

## Cheating at UCLA: How Do Students React to it?

by Etaoin Schroedlu

A recent issue of the UCLA *Daily Bruin* contained two interesting articles on cheating at UCLA, the gist of which seemed to this reporter to be worth passing on. The headline of the longer article was "CHEATERS! Poll shows 66% of students cheated—without regrets" and went on to cite a recent survey given to a class of over 200 students. Of those who returned the questionnaire (a number not given), two-thirds admitted to having cheated at least once. Worse yet, most of the class were first-quarter freshmen! The figure may or may not be typical of the 33,000 or so UCLA students at all levels of study, but it is up from a 1973 survey, in which "only a slight majority" admitted to cheating.

That 1973 survey, said the DB, also produced the interesting result that many students did not think that using crib notes in exams, or turning in term papers written by somebody else, constituted cheating. (That doesn't really leave very much, except stealing the answers to exams before they are given—which has happened.) Those attitudes represented a definite softening of the traditional moral views on cheating, compared to an attitude survey a decade earlier.

The major reason students gave for cheating was to get good grades, but some also wanted to "beat the system." (I can have a little bit of sympathy on that score; the "system" at UCLA can be maddeningly random.) Sixteen percent laid the blame for their cheating on parental pressures—all in all, I find that number rather low. Cheating was morally acceptable, said 24% of the respondents, and 36% "claimed they would use cheating or deception after they graduate in order to get a job or promotion." (Any one who had worries about where our next generation of political or business leaders are coming from can relax: the school that gave us Haldeman and Ehrlichman is still on the job.) By consensus, the worst cheaters are the pre-med students and the athletes. (It's probably no accident that doctors and athletes have descended from

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Photo-Dave Wheeler  
The Mudeo site is being landscaped, leaving no place for next year's Mudeo. Where will it be?

## Wells Beats Strong No Vote to Win Presidency

Following are interviews with three of the most important newly elected ASCIT officers: President, IHC Chairman, and Director for Academic Affairs.

by Kevin Drum  
and Ken Herkenhoff

The ASCIT presidency, according to Bert Wells, should be a liaison between the faculty and administration and the students. Rather than concerning itself just with social, student oriented operations, ASCIT should stay in contact with the faculty and administration in an effort to improve communication and possibly obtain greater benefits for the student body.

One of the problems that the ASCIT president will have to deal with this year is the search for a new Institute President. Wells believes that the ASCIT president can play an important part in the process even if there are no students actually on the search committees themselves. During the last search, which produced Harold Brown, students were given no voice in the selection until late in the game when the choices had been narrowed down to two or three candidates. Even then, student input was minimal. There are official student contacts for the committee (ASCIT president, IHC chairman, and the Director for Academic Affairs). Wells would like to obtain permission

for these three officers to sit in on sessions of the search committee. He claims that his connections with various faculty members and administration officials will allow him to gain useful information about what is going on and that he will be able to make suggestions at an earlier stage than last time.

The second problem that Wells considers major is that of the size of the undergraduate class. "I have no preconceived notions about the size of the undergraduate class in the long term," he said, "and I will accept the decision of the ad hoc faculty committee appointed to study the problem." He mentioned that he will try to have some influence in choosing mem-

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## Tuition Increase of Over \$250 Projected for 77-78

by Kevin Drum  
and Henry Fuhrmann

Caltech undergraduate students can expect an increase in expenses for the next academic year. The *Tech* has learned that tuition will rise from the current \$3375 to \$3648, while overall expenses (including fees, room and board) will jump from about \$5200 to \$5567.

David W. Morrisroe, Institute Vice-President for Financial Affairs, explained the reasoning behind the projected cost increase. According to Morrisroe, the inflation of higher education costs is normally greater than that of the general economy. The reason is that expenses are totally "salary driven." That is, 70% of all costs are due to employee salaries and benefits.

Other factors are financial aid and Institute operating expenses. Financial aid is currently the fastest growing expenditure. Aid increased 15% last year and 14%

this year. In contrast, the overall budget went up 8% and 6% during the same time.

Despite the increases, the Caltech student still pays less for an education than do his counterparts at other major private colleges that Tech competes for students with (the University of Chicago excepted). Other schools are experiencing increases of 10% or more. Morrisroe cites a rather familiar example—the case of Stanford University. In years past, it cost \$150 more to attend Stanford than to attend Caltech. Today the difference has climbed to \$750.

At most schools, tuition comprises about 40% of the total income. These schools need large increases to counteract inflation. Some of the revenue generated is later "recycled" back to students in the form of financial aid. This is not the case here where tuition increases are by design kept relatively low.

## ASCIT BOD Finally Set After Second Runoff

The elections are over, and the new ASCIT Board of Directors has been selected. The new ASCIT President is Bert Wells of Ruddock, Chris Sexton of Fleming has become the Vice President, and the IHC Chairman is Eric Kaler of Ruddock.

The other members of the BOD are Secretary Tom McDonnell from Dabney, Treasurer Mike Schwartz from Dabney, Director for Academic Activities Leroy Fisher from Ruddock, Director for Social Activities Paul

Gutierrez from Lloyd, Athletic Manager Ray Gildner from Fleming, and Directors-at-Large Leslie Paxton from Fleming and Ray Beausoleil from Lloyd.

The new ASCIT BOD will be sworn in by the present BOD sometime this month. However, before this is done, the results of the election must be approved. There should be no problem with this and the formalities should be taken care of within a week. The last BOD meeting of this administration will be next week.

## The Week In Review

by Kevin Drum

The big story for the week turned out to be the weather. Storms lashed the Eastern and Southern parts of the country all last week and have not subsided yet. Over 1.5 million people were left jobless after the cold wave shut down factories all along the coast and the figure has now risen to over two million.

President Jimmy Carter said that "some degree of crisis" was being faced by 11 states. The sudden storms have increased the chances of agreement on an energy bill now in Congress. The bill would permit reallocation of natural gas to areas hardest hit by storm caused fuel shortages.

Secretary of State Cyrus Vance said that the Carter Administration will speak frankly on human rights where it feels it is necessary. The state-

ment came a few days after a State Department statement of human rights in Moscow had drawn fire from the Soviets.

