



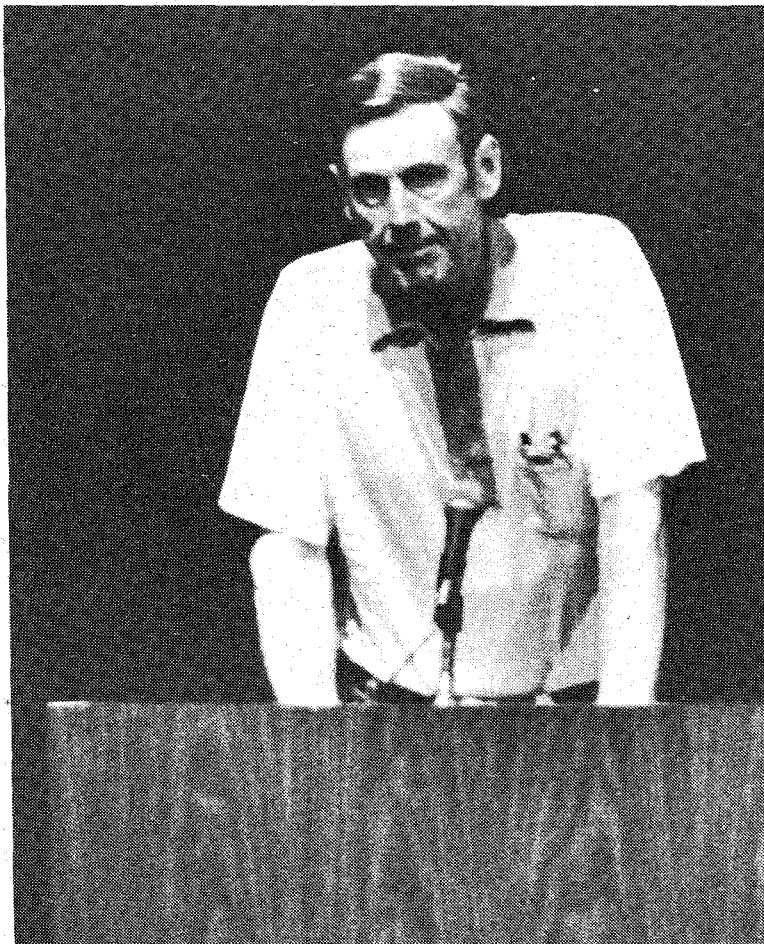
## Board Suspends New Logo

by Lily Wu

The Board of Trustees (of Caltech) recently discussed the new Caltech logo which Public Affairs had chosen in January. The new logo was chosen for a newer look and to eliminate confusion over the fact that previous to this year, three logos had been used interchangeably.

The Board decided that not enough time and consideration went into selecting the new logo and questioned the need for a new logo. Therefore, the use of the new logo has been suspended and the previous logos have been reinstated. A final decision will be made concerning the whole issue after further discussion.

To help limit any further costs that logo changing may incur, Caltech intends to finish using all stationary and related items bearing any logo and not order more until a final decision is made.



Robert Christy at Ramo Auditorium.

## JPL Secret Work Questioned

by Ken Whang

Classified research at JPL and its implications for Caltech were described and discussed Wednesday at a meeting organized by the Committee on Oversight of Classified Research and open to the administration, faculty, research staff, and students of Caltech and JPL.

Primary issues raised were the exact relation of these projects to Reagan's Strategic Defense Initiative (the "Star Wars" program), consequences of this research on academic freedom at Caltech, and the current criteria for accepting classified research at JPL.

The meeting began shortly after 3 p.m. in Ramo Auditorium and lasted for two hours and fifteen minutes including an extended question and answer period which began one hour into the meeting.

Nearly half of those present were from JPL. Few undergraduates attended. President Goldberger and Provost Vogt were present but did not participate in the discussion.

Robert Christy, chairman of the Committee on Oversight of Classified Research, presided. Speakers from JPL—Harris Schurmeier, Rhoades Stephenson, and Jim Breckinridge—offered some information on the nature of the classified work being done and its relation to the Strategic Defense Initiative. Members of the Committee on Oversight of Classified Research—Jerry Wasserburg, John List, and Robert Christy—summarized their own opinions on the matter. The floor was then opened to questions from the audience.

According to Schurmeier, these defense projects "complement and supplement the NASA space program," and therefore are appropriate work for JPL.

There was a period in the 1970's when no classified work was done at JPL. Later, the Institute decided that a fraction of classified work at JPL was acceptable on the condition that it involved technologies closely related to and applicable to JPL's space-related research.

Autonomous spacecraft technology was necessary for the Voyager project and is now being applied to Air Force satellites.

Talon Gold is the name for a project developing precision pointing and tracking systems in space. Schurmeier stressed that at this point, it is not a weapons system, but conceded when pressed that its applications were towards the precise aiming of weapons in space.

