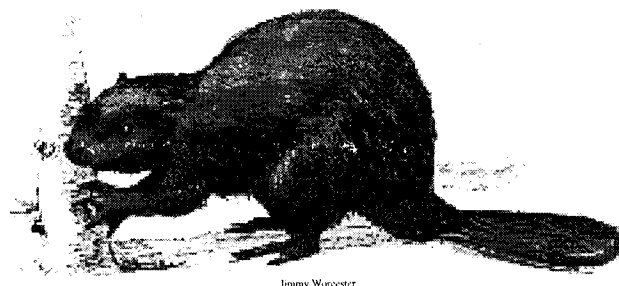
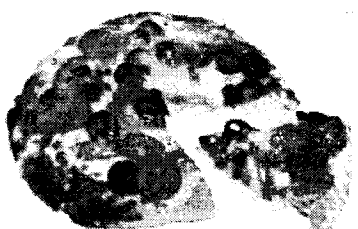


Reminder: No Tech meeting today at lunch.

The next meeting is Mon. 9pm in SAC 40.



**Mini-Decompression**  
Caltech Y  
Center for Student Services  
Sat 10/28 9 pm

# The California Tech

VOLUME CII, NUMBER 6

PASADENA, CALIFORNIA

OCTOBER 27, 2000

## QUESTION OF THE WEEK:

WHAT DO YOU THINK ABOUT THE NEW CALTECH MEAL BOARD PROGRAM?

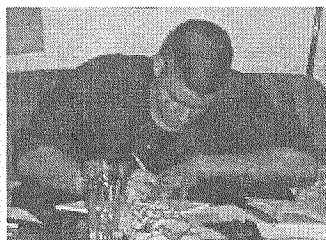
BY JANET ZHOU



Frosh: "If they're going to do something like that, I don't see any good reason why

they should exclude the freshman." — Eric Peters

Sophomore: "Why can't we just pay for the food we actually



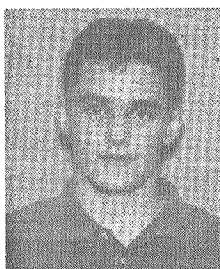
eat? I can eat better, and more, than I can on board, and for less money, but Caltech's misguided policy forces me to waste money unnecessarily on inferior food." — Ryan McDaniel

Junior: "It seems unfair to dis-



allow carry over of balances for the declining balance programs. It is nearly impossible to spend all

of the money on one's balance without incurring additional costs, and so many students will simply lose much of the money that they have paid into the program." — Kenneth Higa



Senior: "I like how it gives upperclassmen more options, but I'm concerned that they may eventually close down the south kitchens because of it." — Dan Daly

Some stats about the board program:  
~ 667 upperclassmen  
~ 117 of them are on the Feynman plan  
~ 6 of them are on the Millikan plan

## Coffeehouse opens, little t arrives

*Can a cure for cancer be far behind in this week of miracles?*

BY JONATHAN FOSTER

Two staples of Caltech existence finally materialized last week. The coffeehouse, located in the Student Activities Center (SAC) under the south houses, first opened its doors on the evening of Tuesday October 26 and began dispensing its usual fare of late-night food-like substances. Even more surprising, the little t, which failed to come out last year, was actually distributed to an eager student body on Wednesday.

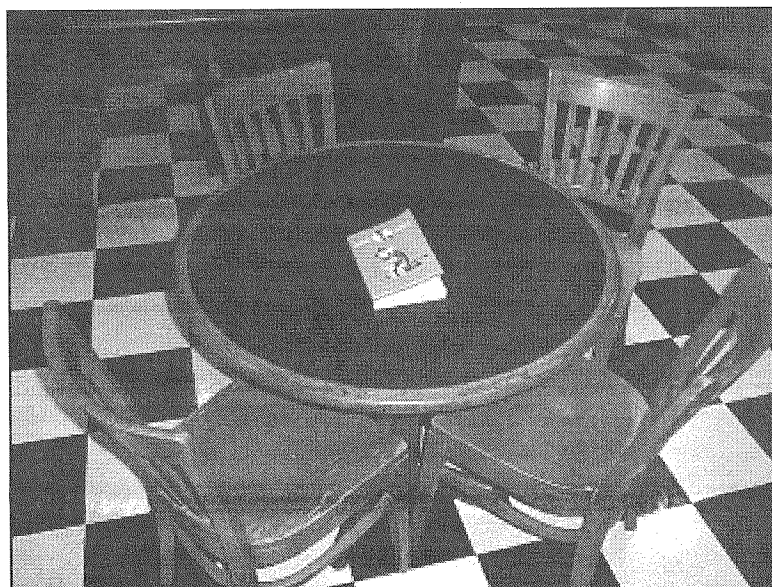
The little t's non-appearance last year deprived the class of 2003 of this valuable resource for life on campus. Where could they learn about how to acquire LN2 or fend off a shark attack? Where could they get an out-of-date list of the Pasadena restaurant scene? The answer was that they couldn't. Luckily, this year has sort of made up for it, since after a few delays, the brand-spanking new little t's, graced with a Calvin and Hobbes theme, were distributed to both the current freshmen and sophomore class.

Although there are a few mistakes (the cover portrays Calvin with distinctly orange hair when it is in fact yellow), the Calvin and Hobbes comic-strips, several of which have been updated

to reflect life at Caltech, more than make up for any typos or poor write-ups about the office of Tech editor. "This has gotta be the best little t ever," raved Jane Greenham, eagerly flipping through her copy.

In case your physical thirst has not been as thoroughly satisfied as your thirst for knowledge. (Too bad the coffeehouse doesn't serve soda with a firehouse...)

