

Scudder Talks Ethics

by Ketan Shah

Dr. Thayer Scudder, Caltech Professor of Anthropology, lectured on "Ethical Issues for Consultants in Dealing with the Third World" last Wednesday at the Y Noon Update.

Dr. Scudder has been a consultant to the World Bank. He gave a personal account of the strategies he has employed in facing the ethical and social dilemmas confronting social anthropologists in the field and as consultants.

The dilemma, Dr. Scudder feels, is that in the 5-6 years spent in the field, usually to gather material for a thesis, anthropologists extract a great deal of information from their subjects, yet are unable to give very much in return, at least directly. Often, an entire career is based on a few years spent in the field.

In the 1950's, anthropologists would reciprocate with small gifts such as cigarettes. More substantial help was using their vehicles for medical emergencies. This clearly did not benefit the whole community.

Some anthropologists felt that they did a valuable service to the societies they were studying by writing their social histories. However, neither the above, nor teaching, did much to ease their consciences.

Disenchantment set in. Dr. Scudder gave an admittedly cynical view that many anthropologists found refuge in Marxist ideology. Ensnared in a safe professorship, they imposed socialist ideology from without and saw structural changes as the primary solution to problems afflicting the Third World. Others began to lead an activist life upon joining "symbolically rich" religions such as Catholicism.

Dr. Scudder, on the other hand, has been a consultant, since the early sixties, to the United Nations Development Fund (U.N.D.F.), the Food and Agriculture Organization (F.A.O.) and the World Bank.

When Robert McNamara took over the World Bank, the organization applied its attention to Third World poverty. The budget was in-

creased fourfold. While Dr. Scudder concedes that the World Bank's effect on poverty has been appreciable, the massive flow of funds have had a less than salutary effect. Only giant engineering projects such as building dams could absorb the large amounts of money the Bank was dispensing. These projects cause forced relocation of whole societies.

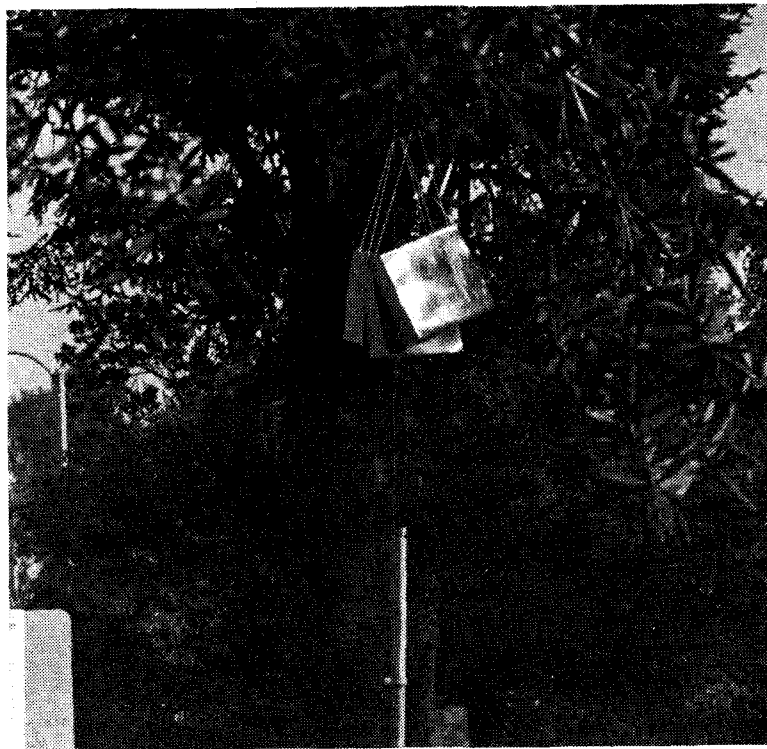
Dr. Scudder said that India alone will have relocated two million of its citizens by the end of this century. Forced relocations can cause increased infant mortality, lower the status of women and a host of other social problems.

In the last 2-3 years, Dr. Scudder has adopted a new approach. He has sought to build constituencies which would apply pressure on governments and the World Bank. At the heart of this strategy is the belief that change must come from within the system; structural and policy changes must come from within. This runs counter to the Marxists' contention that ideology will solve the problem. Little fieldwork is done to back up their argument; most of it is desk-analysis.

The new strategy evolved after several governments failed to implement programs approved by consultants and funded by the World Bank. The consultants were accused of legitimizing programs in order to win funds. In other words, they were "window dressing."

The solution, as Dr. Scudder sees it, is to increase pressure on the political economy. This is best done by feeding valuable information to planning committees, environmental movements, and public advocacy lawyers. Armed with such information as the opinion of the World Bank on, or the social cost of, specific projects, such groups can bring pressure to bear on local politicians and planners to define goals and implement programs to successfully achieve them.

To paraphrase Dr. Scudder, the ethical dilemma continues. It remains to be seen whether his latest strategy of building constituencies with the supply of information will be effective.



—photo by Ron Gidseg

New phone book distribution method after AT&T breakup

No Evidence of Quarks

by Charles Barrett

An involved search by a group of Caltech physicists using a highly sensitive apparatus has found no evidence for the existence of free quarks. Caltech Assistant Professor of Physics Robert D. McKeown presented this information, based on data he and his colleagues gathered in experiments performed at Caltech, in a paper at the annual meeting early last week of the American Physical Society in Toronto.

Current theory identifies quarks as being fractionally charged "building blocks" of matter, the constituents of subatomic particles that display integral charges, such as protons and neutrons. Particle physicists have been searching for evidence of the existence of quarks in a free (i.e. not bound up in a subatomic particle) state. Theory does not imply that free quarks must exist, but in 1981 Dr. William Fairbanks of Stanford University announced that he had found evidence of fractional charges, indicative of free quarks, in an experiment of his.

The Caltech experiment, which began last summer, used the 3MeV tandem electrostatic accelerator to accelerate ions of niobium or

tungsten that had been created by eroding samples of those metals with a 30KeV stream of argon ions. The output of the tandem then passed into a device that determined the particles' charges by checking their deflection in an electric field. The apparatus is extremely sensitive.

"We could have detected fractional charges in niobium on the order of one particle in 5×10^{17} , and in tungsten on the order of one particle in 10^{17} ," said McKeown. No evidences of fractional charges were obtained, however.

The apparatus is capable of searching for free quarks in a wide variety of substances. The use of niobium and tungsten at the outset was dictated by the fact that Fairbanks had obtained his positive results by using tiny niobium spheres, annealed by heating on tungsten.

The Caltech equipment is sensitive enough to have detected charges present in the concentration reported by Fairbank in 1981, according to McKeown. "Our negative results certainly do not mean that we can rule out Dr. Fairbank's finding, but they do put a great number of constraints on

continued on page 2

Neugenbauer Wins Hughes Prof, Prize

by Tom McKendree

Dr. Gerry Neugenbauer has been appointed the first Howard Hughes Professor at Caltech. He has also just received the 1985 Space Science Award of the American Institute of Aeronautics and Astronautics.

The Hughes Professorship, established last year in memory of the late Howard Hughes, was designed to honor a faculty member doing leading physics or engineering research.

Neugebauer is director of the Palomar Observatory, and helled develop many infrared detectors for astronomical studies, including instruments for the Mariner, Pioneer and Viking missions. He was the Principal U.S. Scientist for the Infrared Astronomical Satellite (IRAS).

Neugebauer has worked with the Santa Barbara Research Center, a Hughes subsidiary. He also helped form plans for the recently announced Keck Observatory, which when completed in 1992 will be the largest optical and infrared telescope in the world.

After receiving his A.B. degree from Cornell University in 1954, Neugebauer came to Caltech, graduating with a Ph.D. in physics in 1960. He joined the Caltech faculty in 1962 as an assistant professor of physics. In 1970, he received full professorship. Neugebauer's awards include two NASA Exceptional Achievement Medals, in 1972.

Hughes is the professional home of some 250 Caltech graduates, more than any other company. As a result, the company is "perhaps more aware than most of the outstanding role the Institute has played in this era of exploding technology," according to Dr. Allen Puckett, Chairman of the Board and Chief Executive Officer of Hughes.

ASCIT Elections

Results

Gender By-Laws Amendment did not pass. Joy Watanabe won ASCIT presidency decisively.

Nominations

Nominations are open for the offices of Vice President, Secretary, ICH Chairman, Director for Academic Affairs, Director for Social Activities, Directors at Large, Activities Chairman, Athletic Manager, BOC Secretary and California Tech Editor. They will close at 5:00 pm this Tuesday, Feb. 5th. Nominations should be addressed to Joy Watanabe, ASCIT Secretary and delivered to the Dean's office. An update listing the current nominees will be on the door to the Master's office.

Any statements the candidates would like to make must be delivered to the Tech office by 8:00 pm on Tuesday, Feb. 5.

