EE Reqs Changed

By Lily Wu

The option requirements in electrical engineering will be changed as of this September. The changes place greater emphasis on digital systems and require fewer specific courses for graduation.

The shift of emphasis from analog to digital courses is meant to reflect the new areas of development in electrical engineering and to take advantage of the digital specialization of the newer faculty members of the department.

For the undergraduate electrical engineering student, one less term of specific required classes provides more room for electives. The engineering classes also reflect a wider range of topics now.

Professor Andrew Buffington, senior research associate in physics at Caltech, said, “I look at the curriculum as a whole and try to make it as coherent as possible.”

For Sergay Mnatzakanian’s stack, the S. and M. Liberation Army took over a TWA 747.

Interview

Chairman on Caltech

By Lily Wu and Chris Meid

We interviewed Ray Stanton Avery, Chairman of the Board of Trustees of Caltech, two weeks ago so that we could find out exactly who he is.

Avery is Founder Chairman of Avery International, and $805 million corporation that he started in 1946 with his wife in downtown Los Angeles and $100. The company is now the world’s leading manufacturer of self-adhesive labels.

Avery is also Chairman of the Board of Trustees of the Huntington Library and is on the Board of Trustees of the Los Angeles County Museum of Art.

Chairman Avery: I have been trying to figure that out. I do have some perceptive of that. I think the best way to express it is that organizations are departmentalized of necessity, specialized, and are hierarchical in their structure. So there are territories of responsibility of individuals within the different groups that make up the campus or organization.

Everything tends to focus on the president because he is the apex of the pyramid, and you might say he is the ameliorating force that keeps everything peaceful if he can.

Then you have to say, “who looks at the president?” and that is the board of trustees. It has, you can’t really say a different point of view because they are both interested in the overall welfare of the organization, but we have different weights of responsibility. The president being very involved with the administrative and operational aspects and the trustees with how well that is done. An observer, not so much a supervisor, but an observer of the administration.

Then it takes a very broad view of the total interest of the Institute in the nation, in the society, in the world, and of course among rival institutions. However, you are competing for good professors. So the board is part of the structure, and a very useful part of the structure as aid to the president.

CM: Why did you become a trustee?
SA: Oh, I don’t know. I was Chairman of the Board of Trustees at the Claremont Colleges for nine years. One of the functions of their trustees in cooperation with the President is helping with reorganization, restructuring or growth problems, if you need them.

At Claremont that is a continuing thing because of the complexities of the relations between the colleges, I have had initiated two restructurings, each of which accomplished some things, and we had a third coming up. I felt that after having spearheaded two of those, people were going to get a little tired of my style and way of doing things.

I wasn’t disillusioned or anything there, but I felt I had done what I could to help that group of colleges grow and get along together, so I dropped off their board. When I did, Arnold Beckman who was Chairman of Caltech, invited me to join the Caltech board. One thing that always amused me was that my scholastic record was not especially good or impressive. Fortunately, they did not check on that.

Nonetheless, Caltech is the most stimulating environment you could ever dream of and I know it causes me to operate above my norm, and I think it has that effect on other people.

Directly on your question, in my opinion, in the business of living and doing things, I live as an individual in a very conceptual world. I don’t like detail, which a lot of managers

continued on page 10

Senior Ditch Day

Tuesday, Caltech undergraduates busied themselves with senior ditch day, 1984. The Tech received the following “Inside World” accounts of the day’s activities in the student houses.

Blacker

It was the night before Ditch Day, and all through the House you couldn’t hear anything except for the circular saw and drill and whatever the heck else they were using.

The seniors were coming back from the Pantry with great back swimming with stuff for bribes. And trying to look as if we or they really didn’t know when was Ditch Day, OK?

And then they all left by eight the next morning and we were awakened by an ominous horn blowing.

Well, the freshmen ran around and the sophomores ran around, and the juniors ran around and the freshmen ran around.

We solved lots of puzzles and riddles and did lots of fun things and ate lots of foods.

Each senior came back and asked about his stack and we said fine even though we were lion

Now the juniors are panicked ‘cause they know they’re gonna have to do the same tomorrow next year!

Dabney

Have you ever wondered where all the lights are on campus, or about the night habits of slugs, or about the relationship of Swiss chocolate to Ding Dong’s? Then you can have, and in different ways imparted this knowledge to the underclassmen in Dabney House.

Racer X

P.S. There are still points that can be earned in section 10 of this game. Note: No bribe, but the reward is the Tech.

P.P.S. Art is in the courtyard.

P.P.P.S. There is none.

Fleming

At 7:55 a.m. on Tuesday, as the seniors were making last minute adjustments in order to get the hell out of here, Jonathan made sure all were awake.

The Alley 4 east “pre-stack” was the first to go at around 12:30, leaving the upper 400 fairly well intact, Paul, and Eric, extremely clean.

Shors’ stack fell soon, and the boys were gone. Fleming’s was declined. Migno’s encoding was decoded shortly thereafter.

Who put the fish in my bed? Whoever and Jannine’s stacks came down soon as the bridges were not going to be denied. Kup, Tarik, and company led a crowd to the golden egg in the public of the most creative of them all.

Krehbiel wimmed out at 2:00, Villanov’s and Hays’ crossword was completed by a few dinosaur rockers, and Stewart’s “dream game” went off fairly well. Krehbiel’s getaway at 3:00 amazed everyone. After searching everything within 11 inches of Russ Nutter’s room, Derek found the map, the pool, and the key. Matt took notes for the next one. Sam, Kup, and Foxey to help break that stack; others were excited that we knew how to.

After working all day on Ahela and Remmer’s stack, Doug and Fossy’s room, and the most creative of them all.

Krehbiel’s return at 4:00 blew the entire house.

continued on page 6

Caltech Completes Successful HEIST

Caltech News Bureau

HEIST, the High Energy Isotope Spectrometer Telescope designed by Caltech physicists to gather unprecedented data on the heavy cosmic ray isotopes bombarding the solar system, has successfully completed its flight as scheduled over west Texas. Carried beneath a 17-million-cubic-foot balloon, the 2,600-pound detector lifted off from the NASA National Scientific Ballon Test Facility in Palestine, Texas, at 5:18 pm. Pacific Daylight Time, on May 13. After a flight of 41 hours, 38 hours of it spent at operational altitude, the experiment was completed at 10:04 am PDT on Tuesday, May 15. The instrument package reached a maximum altitude of about 120,000 feet (approximately 23 miles) and drifted about 250 miles from the launch site.

