

BSD Unix Worm Infests ARPAnet VAXen, Suns

by Don Speck

On November 2 a rapidly self-replicating program attempted to worm its way into every Unix VAX and Sun-3 on the Internet, causing widespread alarm and media attention. Caltech was first hit sometime around 8PM, only one-half hour after U.C. Berkeley. Approximately ten major Caltech machines, including csvox, were infested. Although the worm was seen on the evening of the 2nd, it wasn't until 9AM on the morning of the 3rd that Caltech system managers became suspicious of this rogue process. John Uhley, a system manager for the Bower Lab and the Computational Neural Science Division identified the worm early Thursday morning. He immediately killed the worm and contacted other Caltech computer managers to discover the extent of the infestation. By 10AM Uhley and Joe Beckenbach, a system manager for the CS department, had discovered the nature of the worm. Uhley called the UC Berkeley Experimental Computing Facility, also known as the Center for Computer Disease Control, and got the "inside scoop." They quickly applied the first of several worm "condoms" to prevent the worm from reinfesting Caltech machines and went to work disinfecting the machines which had been infested.

The worm caused CSnet, Milnet, ARPAnet, and many large facilities such as JPL and Los Alamos Nuclear Labs to disconnect themselves from the network. Some sites remained offline for several days.

The worm showcased a variety of security holes, any one of which was sufficient to allow it to replicate. The two primary mechanisms:

—The mail delivery program (sendmail) allows mail to be addressed to arbitrary programs for final delivery, permitting great flexibility (such as automatic generation of "I am on vacation" replies). Normally, this is disallowed for remote mail, but a debugging mode which bypasses this check had been left in the program. This let the worm run any program it wished to under the guise of the non-privileged account "daemon."

—The worm gave the user-information service (fingerd) a request longer than it expected. The fingerd program did not check array bounds, so the overlength request overwrote the subroutine return address with a pointer to some VAX machine code.

The worm was injected into the Internet on the fifth anniversary of

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photo by Pat Huber

Was ASCIT Ever Dead?

by Paul J. Ste. Marie

The Franchise Tax Board may have acted improperly in suspending ASCIT's incorporation. An appeal for help to State Assemblyman Pat Nolan, (R-Glendale), resulted in a phone call to the Franchise Tax Board that actually produced some results. Some searching in the Tax Board's offices resulted in the discovery of an envelope marked "1987 Tax Return." The envelope was ignored when it was received because it apparently was for next year. When they opened it after Nolan's office called, they found out that it contained a check from ASCIT to the state Franchise Tax Board for the amount in penalties that was then due to the IRS for the missing 1986 tax return.

What this means for ASCIT is unclear. Although the Franchise Tax Board is the agency that oversees the status of corporations in California, the money was due to the Internal [Infernal?] Revenue Service. It is unknown whether the IRS will consider the penalty to have been paid at the time that the money was sent to the Franchise Tax Board. The Franchise Tax Board has, however, taken steps to nullify ASCIT's suspension.

College AIDS Rate Surprises CDC

by Ellen Hale

GANNETT NEWS SERVICE

ATLANTA—Nearly 1 of every 300 college students is infected with the AIDS virus, according to preliminary results from surveys of universities across the country.

"Frankly, I was disappointed" the rates were that high, said Dr. Gary Noble, an AIDS official at the federal Centers for Disease Control.

"What this means is that if you have a college of any size, you can bet you have a case of AIDS or HIV infection on campus," Noble said here at a meeting of college newspaper editors. "Prostitutes have only tenfold more (cases) than college students."

The study was launched earlier this year by the American Col-

lege Health Association and the CDC. They planned to test anonymously 1,000 blood samples from each of 20 universities in all areas of the country.

So far, about half of the 20,000 samples have been tested. The early findings reported by Noble represent testing on at least 5,000. The infection rate was 3 in 1,000, but Noble cautioned that those findings still were preliminary.

Although the study is not scientific, it "is going to give us a representative idea of what's going on on campus," said Wally Brewer, a researcher with the college health association.

For comparison, other U.S. testing programs have found these approximate rates:

- Prisoners: 4 in 1,000.
- Prostitutes: 35 in 1,000.
- Members of the armed forces: just over 1 in 1,000.
- Job Corps entrants: 4 in 1,000.

The college testing was done on blood samples from student health centers. The samples were taken from discarded blood drawn from students using the health center for reasons ranging from illness to routine physical examinations. All identification except age, race and sex was stripped from the samples before they were sent to be tested for the human immunodeficiency virus, which causes AIDS.

Brewer thinks the study is as scientific as possible. Volunteer

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Pennsylvania Murder Triggers Social Change

by John Hanchette

GANNETT NEWS SERVICE

BETHLEHEM, Pa.—When Joseph Henry, just before dawn here on April 5, 1986, slipped silently into the Lehigh University dormitory room of freshman Jeanne Ann Clery, he may have changed forever the way college campuses are viewed.

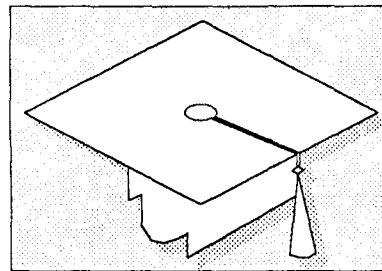
Henry, now 22, had a part-time job with the college's housing operation, a history of violence and a smoldering anger over losing a close student election the night before. Henry raped, sodomized, beat, bit, slashed and strangled Clery, 19, a promising scholar and ranked tennis amateur, until she was dead.

He later told a cellmate he had to kill her because he realized while he was robbing Clery's room that he was the only black Lehigh student with a flattop haircut and was thus easily identifiable.

Henry—with a shaved head—now lives on Pennsylvania's death row, awaiting execution for the murder, but his actions in those wee hours unleashed a relentless crusade by Clery's parents.

The implacable couple, Howard and Constance Clery, already have changed the way crime statistics are kept in Pennsylvania, and they promise to trigger nationwide reform in the field of campus safety.

The Clerys pressed a \$25 million lawsuit on Lehigh, which they recently settled, but this summer they warned sympathetic campus police chiefs meeting in Texas to go home and tell their college administrations: "We, as parents across the country, are going to just keep on suing you and suing you



Crime on campus

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until we force you into improving your campus security. If you don't, it's going to cost you much more than you'd normally spend."

The Clerys aren't kidding. They settled their suit against Lehigh for slightly more than \$2 million, but they are more excited about a more important clause in the settlement. That one holds the college, under formal contract, to spending almost a million dollars next year in improving its campus security with sophisticated lighting, more guards, restricted access, alarm systems and high-tech electronic door monitors.

The highly publicized Clery litigation was just one of a steady judicial drumbeat of lawsuits against schools by campus victims and their parents, a rumbling legal thunder on the horizon of college administrators trying to cope with a burgeoning social problem surprising to many segments of the U.S. public: the proliferation of campus crime.

There are hundreds of such suits, and experts say college administrators should be frightened down to their pinstripes.

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Red Door Café Manager Fired

by Brian Lemoff

John Avery, manager of the Red Door Cafe since June of this year, was replaced last week by the GSC. Avery is extremely upset by the decision and does not believe that the GSC followed due process. He does not, however, blame the new RDC manager, Sharon Goldstein, whom he has promised to assist in every way until she is well established in her new role.

Avery does not question the GSC's authority to appoint whomever they please as manager. Says Avery, "I believe that they [the GSC] have the right to appoint a Pekinese if they want to." What Avery does object to, is that the GSC did not inform him that his job was in jeopardy prior to making the decision to replace him. Avery feels that, had he been given the chance to defend himself before the GSC, they might have made a more informed decision.

Craig Steele, Vice-Chairman of the GSC and head of the committee which oversees the Red Door Cafe, defended the GSC position. Steele understands that Avery has a right to be upset, but he insists that the GSC acted properly. Avery, who is a fifth year senior, had planned to graduate at the end of

"I believe that they have the right to appoint a Pekinese if they want to."

first term. According to Steele, the number one reason why Avery was not considered for the job was that the GSC believed he would not be around after December. Steele did not find out that Avery would still be a student next term until after

the decision to hire Goldstein had already been made. Steele also complained that Avery did not keep in close contact with the GSC. Says Steele,

"The only time I spoke to John since soon after he took over as manager was when I met him on the street, and that was only for five minutes." Part of the problem, according to Steele, was that Avery moved several times, and Steele never had Avery's current phone number.

