Computer Prof Sutherland
Elected to NAS

Dr. Ivan E. Sutherland, professor of computer science and pioneer computer scientist, has been elected to the National Academy of Sciences in recognition of his achievements in original research. The most distinctive of the highest honors that can be accorded an American scientist, was presented to Sutherland by the president of Washington D.C., during the business sessions of the 115th national meeting of NAS. Sutherland, 39, is one of 60 persons chosen for NAS membership this year.

In his research, Sutherland is developing new philosophies of computer science that might be used in order to cope with the rapid growth of computer components. One of his early concepts was the use of computer-generated pictures in industry—and education—for everything from designing automobiles to simulating airplane landings for training pilots.

Currently working in what he calls "the integrated circuit revolution," Sutherland is stacking the problems inherent in the expansion of the sophisticated interconnected mechanisms of the integrated circuit technology and computers.

Born in Hastings, Nebraska, Sutherland earned his undergraduate degree from Carnegie Tech in 1959, an M.S. from Caltech in 1960, and a PhD in electrical engineering. Shortly after leaving his PhD, Sutherland went with a team of Evans and Sutherland to develop the first large Advanced Research Projects Project (ARP) computer, which was used to aid the Information Processing Techniques Office.

In 1962 Sutherland went to Tufts as associate professor. Two years later, with a fellowship, he founded Evans and Sutherland Computer Corp., a company that now has revenues of $1 million.

Vic Manzella wins half a mile run with a time of 4:53.2 in a double dual meet against LA Verne at Claremont. Other winners were Bill Gould in the steeplechase, Tom McCabe in the quarter-mile, and Ben Bonham in the 880 yard run. The team beat LA Verne 90.5 to 37.6 and lost to Claremont 41 to 02.

Photo by Steve Kellogg

Tech's Money: Where Got... Where Gone?

By Richard Willson

Tech campus faced a number of cuts for the fiscal year ending September 30, 1977, amounting to $35.5 million, or 12 percent of the previous year. The largest increase in campus expenditures was for the instruction and departmental research programs, whose costs totaled 16.9 million dollars, a one percent increase. Gifts and non-government grants to Caltech during the period were $18.2 million, well above the average of recent years. The level of gift funding has shown a steady increase over the past decade, and gifts and grants continue to be the primary financial resource of the Institute.

Over the same period, endowment income showed a 10% increase in $2.4 million over the previous year, and the endowment fund, the income of which is invested, was valued at $155.5 million on September 30. Although this represents a considerable increase over the June, 1970 figure of $107.8 million, this is considerably lower than the 1971 level of $140 million and is essentially the same amount as the 1970 sum when measured in constant dollars. This year's endowment income, major gifts and endowment earnings, and the major gift as well.

Major gifts in the last year were made possible by widespread support from a number of generous donors. One major innovation was the "Beggar in Bankruptcy" poll, which was a $10,000 first prize from the Cost Reduction Incentive Awards Program of the U.S. Steel Foundation. Its use and other methods of conservation will be shown over the 1970-71 academic year as the electrical power usage by about 30%.

In addition, the Institute undertook a program of examination of consumption patterns and opportunities for conservation of natural gas and fuel oil. These will appear on page three.

Still Lovers Sex about

After the war ended, Wiesel was sent to France with other Jewish orphans. He studied at the Sorbonne and later became a correspondent for several newspapers and magazines in France and Israel. Wiesel came to the U.S. in 1956 and is currently Andrew Mellon Professor of the Humanities at Boston University.

Wiesel is today a renowned spokesman for the Jewish people. He has been called the "Louis Pasteur of the Jewish people" and "a modern Job." The L.A. Times writes: "Perhaps more than any other writer today, Wiesel forces us to remember. His words make us confront our history and ourselves; his images bring tears to the eyes and gladness to our souls. He calls himself a storyteller, but he is surely more than that. He is a chronicler of madness and sanity.

BOD Bawls "Big Book Bankrupt"

By ed. Bielecki

"Shit!" said Gentle Ray Beaulieu, the ASCIT President, and this was indeed a good analysis of the new and highly improved Big T alutation. At the end of this year, the Big T, and hence ASCIT, will owe $6,000 to the publishing company, for the last yearbook. The Big T is now very deep in terms of deficit spending.

The BOD will have to take out an Institute loan for the $6,000. The company won't print this year's book until last year's is paid off, but this is only a delaying action, and not a cure. The $1,500 debt will have to be made up one way or the other. One of the more reasonable ways to do this involves raising the cost of membership, and will appear on page three.