The annual cost of the Talon Gold project is about \$4.5 million. Increased funding may raise this figure, perhaps to \$10 million.

The major funding source for these projects is the Defense Advanced Research Projects Agency (DARPA). Control will likely be transferred to the Strategic Defense Initiative Office.

Schurmeier noted that JPL is not involved in the Air Force companion project to Talon Gold called LODE, for Large Optics Demonstration Experiment, a key project in the Strategic Defense Initiative program.

continued on page 4

## Trustees Form JPL Committee

by Ken Whang

A new committee of the Board of Trustees concerned with the Jet Propulsion Laboratory is provided for in a revision of the Institute Bylaws dated May 14, 1984.

The committee is to consist of the Chairman of the Board, the President, and at least five additional members of the Board elected by the Board at their annual meeting.

President Goldberger declined to comment on the expected role of the JPL committee in decisions concerning JPL or on the motivations behind the establishment of the new committee.

The bylaws specify only that the committee should from time to time submit a report on JPL to the rest of the Board.

## IHC Modifies Rotation Rules

By Hossein Mohammad

In a decision that constitutes one of the most major changes in Rotation regulation in years, the IHC voted last Wednesday night to heavily modify the so-called "gag rule" and allow discussion of the general mechanics of the Rotation process with freshmen. Some restrictions still remain on discussion of the specific picking policies of the individual houses.

The vote followed a petition drive that urged the IHC to delete the "gag rule" from the Rotation regulations. Some 231 students signed the petition, which was presented by its organizers to the IHC at the Wednesday meeting.

Up to now, it has been against Rotation rules to give an incoming student any information about Rotation besides telling the student that he or she has the right to choose four houses and express his or her preference to the presidents of the houses. The new changes vastly increase the domain of allowed discussions.

The gag rule (rotation rule II.5) was changed to read: No information about the outcome of past picks or information about the possible outcome of

future picks may be discussed with new students. Information pertaining to the ranking of each student at Rotation and the order of the picks may not be made public.

A new section added to the regulations describes in detail the mechanics and conduct of the meeting of the representatives of the seven houses at the end of Rotation for the final selection of freshmen.

Also added to the regulations was the new rule II.6: Rotation selection procedures of individual Houses may not be discussed except by members of that House.

This means that rotation policies such as the specific rating scales used by each house in rotation can be discussed only by members of that house. The IHC left it to the discretion of the individual houses to decide whether or not to make such information public. Thus, a freshman could ask any member of a particular house about the scale used in that house to rank the incoming students. The house member may then discuss only information pertaining to his or her house's own ranking system. The purpose is to pre-

continued on page 2

## IBM President Joins Board

Caltech News Bureau

John F. Akers, president of IBM, has joined the Board of Trustees of Caltech, Chairman R. Stanton Avery has announced.

Mr. Akers is also a director of the corporation and a member of the Corporate Management Board and IBM's Policy Committee.

He joined IBM in 1960 as a sales trainee in San Francisco, following active duty as a Navy carrier pilot. Following various marketing assignments with IBM, he was appointed vice president of the Data Processing Division in January 1973 and became president of the division in April 1974.

Mr. Akers was elected IBM

vice president in July 1976 and a month later was named assistant group executive, plans and controls, Data Processing Group in April 1978. In October 1981, he became group executive, Information Services and Communications Group. He was elected senior vice president in May 1982 and elected IBM president and a director in February 1983.

Mr. Akers holds a BS degree from Yale University. He is a director of both the Home News Publishing Company, New Brunswick, New Jersey and the Council for Financial Aid to Education; and is a member of the Advisory Board of the Yale School of Organization & Management.

## Emr Selected as Searle Scholar

Scott D. Emr, assistant professor of biology at Caltech, is one of twenty outstanding biomedical researchers nationwide to be selected as a Searle Scholar by the Searle Scholars Program of Chicago. A microbiologist and geneticist, Dr. Emr will receive a research grant of \$157,000 over a three-year period to support his research on the dynamics of protein delivery and distribution within complex cells, called eukaryotes.

Normal functioning of eukaryotic cells depends on the

efficient and timely delivery of protein molecules (including enzymes) to specific subcellular compartments, called organelles. Using yeast cells as their laboratory subject or "system," Dr. Emr and his research team will be investigating how certain proteins are sorted and then targeted for delivery to their correct organelle destinations. Their research is also aimed at understanding the causes of breakdown in the delivery system, a condition that characterizes a number of

