

photo by Kim Gleason

ASCIT candidates pose with their best SEG in a vain attempt to impress the constituency. Following are their names and the office for which they are running. Seated, left to right: Norton Greenfeld, Bob Berry, and Tim Hendrickson, a team for TECH editor; Ralph Kimbrell, rep-at-large. Standing, front: Stu Hopkins, social chairman; John Haviland, rep-at-large; Leonard Fisher, IHC chairman; Greg Brewer, rep-at-large; Steve Card, social chairman; Fred Lamb, secretary; Gordon Myers, vice president. Standing, rear: Ed Robertson, vice president; Bill Broste, IHC chairman; John Walter, athletic manager; Dave Close, secretary; Jerry Yudelson, activities chairman; Eric Young, treasurer; Martin Smith, BOC secretary.

Many Vie In Elections

The nominations for the 11 ASCIT offices were officially closed as of last Monday night. Final nominations were placed in the ASCIT meeting in Winnett as the number of candidates ran up to 22. The elections will be held next Tuesday, Feb. 23, to be followed by any necessary runoff elections.

Five of the 11 offices are a sure bet for the candidates running unopposed on their tickets. These candidates are: Eric Young for treasurer; Jerry Yudelson for activities chairman; John Walter for athletic manager; Martin Smith as B.O.C. secretary; and the team of Bob Berry, Norton Greenfeld, and Tim Hendrickson for editors of the Tech.

'Sblood!

Gordon Myers meets Ed Robertson in the contest for the vice-presidency. Dave Close be pitted against Fred Lamb in their contest for secretary's office.

Bill Broste and Leonard Fisher are running for IHC chairman. The trio of Steve Card, Doug Eaton, and Stu Hopkins will be narrowed down to just one social

Drama Club Needs Actors

Despite the crush of eager would-be thespians who jammed Dabney Lounge for the first try-out sessions Monday and Tuesday, the Drama Club proudly announces that there are still juicy parts available in the ASCIT Play.

The play, Tennessee Williams' "A Streetcar Named Desire," will be presented in Culbertson Hall in May.

If you couldn't make it this time, be sure and show up next week on Wednesday and Thursday nights at 7:30 in Dabney Lounge. If you want to be in the play, be there; it's your last chance.

chairman. The office of representative-at-large is under even greater demand with Greg Brewer, John Haviland, Ralph Kimbrell, and Sam Logan all competing.

Sue for President

During this week the candidates will be visiting the Houses during lunch and dinner in or-

Computer Debate Set

The Caltech chapter of Pi Kappa Delta is sponsoring on the Caltech campus tomorrow and Saturday the Caltech Computer-Controlled Debate Tournament.

The Caltech students want to welcome the over one-hundred debaters from ten states who will be on our campus Friday and Saturday. This tournament represents a "first in forensics" since the initial pairings and final results will be determined by the Booth Computing Center's 7094. Schedule

The schedule of events for the two day event is as follows:

Friday, February 19, 1965	
Round I	12 noon
Round II	1:30 p.m.
Round III	3 p.m.
Round IV	4:30 p.m.
Saturday, February 20, 1965	
Round V	9 a.m.
Round VI	10:30 p.m.
Quarter-finals	2 p.m.
Semifinals	4 p.m.
Finals (Dabney Lounge)	7:30 p.m.

Any students who are interested in hearing the debate rounds should go to the tournament headquarters in Dabney Lounge. If any of the visiting debaters need assistance they should also report to this location.

As an added attraction, actress Julie Newmar, star of "My Living Doll," will attend the final debate on Saturday and will award the prizes.

der to arouse enthusiasm and support. Sometime next week the students will be treated to the rare privilege of viewing their candidates in a new light when the election lally comes off. The candidates had to pay their filing fees by Wednesday, Feb. 17, in order to be eligible for the elections.

Fred Bruswig will be running uncontested for ASCIT President. Doug Holford who was nominated dropped out of the race on Tuesday. This is the first time in many years that the ASCIT presidency has gone without a battle.

NSF Grant To Build Owens Valley Dishes

A \$1,645,000 grant from the National Science Foundation has made it possible for Caltech to build the first of several 130-foot dish antennas at the Owens Valley Radio Observatory, Dr. Lee A. DuBridge announced this week.

Designed to augment the twin 90-foot dishes already at the observatory, the new metal "ears" will be the world's largest antennas capable of being pointed to any place in the sky. Westinghouse Electric Corporation has been awarded a \$1,200,000 contract for the first of the antennas, which is scheduled for completion in mid-1966. The remainder of the NSF grant is for development of a digital computer drive system capable of operating and coordinating all antennas simultaneously.

Ideally Located

The Caltech observatory, deep in the Owens Valley 250 miles north of Pasadena, is ideally located for radio astronomy because it is shielded from man-made radio and television signals

Honor Keys Given To Tech Leaders

ASCIT awarded 20 honor keys and nineteen honor certificates to deserving Techmen at last Monday's meeting. Those who receive honor keys are considered by the BOD to have contributed the most to campus activities. The recipients of honor certificates are cited for contributions which are only slightly less significant.

Honor keys were awarded to seniors Kendall Brown, Randell Cassada, Jim Eder, Roger Davison, Steve Garrison, Dave Jackson, Ted Jenkins, Doug Josephson, Dennis McCreary, Bill Pence, J. C. Simpson, Viv Sirelson, Bob Sweet, John Walter, and Rodger Whitlock. Juniors receiving keys were Fred Bruswig, Bill Broste, Stuart Galley, and Gordon Myers. The only sophomore to whom a key was given was Eric Young.

The seniors receiving honor certificates were Steve Blumsack, Walt Davis, Chris Dalton, John Harkness, Vance Hirschi, Bob Levin, Guy Jackson, Bob Scott, and Mike Rosbash. Junior recipients included Doug Gage, Mike Cunningham, Ed Robertson, and Seam Solomon. Sophomores receiving certificates were John Eyler, Dick Hackathorn, Fred Lamb, Mark Satterthwaite, and Martin Smith. The only frosh to get a honor certificate was Mike Meo.

The awards will be presented at the spring awards banquet at Tournament Park.

Notices

NEW HOUSE MOMS

All those with an eager heart and a willing spirit, or otherwise interested in applying for the position of Resident Associate in the Undergraduate Student Houses for the academic year 1965-66, should contact the Master of Student Houses before March 5. All applicants must be graduate students (in their second year of graduate study or beyond), or members of the faculty. For further information call at the Office of the Master of Student Houses or phone Ext. 541.

TO KILL A MOCKINGBIRD

will be shown in BECKMAN Sunday night at 7:30. Admission is 75c and everyone is invited—friends, enemies—everyone.

FOLK SINGERS

If you like to mess around with a guitar and/or sing folk songs, stop over at the Y lounge Sunday around 3 o'clock.

CONTINENTAL BASEBALL

Caltech's Cricket Team, undefeated last season and winner of the California Cup, is in need of new blood. Every member of the Caltech community—from freshmen to professor emeritus—is eligible to play. All those with either experience or interest (or a taste for tea) are asked to contact R. A. Huttenback at Ext. 541.

PASADENA NEEDS YOUR HELP

Bob Oliver, Caltech econ prof, has joined the race for Pasadena City Council. Anyone interested in doing campaign work for him please see Paul Purdom in 311 M-J House or Tim Stephens in 51 Blacker.

THERE IS STILL TIME

to bleed! See your House representative or Eric Young in 103 Rud-dock. Sign up by February 22.

BOC

All those interested in being considered for one of the two appointed positions to the Board of Control for the third term of this year through second term next year, submit your application in the G Box of Page House. Deadline is February 24.

FOUND: ONE NECKLACE

One necklace found after Brothers Four concert. Identify and claim at Y office.

Y ELECTIONS

will take place Wed., Feb. 24, at 6:30 p.m. in Chandler. Y membership sign-ups will be closed from Feb. 17 through 23. Y members will receive notices of the election with meal reservations by Mon., Feb. 22.