Vice-President Walter Mondale remained firm on Carter's commitment to withdraw troops from the South Korean peninsula. The decision came despite the wishes of both Japan and South Korea.

Claudine Longet was sentenced to 30 days in jail and two years probation for her accidental killing of her lover Vladimir (Spider) Sabich.

The State Department issued a statement in support of dissident Andrei Sakharov Thursday which, according to Carter, was not authorized by him. Carter indicated displeasure with the statement but said that it did reflect his stand on the issue.

Actor Freddie Prinze died Saturday after he shot himself in the head. He had reportedly been despondent over recent personal problems.

White House officials said that the way is being cleared for resumption of arms talks with the Soviet Union. Secretary of State Cyrus Vance is presently discussing the possibility of a visit to Moscow in March or April as a first step toward a Carter meeting with Leonid Brezhnev in late Summer or Autumn.

House Democrats voted to strip Rep. Robert Sikes (D.—Fla.) of a key subcommittee chairmanship in what was seen as a crucial test of their desire to clean up the House. Sikes was reprimanded last year in a conflict of interests controversy.

## Inside the Tech

What will Harold Brown do now that he is in Washington?  
Page 2

Caltech's Hockey Club: why aren't they doing as well as last year?  
Page 5

Basketball team beats LIFE College for first win of season.  
Page 8

# Parry! Riposte!

The Editorial Page

## 3.2 Not Good Enough

Over the past five years, the average G.P.A. of Caltech students has increased one-tenth of a point. Many of the powers-that-be believe this increase to be a sign of grade inflation. This group has also concerned itself with the fact that 50% of the 1976 graduating class will graduate with honors. These powers have gone so far as to recommend that the G.P.A. required for honors status be increased to 3.3 from the present value of 3.2. The current status of this proposal is unknown.

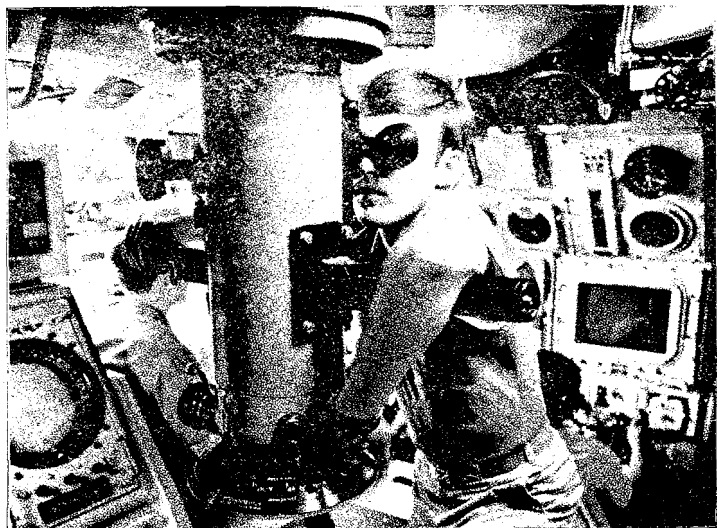
Although these policy-makers probably consider this move to be reasonable, they ignore student attrition. The predicted attrition rate for the class of 1980 now stands at 50%, and thus only 25% of the current freshmen will graduate with honors. This is a reasonable level.

Of course, if those students who leave were to stay, the average G.P.A. would decrease. Consider the following simple example:

A group of students — one with a 1.9, another with 3.0, and the third with 4.1 — has an average of 3.0. If the first student, in agony and disgrace over his 1.9 (which is still a "C," which meant "average" back where life was slower), drops out of Caltech the average G.P.A. instantly shoots up to 3.55. This move increases the group's average score, although no one has increased his personal G.P.A. The policy-makers decide to increase the difficulty of the courses, and thus bring down everyone's grades.

There doesn't seem to be a solution in sight. All we can hope for is that the courses don't become any harder—we hope they'll become a little easier—and that the attrition rate stays low. Of greatest importance is that an increase in the average G.P.A. should not be cause for concern. Instead, it should please the administration that Caltech is getting better.

—Al Kellner



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## Brown in Defense-What Does it Mean?

Reprinted and condensed from the Harvard Crimson. The article in its full form appeared on January 12.

By Michael Calabrese  
and Jake Herms

Mondale, Vance, Brzezinski, Brown, Blumenthal—these men represent the entire Cabinet-level foreign policy wing of the new Administration. These men, along with Jimmy Carter himself and most of his old foreign policy and economic advisers, are among the 60 original American members of a private international group known as the Trilateral Commission.

The Trilateral Commission, founded in 1973 by David Rockefeller, seeks to encourage cooperation between three great industrial regions of the world—North America, Western Europe, and Japan.

Gerald Rafshoon, Carter's media specialist, has said that Carter's selection to the commission in 1973 was "critical to his building support where it counted."

Carter's first appointment to the new administration was fellow member Cyrus Vance to succeed Henry Kissinger as Secre-

tary of State. Vance was Deputy Secretary of Defense under Robert McNamara and defended the escalation of bombing in Vietnam.

Carter has also nominated former Caltech President Harold Brown to be his Secretary of Defense. Brown's past record has not received the attention it deserves. At a press conference on December 21, Brown denied that he had advocated totally bombing and mining of North Vietnam while Secretary of the Air Force in 1968, and stated that this was only one of several strategies that he had transmitted. He failed to mention that his other two proposals also called for increased bombing of Indochina.

The Pentagon Papers reveal that Brown did in fact personally advocate the first plan. Part of his actual cover letter is quoted: "I would judge that Campaign No. 1 can, in military terms, limit South Vietnamese actions near their pre-Tet levels (a reference to the Tet offensive begun early in 1968.) It could possibly reduce North Vietnamese capability in South Vietnam substantially below the 1967 level."

In comparison, the CIA was recommending that the bombing be terminated, since it could not destroy North Vietnam's determination or capabilities.

The Pentagon Papers also show that in 1967, Brown had played the major role in dissuading McNamara from limiting the bombing of North Vietnam. Part of his argument was an impressive analogy based on an incorrect "law" of diffusion: that "interference close to the source has a greater effect than those close to the output."

Brown was also the main proponent of the jinxed F-111

Continued on Page Three

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The California Tech, a major college newspaper, needs writers and production crew. No experience necessary. Come on by our offices in Winnett Center or see Henry Fuhrmann, Kevin Drum, or Al Kellner.