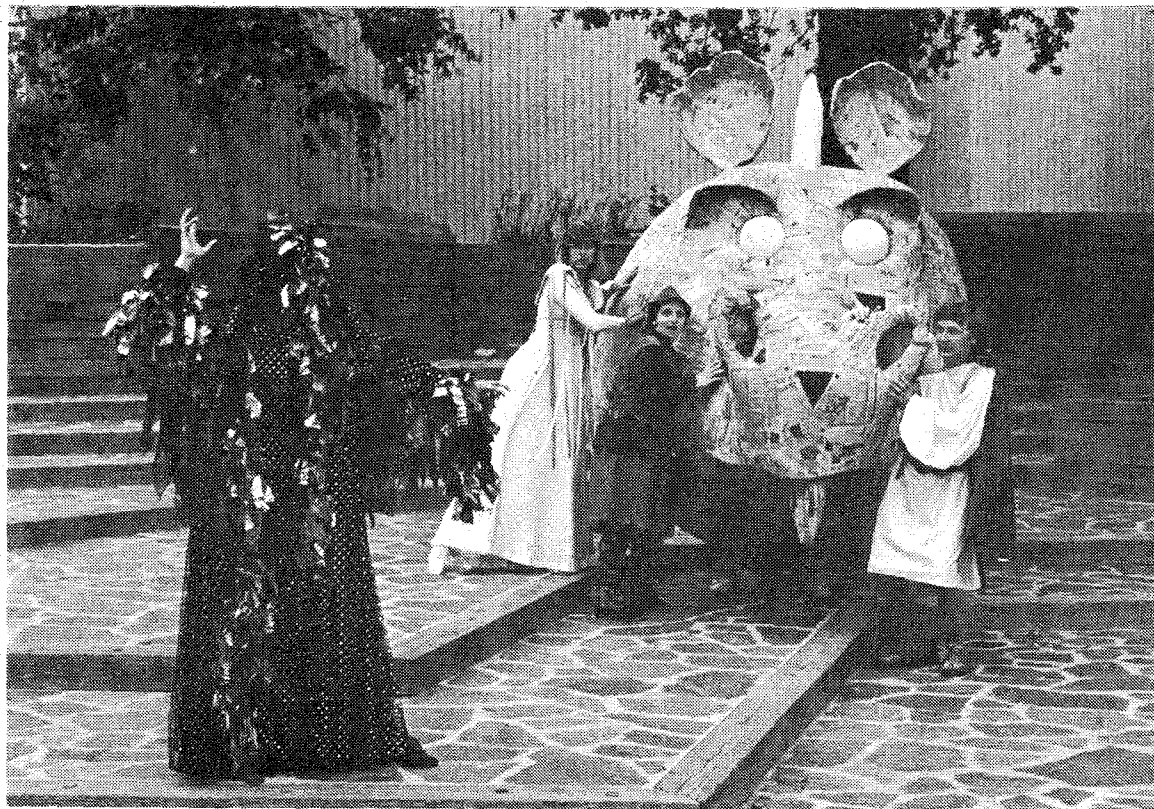
genetic disorders, including many affecting humans.

Dr. Emr received his BS in 1976 from the University of Rhode Island and his PhD from Harvard in 1981. He joined the Caltech faculty in 1983.

The Searle Scholars Program was initiated in 1981 under the terms of a trust fund established by the late John G. Searle, president of the research-based pharmaceutical firm of G. D. Searle & Co., of Skokie, Illinois. The program is administered by the Chicago Community Trust.







Sir Peter, the Princess Carola, the dwarf, and the dragon Noopers (to be painted) are under the spell of the evil sorceress Vivien (above) and the magic dragon battles the inexperienced knight (below) in *The Dragon's Tale*. Performances are this weekend in Braun Court at 2:30 and 5:00 on Saturday and 2:30 on Sunday.



## Arroyo Singers Will Perform at Dabney

The Arroyo Singers will present their twenty-second annual Spring Concert on Friday, June 15 at 7:00 p.m. in Dabney Lounge. The concert will feature tenor, Warren Hays, and will be accompanied by chamber orchestra.

The featured work of the evening will be Ralph Vaughan Williams' "Folk songs of the Four Seasons" for women's chorus, tenor and chamber orchestra. The same composer's "On Wenlock Edge" for tenor,

string quartet and piano, will also be performed. Other works included on the program are music by Palestrina, Vitoria, Berger and Faure.

There will be a reception afterwards with refreshments. A donation of \$5 is requested, and tickets can be ordered by calling Sue Glassco, President of the Arroyo Singers, at 795-7642 or Fin Cotton at 796-4462. Seating is limited, so advanced purchase is recommended.

## ON THE RECORD

by Chris Meisl

### Shakespeare Festival

For Shakespeare fans who will be in the Los Angeles area this summer, there is a special treat—the Grove Shakespeare Festival.

From July 6 through September 8, three Shakespeare plays will be presented in Garden Grove's Festival Amphitheatre, a striking outdoor facility. The Festival will also include a production of Moliere's dynamic social comedy, "Tartuffe," at the Gem Theatre (an old movie house transformed into a beautiful example of 1930 art deco).

### Much Ado About Nothing

Beginning the Festival, from July 6-28, is "Much Ado About Nothing," a hilarious comedy of disguises, intrigues, and love. According to director Lee Shallat, the play will be set in 19th century Spain against a backdrop of a carnival or Mardi Gras. Furthermore, "by studying it carefully and cutting it judiciously," Shallat hopes to make the performance "as easy as possible to appreciate." So, if you cannot understand the original, here's a chance to see and hear pseudo-Shakespeare.