Shuttlesworth To Speak Here

The Reverend Fred L. Shuttlesworth, described by CBS news reporters as "the man most feared by Southern racists, and the voice of the new militancy among Birmingham Negroes," will be speaking in Winnett Center on February 23, at 4 on the subject, "What Price Freedom." This program is sponsored by the Public Affairs Commission of the YMCA.

Reverend Shuttlesworth is the President of the Southern Conference Educational Fund. He has worked closely with Martin Luther King, Jr. as Secretary of the Southern Christian Leadership Conference, the organization (Continued on page 3)

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Editorials

Millikan Mess

In a month or two construction will begin on the Millikan Memorial Library, destined to be a narrow glass-and-steel structure nine or more stories tall and consolidating all present libraries on campus. A week ago the Pasadena City Planning Commission approved a zoning variance to allow the building to have its unprecedented height. So, if nothing else happens, contractors' bids will be received within a month and within two years we will have a modernistic sore thumb sticking up into the smog from among the modest three-story Mediterranean buildings around the quad, and the eucalyptus trees will be gone.

Realistic planning for the library has been going on for at least three years, with of course a cost of tens of thousands of dollars. Although the area between Bridge and Gates was conceived as a central library site as early as 1920, only a recent generous gift by Dr. Seeley Mudd has brought the building close to reality. The present design was chosen from among some 50 possible ones, and so many people have been involved in the choosing that it is hard to tell where to put the blame. Aside from tradition, apparently the only reason for putting the library where the trees are is that the spot is in a central location. But space is so limited there that, to keep the amount of ground occupied small, the edifice had to be made tall.

Now, we don't argue against the need for a central library; we are faced with underlit, depressing reading rooms and a stock of books that overflows into halls and steamtunnels and labs where books are decayed unmercifully. We are also not ungrateful for Dr. Mudd's generous contribution that makes the new building possible. But we are concerned about the prospects for having an eyesore on campus for the next 50 or 100 years. The design for the building is not intrinsically ugly; but modern architecture has its place, and on this campus it can easily be out of place. Beckman Auditorium avoided being a complete monstrosity by placing itself in relative isolation. If the new style of Caltech buildings is destined to be along the lines of Keck and Booth and Millikan, then at least we must avoid mingling them intimately with the grand old Spanish tile and vaulted ceilings.

Furthermore, is the proposed site really a central one? When the campus extends itself up to Del Mar, most likely within 30 years, the library would be down in the corner of the campus. Certainly a location such as behind Steele (now being constructed) would be the central site of the future; and remember that the library will serve under those future conditions more than half its life. Even if all teaching is still done in the block of old buildings west of Throop, the people doing research, who use the library more and who will be spread all over the future campus, and the students, who go to the library to study most often directly from the residence Houses, would welcome a true central location for something that everyone hopes will be used a lot.

Granted that another acceptable design would cost another pile of money to produce, the easy resolution is to build the thing where it will look respectable. We feel that good taste and a (sometimes squelched) desire to be proud of our campus demand that Millikan go north of San Pasqual.

—Stuart Galley
Wally Oliver

Owens Valley -- Radio Telescopes

(Continued from page 1)

plained. The pedestal on which the antenna is mounted will be 68 feet high, as tall as a six-story building.

Rugged Construction

Each dish antenna and its pedestal will weigh 406 tons, and will be designed to survive winds up to 90 miles an hour. The pedestal, mounted on railroad tracks, will be self-propelled by 4 five horsepower electric motors and will move on a set of heavy rails 44 feet apart.

The rail system will form an inverted "T" whose stem will ultimately extend for three miles north and south and whose east-west crosspiece will be 7500 feet long.

On the rails the dishes may be moved into a variety of patterns, giving them capabilities equivalent to those of a much larger dish. The system will be able to resolve very small objects, down to a few seconds of arc in diameter, and will increase the observatory's ability to detect very faint signals.

"The new antenna system will

make the Owens Valley Radio Observatory the world's most powerful and flexible one for the study of objects in and beyond our galaxy that radiate energy in the radio frequencies," claims Observatory Director Gordon J. Stanley.

New Projects Proposed

"With the new dishes we can greatly expand our major research program," Stanley said. "They will enable us to observe many more radio sources and to define more accurately their sizes and shapes. It will now be possible to tackle the cosmological problem of general relativity—that of the size and shape of the universe."

Other plans include a more detailed study of the hydrogen clouds within our galaxy, along with additional planetary observations. Astronomers want to learn whether the earth and Jupiter are the only planets with radiation belts and magnetic fields, and to obtain some idea of the planet's surface composition.

Impressive Accomplishments

Since its dedication in 1958, the

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Many People Living Soon

BY MICHAEL MEO

In 7000 years, if present population trends continue, the bodily heat of the people on earth will be sufficient to boil away all the water of all the oceans in one year.

Dr. James Bonner, lecturing last Friday in Chandler Dining Hall at the Frosh Diner's Forum, saw population as the main problem of the next 100 years of "The Future of Man." New food will be needed to nourish the millions who will arrive before the year 2000, but a foolproof method must be found to stop the burgeoning baby boom. The earth's population at present doubles every thirty-five years, said Bonner, but the limit of our capabilities will be reached before it doubles again.

Ad-men Rescue

The underdeveloped nations are contributing the lion's share of these infants, noted Bonner, and their tradition of large families doesn't help a bit. He is confident, however, that in their struggle for industrialization the peoples of the underdeveloped nations will be obliged to restrict their growth rate. India devotes 10% of her GNP to investment, for example, but her population still rises faster than her ability to produce goods.

The physical means for birth control have been around for a long time, but the need for their use has only now been recognized. A good old Madison Avenue-style advertising campaign, said Bonner, such as was successfully waged in Japan, is all that's required to lower the birth rate.

Leon's Life

So much for the near future. Once the world population has been stabilized at about six billion souls, Bonner foresees the day when governments will institute human breeding programs to have the best possible six billion. The six billion with the most valuable qualities can be scientifically chosen, said Bonner, who then outlined a program to do so.

Suppose Leon Fung is born. At birth a couple of thousand sperm cells are extracted from his testes and stored away in the deep freeze. Poor, sterilized Leon goes his way in the world until he grapples with the Angel of Death (death wins). After Leon's death, in other words, a committee meets and decides whether or not to use his spermatozoa. Who's on the committee? Why, geneticists, of course.

Through the mind of this reporter ran a swarm of the "best possible" six billions: the most noble six billion, the bravest six billion, the handsomest six billion . . . Bonner, on the other hand, had no doubts—"It'll be the most intelligent of course," he announced. "We'll have six billion Techmen."

F&SF

Not advocating but merely predicting, Bonner continued into the future. Our heads after a few generations of scientific selection will enlarge to accommodate our new-bred brains; soon it will be too difficult to carry them with us. Homo sapiens then will come in two pieces: one little piggy, the brain, staying home and analysing data; the other little piggy, a kit of sensory organs, going to market and gathering data.

H5 Notes

Avital Speaks on Israel To Enthral H5 Class

It's only twice the size of Los Angeles County. With a climate similar to that of southern California and a lack of a water supply, it also has an influx of immigrants similar to California's. Explaining "Israel, her policies and aspirations," in 155 Arms Tuesday, Mr. Bernard Avital, the former official press officer of the Eichmann trial, used the similarities of Israel and Los Angeles as a starting point for his lecture.

The London-born Avital, who has served with the British and Israeli armies, reviewed for H5 students the economic and military situation of his adopted homeland. The seventeen-year-old country, he said, has problems similar to that of any newly-independent nation, except that it is firmly Western-oriented.

Israel's biggest problem is of course her Arab neighbors. Avital noted her policy of aiding African nations, so that the circle of Arab enemies of Israel will perhaps soon be ringed itself by African friends of Israel. It's "encircle the encirclers."