## THE CALIFORNIA TECH

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## Letters to The Tech

To the Editors,

Having read the minutes of the ASCIT BOD meeting of 24th January published in the Tech, I would like to make some comments regarding the appointment of the new Big T editor.

In the minutes it is written: "the California Tech wants an editor 'they can deal with.'" And after deciding that it was not worth the effort of interviewing the two people in consideration, the BOD voted to appoint Stan Cohn, whom the California Tech editors "expressed a strong preference for," to be the editor.

On reading the minutes, one cannot help but notice the total absence of any discussion on the qualifications of the applicants for job of editor. One is also led to wonder exactly what "they

can deal with" means? From my perspective as previous editor, the implication is that anyone who does not automatically go along with the Tech editors is someone they can not deal with.

It seems that the only two criteria that was used in determining the new editor were expedience—"Let's get it over with"—and personal preference on the part of the Tech editors.

No one will argue that there should be close co-operation between the various publications of ASCIT. But this co-operation should be based on the respective purposes of each publication and not on the personal preferences or differences that might arise in the course of each publication, as the editors attempt to do their job.

Respectfully,

Young-il Choo

## THE ASCIT FRIDAY NIGHT MOVIE

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NEXT WEEK

The Four Musketeers

# All the News That Fits

**Dance the Night Away**  
The Advocates for the Arts invite students to attend the Artists and Lawyers Ball tomorrow, Saturday, 8 p.m. to 2 a.m. It's at the Elks Building, Sixth and South Parkview, Los Angeles. Tickets are \$3.50 at the door.

**Congratulations, Dr. McKee!**  
The American Society of Civil Engineers will present Dr. Jack McKee with the Edmund Friedman Professional Recognition Award. The award is in recognition of his encouragement to engineering students and his contributions to civil engineering.

**Study Abroad**  
Tel Aviv University has announced a full-scale promotion of its Student Overseas Program for the academic year 1977-78 for English-speaking, academically qualified students who may wish to continue their higher education in Israel.  
For information, write to the American Friends of Tel Aviv University, 1900 Avenue of the Stars (Suite 2625), Los Angeles 90067, or call 213-556-3141.

**Get a Job**  
Two hundred students from the western states are needed for a variety of internship projects that will be developed during 1977 by the Western Institute Commission for Higher Education (WICHE).  
These internships will involve twelve weeks of work on action-research projects with public agencies. The sponsoring agency will provide a tax-free grant of \$100 per week.  
For additional information, write the Resources Development Internship Program, P.O. Drawer P, Boulder, Colorado 80302.

**Flashers Wanted Bring Your ...**  
The 1976-77 yearbook editors are looking for photographers for this year's *Big T*. Anyone interested in taking or printing pictures should contact Dave Wheeler or Al Kellner at 449-9696 or x2153.

**Kill It Before It Dies!**  
Saturday, February 5, the Caltech Gamers will present a free-for-all game of Alien Space. The action will start at 7:30 p.m. in Dabney Hall Lounge.

## CHEATING ON RISE AT UCLA

**Continued from Page One**  
their pedestals in the last generation or so.)  
Cheating has advanced technologically from the cruder days of yore, the article notes. Apparently some women students have taken to putting crib notes inside their underwear, secure in the knowledge that their professors wouldn't investigate to the root of the matter. (Well, I wouldn't be so sure about some of the professors I know, but that's a different story.) There has been quite a rash of people taking exams for other students. (If you have someone do that, you might get to be Senator from Massachusetts.) Some term paper writers have even "submitted material that their own professors have written"—it was unreported what resulted from those efforts at cheating.  
The faculty have made efforts to reduce the cheating, such as requiring photo IDs in exams, but the article does not dwell on the fact that there isn't much that can be done to stop cheating. Unless the evidence is very solid, in fact, a prof or TA can get in a lot of trouble making accusations of cheating

these days. Rarely can a case be handled (and not often can it even be discovered) without the help of honest students. Two students appeared to be cheating in an exam I proctored last year; the other proctor, who looked like Arnold Schwarzenegger, went and stood behind them for a while, and when they turned in their exams, I conspicuously put a check mark on each one: psychological warfare, since we didn't really want to try to do anything else. (They both flunked anyway, as it happened.) The check marks shook them up a little at least, and may have had deterrent value.  
One of the Deans reported that in 1975-76, 94 cases of cheating were referred to the Dean of Students Office, and 30 students were "separated from the University," but obviously this is only a drop in the bucket.  
The second article in the *Daily Bruin* related the story of a student, not named, who has a 3.9 GPA and gets extra money and payment in kind (dope) for cheating on behalf of other people by taking exams for them. "It guarantees an A," he said, and related some details of his modus operandi. He also said, "I don't think I've ever cheated," but even aside from one's views of his extracurricular exam-taking, he admitted to using crib

sheets in his own behalf. Clearly, his moral standards don't rank as high as his GPA.  
Is the trend at UCLA also going to be the trend nationwide? I don't know about that, although I've had a notion for some time that the full price of Vietnam and Watergate won't be paid until we realize the contribution those episodes have made to the morality of the next generation or two of Americans. It is possible to have hope—as far as I'm aware, cheating at Caltech is neither rampant nor increasing, and the pressures at Tech are surely greater than at UCLA. On the other hand, although people at Tech generally don't seem to realize it, numerically speaking the UCAs of the land are so much more significant and typical than the Caltechs.

## Late News

**Linen Exchange Time Change for Graduate Students**  
For those who have not noticed, the linen exchange time for Graduate Houses on Thursday has been changed to 12:30 through 1:30 p.m.  
**Financial Aid**  
Attention! Financial aid applications for the 1977-78 academic year are available now in 109 Dabney Hall.

## HAROLD BROWN IN WASHINGTON

**Continued from Page Two**  
fighter-bomber, a plane that even the Republican National Committee had rated as "unacceptable." He testified that it was "proving to be an outstanding aircraft," while failing to mention that three of the six original prototypes had crashed.  
Even while he was a delegate to the 1969 SALT talks, Brown was pushing for immediate U.S. deployment of several hundred ABM's along with MIRV missiles. This was despite the fact that the U.S. already had a three-to-one advantage in deliverable war-

heads. Thus, his support of the B-1 bomber should be viewed with some circumspection.  
As a point of interest, another important member of the Trilateral Commission is J. Paul Austin, chairman of the Atlanta-based Coca-Cola company and Caltech trustee.  
Brown's, and the entire Trilateral Commission's, influence on Carter should be substantial. We hope that Carter is not so overwhelmed by his governing coalition that he forgets about the common people who elected him.