The coffeehouse is still much



*The fabled little t rests comfortably on a table in the newly-opened coffeehouse.*

In contrast to the little t, the coffeehouse did eventually open last year; that delay was caused by an extensive remodeling of the venue. This year, there was nothing so major, but simply the problem of finding enough students willing to staff the coffeehouse. The only thing new this year is the coffeehouse now sells Gatorade and bottled soda, just

the same as it always has been. The ceiling still has a few token tiles with toothpicks stuck in them, the music is still obnoxious/interesting depending upon your tastes, the staff still sits behind the counter working on problem sets during slow periods, calzookies are still by far the most popular item, and there are still Caltech students who

complain about everything. "They're out of pizza already, and it's only the second night," said one student who spoke on condition of anonymity. Another complained that the fries got cold too fast. Still, there are also those who love the coffeehouse, and gathering from the number of students who have been down there the first few nights, the coffeehouse has more supporters than detractors. "I like this place a lot," said Melissa Soriano, a long-time coffeehouse veteran on duty behind the counter. "It's been totally crowded so far this year." Most students were fairly hostile to the rotation-like question "Why do you come to the coffeehouse?", although Vikki Kowalski said she came for the people. Another student gave a fairly ringing endorsement of the food saying, "The hot dogs, curly fries, and shakes have never made me sick."

From here on in, the coffeehouse will be open from 8 to 2 every night of the week, and the staff assured the Tech that there will not be similar delay in opening after winter break. And take comfort: although the coffeehouse is currently out of blue dye for shakes, they have at least 20 bottles of red and the blue dye is on order.

## Bradford Sturtevant, professor of aeronautics, dies

BY TECH STAFF

**Bradford Sturtevant**  
(1933 - 2000)

Brad Sturtevant, the H. W. Liepmann Professor of Aeronautics, passed away on October 20, 2000. He had been battling pancreatic cancer for the past several months. Sturtevant was a dedicated member of the Caltech community, spending his entire professional career in the Graduate Aeronautical Laboratories at Caltech, or GALT.

Sturtevant graduated from Yale with a B.S. in Mechanical Engineering. He came to Caltech in 1955, received his Ph.D in 1960 and joined the faculty immediately.

Sturtevant was known in the

Caltech community for his enthusiasm and the broad range of his interests. He was a vigorous athlete, a lover of the outdoors, and a proponent of fluid mechanics as a rigorous intellectual activity that spanned across scientific disciplines from medicine to geology.

Sturtevant's accomplishments include developing and running the E5 freshman laboratory in the 1970s, serving as Executive Officer for Aeronautics from 1971 to 1976, and leading the effort behind the Sherman Fairechild library. He was also very involved in Caltech athletics and served terms as the Chairman and Secretary-Treasurer of the Southern California Intercollegiate Athletic Conference. He received many per-

sonal awards for his swimming, especially in the open ocean.

Sturtevant was best known for his research on shock waves and nonsteady gas dynamics, and over 30 years ago he introduced Caltech students to nonsteady gas dynamics. Twenty-eight students received their Ph.D degrees under his supervision.

In lieu of flowers, the family has asked for donations to be

made in Brad Sturtevant's memory to Caltech, "Sturtevant Memorial," and sent to Kay Paul, Caltech Development Office, MS 105-40, Pasadena, CA 91125. The funds will be used by the Athletic Department to construct a jacuzzi whirlpool bath. A memorial service here at Caltech is planned for later this year or early 2001.

### Inside the Tech

The Usual	Features
Letter to Editors ..... 2	Yoghurt ..... 3
Foxtrot ..... 6	Innerspace ..... 4
Dilbert ..... 6	Small Politics ..... 5
The Dean's Corner ..... 7	
Mints ..... 8	

# Letters

## LETTERS TO THE EDITORS

Open Letter to Dr. Brennen

October 17, 2000

Dr. Cristopher E. Brennen  
Vice President for Student Affairs:

Dear Dr. Brennen:

Our former Resident Associate (RA) Brian Meehan has recently applied for reinstatement. The House has been devoid of an RA for several weeks now and we are frustrated that this has been ignored so long when Brian's appointment could have long since resolved this issue. However, it has come to our attention that some of the administrators involved with Undergraduate Student Affairs have doubts that Brian will be able to continue to adequately fulfill his

duties as our RA. We write this letter to dispel any misconceptions about Brian's abilities as RA and to explain why he is still the ideal choice for this position.

The upper-classmen of Ricketts unanimously agree that he has done an admirable job as our RA for the past two years. He has formed a strong liaison between the Administration and students in the house, remaining faithful to both the interests of Ricketts and his obligations to the school. This is not an easy task considering the inevitable skepticism the students hold towards many administrative policies. He has also shown genuine concern for the students and has been responsive to our needs, especially in times of emergency. In this way, Brian has been at least as reliable as any other RA on campus.

Not only is Brian concerned for our welfare; we are also concerned for his. Many of us realize that our mischief often re-

sults in much duress for Brian when he has to answer to his supervisors in the Residence Life Office. As a result, we often chose to refrain from questionable activities to avoid "getting Brian in trouble." We feel that this mentality of a cooperative co-existence between our RA and us is far healthier than many alternatives that would result from someone other than Brian taking over his position.

The most important consequence of this relationship is that Brian has become a valuable member of the Ricketts Community. In fact, it has often been remarked that if Brian had been an undergraduate at Caltech, he would have been a member of Ricketts House. This sentiment is indicative of our relationship with Brian: he is as much a member of the house as any other student. As a result, there is a level of trust towards our RA that is unprecedented with past RAs and unknown to most of the

other houses on campus. All of us know that we can always go to Brian with our concerns and problems and expect to receive sound advice and fair treatment. Since few of us feel safe talking so openly with other RAs and most administrators, Brian has been in a unique situation to handle issues and problems in our House better than anyone else has at this school. It is this trust and our genuine concern for each other's welfare that makes him such an effective RA in Ricketts House.

In light of the reasons described above, it should be patently obvious that Brian has skillfully executed his job and that there is no indication that he will not continue to do so. In fact, we find it strange that instead of being commended for a job well done, his employment status is currently in question. Moreover, many of us feel that it will be impossible to find a replacement RA who is as ex-

perienced and trusted as Brian. Hence, we request that Brian be reinstated as our RA and allowed to return to his home.

