in the first half compared to 39% overall and 45% in the first half for Redlands. This. combined with 16 turnovers put the game out of reach at 41-12 at halftime. Tech played even in the second half but it was much too little, too late. There were no double figure scorers for the Beavers, but Ault led with 9 points. Heinz once again led all rebounders with 17. Not to blame for the final outcome, of course, was the very poor referreeing. Almost no fouls were called under the boards both ways and Redlands set many illegal and moving picks that went unacknowledged. With this the game deteriorated into more a battle of muscle than finesse, as Tech was clearly out-muscled

and was denied many rebounds and fair second shots.

Techs frosh lost to Redlands 75-37 by committing 43 turnovers, but beat Cal Baptist 79-77 as 6' forward Joe Pool scored 40 points and pulled down 26 rebounds, setting season's records in both categories and boosting his season's totals to 373 points and 186 rebounds to lead the team and achieve a 22 point per game average. Six-one guard Scott Needham added 19 points and 17 rebounds while 6'4" center George Meadows contributed 14 rebounds as Tech won the battle of the boards convincingly 80-56 and thus the game.

On Friday, February 7 the Beavers battle Claremont there, looking for a better showing against the team they have played their best league game against; and on Wednesday, Feb. 12 Redlands journeys here. Frosh games begin at 6:30 with Varsity tip-offs at 8:20.

Ruggers Win

by Alan Cope

The Rugby Club beat Eagle Rock II 15-0 on Saturday to register their third successive win and to maintain their perfect record for 1969. The victory was satisfying, but painful as the opposition made up for their lack of finesse by playing in a hard physical manner.

Dick Lipes was Caltech's best player and his determination was rewarded with two tries. Other try scorers were John Gallivan and Nelson Briceno, while John Davies converted a penalty goal.

Next Saturday, Feb. 8, Caltech opens their league schedule with a home game against San Fernando Valley State College. Last season San Fernando won the league championship and were 17th in the nation's rankings. Their one set-back was an 8-3 defeat by Caltech, which should be repeated this year.

Fleming Wins I. H. Tennis

Interhouse Tennis finally ended after many postponements due to our delightful Southern California weather. Fleming won it with three seconds and a first. Dabney was second while Ricketts grabbed third. Lloyd was fourth with Page, Blacker and Ruddock following in that order.

Pischill of Ricketts won first singles while Miller of Fleming and Battelle of Page were far behind tied for second. Chw of Dabney edged out Madura of Fleming for first in second singles. Pendergast of Ricketts managed to slip in third. Another Flem, Lomeli was gain edged out of first as Siegel of Lloyd took third singles. Fisher of Dabney came in third.

In doubles, not all of the matches have been played. The Fleming team of Isaacs and Turner won the doubles competition, 31-30 over the Fong and Konin team of Lloyd. Dabney's Joseph and DePauw and Blacker's Pearson and Stewart were tied for third. Next week is Interhouse track. Three houses appear to have an equal chance of winning: Page, Fleming and Ruddock.

Beagle Beats Baumgartner But Beavers Lose Two

Caltech's matmen had two meets last week and lost both, to University of California at Riverside (UCR) 25-11 and to strong Cal Lutheran 32-3.

Against UCR, the Beavers heavyweights were the only ones to win. Cox (160) and Woodhead (167) won, as did Baagle (heavyweight). Devinny gained a tie with his opponent in the 177 division.

Lewis lost his match at 145. Morris (123), Hornbuckle (130),

Barber (137), and Taylor (160) were all pinned.

Against Cal Lutheran, Beagle wrestling heavyweight, handed Baumgartner of Cal Lutheran his third loss in four years to highlight the match. The only other Beaver win was Langill in an exhibition match.

Cox, Woodhead, Lewis, and Devinny all lost their matches. Morris, Hornbuckle, Barber, and Taylor all lost by pins.

64-49.

by Bob Enenstein

It's official now! O. J. Simpson will play for the Buffalo Bills next year. However, the Philadelphia Eagle fans can't be too unhappy as the Kuharich Klutzes will enjoy the services of Leroy Keyes. The Rams, by drafting Larry Smith, Jim Seymour, and Bob Klein, should bolster their offensive attack. Depleted by injuries and old age last year, the Rams offense lacked the punch that enabled them to lead the league in scoring in 1967.