Between July 13 and

August 4, the Festival will feature Moliere's masterpiece of misunderstanding and misrepresentation, "Tartuffe."

### Hamlet

Then, from August 10 to September 1 comes the highlight of the Festival - "Hamlet." This is easily the greatest play Shakespeare wrote, if not the greatest ever written. It is the story of the Melancholy Dane and his "spiritually" inspired plan to extract vengeance for the murder of his father, the king of Denmark.

Included is an incredible interplay of personalities, emotions, and action (or lack thereof). "Hamlet" will be directed by Kristoffer Tibori, a multi-award-winning actor-director, who last year directed "Two Gentlemen of Verona," and played the title role in "Macbeth" at the 1983 Festival. Although the youth of the director (he's only 31) might limit the depth of the performance, any chance to see "Hamlet" should be taken with enthusiasm. It is the only play that truly has "something for everyone."

### Comedy of Errors

Concluding the Festival will be "The Comedy of Errors," from August 17 to September 8. This is Shakespeare's first

continued on page 4

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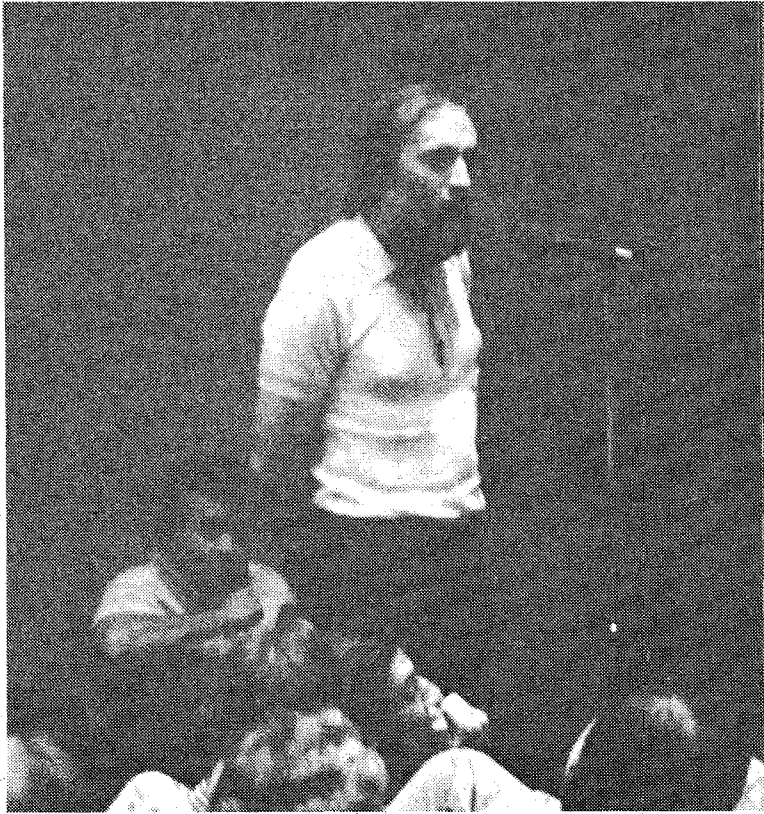
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**Record**

from page 3  
comedy, combining adventure, the comedy of human folly, romance, suspense, mistaken identities, and the confusion of twins. Furthermore, this last performance is FREE if you subscribe to the other three plays.

As an added bonus, both theatres offer concession stands (including wine and beer) as well as free parking and ticket exchange.

The whole series can be seen for only \$24 (or \$30 for better seats). The Festival is an excellent opportunity for an inexpensive and yet quality introduction to Shakespearean drama and Moliere's fantastic humour. Address ticket information to the Grove Shakespeare Festival at 12852 Main Street, Garden Grove, CA 92640 (714-636-7213).



Kip Thorne reviews the history of classified work at JPL.

**JPL Work Connected to Defense Initiative**

from page 1  
Rhoades-Stephenson and Jim Breckinridge took about ten minutes each to describe JPL's space interests in pointing, tracking, and optics. They emphasized the utility of these technologies in the NASA program and did not relate them to contemplated defense applications.

The real issues at hand were not addressed until the faculty spoke.

Wasserburg saw a conflict between doing defense-related research and raising money to survive institutionally. He posed the question, "Are we a civil institute or a branch of the DOD?"

List viewed both projects as being appropriate work for JPL, since they "complement and advance the stated goal of the Lab."

The problem he saw was a possible loss of faculty influence over the projects at JPL. He argued that if both projects are successful, JPL will be left with fewer options, and the Institute faculty might have less control in decisions on which specific projects are undertaken at JPL.

"The risk is greater possible involvement and loss of control over what is done at JPL."