Election Runoff

The runoff election for Treasurer between Dave Bruning, Everett Howe and Joe Williams will be held today. The voting procedure for this election is outlined below.

Article VII, Section 5. of *Ascit By-Laws*(little t, page 160)

The voting procedure . . . is as follows: (a) A voter circles the preferred candidate and/or crosses out the least preferred.

Pol E. Duwez Dies

There will be a memorial service for Pol Edgard Duwez today at 4 p.m. in Dabney Hall lounge.

Pol Duwez was born and educated in Belgium. He first came to Caltech as a Research Fellow in 1933. After a five-year period back in Belgium he returned to 1941 as a Research Engineer on various defense projects at Caltech. In 1944 he became the Head of the Materials Section at the Jet Propulsion Laboratory. He joined the Caltech faculty as Associate Professor in 1947 and became Professor in 1952.

Immediately after his return to Caltech in 1941 he conducted the first experiments which demonstrated the existence and nature of waves of plastic deformation in solids which had been

predicted theoretically by Theodore Von Karman. He subsequently made many other original contributions to the field of materials science, and he became especially well-known for his discovery and study of amorphous metal alloys. The many students who studied with him now occupy prominent positions in academic institutions and industrial companies in the United States and other countries.

Pol retired as Professor Emeritus in 1978. He continued to consult daily with his colleagues at Caltech until his final illness. He died on December 31, 1984, at the Huntington Memorial Hospital in Pasadena. He is survived by his wife Nera of Pasadena and his daughter Nadine, who lives in Paris.



Live From New York

Tech's Not For Me—Afterwards

by Ken Whang

I should tell you something. I'm actually not a transfer student at Columbia. In fact, I wasn't accepted as a transfer student to any of the schools that I applied to last spring. Nevertheless, I'm here taking Columbia classes for a second semester, on a path which, if all goes well, will lead me to a degree from Columbia College in the spring of 1986.

The story begins at Caltech. Fall of sophomore year, I started thinking that I wasn't getting what I wanted from my education. Not only was I finding Caltech's curriculum restrictive, but I wasn't performing well within it, and saw my future options closing in on me. Winter soul-searching and discussion with friends, professors and deans led me to the conclusion that Caltech just wasn't the right school for me.

Chapter two. Applying to schools was much worse the second time around. This time I had few assets to speak of and many academic blemishes. I was really a poor student at Caltech, failing two classes freshman year and finishing sophomore year with a GPA of 2.4. I found more recently that, due to an error, my transcript at the time had credited me with a GPA of 1.8. Sure I was editor of the student paper and that was a meaningful experience, but it's my impression that the value of extracurricular endeavors is overrated, that it's usually limited to distinguishing applicants who are otherwise equal academically.

What saved me, I think, were my high school record and my essay. Columbia's application asked me more about my high school record than any of the others. So, having a Caltech student's high school record, I could throw in a lot of good points that I thought had expired. In my essay, which I consider to be one of the best essays I've ever written, I focused on why

I wanted to transfer and did a bit of pleading as well. Columbia was in fact my first choice. I'm sure that showed through in my application.

But, as I said before, I wasn't offered admission as a transfer. It turned out that Columbia requires a minimum GPA of 3.0. Many other schools have similar policies. Columbia, however, was still interested in somehow bringing me to the university. The deal was this. I could register for Columbia College classes as a visiting student through the Columbia School of General Studies. If I got a B+ average for the year or did extremely well in the first semester, they would take me as a regular student. Under these conditions I came to Columbia.

Chapter three. Fall 1984 didn't finish as well as it started. I got sick the last week of term, and finals week went just terribly. I finished with a GPA of 3.1, which happens to be the average GPA at Columbia, instead of the required 3.3, so my application was unsuccessful.

The first few days of 1985 were traumatic. I heard from them on the third of January. On the fourth, I went to New York to talk with the admissions officers and, if necessary, to mail my belongings and fly back to Pasadena. I had signaled to the admissions office in December that I would return to Caltech before registering for a second semester with the same uncertain status at General Studies.

I think I played most of my cards right, as I did end up striking another deal. This semester, I'm a Columbia College visiting student with university housing; if I get a 3.3 or better this term, I'll be able to continue as a regular student and both of my visiting semesters will count toward the two-year residence requirement (Under previous conditions,



Notes from here

by Mike Chwe

Creativity Appreciated

Pull up a chair, and I'll tell you a story about Caltech and creativity. My private life isn't very interesting, but this is one story that I really enjoy. (This is one hundred percent true, of course.)

One night a few years ago two ex-Techems visited our alley and spray painted graffiti all over a previously blank wall. Well, none of us minded too much. But Arlene was soon to be hosting a prefrash, so she covered over the graffiti (which really wasn't very good) with some leftover "Bravo Beige."

Later, since people were gradually flaking off the Bravo Beige with their fingernails, in their spare time, another alley inhabitant (whom I'll call Arthur the Artist) decided to replace the eyesore with a colorful mural.

He scraped as much of the old paint as he could (there were layers and layers of it) and thought about what to paint. After considering unicorns and the like, he found the right image on a Christmas card: two large pheasant-like birds flying over a snowdrift.

He drew a square grid on the card, and made an equivalent grid on the wall with string and mask-

ing tape. He carefully copied the image, square by square, from the card to the wall. After he finished drawing the outlines, he bought some brushes and paints, and carefully painted the birds and the snowbank. All this took weeks.

When he was finally done, around one in the morning, we had a little celebration, and watched him "sign" his name with script rub-on letters. We weren't satisfied, so we made her sign in her own hand with a magic marker.

"So what," you say. "This happens all the time around here. People spend long hours simply copying existing images—from M.C. Escher to Pink Floyd—expressing nothing personal, employing no creativity whatever, and achieving no more than a super-size color Xerox." But there's more to the story.

After Arthur signed his name the second time, I saw gobs of unused paint on the palette—oranges, reds, and browns. He was using a paper palette (a pad of wax paper, so you can clean up unused paint easily by simply throwing away the top sheet.) I had an idea.

I asked Arthur if he needed the leftover paint. He said I could have

it, and so I slowly pulled off the top wax paper sheet, heavy with paint.

I've never done much painting, but I can recall the excitement when I took the wax paper in both hands and boldly smeared the entire sheet of paint on a blank spot on the opposite wall. It took about twenty seconds, with my friend Fred cheering me on.

With my index finger I smeared my initials, and stepped back to look at my orange-brown-red, twenty-second, spontaneous, energy-filled smear-painting.

The next morning I woke up early to work on my physics prelab. As I was drawing the graph for problem three, Arthur came by, paintbrush in hand, and exclaimed: "Look what the vandals did to your painting!" I walked over and found that Arthur had very carefully painted over every last square inch of my six-hour-old creation.

"I'm sorry," he said, with a little giggle. "I thought that you didn't care too much about it, anyway."

It was too early in the morning to be furious. "That's okay," I said, still in a state of disbelief.

The following week I managed to keep from defacing his big brown birds, with their blank stares. The birds are still there today. You might also see nearby an irregular white blotch, the shroud of a moment's exuberance. So much for creativity.

semesters at General Studies would not count for this).

One thing that I've found out about the bureaucracy at Columbia is that, though there is an overabundance of rules and regulations, most rules are either pliable or subverted by several loopholes. My existence at Columbia has been driven throughout by unorthodox mechanisms.

Chapter four. The running joke is that, after coming to Columbia on a 1.8 GPA, I'll have a different official status each term and I'll have been every possible kind of undergraduate by the time I graduate. If I just apply to the Engineering School next term.

Quarks

from page 1
what one would assume he is observing," he said.

The search will continue, with the next substance to be analyzed being copper wires that have been bombarded by high-energy beams of heavy ions, an occurrence that some scientists theorize might liberate free quarks. Plans also include a search of meteorite samples, in the hopes that ancient material may have retained free quarks.

Funding for this study is provided by the Institute and by the National Science Foundation.

The Caltech Y Fly-by

Friday... February 1

Noon Concert, Chuck Manning Quintet, featuring "the meanest saxophonist in Pasadena" noon on the Quad.

Sign up for Philharmonic trip which will be on February 8.

Sunday... February 3

"The Shaper" the show is at 8 pm, don't forget.

"The Bermuda Triangle Mystery Solved" presented by the Southern California Skeptics, Baxter Lecture Hall, 2 pm.

Monday... February 4

Alan Wolf, author of *Star Wave* will speak. 4 pm, Winnett Lounge, refreshments will be served.

Wednesday... February 6

Noon Update, to be announced.

Friday... February 8

Noon concert, to be announced.

Philharmonic Trip. The program will include works of Shostakovich and Lalo.

Tuesday... February 12

"On The Threshold" modern Art; dancers, musicians, computer animation and laser artists. All at the Palace on one night. The Y has Tickets (\$7) and transportation.