The mention of O. J. Simpson can start one thinking about power in sports. A good definition of power might be telling an opponent what you're going to do, doing it, and having your opponent not being able to stop you. For the last two years, U.S.C. gave O. J. the ball about every other play, but even knowing where the ball was probably going didn't help many defenses. O. J. still scored almost twice per game, while gaining about two miles of rushing yar-

Another example of power occurred right here at Caltech. Any of you who saw the Whit-

Hocker

(Continued from page 9) ning for ASCIT office. I don't know if you know me or not but usually I'd feel more inclined to write poetry, or better yet, paint, than go to a political activist rally. Still I've worked with ASCIT some, and have worked considerably on the Black SRA program. So I'm internally diverse and perhaps for me, for selfish reasons, the job of ASCIT president may be an abondonment of personal provincialism.

William C. Hocker Candidate for ASCIT President

The Beavers dropped the 400 medley relay to Occidental by a stroke, and Oxy was never headed as they went on to win,

Sheffield was again the star of the team as he won the 1000 and 500 free, and lowered his own school record in the 200 butterfly. Wright won the 200 back (as usual) and was second in the 200 I.M. Hall just outtouched Stefanko as they went 1-2 in the 200 breast.

Kalisvaart, showing improvement, was second in the 100 free and third in the 200 free. Watkins swam well, and out-touched the Oxy swimmer to win the 50 free. Mikowicz was third in the 50, as was Tyson in the 200 I.M.

Johnson was second in both the 1-M and 3-M dives. He lost the 3-M by .85 points out of 180 points. Reedy was third in both diving events. This weekend, the Beavers swim CHM, conference champions and ranked second by the NAIA.

tier - Caltech basketball game know what I'm talking about. If not, just ask Steve Kraus about how easy it is to guard Hugh Fenderson. When a team doubles your score using mainly its second and third string players you get impressed. When they do it by just working for lay-ups, you know you've seen real power.

Next Wednesday, Caltech celebrates Lincoln's birthday with a sports doubleheader at Scott Brown Pavilion. While still pissed off at having to attend classes on a holiday, go join the Darbs and Scurves in releasing hostility by yelling at opposing competitors. At 4:30, the "Puppy" and company wrestle Whittier, and at 8:20 Scotty's Swishers battle Redlands, the second worst team in the league.

Fuhrman

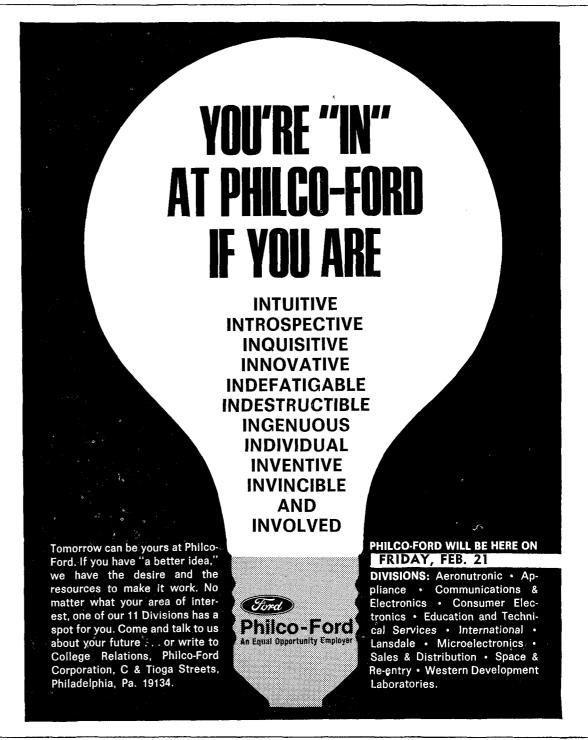
(Continued from page 5)

Activities Chairman must work well with and in complete cooperation with the Social Chairman.)

Many of the Activities Chairman's former duties will be taken up by the new Directors of Student Life and Academic Affairs, so he can now be wholly devoted to organizing and presenting activities. (No more hang-ups with the Research Center and Project or Academic Reform Committees or the Coffee House for the Activities Chairman.) This lightened work load will now make it possible to spend a significant amount of time finding out what kinds of clubs and activities you would like to have. I also will be able to do a more respectable job of publicizing the activities you have decided upon than has been possible in the past when the Activities Chairman was doing the work of three officers.