Recently Israel suffered a grave defeat in the political war against Egypt and the Arab League. West Germany protested to Egypt last week when Ulbricht, premier of East Germany, was invited to visit Nasser. Nasser replied that, unless Erhard stopped Germany's military aid to Israel, Egypt would no longer recognize West Ger-

many.

West Germany, caught between safeguarding her image as a legitimate nation in the world in spite of the fact that a peace treaty ending World War Two has not yet been signed, and paying off the moral debt she owes to the Jews who escaped the Nazis, capitulated to Egyptian pressure. A recent agreement to ship arms to Israel will not be honored by West Germany, in return for Ulbricht receiving a nine instead of a twenty-one-gun salute when he steps off the plane in Cairo. The Arabs win this round in the Arms race.

Three New Humanities Courses

Three new courses will enrich the history curriculum starting third term. The courses, all senior electives consisting of nine units, are listed as follows: H21, Science in America, to be headed by Donner Kevles; H42, An Age of Reform in America, will be taught by Robert L. Woodbury; and H27, Comparative Politics, with Mrs. Dorothy Guyot as instructor.

Each of the courses will require three hours of class each week in addition to an estimated six hours of outside work.

Science in America consists of an historical examination of the scientific community from 1865 to the present time. Topics such as the patronage of research and the nature of a scientific career, will be discussed along with the relation between the scientist and science to the universities, industry, and government of the United States.

The major issues and personalities of the progressive period from 1890 to 1917 will be discussed in An Age of Reform in America. Political responses to the social problems caused by emerging industrialization and urbanization will spice the seminars.

(Continued on page 3)

Leighton Talks on Sun

BY HANK SUZAKAWA

Do you know that the sun is round, hot, and has spots? If so, then according to Dr. Richard Leighton, who spoke about "Solar Magnetism" Monday night at Beckman, you have the average amount of knowledge about the sun.

Leighton described himself as "one of those people who cares why the sun is round, hot, and has spots." Since the causes of the first two phenomena are well known, Leighton decided to talk about the sun spots and the mag-

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Caltech Has Director of TV and Radio

Mrs. Rose Blyth will rejoin the Caltech public relations staff on March 1 as director of television, radio and film activities.

In her new position, Mrs. Blyth will concentrate on developing material for television and radio programs and on expanding Caltech's film library. She will be in charge of distributing these materials to commercial and educational television stations and to schools, colleges, and other organizations.

Mrs. Blyth first went to work for Caltech in 1955, and in 1959 produced the Institute's first television series—27 half-hour programs entitled "The Next Hundred Years." In 1962 she left to take part in the formation of the new Los Angeles educational television station, KCET (Channel 28).

Since October 1963 she has served as Director of Community Development for Community Television of Southern California, the non-profit corporation that determines operations policy for KCET.

Mrs. Blyth won the 1964 Robert Eastman Award as "Outstanding Woman in Broadcasting." She serves on the board of directors of the Western Radio and Television Association and the American Women in Radio and Television. From 1961 to 1963 she was a director of the University Film Producers Association.

From Other Campuses

By Jace

If this column, or some of the other superb features of the **Tech**, occasionally annoys you, you should consider writing a letter to the editor. Many Techmen are reluctant to do this due to a lack of experience in writing succinct poison-pen letters, so below are two examples of how to get your idea across as briefly as possible.

First, from the Tulane **Hullabaloo**:

"To the Editor:

We regret to announce that our patience with your newspaper is already totally exhausted.

Michael C. Harry
Donald A. Martinetti."

Not quite as good, but still above average, is the following missive from the Antioch College **Record**:

"To the Editor:
I had begun to worry that Antioch would fall to pieces, me being away so long, when at long last I received the **Record** of Oct. 2 and spied the heading: 'Dixon at Tuesday assembly compares freshmen to grapes.' Somehow I know now that everything's O.K."

On the light side:
From the George Washington University **Hatchet**: "Syracuse men placed a sign midway between coed Syracuse and all-male Colgate: 'Nine out of ten Syracuse women who have tried Colgate prefer tooth decay'."

Again from the **Technique**: "People are always doing something about sex, but nobody ever talks about it."

From the **Santa Clara**: "At the University of Nevada there is a certain man on campus, Mr.

Goetting by name, who claims to be Jesus Christ. Speaking at a student rally, he (He) said he (He) would speak out on issues, but lost much of his following when he (He) refused to change water into wine."

From the MIT **Tech**: Seventy-five years ago the following note was found in the **Tech** box: "To the Editor — Will you please tell me where the Institute has its printing done, such as examination papers, etc.?"

Shuttlesworth

(Continued from page 1)

that is presently providing leadership in the voter registration drive in Selma, Alabama.

His presence here on campus is an opportunity to learn first hand the background of the personalities and issues involved in this test of the Civil Rights Act of 1964.

Experienced

Mr. Shuttlesworth has had long experience in the civil rights struggle—most notably the movement in Birmingham in 1963. It was because of his central role in the demonstrations that he was one of the seven Negro leaders called to the White House to discuss racial problems with President Kennedy. It was from these discussions that impetus was given to the President's decision to ask Congress for a Civil Rights Bill.

Intertwined in this history of demonstrations for Negro equality are 26 arrests for civil disobedience and a series of bombings of his home and threats to his family.

More NSF

(Continued from page 2)

Owens Valley Radio Observatory has made many contributions to the young science of radio astronomy. It has played a leading role in discovering and investigating quasistellar radio sources—the distant, most energetic objects in the universe.

It has also discovered and mapped many radio sources in and beyond our galaxy and has found that most radio sources outside our galaxy come in pairs. This led to the concept of their explosive nature. The observatory has mapped the arms of our galaxy and determined its polarity, has discovered Jupiter's Van Allen radiation belt, and has made important observations of Venus.

More History

(Continued from page 2)

Seniors with a longing for power should take the Comparative Politics course. It will provide insights into how parties, cliques, and pressure groups gain and use power in different political cultures. The political practices of the United States will be compared to both a western democratic government and a non-western government. The non-western government to be discussed has copied western institutions but has not followed them up with western practices.

All three of the instructors of the new courses are relatively new to Caltech, having first taught at the Institute some time in 1964 at the earliest possible date.

Sun Spots

(Continued from page 2)

netic fields that cause them; a relatively unexplained field.

The early observers of sun-spots could hardly believe their eyes. One early astronomer called for his father to verify his discovery. To complicate matters even more the Church took a dim view on the new discovery since Aristotle did not mention them. Still, the sun spots became well documented and are the first reported evidence of the sun's rotation.

Above and Below the Belt

Sun spots occur in eleven year cycles, generally in belts above and below the sun's equator. They are caused by the magnetic fields of the sun's surface. The fields hold the surface gases stationary, thus cooling them and making them visible as dark spots.

These spots are accompanied by solar flares, which are explosions sending great amounts of gas and energy into space. This causes problems here on earth by messing up radio communications and might be disastrous to a space traveller.

Yet, while all these facts are known about sun spots, many questions have not yet been answered. These, according to Leighton, are questions that the next decade may be able to answer.

At this point, Leighton stopped talking and began demonstrating. The sun was too large to bring into Beckman, but through time lapse photography the sun spots and all the phenomena associated with them were brought to the audience. Leighton managed to prove that there is still some life, excitement, and beauty left in science, even at Caltech.