For more information, contact the Caltech Y at 356-6163, or just drop by.

Cinemattech

Episode 3 of Flash Gordon

Katherine Hepburn-
Spencer Tracy-

Adam's Rib 7:30
Pat and Mike 10:00

Saturday Evening in Baxter Lecture Hall
Students, \$1 All Others, \$2

THE ASCIT MOVIE
TONIGHT at 7:30 and 10:00

Revenge of the Pink Panther

in Baxter Lecture Hall
\$1 ASCIT members \$1.50 all others

THE CALIFORNIA TECH

Volume 86 Number 15
Friday, FEBRUARY 1, 1985

Published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and do not necessarily reflect those of the editors.

Letters and announcements are welcome. Included with all contributions should be the author's name and phone number and the intended date of publication. The editors reserve the right to abridge letters, so please keep them concise.

Turn in copy to the Tech office mailbox, room 107 Winnett. The deadline for copy is Wednesday evening at dinner time (Tuesday evening for announcements). Late copy may not be printed unless previous arrangements have been made with the editors.

Editor in Chief Chris Meisl
Entertainment Editor . . . Matt Rowe
Sports Editor . . . Santosh Krishnan
Announcements Editor John Beahan
Photo Editor Min Su Yun
Reporters Tom McKendree
John Beahan, Ketan Shah, Hisaho S o n o d a
Photographers Ron Gidseg, Lawrence Anthony
The Inside World . . . Bob Bolender (Ricketts), Jim Bell (Blacker), Joel Seeley (Dabney), Ravi Subramanian(Lloyd), Chris Mihos (Ruddock), Warren Goda (Page), Ed Zanelli (Fleming)
Production John Beahan, Nick Smith, Lily Wu.

Business Manager . . . Karla Peterson
Circulation Gavin Claypool
Paul Gillespie

The offices of the California Tech are located in Winnett Center on the Caltech campus.
Editor: Room 107 356-6154
Business Manager: Room 107 356-6154
Production: Room 115 356-6153

The California Tech, 107-51
Caltech, Pasadena, CA 91125
Printed by News-Type Service, Glendale, California.
Subscriptions should be directed to the attention of the circulation manager.
\$6.00 per year (three terms)
\$100.00 per life ISSN 0008-1582

entertainment

Fred Alan Wolf Makes Waves

by Rob Fatland

"Life is the only crapshooter in God's cosmic dice game."

—*Star Wave, Part Two, Book Three, Chapter Three, Verse Six.* Fred Alan Wolf, the author of this miraculous tome of quantum mechanical psychology, will visit Caltech on February 4th, at Winnett Student Center. Thus I present a few thoughts on his book, the full title of which is *Psi*Psi; Star Wave; Mind, Consciousness, and Quantum Physics.*

Our hero, Fred Alan Wolf, began his trek to this bizarre book in 1970 when, besieged by trauma and depression, he took a sabbatical from his post as professor of physics at San Diego State University. After touring distant pieces of the globe for a year, he returned to California to discover in himself the desire to combine the

concepts of modern physics and psychology and spread the word of his new psychophysics to nonscientists.

This, then, is the plan of *Star Wave*: Take a big pile of ideas within modern physics (partial list: time, space, particles, wave functions, matter, observers, energy, Greta Garbo), and take another big pile of ideas within classical philosophy, psychology, and romance (partial list: time, space, consciousness, love, hate, mind, psyche, reality, being and existence, Marilyn Monroe), and tie them all together and define them in terms of one another, thereby resolving everything into a marvelous new picture of what is really going on.

For example, Wolf concludes that atoms have Freudian egos, that human self-hatred is a direct con-

sequence of the Pauli Exclusion Principle and electron loneliness, and that boson condensation is the physical manifestation of love. But it is actually sort of unfair to quote such obtuse claims out of context, because doing so tends to make Fred Alan Wolf out as a crackpot. I believe this is not the case. He is in the awkward position of a man who has come to an original realization and must justify himself or face eternity handing out leaflets on Hollywood Boulevard.

To begin with, his physics seems sound. He agrees that $E=mc^2$, for example, but then he goes on to conclude that electrons have a 'desire' to be annihilated, "(seeking) to return to the blessed, timeless, and spaceless state of pure light." As far as I know, there is no physical evidence that elec-

continued on page 6

Penn and Hutton starring in *The Falcon and the Snowman*

Movie Review

This Is Not A Spy Film

by Matt Rowe

The Falcon and the Snowman
Orion Pictures

A spy movie starring Timothy Hutton and Sean Penn? Well, it's a long story...

Perhaps you recognize the title. *The Falcon and the Snowman's* based on the book of the same name by Robert Lindsey; it was a best-seller about five years back. But not on the fiction lists. This spy story is true.

Christopher Boyce (Timothy Hutton) and Andrew Daulton Lee (Sean Penn) grew up as neighbors in Palos Verdes. Daulton was the local (later regional) drug dealer; Chris went on to seminary. He soon left, however, and this is where the movie picks up the story.

In 1974, 21-year-old Chris Boyce, with his father's influence, got a job as a clerk at TRW. (TRW is called RTX throughout the film.) He was promoted quickly—too quickly as it turns out—to a position in TRW's "Black Vault," a monitoring station for a number of spy satellites. Chris now had access to top-secret information. It was tempting...

Daulton was on the lam from authorities at the time, and agreed to act as middleman between Chris and the USSR. And that's what *The*

Falcon and the Snowman is about. (You wouldn't want me to give anything away now, would you? Of course not.)

The Falcon and the Snowman was directed by John Schlesinger, an Associate Director of the British National Theatre and the man who brought you *The Day of the Locust*, *Marathon Man*, and *An Englishman Abroad*. That is to say, this is no B-grade movie. I'm no connoisseur, but I'd call it one of the best spy movies I've seen.

It's good because it's not like other spy movies—there aren't a lot of high-speed chases, and there's only one sexy girl. Instead, Schlesinger concentrates on developing the characters of his two young spies, and tries to figure out why they did what they did. That development is believable and even involving because of the actors who play Chris and Daulton.

Christopher Boyce ("The Falcon") is played by Timothy Hutton, and as in *Ordinary People* and *Taps*, his role is frighteningly realistic. (Perhaps even more so because many Techers do go on to work for TRW.) The temptation Chris succumbs to is a real one, and Hutton's many talks with the real Chris Boyce obviously helped

continued on page 6

Serving Caltech &
JPL since 1938Pasadena's only complete source of
ART, DRAFTING, CHART-MAKING,
and LAYOUT supplies.

Now open Thursday evenings until 9.

1292 East Colorado Blvd., Pasadena CA 91106
(213) 681-0615 Caltech Student Discount (818) 793-4-ARTBuy Caltech Cards
and save 20%

CALTECH'S

Buy Caltech Cards
and save 20%

BURGER CONTINENTAL

TO ALL CALTECH STUDENTS AND FACULTY:

Have your BREAKFAST with us 6:30-11:00. Ham, bacon, or sausage, 3 eggs, country potatoes, and zucchini bread for only \$1.99 with Caltech ID, Monday thru Friday.

SPECIALTIES: SHISH-KABOB, SHAORMA, SOUVLAKI-STEAK
HOMEMADE PASTRIES: BAKLAVA, BURMA, AND NAPOLEONSgood food at reasonable prices refills on soft drinks at all times
seconds on salad barFor the Entire Month of February
A free root beer float to all Freshmen, and Sophomores

Faculty, Grad Students, Attend!

Mondays and Tuesdays are Beer Days. Half price on beer.

B. C.: On Lake Avenue
½ Block North of California

Sponsored by the Caltech Y

BLOOM COUNTY

by Berke Breathed

Panel 1: LIFE. IT'S LIKE... A BLUSTERY DAY... THROWING ITS WINDS OF TROUBLE AND TRAVAIL RIGHT INTO OUR FACES...

Panel 2: LEAVING US TO LEAN INTO OUR PAINFUL PESTINIES... FARTHER AND FARTHER...

Panel 3: ...AND EVEN FARTHER...

Panel 4: ...UNTIL AN OTHERWISE PROMISING ANALOGY IS HOPELESSLY SHOT AND WE'RE SNORTING SOD.

Panel 5: THERE'S WANDA GARTHBOT. I LOATHE HER. SHE SHEDS SPITWADS UP MY NOSTRILS DURING BAND PRACTICE.

Panel 6: TAKE NOTE, WANDA GARTHBOT. YOU'RE BOVINE AND PIG-LIKE AND YOUR NAME STARTS WITH A "G"!!

Panel 7: WELL THAT WAS AN INTRIGUINGLY AMBIGUOUS INSULT. THANK YOU. I THOUGHT I'D LET HER CHEW ON IT ANWHILE.