List did not see a moral issue in whether Caltech is involved in weapons research. "Everyone has something to do with weapons." Research in nearly all scientific fields has eventual application to weapons.

Christy focused on this issue of weapons research. The "most difficult question" he saw involved his perception of "widespread and deep mistrust of the Strategic Defense Initiative" within the Caltech community.

But rather than simply disconnecting Caltech from the projects, he saw a chance to "prove that the goals" of the initiative "are illusory."

Christy noted that, although he chairs the Committee on Oversight of Classified Research, he has chosen not to obtain clearance and look at specific classified documents, and must often "guess at people's interests without knowing."

Issues brought up by the faculty speakers and other questions related to the projects were brought up during the question-answer period.

It was generally agreed upon that the projects did satisfy the criteria restricting classified research at JPL. Kip Thorne and Harry Gray found the need for the criteria themselves to be reconsidered.

Thorne reviewed the history of classified research at JPL. Work at the Laboratory was largely classified until an effort was made in the 1960's to remove these projects. For a period in the early 1970's, no classified work was done at JPL, then it was reintroduced under specific restrictions.

Thorne proposed that "if classified work were phased out, JPL would still be healthy and viable," and the growing "potential for divisiveness and disruption of the community" would be greatly reduced.

Jerry Pine brought up the issue of academic freedom. Involvement in classified projects, he said, has "extremely dangerous implications on academic freedom at Caltech."

Pine also questioned Christy's ability to represent the faculty well without having access to classified records. Christy chose not to for fear that he would not be able to talk as openly if he had such clearance.

In response to another concern, Schurmeier said that NASA projects are not being turned down by JPL because of their increased occupation

continued on page 7

<p><b>GSC Wednesday Evening Cinema</b> Baxter Lecture Hall, 8:30 pm</p> <p>Caltech students      \$1 All others                \$2</p>		<p>June 6</p> <p>Summer of '42</p>	<p>June 13</p> <p><b>THE EAGLE HAS LANDED</b></p>
<p>June 20</p> <p><b>LOCAL HERO</b></p>	<p>June 27</p> <p><b>COMEDY SPECTACLE!</b> A STEVEN SPIELBERG FILM <b>1941</b></p>	<p>July 11</p> <p>PETER SEILLERS in <b>THE PINK PANTHER STRIKES</b> BLAKE EDWARDS</p>	<p>July 18</p> <p>There are still some things we have yet to imagine.</p> <p><b>SOPHIE'S CHOICE</b></p>
<p>July 25</p> <p><b>GUNS OF NAVARONE</b></p>	<p>August 1</p> <p><b>"A MASTERPIECE."</b> ARLEEN WISSEN, NEW YORK POST <b>Das Boot</b> The other side of World War II.</p>	<p>August 8</p> <p><b>ATTACK OF THE KILLER TOMATOES</b></p>	
<p>August 15</p> <p><b>Clint Eastwood Dirty Harry</b></p>	<p>August 22</p> <p>DUSTIN HOFFMAN <b>Kramer vs. Kramer</b></p>	<p>August 29</p> <p>WHEN THE GANGS TAKE OVER THE HIGHWAYS... PRAY HE'S OUT THERE SOMEWHERE!</p> <p><b>Mad Max</b></p>	
<p>September 5</p> <p><b>THE GRADUATE</b></p>	<p>September 12</p> <p><b>THE GENERAL plus You Natzy Spy</b></p>	<p>September 19</p> <p><b>STANLEY KUBRICK'S CLOCKWORK ORANGE</b> From Warner Bros.</p>	



# Fleming Prevails Over Page In Interhouse Competition

By Ath Man at Large

The 1983-84 Interhouse competition was marked by surprises, Ath Team mistakes, and the first new champion in four years as Fleming broke Page's four-year win streak.

Softball was the first sport as usual, and defending champion Page fell flat on its face. Bereft of significant practice time and shorn of its best players, who were playing other sports, Page lost to Fleming, Lloyd, Blacker, and finished in a tie for third with Lloyd. Fleming, who had practiced intensely for the season, lost only to Ruddock (and the Flemings avenged that defeat two days later with a shutout Discobolus victory) and tied the Rudds for first. Ruddock lost to Page in a close match, the defeat made even more frustrating by the fact that Ruddock scored the winning run in the bottom of the fifth, but the runner was called out for leaving third base early. Blacker beat Page and Lloyd but no one else and tied Dabney for fifth.

Soccer was next, and the Fleming-Page game seemed certain to decide the champion. The teams battled to a scoreless tie, with a strong Fleming defense and inexperienced instant-goalie Russ Natter protecting their goal from onslaughts by the Page offense. Natter even saved a penalty shot by Manny Acevedo-Ruiz. The two houses seemed destined to tie for first, but, due to some strange substitution strategy, Page was unable to score against Ricketts, and the early-falling darkness ended the game with no score. This mishap gave

Fleming the championship.