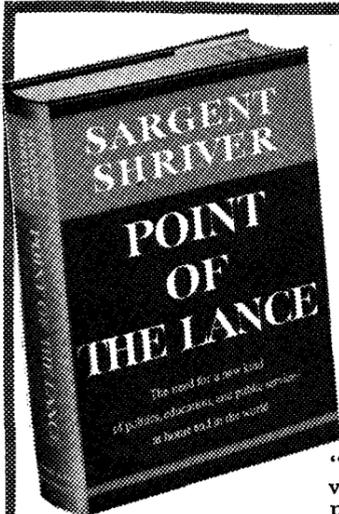
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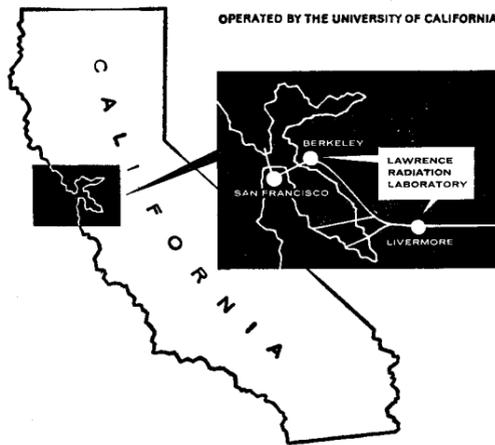
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Laboratory staff members will be on campus to interview Science and Engineering students
Wednesday, March 3

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ASCIT Candidates Give Campus Statements

Brunswig Runs Unopposed For President; Broste, Fisher Vie Describes Qualifications And Platform For Job

The ASCIT president is in the unique position of contact between student government and administration which makes him the key to the success of many student plans. In this position I plan to solicit continued faculty support for the many ASCIT operated programs so vital to student life. The key examples are the assembly series, coffee hour, and athletic programs. The broadening of the athletic program, hopefully, will be carried out as was originally proposed, to include such possible sports as skin diving, squash, and handball. The faculty-student relations problem needs to be explored along the lines of more frequent faculty visits to student houses.

Faculty members with an interest in the students lives and thoughts might consider getting to know one house well, for only then is the air of tension dispelled; only then can a fruitful exchange of ideas take place. I am convinced that the students of any house would welcome the chance to have several interested faculty members visiting several times a term. I turn now to the subject familiar to all.

The notorious ASCIT debt of last year has ceased to be a campaign issue. During the past year we have paid off a real debt of \$2500 to Bickley Printing Company for the California Tech.

One thousand was removed from the bank balance at the beginning of the year, so it represented the contribution of last year's BOD. This year fifteen hundred was taken off the top of the budget to complete the great relief bill. During the coming year we will be in a position to expand our programs in new directions.

Just three years ago one of the



Would you buy a used car from this man?

presidential candidates said, "Having all the money it needs, ASCIT tends to spend too freely." After two years on the BOD, I know this need not be the case. The times spent arguing over how much money should be spent per person for various clubs, has left an impression and we that won't be forgotten in good times. There are several ASCIT organizations which seriously need new equipment, such as camera equipment for sports coverage by the publications. In addition, a lot of people were ticked off about not getting a winter formal. All this goes to say that we are aware of enough good causes that no one is going to fly to Hawaii for any debate tournaments.

Some concrete suggestions were made last year an excellent cultural events which we had to pass by. Some were due to lack of funds, but others merely lacked people willing to commit themselves to a week or two of

concentrated effort. I know there are people out there who would like to see a jazz concert for a change, or an off beat play production. This type of event needs interested people to work in a small group to see the event demanding participation can make you suddenly realize why you've been sitting in front of your books snaking more and getting less. This past year has seen the birth of four new clubs. There is every chance that the coming year could be the year of the unique culture event. I am seriously encouraging people to let me know of such special interests, so that the Board can bring together any groups with fertile ideas.

The Tech urges that everyone save these campaign statements to compare the views of all candidates.

Close and Lamb Run For BOD Secretary

Ladies (?) and Gentlemen of the Jury, exhibit No. 1: the man. You are here confronted with a wild-eyed potential flunk-out known to espouse unpopular causes. Apparently ASCIT Secretary is one of them: he is the only candidate who chose to run without persuasion.

Exhibit No. 2: the record. This guy not only belongs to campus groups, he participates in them! He is a varsity debater, has been Secretary and is now President of Pi Kappa Delta, and is currently chairman of the Caltech Computer Debate Tournament. He sponsored and participated in last term's political debate and is now Legislative Vice President of the Caltech YRs. He has aroused the ire of the Administration for outspoken opposition to unpopular developments.

Exhibit No. 3: the job. As ASCIT Secretary this nut will take copious and accurate minutes. More importantly, he will lend a voice of "show-me" defiant leadership to a complacent BOD. What this campus needs is a good \$64,000 Secretary for 5c.

Honorable Jury, as the kook described above, I make no apology for my stand. I ask only that you consider who really wants the job and who can do more . . . for MIT.

Dave Close

A PLETHORA OF EDITORS TO REACH THE PINNACLE OF IRRESPONSIBILITY AND SLOTH

We are unopposed; therefore we may rejoice.

We seek to abolish horniness, abrogate fear, banish evil, bust trusts, destroy corruption, eliminate sin, end infamy, eradicate vice, expunge famine, exterminate wickedness, ostracize Leon Fung, prevent sloth, scuttle incompetence, and—when not engaged in the worthy pursuit of the above-mentioned valorous accomplishments—perhaps promulgate truth. It is altogether fitting and proper that we do this.

But in a larger sense, we can not dedicate, we cannot hallow, we cannot consecrate this paper,

According to the ASCIT by-laws: "The IHC Chairman shall be a member of the Board of Directors. He shall call and preside over meetings of the Interhouse Committee. He shall be Chairman of the Honor Point Committee. He shall be responsible for liaison between ASCIT and the various House organizations."

These are not easy duties, nor are they limited in scope. This office calls not only for experience, but also for interest and enthusiasm. My experience as House treasurer and UCC, as well as work during rotation, has given me valuable insight into intra-House activities. Furthermore, participation in Interhouse sports, past work as Head Yell Leader of two years ago, and membership in the Beavers have provided me with necessary background in Interhouse activities. It is this combination of background and insight into intra- and Interhouse activities that is a prerequisite for a person to hold the position of IHC Chairman.

The ASCIT Secretary is primarily responsible for keeping you informed about what the BOD is doing, for carrying on correspondence with other organizations, and for representing the student body in ASCIT decisions. I take these responsibilities seriously.

In the past, ASCIT financial difficulties have seriously limited the support it could lend to campus activities. This coming year ASCIT will be able to use its full budget in supporting activities for the first time in several years. With this in mind, careful consideration must be given to these expenditures and close attention paid to the details of ASCIT projects, to safeguard the interests of all of us.

The secretary can be instrumental in seeing that the whole student body is aware of these decisions and can insure that everyone will have a chance to make his wishes known. It is his obligation to maintain contact between ASCIT and the student body. I have the desire, and I am willing to spend the necessary time, to do these jobs well.

Fred Lamb

But experience and basic ability serve merely to narrow the field—what really matters is whether or not one "really cares." I assure you that I do care and will carry out the duties of this position to the best of my ability.

Remember to vote for FISHER for IHC Chairman—your vote will be sincerely appreciated.

Leonard Fisher

The post of IHC Chairman demands responsibility and leadership if the IHC is to maintain the position which it has gained over the past two years.

I have had experience on my House Excomm, so I am familiar with the problems faced by House governments, and will be better able to coordinate the activities of the seven Houses. My work as editor of the Big T has demonstrated my leadership and responsibility.

The IHC Chariman must have the respect of Dr. Huttenback, the faculty committee, and the House presidents to be able to maintain the position of authority which the IHC has gained. I feel that my past contacts with these people and my record of work accomplished qualify me for this position of respect.

If you want to maintain responsibility on the IHC, and therefore the right of the Houses to govern their own affairs, vote for me for IHC Chairman.

Bill Broste

Young Vows To Guard ASCIT Money

As ASCIT Treasurer during the next year, my greatest concern will be the finances of what certainly isn't a profit-making corporation. Indeed, the greatest problem which the ASCIT board faces is determining how the dues paid by ASCIT members can be most fairly and usefully distributed.

Experience on the retiring board has shown me the pitfalls and problems involved in this process. I know that this experience will be invaluable to me in helping to determine the financial situation of next year's board.