In summary, I will try to make the office of the Activities Chairman a clearing-house for student ideas about clubs and activities by (1) finding out what activities and clubs would be worth having (in terms of student feeling); (2) setting up and doing the necessary things to put on these activities or develop these clubs; (3) publicizing the activities or clubs and getting students originally interested to spread their interest and enthusiasm; (4) getting feed-back from all portions of the student body about how to make future improvements. In other words, a Caltech student can get his \$22's worth only if ASCIT finds out his interests and keeps him informed of what's happening, when, and where!!

James C. Fuhrman



Szolovits

(Continued from page 5)

with the normal services you expect of student government. You will want an effective Board of Control to make sure that the Honor System under which we have is upheld. You will want a Board of Directors which will look to your concerns for a social environment which you find likeable. You will expect an opportunity to meet with faculty and other students in ASCITsponsored events. You will expect an EPC to help you deal with problems of communicating with professors. All this is your right to expect by your membership in ASCIT, and all this it is the duty of your ASCIT officers to provide for you.

If on the other hand you are interested in an opportunity to be involved with an education different from the one traditionally offered by Tech, your student government also ought to provide the facilities to let you pursue your goals. A fairly small percentage of Tech students has taken this opportunity to actively participate in programs of

an unconventional nature. Even the academic reforms groups of two years ago actively involved only a minority of the student body. The Research Project and Center have attracted an even smaller number, and have unfortunately alienated many others because of the poor communications between those working in the project and those not in it. You must realize, however, that a person who holds an ASCIT office has to have some motivation to put up with all the demanding work of the office. He is not selfless or dedicated to learning what administration is about. He works because he gains some pleasure from the work he does. Creativity is supposed to be a big thing at Caltech. All our professors advocate it, yet there are very few courses where the opportunity to create exists as it does in the student government. This, the opportunity to try something that I hope will benefit the student body, is what I think is the major attraction to ASCIT office.

During he past two years, we (Continued on page 12)

Hocker Continues

(Continued from page 4) overtones of personal failure and pessimism. That is a subjective feeling of what Caltech is like . . . what do I anticipate as the needs of Caltech?

I think that things that have proven good at Caltech should be maintained and expanded to larger groups of students. That is a need. That is an obvious need, in fact. I means that something that can be said to have a "good" effect on a relative small, special group of people should be, perhaps, made available in translated form to larger groups. Take as a first example group number seven, those satisfied with their social lives: this group includes those who have formed a more than meet-you-at-the-exchangewill-you-come-to-my-room relationship with girls. They may tell you that one of the most valuable aspects of an extended relationship with woman is the relaxed, non-deadlined friendship that may develop. These are the guys who are said to have girlfriends, and to have had them

a long time. How does their experience translate into possibilities for those who are dissatisfied? Well, I'd see it that what is useful for some Caltech students is not necessarily simply a forced exchange-dance-on-Friday-night but some sort of nonhigh pressure activity where there is a primary motive of people interacting together and only a secondary motive of boy meets girl. What is this in concrete terms? I like sensitivity conferences up to the point where they become an excuse for not interacting with people in daily life. I like having SRA's on campus. I like the Scripps student exchange idea. And I do like dancing: I just think that there should be other means provided for social encounter. (at this point I will make a digression . . . I've been so far talking about what to spoonfeed Caltch students—as if they are not capable of taking care of business for themselves. Basically my opinion is that I can promise you nothing unless you can be expected to do most of the selfbenificial work yourself. ASCIT won't work too well as MOTHER STUDENT BODY to nurse people all the time, but must be a mechanism through which a person can work to satisfy his own needs, and, incidently the needs of some others.) So in the social environment of Caltech, I like expansive, people as people, ideas. And I have some ideas . . . suppose you like to dance, but find regular exchanges a bit below your level of interacting with people? It is possible in a situation with people who don't all know each other that techniques of sensitivity training can be applied in a context where people are meeting each other in order to have a good time togther, listening to music, talking, dancing, becoming friends . . . another idea: perhaps Caltech could have a series of joint classes plus more on a regular basis with a local college. It might be lecture, then seminar, then microlab, then free time . . . But I am not $\,$ running for Social Chairman. My way of thinking is that I have ideas, and other people who might be on the BOD have ideas and that, at the minimum, we should confer on the planning of seemingly unrelated programs in order for ASCIT to have an impact in making the Caltech environment better.