HEIST, which was constructed by Caltech’s Central Engineering Services, appeared to perform excellently, according to Caltech Senior Scientist Steven Schindler, although full analysis of the data will take several months. Other scientists involved in the project include Andrew Buffington, senior research associate in physics at Caltech; C. Stone, Caltech professor of physics and chairman of the Institute’s Division of Physics, Mathematics and Astronomy, and J. R. Rasmussen of the Danish Space Research Institute.

The Caltech scientists hope that HEIST signals and new insights into the age of cosmic rays—high-energy atomic nuclei streaming from the galactic material they have encountered in their millions of years of travel through the Milky Way. For instance, the radioactive isotopes of such heavy elements as aluminum, calcium, and iron can function as cosmic ray “clocks,” to measure how long cosmic rays have been streaming through space. Isotopes are atoms of the same chemical element, that differ only in their mass.

Information provided by HEIST could also help resolve the question of whether cosmic rays are created by exploding stars—supernovas—or by smaller events. It could also have caught up in the hurricane-like shock wave of a supernova as it sweeps through space.

With its inaugural voyage successfully completed, HEIST will go into a long period of space shuttle. The Caltech project is supported by NASA.
from page 1
and chairmen and presidents do. One time I contracted tuberculosis and was in bed for several months. My life was almost as active in bed as when I was standing up, because I was daydreaming of things and formulating—which is related to what you do as Chairman of the Board of Trustees. You're dealing with the larger picture and that's what I tend to do, and what I enjoy doing, and what is needed in the trustee function.

You've got to avoid, insofar as you can, getting involved in the nuts and bolts in the administration's daily run of things. As I said, that becomes confusing. People think they have two bosses; who should they listen to, the Chairman or the President?

SA: Very informally, of course, the trustees and presidents should know enough people

“there is no intentional tradition about hiring a physicist that I'm aware of,” and circulate enough to get some sense of how well things are going, whether there are problems. It's also very much up to the president to keep the chairman advised of things that he wouldn't know otherwise.

LILY WU: Isn't that one of the most important duties of the trustees, to pick a president when one is needed? What specifically were you looking for when you picked a few years ago?

SA: Yes. Let me first say, there is no intentional tradition about hiring a physicist that I'm aware of. The sciences can produce broad based people, or narrow based people, and so with the president, and I don't think the physicist will be too bad. Things will not always be perfect at all times, but that shouldn't be surprising and stimulating. CM: So do you have a weekly contact with the president?

SA: No, I have no scheduled contacts, no. It might not be a bad idea to have monthly or weekly sit-down talks. We've simply not fallen into that pattern. And I feel that the best relationship is informal. If things are all right, then as Reagan says, “if it ain't broke, don't fix it.”

CM: Does the president mainly speak to you, and then forward to the other trustees?

SA: It can go both ways. The president is so intertwined with everything that he has to communicate with the trustees. The chairman might go to the board, but if the chairman would communicate with the professors or the administration. The President there, and the Secretary of the Board is part of the administration. The Financial Officer isn't really there.

“The hardest money to raise is the general fund, the endowment, because people have the feeling you're just asking for money,”

Paul Filmer and Eliza Sutton received the Noland Leadership Award at a dinner in the Athenaeum on Thursday evening, May 10th. Each was received a check for $5,000 and the congratulations of Robert Noland and several of his former associates at the AMETEK Corporation.

The awards are funded by AMETEK, a leading manufacturer of microelectronics, and Robert Noland, a Caltech alumnus.

The major criterion of the award is the ability of a particular awardee to show potential contributions in leadership and to stimulate leadership qualities in others to the maximum possible extent. AMETEK feels that “Leadership is exemplified by the unique ability of a particular individual to select and develop from among qualified individuals a person or an industrial organization those individuals who can assume the responsibilities of managerial skills which is essential to the leadership and success of the organization."

“Without such leadership and development of proper persons and the stimulation of others, there will be stagnation in the industry and we can contribute to its eventual failure. With this leadership and development of proper persons, in industrial firms and institutions will grow and prosper, making a major contribution to our American social and economic structure.”

Paul Filmer receives the Noland Leadership Award because of the way in which he takes on responsibility for specific tasks and completes them in a very capable and responsible manner. He spent tireless hours as ASCIT treasurer. Their success has been in great disarray when he began. He was able to arrange the books and reorganize the system so they will be kept up-to-date.

He took a leading role during the Faculty-Student Conference, co-originator of one of the sessions on Humanities and Social Sciences. His careful analysis of the problems associated with this subject provided an excellent session. Filmer works quietly in our background engineering changes. He has also been active in fencing, wrestling, and cricket.

Eliza Sutton has been chosen for the Noland Leadership Award because of her outstanding contributions over several years, and especially because of her leadership on the Board of Control. She is respected by many for her clear thinking and her thorough, competent manner. Sutton organized several discussions in the Student Houses about the system and the Board of Control. She co-organized the Faculty-Student Conference discussion on graduate-undergraduate relations this year.

Sutton has been active in women's sporting activities. Thoroughly had been the Underclass Admissions Committee. She is able to balance her many extra-curricular activities with excellent academics.

We've been doing a very good job in the way which Miss Noland has been spearheading. We have a special presentation by some of our guests on Thursday meeting and that's always very stimulating.

CM: On campus, the President takes care of things. But off campus, to the community, is the image more important, then?

SA: In a sense, yes. Structurally, the President serves at the will of the trustees. That is, he is found and employed by the trustees. I think the public knows that. It isn't a matter of dominance in a simple sense of either one over the other. They've got to have each other or you don't have a full organization.

CM: So do the trustees spend most of their time trying to get money for Caltech?

SA: They should be helpful. They would feel very responsible for that.

Filmer and Sutton Win Noland

The Provost is always continued on page 3

SURFs and plans to attend graduate school next year on a National Science Foundation Fellowship.

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The Gadfly .............. Lily Wu
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You're as busy as a bee when you're working on the student newspaper. You've got to see that the deadlines are met, that there are no editing errors, that the copy is legible, and that the newspaper looks good.
Avery Discusses Fundraising for Caltech

from page 2

W: When you talk about rais­
ing funds, do you raise them for specific projects or just in gen­eral? And if it is for specific projects, what kind of projects are the easiest to raise funds for? Because they are not strictly related to the well-being of the Institute.

A: You do both. The hardest money to raise is the general fund, the endowment, because people have the feeling you're just asking for money. It's not easy. Money comes more readily when you build a building which is then called so-and-so, or a professorship which is named so-and-so, and that's necessary.