Dr. Morgan and Dr. Rossho
Elected to NAE

Two members of the Caltech faculty have been elected to the National Academy of Engineering, President Courtland Perkins of the Academy announced in Washington early this month. They are Dr. James Morgan, professor of environmental engineering science, and Dr. Anand Rossho, professor of aeronautics.

The election of Morgan and Rossho brings to 24 the number of Caltech faculty who are members of the prestigious Academy, including Dr. Robert O. Cannon, Jr., chairman of the Division of Engineering and Applied Science, who has been reelected for a second three-year term to the council of the Academy.

Morgan, 45, was honored for his contributions to the engineering profession through basic research and application of chemistry in water purification and pollution control.

Rossho, 54, was named for his research on turbulent shear flow with applications to wind engineering problems, vehicle aerodynamics, and the various turbulent mixing processes.

The two Caltech scientists are among 1,400 engineers from the United States who were honored this year by election to the Academy. The total membership is 5,128.

Morgan has been a member of the Caltech faculty since 1965. He has degrees from Manhattan College, the University of Michigan, and Harvard. Rossho came to Caltech in 1946 from Columbia University and the University of Alberta. He received both an MS and a PhD from the Institute, and in 1952, was appointed to the faculty.

"Big Book Bankrupt"
The main interest with this first question is to determine if Caltech, a school with close to 90% of its undergraduate population being male, presents an environment which encourages homosexual contact. There is often the common belief that a school which is mostly male will breed a larger number of homosexuals. This idea is proven quite false by the data in my poll, as shown by this first graph. Less than thirteen percent of the Caltech male undergraduates have had some sort of homosexual contact since the age of eleven. In sharp contrast, at Pasadena City College, a school with a much more equitable male to female ratio, more than 20% of the males have had some homosexual contact. This is even higher than the 20% figure for males overall, found by Playboy. Thus, it becomes quite clear that the Caltech environment does not encourage or cause any abnormally high degree of homosexual contact.

The second graph which I would like to discuss deals with fellatio. This graph is shown on page (2). The question asked was, "Have you ever been involved in or participated in fellatio (heterosexual; def: oral-vaginal sex) in the past year?" The graph shows the percentages of people responding yes to this question.

The graph on fellatio is in many ways very similar to the previous graph on cunnilingus. Once again, Caltech males show the highest degree (71.8%) of participation in Fellatio. The data is similar to the subpopulation polled (including Playboy data). Caltech females showed the same relatively lower overall involvement or participation in fellatio (37.3%) that they did in cunnilingus. In addition, the Freshman to Senior trend for Caltech males is also evident as through sexual cunnilingus increases from 22.2% to 60%, Caltech male Sophomores show a higher percentage that the "Sophomore anomaly", present in all three graphs last week, is absent in this graph. Two graphs dealing with oral sex.

Also similar to the previous graph on fellatio, PCC males showed an unusually low inclination of participation in fellatio (35.9%). However, PCC males, who showed a low degree of participation or involvement in fellatio in the last graph, show a much higher degree of participation or involvement in cunnilingus (48.3%) in this third graph. I have no explanation for this disparity in the PCC male response, but it is worth taking note of.

The third graph which I will discuss this week is very similar to the second in that it also deals with oral sex. This third graph deals with cunnilingus. This graph is shown on page (2). The question asked was, "Do you prefer to reach orgasm through intercourse or through oral sex?" The graph shows the percentage of people who checked or circled intercourse as their preference.

This is an interesting question in that it points up another of the many problems in analyzing the data from such a poll. The people responding to this question included a large number of virgin who have never experienced an orgasm through either sexual intercourse or through oral sex. It also includes responses from people who have never experienced one or the other of these two orgasmic experiences. Thus, the results reflect, to a rather large extent, what many people think they prefer, in addition to what some people actually do prefer from their own experiences. Thus, when it is seen that Caltech males (91.3%) prefer intercourse over oral sex more than any other group, it should also be added that Caltech males had the least experience in sexual intercourse of any group polled. Thus, it appears that the prevailing opinion among Caltech males is that orgasms through sexual intercourse are more desirable than orgasms through oral sex. This opinion fluctuates a lot from class to class, as seen in the last four columns on this graph.

In contrast, only 77.8% of the Caltech females polled preferred orgasm through sexual intercourse rather than oral sex. Thus, in comparison to Caltech males, Caltech females show a slightly higher degree of preference for oral sexual orgasms. Still, the overall percentage of Caltech females preferring intercourse orgasms is essentially equivalent to the figure compiled by Playboy for all those adults age 18 and up.