Back to my thesis of translating attitudes and programs from a successful group to a group wanting improving changes. It has been said that the Research Program in the Student Body of Caltech has perhaps been good for a small clique of the "social activists" on campus, but has done little to make life better for most students here; it has been said that the Research Program may have made things worse through the neglect of standard ASCIT activities. The complaints hold water if you assume that the duty of student activists is to satisfy the desires of those who apparently won't do anything for themselves. Maybe that is a bit harsh. If you are an ideological separatist, then I will say that my sympathies lie with both groups—I have played both roles. I believe that the decent question for the person outside the clique to ask is not "Why haven't you done anything for me?" but "What have you learned in programs that may be of use in designing a program that fulfills my needs?" I think that the expansive, optimistic, slightly mind blowing approach to things that has evolved in the Research Program is an approach that ought to be used in several aspects of Caltech student life, In the social program a who pro gram idea might be successful in getting girls to really want to come to Campus. A series of talks where academicians criticize their colleagues' work as being out of its all may reveal that the arts and sciences are not so cold after all. God knows what but something really unconventional might make the Coffeehouse thrive. So I believe in ASCIT attention being directed toward "totally Caltech" things but don't believe in equating internal concern with provincialism.

And I could go on and on. But maybe you already get an idea of what I'm talking about. I've thrown around a lot of platitudes of how to do things. I'd like to see the ASCIT BOD as a cooperative body that implemented its own as well as other people's ideas.

What are my motives in run-(Continued on page 8)



At JPL there's an exciting future waiting for you on our team. We're a hard-working, dedicated group of creative-minded individuals who look beyond the probabilities of our own world, and into the yet undiscovered possibilities of other worlds. One of which will be over 62 million miles away when our two Mariner '69 spacecraft arrive.

This is the distance factor involved in sending our two Mariner '69 spacecraft on a fly-by mission to Mars. The objective is to gather information and scientific data that will lay the groundwork for future explorations and experiments, especially those relevant to the search for extraterrestrial life. And Mars is only the beginning.

The future awaits those who plan for it. Isn't it time you planned for the future? If you're qualified, and would like to work with a variety of talented individuals (engineers, programmers, mathematicians, physicists, chemists) who continuously think in terms of tomorrow's challenge—there are opportunities today, at JPL.

The JPL Professional Staffing Team will be at Cal Tech on February 7, 1969. Contact your Placement Director for appointment. Or, send resume in confidence to Mr. Wallace Peterson, Supervisor, Employment.

(No. 3 in a Series) At UC BERKELEY

Nansi Corson (center), Director of Placement and Career Planning, presents PhD Candidate, Albert Klain (standing in center) to Wallace Peterson (left), JPL Employment Supervisor. Reed Harker, UC BERKELEY 1956, (right), JPL Section Manager, Telecommunications Division, explains function of 1/10 scale model of JPL's Mariner '69.

JET PROPULSION LABORATORY California Institute of Technology

California Institute of Technology 4800 Oak Grove Drive, Pasadena, Calif, 91103 Attention: Professional Staffing Department 636 "An equal opportunity employer." Jet Propulsion Laboratory is operated by the California Institute of Technology for the National Aeronautics and Space Administration.

At Large Westerman

Men, no freshman knows any-

The validity of that statement can be ascertained by consulting any of that acknowledged body of the truly learned—the senior class. Why then do the by-laws of the Associated Students call for a director at large, elected as a freshman? Surely given the initial statement this is a logical absurdity.

Why, then, does a freshman become director-at-large? Perhaps the ASCIT board is more intelligent than many people suspect. It may be that they wish to take this poor innocent freshman and give him a termis experience in the wiles of student government. Then, on that mysterious day sometime between registration sophomore yeat and the first PH2a lecture, when the miracle of true wisdom comes to the budding scientist (ah, who can doubt that sophomores have found the truth? Why, ask anyone in the class of '71), the ASCIT board stands to win big.