Then on special projects, right now we are talking about this thirty meter telescope in conjunction with UC, for which we need to raise twenty-five million dollars. I don't know how we're going to raise that. That's a highly specialized project and one that's very important to the future of Caltech. So we're mobilizing.

But to show you the com­plexity of it, you have to do that without subtracting funds from something else. In this case, it is a search for some group or groups or an in­dividual who are especially in­

R, Stanton Avery

“We've always been concerned about the effects of classified work on the scientific mode of thinking and exchange of information.”

terested in that and who might not give otherwise. But endow­ment is the most difficult to in­crease because it is sort of anonymous.

W: Aren't non-research type projects, student centers or athletic facilities, difficult to raise funds for? Because they are not strictly related to the well-being of the Institute?

A: They are. In the beginning, they were. I think that's why Caltech enlarged its board to the size that it is, so we could get diversity in the members—which you are bound to get when you have 45.

SA: Insofar as they are able, they should help financially themselves, and they should encourage others to give. They do serve on fund raising subcommittees to help the President and others get money for the Institute. That's a very important func­tion. But they are not necessarily chosen for that. Some people make a great con­tribution who are not par­ticularly wealthy people or con­nected with wealth. I think that's why Caltech enlarged its board to the size that it is, so we could get diversity in the members—which you are bound to get when you have 45.

LW: How do the priorities fall?

SA: It's a very important func­tion. But they are not necessarily chosen for that. Some people make a great con­tribution who are not par­ticularly wealthy people or con­nected with wealth. I think that's why Caltech enlarged its board to the size that it is, so we could get diversity in the members—which you are bound to get when you have 45.

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SA: If you serve on fund raising subcommittees, what kind of projects would you encourage others to give?

LW: I suppose we could get diversity in the membership who are not par­ticularly wealthy people or con­nected with wealth. I think that's why Caltech enlarged its board to the size that it is, so we could get diversity in the members—which you are bound to get when you have 45.

LW: Why does Caltech have a fund raising subcommittee?

A: They are for the good of the Insti­tute. And they are, each in his or her own way.

It gets into this area that I mentioned earlier of the delicate point, where if the trustees inject themselves too far or too frequently or too in­timidating, people wonder who should be listened to. So it's necessary that the trustees not be too visible or too active.

They've also got to know what's going on and the way to handle that is to use advisory committees like the JPL ad­visory committee which is in­terested in the relationship be­tween JPL and Caltech. They do a real good job, do not in­terfere with the administrative day to day running and can be extremely helpful.

So, the visiting committees in the different departments, some are better than others of course, some are more active than others, are another window, which is helpful and not ob­trusive. Those are some of the mechanisms that are used to make the whole thing into a whole and give specialized at­tention to the parts, but not erode the position of the ad­ministration.

CM: The trustees work with Caltech. Does that include JPL?

SA: Yes and no. JPL has no Board as such, but there is a trustee committee which is assigned that responsibility.

LW: But does that come up very often?

SA: No, that would be in serious situations only.

LW: Do the trustees actually try to dampen Caltech publicity?

SA: There are the Brauns gave. They've always been concerned about the effects of classified work on the scientific mode of thinking and exchange of information.

Though they are things that students in particular would like to have.

SA: Right. There are the new athletic facilities which you have which the Brauns gave. The Brauns have been ex­ceedingly generous to Caltech and have been very thoughtful. You need that sort of help.

Fundraising is, well, let's say opportunistic. You try to build a board or a public that is supportive, and then, as you say at Caltech, work the prob­lem.

CM: Do the trustees actually try to dampen Caltech's publicity?

SA: I've never been aware of that. No.

CM: I was just curious because I've never been aware of that.

SA: I'm sure that is true; that it's almost threatening to have someone in the background who is powerful as well as unknown. You almost have to accept them on faith, that they are self-serving, that they are for the good of the Insti­tute. And they are, each in his or her own way.

It gets into this area that I mentioned earlier of the delicate point, where if the trustees inject themselves too far or too frequently or too in­timidating, people wonder who should be listened to. So it's necessary that the trustees not be too visible or too active.

They've also got to know what's going on and the way to handle that is to use advisory committees like the JPL ad­visory committee which is in­terested in the relationship be­tween JPL and Caltech. They do a real good job, do not in­terfere with the administrative day to day running and can be extremely helpful.

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CM: The trustees work with Caltech. Does that include JPL?

SA: Yes and no. JPL has no Board as such, but there is a trustee committee which is assigned that responsibility.

LW: What sort of a suit?

SA: A suit is pending, how do they know such crises oc­curred?

LW: Well, the Arroyo Center question was almost as disturb­ing as anything that has occurred while I've been chairman.

LW: I've been on the Board for a little over ten years, and I'd say the success of the Board or the Chairman and the President can be measured by whether anything happens or not. "If it ain't broke, don't fix it"—but at the same time be aware that things can go wrong and the Board is the ultimate straightener-out if serious problems come up.

LW: But if something like a suit comes up, who ends up being sued? Does Caltech, the ad­ministration, or the trustees feel itself being responsible in that case?

LW: What sort of a suit?

B. C.:

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Movie Review

Indiana Returns

By Lily Wa

Aside from the plot, there was nothing at all to indicate that a special preview would be showing of the movie of the summer of '84. There were no announcements and no press coverage, but an hour before the show, hundreds were lined up with preview tickets hidden somewhere on their person. No one uttered a word of excitement, as if seeing previews were all they ever did.

Once inside the anonymity of the dark theater, everyone ran for a seat, hugging their popcorn, waiting for Indiana Jones to return.

This movie is full of short suspenseful sequences like the one that opened Raiders of the Lost Ark, where Indiana Jones entered a cave to obtain a figure and, just as you'd had your hair standing set-backs and all seemed to be well, director Spielberg would introduce yet another Raiders, but the price for it was a skimpier plot.

Lost on his way between nowhere and New Delhi, archaeologist Jones, played by Harrison Ford, is asked by a village shaman to stop over at the Temple of Bankot to reclaim the village's children and fortune.

The shaman explains that right after their sacred rock was taken, the village was struck with drought and famine. In addition, one evening all the children were kidnapped and taken to the Temple.

Unlike in Raiders, where Indiana's motivations were purely for his own fame and glory, he chooses to go on this venture to help the village. As in the Star Wars trilogy, writer George Lucas tends to mellow out his characters' rough edges in successive sequels.

Accompanying him on his adventure is a cute urchin Indiana picked up in Shanghai named Short Round and a reluctant night club singer, played by Kate Capshaw, who whines and complains for the whole trip.