Panel 8: CHEW ON THAT, GARTHBOT. MY MOTHER'S NAME, BY THE WAY, BEGINS WITH...

Panel 9: SO THERE I WAS AGAIN ON THAT BLEAK, MIDNIGHT THRESHOLD OF MY HORRID ANXIETY CLOSET...

Panel 10: FOR AT 8 YEARS AND 4 MONTHS OF AGE, THE SITUATION HAD BECOME CRITICAL...

Panel 11: ...AFTER FALLING POPULARITY AT SCHOOL AND GENERALLY POOR REVIEWS AT HOME, THE SITUATION WAS FRIGHTENINGLY CLEAR.

Panel 12: ...MY RATINGS WERE IN THE PUMPS. I'M SORRY. WE'RE CANCELING YOUR CHILDHOOD.

Panel 13: HEY! BINKLEY BABE! ALL OF US UP IN THE EXECUTIVE OFFICES ARE MAD ABOUT YOU. REALLY... BUT THE NIELSENS CAME OUT TODAY. NOT GOOD, BABE.

Panel 14: YOU CAN'T RATE A LIFE LIKE A TV SHOW! ... YER DOWN 20 POINTS WITH TEACHERS. DOWN 13 WITH FRIENDS AND 9 WITH FAMILY. OUCH, BABE!

Panel 15: SORRY GUY. YER JUST NOT BRINGIN' IN THE BIG NUMBERS... "BIG-MOUTHED," "PRECOCCIOUS"... THAT'S WHAT I'VE BEEN HEARING.

Panel 16: WELL, THEY HAVEN'T CANCELED GARY COLEMAN! THAT LITTLE MIDGET'S GOT A 90-YEAR CONTRACT. I THROW UP JUST THINKIN' ABOUT IT.

Panel 17: THESE ARE THE EXCITING AND DRAMATIC SCRIPTS FOR FUTURE EPISODES OF YOUR LIFE? YES. I THINK EVERYTHING IS PLANNED OUT NICELY.

Panel 18: "BINKLEY GETS HIS MAA AND BECOMES A YUPPIE"... "BINKLEY MARRIES HIS LAWYER AND BUYS MATCHING RUNNING SHOES"... "BINKLEY DIES AT AGE 37 CHOKING ON A CROISSANT"

Panel 19: HEY! THOSE ARE VERY HOT PROPERTIES THESE DAYS!!

Panel 20: WE WON'T BE NEEDING ALISTAIR LOOKE TO INTRODUCE THESE. WILL WE?

Panel 21: HE WAS GONE... BACK UP TO THE CORPORATE OFFICES WHEN HE CAME. BUT HE, THE CHIEF PROGRAMMER, HAD REVENED ME FOR ANOTHER SEASON.

Panel 22: YES. WITH BETTER CHARACTER DEVELOPMENT AND A MORE MEANINGFUL PLOT LINE, MY LIFE WOULD BE GUARANTEED AN EXTENDED RUN.

Panel 23: BUT QUALITY HAD TO BE MAINTAINED. HE SAID, OR ELSE! OR ELSE WHAT? I ASKED... OR ELSE THE UNHOLY, THE UNSPEAKABLE WOULD BE ORDERED UPON ME...

Panel 24: ...A LAUGH TRACK! THE HORROR. THE HORROR!

Panel 25: THIS IS ADAM 13. SEND AN AMBULANCE TO MAIN AND GILBERT. WE'VE GOT SIX ASSAULT VICTIMS HERE... SOMEBODY MUSTA JUST GONE BERSERK!

Panel 26: BARELY. IT LOOKS LIKE THESE PUNKS PICKED THE WRONG GUY TO HARASS THIS TIME.

Panel 27: VIGILANTE, EH? : SNIFF! : WHAT DID HE SMELLS LIKE... : SNIFF! : A BIG SLAB OF OLIVE LOAF...

Panel 28: THE BLOOM BEACON "OLIVE LOAF VIGILANTE PUMMELS STREET MIMES" *HUNDREDS CALL POLICE *PRAISING MYSTERY MAN *UNLICENSED LUNCHEON MEAT WAS WEAPON

Panel 29: I SPOSE YOU'VE HEARD ABOUT THE VIGILANTE... WHACKIN' THOSE STREET MIMES WITH AN OLIVE LOAF LAST NIGHT...

Panel 30: SUCH A STORY IT IS! SUCH A TRAGIC AND VIOLENT STORY IT IS INDEED!

Panel 31: GOODNESS ONLY KNOWS WHAT SCURRILOUS FORCES ARE MOBILIZING AT THIS VERY MOMENT TO EXPLOIT THE WHOLE SORRY AFFAIR...

Panel 32: FALL IN!! BLATT!! BLATT!!

Panel 33: MOVE IT PEOPLE! WE'VE GOT A VIGILANTE OUT THERE BOPPING STREET PERFORMERS! I WANT RUMORS! DIRT! SCANDAL! TITILLATING PERSONAL DETAILS!

Panel 34: HELLO? EDITORIALS? I WANT INDIGNATION... SHOCK... MORAL OUTRAGE... THIS IS NO WAY A CIVILIZED SOCIETY SHOULD DEAL WITH ITS UNSAVORY ELEMENTS.

Panel 35: NEWS!! GIVE ME A 20-INCH HEADLINE: "MYSTERY MAN MUGS WITH MEAT-MILLIONS MAKE MERRY!"

Panel 36: BAD NEWSPAPERS LIVE FOR THIS KIND OF THING.

The Inside World

Fleming: This past weekend the new and misguided Social Team ushered in their term of office with a winetasting, to celebrate the election of the new new house officers.

- President: Frank Kragh
- V.P.: Janice Pata
- Secretary: Mitch Smith
- Treasurer: Gary (Gibbs)

This Saturday is the penthouse party, dammit.

Congratulations to the newest member of Fleming House, Adam Slovik. —Al Fansome

Lloyd: FINGAL'S LIST (OF THINGS TO PICK UP)

1. The Discobolous Trophy (yes, we have recovered our own!!)
 2. Jeff Freymueller
 3. Supplies
 - A. light bulbs for new computer room
 - B. bed frame no.3 for Thumper (Brett, either lower your bed, or raise the ceiling)
- Proxy ballots (it's that time, vote Monday for the party of your choice).

I've got places to see, people to go. Take an hour off today, and go play in Ricketts (the Lego comes in Tuesday in a moving van). P.S. Tiger, I'll take the movie. —J.P.

Page: Last Thursday was the infamous Mt. Wilson ordeal for the freshmen. Fortunately, we did not lose any this year on those icy slopes. Several went to a strip joint on Sunset, a few actually went to Mt. Wilson, and a couple were held at bay by a convincing mugger armed with a starting pistol.

Last night, the Page House freshmen were formally inducted into the house after surviving the Mt. Wilson trip. A dress dinner and ceremony inaugurated the new ladies and gentlemen at our house. Congratulations!

Elections are coming up. February 8th is the day.

P.S. MKB: It's a heavy burden, isn't it? —Cyndi LePage

Ricketts: Hello, and welcome to the International Shipyards of Ricketts Enterprises (ISORE). For those of you who haven't noticed this week the superstructure was completed upon the previously laid keel of the House Boat and she now proudly flies her true flag. Those desiring lessons in emergency disembarkation please contact Midshipmen Mackey and Waltman for assistance. Don't forget Sunday's

BQ on the Ath Lawn, it should be a good break from those early midterms. Also, profuse thanks to Sally Doll (a really nice secretary in Thomas) for donating Ricketts' latest toy and center of controversy—the pool table. —Bob B

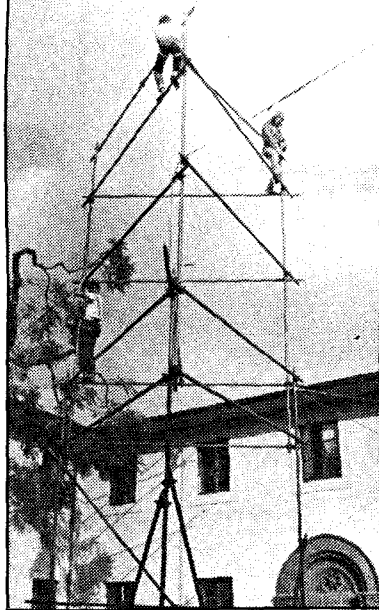


photo by Ron Gisseng

HAIRCUT \$8.50
 Call Lu for appointment
 795-1126
 240 South Lake Ave
 (mezzanine level)
 Mon. Tues. Fri. Sat.
 10:00 am to 5:00 pm

PSYCH MAJOR TRIPS OUT.

But then winning a Hawaiian vacation can do strange things to people. Even to you.

See, you can win a trip to Paradise for two, including airfare and six nights at a great hotel.