Avery was himself bothered by the lack of communication, but does not see Steele's lack of telephone numbers as a valid excuse. "Basically, they didn't follow due process... The Red Door has a mail box. Hell, they could've let me know about any of those meetings."

Steele was quick to point out that Avery was never actually

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opinion

letters

Board Secrecy Merits Revision

Secrecy allows the Board of Control to investigate and maintain the integrity of the Honor System without disrupting the community of trust upon which the Honor System depends. Unfortunately secrecy also places the Board apart from the community it serves, inhibiting community understanding of the Honor System and of the Board's methods and creating the potential for Board misconduct without fear of public review.

Given this paradoxical role of secrecy, how best can we achieve the openness which promotes understanding and reinforces trust in the Board's role in protecting the community, while preserving the stability against suspicion and distrust which confidentiality provides to both guilty and innocent.

BOC bylaw revisions passed in October sought to establish, if not openness, then at least explicitness in defining Board procedures and the rights of the defendant during an investigation. None of these reforms, however, fostered understanding by loosening secrecy and making the BOC substantially more visible to the community.

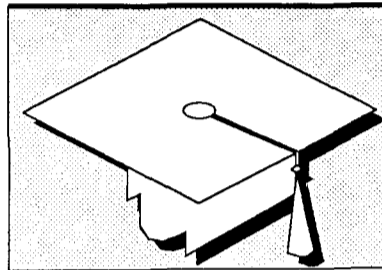
In the past, BOC reps and community members have suggested publishing abstracts of actual Board cases, including investigations, deliberations, and decisions, either in real time, or with some lag to allow involved parties to clear the Institute. Such proposals have met with criticism because they clearly threaten to undermine trust in the parties involved, who often may be identified, even though referred to only in abstract.

Perhaps the simplest reform overcoming these difficulties requires no bylaw changes but only the agreement of the Board. I suggest the inception of an annual or quarterly Board of Control review article, written by the chairman, approved by the Board, and published in the Tech. Without revealing details, such an article would make explicit the numbers and types of cases, decisions, with vote tallies, and modes of nullification and protection employed in cases the Board had seen during the previous term. Curiosity about general Board practices and typical caseloads thus might be satisfied; in addition, over time these articles would allow members of the community to

crudely evaluate the efficacy of the Honor System/BOC dynamic.

While Board members are bound to secrecy in all cases, defendants informally may publicize selected aspects of their cases without rebuttal or clarification from Board members. This not only stresses Board members, as I discovered during two years on the BOC, but it also can foster incomplete or incorrect interpretations of Board actions, often further isolating the Board from a mistrustful community.

A more balanced alternative, one requiring a bylaw change, would give defendants the right to publish in the Tech the Board minutes (verbatim or in abstract, but all of them, from preliminary investigation to final Board recommendation) for their case. With the complete minutes published, Board members might be released from secrecy, eroding isolation and enhancing communication between the Board and the community. This would augment the right of informal publicity but would assure that the community's impressions of the case and of the Board's **continued on page 6**



Crime on campus

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Lehigh's defense lawyer Gregory Harvey, a top Philadelphia lawyer, said, "In these cases, if they occur in college housing, it is my belief the defendant has virtually no chance of avoiding a verdict once it reaches a jury."

Although the wave of litigation may be forcing changes in campus security policy, some crime specialists are not sanguine about the sincerity of college administrators when it comes to taking student safety seriously.

"Are college administrators keeping their trustees from the truth?" said Frank Carrington, director of the Crime Victims Litigation Project. "Absolutely. I don't think that there's any more in-group, tightly knit, turf-guarding

bunch of bureaucrats in the world than your college and university administrators. . . . With few exceptions, the colleges are in a total cover-up mode."

No one really knows how much campus crime is committed. The FBI publishes an annual "Uniform Crime Report" that is notoriously deficient; 1987's covered 359 colleges, about 12 percent of the national total. Big education states have only a handful of schools reporting; for instance, 41 of 141 in Texas, 23 of 119 in Pennsylvania.

When Howard Clery's lawyers examined FBI statistics in Pennsylvania for the years 1985-87, they found only one campus killing—Jeanne Clery's—listed. Further research revealed there were actually seven student murders in the state during that period.

The zeal and lobbying efficiency of the Clerys resulted last summer in a new Pennsylvania law called the College and University Information Act, which requires that colleges each year publish and distribute to students and school employees the campus crime rates for the previous three years. Potential freshmen, upon request, also can receive the information. The

bill passed the Pennsylvania Legislature without one negative vote.

In nationwide interviews with 2,500 students on 50 campuses, a USA TODAY/Gannett News Service task force found that 69 percent of those questioned thought similar legislation should be enacted to force their schools to publish crime statistics.

Most campus police officials see the Clery law as potentially helpful in wheedling more funds and manpower out of recalcitrant administrators.

Are the parental lawsuits the Clerys warned about having any effect? Yes, says at least one expert.

"They really are," said Michael Clay Smith, criminal justice professor at the University of Southern Mississippi and author of "Coping With Crime on Campus." "Administrators think the adverse publicity from them is probably worse than paying the bill on a lawsuit.

"I don't think college administrators are guilty of malice or culpable negligence when it comes to the increase in campus crime. This thing exploded on them a few years back *ex nihilo*, out of nothing. Only now are the administrators beginning to realize how serious and pervasive it really is. Only now are they beginning to pull together from all campus sources the necessary data they need to correct it."

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To the Editors:

Like many techers, I enjoy reading the Inside World—especially in an uncensored, unadulterated form. Unfortunately, it seems that no matter who the editors are, the Inside World somehow gets screwed up.

The previous editors rampantly censored the Inside World last year, and often ended up not printing the columns because they didn't want to spend the time editing them. This was obviously the result of a lame editorial policy and/or staff.

Initially, the current editors stated that they would not censor the Inside World but would give it minimal priority in the paper overall. This, in my opinion and in the opinions of many other techers, is wrong because most don't give a hoot about the "news" and other articles in the Tech; the Inside World is the main focus. Maybe editors of the Tech will never realize that the only parts of the paper anyone actually cares about are Bloom County, the Inside World, and maybe the pizza coupons.

The editors' gratuitous comments that appeared in last week's paper were uncalled-for and, in that case, stupid, not funny. Editorial comments should clarify or correct material in an article; the inane inserts of Mr. Ste. Marie were entirely unnecessary and served only to destroy the continuity of an otherwise entertaining article.

The editorial policies outlined in the October 21 issue of the Tech referred to the Inside World as "shit" and said that the submissions "offer nothing to the general reader." First of all, who do you think is reading this paper? What do you mean by "the general reader"? Are you directing this paper at a Los Angeles Times or USA Today audience? If so, I think you overestimate your readership by a large margin.

The Inside World is nothing but a few entertaining anecdotes and random comments about what went on in a given house that week—it isn't intended for the "general reader"; most "general readers" would be insulted or bored by house news. It is intended for the students in each of the Houses; they make up the majority of the Tech readership and also pay for its production through ASCIT. The writers of the various Inside Worlds write for

members of their own houses, not for anyone else. Mr. Ste. Marie's various insertions did nothing to clarify the Inside World and destroyed its readability. You have done nothing but make what you termed "shit" into actual shit. You call this "editing"?

The latest announcement that the writers of the Inside World should cut the size of their submissions by 50% is hypocritical. If you wish to shorten the Inside World, then stop filling it with asinine editorial comments. I think that the editors have a lot to learn about the wants and needs of the students and what we expect of the Tech.

Signed,

—Robert S. Williamson
Chris Habecker
(50 attached signatures)

To the Editors:

These are my comments on Robert Williamson's letter in which he complains about the Inside World policy:

THE CALIFORNIA TECH

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Letters

I like reading the Inside World, too. I also used to enjoy writing it. I found that it was possible to write a column that was informative, somewhat amusing to the other members of my house, and publishable in a largely unedited form. Usually when my stuff did not appear in Friday's paper, it was because I tried to turn it in on Thursday. Rather than reducing the amount of text by 50 per cent. I suggest the Inside World writers who have been experiencing problems with the editors sharply curtail their use of profanity and blatant sexual references. Try being funny without using the word "fuck." Try being creative. It's difficult, but it can be done.