But enough conjecture, suffice it to say that I am here as a candidate for director-at-large. I cannot promise anything or make any claims. I can only say I will do my best to live up to the duties of the office. (After all, who expects to a frosh to know anything anyway?)

Larry Westerman

Tech Eds: **Tech Team**

Hello out there, bored readers! So its two o'clock in the morning and you've got insomnia and there are all these damn campaign statements to read, and you figure, if these don't put you to sleep, nothing will. Well you can't relax 'cause, this ain't gonna be a campaign speech. The two undersigned and overcommitted are taking over from a which you are now Barrel, under.

Seriously, the California Tech has the potential for becoming a fine paper. In the past, The Tech has garnered three All-American ratings from the American College Press. Since we are running unopposed we would like to use this opportunity to ask for the support of the Caltech community as writers, photographers, and most important, critical and involved readers. Teckers are some of the most creative, and also some of the most bullheaded, people. If their interest ,or anger,) can be aroused sufficiently, they will stop at nothing to write the wrong (or get their own way.) The California Tech should be a meeting ground for a variety of ideas and opinions. How much variety will, in the most part, be because of you, the readership. We would like letters in reaction to our stories and editorials, and would appreciate story ideas which may be submitted by telling one of us or by dropping as a note by the box next to the Tech Office in Winnett.

One more thing, the above also applies to Grad students. The California Tech will cover the activities of all the students, and we would appreciate the involvement, as writers, of grad students and interested faculty also.

We hope to put out a competent and creative paper, with your help.

> Craig Sarazin Ira Moskatel

Dir. At Large: Clark

Tech does have a problem. lucky in the future. Apathy. Nobody gives a damn. The students or the BOD. At a recent BOD meeting a commendation to Eldridge Cleaver for jumping bail was proposed and passed. Did you hear about this? Or if you did, is this an action a body that "cared" would

The BOD practically represents the students of Tech to the administration, yet they seem to remain an entity separate from the wishes and desires of the student body. There have been no petitions circulated, no board members have come to the houses to ask for complaints.

But the student body also must bear much of the blame. For years an effective administration has anticipated our desires ,but they can't think of everything. Matters relative to social programs, exchanges, concerts, course changes or additions have had little or no consistent student influence in them. Also, that administration is changing. We have been lucky in the past, we may not be so

The "outside world" also gets much of its impression of Tech from the BOD. Without a student-BOD liaison, no effective job of straightening out Tech's social image can be done.

The administration of Tech has long been listening to the desires of the students. But for years they have heard little. At other colleges the students riot to ge the same priviledges we are given freely. But we almost never use them.

Tech is changing. Without effective communication of the students' desires through the BOD, these changes may not be what we want. We can have a hand in the shaping of Tech through a student-faculty liaison. Only the BOD can set this liaison up. I promise that communication.

Francis Clark

Vote!

Director At Large Glen Spain

Well, here I am running for ASCIT Representative at Large, so I'd better tell you why. This is not part of some formal speech, nor an essay on why you should vote for me, since such things are usually more boring than worthwhile. What I will do is give my personal reasons for running and something of what I would like to accomplish in that office.

First and foremost, I am concerned about Caltech. I think this is a great place, sure, or I wouldn't be here, but this is far from saying that Tech can't and shouldn't be improved. I want to see this place become a more human place to live, to improve the social life and living conditions in the student houses, and to have more reward than four year's hard work for a degree. I would also like to see as many improvements in the intellectual life around here as can be made, including seminars on current events, plays and so on.

Secondly, I am concerned

about ASCIT, both as an organization and as an idea. Student government should allow the students to get things done, to organize for change. ASCIT has both the name and the power to get what the students want and need, though it has failed in the past. I think that ASCIT is the only thing that we have that can represent us-ASCIT is us. We have the power now to turn ASCIT into whatever we want it to become.

Finally, I am concerned with what we, as students, can do in the real world. This is the idea around such things as the Smog Research Project and the Research Center (and, if you think about it, Tech itself). However controversial (and they are), they have tremendous potential and usefulness, if only we take advantage. Personally, I think they should be given student support and used to better our environment at Caltech.

The Representative at Large

(Continued on page 11)

It's not everyday you can line up an engineering job at General Electric.