All in all, the film is very well put together and the viewer is guaranteed to have fun. Lapses of credibility that the plot may suffer from are forgiven and forgotten amid the color and thrill of this film.

Dyson on MAD Nuclear Policies

by Matt Swass

Freeman Dyson, author of Weapons and Hope, was the guest at one of the Caltech's noon discussion series. The discussion was well received, with more than one hundred members of the Caltech community attending.

Dyson is a physicist at the Institute for Advanced Studies at Princeton. His career has spanned many fields, from radio astronomy to arms control. He presents some unique views on contemporary arms control issues.

He began his discussion by asserting that atomic bombs aren't useful as weapons and are over-rated. He posed a counter factual question: Suppose the axis powers, in 1943, had perfected an atomic bomb. Would they have won? Dyson says probably not—they might even have lost more quickly, if anything.

Dyson stated that the current policy of Mutually Assured Destruction (MAD) raises the moral indignation of many people. In many cases, the government prefers MAD because it is believed to be more stable than the proposed alternatives. In the long run, it would be more desirable to switch to a new defense concept, one which gives people more hope.

The problem is a multifaceted one, as was reflected in the discussion. The problems encountered today stem from many sources. One is the belief that treaties have to be completely verifiable in order to be any good. Another is that current treaties don't take into account the Soviet point of view adequately. One last is the view that if arms reductions talk is successful, and weapons stockpiles are eliminated, the country that reneges on the agreement and hides a few weapons will have a great advantage.

This gets back to the counter factual question posed earlier—would a few weapons make all that much difference? Dyson says no, because one needs a complex delivery system and support system to be able to use nuclear weapons, and the task of hiding these is too difficult to be successful.

Given that the current policy of MAD isn't very satisfactory, Dyson suggests alternative concepts, some of which he lists in his book. They range from "Nonviolent resistance" to "Non-nuclear resistance" to "Defense unlimited."

The "Defense unlimited" alternative concept is essentially the same as the Reagan Administration's Strategic Defense Initiative, and this caused Dyson a little embarrassment at the discussion, as well as generating some confusion among the participants.

Dyson only wished to point out that some of these alternative ideas have a stronger moral appeal than does MAD, and so would probably make for a better, more hopeful future.

The Caltech Y Fly-by

Friday... May 18

Music Concert—"Rush Hour," Mellow Jazz. Presented by our own Suzy Blue.

Monday... May 21

"After 300 years, a new gravity equation," Dr. Lawrence Boren. Is this guy for real? Come to the Y Lounge at noon and see. (Rescheduled from Tuesday, May 15.)

"Celebration of Andrzej Sakharov," Danby Lounge, 8 pm, co-sponsored by The Y.

Tuesday... May 22

Noon Update, "Uranus," David Stevenson. Winnett Clubroom 1. Bring a lunch and a friend. (Normally on Wednesday.)

"From Russia With Slides and Photos," What is really like? Find out from some Techers who went there over spring break. Winnett Lounge, 8 pm.

Wednesday... May 23

"Coercion or Persuasion: A Theology for the Nuclear Age," Claremont Professor David Griffin. Winnett Lounge, noon.

"The Cold and the Dark: The Ecology of Nuclear War," Paul Ehrlich, a Weingart distinguished Speaker. 7:30 pm, Beckman.

For more information, contact the Caltech Y office at 356-6183, or just drop in.

Winnett: Student Center held a full house for Freeman Dyson's talk on Nuclear Weapons. Photo by Huston Horn

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THE CALIFORNIA TECH / FRIDAY, MAY 18, 1984
Problems Troubleshooting

from page 3

Caltech for unfair practices. Wouldn't, in cases like that, the trustees be very concerned about:

SA: We would be ultimately responsible and would have to be sure that we were defended as best as possible and things were straightened out if they needed to be.

Are you thinking of liability?

LW: That sort of thing.

SA: Well, for instance in genetic engineering, if something jumped out of the test tubes; we worry about that sort of thing. Wherever there is a crucial issue the Board is involved. At the same time, it's its duty to see that there are no crucial issues, if it possibly can.

LW: What specific aspect of that Arroyo issue concerned you the most? Was it that Caltech was politically involved with classified research or was it just that only as sort of a threatening schism or emotionally loaded thing as far as people were concerned?

SA: Oh, I wasn't thinking in terms of judgment on the merits of the question or assignment of blame. I was just thinking that that only as sort of a threatening schism or emotionally loaded thing as far as the people involved were concerned. I'd say from a Board standpoint, you almost have to deal with it as a moment of tension which should be ameliorated or should be resolved. The clarity of an ethical position or judgment just isn't there in any group, unless it's a specialist in that field who is focusing on that point.

But I'm very interested in your raising the question in that way because I come from a minister's family and ethics and morality and those things I know have been tremendously important in my business life.

CM: Can the Board of Trustees actually shut down a project, like a classified research project at JPL or something like that?

SA: If you express it that way, I would say no. In fact, if you talked to the Board or the administration, they would tell you that that would never happen. It would be too difficult. It would be complex.

CM: Was there something that went wrong in the communica­
tions between the trustees and the administration?

SA: The communication was not good. The level of commu­nication in that case. The board authorized it. It was presented by the administration. We discussed it. We knew it was a sensitive subject and it was authorized, and then fell apart. That's the disturbing part of it. I'd say from a Board point of view, I don't want to point fingers in any direction, but that's what made it stressful.

CM: So does the board now keep a closer eye on things, such as classified research, defense-related work?

SA: We've always been concerned about the effects of classified work on the scientific aspects or the scientific mode of thinking and exchange of information. It's been our desire to keep that at a minimum for that reason. It's intrusive as far as the scientific and pure research are concerned. At the same time, of course, you can't do the best research in a vacuum either. Where do you do it? We all live in a real world, so classified work itself isn't...Well, the limitation on non-classified work is that it's classified. It's sort of stymied because of that, and yet, that would've been some level of secrecy.

CM: What is the Board of Trustees actually doing now, an investigation because of the JPL issue?

SA: If you express it that way, I would say no. In fact, if you talked to the Board or the administration, they would tell you that that would never happen. It would be too difficult. It would be complex.

CM: What are you referring to the Arroyo community who would be responsible for stopping some project?

SA: The person who could, within his or her responsibilities would be the president. As every president has his own style of doing the job, you might have a president who would be inclined that way. I don't think that's the best way myself, but it could. If he did and the board didn't agree with him, that might create a very serious situation, so I think he would be unlikely to opt for a certainly thoughtless decision.

SA: When I say that, I don't mean to say that the president would be the only one that would be the one to make a decision, but that's how it's presented.