All you have to do is go to In-N-Out Burger, fill out an entry form, take our bumpersticker and put it on your car. You don't even have to buy anything.

We're giving away 30 Hawaiian trips for two beginning February 8, 1985. So get your entry in and display your In-N-Out bumpersticker today.

You could be tripping out in Hawaii before the year is up.



Call (818) BURGERS for all 35 locations.

entertainment

Pop Review

The Arrows' Aim Is True

by John Fourkas

Stand Back
The Arrows
A&M Records

I have a confession to make... One day, while two friends and I were plowing through the stacks of used records at Moby Disk, an album with a very...er...intriguing cover showed itself. You see, there was this woman with long blonde hair wearing a black leather bathing suit with a matching blindfold. This nice lady was drawing the string of an expensive-looking compound bow. It immediately became obvious to us that this was an athlete practicing for the next Olympics. Being the staunch athletic supporters that we are, each of us quickly purchased a copy of the album.

OK, so this is not exactly the truth. Actually, we bought the albums for a practical joke. You see, they only cost 25 cents apiece, and we thought that it would be very funny for one person to buy three copies of the same record. Get it?

All right, so that was not entirely true either. In truth, we wanted to run through Ricketts Lounge

yelling that the new Arrows album was out so that we could enjoy a lot of blank stares. After that, we could put the album covers on our doors and play frisbee with the records. That is *all* there was to it.

How is it that I never got around to putting the record cover on my door or playing frisbee, you ask? Um...you see...er...well...there was this...uh...problem. Just for kicks, we played the album, and I feel duty bound to report that it was rather good. Of course, it should have been immediately obvious to me that any band conscientious enough to support the Olympics would play good music. I guess I just was not thinking very clearly.

At any rate, the Arrows are a new A&M recording group featuring Dean McTaggart (vocals), Rob Gusevs (keyboards), Earl Seymour (tenor saxophone, bass clarinet), Doug Macaskill (guitars), and a host of guest musicians. Also, they happen to be Canadian (which is generally worth a few style points in my book). Their musical style tends towards pop, but it is all fairly well done. The keyboards are not present simply because having

keyboards is the thing to do; neither are they mixed overbearingly. Also, Seymour makes good use of the saxophone and clarinet—one knows that these instruments are useful to the music (unlike so many contemporary pop songs which use horns in order to sound "arty"). The lyrics are, in general, run-of-the-mill pop lyrics. Some of the exceptions, however, are fascinating. Take these lines from "I Owe You," for instance:

I owe you
I owe you
You gave me more
Than I ever gave you

How often have you heard a pop song in which the singer laments how well he is being treated?

If lyrics are not exactly the Arrows' strong point, catchy, danceable melodies often make up for this fault. The beat, while not overbearing, is the first thing which draws one to the music. "Girl in 313", for instance, is a standard love-from-a-far pop song, judging by the lyrics. But able drumming, tight bass, and skillfully interwoven synthesizers are enough to make the listener ignore the lyrics and enjoy the song. The title cut "Stand Back" has a similar effect; indeed, most people seem to quickly develop the urge to sing along.

"Enough is Never Enough" is probably the most sincere track on the album, and it works to good effect. The lyrics are a cut above those of the rest of the album:

Walking on a thin line
It's getting better all the time
If it's the right place it's the
wrong time
Living by Murphy's Law...

Admittedly, these are not Rush or Yes lyrics. On the other hand, they are not Loverboy lyrics (an obvious Canadian pop comparison). "Enough is Never Enough" is enough to convince me that the Arrows do indeed have the potential to succeed, if they can manage to put out a more mature album (although I suppose Loverboy never did).

At 25 cents per disk, *Stand Back* is an outstanding entertainment value. At list price, it is still worth thinking about—especially if you are a fan of Olympic archery...

Fantasia
Walt Disney Pictures

It was wonderful—a free screening, a press conference, posters, popcorn, stills—they thought of everything. What was all the excitement about? Disney would be rereleasing *Fantasia*.

They forgot to tell me the date. On the assumption that shows begin today, I'm taking some space in this paper to tell you why every sane human being should see this movie at least five times before he turns twenty. I thought everyone already had: everyone I ran into before the screening had seen it before.

Within hours of returning, I ran into three people who had been hearing about it for years but who had never seen it, and one person who had never even heard of it. What can the world be coming to?

Okay: everyone watched Saturday morning cartoons when you were younger, right? You saw all those ads for idiotic films like *That Darn Cat*, right? You wondered why Walt Disney couldn't be satisfied with animated characters and had to use live people, right? Well, the movie for you was *Fantasia*—you just didn't know it. Maybe your parents did (thanks, Mom)—or maybe you never even heard of it. So hear of it now.

Fantasia was first released in 1940, after a thousand people had put three years of work into it. Disney claims it would cost \$100 million to make it today. There was a war on, however, and *Fantasia* didn't turn a profit until its second or third release.

What is it? Oh yeah. You see, Disney was bored with silly and animated melodramas like *Snow White*. Old Walt (who wasn't so old at the time) wanted to go for the Big Stuff. So he started with the soundtrack. Enough of cheap Hollywood canned atmosphere music. *Fantasia's* soundtrack: *Toccata and Fugue in D Minor*, Johann Sebastian Bach; *The Nutcracker Suite*, Peter Tchaikovsky; *The Sorcerer's Apprentice*, Paul Dukas; *The Rite of Spring*, Igor Stravinsky

Symphony No. 6 (Pastoral), Ludwig van Beethoven
Dance of the Hours, Amilcare Ponchielli
Night on Bald Mountain, Modest Moussorgsky

Ave Maria, Franz Schubert. To conduct all this, Walt Disney hired Leopold Stokowski. To record it, they used the first stereo movie equipment. The soundtrack was an achievement in itself.

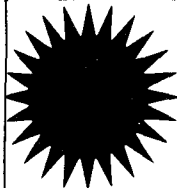
Now all Disney needed was some pictures. Some of the music was abstract; some suggested actions or feelings; some told a definite story. So, for each piece, Walt sent a group of animators to work. The spirit of competition led to some of the best animation ever produced.

The Rite of Spring tells the story of evolution, with bubbling lava and battling dinosaurs. *The Nutcracker Suite* shows the changing seasons, with dancing flowers and alluring...goldfish?! *The Pastoral Symphony* is set on Mount Olympus, where fauns, unicorns, centaurs, and pegasi romp about under the influence (literally) of Bacchus. *The Sorcerer's Apprentice* stars Mickey Mouse, who gives his finest performance as he loses control of some spells he decides to try out.

The reason Disney studios is rereleasing *Fantasia* is the death of Leopold Stokowski. You see, things recorded 45 years ago don't sound too great today. So, a year or two back, Disney hired Irwin Kostal to conduct a rerecording of the soundtrack. Everything was perfectly synchronized, and it *does* sound...fantastic. All the prints are brand new, etc., etc. What you see is just as amazing as it was in 1940.

It still probably sounds pretty boring, doesn't it? Why would a college student want to see an animated movie? I don't know—all I know is that everyone in the screening room (or theatre, rather—there must have been a thousand of us) was smiling and applauding at the end. And we were all college students.

Fantasia is released by Walt Disney Pictures, Inc., and stars Leopold Stokowski, Mickey Mouse, and a bunch of elephants. Running time 114 minutes.



DO YOU BELIEVE

...today's technology represents only a preview of the possible?

We do too! So, join us in probing the frontiers of science and technology with basic and applied research at sophisticated levels.

We are not probing just a few frontiers. Consider these: laser optics, infrared electro-optical systems and fiber optics; microelectronics, semiconductors and semicustom IC/hybrid circuits; advanced control concepts, signal and image processing, robotics, CAD/CAM; gas turbine technology, fluid dynamics, combustion, aeroacoustics; materials science; V/STOL technology, aeromechanics, applied mechanics; automotive technology; building systems technology; manufacturing technology, NDE, industrial lasers; computer science, software engineering, artificial intelligence, digital applications and operating systems.

During the remainder of this decade United Technologies plans to spend an average of \$1 billion annually on R&D. Few other U.S. corporations make such substantial investments in their future.

Think about it!

UNITED TECHNOLOGIES RESEARCH CENTER IS COMING ON CAMPUS THURSDAY AND FRIDAY, FEBRUARY 21 AND 22
Be sure to sign up at the Placement Office for an interview

If you are unable to meet with us, please send details of your education and experience to Mr. A. Marcin at United Technologies Research Center, Silver Lane, East Hartford, CT 06108.



U.S. Citizenship Required
An Equal Opportunity Employer

827 E. Colorado Bl.
Pasadena, CA 91101

(818) 793-6336

KINKO'S

From the rough draft to the final product... KINKO'S can produce high quality copies of all your dissertation work. Please call or stop by for more information. Remember, we're open evenings and weekends!