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# Entertainment News

Elizabeth Kubler-Ross, M.D., the author of *On Death and Dying*, will speak on the topic of "Life and Transition" next Tuesday, February 8, in Beckman Auditorium and 8 p.m. The Office of Public Events is offering 40 free tickets to Caltech students.

\*\*\*

Tickets are now available to ASCIT's production of *Guys and Dolls*. The show will play in Beckman Auditorium from Friday, February 25 through Sunday, February 27. For prices and reservations, call the Caltech Ticket Office at 793-7043.

\*\*\*

Fifty free tickets to see the French String Trio and pianist Georges Pludermacher will be available on a first-come-first-served basis in the Caltech Ticket Office beginning Tuesday, Feb-

ruary 8. The program for the February 13 concert at 3:30 p.m. will consist of the Mozart *Quartet in G minor*, K. 478-*Serenade in D major*, Opus 8 by Beethoven; and Schumann's *Quartet in E flat major*, Opus 47.

\*\*\*

Christiane Edinger, the amazing young German-born violinist, will perform at Ambassador Auditorium in Pasadena on Saturday, February 5 at 8:30 p.m. A highlight of the program will be the world premiere of Gottfried Von Einem's *Sonata*, Opus 47, for unaccompanied violin. Her Ambassador program will also include Bach's *Sonata No. 1 in G minor* for unaccompanied violin and Beethoven's *Sonata in F major*, Opus 24 ("Spring") and Prokofiev's *Sonata in D major*, Opus 94a, for both violin and piano.

The Lotte Goslar Pantomime Circus is returning to Caltech for a performance in Beckman Auditorium at 8 p.m. on Saturday, February 12. There will be a special free performance for young people in Beckman at 11 a.m. that Saturday, and a special master class in mime from 9:00 until 10:30 a.m. Friday morning. For more information, call the Caltech Ticket Office.

\*\*\*

*The Importance of Being Earnest* by Oscar Wilde and the West-coast premiere of *Travesties* by John Stoppard are currently playing in repertoire at the Mark Taper Forum of the Music Center. The repertory cast includes David Dukes, Jean Marsh, and Anita Gillette. Tickets are available by calling the Music Center box office at 972-7211.

—David Ritchie

## Rock on Rock

### The Pretender: One of Jackson Browne's Finest Albums

by Rock Howard

Here are a number of brief impressions I can relate concerning some records of recent vintage:

*The Pretender* by Jackson Browne.

This is another fine production by possibly the most important singer-songwriter in soft-rock during the last few years. The songs are mostly wistful and sad with touching melodies that are fairly simple but arranged brilliantly to make them musically worthwhile. The lyrics are best described as beautiful as, time and again, Jackson captures an emotion that I've felt myself, but never known exactly how to express. While this is not Jackson Browne's best album, it should be ranked amongst his finest.

Low by David Bowie

I've enjoyed a fair amount of the music that Mr. Bowie has created over the years, so it's not as though I don't appreciate his music. Still, this new album is the most worthless drivel I've heard in years. The songs are incredibly baroque, unrhythmic, and weird. Maybe the off-key lead guitar phrases and the excessive studio effects are Bowie's idea of where music is heading. Frankly, I don't consider it music at all. By all means avoid this album like the plague.

*Wings Over America* by Paul McCartney and Wings

I wouldn't have thought that this band would have enough talent to put on a live show. They manage it only by working up very short and tight arrangements with lots of pop-rock gimmicks. Only McCartney has any free rein in the production. The rest of the band might as well have been on tape (maybe they were). There is a large entourage of stage performers including a brass section, a female back-up vocal crew, and such. The spotlight never really leaves McCartney however, and this is just as well for Paul, puts on a well-paced and entertaining show. It's sad that I don't really appreciate his pop-rock music, for he and his band are certainly leading exponents of this genre.

*Hotel California* by the Eagles

The Eagles are trying to put some meaning and purpose in their music with their latest album. This is certainly a daring change for the band whose good time rock-and-roll put them at the top of the charts. At the same time the band incorporated Joe Walsh's dynamic guitar into their music. The slight change in approach might scare off some of their fans, but I like the album, particularly "Life in the Fast Lane" and the haunting title cut, "Hotel California." The album has a few faults. For instance, I think the guitars should be a bit louder and a little less clean. The vocals are simply excellent, though, and the songs all fit together coherently. The album should be rated as a critical success. It'll be interesting to see how the public responds to it. [Editor's Note: The album has already attained 'platinum' status, with over 2,000,000 copies sold.]

*Hopp Korv* by Hot Tuna

Jack Casady and Jorma Kaukonen have played together over ten years now so it's not surprising that their music sounds like one person playing two guitars with four hands. Jorma sings a lot on the album with his characteristically gruff voice. Fortunately, the lyrics aren't exciting, so not being able to understand them is not critical. What is important is that Jorma's leads are as hot as ever and Hot Tuna's rock and roll still hits hard and heavy. None of the songs last over five minutes, though, and fading out during such blazing guitar play is almost criminal. The music is good while it lasts, so turn up those amps and wake up the whole house.

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This year's story: Dick Junchano in Caltech's 2-11 loss to Cal State Northridge.

*All good things must pass...*

# A Caltech Hockey Update

Story and Photos by  
John Loo

For a number of years, Caltech's hockey team was one of the few exceptions to the CIT sports syndrome. Unlike the other Tech teams, the hockey squad had a winning record, and swept their division two years ago.

This year, however, the team is 0-9. What has caused this dramatic change? According to George Yates, team captain, any of a number of things could have done it.

Caltech plays within the Southern California Hockey Association (SCHA), not the NAIA, NCAA, or SCIAC. The SCHA likes to reorganize itself rather often. Two years ago, the SCHA had two divisions: Class 1 and Class 2; Class 1 consisted of the "tougher" teams. Caltech played in Class 2, and beat everybody.