Although the large debt with which ASCIT began the last year has been largely eliminated, some unexpected misfortunes, the Brothers Four concert for one, and some inaccurately budgeted undertakings, Lost Weekend is an example, forced the board to cut some corners in other deserving areas. Although unfortunate, I feel strongly that this sort of strict adherence to a maximum expenditure is the best financial policy for ASCIT.

ASCIT begins the new fiscal year with an essentially clean sheet. I intend to do everything in my power to see that next year at this time, the situation is the same.

Eric Young

Myers Opposes Robertson For Vice President

The Vice-President of the student body has two main jobs, the most important being Chairman of the Board of Control. As BOC Chairman, he performs the preliminary investigation of possible violations of the Honor System, presents cases to the BOC, and presides over meetings.

In order to perform these duties properly, the Vice-President must have a thorough knowledge of the workings of the BOC and a maximum of experience in matters concerning the Honor System. Having served on the BOC since last February, I feel that I meet these qualifications.

The Honor System is one of the most important aspects of life at Tech. I wish to play an active role in maintaining it.

The other duty of the ASCIT Vice-President is to serve on the BOD. Being active in campus affairs, I feel that I have gained a considerable knowledge of student opinion and will be able to represent this opinion on the BOD.

I would appreciate the opportunity to serve the student body in this office.

Gordon Myers

ly state: "His primary responsibility shall be the continuance of the Honor System as a vital force among the students."

To effect this he is non-voting chairman of the Board of Control and the prime representative of the Honor System to both the faculty and students. In addition the Vice-President is a member of the ASCIT Board of Directors and acting President in the President's absence.

At Caltech the Honor System is indeed a vital force. It is a practical mechanism which gives us many advantages, as take-home tests, and also an ideal which many people hope to have govern their entire lives.

It survives not by the rulings of the BOC, but by the respect of the students. Its enforcement, then, should keep these facts in mind and neither press matters which are impractical or petty, nor neglect any region of campus life which could be deeply affected by violations.

My prime qualifications are feelings, which I hope well-grounded, of respect for the Honor System and sympathy with its aims. In addition, my experience on the BOC, in Blacker, and around campus should enable me to effectively perform the duties of Vice-President if elected.

Ed Robertson

Smith Talks On Four Frosh Compete For Honor System Office Of Rep-At-Large

Of all the offices to be filled in the coming elections, there is none from which you, the students, will hear so little as from the BOC Secretary. This silence is not the result of traditional shyness on the part of BOC secretaries, but is just a consequence of the secrecy under which the BOC operates.

Although I'm unopposed for this office, I would like to express here a few of my feelings on matters concerning the Honor System.

First, communication between the BOC and the student body could be better than it is. The BOC's policy of never acting on precedent and the secrecy with which meetings are conducted make such things as policy statements very difficult, and disclosures of procedures and the disposition of cases near impossible.

Communication in the other direction could, however, be improved. BOC members are always anxious to hear suggestions regarding the Honor System—if you think, for example, that a professor could do a better job of living up to his end of the Honor System, tell a BOC member; maybe something can be done.

Some individuals are reluctant, or unwilling, to extend the Honor System much beyond the sphere of academic matters. If we are to continue to enjoy the very effective and very advantageous state of affairs we now have at Tech, we must all be willing to apply the Honor System to all aspects of campus life. Carelessness in this area creates extremely difficult problems for the BOC and hinders the effectiveness of the Honor System. I hope you all will bear this in mind.

I'm grateful for the chance to serve as BOC secretary, and I'll see that the duties of the office are fulfilled to the extent of my abilities.

Martin Smith

Activities Chairman

This statement, you may be warned, is being written with that immortal statement, "Be sincere whether you mean it or not," in mind; so here goes.

It is probable that the Beckman use fee will be eliminated soon, or brought down to a reasonable level so that ASCIT will be able to procure more high-level entertainment along the lines of the Brothers Four, Bud & Travis, etc., more often.

In addition, I plan to hold the coffee hours at less frequent intervals than once a week, in order to increase attendance and interest by making each coffee hour a more special event.

I will have more ideas and innovations forthcoming, hopefully, as the year goes on. Oh yes, my name is Jerry Yudelson, and I'm running for the office of ASCIT Activities Manager.

Jerry Yudelson

As of Tuesday night, ASCIT candidate for Rep-at-Large, Ralph Kimbrell did not turn in a campaign statement.

The ASCIT Representative-at-Large is a voting member of the Board of Directors; this in itself is important. In addition, the Rep must conduct the annual charities and blood drives, and maintain the activities board on the Olive Walk. These are not critical matters but they must be done, and done well.

The office of Rep, by virtue of being on the BOD, bears considerable responsibility. Each year ASCIT spends \$16,000 of your money. Having a voice in the allocation of funds, I assure you I will keep these responsibilities in mind. Discussion, being the path to understanding, will play an important part in my participation at the Board meetings, as well as with all fellow students.

I honestly want a chance to serve as a member of the BOD; and I will conscientiously work to fulfill the duties of Rep. Please place your vote for Representative-at-Large beside my name.

Greg Brewer

The office of Representative-at-Large is just as important as any other office which represents the entire student body, because, since he is on the BOD, he helps make decisions which affect the entire student body. The main responsibility of the Representative-at-Large is to represent the entire student body, especially the Freshmen and Sophomore classes. To fulfill this responsibility, I want to maintain close contact with as much of the student body as possible.

In addition to this, the Repre-

sentative-at-Large has other duties, which are to take care of the events board on the Olive Walk and to run the charities drive and the blood drive. All of these functions are important to the student body, and, if elected, I would carry them out to the best of my ability. However, I feel that the most important duty of this office is the use of its vote on the BOD in the way which will be most beneficial to the student body. I will do this if elected.

Jon R. Haviland

The position of ASCIT Representative-at-Large entails organizing and managing the annual blood and charities drives, maintaining the campus activities calendar, and serving on the Board of Directors. While the first tasks are important and must be carried out competently, the last is certainly the ASCIT Rep's most important responsibility. He must not only represent underclass opinion on the BOD, but also be able to cast his vote intelligently on all campus matters.

My desire to become involved has been demonstrated by membership on the football and track teams, service as a freshman section leader, and avid support of house and ASCIT activities. This gung-ho-ness and previous experience in student government will, I feel, allow me to fulfill not only the assigned duties of Rep-at-Large but also any other jobs that I may have the opportunity to perform.

Sam Logan

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Sex On Campus

In running for the office of ASCIT Social Chairman, I am very aware of the responsibilities of this job. I have been a House social chairman for a year and know the work which the job involves. I am prepared, and eager, to do this work.

There are several problems involved with social activities at Caltech. The two most important of these are participation by the men and obtaining women with whom the men can "participate." With these problems in mind, I support the following policies which will provide more successful ASCIT social events: 1) More consultation of student body opinion regarding selection of bands for ASCIT exchanges and dances. 2) More communication between the ASCIT social chairman and the House social charimen. 3) More publicity for ASCIT social events.

On the basis of these policies, and my experience as a House social chairman, I ask for your support.

Steve Card

It's difficult for some people to appreciate the usefulness of a social chairman. After all, we only intend for people to have fun. This puts us at cross purposes with the school at times, but we try. In order to fulfill the goals of this office, that is to have Tech students enjoy them-

selves, I would if elected, press for an expansion of the ASCIT social program to include not only the traditional large events such as the Winter Formal and the Catalina Party, but also smaller affairs designed especially to serve as first date affairs.

Douglas C. Eaton

In the past Caltech has acquired a reputation as the home of the mad scientist and the troll. Many bitching broads still believe this. There are, fortunately, a growing number who realize this is not true — those that have been to a good Caltech party.

If you elect Stu, I promise at least three open exchanges with good (!!) live bands. I will prepare posters and fliers for distribution to all girls in nearby schools to encourage attendance at a more personal level. With these vigorous methods, Stu will have a girl for you at the exchange.