Star Wave

from page 3

trons possess such human emotions as desire. Yet Wolf asserts this idea not as a harmless metaphor for Quantum Electrodynamics, but as an honest-to-gosh real electron quality which conveniently permits previously unheard of unifications between the quantum and macroscopic worlds. It is Mr. Rogers' version of the Bohr Correspondence Principle.

This is perhaps why Caltech might take note of Fred Alan Wolf when he comes to visit. Much of what he says is interesting, in particular his discussions of quantum mechanical uncertainty implying a human mind and consciousness beyond mechanistic determinism. But much of his thesis is suspect, as well, because it does not seem to arise from standard scientific method, because it draws connections where no man has drawn before, and because sometimes it sounds just plain silly. And it's all encompassed by his pinnacle of verifiability: He is a professor of physics and he gives seminars.

Falcon

from page 3

him to prepare for the part. To say he plays it well is an understatement. Unfortunately, the script chooses to emphasize the temptations Chris felt, and to all but ignore the human aspect of the drama. What might have been some of Hutton's best scenes do not even appear in the film.

Many of the good scenes that do appear are stolen by Sean Penn. Daulton Lee ("The Snowman") is primarily a drug-dealer, not a spy, so the role is not as much of a departure from Jeff Spicoli (*Fast Times at Ridgemont High*) as one might expect. But Spicoli was basically one-dimensional; Lee is a character in doubt about his position, and scared when he can't find a way out. Like Hutton's, Penn's acting is top-notch—he may play a whiny little snit, but it's a whiny little snit with human depth.

All in all, the movie is excellently done. Schlesinger's bleak but compelling direction makes Palos Verdes seem just as foreign as Mexico City. As in many spy films, lighting and color are used to define good and evil—but good and evil are such vague concepts in *The Falcon and the Snowman* that they blur together nonetheless. Excellent performances by Penn, Hutton, and David Suchet as a KGB agent; a very direct screenplay by Steven Zaillian; a typically beautiful soundtrack by Pat Metheny and Lyle Mays—this is a film with everything going for it.

But it is not a spy film. *The Falcon and the Snowman* may tell the story of two young men who became spies, but it is chiefly a drama. Don't go to this film expecting high-speed James-Bond-style chases. Don't go to this film expecting incredible technology and stunts. Don't go to this film expecting hordes of beautiful women pawing Hutton and Penn. But do go to this film.

The Falcon and the Snowman, from Orion Pictures, is rated 'R'. Running time 144 minutes. Now playing at the UA Coronet in Westwood (213-475-9441) in THX; and, nearby, at the Pacific Theatres in Eagle Rock Plaza (254-9101).

Restaurant Review

Fuddruckers Hamburgers

by J. Peter Alfke

So we were digging through the *Times* late one night, looking for the SOLID GOLD BRICKS ONLY \$5 ORDER BEFORE MIDNIGHT TONIGHT ad, when we came across an advertisement for the Grand Opening of a new hamburger place. We decided to forget about the gold (probably a catch, anyway) and check out the burgers instead, despite misgivings over the restaurant's name. Fuddruckers. Maybe it was a spooneristic typo? Naw. But they did promise the World's Greatest Hamburgers.

Up bright and early at the crack of noon the next day, we made our rendezvous with Fuddruckers. Sides of beef greeted us as best they could, hanging on hooks behind large windows, as we waited in a

line marked by a low fence made of cases of Budweiser. As promised, the menu offered hamburgers. Not the 79 kinds offered at some wimp restaurants; just Hamburgers, in 1/2 or 1/3 pound denominations. They also had chicken and steak sandwiches, but hey—those weren't what we'd come to check out. There were lots of people; apparently we weren't the only ones who thought it sounded interesting. Despite the long line, we got served pretty quickly, thanks to Fuddruckers' assembly-line scheme of hamburger production. By the time we got our drinks, our names were already being called over the PA system. After a short stop to put slop on our burgers (chosen from lettuce'n'tomatoes'n'pickles'n'mustard sauce'n'barbecue sauce

'n'cheese sauce'n'mayonnaise'n'ketchup) we sat down at a table in a cavernous interior.

So what about the food? The aforementioned dismembered cows tipped us off to the fact that *hey, they make the meat right here*—and it shows. The meat is juicy and delicious, lightly peppery, and they give you a lot of it. Somehow, my 1/3-pound burger seemed to have as much meat as two or three McDonalds' quarter-pounders. Continuing the DIY philosophy, the buns were wonderfully homebaked. Yummy wedge-cut fries too. The Coke was Coke (what did you expect?). All for \$5.23; more than a lot of burger joints, but Fuddruckers way shreds over most cheaper places.

Ambience is of course a must: after all, what would Tommy's be without its atmosphere of barely restrained urban anarchy? At Fuddruckers, the Word is Texas (apparently the origin of this chain). The interior, as well as the ham-

burgers, is Texas-sized, and lit primarily by neon beer signs in four or five colors not found in nature. Only American beers are represented, but luckily Henry's puts in an appearance. (You can also buy beer, natch, by the bottle or bucket.) The more outdoorsy can sit in an adjoining area with lots of open glass doors and a tent roof, and those into really roughing it can actually sit outside in a patio. Definitely seems a good place for a house trip: Ruddock and Page could probably fit at the same time.

We agreed: a great place, a bit-chin' name. Two visits later, we agree even more. World's greatest? Probably not (see my upcoming review of the Bucket) but definitely a contender. Joe-Bob says check it out. (Especially you Rudds.)

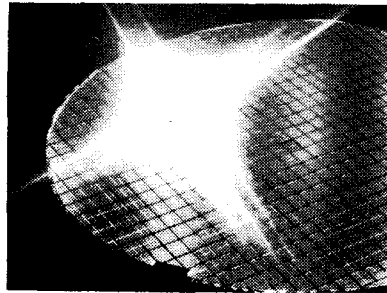
Fuddruckers is at 3883 E. Foothill, just past Music Plus/Kabuki/the Good Earth. Look on your left for a big place with yellow awnings.

From imagined future to technical fact. Motorola creates.

Creating the technology of tomorrow takes more than knowledge alone. It takes an inventive spirit. A probing mind. And the ability to transform imagination into reality.

The individuals who possess these qualities aren't satisfied with an ordinary career. They're seeking immediate challenge and the professional rewards only an innovative company can offer. A company like Motorola's Semiconductor Products Sector (SPS) — the international leader in the research, development and manufacture of microelectronic components and systems.

Located in both Phoenix, Arizona and Austin, Texas, SPS operates the largest, most sophisticated semiconductor facilities in the world. Where we produce over 75,000 different semiconductor devices, considered to be the finest quality products of their kind. Our reputation for excellence extends into discrete and bipolar circuit technology, MOS and related logic families, memory products, VLSI and high performance microprocessors and systems.



In addition to technical leadership, we offer beginning engineers an important choice: direct job placement or our Rotational Program which exposes you to several functions within SPS. Currently, engineering and other professional opportunities exist for the following individuals:

- Electrical Engineers
- Mechanical Engineers
- Physicists
- Computer Scientists
- Software Development Engineers
- Chemical Engineers
- Chemists
- Materials Scientists
- Finance, Marketing and Materials Specialists

For more information, write to **Manager, College Recruiting** at the appropriate address below or call COLLECT or TOLL FREE. You'll discover that the career you've imagined is the one that exists at SPS.

Arizona Opportunities

1140 S. Priest Dr., Dept. CU22
Tempe, Arizona 85281
(602) 994-6219, COLLECT

Texas Opportunities

1112 W. Ben White Blvd., Ste. 200
Austin, Texas 78704, Dept. S85
(800) 531-5183, TOLL FREE
(512) 928-6179



MOTOROLA INC.

Semiconductor Products Sector

An Equal Opportunity/
Affirmative Action Employer

What could be...is.

sports

Weekly Sports Calendar

Day	Date	Time	Sport	Opponent	Location
Fri.	2-1	4:00 pm	Swimming	Colorado College	Caltech (M/W)
Sat.	2-2	All Day	Wrestling	Pomona-Pitzer Invitational	Pomona-Pitzer
Sat.	2-2	11:00 am	Men's Tennis	Claremont-Mudd	Claremont-Mudd
Sat.	2-2	12 noon	Baseball	(scrimmage) Pacific Coast Baptist Bible	PCBBC (2)
Sat.	2-2	1:00 pm	Fencing	U.C. San Diego	Caltech
Sat.	2-2	1:00 pm	Women's Tennis	Claremont-Mudd-Scripps	Claremont
Sat.	2-2	2:00 pm	Basketball (JV)	Whittier	Whittier
Sat.	2-2	4:00 pm	Basketball (Varsity)	Whittier	Whittier
Tue.	2-5	3:00 pm	Men's Tennis	L.A. Harbor College	Caltech
Tue.	2-5	3:00 pm	Baseball	Pacific Christian College	Caltech
Tue.	2-5	8:00 pm	Hockey Club	Pierce 2	Conejo Ice Rink
Wed.	2-6	3:00 pm	Women's Tennis	Pomona-Pitzer	Caltech
Wed.	2-6	4:30 pm	Wrestling	Pomona-Pitzer	Caltech
Wed.	2-6	6:00 pm	Basketball (JV)	Occidental	Occidental
Wed.	2-6	8:00 pm	Basketball (Varsity)	Occidental	Occidental

CIT B-ball Wins, Loses

by The Ghost of Stu Peebles
After opening up their league season with four lopsided losses, the Caltech varsity basketball team came home Wednesday night to play La Verne, a team Caltech had not beaten in the lifetime of any of the players on either team. Coaches Mike Poizner and Paul Drozd had prepared the team especially well for the game, and each of the players had the confidence that this game was their opportunity to halt a losing streak in league play that spanned 11 years.

designed for Kyriakakis, who was double-teamed. Zanelli, however, saw an opening and netted a jumper with 10 seconds to go. La Verne's desperation shot at the buzzer missed, and the champagne was poured.