What is the purpose of an editor? It seems to me that he is supposed to decide what is worth publishing and what's not. He gets to cut out the parts of your work that he doesn't like, and if the whole thing is really bad, then you probably won't see it in the paper. There are no absolute standards for what is good and what is bad writing. We are allowed to elect the Tech editors in the hope that the majority of the people can choose someone who can make rational decisions about what to put in the paper. It appears that some Tech readers have an insatiable appetite for bathroom humor and sexual innuendoes. But most of us can only take so much. Let the editors edit. However, I would like to reemphasize Mr. Williamson's point that the editors are not, in general, supposed to insert stupid comments in the middle of somebody's column.

The Inside World is not sacred. Just because you write it doesn't mean it has to get printed. The other articles that appear in the Tech have to fulfill various criteria of quality. Why shouldn't the Inside World?

—Dean Wilber

[There seems to be a perception that the *Inside World* was reduced in size this week as a punishment of sorts for previous unacceptable output. This was not the case. Due to reduced sales of advertising, the primary source of our revenue (70%), we were forced to go to 8 pages this week. That meant that everything, including the *Inside World*, had to get smaller, and last week's *Inside World* was larger than usual. We could have simply chopped submissions without warning the authors first, but we felt that this would have been unfair. —eds]

To the Editors:

I hate USA Today. I am livid about the Tech's adoption of the USA Today format. That format uses cheesy graphs, "at-a-glance" digestions of already shallow articles, and other displays that gloss over facts so thickly that all meaning is lost. The intent of such Hollywood techniques is clearly to present the readers with only selected information and to divert their attention to pretty colors from semi-relevant content. This is demeaning and dangerous. Dangerous in that responsible journalism is thrown to the fish in order to present a happy picture. Demeaning in that editors do not consider the readers capable or interested

enough to make decisions for themselves.

The front page of last week's Tech was equally repugnant. I was immediately insulted by the graphics. Do the editors think the readership is incapable of getting information from the article? What relevance did the mortarboard have? None. Clip art has no place on the front page (except for the ears). The layout of the page indicated that the crime article was the most important news item of the week. The piece had nothing to do with Caltech in any way. It was a review article; there was no newsworthy event reported. Did the editors think they could dupe the Caltech community like USA Today does with its readership?

The editors' judgment was obviously warped. They could have had a very interesting front page last week. The dropped pumpkin emitted a blue flash for the first time in years! That event deserved top billing on the front page. The Public Relations article on page 2 about the Caltech biologists' invention was clearly more suited for page 1 than the Gannett News Service article. The decisions made last week were the last actions I expected from the editors whose platform promised more relevant articles.

The tragedy of last week can certainly be avoided in the future. I hope coming issues of the Tech leave me informed, not insulted.

Respectfully,

—Josh Kurutz

[The Gannett article was run in the position it was primarily because that resulted in a more attractive front page layout. As for the graphics and the merit of the article, by Mr. Kurutz's own admission to me, he had not actually read the article. It is not a USA Today reprint, but an article from a wire service for college newspapers provided by

Apple Computer and Gannett, and was very well researched and documented. Those students I spoke to that had read the article were astonished to find that 27% of college women had been forced to have sex, i.e. raped, and I felt that that alone merited front page coverage. The graphics, while could have been better, were informative, and I thought them better than an enormous photo of a randomly selected campus building. —PJS]

To the Editors:

Last week there was a party which I was barred from attending at the Master's house funded by the MOSH and the Y. Mind you I wasn't subject to disciplinary action nor was I excluded for any reason held against me personally. I was barred simply because I happen to have a John Thomas between my legs. That's right, the party was an all-female event. I was really amazed that the MOSH and the Y, which we indirectly pay for, supported such a blatantly sex-discriminatory event.

I would also like to know, why didn't the OWC complain about the Women's End-of-Midterm Picnic? After all in the '87-'88 little t it states that OWC "was formed to ensure that rights, privileges, and status at Caltech are equally available to women and men." The picnic certainly was a privilege not available to men.

I propose that instead of carrying on sex discrimination and counter sex discrimination, why don't all of us attack sexism in any form. For those of you who believe that the sexes can have separate but equal privileges, TELL IT TO THE NAACP.

Think about it.

—Dirk P. Runge

More Worm

from page 1

the release of the operating system containing these bugs.

Once the worm gained entry, it copied its object code to still more computers by using the above bugs, the remote execution feature, and whatever passwords it was able to guess. Afterward, it deleted itself. Researchers who have closely examined the worm's object code assure us that it changed no files on its way through.

The FBI is seeking to interview Robert Morris Jr, a Cornell graduate student suspected of releasing the worm. He is the son of the head of the National Computer Security Center and is credited with reporting a number of other Unix security holes while working at DEC and AT&T Bell Labs.

The worm vividly demonstrated how widespread the

potential vulnerability of computer system security due to years of delay in getting bugs fixed, and the corresponding potential for lost effort and panic. It has sparked a renewed willingness to talk about security bugs, and already several bugs with greater potential for damage have come to light.

Unix system managers at Caltech and other major institutions were interviewed on local and national television during the spread of the worm. On the emergency mailing list set up by Purdue to coordinate the extermination of the worm, there were numerous reports of sensationalism and comments taken out of context to im-



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November 1, 1988

WHEREAS, the Caltech Debate Team is a successful organization representing the Caltech Community in Debate Tournaments throughout the nation,

WHEREAS, the financial necessities of this group are extraordinary for a Caltech Club,

WHEREAS, the members of the team will soon begin to pay dues to support the organization, a requirement not necessary for other organizations representing Caltech such as sports teams,

WHEREAS, debate teams at most universities are supported by the Humanities or Social Sciences Departments of that University,

THEREFORE LET IT BE RESOLVED, by the Board of Directors of the Associated Students of the California Institute of Technology on this 1st of Novmber, 1988, that the Caltech Debate Team deserves the full coöperation of the Division of the Humanities and Social Sciences in seeking the financial support necessary for the continued successful operation of the team.

More AIDS

from page 1

AIDS testing of students would be far less representative, and it would be virtually impossible to do a random scientific survey, he said.

Even though samples are taken from students attending the health centers, they're not more likely to be infected with the AIDS virus than other students or to come from groups at higher risk of AIDS, both Noble and Brewer said.

"This study is about as unbiased as you can get," Brewer said.

Some critics have argued, however, that the study is skewed because many students visit campus health centers for treatment of other sexually transmitted diseases, which would put them at higher risk for AIDS infection.

When the study is completed early next year, even participating universities won't know their rates of infection, Brewer said. Instead, infection rates will be compiled for six geographic regions.

(In July, the University of Texas announced that 4 of 1,000 student blood samples tested in a separate study carried the AIDS virus.)

Although the college health association won't disclose which universities are participating, it is known that Rutgers University in New Jersey and the universities of Kansas, Texas, Georgia and Maryland are participating. Only two or three universities that were asked to participate refused.

Noble, who is deputy director of the CDC's AIDS program, said he was surprised by the results. If they wind up being representative of college students, AIDS infection among them is comparable to rates among groups that health officials had expected to be high, such as Job Corps entrants.

"You would have thought students would be much lower than that, since kids who join the Job Corps tend to be minorities and economically disadvantaged," Noble said. Studies have shown that minorities and those in lower income groups have higher rates of AIDS infection.

Does that make rates among students alarming?

"You tell me," Noble said.