If Stu is elected, I promise closer cooperation with House social chairmen to avoid conflict between House and campus activities. I would also like to see an all-campus stag event—perhaps a study in fermentation.

I believe a well planned program of this type and a sensible budget are compatible; I will strive for both. Remember to vote for Stu; it's best for you!!

Stewart Hopkins

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SPORTS

Frosh Cagers Hold On, Beat LaVerne 80-69

BY LES FISHBONE

Playing one of their few well-contested games of the year, the Caltech frosh basketball team bested La Verne 80-69 last Thursday at Caltech. The major factor in the victory was the overall balance displayed by the Beavers; four men scored in double figures. Also 67% of the foul shots were swished, most necessary in close contests.

With the opening tip the men from Caltech took the lead. Working the "Loyola continuity" to perfection, guards Jim Stanley and Carl Fink scored basket upon basket on easy lay-up shots. At halftime the ledger read 47-35, Tech.

Page Loses To Ruddock Once Again

BY THE PITCHER

Pasadena College was the scene of Ruddock's second Discobolus victory over Page this year; this time the men in blue overwhelmed their opponents in handball, 4-1. Due to difficulties in scheduling, the match was held last Monday afternoon.

Ruddock, who also challenged Page in soccer and track, was disappointed that the eventual losers chose the less manly sport, went ahead with the challenge anyway, and sent four members of the softball team that beat Page last fall against them again, this time in handball, with an equally decisive result.

Four singles matches were played plus one doubles match at the PCC three-wall courts. All games were played to 21 points and the first to win two games was declared the winner of the match. An additional rule stipulated that a game must be won by at least two points.

Strike One

Les Fetting, Ruddock's short-stop, faced Hammons first. Before the crowd had settled down, Les had won the first game 21-6. The second game didn't take nearly as long—21-1.

In the meantime Mike Dole, another Ruddock frosh, was being taught a lesson by the more experienced Radcliffe in two straight games, 21-5 in each.

Strike Two

Page refrained from any subsequent cheering as Bo Barbosa, Ruddock's catcher, showed his all-around athletic ability against Isgur in straight games 21-8 and 21-5. Bo's favorite shot was a karate chop whack at the ball.

Flip Karlton clinched the match by beating Thompson of Page 21-8 and 21-5 just as the doubles match began.

You're Out

Page put up a good fight in doubles, but Dickinson and Yoshida, whose athletic prowess had been proven in Ruddock's outfield, were too much for the Jubin-Schwartz combination, 21-8, followed by 21-13.

The men from the northeast are now eagerly awaiting Lloyd's challenge.

The second period saw La Verne whittle away the Beaver's lead to a mere three points with about three minutes left; however, our frosh finally pulled together and broke it up with 10 straight markers at the game's end. Stanley and Fink led the scorers with 23 and 22 respectively, while Terry Bruns contributed 12 and John Frazzini 14.

Fencers Triumph

In the second of such annual tournaments last Saturday, the Caltech fencing team was victorious by a narrow margin over California State College at Los Angeles (better known as LASC).

The match was held at the Southern California Fencing Center in Los Angeles. The fencers were split into two foil teams, one epee team, and one sabre team. Each man fenced only one bout in each of the events that he entered.

At stake was the Delmar Calvert trophy, named after the fencing maestro at both schools. The Caltech fencers were John Hsu in the epee, foil, and sabre events; Jay Freeman in foil; Greg Kourilsky in foil; Dan McCammon in epee and foil; Dan Metlay in epee, foil, and sabre; and Carl Paul in foil and sabre.

Before the last bout, the score was 6-5 against Caltech in bouts and 42-42 in total touches. Carl Paul won the final match in sabre against Piper of LASC by five touches to four, bringing the bout score to 6-6. However, the win delivered the trophy to Caltech by giving our team a one touch advantage out of a total of 93.

Swimmers Win By One Point

The Caltech swim team met UCLA and L.A. State last Saturday at the Alumni Pool. The meet was scored as a double-dual meet and Caltech lost to each opponent, to UCLA 73-21, and to L.A. State 60-34. Since USC defeated UCLA 83-8 previously, it is safe to say that Caltech is definitely out of the running for the NCAA championship this year, based upon comparative scores against common opponents.

Earlier the same week (Thursday), Caltech defeated PCC in a tight meet 48-47. The meet hung in balance throughout most of the final relay, but Rick Touton, the anchor man, was finally able to finish half a pool length ahead to eke out the victory. Larry Anderson had an impressive performance by winning the 50 free, the 100 free, and participating in the final relay.

The team travels today to Santa Monica Junior College to meet Santa Monica and Pierce Junior College.

Page Wins IH Track

BY JOSE

The most incredible Interhouse sporting event of the past several years has come and gone. Page House won the three-day meet ahead of second-place Fleming and third-place Ruddock. The standings do not tell the story of the meet, nor do the individual finishes of the events held last Wednesday through Friday at Tournament Park.

It all started innocently enough during the trials on Wednesday. Dick Harley of Ruddock showed his back to the rest of the pack in the first heat of the 100-yard dash. Goral of Page did likewise moments later in the second heat. DeWitt of Blacker easily romped across the finish line in first place in the 330, but Baze of Fleming had a little trouble.

In the 220, it was DeWitt and Harley again as winners of the individual heats.

Good Clean Fun

The real fun started on Thursday with the field events. Two Interhouse records were set and several other impressive performances were recorded. Ricketts' favorite javelin thrower, Charles Sawicki, waited until his final toss to overcome a determined bid by Hawk. a Flem. The distance was 178' 9-5/8" for the second record of the afternoon; Levinson of Page was second. These two switched positions in the shot put, and Levinson completed a hard day's work by tying Dabney's Beard in the high jump.

Dabney wound up in the lead at the end of day due to the performances of Beard and Scott, each of whom placed in three events. Scott was one of the meet's three double-winners, excelling in the pole vault and long jump, and placed third in the high jump.

Thus the stage was set for the finale on Friday. Dabney had a one-point lead over Fleming after the field events; Page was close, only three points behind the leader, while Ruddock could amass but 14 points in the six field events, although placing at least one man in each event, and was 12 points behind the Darbs.

Sob story

A couple of weeks ago, Ruddock would have been unbeatable at this stage of the meet; Dick Harley looked like a cinch winner in the sprints, Alan Lee was in the same class as Doug Gage in the hurdle events, and several other members of the Ruddock team seemed likely to take seconds or thirds. However, Lee injured himself in a football game, and Greg Shuptrine, their second hurdler, was on a field trip for half the meet. Another lab conflict cost them a participant in the 1320; on Thursday a traffic accident cost them valuable points in two field events. The outlook was for a tight finish.

The runners could hardly have hoped for a better day last Friday. The sun was shining, there was only a slight breeze, and the temperature was in the 60's, perhaps a little chilly for the sprinters.

Like a bunny

As the gun was fired for the start of the 1320, Rob Dickinson forgot what race he was in and ran the first lap in 60-flat; Blacker's leading distance runner, Thompson, ran a steady race, and won easily. Bloom of Ruddock moved from fourth to second in the final twenty yards far behind Thompson. Logan of Ricketts finished third and Dickinson faded to fourth in the final few steps.

Henry DeWitt coasted to a win in the 330 next, with Stu Galley (our master) about five yards behind; "Mad Dog" Baze chugged in to grab the show money. It

was a rather dull race, despite the fact that it was run very fast.

The meet was narrowed down to three teams by this time; Fleming had a four-point lead over Page, who, in turn, held a one-point bulge over Ruddock. Dabney still led Page by one, but

had "shot its wad." Harley tightened up the meet even more by winning the 100. The "Big Three" teams had a field day in this event, as each team pocketed two places (There was a tie for fifth place.).