Last year, the SCHA had one division, due to a lack of teams and interest. With Class 1 and Class 2 combined, Caltech suffered some losses, but managed to win enough to look respectable.

This year, the SCHA split into two division again, and stuck Tech into Class 1. The SCHA officials refused to place Caltech back into Class 2, due to scheduling problems.

Tech faced a number of other problems. First, five experienced players graduated. Then, the home ice rink (the Ice Capades Chalet in Pasadena's Civic Center) was not completed until October. As a result, the hockey team had only two or three practices before the season started in November. Tech's team entered the 1976-77 season inexperienced, out-of-shape, and lacking teamwork. Other SCHA teams (such as USC, Cal State Northridge,

and UCI) had been practicing for the entire fall; some even worked out through the summer.

Why did our team only manage two or three practices in an entire month? The reason is money. Hockey teams in Southern California must rent ice time for practices. Our team pays \$50 per hour for the rink, and an average practice lasts 1½ hours. Unfortunately, hockey money here is less than what the team needs. Even with the support of ASCIT, GSC, the athletic department, and the Alumni Association, Tech's hockey squad can only afford about one or two nights of rink time per week, including games. This doesn't leave much time to practice.

The rink also manages to schedule Caltech practices so that they will not conflict with "prime time" ice skating. Thus, practices and games are held late Sunday night. Spectator turn-out is almost zero.

SCHA player quality has risen over the years, too. A few years ago, Southern California hockey had a minor explosion on the junior league level. Many of the junior league all-stars are college-age now, and are competing in the SCHA. In contrast, some of Tech's players are still learning how to skate.

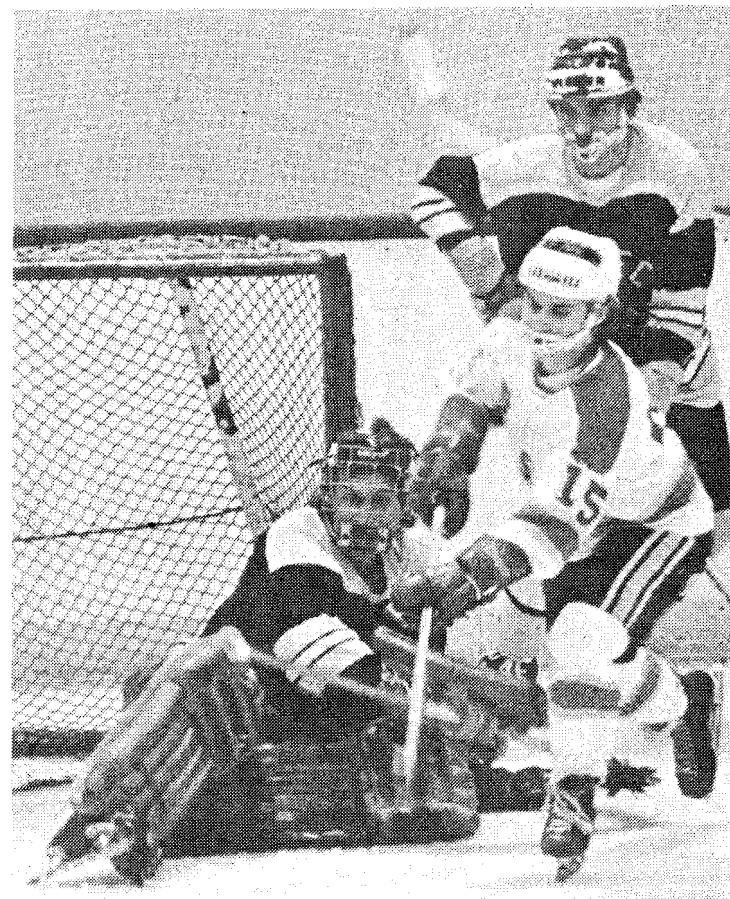
All factors considered, it is still amazing that Caltech managed to dominate Class 2 back in 1974. Two years ago, the team suffered from many of the same problems: inadequate funding, no practice, odd practice hours, and inexperienced players. But extra effort from the coach, Jim "Doc" Warden (who works for free, incidentally), and fine performances from the more experienced players on the team helped to pull Caltech through. The switch to Class 1 and the loss of some seasoned players really hurt.

Caltech still has a number of talented players. Phil Wood, a graduate student in Chemical Engineering, is third in the league in scoring this season. Rick Lye, a junior, scored four goals in Tech's last game against UCI. Dr. Fred "the Jet" Culick is still with the team, too.

What's in store for the future? "The main thing will be that we will try to drop back to Class 2," Yates says. This move, combined with more experienced players, may put Caltech back on top.



Rick Lye (Black) fights for puck with a USC player, as Fred Culick (left), George Yates (2nd from right) and Dick Junchano (right) skate to assist.



ABOVE —  
USC player lunges for puck with Dick Junchano down and George Yates screened from play

LEFT —  
Jay Killea (No. 8) body checks USC player in Tech's 17-5 loss to USC.

## Aerial Imaging Subject of Wednesday Y Discussion

by Alan Silverstein

Know it or not, the new science of aerial imaging has been affecting your life for several years now and will become even more important in the future. So spoke William Brown, U.S. Geological Survey Hydrologist, at an evening presentation sponsored by the Y last Wednesday in Winnett lounge. His multimedia, hour-and-a-half talk entitled "New Window on Our Planet" featured large static displays, a NASA film on the Earth Resources Technology Satellites (ERTS), a bevy of beautiful slides, and free sample lithographs.