CM: How heavily do the ethics of the question weigh?

SA: Are you referring to the Arroyo Center or anything?

CM: Ah, I mean the Arroyo Center.

SA: It's sort of peculiar that, from what I gather, the ethics of the question hardly even enter in. It's just merely the fact that a controversy exists. How heavily do the ethics of the question weigh?

SA: That's a very good point. If you have unanimity on the Board or on the administration that this is unethical, then that would be that. Being the open society that we are, there normally isn't the same level of concern or agreement on whether it is even an ethical problem or a moral problem or a practical problem.

I think you're right that from an administrative standpoint, you almost have to deal with it's its duty to see that there are no crucial issues, if it possibly can.

The Arroyo Center was actually shut down a project, like a classified research project at JPL or something like that?

Otherwise it's its duty to see that there are no crucial issues, if it possibly can.

The concern or agreement on whether it is even an ethical problem or a moral problem or a practical problem.

What specific aspect of that Arroyo issue concerned you the most? Was it that Caltech was politically involved with classified research or was it just that only as sort of a threatening schism or emotionally loaded thing as far as people were concerned.

I'm very interested in your raising the question in that way because I come from a minister's family and ethics and morality and those things I know have been tremendously important in my business life.

LW: With the Arroyo question, it seemed more the issue that a controversy which shook the Institute was raised, rather than an issue of whether the Institute should be involved in classified research.

CM: Sometimes it's good that questions like that come out in the open and shake institutions because they are very important questions. Is it right or desirable to conduct research for defense purposes?

SA: Well as I say, the problem in dealing with this is what's one man's meat is another man's poison. People feel very strongly on both sides of an ethical issue.

In the middle of the Chapel ceremony, one of the standard pranks was to have a bag of flour in the ventilation system with an alarm clock. In the middle of the talk, the alarm clock would tip the flour over and the flour would be blown out all over the stage.

There were people who thought that was pretty irrelevant. And finally they did away with compulsory Chapel. It was sort of a form of protest, I guess, I think there should be wide tolerance with students.

EAT BEEF BOWL

It Will Suit You To a Tee (Shirt)

Come to the Beef Bowl Grand Opening in Pasadena and your $5.00 donation to the American Heart Association will get you a free Beef Bowl Tee-shirt - done in the latest pastel colors (or black) with white writing...The Grand Opening Celebration will also have music and dancing prizes, a celebrity look-alike photo session, sophomore silly and social performance by the L.A. City Rockers - the hottest break-danc­ing group in the country!! All proceeds will be donated to the American Heart Association so come join in the fun while you join in the fight against heart disease.

It's all happening Friday, May 18 from 1 - 6 pm at 1441 East Colorado Blvd. in Pasadena, right across from Pasadena City College.

I ♥ Beef Bowl
Tomorrow is Today; Students

from page 1

4:00 was an unlucky one, he then visited the Ath before receiving the grand tour. Sport's stack was broken with 10 minutes to go, but he still doesn't know why. The two girls who had been in, Non Senior trivia quiz was too different for the many who tried, and Child's clues disappeared, these were the only two which survived.

Al Fansome

Ricketts

News Flash: Ditch Day is not tomorrow! That's right, it happened again and again. The only way to make out the bodies was by tremendous sugar & food overdose. Fortunately, there are glorious stacks and little styrofoam beans everywhere, right Dave? We had many stacks this year and there was always something to be done throughout the day. For the athletically inclined there was Frisbee golf (twice), gymnastics, aerobics, tennis ball and water balloon throwing, as well as softball with Fleming. For those more cerebral-inclined there was Ed Suranyi's cryptography/airline/geography stack, Evan's Godfatherism, and many crossword puzzles and riddles to be solved. Ditch Day is also a day of special fondness especially thanks to Hiram's hugging stack. Special congratulations to Stan and Minami, the second couple to tie the knot this year, I can't wait till the pictures come back. Anyone who's seen Dave's furniture please tell one of those undercover types hanging around the campus lately.

Bob

Ruddock

Well, tomorrow finally dawned last Tuesday, much to the underclassmen's feigned surprise. So at 8 a.m. we were all awake, hair piled on, and undressed (thanks to Evan), ready to crack open some stacks.

Things were pretty congested up in Alley 4, where there were three stacks side by side. The Meixner/Michelson stack involved tracking down that international terrorist Mr. Cow—who it turned out had been dead three years, killed by Prof Ellenbeck. That stack was the first real stack to break. Next door, Cromwell showed us what a day in the life of a chemist was like. Lots of chemistry, but it had its rewards. And Mahanty, Marvil, and McDowell had the underclassmen build a metal Frankenstein that tried (but failed) to bash open the door.

Meanwhile, Swanson, Schloen, and Donnelly linked their stacks which involved a treasure hunt using given directions. The stack culminated in a hike up Echo Mountain—unfortunately, the hikers got back too late to crack open the box before the deadline.

Katz and the Stassens had an intricate logic stack where ten little black boxes had to be correctly arranged to show the location of the room key. Behind that door was lots of very good food (so I hear—I got down there a little too late).

Fong and Lau also linked their stack—people were sent all over the place—the zoo, the beach, wherever, and finally collect the clues for how to wire up the electronic boxes so the doors would open.

Anderson and Sorenson teamed up on a C-type stack were a bit code had to be figured out to enter the room. The stack was broken into with very little time left, and the counterstacker only had time for a quick rearrangement of the wiring. Oh well.

Powerful Dave had a D-Day stack in honor of the 40th anniversary of D-Day. After following some rather literary clues, people were supposed to "conquer" certain cities on the map of France on his floor with a radio controlled tank, but the stack was never broken. Oh well.

And of course Ditch Day wouldn't be Ditch Day without a Purple Gap Room stack—this year courtesy of our friend Zobel. Zobel sent us on a video tape hunt—part of the time on skates, part of the time a phone chase a la Dirty Harry.

There wasn't a whole lot of counterstacking, due partly to not being able to get into a lot of rooms because of stack failures, and also due to the nice brises left behind, such as food, beer, white russians, and other fine consumables. All around, it was a pretty good holiday.

Page

The final score read "Seniors: 4, Underclassmen: 6." I'm not going to speculate about the supposed superiority of the seniors, but I think the score is indicative.

Mike Terepka and Dave Chavez had the most ambitious stack, but tomorrow came sooner than they thought. Instead of being opened by manipulating laser beams with mirrors, the door was opened by connecting two wires found hanging outside the window. It was counter-stacked by actually using the laser, splitters, and mirrors. The two seniors had to retrieve some of these parts from the bottom of a mug full of alcohol.