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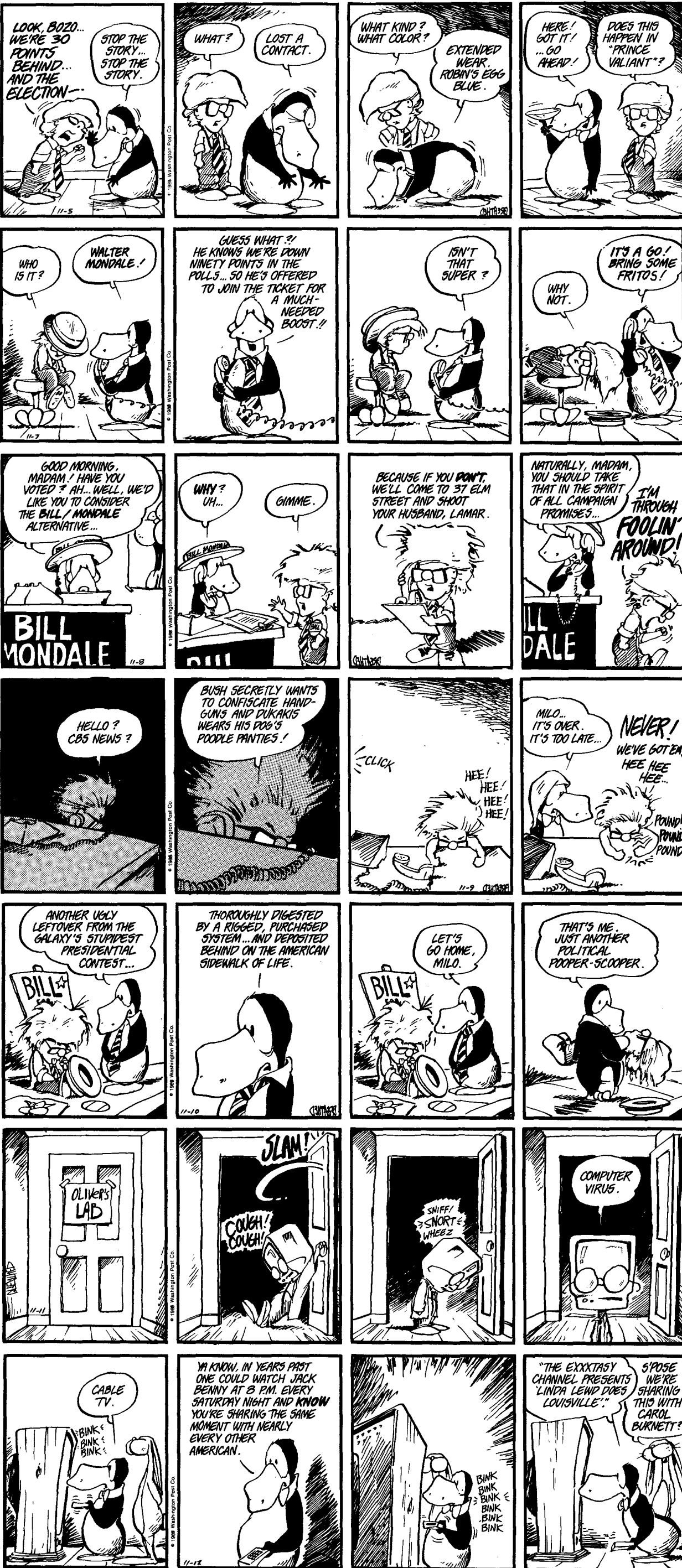
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Lloyd: None submitted
Page: Dean Wilber
Ricketts: Kitt Hodsen, Charles Cook, John Schmidt, and some frosh
Ruddock: Betsy Andrews, David Proctor, and Milton Tinkoff

Blacker: Interhouse? Oh yeah, DEATH. Like the terrifying DEATH Star o' aluminum suspended in awesome grandeur in the courtyard...

[deleted-I said I wasn't doing oddball typesetting -PJS] Apart from Interhouse, the National Dinner Service in Miami has put a Severe Dinner Warning into effect...

And the virus which has infected the house since early in the term shows no sign of subsiding. Yes, sign-up fever has hit Blacker House, as resident after resident is powerless to conceal his/her favorite color, favorite BC food item, desire to own a fine geodesic dome house t-shirt, or favorite Interhouse theme music...

That's all for now. This week's Inside World is brought to you by Prime Chewing Gum: "It's the worst chewing gum you've ever tasted."

Dabney: The Potential Well-Shaped Dabney House Probability Curve

- The probability that... is...
This Inside World will be printed 50%
This Inside World will be printed without revisions of things said about the editors' friends 30%
This Inside World will be printed without revisions of things said about the editors 10%
The Inside World editorial policy will change again this week 75%
The members of Dabney House "will come begging" to Erich asking him to write "quality Inside Worlds" 2%
Paul R. will get mad at me if I say something about him 99%
Erin Hellner will appear at a social event 10%
Dave Wood will know anything about a social event 50%
Danny Rintoul will stay at Dabney's Interhouse for more than an hour 10%
Danny Rintoul will stay at Ruddock's Interhouse for more than an hour 80%
I will play music at Interhouse that I haven't screened 0%
I will speak to you in a quiet tone of voice 15%
I will be speechless 2%
Jared Bronski will be under the influence of alcohol after 9 pm 80%
John Uhley will say the word "Moosefish" in a conversation 75%
Al Petersen will engage you in a conversation on a subject other than hacking, gaming, comic books, or politics 5%
Any of the editors will graduate this term 25%
Pete Wyckoff's hair will look combed 8%
Part of Maneesh's "cheese thing" will spoil in the Alley 7 refrigerator 35%
The spirit of Elvis Presley has possessed Dave Stevens 60%
Arkanoid will not be played in any alley at any given time 5%
Miriam Yee will have a demonic gleam in her eyes when you talk to her 85%
Stan and Don will be within five feet of one another 90%
Chris Campo will own a controlling interest in the Brooklyn Bridge by the end of the week 45%
Two or more people will be tickling one another on Lyle's bed 50%
The View section of the Times will be available when you want to read it 10%
Somebody who already has a bed will be sleeping in the lounge 65%
Somebody who already has a bed will be sleeping on the Alley 7 kitchen counter 3%
I'll ever use this stupid format again 10%

Fleming: The Fleming House Inside Editorial

The following exclamation should be patterned after Sam Kinison in "Louder Than Hell."
I just wanted to tell these retarded editors to STOP FUCKING WITH MY ACT!!!! It's a fucking article you morons!! I didn't ask for any help. I didn't ask you to interject between the sentences. Y'know, before you saw that article, before it even became part of your paper, it was a free spirit in the next stage of life. There were no questions only answers, no weaknesses only strengths. It was truth, it was light, it was a spiritual being, but then you had to FUCK with it and bring it to your level! And now you want me to stand by and let you cut it to pieces? Well FUUUUUUCK YOOOOOO!!!
I will now freely interchange the words "editors" and "spooageheads" for the remainder of the article.
I had another couple of paragraphs expressing my views of the so-called editors, but now I have to cut the length of this in half. Y'know it occurred to me, there wouldn't BE a length problem if the limp-wristed spooageheads wouldn't add all of their worthless DRIBBLE to my article. In the interest of saving space I'm leaving the vowels out of this next sentence. Th dtrs r wrtlss stck-ssd cmbld mtrfrckrs!
I'd just like to reiterate my last eight points:
a) Editors are supposed to edit, not translate.
b) If I wanta mispel sum shit inn duh inside world I wil. It just mite bec 4 fecet. Gee, ain't that clever.
c) The inside world already takes up less than a page. Maybe there would be more room if the spooageheads weren't trying to make this into the USA TODAY. (Really, is a four part overkill on campus crime necessary? Or for that matter, is it even all that interesting?) So quit trying to get rid of it!
I figure I can get away with a few sentences of news in my remaining space...
Alley Five... Fecathlon... BIG WINNERS... Mark Vermies new record egg eating... 26 in one minute... later... 26 in five seconds...
Interhouse... Hell Theme... "River Styx Waterslide O' Doom"... "Hell's Cavern Casino"... "Fleming Inferno" play... "Flames O' Hell" shooting gallery... "Effigy Burning" booth... plenty o' fun... don't just be there. Fucking be there!
Vomit Mop... stupid?... gullible?... wet! Head Waiter # MAN, by definition.
Darbs... Softball?... Easy win 12-7... fifth inning walk-a-thon.
Blacker... Soccer... Easy 7-1... sweep?

Page: Slowly but steadily, working night and day, enduring hideous extremes of temperature...