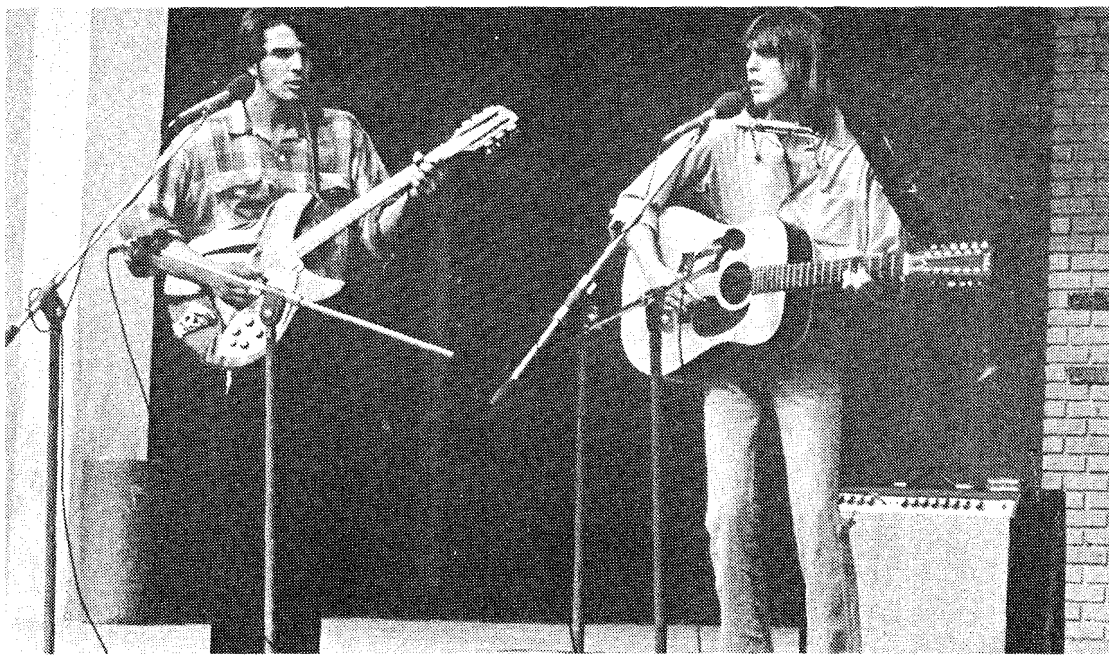
Man first studied the earth from above in 1858, during a balloon ascent near Paris. Systematic high-altitude observation is a more recent occurrence, however. In 1960 the Tiros weather satellite was orbited primarily to return images of large-scale weather patterns. ERTS-1 in 1972, and ERTS-2 in 1975, were the first unmanned craft wholly dedicated to looking at the entire planet in a regular fashion.

Brown emphasized the multilevel nature of aerial imaging, showing how ground observation, aircraft recording, and

orbital photometry interlaced to give complementary data about a region. He showed graphically that "aerial imagery is a way of finding things hidden in the world around us," by showing the audience a series of slides from street level to 38,000 miles above San Francisco. The inherent tradeoff is perspective for detail; the goal is multiple views of a region that not only give aerial fidelity but good resolution as well.

After the film, Brown told how each ERTS image, 100 nautical miles on a side, represents about 2340 scan lines, each about 80 meters wide. Hence each individual image returned to earth stations either directly or off automatic magnetic recordings contains around 28 million bits of data.

Brown particularly stressed the "benevolent nature" of remote sensing, despite the political hassles relative to the possibilities for international spying. He succeeded, in well organized fashion, accompanied by polished delivery and beautiful graphics, in not only conveying a capsule understanding of the methods of the science but the possibilities and usefulness of it as well.



Robert Leslie appearing in the quad during Noon Concert last week. The concert was sponsored by the Caltech Y. Photo-Ngaiman Chau

## The Reason for Those Tech Epidemics

by Carl Lydick

Once again, the annual Caltech cold epidemic has arrived. One of the more unique aspects of student life at Tech is the annual epidemic: a major portion of the undergraduate community comes down with a cold or the flu within the span of only one or two weeks. The question arises, though, "Why here?" Why is it that Caltech, unlike public schools and private business

firms, has such a high rate of illness among its students on a regular basis?

At least in part, the answer lies in the fact that various institute policies encourage such a problem. Whereas private businesses generally provide for sick leave, so that someone unfortunate enough to be sick is not also disadvantaged at his job, Caltech makes no provision for academic difficulties arising from illness. Recently, a nurse at the Health Center asked an Institute administrator about the possibility of providing a tutor for a student who had been bed-ridden for a week. The administrator replied that the student could, of course, have a tutor, but at his own expense.

Since the student can expect no help from the Institute in making up lost time due to an illness, the average student must attend his classes even if he is sick with a contagious disease. Thus, the cold can spread to the other members of the class. In addition, the Institute makes no provision to handle more than a few bed patients at the Health Center. Thus, in the event of a major outbreak of any communicable disease, one can expect a large number of sick students to remain in the houses, and will spread the disease there as well as in the classrooms.

Perhaps the reason for these problems is that the students

have not made the problem clear to the Institute's administration. Whatever the reason, now is an appropriate time to act on this problem. The undergrads are not simply an expendable group attached to the Institute; they are an integral part of it, and should be treated as such.

## BOD Minutes

Chess states that the Women's glee club will not be going on tour this year; instead they will be going to a camp at Oceanside. Since the BOD had given the club \$200 specifically to subsidize tour expenses, they would like the BOD to review their request. A representative could not be present at the meeting because it conflicted with a singing practice that night. Since there was no quorum, it was decided to table the matter until later.

2) Bielecki mentions that Steve Hurst suggested that the BOD award Dr. Schaefer with more than just a letter of commendation—perhaps a plaque or a beer blast. McDonnell thinks this would be a good idea. Bielecki says we cannot figure out an appropriate presentation until we have a quorum.

3) Bielecki suggests that the BOD agree to meet at a new time to allow more member to

Continued on Page Eight

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## NEW ASCIT OFFICERS

Continued from Page One  
bers of this committee.

However, he does have several ideas about short-term solutions. He wants to get a definitive statement, to talk to key people and gather opinions about possible solutions to the problem. "Some priorities will be violated in any solution," he commented, referring to two specific solutions to the problem. These are to either force upperclassmen off campus reduce the size of the freshman class for one year. However, he says that several people have led him to believe that this is not an acceptable solution to the faculty. If admissions keep up at the rate they are at now, the student houses would end up 40% freshmen in a few years if upperclassmen were forced off campus. He doesn't believe that "this is a conducive environment for either the honor code or for social life in general. However, no new student house can be built for at least five years, so some short term solution must be worked out within the present framework. He suggested that a reasonable solution might be to keep the freshman class definitely under 220 and probably closer to 200. He cited these figures from a faculty report written a few years which said that the optimum class size was between 200 and 220.