(Continued on page 7)

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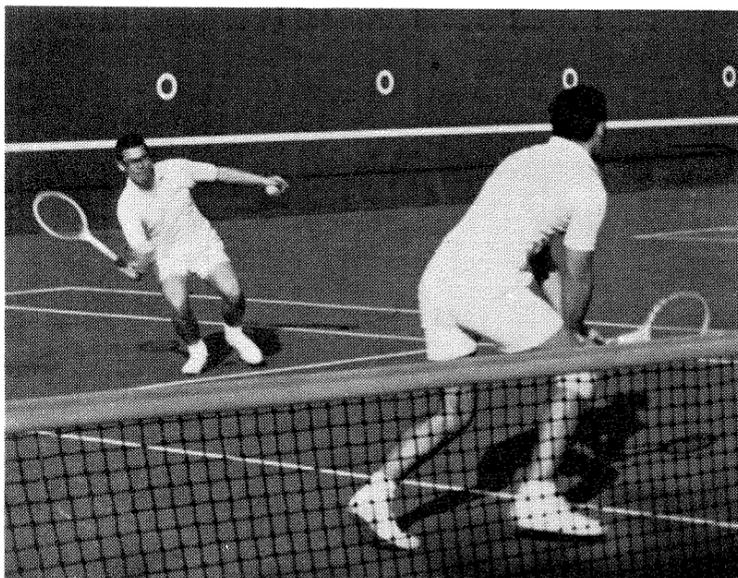
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—by Kim Gleason

Val Ellis watches Don Green return a shot in their doubles match against Redlands. Note the ball near Don's elbow.

Redlands Humbles Both Tennis Teams

The Caltech Varsity tennis team played its first match of the season last Thursday at T.P. and lost to Cal Poly. The final score was 5-3, with three of the individual matches going the full three sets and two matches ending in ties. Hoshier and Buckholtz won singles matches for Caltech, while Ellis and the team of Rose-Pressing tied.

The home courts proved to be of little advantage against two very strong Redlands teams last Saturday. In the varsity division, the hard-hitting Redlands players swept all nine matches as part of their bid for the conference crown. Techman John Hoshier deserves special note for

the tough match he fought, only to lose 5-7, 2-6. The Redlands team has enough talent that Peacock, best frosh in the conference last year, only played second doubles against Tech Saturday.

Tech fared little better in the frosh match, but Jeff Haight and Ed Groth put up determined fights and each won a set before being defeated.

LOST FOOTBALLS

Before the state of the Interhouse football season, each House was allowed to check out two footballs from the athletic stockroom. At the time of this writing four of them are still unreturned.

Probably, someone has a football in his locker without realizing it. The only other possibility is theft. If there is any chance that the missing footballs are in your locker, please check as soon as possible and tell Mr. Ferguson, stockroom manager.

Next Week In Sports

BASKETBALL			
Sat.	Feb. 20	6:30 p.m.	LaVerne at LaVerne
Tues.	Feb. 23	6:30 p.m.	Whittier at Whittier
VARSITY BASEBALL			
Wed.	Feb. 24	3:00 p.m.	Cal Lutheran at Caltech
GOLF			
Mon.	Feb. 22	1:30 p.m.	Occidental at Caltech
VARSITY SWIMMING			
Thur.	Feb. 18	4:00 p.m.	Pierce JC and Santa Monica CC at S. M.
Wed.	Feb. 24	4:00 p.m.	San Bernardino and Cal Poly at Caltech
VARSITY TENNIS			
Fri.	Feb. 19	3:00 p.m.	Cal Lutheran at Caltech
Sat.	Feb. 20	1:30 p.m.	Occidental at Occidental
FROSH TENNIS			
Sat.	Feb. 20	1:30 p.m.	Occidental at Caltech
TRACK AND FIELD			
Sat.	Feb. 20	1:30 p.m.	Redlands at Caltech
WRESTLING			
Fri.	Feb. 19	4:00 p.m.	LA State at LA State
Tues.	Feb. 23	3:30 p.m.	LA City College at Caltech

More Interhouse Track Meet

(Continued from page 6)

Don Radcliffe won the high hurdle event for Page; Fleming managed to come in second and fifth, while Daniel pulled out a surprise third for Ruddock.

Brewer wins

The most wide-open event of the afternoon was the 660. Greg Brewer, following the advice of his coach, spotted a hole in the pack at the start, and moved into third place before the first turn. Running a nearly perfect race, the Ruddock frosh pulled the biggest surprise win of the meet, with the respectable time of 1:31.5.

Then things began to get tense. Ruddock and Fleming were tied for first, but Page was a scant half-point behind. Looking ahead, it appeared that Ruddock would battle Page in the final relay to decide the meet, especially if Radcliffe won the hurdles and Harley the 220.

DeWitt almost wrecked Ruddock's hopes in the 220, by closing very fast on Harley, but the Ruddock frosh held on to win in a photo-finish. Resney of Page nailed the lid on Fleming's coffin by taking third place away from Flem Kimbrell.

Rip!

There was little suspense in the 220 intermediate hurdles. Radcliffe bettered his own Interhouse record, as expected, and Shuptrine, finally recovering from his falls of last year, also broke the previous record for second place. Wright of Fleming finished in third place, hanging on to his pants over each hurdle.

By this time the sun was setting and the air was getting a bit chillier. Maybe the tension in the air was partly responsible for this effect, but it was definitely noticeable. A low murmur was heard all over the infield, various people asking about the score and the prospects for the last event, the relay.

Parker

Here is how the score stood. Ruddock had 49½ points, Page 49, and Fleming trailed with 46½. If Ruddock won the relay, they would win the meet; the same with Page. If Fleming won the relay, then whoever took second would win the meet, unless it was Blacker, in which case Fleming would walk away as the winners.

Ruddock was sporting an excellent relay team, comprised of Hunsaker, Galley, Brewer, and Harley, who collectively had accumulated 23½ points already that afternoon; all four of them were reasonably fresh, too. Page's team was of about the same caliber, but Radcliffe had just finished his hurdle race. Fleming was in the same position as Page, as Jarvis had had

only a five-minute rest since his last event.

Guess what?

As the gun was raised for the start of the 880 relay, an eerie silence hung over Tournament Park. Crack! They were on their way. Hunsaker, in the usual Ruddock tradition, was given the outside lane, and got off to

a tremendous start. He never made it to the first curve, as the strain on his thigh muscle caused him to fall to the track; as he had to be helped to his feet, the Ruddock team did not finish, thereby handing over the meet to Page; the rest of the race was a mere formality, as Resney hung on to beat Kimbrell.

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Among them . . .

MAJOR COMMUNICATIONS SYSTEMS DEVELOPMENT—Design of new antennas, transmitters, receivers and terminal equipment. Constructing preliminary and basic engineering models to demonstrate the feasibility of using new communications concepts, techniques and circuits. Adapting and perfecting these through the design of a working prototype or field test model.

COMPONENT MINIATURIZATION STUDIES — Practical attempts, through basic design and analysis, to reduce the size yet improve the capability of communications and electronic data processing systems.

SYSTEMS SIMULATION STUDIES—Utilization of modern digital and analog computers to predict the feasibility of engineering ideas and innovations.

MATHEMATICAL INVESTIGATIONS—Exploring the phenomena of the intermarriage of mathematics and electronics in the design of secure communications systems; an essential element of the complex science of cryptology.

ENVIRONMENTAL TESTING—Proving the capabilities of components and systems by simulating atmospheric

extremes. These tests are conducted with the latest equipment capable of simulating a wide variety of environmental conditions.

For the ENGINEER and the MATHEMATICIAN, NSA provides a unique variety of opportunities in a *NEW* dimension in science and technology . . . To assure the success of this venture, scientific employees are encouraged to pursue graduate studies at local universities under Agency sponsorship.