Honor stacks were popular this year. People were seen skipping from the Ath in bathrobes, serenading girls with Johnny Cash songs, going to adult book stores in drag, washing cars, vacuuming rooms, writing essays about today's morals, and drinking bottles of vodka.

Ken Hui's and Phu Nguyen's stack consisted of driving a radio-controlled tank through a maze in order to retrieve a key. Although parts of the maze were hidden from view, it was broken with the aid of a mirror and stick.

The stack of Erik Fernandez and company was called "The Severity Stack." By performing certain acts, people could earn money with which to buy imaginary air flights. The object of the stack was to visit certain cities around the world.

The stack of Joe Lee and Steve Baxter gave Page people the chance to complete a crossword puzzle, sample exotic Chinese delicacies, and scurry around campus. Much to the chagrin of the underclassmen, the key to the room was hidden inches away in a light.

Other stacks included the chess game idea of Hank Ev- ing, Dave Hawley, Jim Determan, and Mark Waggoner. Next door, people were busily collecting old Time magazine covers for the stack of Mark Marley. J.R. Page's ingenious stack had Ed Zanelli building a parking lot in the space south of Page House. Brad Brock's consisted of solving math problems (of course!). Eliza Sut- ten's stack also involved math.

Rudds dance on the Ath lawn to the beat of John Fong's stack.

Photo by Min Su Yun

The BOC comes under fire from Marit Jentoft-Nilsen of Flemming House.

Photo by Min Su Yun

Senior Han Toh captured by Page dudes and handcuffed to a tree for the day.

Photo by Min Su Yun

Lloyd seniors reveal their true identities for counterstack.

Photo by Min Su Yun

CONTRIBUTED PHOTO
Scramble to Solve Stacks

Underclassmen were supposed to plug in values into a complex formula and get the combinations to padlocks attached to the door. Asad Khan's stack, which was broken using the unconventional method of snipping wires, had people hypnotized by seemingly random patterns of LEDs. Dan Davis sent frosh running to plug in values into a complex formula and get the combination to the door. Asad Khan's stack was hypnotized by seemingly random patterns of LEDs.

Lloyd

Ted Williams' Ditch Day stack involved several facets of his life at Caltech. Questions and activities involving holography, the Bible, Tau Beta Pi, electronics, and, of course, the Rose Bowl, along with an activity involving a "SWAT" team, made this an 8 a.m. to 4:59:30 stack. Memorable incidents included several secretaries trying to ponder the infernal question "How should wimps talk to a computer?", the sight of a banner criticizing the Pasadena DA in City Hall, an unreadable hologram, wonderful timed clues, impossible trivia questions whose answers were correctly guessed, "efficient" driving, and Ted looking into his room just seconds after we had entered.

Sally Rigden, or Resident Australian, left us with a set of timed envelopes which contained four photographs and several clues. Each picture lead us to an Australian on campus, who gave us a bag of ingredients. With the ingredients, we had to prepare an Australian dessert, which we then took back to the person who gave us an envelope containing parts of a picture.

After concocting Lamingtons, a Pavlova, and pumpkin scones, we had enough of the picture to begin the search for the man who had Sally's key. We found him and entered the apartment around 2:30.

The counterstack team arranged for a eucalyptus tree and stuffed koalas. Unfortunately, the man with the walabyy flaked out, so we had to settle for a nice dinner.

Sergay's stack revolved around five favorite themes of the ex-president. Planes—he got the underclassmen to play hijackers in the cockpit of a 747. The feat took quite a bit of doing. Many congratulations to Yosifli, Miles, and Dave.

Food—Sergay challenged three underclassmen to finish a Super Anietiios El Zapato burrito and three hot fudge sundaes. He also had them send Ernie Cohen some Bill's Chicken and Ken Rozendal a Tommy's Burger. (Both of these former Loydies are at UT Austin.)

Photography—Sergay decided to be artistic, so he got three frosh to pose next to the UCLA and USC signs. The only catch was that they had to moon the poor things.

Loyd

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Photography—Sergay decided to be artistic, so he got three frosh to pose next to the UCLA and USC signs. The only catch was that they had to moon the poor things.

CARS—Pictures of silhouette-ttes of cars had to be found in various Pasadena phone booths. The first letter of the make of each car was part of a clue to the location of the hidden key. Also, Bob Shore's '76 Pinto, "Sir Isaac", had to be moved to his residence on Michigan.

The key was finally found at Paradise Cove and rushed back to campus...just in time!

Scott Paine and Mehrdad Hagh's stack was designed with the diverse underclassmen in mind. Seven tasks needed to be performed, each of which yielded a seven digit number, forming the rows of a 7 by 7 magic square.

One of the columns was the phone number for the professor who had our key. The tasks included everything from breaking seven concrete blocks to find one number, to finding 5-micron thick digits etched in a 500 angstrom gold film, to whisking a Vivaldi concerto, to factoring a 42 digit number.

None of these tested the wits and skills of the underclassmen as much, though, as finding a way of asking tens of professors if "they had had a banana today" without looking too silly.
Interhouse Football Begins

by Ath Man at Large

This year's Interhouse Football season in full swing, and it appears that Page and Fleming will contend for top honors, although Ruddock will have a shot at the top spot when they play Fleming later in the season.

Fleming opened the season with a bang by defeating Page, 26–7, last Friday. The Flems lead on touchdown passes from Phil Scott to Mike Burl from the Page end zone, the play covering more than 70 yards.

In other games so far, Lloyd defeated Ricketts, 20–0, and Page stopped penalty-prone Blacker 13–0. There should be plenty of exciting action today and next week, so come out and watch.

Caltech Choral Groups Perform

By Jung Im

An all-Caltech production of Gilbert and Sullivan's musical, Trial by Jury, and the best from the much publicized Glee Clubs' spring tours will highlight this year's annual home concert at 8 p.m. this Saturday in Beckman Auditorium.

Joining the Glee Clubs will be our chamber singers, Men's barbershop quartet, and the new women's sextet. Shutz's Psalm 100 opens the program, followed by madrigals, spring songs, and works by Gounod, Rossini, and Ives.

The concert will conclude with the traditional "Salvation Belongeth to Our God," by Tchenkovich and the Caltech Alma Mater, followed by a reception at Dabney Hall.