Sincerely,

Members of Ricketts House

- |                          |                           |
|--------------------------|---------------------------|
| 1) Roger O'Brien         | 33) Nicole Eber           |
| 2) Richard Kamesky       | 34) Yuri Goldfeld         |
| 3) Dinkar Gupta          | 35) Elizabeth Thomas      |
| 4) Ben Backes            | 36) Joseph Mohrke         |
| 5) Marcos Arribas-Layton | 37) Rui Wang              |
| 6) Dave Zaragoza         | 38) Felix P. Maisch       |
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| 8) Ben Gudlewski         | 40) Beverly Karlson       |
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| 10) Kathryn Oseen Senda  | 42) Connie Wang           |
| 11) Leo Polovets         | 43) Juan Rodriguez        |
| 12) Jacob Zasada         | 44) Grey Rybka            |
| 13) Martin Gaitan        | 45) Christopher E. Crabbe |
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| 16) Kevin R. Babcock     | 48) William Wajent II     |
| 17) Adam Scott           | 49) John Estes            |
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| 19) Shannon F. Stewman   | 51) Kinsey Ingraham       |
| 20) Jim Anderson         | 52) Mauricio Cordero      |
| 21) Jeff Bolz            | 53) Adam Lichte           |
| 22) Jessica Heller       | 54) Yann DeGraeve         |
| 23) Jonathan Leong       | 55) Yifan Yu              |
| 24) Rik Williams         | 56) Kaley Isaacs          |
| 25) Cody Geary           | 57) Mona Sheikh           |
| 26) Michael Desalvo      | 58) Jonathan Muliang      |
| 27) Bradley McCoy        | 59) Timothy Pfeiffer      |
| 28) Leonid Rosenberg     | 60) Ian Farmer            |
| 29) Lu Gan               | 61) Christoph Barance     |
| 30) Benjie Limketkai     | 62) Miro Dudik            |
| 31) Sasha Calkins        | 63) Joseph Tremoulet      |
| 32) Matt Mayernik        |                           |

Please send submissions for letters to the editors to [tech@ugcs.caltech.edu](mailto:tech@ugcs.caltech.edu). Deadline for submissions is Monday at 5 p.m. on the week of publication. The editors reserve the right to edit or refuse to print any letter for any reason.

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Letters to the Editor:	6 p.m. Tuesday
Unsolicited Articles	noon Monday

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# Art and Culture

Yoghurt

BY ANSEL AND GEORGIA

As I write this I am often reminded of something that I hear over and over again every midterms week. "Ansel," they say, "I really have too much time on my hands over the course of this weekend and would really like if you could recommend something for me to do with this free time." I am paraphrasing here, but for brevity I shall leave out all the other compliments they give me at the same time.

Well, fear no more countless people, for those of you who are looking to kill hours and hours, or just twenty minutes, we have the thing for you this weekend. This is the year 2000 and in this year a significant event occurred: Chaucer died 600 years ago. Now while this anniversary may not be all that important to you it is very important down at the Huntington where they have the illustrated Ellesmere Manuscript of Chaucer's The Canterbury Tales.

Scribes penned this copy shortly after the death of Chaucer. It is the most beautiful and most complete version of the medieval poet's best-known work. It consists of 240 parchment (animal skin) leaves, richly illustrated and decorated with gold leaf. Henry Huntington acquired the Ellesmere Chaucer in 1917. It was purchased from the third Earl of Ellesmere, whose family had owned it for 300 years.

Among the other items displayed will

be the first printed edition of The Canterbury Tales, and a copy of the famous Kelmscott Chaucer designed by William Morris and Edward Burne-Jones. (I'm not sure what the Kelmscott Chaucer is either, but I'm assured that it's important.)

The exhibit runs from now until the 28th of January. Student rates are \$6 for students with ID.

For those of you who are more interested by the art of the world, the Los Angeles County Art Museum (LACMA) has a display "Made in California: 1900-2000" that runs from this month until February. Those of you who are from out of state can be introduced to the beauty of California, most of which you will never see since you don't have nearly enough time to travel.

For all of the problems that California has, there is something remarkable about having Mt. Whitney, the Mojave, and Monterey all in the same state. There are about 550 works of art in a wide range of media, including painting, sculpture, photography, graphic art, decorative art, fashion, film, and music.

Also included are approximately 350 additional cultural documents, such as travel brochures, posters, postcards, magazine and newspaper articles, and documentary photography conveying California's image to the rest of the world. Other organizations are also presenting displays in conjunction with the LACMA exhibition, contact LACMA for more details. Admission is \$5 for students with ID.

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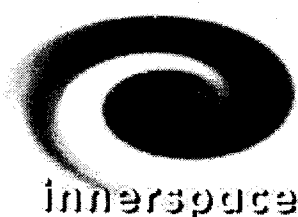
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# Innerspace



## Innerspace Affirmative Action by Jason Meltzer

I am disappointed that in this election year, there is a big fat elephant of an issue that has barely been addressed by the candidates: affirmative action. Actually, this is part of a broader problem, that of discrimination and prejudice in general, that our country always seems to have a hard time dealing with.

This issue is on my mind because I am applying to graduate school and fellowship programs at this time. As with many such processes, it is filled with blatant discrimination, seemingly to no end that positively benefits society. For example, there are tons of fellowships and grants, many of them funded by the

government, that are available only to "minority groups" or women entering science or engineering fields. I don't question the fact that the sciences are unusually unbalanced in their representation of these groups, and society should encourage their members to explore science education early on. At the level of a PhD program, however, sponsoring a fellowship for minorities or imposing an affirmative action program just seems silly. The people who are seeking this level of expertise in the sciences should have already made up their minds pretty firmly that this is what they want to do. As this is the case, the fellowships exclusively for minorities and women are at best ineffectual, but probably destructive. Why, you may ask? If the point of such a fellowship is to provide a monetary incentive to enter graduate school, the only people it will encourage are those who probably don't really want to pursue this career in the first place. If they do, they are going to do it, anyway! There's no reason to tempt people with money into going to graduate school in science, as is the point of such

scholarships for high school or undergraduate programs. In those cases, the education may be exploratory: the extra incentive may cause someone to be a science major when they might not have otherwise done so. If they then find they really enjoy the work, they continue; otherwise, they stop. No harm done either way. Anyone who's applying to a Ph.D program should really have their mind made up already, fellowship or not.

Now that I have vented my personal frustration on this issue, I'll address the broader problems I find when thinking about the way we handle discrimination. Usually, to correct a general wrong due to racism, a compensation of some sort is offered to the involved parties. This may come in the form of affirmative action programs, money, or both. An interesting fact I read is that Germany actually pays billions of dollars in reparations to Israel to say "we're sorry" for the Holocaust. This is a rather extreme case, but it raises the interesting question: should the current generation be held responsible for the crimes of

the past? In this case, a very small percentage of the German population actually participated in any crimes against Jews in the Holocaust, yet they still pay. This case I will simply leave as food for thought, as I don't really know the answer myself.