Slowly but steadily, working night and day, enduring hideous extremes of temperature, with sweat freezing on their little brows, a small group of dedicated underclassmen are turning Page into... BAVARIA!! land of ice, snow...and beer!! Warm yourself by the fire of our "Ski Lodge" with a properly chilled glass of traditional Bavarian fermented malt beverage as you regale your companions with spine-chilling tales of the whirlwind-inducing acceleration of the ICE CAVERN EXPRESS located in the subterranean depths below Page House. Relive the childhood thrill of throwing a ball of packed ice at someone you love. Don't miss this once in a lifetime experience.
Mark says: Don't write your name in the snow. Wait until we tap the kegs, then we'll all do it together. Experience the Page Interhouse Ice Ride in Your Own Home!: Get an ice cube and a rubber band. Then drink a beer. (Or a six-pack, or however much you want, I don't care.) Shoot the ice cube across the room with the rubber band. There you go.
Come one, come all. Don't worry about the puddles in the courtyard. The beer will definitely be cold. And remember, the guys at the Icehouse know what the "F" really stands for.
-Mr. Laughs, somewhere in the frozen wastelands of Page House.

Ricketts: And the Kat came back...

What happens when you let a frosh write the Inside World? You get the lamest one ever. I deny all responsibility for last week's Inside World. I was sick.
Johnboy finally lost it after a year and a half. He got his hair cut. After 18 months of not cutting or combing it, he was attacked by a runaway B&G weed WHIP (not to be confused with a weed cat-o-nine tails). Why didn't John mess with his hair? Elvis touched it back in '69. He didn't want to lose his rapport with the presence of the Elvis. He also won't shave his pubic hair. He won't give a reason for this. We think maybe Elvis touched it, too, but we can't prove it.
Interhouse is going to be along the lines of an Iran-Contra theme. Everyone will stand around pretending they don't know what's going on and they had nothing to do with it. Andrew is playing Ollie North. Shredding Interhouse is all done except for Karin's part of the work. We wish her luck.
We'd comment about the desert run, but all we know is the score: Scurus 3; California State Police 0.
Hot news tip from Wilson street: VJ was spotted around town with various Indian and non-Indian females. House mouth quotes of the week: "I like her, but she doesn't excite me. I don't get a hard on... I like wild women, not women who sit there meekly and say 'fuck me'."
In apology for last week's Inside World, we will not mention Kitt this week. At least we didn't talk about her real secret. Its--**[&*]. Hey untie me Kitt! Help! That's horrible. Lame. Silly. Vaguely sexual. Fun. Exciting. Erotic. Ooh stop! No don't. Stop. Nodon'tYesdoNodon'tYesdoNodon't.
And now back to the Inside World...
STOP THAT! How can I write the Inside World if you keep distracting me? Now that the three of them are exhausted...
As needs turning sideways in the wind, we avoided any serious injuries in our soccer game against South Ricketts.

List for the Week: Our ten favorite Caltech architectural changes:

- 10. Turn the Ath into student parking
9. Turn Millikan into an all girls dormitory
8. Build the California Institute of Hairdressing whose office is located in Professor Fuller's former office
7. Build the Beckman Memorial Very-Expensive-Place-to-Look-at-and-Say-Whew Building
6. Complete the started construction of the full scale model of the Enterprise
5. Build the Oppenheimer Memorial Atomic Bomb Test Crater (located on the former site of the PCC campus)
4. Build the Richard P. Feynman Memorial Roller Coaster forclassical physics research
3. Move Caltech to Malibu, where it should have been in the first place.
2. Finally create the Fleming lot
1. Bring back our long lost marble pot (*sniff*)

For extra fun, read this inside world backwards for your own personal satanic message. Later days.

-Kat, Chuckles, Guido the Killer Pimp, and the Frosh

Ruddock: n ndr t cnsv spc n ths wks nsd wrld w hv dced t lmnt ll th vwls.

xprt fr th tp tn.

Top Ten Nasty Rumors That Couldn't Possibly be True.

- 10. Dabney beat Ruddock in Interhouse soccer.
9. Alley 4 lost to Alley 6 in broomball.
8. You can squeeze an infinite amount of toothpaste out of every tube if you are strong enough.
7. George Bush is President.
6. Jamal is coming back for Interhouse... and staying.
5. Alley 5 kitchen is the new Passion Pit, and Tony says it smells like Au Gratin potato chips.
4. The Frosh aren't building Interhouse.
3. Interhouse is tomorrow.
2. Betsy is not included in this Inside World.
1. Milton is.
ATTENTION L. BARRY TINKOFF: Hi-light above line.

D'Abo Talks About "The Wonder Years"

by Lane Crockett
GANNETT NEWS SERVICE

Everything seems to be falling right for actress Olivia d'Abo. "The Wonder Years," her ABC series, took the Emmy Award for best comedy. She's just completed a feature film called "Personal Choice" with Martin Sheen and Christian Slater. And she and her cousin, Maryam d'Abo of NBC's "Something Is Out There," have moved into a new home.

On "The Wonder Years," which returned Nov. 2, she plays older sister Karen to Fred Savage's Kevin and Jason Hervey's Wayne. The series is about growing up in the '60s. Other cast members are Danica McKellar, Josh Saviano, Dan Lauria and Alley Mills.

"I was very surprised when our show won the Emmy," d'Abo said in a voice that revealed her British background. "We had only done six shows. It was very exciting for everyone."

"I think we won probably because America is ready for this type of show. It makes a lot of breakthroughs as far as quality goes. It's very thorough in each story. An hour show has more time to pack in things, so it's very crucial for us to get ours well done in 30 minutes. We have very good writers who are able to produce these scripts."

Although the Vietnam War is part of the background for "The Wonder Years," d'Abo said the show came towards it from a different perspective than other series like "Tour of Duty."

"We're more about what's happening at home," she said. "The country was very much split down the middle. But there were wonderful things happening too, like the music and the country going through evolution. It wasn't all Vietnam."

"It was very flattering for me to get the show. I haven't done a lot of television. I remember reading the script. Usually some are good, some not. But I had never seen that good of a quality in just three pages. And I saw variety in Karen, ... a lot of freedom, no matter how many lines she may have. She comes from the truth."

Karen is something of a rebellious flower child, although d'Abo doesn't like to categorize her. "I'm still developing her," she said. "I went into the first six shows, not naive, but not really having a grasp on her. That's fine though. You learn and progress."

"I think I might have been mocking Karen a little bit. She's always sort of argumentative, trying to persuade other people. She does feel she can change the world, in a sense. But I don't think she's really a flower child. She wouldn't be a follower but a leader."

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More Red Door from page 1

selected by the GSC for the position of RDC manager. When the former manager, Nancy Patchett, resigned under fire in June, she appointed Avery her successor. Steele was out of the country at the time, so Avery assumed control. When Steele returned, two weeks later, he found John Avery managing the Red Door Cafe. At that point, Steele had only two choices, allow Avery to continue as manager or close the Red Door Cafe. According to Steele, the RDC lost money at the rate of one hundred dollars per week during the summer. Most of this was due to the fact that neither Avery nor one of his employees was on Work Study and had to be paid from the Red Door's account. The GSC,



Photo courtesy Don Finnell

Olivia tries to hide raunchy Techer graffiti from her mother as fan club members Stanley Chen and Matt Breden take her on a guided tour through the steam tunnels. The Olivia D'Abo Fan Club was founded in Dabney House during the summer of 1987.

faced with a current RDC deficit of about four thousand dollars and the possibility of folding the Cafe, decided that they wanted a new manager, someone they themselves had chosen.

Avery has reported a one hundred dollar profit for the month of October, but this information was not available to the GSC at the time that their decision was made. Steele gives Avery credit for his accounting skill. "John has been quite good about trying to analyze the cash flow," says Steele. The previous manager, according to Steele, made no effort to keep the accounts organized. In fact, says Steele, Patchett paid all RDC expenses either in cash or with personal checks. After assuming control of the Red Door, Avery kept excellent records and actual-

ly discovered errors which had been made under the previous manager.

John Avery was viewed as an extremely devoted manager by those who worked with him at the Red Door. Avery was known to have skipped his afternoon classes to work at the RDC when he couldn't find anybody else to work. Avery has also put in volunteer time at the Cafe. Lisa Giaimo, an employee at the Red Door had this to say, "I just gave up half of my hours at the Red Door. While this is not a direct reaction to what they did, I never would have had the heart to do that under John's management. . . . Avery will continue to work at the Red Door until the new manager is completely trained."