This Saturday should be one of the most artistic events Caltech has had this year. For information regarding the concert, call the Caltech Ticket Office at x4652.
Bylaws Changes Proposed

Following are proposed Amendments to the Bylaws of ASCIT, to be voted on Friday, May 25th:

1. Nominations Procedures.

Section XI. Nominations:

(a) The Board of Directors shall have the responsibility to select the candidates for the Executive Officers. The Board shall be notified by the Secretary immediately prior to the election containing a complete list of nominated candidates and any statements the candidates may wish to make. (PROPOSED CHANGE: Insert between first and second sentences) 

(b) For a nomination to be valid, the nominee must be a current ASCIT member.

2. Recognition of Organizations

Section XI. Official Recognition of Campus Organizations:

(a) The college has the responsibility to select and approve valid nominations for recognition to the ASCIT. (PROPOSED CHANGE: Insert between first and second sentences) 

(b) All nominations must be given to the ASCIT for official recognition, a campus organization must submit a petition to the ASCIT and receive official recognition, and the ASCIT shall then be responsible for the organization to serve as a recognized student organization.

(c) The Board of Directors shall have the responsibility to select the candidates for the Executive Officers. The Board shall be notified by the Secretary immediately prior to the election containing a complete list of nominated candidates and any statements the candidates may wish to make.

3. Publications and Commissions

Section XIV. Articles of ASCIT:

(a) The Editor will receive a salary of one hundred dollars ($100) with a possible bonus of one-hundred dollars ($100). The Business Manager will receive a commission of 15% on all advertising sold and paid for.

(b) The Editor will receive a salary of one hundred dollars ($100) with a possible bonus of one-hundred dollars ($100). The Business Manager will receive a commission of 15% on all advertising sold and paid for.

4. Voting Procedures

Section VIII. Procedures:

(a) A voter circle shall be the preferred candidate and/or cross out the least preferred candidates. The amendment deletes "or writes in." There should be no write-in in the final election. The first election super- 

5. The Inside World

Title: Let's see, uh. Not much. Seniors pulled a brilliant fake ditch day. Foolled nearly every single person on campus, but still, nothing. It's Wednesday and Face it, there are three.

The Inside World

(2) From the Stellar.

Title: As usual, no entry.

The Inside World

(3) From the Stellar.

Title: No entry.

The Inside World

(4) From the Stellar.

Title: Page has been quite an eventful week. Last Saturday, junior comedians were replaced through a rousing game of Flag. One team was last reported following a mysterious tip to Argentina. Unfortunately, this included half of our Ultimate Debutantes team. Page posted its first win of the Intershore football season. The Rudds (a cheerleaders and half-time entertainment) fell to an integrated Page squad. Phil Scott lead the attack as QB. Ed Felten snagged a crucial interception to stop the drive. The final score was 26-7. This was despite the absence of star running back.

Title: No entry.

The Inside World

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Stay cover'd for Summer

By Janice Ramaeker
Health Center

It’s summertime and the livin’ is easy. We head to the beach to bask in the sun in search of a good healthy tan. But that healthy tan is truly a sign of unhealthy, damaged skin.

The sun sets us up for wrinkles, sagging, discoloration, dryness, solar keratoses (warty growths) and skin cancer much earlier in our life than expected. Even though a tan is flattering, the exposure to the sun is damaging and most times only corrected with surgery.

Sun screens can put an effective barrier between you and the sun, reducing the amount of UV that is allowed to penetrate. There are two basic types of sunscreens used: chemical absorbers and physical reflectors. Reflective-type sunscreens protect the applied area by scattering the rays. They contain titanium dioxide or zinc oxide, or red, yellow or brown iron oxides. Application of this type of sunscreen must be spread evenly and reapplied frequently.

Chemical absorbers’ main ingredients are PABA, PABA derivatives and benzophenines and its derivatives; PABA filters UV-B, the benzophenines absorb UV-A. These screens are more popular than reflective-type because the active chemicals can be mixed with lotions and creams. There can be some drawbacks with these screens, fabric staining, skin irritations and allergic reactions.

Sunscreens are rated (sun protection factor) by the amount of protection they provide against sunburn. The higher the SPF, the greater your protection. Your choice of what SPF to use should depend on your skin type, the season, the time of day you are outdoors and the actual weather condition (humid, windy). The SPF are classified as: 2-4, minimal protection; 4-6, moderate; 8-15, maximal protection. More than one application of sunscreen doesn’t increase the SPF. Anything over SPF-15 gives a false sense of security.

Safety in the sun does go further than a SPF. Be cautious when you are outdoors.

• The sun is at its peak June 21, and always between 10:00 am and 2:00 pm.
• In water, the UV light penetrates 3 feet deep.

New EE Requirements Favor Student

from page 1

follow the new curriculum, though they may choose to graduate under the present requirements. All incoming classes will be required to follow the new curriculum.

The new courses, though not listed in the current preregistration material, will be offered beginning this fall.

Specifics of the new requirements:

• Sophomore year requirements will remain the same with EE 90 ab and EE 14 abc.
• Junior year requirements will no longer include EE 114 abc. Instead, a new course, EE 32 ab offered first and second terms will be required.

• EE 40 is still required along with EE 60, which has been renumbered EE 160.
• EE 151 ab is no longer required, leaving only EE 10 and EE 91 ab to be taken in the senior year. To replace it is EE 51 ab to be taken second and third terms junior year.

Course changes:

• EE 32 ab, Introduction to Linear Systems, is a new class modeled after the old EE 13 abc. The course will deal with signal processing, transform methods, and system and circuit analysis.
• EE 160 will cover the same material as EE 60 and is still called Communication System Fundamentals.
• EE 51 ab, Engineering Electromagnetics, will cover the same material as EE 151 ab.
• EE 114 ab will still be offered as an elective geared towards seniors and graduate students.

New electives to be introduced next year are EE 152, Guided Wave Circuits, and EE 153, Antennas. These two one-term courses will focus in depth on the topics normally covered in EE 151 c.

• The existing EE 112 abc will shift emphasis from analog to digital filter design to digital signal processing principles.
• EE 140 ab, Electric Machines Modeling and Control, which was given this year, will be reoffered next year.

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AMERICAN HOSPITAL SUPPLY CORPORATION

Summer Employment Opportunity

EE/CJS junior, Senior, Grad Student

REQUIREMENTS: Familiarity with operating system structure, data structure, assembly language, one or more structured languages, and Unix® (in other words CS 112 and 114). 

JOB DESCRIPTION: Current project involves writing software for the 8088 and 68000 based microcomputer systems.

SALARY: $8-$13 per hour (commensurate with skill and experience)

HOURS: Flexible; full time.

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**announcements**

**Dinner Winner 4**

Just one week left to win $20 in the little p's restaurant review contest. Enter your entry by next Wednesday to little p's 107-51. This week's winner is Eric Olofsson.