Most of the time, the issue at hand is less well defined than my last example. One that really gets me is affirmative action for minority groups in this country. First of all, how do we define a minority group, and (more importantly) how do we decide if they have somehow been wronged by society? I think most of these programs are terribly hypocritical. They claim that certain people, primarily because of their genetic makeup, are put at a societal disadvantage: it's harder for them to get into college, get jobs, and get high salaries because of discrimination. I find it reprehensible that we, as a society, have decided to help some groups and not others.

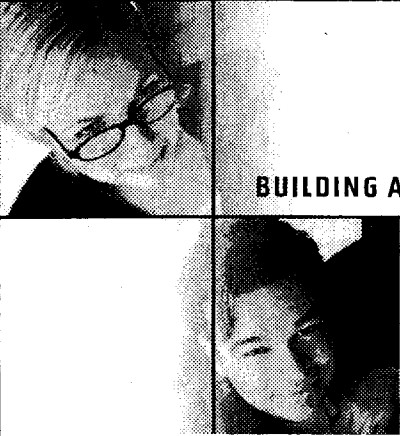
I'd say the biggest group of genetically disadvantaged people are ugly people. Our outward appearances are almost completely determined by our genes, and if you happen to have a few ugly genes, you're at a serious societal disadvantage. People are really quite superficial in judgement, and more physically beautiful people have a huge advantage in all aspects of life, including the job market. Take two people applying for the same job, both of whom have similar qualifications. The one that's better looking will probably get it. I'd bet that even if the more attractive person is less qualified (to a certain extent), he's still more likely to get the position. This is a form of discrimination, just one that isn't recognized by society.

ety. If it were a man and a woman applying for the job, and the less qualified man got it over the more qualified woman, people would cry "sexism!" "Racism" would be the word if it involved a minority. Nobody cares, however, when it's discrimination based on appearance, an equally genetic property as sex or race.

This example puts a big dent in the consistency of affirmative action policies. Why don't we have quotas for ugly people? They certainly seem to have the same problem as those who are discriminated against because of race: their genes give them a disadvantage. Basically it's because society doesn't really care about the people or groups it supports with these policies. It only institutes them when enough of the discriminated against group gets together and makes themselves heard. Perhaps if there were an ugly people's lobby in Washington (just think of how many members that group would represent!), then there would be scholarships for the "aesthetically challenged."

This train of thought just goes to show the absurdity and hypocrisy in both the idea of discrimination and what we do about it. Everyone discriminates, to an extent, and most are disadvantaged in some way. Stupid people can't get good jobs, often, and much of the time their condition is totally beyond their control; it's just the genes they were given at birth. Unattractive people have trouble with dating. No matter how hard I try, I will never be able to pick up women as easily as a GQ model, and there's not much I can do about it. Life just isn't fair, and we can't fix everyone's societal problems with laws or policies. Maybe, then, the most "fair" way to fix the problem is to do nothing.

*Innerspace is a semiregular column written by Jason Meltzer, a Senior techer.*



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## Hair on Lake



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# Domestic Politics

## Off the beaten path: lesser-known parties

BY WILL PETERSON

As election time closes in, the media milks the disputes between Republicans and Democrats ad nauseum. Some refreshing views from lesser-known parties are subsequently presented.

### Libertarian National Socialist Green Party

[www.nazi.org](http://www.nazi.org)

I'm almost 80% sure it's a joke, but the volume of information and professional tone on its website make me wonder...

"The Libertarian National Socialist Green Party is in part based upon the work of the Libertarian party from whom we gain appreciation for the individual spirit and independence from a morally-judgmental, active government. From the Green party we inherit extreme concepts of practical ecological value. Our emphasis upon self-reliance, diligence, and individual labor without interruption from the herd or the whining of the weak comes from the National Socialist regime of Germany."

They have a very interesting gun control policy: "We support the socialization of gun manufacture and distribution to every able-bodied adult a fully working assault rifle to prevent crime through local enforcement. This removes the danger of guns, since no citizen will have an unfair advantage over others and will be assured mutual return of destruction."

### The Light Party

[www.lightparty.com](http://www.lightparty.com)

The Light Party claims to have "a practical, synergistic 7-point program which serves to successfully resolve our current socio-economic and ecological challenges..." Light Party objectives include:

- Encouraging people to eat healthier
  - Closing down the IMF
  - Abolishing nuclear weapons and asking the Native Americans for forgiveness.
  - Encourage people to create "artainment." These are works which "Inspire, Delight, Heal and Enlighten"
- They also plan to create a national television network

that will broadcast artainment nonstop.

—Create a Global Peace Center on Alcatraz Island.

If the Light Party appeals to you, feel free to write in "Da Vid," the founder, as your choice for president. As a special bonus, with a \$33 membership donation, you get a free CD of his New Age music.

### United States Pacifist Party

[www.igc.org/uspp](http://www.igc.org/uspp)

To members of the Pacifist Party, not only war, but "military power is a practical mistake in our time." Using the 'Armageddon Equation' and a (flawed) game theory proof, they conclusively prove that the existence of any type of military is a horrible mistake.

To remedy the situation, they suggest "Zero military budget" and "Establishment of an unarmed service corps, a 'Mercy Force' trained in strategic nonviolent defense and equipped for mobilization anywhere in the world."

They suggest not only that America should completely abolish her military, but that she should continue to intervene in countries throughout the world. Understanding that not all countries would appreciate this peaceful nature, they call for "Preparation for nonviolent resistance against possible invasion and occupation attempts." Bradford Lyttle is the candidate for the Pacifist Party

### The Family Values Party

[www.members.aol.com/fvparty/fvparty1](http://www.members.aol.com/fvparty/fvparty1)

"I, Tom Wells...started The Family Values Party (FVP) at the command of OUR HEAVENLY FATHER, and that is why there are some serious restriction as to who can and who cannot give their money to The Family Values Party. But at 2:00 a.m. December 25th, 1994, I was awakened...by a BRIGHT LIGHT. A voice called to me saying, "TELL MY PEOPLE THAT THEY... ARE NOT TO PAY THEIR TAXES UNTIL ABORTION IS NO LONGER PUBLICLY FUNDED."