Also, he said that we should "plan for a new student house, assuming... the recommendation is to increase the student body size." He estimated that it would take about one year to find a donor to finance the new house.

The third, and last, on Wells' list of the most critical problems is "underutilization of human resources." Basically, he thinks that faculty members are not putting forth the enthusiasm that they once had, that they are not putting enough interest into their teaching. He will be working with the Director for Academic Affairs (Leroy Fisher) in trying to find solutions to remedy this situation. He thinks that greater teaching enthusiasm could be encouraged through the continuance of the teaching awards and the TQFR. Another suggestion of his is to start teaching Seminars, where good teachers (possibly those receiving the teaching awards) would talk to others about how to teach courses. This has been done before but he believes that it should be tried again. "I think they (the teachers) should be interested," he concluded.

Related to the problem of lackluster teaching is lackluster students— i.e., student apathy. He believes that Caltech is more serious these days, that students are more concerned about doing well academically than before. "Students come here very purposefully," he commented. "They want to get out of here with a B.S. or an M.S. that will get them a job or into a good grad school. They don't seem to care about much else." As an example, he doesn't believe that the rising GPA's here are necessarily due just to grade inflation. It may also be because of the increased seriousness with which students take courses. He claims that student apathy is not really a problem per se, but that it is simply a situation, and one that must be worked with. He also believes that the strong NO vote in the presidential campaigns (16% in the first runoff and 37% in the second) represents strong student apathy.

Wells also has several other things that may produce interesting results. For instance, he would like to work with the IHC Chairman (Eric Kaler) and perhaps arrange joint meetings of the IHC and the BOD. He will also look into the possibility of sitting in on Trustees' meetings. Finally, he is considering going around to different houses once or twice a week just to talk to people after dinner about things they would like to see the BOD do. And if none of these things work, then he suggests that we just call a corporation meeting. "You need a hundred people and it's a lot of fun," he said. "I'm sure we could do some interesting things."

### IHC Chairman

The IHC Chairman is perhaps the second most influential office in ASCIT next to the President. And, according to newly elected Chairman Eric Kaler, it is also the most representative office in the ASCIT hierarchy. Kaler, who was ASCIT Secretary two years ago, believes that the IHC Chairman has no actual power, since he is not a voting member of the IHC, but that since he is the spokesman for the group, he is in many ways more influential than any of the other members (the seven house presidents) despite not having a vote. Kaler gave his thoughts on several of the activities that the IHC coordinates: principally, rota-

tion, faculty committees, and the quality of the food service.

On rotation: "When the gag rule was abolished last year I thought that freshmen would get many wrong impressions of the houses. I was wrong, though. I think that most people are more honest than they are given credit for." He believes that it doesn't hurt freshmen to be aware of other houses' reputations as long as they are aware that these are opinions of people who have not actually ever lived there. He claims that rotation went more smoothly this year because of the lack of a gag rule. "When there are fewer rules, there are fewer rules to break," he stated.

On faculty committees: Kaler thinks that better feedback from student members on faculty committees is important to a smoother running government (the IHC chooses student reps; the BOD approves them). Although an effort to have student reps submit statements to the BOD after every meeting failed a few years ago, he believes that it would be worthwhile to try it again. In addition, he would like to print these summaries of faculty committee meetings in the *Tech* in order to make the proceedings and the functions of these committees more well

known.

On food service: "People around my house (Ruddock) have been sick more than usual lately and I wonder if it is due in part to the food. Last term the food was all right, but this term it has gone straight downhill." One possibility, he thinks, is to find out what food services other campuses use (this was tried last year). However, due to Caltech's small size, it may be nearly impossible to get good food without a raise in price that is unacceptable, he said. In any case, he feels that the contract with Saga (a new one was signed last week) should definitely be reconsidered.

Personally, Kaler gives the impression of someone who is looking forward to his office and believes that he can make a positive contribution toward improving life at Tech. He is reasonable but has definite opinions on many subjects—opinions that he has no doubt thought through carefully.

### Director for Academic Affairs

The Director for Academic Affairs has many important duties, among them coordinating

the Teaching Quality Feedback Report, serving on several committees which deal with academic policy and curriculum, and this year occupying a spot on the faculty advisory committee which will search for a new Caltech president. Director-elect Leroy Fisher looks upon these responsibilities not only with respect for their importance, but with an encouraging willingness to give his best toward tackling them.

Personally, Fisher impresses one as an introspective, well-mannered, and generally quite likeable guy. These qualities will undoubtedly be to his advantage, when one considers the large number of people he will deal with on the BOD and elsewhere as he fulfills his obligation. He will try to find ways to increase interaction between faculty and students and make the faculty more aware of student needs. He will continue successful programs such as the Teaching Awards, and will initiate new plans, including frequent faculty visits to the houses. Fisher feels that any increase in faculty-student communication is desirable, and he plans to work with the outgoing director, Bert Wells, to facilitate smooth implementation of his policies.

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# Cagers Beat LIFE for First Win

by Rock Howard

The Caltech basketball team won its first intercollegiate contest of this season by defeating LIFE College 67-56. It was a sweet victory for Tech, who had lost to LIFE by six points in the very first game. The loss put a damper on the homecoming day festivities at LIFE, as the Beavers controlled the game all evening.

Bart Croes and Joe Zasadzinski hit the first baskets of the game for Tech, but LIFE came back with five unanswered points to take the lead. The lead changed hands until John Pender hit two straight buckets to put Tech ahead 10-7. Tech held the lead for a few minutes but Life reeled off six straight points to recapture the lead 19-18 with five minutes left in the first half. John Pender then hit a crucial three-point play, and Charlie Curatolo sparked Tech's sputtering offense to send Tech back on top 31-25. LIFE then hit two baskets in the last minute to cut Tech's half-time lead to a mere bucket.

Bart Croes opened Tech's scoring again in the second half with a quick basket. Both teams then went cold with the exception of Buzz Blaisdell, who pumped in eight straight points for Tech. LIFE, meanwhile managed only three points.