If you don't know what to review, you can try any of the following: Pizza Man, Uncle Nick's Falafel, El Pollo Loco, Yum Yum Dell, PCC Cafeteria, Bimbo's, Uncle Sonny's Pizza, Real Taco. All of these are just a short walk from campus.

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**Tad White, Soloist**

The Occidental-Caltech Orchestra will present its final concert of the year this Wednesday, May 23, at 8:30 p.m in Pitzer Auditorium. This program will feature Tad White as soloist playing the Mozart Piano Concerto No. 21 in C Major. Also featured will be two other winners of the annual Oxy-Caltech Concerto Competition, both students of Dr. Alain Mar. Alain Mar will play the third movement of the Beethoven Violin Concerto, and soprano Carol Rosenthal will sing a Mozart concert aria, "Basta, Vinciti.-- Ah non lasciarmi, no". Other selections will be the Russian and Ludmilla Overture by Glinka and Capriccio Breitkopf by Rimsky-Korsakoff.

The orchestra, directed by Dr. Alain Cross, is composed of students, staff, and faculty from both schools; it has over 50 members, including around 20 from Caltech.

The concert is sponsored by the Office of Student Affairs, with support from the Caltech Student Investment Fund and the Office of Public Events. It is free and open to the public.

**C+LAG+S**

CLAGS will meet on Sunday, May 22 in 210 Baxter to make the final plans for the May 25 dance. Everyone is welcome. Birthday cake will be served.

**CLUBS/ACTIVITIES**

If your club or activity was not listed in last year's little p's, please send a short description of what your group does, along with the name, mail code & phone number of a contact person for next fall, to: little p's 107-51.

**Run for the Pi**

The Organization for Women at Caltech will hold its second annual "Run for the Pi" on Thursday, May 24, at 9:30 a.m., starting in Tournament Park, behind the Caltech gym. There will be a one mile Fun Run and a 5K race. Prizes will be awarded to the top finishers, as well as group competitors of each sex. After the races, all are invited to partake of a Pancake Breakfast at the Park and to take their chances on winning a prize at the awards ceremony.

Entry fees will be $2.50 for faculty and staff, $1.50 for students and children, with a maximum family fee of $5.00. The Pancake Breakfast will be $2.50 for adults, $1.50 for students and children.

Come join the fun!

**Der Junge Toerless**

There will be a showing of Der Junge Toerless (1966) in conjunction with a Caltech Y Student class, Lit 1006 (German Literature in translation) on Monday May 21 at 7:30 in Baxter Lecture Hall. This film was a multi-prize winner and marks the beginning of the "new German film."

**Chamber Music**

There will be a chamber music concert tonight in the Caltech Chamber Music program will play music by D'Inoy, Mendelssohn, Ratenbach, and Kuhlau. There will be a reception, with refreshments, following the concert.

**From Russia With Slides**

On Tuesday, May 22 at 8:00 p.m. in Willard, the undergraduates who went to the Soviet Union over spring break will present a Caltech Y program based on their experiences. It will be a rather informal setting, but we will show slides and photos and speak on individual experiences.

**Caltech Jazz Band**

On Thursday, May 24, at 8:15 pm in Baxter Lecture Hall, the Caltech Jazz Band will play their final concert of the year. Nick Cerroll, drummer with Stan Kenton, and Benny Goodman, will be the guest soloist. Caltech has a great jazz band - try not to miss the concert. Admission is free.

**Attn: Page, Fleming,**

(and all undergraduates who participated in the shower-raid on the grad house at 5:00 Ditch Day.)

It's good to see there is a little fighting spirit in the undergrads here at Caltech. However, you had better "Ride the Valkyries" a little faster next Tuesday through Thursday.

**New Grad Jobs**

If you have not yet decided on a permanent position, be sure to check the "New Grad" job folder in the Career Development Center. Companies who wish for you to have a team of students and children, with a maximum family fee of $5.00. The Pancake Breakfast will be $2.50 for adults, $1.50 for students and children.

**Food for Techers**

The Old Spaghetti Factory
9539 W. Sunset Blvd.
469-7140

Housed in an old mansion with purple velvet wallpaper, the Old Spaghetti Factory is as interesting to see as it is to eat in. The price. It is right—$5 will buy an all-inclusive dinner for two. The menu is small, just beef or teriyaki chicken, or a combination of the two. The taste is all right and the cost is only $3.40 dollars per person. It is walking distance and much better than American fast food burger joints.

**Bill's Chicken**

942 E. Washington Blvd.
797-9227

For real fried chicken fans: Bill's is a little greasier, a lot cheaper and better flavored than Kentucky Fried Chicken. Their ribs are also excellent. Best of all, Bill's gives tremendous bargains on any purchase of $5 or more.

**KELROF**

KELROF is tomorrow!!! If you have a team make sure you have timers and contact me so that I can give you poster board to keep track of your times. It starts at 9:00 am so be there to run, time, or watch. Dave Gallup, x1680, 131 Lloyd.

**Housing Office Jobs**

The Housing Office will be offering part-time summer jobs, that can be worked around most schedules. Stop by the Housing Office to see about earning some extra money this summer.

**Nuclear Theology**

Dr. David Griffin, professor of theology and process studies at the School of Theology at Claremont, addresses the issue of a nuclear-age theology next Wednesday at noon.

Instead of the usual Y noon Update in Clubroom One, Griffin will be speaking in Winnett Lounge. His title is "Coercion and Persuasion: A Theology for the Nuclear Age.

Griffin is an expert on the application of the philosophy of Alfred North Whitehead, Harvard's famed philosopher and mathematician of the 1920s. The application of Whiteheadian concepts to theology is at the heart of process metaphysics.

How a process understanding of God (who is held to af­ fect creation persuasively rather than coercively) can be related to the use of nuclear arms will be the thrust of Dr. Griffin's discussion.

The Y's faculty Noon Update will be held on Tuesday next week, presenting "Urizen" with Caltech's Dr. David Stevenson.

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HOUSING WANTED: Room or apartment wanted for summer 1979. Two or three room apartment. (301)336-3559 evenings, (310)338-8375 days, or (814)563-5882. I am a summer engineering student.

APARTMENT FOR RENT: Furnished 2 bedroom apartment, no pets at 600 S. Mentor. $500/month. Call 796-4160.

ROOMMATE WANTED: Female Non-smoker wanted to share cute 2-bedroom apt. $125.50/mo. plus util. You would need your own bedroom furnishings. Available June 15. Call Sue. x4538 or 796-1309 eves.


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