If you're interested in donating money to the FVP, there is a rather stringent 9-point checklist that you have to pass. Question 1 requires you to state that "[I have] written my letters to my public officials stating that I am prepared not to pay my taxes until abortion is no longer publicly funded."

Both males and females are required to write this



statement, but only males that have attained the age of twenty years old must actually do what ever they can not to pay their taxes."

He has a rather unique view on homosexuality: "OUR HEAVENLY FATHER clearly says that man shall not lie with man...but has most conspicuously said nothing about woman to woman. I may not like nor understand female homosexual behavior, but I cannot say it is an abomination against OUR HEAVENLY FATHER because HE has been so conspicuously quite on the subject."

### Prohibition Party

[www.prohibition.org](http://www.prohibition.org)

Earl Dodge heads the ticket for America's third-oldest political party. The Prohibition Party has fielded a presidential candidate in every election since 1869.

"Our party, alone, offers a program of publicity, education, legislation and administration leading to the prohibition of the manufacturing, distribution and sale of all alcoholic beverages... We will help Americans to realize that alcohol's harmful effects far outweigh those of all illegal drugs, combined."

Some of the party's older slogans can still be found tucked away on their website: "'Tis here we pledge perpetual hate, to all that can intoxicate."

Apparently the war on drugs has gone so well that we're ready to move on to the next front.

### Southern Independence Party

[www.southernindependentparty.com](http://www.southernindependentparty.com)

Succeeding from the Southern Party just one year after its founding, the Southern Independence Party advocates the formation of a separate nation consisting of the Southern states.

To its credit, the group appears not to hold any racist beliefs. The SIP explains the difficulty in forming an independent Southern nation, "...in light of the current social and cultural condition of the Southern people, it would appear the task of securing full independence for Dixie may require decades and perhaps even a few generations."

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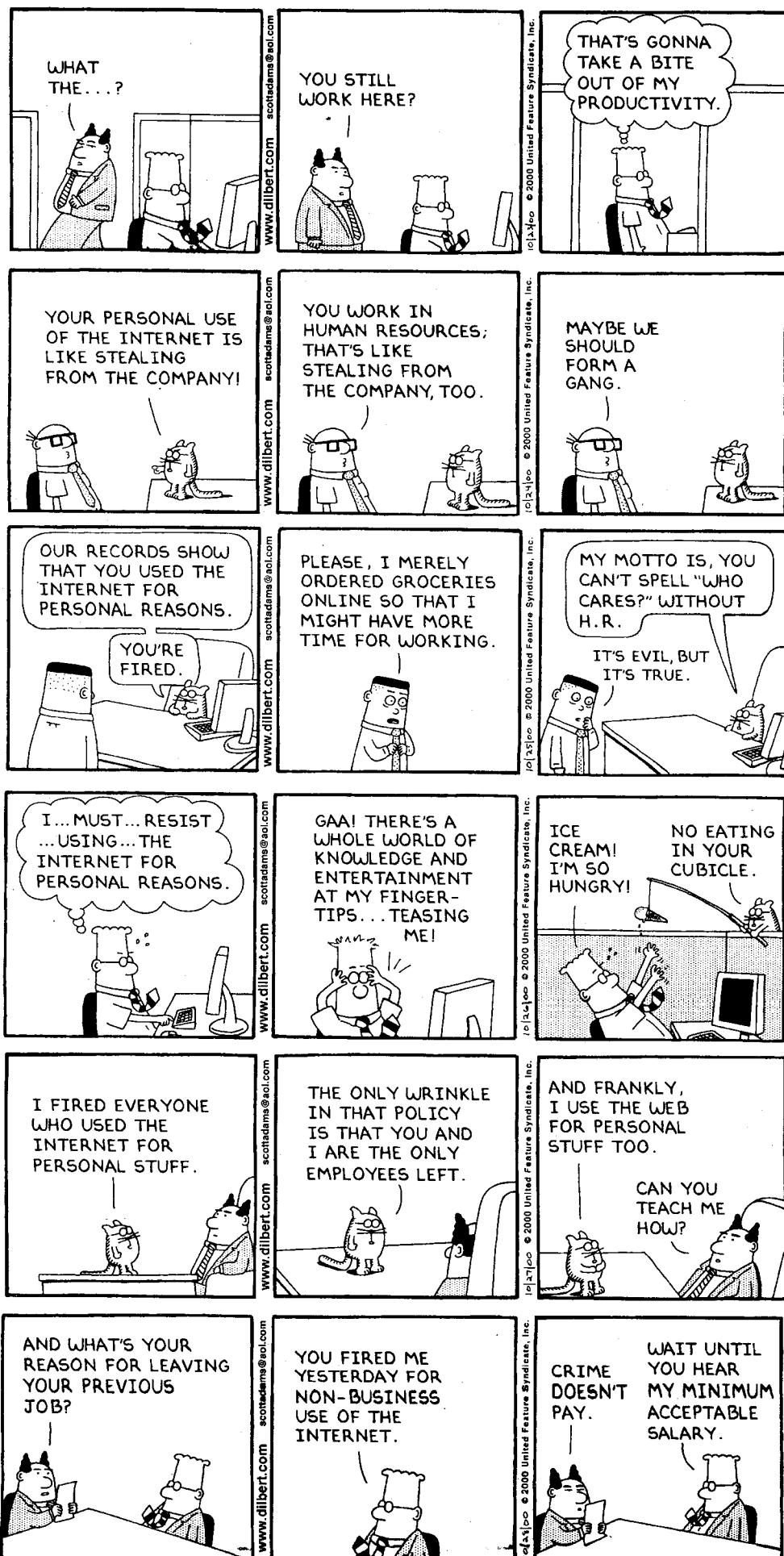
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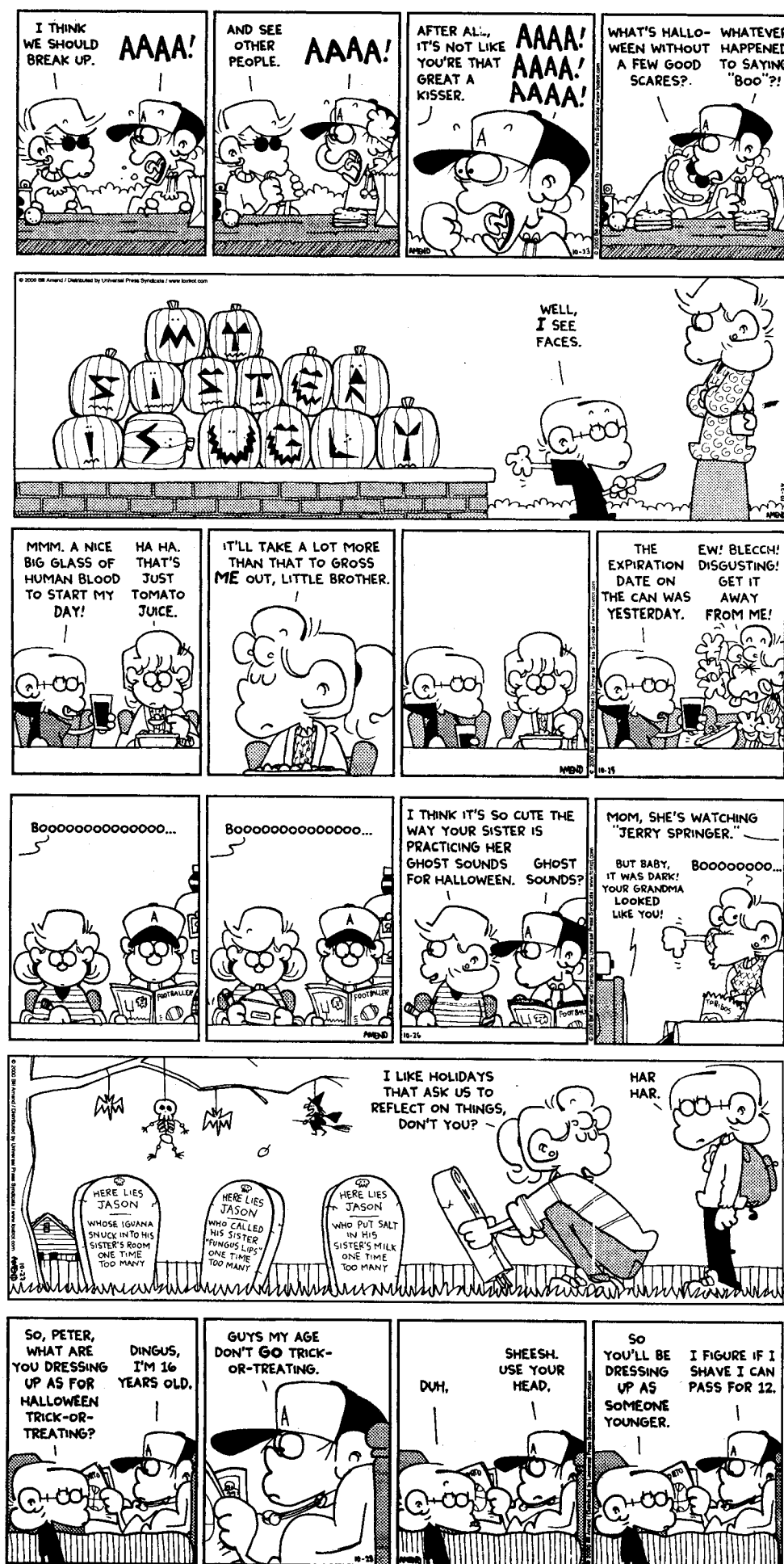
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**No One Under 17 Will Be Admitted  
REQUIEM FOR A DREAM (NR)**  
Fri. - Thu. [12:15] 2:40 5:05 7:30 9:55