Sharon Goldstein, the new

manager of the Red Door Cafe, is the wife of Caltech graduate student Craig Jahnke. Says Goldstein, "I like John Avery very very much and couldn't have gotten along this far without him." Looking towards the future, Goldstein sees major changes in the Red Door Cafe, including the return of home baked goods, a new floor plan, and a cleaner, newer looking decor. In addition, Goldstein hopes, the Red Door Cafe will be enlarged when Winnett Student Center is renovated six months from now. Goldstein also looks forward to many months of profit making for the Red Door. Right now, she is looking for undergraduates with Work Study to work part time in the RDC. She is also looking for graduate students who wish to volunteer their services at the Red Door.

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More Secrecy

from page 2

actions remain faithful to reality and do not undermine the community's trust in the Board (except in rare instances of Board misconduct, the appearance of which signals the need for further reform). Though such an option would likely be employed only rarely, amending the bylaws to include the possibility can only improve the positions of both Board and community with respect to one another.

Certainly openness in limited measure offers this community deeper understanding of itself and its relation to the Board of Control and the Honor System. The secrecy cloaking the Board today has uses, but could be amended nondestructively in many respects. I've suggested two plausible reforms; others, some perhaps superior, surely exist. With general ASCIT elections coming up next term, appropriate bylaw revisions seem timely considerations. Think about it, talk to one another, and write letters to the Tech. Seek constructive change.

-tomy.

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sports

Football Squad Beats Cal Poly 16-7

by Robert Hanna

Last Saturday, the Caltech football team played the Cal Poly Broncos and won by a score of sixteen to seven.

There were many interesting notes concerning this week's game. It was rumored that the Cal Poly coach had called our own Coach Parker to talk to him about the upcoming game.

Coach Parker said that the Bronco coach had told him that none of his players had been practicing this week. Also that, although they had a game scheduled for the week after the confrontation with Caltech, they cancelled it because they wanted to end their season with a win.

This was all the Beavers needed to get them up for the game. And it became obvious early on

that this was going to be no cake walk. The first half was definitely a battle between the Bronco defense and the Beaver line.

One Bronco drive brought them close enough to the Beaver goal line to try for a field goal, but it was unsuccessful.

There was also an incredible goal line stand by the Beaver defense. Early in the second quarter the Broncos moved the ball to the Caltech two yard line. Cal Poly then failed three times in a row to move the ball those last two yards.

On the final down Caltech was able, not only to stop their advance, but to drive them back two yards, thus giving the Beavers the ball on their own four yard line.

Finally, near the end of the second quarter, the Beavers received the ball on their thirty-five yard line

from which our offense began to drive to the other end of the field. It turned out to be a fifty-four yard drive, helped mainly by a great pass from Steve Barato to Dwight Berg for twenty-nine yards.

Unfortunately the Beavers were stopped at the eleven yard line, but the field goal attempt was good, giving the Beavers a three to nothing lead at the end of the first half.

At the beginning of the second half it seemed as if perhaps the tide had changed for the Beavers, as Cal Poly quickly moved into Caltech territory. Once the Broncos were near the Caltech goal line, two successive penalties on the Beavers brought them within striking range, and the Broncos scored the touchdown.

But the Beavers didn't let the situation steal their fire. Soon af-

ter the Bronco touchdown, Jimmy Moore was able to recover a Cal Poly fumble and give Caltech the chance to come back.

The Beavers were able to drive all the way to the Bronco three from their own forty-five with some help from Vince Riley who had one run for twenty-five yards. At this point, all the Beavers had to do was give the ball to Eric Newman who went spinning in for the touchdown. The attempt to run the ball in for two points was unsuccessful.

All that was left for the Beavers to do was to prevent Cal Poly from scoring. But, as always, the Beavers did more than what was expected of them. In the fourth quarter, with the Beavers on the fifty-yard-line, Vince Riley went straight up the middle, bouncing off Bronco defenders and going fifty yards for yet another Caltech touchdown.

Cal Poly still had a chance at this game, and it seemed as if they were going to make the most of it as they tried to make up the ground they had lost. The Broncos were able to execute what seemed at first like a formidable drive, until a crucial point when they were just short of their next down. With just feet to go, the Broncos went for it on fourth down. The Bronco quarterback went back to pass and Robert Welstand sacked him, taking away the Broncos' wind and stealing any hopes they had of winning this one.

Congratulations to the Beavers and to Coach Parker for winning against their rivals, Cal Poly. All of Caltech wishes you good luck on your upcoming battle against the Bulldogs from Britain next Wednesday. Oh yes, and before I forget, it seems that the coach from Cal Poly may be receiving a call in the near future from our Coach Parker.



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Women's Volleyball Falls To Whittier in Last Bout

by Lynn Hildemann

The Caltech Women's Volleyball Club played their last game of the season on Saturday, the fifth of November at Whittier against the Whittier alumni. The match was scheduled to be short, the best two out of three games.

Caltech has played the Whittier alumni once a season for the past several years. Traditionally, Whittier fields a group of experienced players who are not accustomed to playing together.

The ideal strategy against such a team is to score early and often, winning the match before the opponents can get their act together. However, such a strategy requires Caltech to play well early on in the match, which has not been typical for this year's team.

The group of eight that traveled to Whittier showed considerable wear and tear from the season. Three of the women (Courtney Smith, Carol Mullenax, and Lorraine Hwang) had thighs taped due to hamstring injuries, and setter Carol Mayeda had three of her fingers taped. In addition, there was the usual assortment of taped ankles, a taped knee, and an awesome-looking knee brace.

Despite the 11AM game time, the Caltech team looked relatively alert. They began the match quite auspiciously, with constant passes

that allowed the setters to run offensive plays.

The middle blockers, Karen Oegema and Courtney Smith, were effective in blocking the hard hits. However, Caltech ran into problems in handling the "garbage" that came over the net: soft hits and dinks tended to either drop untouched or get mishandled by the Caltech players. In addition, Caltech was spiking tentatively, and Whittier had no problems getting to and returning most of the hits.

Caltech has made many points this season with their varied arsenal of serves. Senior Carol Choy's nasty tennis-style serve has left some opponents standing flat-footed, Courtney Smith's wicked underhanded serve has bothered more than a few players, Julianne Moses' bullet of a serve has dropped untouched on many occasions, and Lynn Hildemann's short floater has proven elusive at times. However, at this match, Whittier had no problem receiving Caltech's serves, so Caltech was unable to run up points just on serves.

The result was a match that lasted relatively long, but ended with Caltech losing, 7-15, 11-15. A high point of the match was a spike left-handed Carol Mullenax put away for an ace off of a chute set. The volleyball team ends the season with a record of 3-9.

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Sat.	11-12	10AM	Cross Country	NCAA III Regionals	Castaic Lake
Sat.	11-12	12 noon	Fencing	San Diego State	Cal Poly Pomona
Sat.	11-12	1:30PM	Football	Bellflower Bears	Caltech
Sat.	11-12	2 & 4PM	Basketball	Alumni	Caltech
Sat.	11-12	TBA	Wrestling	Cal Poly San Luis Obispo	San Luis Obispo
Sun.	11-13	11:15AM	Ice Hockey	Cal Lutheran	Pasadena Ice Center
Wed.	11-16	9:45PM	Ice Hockey	Golden West	Pasadena Ice Center
Fri.	11-18	TBA	Basketball	Invitational Tournament	Menlo College
Sat.	11-19	TBA	Basketball	Invitational Tournament	Menlo College
Sat.	11-19	TBA	Cross Country	NCAA III Nationals	TBA
Sat.	11-19	11AM	Fencing	U.C. San Diego	Occidental
Sun.	11-20	12 noon	Football	Pasadena Police Officers Assn.	Caltech

WEEKLY SPORTS RESULTS

Day	Date	Sport	Opponent	Results
Fri.-Sun.	11-4,5,6	Water Polo	SCIAC Final Round	6-28 vs. Occidental, 6-23 vs. Claremont-Mudd-Scripps, 6-25 vs. Cal Poly Pomona, 6-14 vs. Whittier, and 4-12 vs. Redlands
Sat.	11-5	Soccer	Whittier	3-4 in overtime
Sat.	11-5	Women's Volleyball	Whittier Alumni	0-2
Sat.	11-5	Fencing	Cal State Fullerton	5-4 in foil, 5-4 in epee, 1-8 in saber, and 4-11 in women's foil
			Cal State Long Beach	2-7 in foil, 2-7 in epee, 1-8 in saber, and 1-15 in women's foil
Sat.	11-5	Football	Cal Poly Pomona	16-7



Eric Newman runs into the open field against Cal Poly Pomona. Newman scored one of Caltech's two touchdowns in the game. The Beavers won by a score of 16-7.

what goes

Play With Money

The Caltech Student Investment Fund meets every Wednesday in Millikan Board Room at 5 pm. We have over \$140,000 we use to buy and sell stocks and bonds. Profits buy pizza and soda for every meeting, and pay for dinner at year's end.