It's Wednesday, Feb. 19

It's the day the GE interviewer will be on campus. He's coming to talk to engineers. All kinds of

He'll be talking about the opportunities at General Electric. All kinds of opportunities.

Opportunities in research and development. Where an engineer can work on everything from jet engines to x-ray equipment to ways to prevent air pollution.

Opportunities in manufacturing. Where an engineer can be responsible for designing a factory or developing a new production system or getting the most out of other people.

Opportunities in sales. Where an engineer spends most of his time with GE customers, using his technical knowledge to help them solve a variety of problems.

So no matter what kind of engineer you are, you'll probably find that General Electric has exactly the kind of job you're looking for.

Why not line up an interview now? And you might line up just the job you want.



At Large Breakstone

As you may recall, there was an election last term in which an amendment to the bylaws of ASCIT, Inc. was passed. This amendment rearranged the structure of ASCIT and the IHC

somewhat and created various new offices. Among those is the office of the Director at Large, for which I am a candidate.

The various duties of the Dirictors at Large are: 1) to maintain a file of all ASCIT publications, 2) to distribute the ASCIT cards on registration days, 3) to be responsible for conducting the Red Coss Blood Drive (and probably give his own life's blood!) and the Consolidate Charities Drive, 4) to maintain a calendar

of event which are of interest to members of ASCIT, and 5) to perform other duties as specified by the BOD.

The most important thing about the Directors at Large (there are two of them) is that they are voting members of the Board of Directors. This fact should be in your mind when you vote for two of the candidates for this office on February 13.

I, Alan Breakstone, feel that I

would represent your interests as well as my own (let's not be hypocritical) if elected. I will perform the various duties prescribed and will try to maintain adequate communications with you, the students of Caltech, at all times. So, for responsible and responsive student government, vote for Alan Breakstone for Director at Large.

Alan Breakstone

At Large G. Stormo

What does Tech really need? A Good Director at Large!!?!

It is unfortunate that so many Teckers are unaware of and uninterested in the affairs of ASCIT. After all, they are members, paying members, of a corporation whose decisions affect each student. Two things are needed to make ASCIT more a tool of the entire student body. The first is greater concern and participation by its members. The second is more direct contact between the BOD officers and the student body. I think I can help with the second of these goals. I have participated in enough activities to become acquainted with more students than the average freshman, which enables me to represent more people. I hope that I will be representing you soon on the BOD.

Gary Stormo

At Large Jon Post

There is a moderately random bunch of teckers running for the office of Director-at-Large. To be blunt: six frosh. This situation is unprecedented; a fact which may be dismissed by certain individuals who claim that there was no such office last vear. Nonetheless, it is an important office. Otherwise, why would half-a-dozen noble representative cross-sections of rampant intellectualism be running? Me, I dunno.

To list "qualifications' for office in a case like this is pointless. Does being a fencing team manager or sixth-grade blackboard moniter make a bit of difference? Is someone trying to sell himself to you on the basis of high school accomplishments? Wise up: you're a Tecker! You are too smart to fall for naive propaganda of that sort. THINK! Are you going to listen to the rosy quasi-political promises like "next term's Student Body Cards will be in full color, Three-D, and Cinemascope . . .," or "I think ASCIT should be a viable student-establishment interface . . ." Balderdash! ASCIT needs to do things. I mearly claim to have the sort of offbeat, non-standard, nonconformal imagination needed to get things done. Get out there and vote!

More Spain

(Continued from page 10) should be just that, a direct representative of ASCIT to the students and, more important, from the student to the Board. The student body must be kept informed about ASCIT activities and policy through such actions as having BOD meetings in the houses, posting and sending out complete minutes of all meetings, open seminars and question periods for students with complaints through house meetings, suggestion boxes and every other possible channel of communication. Finally, and most important, the Rep at Large should make himself the sounding board for student opinion in every phase of life at Caltech and the instigator of needed changes for the student body.

Glen H. Spain



remain virtually anonymous.

Somehow we've managed to do it.

We're a group of over 60 companies, making everything from microwave integrated circuits to color television. And we rank number 9 in the top 500 corporations in the nation.