**THE YARDS (R)**  
Fri. - Thu. [11:30] 2:05 4:40 7:20 10:00

**THE CONTENDER (R)**  
Fri. - Thu. [1:15] 4:05 7:00 9:50

**DR. T AND THE WOMEN (R)**  
Fri. - Thu. [1:45] 4:30 7:15 10:00

**DECALOGUE NINE AND DECALOGUE  
TEN (NR)**  
Fri. - Thu. [11:30] 2:00 4:35 7:10 9:45

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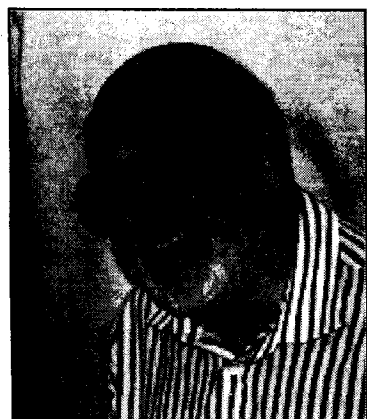


## Dean

## Dean's Corner

## Napster and all that

by Jean-Paul Revel



The Nobel prizes in physics this year were given to three investigators whose research contributed immensely to the development of modern technology. The Russian Zhores Alferov and the German-American Herbert Kroemer were honored for developing semiconductor heterostructures used in high-speed- and opto-electronics, while the American Jack Kilby was recognized for his part in the invention of the integrated circuit. Among all the modern electronic marvels that were made possible by their pioneering efforts, a wildly popular instrument has been the CD player, in which integrated circuits and a laser diode translate digitized information (on compact discs) into music. The quality of the music is much higher than could be obtained before, say with "long playing" vinyl records, previously one of the best mass-produced music media (analog, instead of digital). And all of it in a small package, which can be stuffed into one's pocket (well, a large pocket, although not necessarily a very deep one).

The compact disc, however, is already being supplanted by computer files of digital music, as made manageable by the development of an effective compression method (MP3). Music can now be transferred over the net, bypassing the store-bought CD (or what have you). Without a physical entity to tie the music down, it also became easy for music lovers to send copies of pieces they enjoy to all their friends. While this may have seemed wonderful to the music fans, a few snags have become apparent. When one buys music in the form of a CD, record, tape, or even sheet music, part of the purchase price goes to the composer, to the artists performing the music and/or, of course, to the people owning the label under which the music is released. Presumably that's how everyone involved puts bread on their tables (lots of bread in some cases). When music files are exchanged between computers, however, there is usually no recognition that someone's livelihood might be threatened. The problem got completely out of hand when small scale exchanges between

friends grew into torrents, absolutely immense numbers of pieces being downloaded.