Kyriakakis led Caltech with 19 points, and Porter added 10. Rounding out the scoring was Zanelli (8), Sophomore center Brett Bush (6), Sophomore forward Bill Gustafson (3), and Junior forward Jim Helgren (2).

Coach Mike Poizner, in his first interview as Caltech coach and still under the influence of his pregame 1/2-beer, said "this was great, I've had 52 straight losses, many by 40-50 points. The spirit of the team has always been there, and we knew we could do it, but tonight we finally produced to our capability."

"The students here are great. We feel that whenever we have a home game we have a good chance to win. They keep the morale of the team high."

This Week

The Caltech basketball team ran its win streak to 3 in a row with a 20 point victory over Pacific Coast.

Jim Helgren led the squad with 29 points, his career high. Caltech was ahead by 19 at halftime despite playing poorly, and played an even worse second half, except for "showtime" by Helgren. Pacific Coast, which featured more than its share of Oompa Loompas, was never in the game.

On Wednesday, Caltech faced Pomona-Pitzer at home. Caltech played well despite losing by 23. A and Brett, friends again, had 13 and 11 points respectively, and the Greek had 9. Saturday, Caltech travels to Whittier. Tipoff is at 4 p.m. for those interested.

JV B-ball In Losing Streak

by Sam Duncan

Even though the JV basketball team hasn't yet been able to break the losing streak that has plagued it since the start of the season. Wednesday's game against Pomona might have been the first break in the clouds that will lead to clearer skies. It was the first game that did not follow the normal pattern.

The usual pattern starts the moment the game begins. Either the JV are not prepared mentally or they have difficulty adjusting to each opposing team's different style, so that in the first ten minutes our team falls apart and plays completely without organization or control. The team gives up the ball dozens of times without even taking a shot, so the opposition racks up the points with easy lay-ins and short jump shots. By the end of the half, the JV usually trail by 20-30 points. The team gets it together a little more in the second half, but still manages to give up 10-20 points to offensive rebounding.

Wednesday before last's game against La Verne was no exception, and followed the pattern exactly, with the addition of a tight press by La Verne which caused numerous turnovers before Caltech could even get the ball to half court. La Verne scored fast break after fast break over a disorganized Caltech defense, for a final score with, again, a forty point margin.

The game against Pomona, on Wednesday, finally broke the pattern. The JV started the game in control (for the first time), and for the first eight to ten minutes matched Pomona point for point. Caltech's defense played tight and fast and forced Pomona to make

turnovers and to take wild shots, while our offense moved and passed the ball very well. For the first ten minutes, things were going very well, but after that our defense broke down a little, and let unmatched points go by, to leave Caltech trailing by only 10 at the half.

In the second half, the JV, instead of making a big push to close the gap, fell back into the old pattern, for a final score of 67 to 28. In the first half, the JV played a good game. Chris Cotterel and Went Chung moved the ball down easily, and skillfully passed in to Dave Werntz and Chuck

Neugebauer. Adam Slovik and Jed Lengyer tried hard for the rebounds. Francis Ho sank one of his inevitably perfect jumpshots over a tall defender, and Kevin Lee showed good hustle.

Even with all of their inexperience, the JV has potential. They need to start working together more as a team, to learn a few more plays, and to work on their rebounding, both offensive and defensive. With work, the first part of Wednesday's game can be extended to cover the whole, and the losses can be cut tremendously, and with a little luck, the JV just might win a few.

MONKS PIZZA
FREE DELIVERY

304-9234



NY STYLE

HOURS

Sun-Thr 11:00-1:00 AM
Fri-Sat 11:00-2:00 AM

\$2 OFF
ANY
MONKS
SPECIAL



304-9234

(Limited Delivery Area)
(1 COUPON PER PIZZA)
Expires Feb 28, 1985

LUNCH
SPECIAL
2 FREE
PEPSIS
WITH ANY
MONKS
PIZZA

ORDERED BETWEEN
11 AM & 4 PM
(Limited Delivery Area)
(1 COUPON PER PIZZA)
Expires Feb 28, 1985

\$1 OFF
ANY
MONKS
PIZZA



304-9234

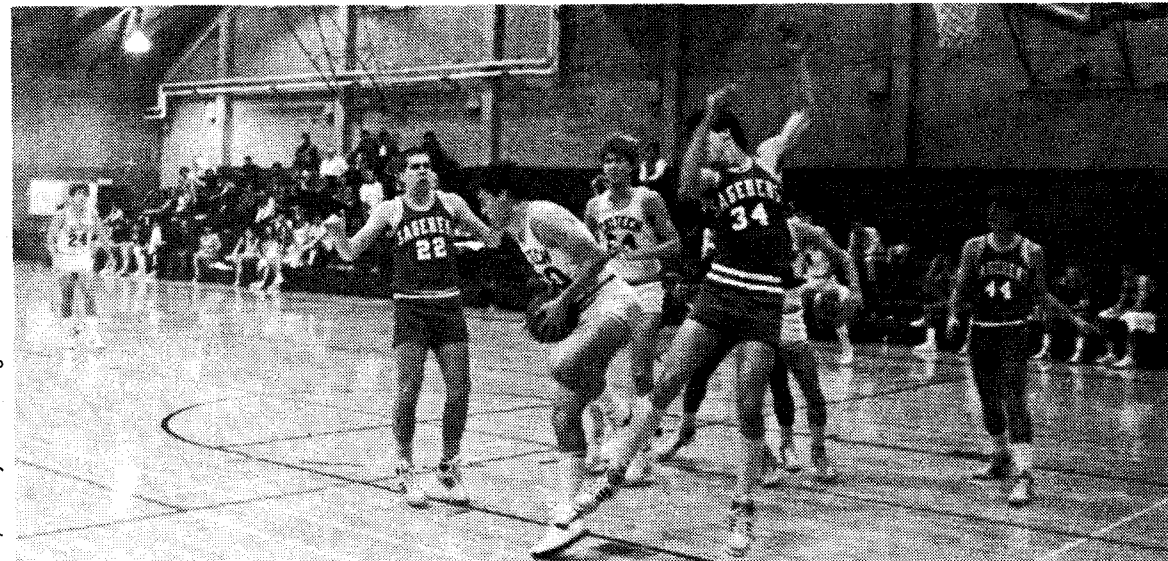
(Limited Delivery Area)
(1 COUPON PER PIZZA)
Expires Feb 28, 1985

\$2 OFF
ANY LG.
2 ITEM
PIZZA



304-9234

(Limited Delivery Area)
(1 COUPON PER PIZZA)
Expires Feb 28, 1985



—photo by Ron Gidseg

Varsity battles Pomona for ball, but loses game anyway

announcements

Material for the announcement section of the California Tech must be submitted typed on or with the Announcement Form available at the Tech office by the Tuesday before the Friday of publication.

Math Problem Group

The Math Problem Solving Group is meeting weekly in 469 Lauritsen, at 4 pm on Fridays. All are welcome; bring any interesting problems that you have. This week, we will also be considering some advances on the string problem, and integer solutions to $m^3 = \text{the sum of } n \text{ consecutive squares}$.

Present Student I.D. For SPECIAL DISCOUNTS!

Join the Elite™
ELITE™



Arrive in Style
AERO™



Go on a Spree™
SPREE™



BILL ROBERTSON & SONS, INC.
HONDA OF HOLLYWOOD
6525 SANTA MONICA BLVD.
PHONE (213) 466-7191

TYPING/WORD PROCESSING
Special Rates: Students & Faculty
We cover all needs and will meet your deadlines.
818-790-4150--Karen/Dorothy

CLASSIFIED

GENERAL—

IS IT TRUE? you can buy jeeps for \$44 through the U.S. government? Get the facts today! Call 1-312-742-1142 Ext. 9718-A.