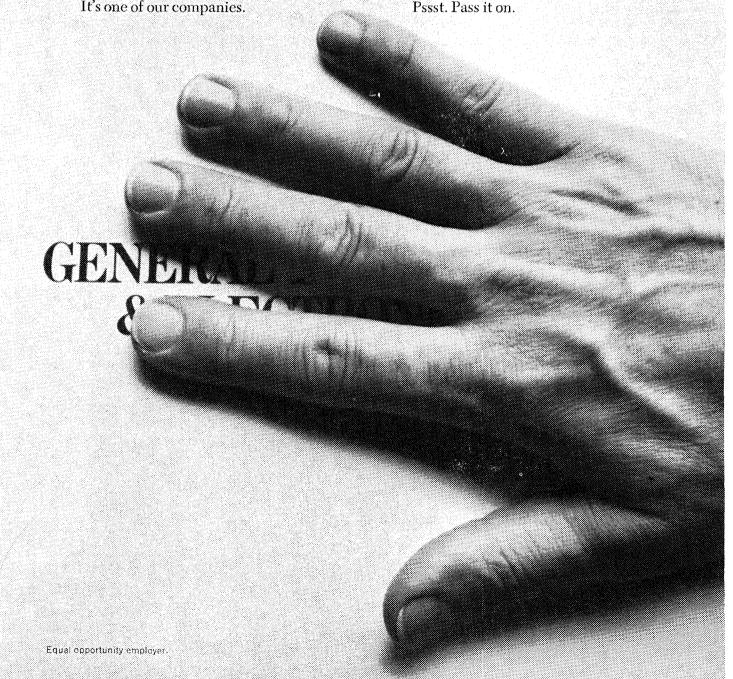
Pretty hot stuff for a nobody. But though you may not recognize our name, maybe the name Sylvania rings a bell.

company areas. We operate in 33 states.

So here we are, 5 billion dollars strong, growing all over the place, and looking for engineers and scientists to grow with us.

Why don't you think us over with your Placement Director?

Incidentally, we are known in the communications field as General Telephone & Electronics.



Treasurer Leonidas Guibas

I believe that the office of the ASCIT Treasurer is an important one for two reasons. Firstly the treasurer is the executive financial officer of the Corporations and so has to perform certain functions that, although routine, are vital to the exitence of any corporation. In addition, the ASCIT Treasurer is closely connected with and financially responsible for the ASCIT Publications, as well as a member of the Fiscal Policies Board of the Research Project. In these areas I am inclined to view the Treasurer both as a source of ideas and as a restraining force, on the basis of his knowledge of the financial realities of the situation. Indeed he is the one who at all times has an overview of the entire fiscal picture, and so is well suited to come to a decision about the best allocation of funds among the different acti-

Secondly the Treasurer is a member of the Board of Directors and consequently he can influence the Board's decisions. Conversely, the Board needs the Treasurer's experience and financial knowldge for some of its most important actions. Looking at things from a more general point of view, I think this is a more significant function, because it gives the Treasurer greater leverage and power in serving the Corporation.

Aside from possessing the elementary skills that the office requires, I consider my many qualifications to be my strong desire to serve the student body and attend to its welfare. Because this year the ASCIT Board will be completely new, I think it becomes even more important to elect to this office one who is both competent in taking care of the fees that you pay, and

Kaufman ...

(Continued from page 3) tion, or the use of videotape so that lecturers could see themselves and improve.

Even in conventional readinglecture courses much could be improved. Would published class notes help or hurt? We must try and see. The Feynman Physics course is a failure; Feynman would be, and in fact was, the first to admit it. We must develop something to replace it.

In sum, the Institute must constantly try new things, constantly evaluate and reevaluate, in order to improve. The present system serves only to kill the enthusiasm of most entering students; to the degree, a great degree, that this inhibits learning, the Institute fails. We as students can help change that. That is what I shall try to do.

Berto Kaufman

Feinberg

self a seat on the faculty Academic Policies Committee. It is important to be able to work with or against these people and not to be intimidated. I am personally acquainted with many of the 14 faculty members of this committee and can honestly say that I will not be afraid to actively promote my ideas or

those that others offer as I come

around and visit the seven

houses.

Jerry M. Feinberg Steven Patt worthy of sitting on the governing Board of the corporation you are members of. I have served the Caltech Student Body in the Board of Control, and now I am asking you to allow me to continue doing so by electing me ASCIT Treasurer.

Thank you for your attention.