On to swimming, and again Page and Fleming were the favorites. Page appeared to have the stronger team, but the surprising absence of one of its strongest swimmers on the day of the finals enabled Fleming to gut out the victory. The surprise of the meet was Ricketts. Led by John Sarapata, the Scurves finished third.

Page dominated track again, although Fleming finished a closer second than usual. Blacker finished third, and Ruddock, usually a competitive team, was rendered impotent by its Ath Team's failure to realize that the meet was imminent. Ricketts surprised again, finishing fourth, ahead of Ruddock for the second straight sport.

The Rudds got revenge in volleyball, however, as they beat both Fleming and Page to become the first house other than Page to win the championship outright in about 15 years. Blacker put forth a strong showing also, but finished fifth, two spots behind Page, which lost to Fleming for the first time in years. Ricketts finished fourth, again, amazing seasoned Interhouse observers.

Third term brought basketball, which saw the year's first three-way tie for first. Fleming, Page, and Blacker all shared the top spot, as each split its two games with the others. Ruddock finished fourth, Lloyd finished fifth, and Dabney, with its two-on-five offense, ended up sixth. Ricketts crashed to earth, winding up seventh.

Tennis was a two-team show, as Page and Fleming

battled for the top spot. For the third year in the last four, Page beat Fleming, 3-2: This year, that was enough to give Page the title. Lloyd finished third, ahead of Blacker and Ruddock.

Football concluded the year as usual, but Page House was caught by surprise. Woefully unprepared, Page was destroyed by a psyched and ready Fleming team, 26-7. Page got ready in a hurry, however, and went undefeated the rest of the way to win the title with a 5-1 record. Fleming lost to Lloyd and Ruddock, Ruddock to Page and Blacker, Blacker to Fleming, Page, and Lloyd, and Lloyd to Page and Ruddock. All this meant that there was parity in Interhouse football. Fleming, Lloyd and Ruddock tied for second, and Blacker finished fifth, one game back.

The overall standings for the year saw Fleming win its first championship in five years. Page finished second.

## Interhouse

## Points

Fleming	414.5
Page	404.5
Ruddock	296
Blacker	274.5
Lloyd	234.5
Ricketts	179
Dabney	80.5

## Discobolus

## Points

Fleming	24
Ruddock	21
Blacker	17
Page	13
Ricketts	7
Lloyd	6
Dabney	4

# A Surprising Discobolus

By Ath Man at Large

The 1983-84 Discobolus season was among the wildest in a long time, with every house but Dabney holding the trophy and with strategies, both good and bad, by the various Ath teams playing a large role in determining the final results.

Defending champion Page lost the trophy to Fleming in its first defense, as the Flemings took a 5-0 tennis verdict. Fleming held the trophy for four more weeks, defeating Dabney, Ricketts, Lloyd, and Ruddock (an 8-0 victory in softball). Blacker broke the Fleming streak with an Ultimate victory. Page, trying to get back in the race, defeated Blacker but lost to Ruddock the next week. The Rudds won two more, and then lost to Lloyd, who lost to Fleming.

Blacker's turn was next, but, not wanting to lose to Page if they beat Fleming, the Moles passed and let Page

challenge. Page beat Fleming, but lost to Blacker in basketball. The Moles won two more, before losing to a resurgent Ruddock. The Rudds defeated Lloyd, which brought up Fleming's turn.

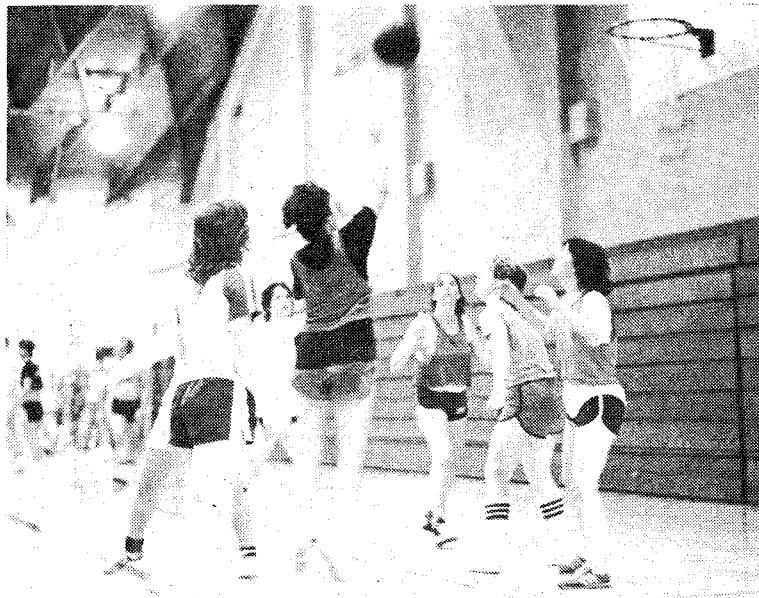
At this point, the wheels in the heads of the Fleming Ath Team kicked into overdrive. With seven weeks remaining, the Flemings, assured of beating Ruddock, were afraid that Page would then beat them and the other five houses and win the trophy. Feeling that their chances against Page were better in a challenging role, Fleming decided to allow Page to challenge Ruddock. Page did not, however, and so Ruddock solicited and got a challenge from Ricketts, whom they defeated.