Polish Workshop

The Polish Language Workshop offers the opportunity to learn or review Polish in a friendly, relaxed atmosphere. It meets Thursdays from 7:30-9:30 pm in 210 Thomas September through June.

Poetry Contest

The John Keats Poetry Prize of \$100 has been established by New American Poets, an annual award open to all U.S. College students. In addition, other prizes will be awarded at the discretion of the award director. Deadline: 30 November 1988.

Asimov On Humanism

Humanist Society of Friends will show Humanist film *Humanism: Making Bigger Circle*, narrated by Isaac Asimov, on Tuesday 29 November at 7:30 pm at Mercury Savings and Loan, 6245 Wilshire Blvd. The film addresses abortion, censorship, creationism, church-state separation, gay rights, women's rights and nuclear disarmament. Discussion will follow the screening. Admission is free. For information call (213) 656-1134.

Jack Smith Speaks To FOCAL

The Friends of Caltech Libraries (FOCAL) will present a talk by *Los Angeles Times* columnist Jack Smith on Thursday 1 December at the Athenaeum. Smith's talk will follow a no-host cocktail hour at 6 pm and dinner at 7 pm.

Smith will also be available at the event to autograph copies of his book, *Dogs, Cats and Other Strangers at My Door*. Tickets cost \$27.50 per person, \$25 for FOCAL members. For information and reservations (due by 23 November), call Gloria Thomas at (818) 356-6411.

Need A Club Mailbox?

Club mailboxes may be obtained from Nancy Matthews (SAC room 50) or Milly Pena (SAC room 38) between 1:30-3 pm, Monday through Friday.

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Yet Another Totem Poll for Art

Attention writers, poets, and artists! The second *Totem* in as many years will appear this spring and will contain a diverse, if not complete collection of Techer-expressed wisdom and imagination. Address submissions to 116-58. For information contact Sam Dinkin (1-59 or x3828), or Erik Russell (Annex #5, 1-59, x6188). Copies of previous issues of the *Totem* are available.

Caltech-Oxy Symphony

David Shostac, principal flutist of the Los Angeles Chamber Orchestra, will perform with the Caltech-Occidental Symphony in its first concert of the 1988-89 season, on 21 November at 8 pm in Ramo Auditorium. Shostac will be performing the Flute Concerto by the twentieth-century Danish composer Carl Nielsen. Also on the program will be Schubert's "Unfinished" Symphony and Ravel's "Rapsodie Espagnole." Admission to the concert is free. For information call Caltech's Office of Public Events at (818) 356-4652.

Bellcore Group Meeting

Bell Communications Research will host a Group Meeting/Pizza Party from 7-9 pm Monday 21 November from in Winnett clubroom 1. Bell Communications Research will interview on-campus Tuesday 22 November. Sign up in the Career Development Center, 08 Parsons-Gates.

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what goes on the back page

Submit announcements for *What Goes On The Back Page* on forms available outside the *Tech* office (SAC room 40A) and in the copy/mail room (SAC room 37), or use a plain piece of paper. Send announcements to 40-58, or put them in the IN box outside the *Tech* office. Indicate the date(s) the announcement must run. Announcements for the current issue must be received by 5 pm Tuesday and should be shorter than 75 words. Announcements will be published as space becomes available and will be chosen according to size and interest to the Caltech community. Announcements for commercial events unrelated to Caltech will not be published.

Auditions For Bye Bye Birdie

Auditions for the Caltech/JPL musical *Bye, Bye Birdie!* will take place from 10 am to 6 pm Saturday 12 November and Sunday 13 November in 25 and 33 Baxter. Anyone interested in joining the production as cast, crew or orchestra should stop by. To see a script or listen to a recording of the show, talk to Jennie Johnson in 59 Blacker (356-9344). For other questions call Roberta at x6259 or x2182.

Medieval/Renaissance Potluck

Caltech's Medieval/Renaissance Society will meet potluck at 3 pm Sunday 13 November in Winnett clubroom 1. All interested members of the Caltech community welcome. For information call Sean (577-7953), Erich (356-9314), or Amy (449-4391).

Master's Tea

All undergraduates are invited to the Master's Tea, Tuesday 15 November, at the MOSH office. Bring your sweet tooth!

Nights Of The Rocking Dead

The Grateful Dead will play in the Long Beach Arena, 9-11 December at 8 pm (6 pm on 11 December). Tickets on sale at Ticketmaster, Music Plus, May Co., and the Long Beach Arena box office.

Glee Club Holiday Concert

Caltech's men's and women's glee clubs will perform their annual holiday concert at 3 pm and 8 pm Saturday 3 December. Tickets cost \$6 for general admission and \$4 for students and may be purchased from OPE or any glee club member.

NSF Fellowships

NSF offers three-year graduate science and engineering fellowships of \$12,300 per year, including a \$6,000 per year cost-of-education allowance. Deadline is 14 November 1988. For information call (202) 334-2872.

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RATES \$3.00 for first 25 words; . . . 10c for each additional word. Send written ad with payment to 40-58. Deadline is 6 p.m., Monday before issue. No charge for on-campus lost & found.

Professional Engineering Dough

The National Society of Professional Engineers offers scholarships to undergraduate and transfer students pursuing a degree in engineering. Deadline: 1 December 1988. For information contact the Financial Aid Office.

Electron Microscopy Awards

The EMSA Council (Electron Microscopy Society of America) offers an undergraduate scholarship program to further educational and research potential for students pursuing electron microscopy as a career. Applicants must be US citizens or resident aliens and full-time undergraduates. Deadline is 15 November 1988. For information contact Dr. Robert Price, Bio-Architectonics Center, Case Western Reserve University, 2119 Abington Rd., Cleveland, OH 44106, or visit the Financial Aid Office.

More Engineering Money

Equal Opportunities Publications, Inc. offers two non-renewable \$500 scholarships to honor outstanding women, minority, or handicapped students pursuing careers in Engineering. For information contact the Financial Aid Office.

Goddard Memorial Scholarship

The National Space Club will award a \$7,500 scholarship for the 1989-90 academic year in memory of Dr. Robert H. Goddard. The 1989 award winner will meet national leaders in science, government, and industry. Applicants must have finished sophomore year, possess US citizenship, and intend to pursue undergraduate or graduate study in science or engineering during the scholarship term. Deadline: 6 January 1989. For information contact the Financial Aid Office.

National Roofing Bucks

The National Roofing Foundation offers a \$4000 scholarship for full-time students enrolled in architecture, engineering, or other curricula related to the roofing industry. Applications and information are available from Aimee Anderson, Scholarship Coordinator, National Roofing Foundation, One O'Hare Centre, 6250 River Road, Rosemont, IL 60018.

Arizona Honors Academy

The Arizona Honors Academy will offer a three-week seminar for exceptional undergraduates this summer, providing opportunities to discuss important world issues with writers, sovietologists, national security officers, historians, physicists, and arms negotiators. Deadline: 15 January 1989. For information contact the Financial Aid Office.

SAMPE International Awards

The Society for the Advancement of Material and Process Engineering will provide 27-\$1000 awards in international competition in April. Students in their freshman, sophomore or junior year may apply. Applicants must be recommended by the department head or scholastic advisor. Deadline: 1 February 1989. For information contact the Financial Aid Office.

Impending Debate Tourney

Students interested in debating in next weekend's CSU Northridge tournament should meet at 4 pm Monday 14 November in SAC room 13 (clubroom A). Novices welcome.