Leonidas J. Guibas

Black Coffee

(Continued from page 1)

cularly to the managers. It goes to the Institute Administration, which is providing free room for four in the Coffeehouse and paying all utilities except telephone, a nontrivial matter. If they withdrew support we'd close in two minutes. But we've said all this before, and business is down to just above ten dollars a night."

What more is needed? "Inter-

est," said Schroeder.

Szolovits

(Continued from Page 9)

have had very creative leadership, not only in the person of Joe Rhodes but also many other members of ASCIT and the Research Project and Center. The possibilities they have opened up for Tech students to do research on problems of their own choosing with immediate social applications must be kept alive and prosperious. At the same time, we must build new ideas to cope with the problems of you, today's students, and we must be sure not to neglect the basic but necessary services which ASCIT provides.

ASCIT Vice President. If elected, I will serve as Chairman of the Board of Control, an organization of which I have been a member for two years, first as Representative at Large, and currently as Secretary of the BOC. I am deeply committed to the ideals of the Honor System and I will do everything in my power to insure that this spirit which we live under will be well protected and cherished. Hopefully, however, my duties

I am running for the office of

as BOC chairman will not prevent me from taking an active part in ASCIT as its real vice president.

The BOC is one of the functions which any Tecker can expect of ASCIT. To fulfill my interest in Tech and its student government, however, I would like to concentrate on a few other duties of the v.p. as well. Students today have representation on many of the faculty committees of the Institute and have been involved in major decisions such as the selection of our new Caltech president. So far, however, very little has been done to co-ordinate the efforts of the students representing us, and none of them are ever called to account for their actions or asked for their ideas by other students. I would like, as vice president, to establish a channel of communication between the student body and its committee representatives, perhaps in the form of coffee-hours to discuss vital issues.

One of these issues is the admission of women. Within two years, we can expect women at Caltech. Present plans call for them to live in a dormitory far

removed from the student houses. I do not believe this is wise, and would urge that some other solution be found. Caltech is in the process of soul-searching about the admission of minority students and non-science majors. Added student input on this subject is vital and I would work to bring it about. The possibility for an individualized educational experience should be investigated, and I would work to assure that it got some consideration.

If you are not interested in ASCIT or the opportunities to experiment which are available to you at Tech, I will of course provide you with the leadership for the BOC which is your right. If you are interested in the programs which ASCIT can create, I will try to work with you and support you. In either case, I will try to keep you informed of what is happening in ASCIT. If you would like these ideas in your vice-president, please support me. But remember that with ASCIT as with anything else, only your participation will lead to meaningful results for

Peter Szolovits

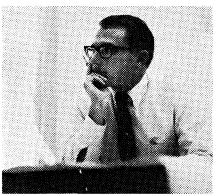
Do you think a bright young engineer should spend his most imaginative years on the same assignment?

Neither do we.

That's why we have a twoyear Rotation Program for graduating engineers who would prefer to explore several technical areas. And that's why many of our areas are organized by function—rather than by project.

At Hughes, you might work on spacecraft, communications satellites and/or tactical missiles during your first two years.

All you need is an EE, ME or Physics degree and talent.



If you qualify, we'll arrange for you to work on several different assignments...and you can help pick them.

You may select specialized jobs, or broad systemstype jobs. Or you can choose not to change assignments if you'd rather develop in-depth skills in one area.

Either way, we think you'll like the Hughes approach.

It means you'll become more versatile in a shorter time.

(And your salary will show it.)

HUGHES
HUGHES AIRCRAFT COMPANY
AKNOSPACE DIVISIONS

CAMPUS INTERVIEWS: February 28, 1969

Representatives of several activities of Hughes Aircraft Company (each with highly-specialized personnel requirements and separate interview schedules) will visit your campus. If your career interests lie in one or more of the following fields of aero-space/electronics, contact your Placement Office TODAY to make sure your name gets on the interviewing schedule for HUGHES AEROSPACE DIVISIONS:

Microwave & Antenna Engineering Guidance & Controls Engineering Spacecraft Design Engineering Components & Materials Engineering Weapon Systems Engineering Electro-Optical Engineering Microcircuit Engineering Space Systems Engineering Missile Systems Engineering Circuit Design Engineering

U.S. Citizenship required/An equal opportunity employer.