The Flemings, encouraged, decided to try the strategy again. This time, they knew, if

Page did not challenge, they would virtually eliminate themselves from the competition. Page, apparently seeing only that Fleming would be their first challenger, refused to challenge again. While those who did not understand Fleming's maneuverings inquired as to the execution date of their Ath Team, Ruddock prepared for its second straight match with Ricketts. Incredibly, Ricketts won, for the first time in years.


Fleming, with the title almost in the bag, destroyed Ricketts in football, and, after a loss to Page in soccer, clinched the championship when Blacker challenged Page, eliminating Ruddock.

The final standings showed Fleming in first, Ruddock second, with Blacker, Page, Ricketts, Lloyd, and Dabney following.



Women's GSC Basketball.

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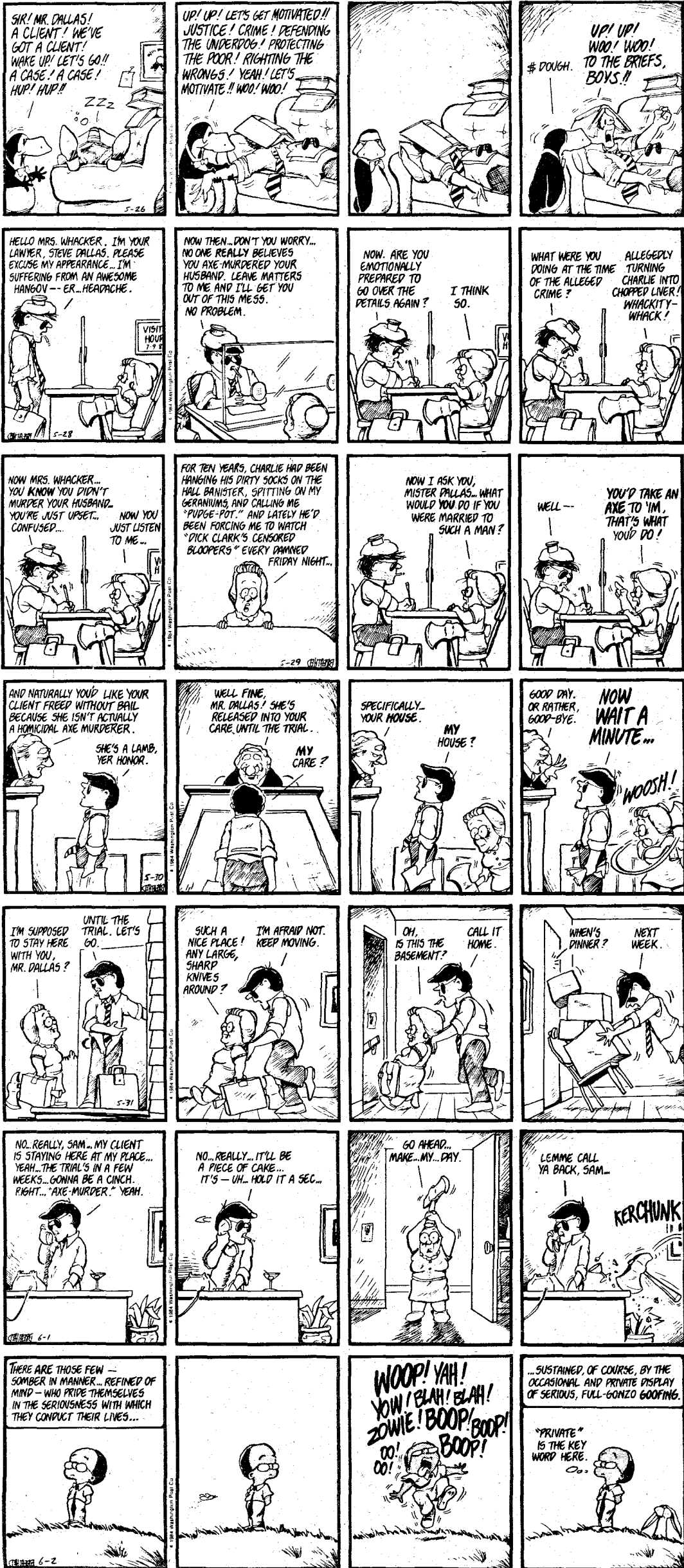


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# Be Careful of Diarrhea When Traveling

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ed volume, one would need 3½ pints for a 1 week vacation. If symptoms do occur, follow instructions on the bottle.

Antibiotics can also be used both preventively and therapeutically. Some antibiotics are more desirable than others; one should check with their medical care provider regarding the antibiotics most often used for travelers' diarrhea.