Free distribution of music (or of books, etc.), may violate the rights of the copyright owner. As the law stands today, a work is protected by copyright when created (in the past the new material first had to be registered, but not any more). No one is entitled to copy or use copyrighted material without permission. The copyright owners can ask for a fee from users of their work or they may give permission to use the material without cost. But it is the copyright owners' prerogative to decide what should be done.

Now the copyright law is somewhat softened by the concept of fair use. This means a person can make a few copies of something for uses such as criticism, scholarly study, teaching etc. The most important element in determining whether copying is fair is whether reproducing the material is likely to damage the potential market for the work. Copyright protection extends from inception to 70 years after the death of the author. So downloading modern music (<70 years old) without permission is an infringement of copyright law. Yet it is so easy

to do. The Napster software provides access to databases from which any music can be copied. Six months ago, more than 450,000 pieces of music were available for downloading. In fact, many schools found that their networks were being clogged by the traffic generated by transfer of music between students. All this activity prompted the Recording Industry Association of America (RIAA) to claim Napster was infringing on the copyright of the composers (and that of recording labels too). Suits against Napster were also brought by Metallica, Dr. Dre, etc. Free distribution of MP3 files will most likely decrease the sale of music, and hurt both composers and distributors. While a judge recently decided that Napster did indeed break copyright laws, the judgment was suspended to allow time for further arguments.

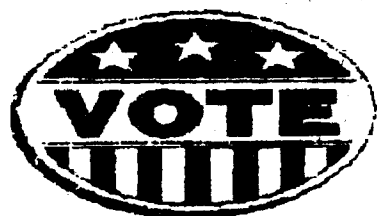
Napster claims it does nothing wrong, since it only provides a database of available music, i.e. the means by which music can be exchanged between friends, and does not exchange the music itself. But it is easy to attack it, since it can readily be shut down by pulling the plug on the servers which hold its database. In another distribution scheme, used by Gnutella, no database is required, so it is much harder to pin the blame for song lifting. When one computer running Gnutella reaches another, it searches the hard drive for other Gnutella running computers that

are (were) connected, and logs on to them. Like a spreading infection, a huge network of connections is rapidly formed, allowing the exchange of files. That approach would seem very hard to stop, although there are signs that Gnutella may well collapse of its own weight. There are too many sites, too many connections, and the system gets bogged down waiting for responses from computers on dialup connections.

It is likely that just as in the case of software piracy, there will surely be solutions to web music piracy. Maybe it will be through the use of "watermarks" embedded in the music, although it appears that system has already been circumvented. Until another way is found to satisfy the needs and desires of all involved, producers and listeners both, I believe it behooves each of us to respect composers', musicians' and, yes, even record labels' rights to earn a living from their endeavors. Whether you think music should be distributed freely, or are willing to pay for the privilege of playing it, right now, taking stuff without permission is stealing, be it someone's wallet or music that can be turned into money. (Caltechers, stealing??!!)

A bientot!

Jean-Paul Revel



# Victory 2000

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## Mints

## ANNOUNCEMENTS

**CIT Guitar Classes** for the spring quarter will meet on Tuesdays in SAC Room 1, starting on October 3 as follows: Beginning Guitar Class: 4:30 PM - 5:30 PM, Intermediate Guitar Class: 3:00 PM - 4:00 PM, Advanced Guitar Class: 5:30 PM - 6:30 PM. Classical and flamenco repertoires are explored, but techniques transfer to other styles of guitar. The Beginning Class includes a jazz/folk chord system. Classes are free to Caltech students and other members of the Caltech community (space permitting). Undergrads can receive 3 units of credit. The instructor, Darryl Denning, has an international background in performance, teaching and recording (two of his CDs are available in the Bookstore). Mr. Denning can be reached at (323) 465-0881 or by email at: [ddenning@caltech.edu](mailto:ddenning@caltech.edu). The Guitar Home Page is at: [www.cco.caltech.edu/~musicpgm/guitar.html](http://www.cco.caltech.edu/~musicpgm/guitar.html)

The **Caltech Ballroom Dance Club** [CBDC] continues its offerings of dance classes and parties for the new term. **Beginning West Coast Swing** - taught by a professional dance instructor, five week series starting Mon 2 Oct'00: \$20/series for undergraduates, \$30/series for others. The lessons will be held from 7:30 to 9:00 pm on Mon in the Winnett Lounge with a 1/2 hr. practice period after each lesson. Refreshments will be provided, and no partner is required. **Beginning Argentine Tango** - "Amateur" - taught, four week series starting Wed 4 Oct'00, free for undergraduates, \$1.00/lesson for others. The lessons will be held from 7:30 to 9:00 pm on Wed in the Winnett Lounge, with refreshments and a 1/2 hr. practice period after each lesson. Refreshments will be provided, and no partner is required.

For last minute changes see [its.caltech.edu/~ballroom](http://its.caltech.edu/~ballroom), or call Don at 626-791-3103

## EVENTS

The **Caltech Ballroom Dance Club** hosts a series of weekly "mini-parties", i.e., no lesson/demonstration or theme as done for the "regular" parties. The parties are free and take place in Winnett Lounge after each pro-taught class [West Coast Swing for the first half of the Fall'00 term and probably the Lindy for the

second half] on Mon from 9:00-11:00pm. Refreshments are provided and no partner is required. From 9:00 to 9:30pm music pertaining to the previous class will be played, but after 9:30pm feel free to make requests or bring your own music.