The fourth graph which I will discuss this week deals with the debate between sexual intercourse and oral sex. This graph is shown on page (2). The question asked was, "Do you prefer to reach orgasm through sexual intercourse or through oral sex?" The graph shows the percentage of people responding yes to this question.

The first thing to note on this graph is the simple fact that 28.6% of the Caltech females see Sex as page three.
of the book, and, by keeping close track of the production, holding the cost down.

The current plan for this year's Big T calls for a book of just under 200 pages, with no color. Before the project gets too upset, note that this is just like the 1970 "Feynman's Big T."

The exact method of getting the money to pay off the debt is not yet determined. Gentle Ray plans to search for new possible sources of funds, but the majority of the money will likely come from raising the ASCIT or Big T dues, for the next many years. (The buck fifty for only two terms you can kiss goodbye.) Anyone with complaints, insights, and/ or brilliant ideas is solicited to attend the next several BOD meetings, at 10:30 am in the Y Lounge.

steps led to a consumption cutback of 40 percent, and an annual savings of $100,000.

The "At The Leading Edge" program, launched in 1974 with the purpose of raising $130 million over five years from private sources, has made satisfactory progress toward its goal, and the overall financial position of the institute, according to vice-president and treasurer Morrison in the "77 President's report, though inhibited by inflation from rapid growth, remains strong."
"Call me a cub reporter will you."

SELF-DEFENSE

It’s just a jump to the left...

Eat Flaming Death, male chauvinist pillow.
by Dr. Mary Conrad

(Below with the whistle)

"Then you hit him."

Photos by Joe DiGiorgio

Why is this person grimacing?
Dream On
Sigrid McPherson, senior staff photographer at the Young Health Center, will present a seminar entitled "Dreams and Dreaming." Wednesday, May 3 at 5:00 in the Y Lounge. The seminar will be a presentation on a number of ways to interpret dreams as well as how to begin learning how to make dreams work for you.

Winners
The winners of the California Tech writing and photography contest were: Martin Goldberg for his article on the film "Annie," and Joe DiGiorgio for his photos of the cooking contest. Martin received $10 and Joe received $5.

Caltech Wind Ensemble Concert
The Caltech Wind Ensemble will present a concert on Saturday, May 13, at 3:00 in Dunby Gardens. The concert will feature music by Bach, Mozart, Moussorgsky, Kabalevsky, Vaughan, Williams and Sousa. For further information, call Jim Rotter at extension 2157.

Awwwwww!!
Dunby House truly regrets that everyone at Caltech is dumping on Ken Rousseau's House. We really love Fleming a lot.

More Jobs
All degree candidates: two companies will be on campus to interview students for possible employment during the month of May. The University of California Lawrence Livermore Laboratory will be interviewing on May 2, and Endevco will be interviewing on May 4. Sign-ups for interviews may be made in the Placement office, Room 8, Dunby Hall.

Part-time jobs: Tutoring jobs in a variety of subjects are available for interested students. Several part-time jobs which have a potential for full-time employment are currently available at JPL. Drop by the Placement Office for further information.

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THE CALIFORNIA TECH
Page Six

Baked Plants?
A plant and bake sale for the benefit of Caltech students will be held by the Caltech Service League on Winnett patio today starting at 9.30 am. The annual fund-raising event is conducted by the 500-member organization of parents and friends of Caltech students to help support student activities on campus through services, gifts, and cash awards.

In charge of activities are League president Ruth Saffman of Pasadena, bake-sale chairman Frances Shipley of La Canada, and plant-sale co-chairmen Dorothy Dean and Mary Hill of Pasadena. Also involved is League financial secretary Martha Corcoran of San Gabriel, and treasurer Thelma Cowan of Pasadena.

The Caltech Service League was organized in 1948 under the leadership of the late Doris DuBridge. Continuing activities of the organization include a monthly well-baby clinic for children of Caltech students and staff, and a furniture "pool" to help young student-families furnish their homes while they are in school. The League also makes regular contributions to student-activity groups such as the Caltech Y, the student musical, the glee clubs and the California Tech.

Betty Davis-In Person and on Film
Bette Davis--"In Person and on Film" is an evening of nostalgia that features scenes from many of her most memorable films. After a stroll down memory lane, Bette Davis herself takes the stage, bring a walk, a look, a voice--all so much a part of the legend. And all this takes place in Beckman Auditorium, Tuesday, May 9 at 5pm. A limited number of tickets remain; unsold and returned tickets will be on sale one hour before the performance.

To Legs! To Legs!
Let it be known hereby that Kellogg's Eighth Light Regiment of Fost does sponsor and does intend to run it's second annual Runner's World 24-Hour Relay.