NRC Research Associateships

The National Research Council has Resident, Cooperative and Postdoctoral Research Associateship programs for research in the sciences and engineering to be conducted on behalf of 30 federal agencies or research institutions, whose 115 participating research laboratories are located throughout the United States. The programs provide opportunities for Ph.D. scientists and engineers of unusual promise and ability to perform research on problems largely of their own choosing yet compatible with the research interests of the supporting laboratory.

Approximately 450 new full-time Associateships will be awarded on a competitive basis in 1989. Awards are made for one or two years, renewable to a maximum of three years; senior applicants who have held the doctorate at least five years may request shorter tenure. Annual stipends for recent Ph.D.'s for the 1989 program year will vary from \$27,150 to \$35,000, and will be appropriately higher for senior Associates.

Applications must be postmarked no later than 15 January 1989 (15 December for NASA) for the first competition, 15 April and 15 August for the later competitions. Information and applications may be obtained from: The Associateship Programs (GR430A-D1), Office of Scientific and Engineering Personnel, National Research Council, 2101 Constitution Ave. N.W., Washington, D.C. 20418.

Environmental Talent Bank

The Environmental Talent Bank, whose goal is to move troops of environmentally-committed individuals into federal government jobs after the election, is recruiting the nation's best and brightest for careers with the federal government.

Project Blueprint, a coalition of the nation's major national environmental organizations, is also assembling a broad range of environmental policy recommendations which will be presented to the new Administration soon after Election day.

For information, write: Environmental Talent Bank, 1001 Connecticut Ave. N.W., Suite 719, Washington, DC 20036.

1989 Markey Fellowships

The Mount Desert Island Biological Laboratory announces the 1989 Markey Fellowship Program. Applications are invited from investigators in the biological and biomedical sciences for summer research at the MDI Biological Laboratory. Using vertebrate and invertebrate fauna from the Gulf of Maine, Laboratory researchers pursue diverse interests including the comparative physiology of the kidney, cell membrane transport, the mechanisms of cell division, and cellular and molecular aspects of environmental toxicology.

Preference is given to applicants several years beyond the completion of the doctorate demonstrating evidence of an independent research program and are still in relatively early phases of research careers. The Fellowships include laboratory space, housing, supplies and equipment, and other allowances. Applications and instructions for the preparation of proposals may be obtained by contacting the Laboratory at:

Mount Desert Island Biological Lab
P.O. Box 35
Salsbury Cove, ME 04672
or phone (207) 288-3605
Deadline for applications is 9 January.

GEM Fellowships

The National Consortium for Graduate Degrees for Minorities in Engineering, Inc. (GEM) announces its 1989 Fellowship competition, which will provide 150 awards to minority students in engineering. The minimum academic requirement for applicants is undergraduate enrollment as a junior in an engineering discipline. Seniors and recent graduates also are eligible.

Each fellowship pays tuition, fees and a stipend of \$6,000 per graduate academic year, as well as providing summer employment with a sponsoring Member Employer. The total award value ranges between \$20,000 and \$40,000 and depends upon which member university the Fellow elects to attend.

Applications must be received by 1 December 1988. Awards will be announced 1 February 1989. Information and applications may be obtained from: GEM, P.O. Box 537, Notre Dame, IN 46556.

International Student Money

The seventh annual International Student Scholarship Competition—a nationwide essay competition for international students studying in the U.S.—is underway. First prize is \$1,500 to be used for academic or professional advancement. International Underwriters/Brokers, Inc., also will award \$350 to the International Student office of the first-place winner.

Deadline for the competition is 1 December 1988. International students interested in entering must submit an essay of no more than 1,500 words on the topic: "Important cross cultural clues are often found in humor. Compare humor in your country with humor as you find it in America. Include examples of humorous situations resulting from cross-cultural misunderstandings, either in the US or on your first visit back to your home country."

Additional scholarships will be awarded for second place (\$1,000), third place (\$500) and five honorable mentions (\$100 each). The International Student Scholarship Competition is open to all full-time foreign students enrolled in a prescribed degree- or certificate-granting program at an accredited high school, junior college, college or university with in the US. Also eligible are students enrolled in an English training program who plan to pursue higher education in the US.

For information, rules and entry forms, write: Essay Competition Coordinator; DSD Communications, Ltd.; 10805 Parkridge Boulevard, Suite 240, Reston, VA 22091.

Free AIDS Speakers Available

At no charge, members of the American Red Cross AIDS Speakers Bureau will come to speak to groups of six people or more and present the facts about Acquired Immune Deficiency Syndrome—AIDS.

The presentations stress the methods of transmission and prevention of the disease, and include a video as well as a question and answer period. For information, please call the Pasadena chapter of the American Red Cross at (818) 799-0841.

Planetary Society Scholarships

The Planetary Society is offering five \$1,000 awards to students majoring in engineering and science. Awards will be made on the basis of scholastic achievement, a commitment to a career in planetary related science, and a written essay on a relevant topic. The deadline for completed applications is 15 April 1989. Mail-in cards for further information are available in the Financial Aid Office, 12-63 (515 S. Wilson, 2nd floor).

Amelia Earhart Memorial Money

The Zonta International Foundation offers \$6,000 grants in memory of Amelia Earhart to women for graduate study in aerospace-related science or engineering. Deadline: 31 December 1988. For information contact the Financial Aid Office, 515 S. Wilson.

Native Russian Needed

The Caltech/JPL Russian language workshop seeks a native Russian speaker as volunteer language advisor one night weekly. No teaching experience or formal knowledge of English/Russian grammar is needed, and the workshop may be conducted entirely in Russian. The workshop meets 7-9 pm Wednesdays in 110 Steele. Transportation to and from campus will be provided. For information call Larry Mak at JPL (x6748).

German Periodicals In Baxter

Available in the Public Affairs Room, 110 Baxter:
The magazines *Duz*, *Deutsche Universitäts-Zeitung*, *Das Hochschulmagazin*, *Revue De L'Otan*, *Scala*, *Der Spiegel*, *Siern*; the newspapers *Neue Zürcher Zeitung* and *Die Zeit*; and the newsletter *German University Affairs*.

Good Science, Bad Science

Caltech President Thomas Everhart will speak on "Good Science vs. Bad Science: Large Science vs. Small Science" at a seminar on science, ethics, and public policy Wednesday 16 November in Judy Library, Baxter at 12:05 pm. Brown bag lunch optional. For information call Sheryl Cobb at x4087.

German Film

Hauptlehrer Hofer (1975) will be shown in Baxter Lecture Hall at 7:30 pm Monday 14 November. Set circa 1900 in a small Alsatian village, the film stars Andre Watt, Sebastian Bleisch, Kim Parnass, Gerhard Sprunkel, and Thilo Pruckner and was produced by Peter Lilienthal. All are invited.

Additional Chemistry Course

Note that **ChE/Ch 164—Introduction to Statistical Thermodynamics** will be taught next term at 11 MWF in 117 Noyes. The class will cover ensembles and statistical mechanical formulations of the laws of thermodynamics; classical statistical mechanics; quantum statistics; translational, rotational, vibrational, and electronic partition functions; chemical equilibria; real gases and their distribution functions; liquids, solids, and other interacting systems. **Ch21abc** is a prerequisite. Instructor: Marcus.

Gay/Lesbian Discussion Group

The Gay and Lesbian Discussion Group will meet next at 7:30 pm Wednesday 16 November in SAC room 26. For information contact Bruce Kahl at x6393.

Chamber Music In Dabney

Pianist Nohema Fernandez will perform works by Schubert, Czerny, Chopin, Franck, Harrison, Villa-Lobos, Cervantes and Ginastera at 3:30 pm Sunday 13 November in Dabney Hall Lounge. Admission free. For information call x4652.

MBA Forums

If you're applying to business school, the MBA Forums are for you. Over 75 business schools will attend, giving you great chances to meet admissions and financial aid officers, placement directors, and corporate representatives from many leading graduate management schools. The Forums open in Los Angeles on 18-19 November and in San Francisco on 3-4 February. Registration costs \$5 each day at the door. For information visit the CDC, 08 Parsons-Gates, x6361.

Leftover Big T Photos

If you had photographs in the 1987-88 yearbook and would like them back, send a note to the **Big T** editors (mailcode 27-58). Include the page numbers on which the photographs appear, the content of the photograph, and your name, mail code and phone. Any pictures not claimed by 28 November will be lost.



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