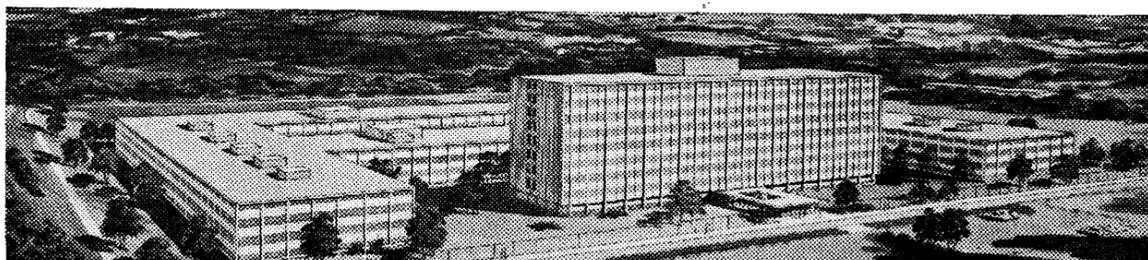
Representatives of the National Security Agency will be conducting interviews on campus on:
February 25, 1965

Check with your Placement Office early to schedule an interview. For further details, write to:

Mr. Phillip M. Coffey
College Relations Branch
Office of Personnel
National Security Agency
Fort George G. Meade, Maryland



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... WHERE IMAGINATION IS AN ESSENTIAL QUALIFICATION

Techmen Institute Flying Club For Enjoyment

By LES FETTIG

Sometime in the near future, a group of groggy Techmen will casually glance up at the clock on the face of Throop to discover they are half an hour late for their eight o'clock math recitation.

When what to their wondering eyes will appear but a large, bird-like object perilously buzzing the selfsame cupola. Little will they know that they will be among the privileged first to witness the manifestations of an enthusiasm even exceeding the loyalty (?) of whoever gets up for an eight o'clock math recitation.

If, by some strange miracle, these bewildered souls manage to open their eyes beyond the fuzzy-eyelish zone they will immediately be enlightened with the knowledge that the mysterious object is an airplane!

Guess What!

With the quick reflexes and instinct of the Caltech scientific spirit, they will quickly proceed to take a crude measurement (good to one part in one hundred) which will reveal that the craft is maintaining an altitude precisely 1000 feet above the nearest obstacle within a 2000 foot radius (in accordance with Federal Aviation Regulations Part 91). This will be the final clue: the Caltech Flying Club is in the air!!!

The above and other incidents will be perpetrated by what at present consists of 18 charter members of the Caltech Flying Club. Temporarily headed by grad students Dave Cartwright and Dave Wooten and senior Don Blumenthal, each have contributed \$100 toward the establishment of the club with the above three adding the remainder of a \$5000 total. With this working capital, sky's-the-limit plans for the club have started their ground roll toward take-off.

Lots of Enthusiasm

A bank account in the name of the Caltech Flying Club has been opened, and affidavits of the club's resources are currently being sent to various aircraft and related corporations in a quest for further funds and/or materials. Along with the statement of \$5000 worth of enthusiasm is being sent a copy of the club's temporary by-laws, and a list of the club's sponsors (among them, Clark B. Millikan).

With lawyer's services arranged through Caltech for incorporation and chances of industrial contributions quoted as at least 6 to 1, the club should lift-off before much of the third term has flown by.

The first objective is to secure a Cessna 150, a sweet little two-seat aircraft that "lands like a baby carriage." With the 150 as a basis for operations, arrangements with flying schools at local airports are anticipated for those members who have not yet earned their Private Pilot's ticket.

Escapists

For those already wise in the ways of the airplanes there is the blissful anticipation of flying out of the smog of the L.A. basin for only \$5 an hour, gas included. (Rates run as high as \$14 for a wet 150 elsewhere.) If the club's performance exceeds its predicted absolute service ceiling, expansion with other aircraft will be undertaken, but never with any more than 20 members assigned per plane for convenience's sake.

Mr. Gilmore, vice president of business affairs at Caltech, has helped the club engage the services of the Hahn & Hahn law

firm and the William Wilson insurance company for the purposes of incorporation and insurance respectively. With such a sound foundation and the magical name of "Caltech" backing their efforts, the club's leaders expect very favorable response to their aid requests.

It is hoped that a company such as Cessna or Piper will donate an old 150 or Tri-Pacer to the club in lieu of a cash grant. This would be preferable in the eyes of club members since \$4000 of the initial costs of the club has been allocated to the purchase of an aircraft.

\$, \$, \$

Other costs will include \$700 for first year's insurance, \$300 for first year's tie-down (also a possible contribution from a firm

such as Northrop or Douglas, the latter of which owns and operates a considerable portion of Long Beach airport) and a \$150 incorporation fee.

Club members will also pay a \$4 monthly fee toward maintenance of the club's activities, covering such items as the pro-rated costs of 1000-hour major overhauls on the club aircraft and the like.

Subsequent flight plans include the construction of a minimum performance glider (it would fly at 35 mph!!) this summer by club members, a perfect companion for the currents that rush around the nearby San Gabriels and San Bernadinos.

So look to the sky! The Caltech Flying Club's taking off!

FEBRUARY 26 **BLUES '65** SANTA MONICA CIVIC

CHUCK BERRY

8 P.M. & 10:45 TICKETS \$2.00 & \$3.00
AT BOX OFFICE & ALL AGENCIES

RANDOM NOTICES

YOUNG CITIZENS FOR EX-PRESIDENT JOHNSON

The official campus partisan organization for the election of Senator Goldwater will not meet this week as originally planned. Watch for future announcements!

YOUNG CITIZENS FOR JOHNSON

A national bipartisan organization for the re-election of the President. All undergraduate and graduate students, Republican, Democratic, and Independent, are invited to learn how they can help. First meeting, 7:30 to 8:30 p.m., Friday, Oct. 9, in Dabney Lounge. Faculty speakers. Dates welcome.

Why is the Glee Club

Concert going to be in

CULBERTSON

instead of

BECKMAN?

THEY LOVE TO FIGHT... BUT NOT AT NIGHT!



Rock HUDSON • Gina LOLLOBRIGIDA
Gig YOUNG

STRANGE BEDFELLOWS

STORY BY EDWARD JUDD • ARTHUR HAYNES • TERRY THOMAS
SCREENPLAY BY MELVIN FRANK
and MICHAEL PERTWEE • Story by NORMAN PANAMA and MELVIN FRANK • Produced and Directed by MELVIN FRANK
A PANAMA-FRANK PRODUCTION • A UNIVERSAL PICTURE

Starts
FRIDAY
FEB. 26th

HOLLYWOOD
PARAMOUNT
THEATRE • HOLLYWOOD • HIGHLAND • HO 3-3263

Ford Motor Company is:

stimulation



James E. Mercereau
B.A., Physics, Pomona College
M.A., Physics, Univ. of Ill.
Ph.D., Calif. Institute of Tech.

What does it take to "spark" a man to his very best . . . to bring out the fullest expression of his ability and training? At Ford Motor Company we are convinced that an invigorating business and professional climate is one essential. A prime ingredient of this climate is the stimulation that comes from working with the top people in a field . . . such as Dr. James Mercereau.

Jim Mercereau joined our Scientific Laboratory in 1962. Recently, he headed a team of physicists who verified aspects of the Quantum Theory by creating a giant, observable quantum effect in superconductors. This outstanding achievement

was the major reason the U. S. Junior Chamber of Commerce selected Dr. Mercereau as one of "America's Ten Outstanding Young Men of 1964." Your area of interest may be far different from Dr. Mercereau's; however, you will come in contact with outstanding men in all fields at Ford Motor Company.

We believe the coupling of top experience and talent with youth and enthusiasm is stimulating to all concerned. College graduates who join Ford Motor Company find themselves very much a part of this kind of team. If you are interested in a career that provides the stimulation of working with the best, see our representative when he visits your campus. We think you'll be impressed by the things he can tell you about working at Ford Motor Company.

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