The rules are simple: A ten-man Relay team, where each man runs one mile legs, attempts to pass a baton around the track as many times as possible in 24 hours (e.g., 240 miles translates to 6-minute average miles which requires each runner to run one mile every hour). The post-track season spectacular is scheduled for Saturday, May 20, 0900 hours to the same time Sunday on the Caltech track. Sign-up lists are now posted in the Gym (KELROF Southern Regional HQ), in Page House (KELROF Eastern Regional HQ), and in West Bridge (KELROF Western Regional HQ). Over 30 have signed up so far. We have the capacity to handle as many as five teams. These will include at least one serious team making an all out effort to better KELROF's last year's mark of 247 miles, 375 yards, and at least one team where fast times will be frowned upon attempting to run under the Caltech Cripples without Cutches mark of 189 miles, 850 yards. UG's, Gradu JPLers, faculty and staff are welcome. Official, timers, and other backup personnel will be needed in great numbers. For more info, call me at x1398 or look us up in the 77 Big T.
The Seven Return, and Return and...

By Michael Kurilla

This week ASCI is presenting The Magnificent Seven. For anyone familiar with the Japanese film, The Seven Samurai, then you already know the plot. Around the late fifties and early sixties, the Japanese cinema became known internationally. Hollywood picked up on the Japanese adventure stories about samurais and converted them to the American counterpart—the cowboy.

Hollywood preserved the story of the seven mercenaries defending a small town from murderous bandits. The action is rather lively, and unless you’re usually bored with any Western, you’ll probably find the film quite entertaining. Naturally to future success, the seven are a fairly impressive group of leading men: James Coburn, Robert Vaughn, Steve McQueen, Yul Brynner (the leader), Charles Bronson, and last but certainly not least Horst Buchwald.

For anyone who really enjoys the film and wishes to see more, Hollywood has turned out its sequels, although a good deal of hunting is necessary to find them. All the sequels are rather poorly made and come off only as routine Westerns. They include, Return of the Seven (1966), Guns of the Magnificent Seven (1970), and The Magnificent Seven Ride (1972). If you wait long enough, there is probably some script lying around for another one, somewhere. [For example, the Star Wars Marvel comic, issues 8-10...]

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Milk Builds Bodies in 7 Ways?

PASADENA, CA—The following is the text of the speech given by Mr. J. Alfred Prufrock to the California Milk Advisory Board, 2-29-78.

"Ladies and gentlemen of the Board, it is my pleasure to present to you the results of the second stage of our "Milk—Somewhere Near the Front" campaign. Most of you know of the sad results of the first stage, the contr.1 with the Physics department at Caltech to design a better cow. Our thought was that the cow had not been improved in recorded history, and advances in milk making had stopped when the cow had replaced the goat. The ideal cow designed by that study has not yet been put into the present to you Frank N. Stein, to create a talking glass of milk. Frank, or rather, Mr. Stein, was a bit more ambitious than we realized.

"It is to Frank's credit that he started off small. After three months of work, he managed to imbibe a glass of milk with a human form and a rather high-pitched voice. From a small glass of milk to a half-gallon carton was but a small step, and Frank was soon working on a mass-sized 'Milkman' when his troubles started.

"Frank had been devoting so much time to his research that his classes, shall I say, suffered, as his midterms amply demonstrated. I suppose that under such pressure as Frank felt, anyone would have cracked. It was unfortunate, however, that his mind found such an ingenious way to, as the Techers put it, 'Cut throats.' One night, before dinner, Frank snuck around to the kitchens and added his various mixes to the milk to be served at the dinner...

"How can we imagine the terror that those students felt at seeing their milk crawl out of their glasses, grab table knives, and advance toward them with a menacing glare in their beady white eyes? Still, the attack would not have been as successful as it was had the student's first reaction to run not been stifled by the fact that occasionally the rest of the food moved.

"The full extent of the tragedy was not known, however, until the police went to arrest Frank for the death of 140 of his classmates. Frank had finished the mass-sized Milkman, and upon its awakening had given it a joyous hug. It was too bad that he had made it from Food Service milk to save money, and it had surface-opened into a big cheese. When it hugged Frank back, it crushed him to a pulp. The Cheeseman was so upset that it smashed the surrounding laboratory; and now we shall never know the secret of how Frank animated the milk.

"In fact, all we are left with is his last work of genius, who has consented to speak at this meeting today. So without further ado: Ladies and gentlemen of the California Milk Advisory Board, I present to you Frank N. Stein's Moeserien.

Without Apologies,
The Midnight Poet.