With the score at 41-32 and 12 minutes to go, Tech turned to its big men to protect the lead. Joe Zasadzinski and John Pender came through for Tech by tallying the Beavers' next 18 points. This drive left Tech ahead 59-49 with less than four minutes to play. LIFE wasn't quite ready to die, though, as they scored six points to cut Tech's lead to four with only two minutes to play. The Engineers didn't panic, though, and LIFE was forced to foul in desperation in an attempt to get the ball back. Croes, Blaisdell, and Peter Edwards then hit clutch free-throws to assure the victory.

John Pender led Tech's attack with a game high total of 26 points, 13 in each half, and 13 rebounds. Greg Blaisdell hit

13 points, 11 in the second half, and pulled down 11 rebounds. Joe Zasadzinski and Bart Broes each scored nine points and had nine of the Beavers' 17 assists between them. In addition, no Tech player committed more than three turnovers. It was a satisfying and well-deserved victory for the Tech cagers, who have hustled all year despite the almost overwhelming talent they face.

The Tech JV almost matched the varsity's win, but fell just short, 39-33. Tech trailed 35-22 with six minutes to play, but then reeled off 11 unan-

swered points to cut the lead to two points. A couple of questionable calls by the officials, and four points by LIFE in the last minutes sealed Tech's fate.

Bob Winchell hit a game high total of 12 points to lead the JV. Bob Burke pumped in eight points and John Hattick chipped in five. Eric Nickell and Doug Ericson each scored four points to round out the scoring for Tech.

Caltech's next basketball hame is tomorrow night against LaVerne here at the Scott Brown Gymnasium.

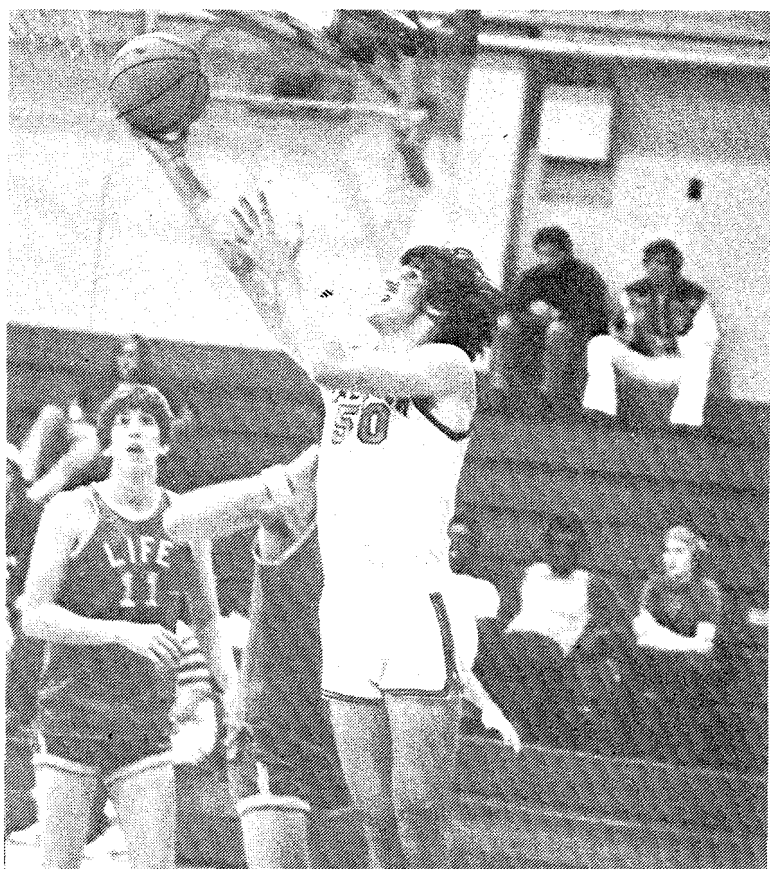


Photo-John Loo  
John Pender goes up for layup in recent game with LIFE College. Tech won 67-56.

## NEW BOD MEETING TIME

Continued from Page Six  
show up. Rea suggests 10:30 Monday night. This meets with general approval.

4) Chess: "We have to have an installation party for the new officers, don't we?" Chess suggests that the IHC provide refreshments by bringing back their doggie bags from the

Sawmill. Bielecki seconds the motion. Chess further suggests presenting the IHC with a "golden fleece" award, or maybe a "golden palm tree."

5) After McDonnell asks if there is any further business (no), the meeting is adjourned at 8:25.

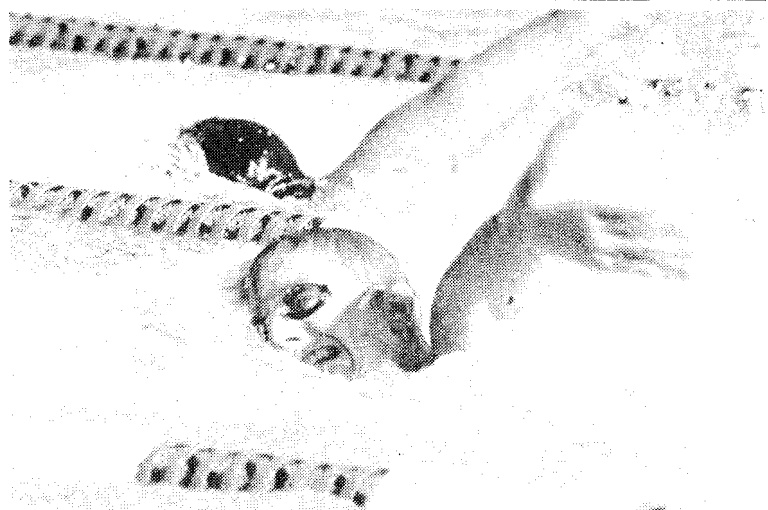


Photo-Tom Snyder

John Reimer swimming stroke-for-stroke with Pomona swimmer in the 500-yard freestyle.

## Ed Spencer Had Nothing to Say Swimmers Lose to Pomona

by Josh Levin

On Saturday, January 29, Caltech's men's and women's swim teams went up against the

Pomona-Pitzer Sagehens. The men did not fare well at the hands of the Sagehens, losing the meet with a score of 25-69. Our sole victor was John Reimer in the 200-yard freestyle.

Our women's team did just the opposite, and beat Pomona-Pitzer with a score of 68-28. This outstanding job was compounded by the fact that they won every event.

After this meet, the men's record stands at 2-2, and the women's at 2-0.

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