A Milonga [Argentine Dance Party], will be held 8:00-11:59 pm in Dabney Lounge Fri 20 Oct'00. The party is free, refreshments will be provided, and no partner is required. For last minute changes see [its.caltech.edu/~ballroom](http://its.caltech.edu/~ballroom), or call Don at 626-791-3103

### Science, Ethics, and Public Policy Lecture Series for Fall Quarter 2000:

Dr. Myles W. Jackson, Assistant Professor of the History of Science, Willamette University, The Standardization of Aesthetic Qualities: Physics and Music in Nineteenth-Century Germany, Thursday, November 9, 2000 4:00 p.m. Room 25 Baxter Building

The William and Myrtle Harris Distinguished Lectureship in Science and Civilization presents Dr. Peter Galison, Professor of the History of Science and of Physics, Harvard University, Poincare's Maps and Einstein's Clocks, Friday, December 1, 2000 4:00 p.m. Beckman Institute Auditorium

Seminars are on the Caltech campus and are open to the community at no charge. For information, contact Michelle Reinschmidt at (626) 395-4087 or [michelle@hss.caltech.edu](mailto:michelle@hss.caltech.edu). For a complete list of SEPP Seminars and Harris Lectures scheduled for this academic year visit our Website: <http://www.hss.caltech.edu/ses/SEPP.html>

Caltech author **Anna Kashina** will have a presentation and booksigning for her fantasy novel, "The Princess of Dhagabad", at the Caltech bookstore on Wednesday, November 1, at 5 pm. Come over to meet the author and get your books signed! Learn how a Ph.D. in biology can write and publish successfully in two languages! Bring your friends!

Caltech will be holding a local competition (tentatively scheduled on October 28th) to select team members for the **2000 ACM Southern California Programming Contest** on November 11. The top two teams there advance to the world final. Last year, a team from Caltech placed 9th at the world final. If you're interested, please email [rliu@ugcs.caltech.edu](mailto:rliu@ugcs.caltech.edu) for further information. To find out more about the ACM program-

ming contests, visit <http://acm.baylor.edu>.

The **Aero Association of Caltech** will hold its Fall membership meeting at 7:30 PM on Tuesday, November 14, in room 201 East Bridge. Featured speaker Dick Rutan will be presenting the topic of Adventure Is The Essence Of Life. Dick Rutan set a world record in his unrefueled, non-stop flight around the world in the Voyager aircraft in 1986. Rutan has also attempted to fly a balloon non-stop around the World in 1998, and more recently made a flight to the North Pole in May, which ended with the AN 2 aircraft breaking through the ice after landing at the North Pole and sinking into the Arctic Ocean.

Anyone interested in aviation, or in learning to fly is invited to attend the meeting. For more information about the club or the Fall Meeting, contact Elaine Ou at [ou@its.caltech.edu](mailto:ou@its.caltech.edu).

## SCHOLARSHIP

*The Financial Aid Office has applications and/or information on the following as well as additional undergraduate scholarships. All qualified students are encouraged to apply. Our office is located at 515 S. Wilson, second floor.*

\* The **AFCEA Copernicus Foundation** is offering a \$2,000 scholarship to eligible students working towards an undergraduate technology degree in the fields of computer engineering technology, computer information systems, and electronics engineering technology. Applicants must be enrolled full-time in a technology related curriculum at any four-year institution in the U.S., be a U.S. citizen, and be a sophomore or junior at the time of application. Special consideration will be given to military enlisted candidates. For further information regarding the AFCEA Copernicus Foundation Scholarship, you may contact: Norma Corrales at (703) 631-6149, e-mail [scholarship@afcea.org](mailto:scholarship@afcea.org), or visit their web site at [www.afcea.org](http://www.afcea.org). Entries must

be submitted to AFCEA Educational Foundation by November 1, 2000.

\***Green Hills Software** annually awards merit-based scholarships and fellowships to Caltech undergraduates who have demonstrated ability and special aptitude in computer science. The award for the junior year consists of a \$2,500 scholarship. The award for the senior year may consist of either a \$2,500 or \$5,000 scholarship. In addition, one or two applicants are invited to become Green Hills Fellows. Applicants should be second term sophomores with a GPA of 3.2 or higher. The selection criteria include programming ability, academic performance, and faculty and peer recommendations. To apply, applicants must submit an application form, current academic transcript, and three letters of recommendation, preferably from faculty or employers familiar with the student's work. Applications are available in the Financial Aid Office. Entries must be submitted to the Financial Aid Office by November 3, 2000.

\*The **Measurement Science Conference (MSC)** has established scholarships to students in an Engineering or Science or Quality Assurance degree program. The scholarship program places emphasis on papers or projects that discuss the advancement of measurement science technology.

Applicants must be U.S. citizens, have a overall grade point average of 3.2 or higher, completed at 24 units of upper division courses in Engineering or Science degree or five courses in a Masters Degree Program in Quality Assurance. Current members of the Measurement Science Conference Committee are ineligible for this scholarship award.

Also, applicants must be able to attend the Measurement Science Conference luncheon held on January 18, 2001, at the Disneyland Convention Center in Anaheim, California. Applications are available in the Financial Aid Office. For further information regarding MSC Scholarships, you may contact: Rick Careyyette, MSC

Scholarships Chairperson Teledyne Electronics Technologies, Marina del Rey Facility, 12964 Panama Street Los Angeles, CA 90066-6534. Entries must be submitted to Teledyne Electronics Technologies by December 1, 2000.

Entries must be submitted to AFCEA Educational Foundation by November 1, 2000.

Applications are available in the Financial Aid Office. Please send completed application materials to: National Academy for Nuclear Training, Scholarship Review Committee, P.O. Box 6302 Princeton, NJ 08541-6302. Entries must be submitted to the National Academy for Nuclear Training by February 1, 2001.

\* The **National Academy for Nuclear Training** is offering \$2,500 scholarships to eligible students majoring in nuclear engineering, power generation health physics electrical or mechanical engineering, or chemical engineering with nuclear or power option. Applicants must be U.S. Citizens, enrolled full-time in a four-year accredited institution, minimum GPA of 3.0 or higher, and interested in nuclear power careers. Additionally, scholarships will be renewed for current Academy scholars who maintain their eligibility. For further information on the National Academy Educational Assistance programs, please visit [www.nei.org](http://www.nei.org). Applications are available in the Financial Aid Office. Please send completed application materials to: National Academy for Nuclear Training, Scholarship Review Committee, P.O. Box 6302 Princeton, NJ 08541-6302. Entries must be submitted to the National Academy for Nuclear Training by February 1, 2001.

To submit an event for the Mints, contact [mints@ugcs.caltech.edu](mailto:mints@ugcs.caltech.edu) or mail your announcement to Caltech 40-58 Attn: Mints. Submission should be brief and concise. Email is preferred. The editor reserve the right to edit and abridge all material. Deadline is noon Wednesday. Unless specified, all mints will run for two weeks.

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