INSURANCE WAR! Will beat any price, or don't want your business! Sports cars, multi-tickets, good driver disc. Request "Caltech Plan." Call (818) 880-4407/4361

TYPING—

WORD PROCESSING by Professional Typist. IBM/PC. Reports, Term Papers, etc. (818) 445-4506.

If you would like to place an ad in the classified section of the California Tech please send your ad along with your name, address, and telephone number to: The Tech, 107-51 Caltech, Pasadena CA 91125. Ads must be received by Tuesday before desired publication. Ads cost \$.40/line with a \$2.00 min. and prepayment is required.

What's Shakin'?

Lee F. Browne and the Secondary School Relations Department presents the 4th lecture in its Lecture Series on Wednesday, February 6th at 3:30 pm in Baxter Lecture Hall. Dr. Kerry Sieh, Associate Professor of Geology, will speak on "Earthquakes and Volcanic Hazards". The lecture (which should be quite a "mover and shaker") is FREE, and is open to ALL interested persons in the Caltech/Pasadena Community. Come one, come all!

85-86 Financial Aid

The deadline for applying for financial aid for the 1985-86 academic year is rapidly approaching. Students interested in applying for financial aid should mail their "Student Aid Application for California" to the College Scholarship Service no later than February 11, 1985. Students who fail to meet this deadline will jeopardize their chance of receiving financial aid next year.

The deadline for students to submit a "Foreign Students' Financial Aid Application & Declaration" is April 15, 1985, and those forms should be turned in to the Financial Aid Office.

All applications are available from the Financial Aid Office, room 10, Parsons-Gates.

Square Dance

The Caltech Christian Fellowship and the Caltech Y are joint-sponsoring a square dance this Saturday, Feb. 2, at Dabney Hall Lounge from 8:00 to 10:30 pm. Whether you are a beginner or an expert, come join the fun!

Attention Seniors

If you are one of the cool dudes and have turned in your senior picture, good for you! If you are one of those who hasn't even had his picture taken, better get your act together. Seniors who don't have an extension from the editors might bum later on. Send your pictures with your name, major, and hometown to "Big T", 107-51.

S A M
Slacks
Suits
Skirts
Shirts

ALTERATIONS
RETYLING
TAILORING
INVISIBLE REWEAVING
TEL. (818) 449-8634
DAYS & EVENINGS
159 S. Allen Apt. 106 Pasadena

T-Shirts for Sale

The Caltech Chinese Student Association is having its yearly T-shirt sale. The T-shirts are made of 100% cotton. The shirt is white with a black design of "Caltech" on the front and "Caltech" in Chinese on the back. \$7.00 each. Good material and good deal! Call Rosie Wu (578-9923, Ruddock 218) or Christine Yu (795-3503, 1170 E. Del Mar #1).

Social Notes

The Executive Social Committee is proud to announce the biggest fiesta of the term, a blowout-scale mixer cosponsored by ASCIT and the Associated Students of Occidental College. Please join your loyal Director in getting psyched up to welcome a thousand guests from Oxy next Saturday night, Feb. 9. Several bands will entertain, for dancing on the quad and for socializing in Page courtyard, where several rounds of your favorite imbibables will be on ASCIT and ASOC. A bit of work needs to be done now and we'll need help at the party; contact your local social team for details.

Last year's Ath Formal photos are just waiting to be picked up! Stop by 230 S. Chester or call x6274. All the orders are in, and there will be no charge. The proofs and negatives will be given away, too.

Finally, my two-year stint as Director of Social Activities will end soon. If you're thinking of taking over what is clearly the most important office on campus, feel free to give me a call at x6274 to find out all the details.

Human Flight

A lecture, "Flight by Muscle and Brain," will be presented by human-powered flight pioneer Dr. Paul MacCready. The lecture will be Tuesday, Feb. 19 at 7:00 pm in Kinsey Auditorium, the California Museum of Science and Industry, 700 State Drive, Los Angeles.

This lecture is sponsored by the Organization for the Advancement of Space Industrialization and Settlement (OASIS), the Greater Los Angeles Chapter of the L-5 Society.

TINA & MICHAEL HAIR DESIGN

For Men and Women

Haircuts, Perms, Color
Manicures, Pedicures

20% Off to Caltech community

By Appointment Only
Tuesday through Saturday
991 E. Green St., Pasadena CA
Parking on 108 S. Catalina
793-2243 or 449-4436

THE HAIR CUTTERS

HIS AND HERS
OPEN EVENINGS

449-6967 449-1022

\$3.00 Discount for Caltech students with this Ad

1009 E COLORADO PASADENA
NEXT TO THE ACADEMY THEATRE
PARKING IN REAR



Bermuda Triangle?

Is there really a strange area in the Atlantic ocean in which ships and planes seem to continually vanish under "mysterious" circumstances, in good weather, without warning, and without a trace? The mystery of the Bermuda Triangle has been told and retold in best-selling books, in magazine articles, and on television and radio talk shows. Despite all the publicity, the public is largely ignorant of the rational solution to the Bermuda Triangle "mystery." On Sunday, February 3rd at 2:00 pm in Baxter Lecture Hall, lecturer Lawrence Kusche, author of the book, *The Bermuda Triangle Mystery—Solved*, will explain what is a most interesting solution to the mystery. Mr. Kusche's book has been acclaimed by Lloyd's of London, the U.S. Coast Guard, and many scientists, as the most authoritative and comprehensive work on the subject. Kusche's most recent book, *The Disappearance of Flight 19*, is a similarly thorough investigation of the most famous loss in the Triangle, the five Navy Avenger torpedo bombers and a search plane, which all took off on December 5, 1945, and never returned. Kusche was also the advisor and major participant in a BBC Nova documentary on the Bermuda Triangle.

The lecture is free and open to the public. The lecture is sponsored by the Southern California Skeptics and the Caltech Y. For information call (213) 540-0915.

PA 15 Meeting

There will be a meeting of the PA 15 class, which is the student newspaper, at 12:15 pm Friday, in 127 Baxter.

Bridge Club

The Bridge Club meets Mondays at 7:00 pm in the Red Door Cafe. All welcome (undergrads, grads, faculty and staff). A tournament is being planned. For more information call Jeffrey at x4744.

Gay Men and Lesbians

The Caltech Lesbian and Gay Society is changing. If you have ever:

*Felt like CLAGS wasn't meeting your needs.

*Wanted to get involved but didn't know how.

*Wanted to do something BESIDES dances.

*Wanted to help other people.

*Wanted help yourself.

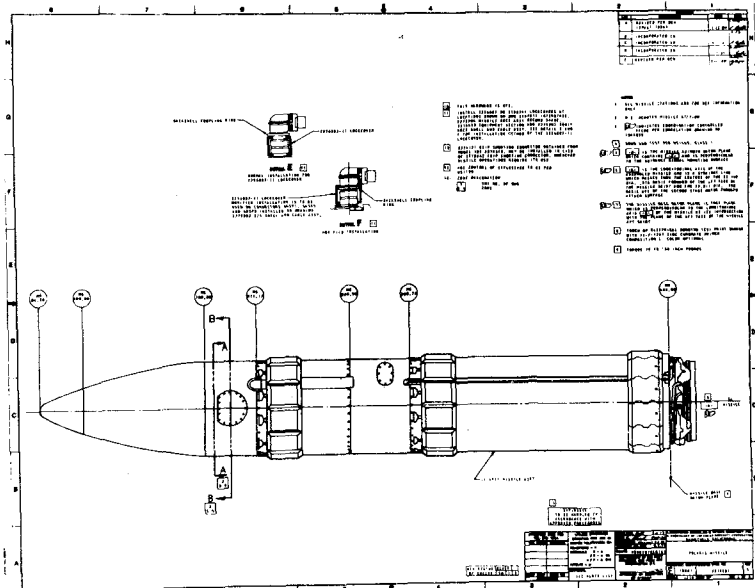
Then the meeting this Sunday will be the most important meeting you've ever missed. 210 Baxter at 2:00 pm. Be there! For more information, contact: Ralph Wolf 1-58 578-9617. All members of the Caltech/JPL community are welcome.

Art Center Exchange

Although few Caltech students are aware of it, the Institute has an exchange program with the Arts Center College of Design which allows Caltech students to attend classes at the Arts Center free of tuition.

There are classes available in Photography, Drawing, Painting, etc. The classes are not intended only for those who have great talent, and interested novices are encouraged to try the classes. However, the classes are serious, intended for those students majoring in liberal arts, and one should expect to do plenty of work for them.

Anyone interested should contact the Dean's office for more information.



Who lost this?

Caltech 107-51

PASADENA, CALIFORNIA 91125

The California Tech is published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc., Winnett Center, Caltech (107-51), Pasadena, California 91125.