Travelers' diarrhea is the major saboteur to most travelers, especially in travels to developing countries. This is a self-limiting illness which can last for several days. The most important aspect of prevention is remembering the diarrhea occurs mostly from contaminated food and water; 'fecal-oral' transmission. Drinking only boiled or carbonated water and avoiding ice, salads, and unpeeled fruit may be the most helpful prevention of the infection.

Not all travelers' diarrhea respond to pepto-bismol and the usual antibiotics. Diarrhea which persists, become severe, or is associated with bleeding or high fever should be evaluated medically.

Travel immunizations should also be a major concern when traveling to developing countries. The Health Center does provide the most up-to-date immunization information. Administration of travel immunizations are done at the Health Center between 9am-11am. No appointment is necessary, but a nominal fee is required.

In addition to our own preventive methods, several medications (over-the-counter and prescription) have been used to prevent and/or treat the problem.

Pepto-Bismol is very effective in preventing travelers' diarrhea, as well as in its treatment. If used preventively, it must be taken in fairly high doses: ¼ cup, 4 times a day. When taken in the recommend-

—Janice Ramaeker  
Health Center

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If you would like to buy one of these T-shirts please contact Karla Peterson some time this week. (In The Tech office Winnett; x6154 or in 208 Ruddock; 578-9886). They cost \$6.50 each and there are over 40 shirts of different sizes and colors. This is the last chance to buy one of these parody T-shirts.

## Summer Go-Ahead Feared

from page 4  
with DOD work. A member of the audience from JPL noted, though, that JPL's resources are strained, and that JPL has cut back in energy research and other programs.

Decisions regarding

Caltech's dealings with JPL are made by the Office of the President, and Morgan Kousser expressed the fear that over the summer, the faculty will be uninformed while policy on JPL is set. No reassurance was offered to allay his fear.

### Appendix

The following findings and recommendations are excerpted from the April, 1976 Study of Relations Between the Jet Propulsion Laboratory and the Campus of the California Institute of Technology.

#### The Impact of Classified Work on Interactions

**Finding:** ... No single issue could be more divisive and inimical to Campus-Laboratory relations than the performance of classified work at JPL...

**Recommendation:** Classified work should not be undertaken institutionally by Caltech, be this on Campus or at the Laboratory, unless there exists a recognized national emergency....

**Discussion:** The conduct of any classified research on Campus or at JPL, except in times of national emergency, is detrimental to Campus-Laboratory interactions because:

(1) It is fundamentally inconsistent with the basic tenets of the teaching and research mission of the Campus; and

(2) It prevents the proper exercise of the quality control function afforded by peer review that is necessary to maintain the quality of work for which Caltech stands....

In refraining from classified work, JPL will not... be able to work at the forefront of some new technologies which would benefit its primary missions. In these cases JPL must await their general availability for unclassified use....

DOD and the nation can benefit by having... research and advanced development conducted... in the free and open manner characteristic of the academic environment. The Laboratory and Campus should be free to undertake such unclassified research and development and, in fact, serve the nation by exerting pressures against the bureaucratic zeal for classification of work that would fare much better in a free environment.

## The Outside World

The U.S., in response to the bombing of oil tankers in the Persian Gulf, sold Stinger anti-aircraft missiles to Saudi Arabia. The Reagan Administration used its emergency powers to make the \$40 million sale of 400 Stinger missiles and 200 launchers. The sale met some congressional resistance caused by fears that the missiles might fall into hands of anti-Israeli terrorists. The United States has also made available to Saudi Arabia a modified DC-10 that has the capability to refuel Saudi jets aerially, which will permit the Saudis to continuously maintain F-15 patrols. The Stinger missile is operated by one man—it is therefore extremely mobile and versatile. However the heat-seeking missile has a maximum range of only 3.1 miles.

The three Democratic contenders for the Presidency, Walter Mondale, Gary Hart, and Jesse Jackson, are preparing for the important primaries in California and New Jersey. Gary Hart desperates needs to decisively beat Mondale in both states to have a fighting chance at the Democratic convention later this year. Not only does he need the delegates to keep Mondale from gaining a majority, but victories in New Jersey and especially in California is the ammunition he will use to convince the undecided delegates that he has a better chance of beating Reagan. A Mondale victory on June 5 will clinch the nomination for him, while a decisive Hart victory will leave the nomination up in the air.

The American trade deficit was at an annual \$130 billion rate in March. The 1984 deficit will be nearly double the last year's deficit of \$69.4 billion, which was a record. The high trade deficit is blamed on several factors. Foremost is the strength of the U.S. dollar, which cheapens imports but makes American products less competitive abroad. Another cause of the massive deficit is, surprisingly, the growing American economy. The quick expansion of the economy and high consumer consumption has caused an increasing demand for imports, while the relative soggy economies of other countries means low demand for American goods. Economists expect the trade deficit to remain at around \$10 billion per month in the near future.

The whereabouts of Soviet dissident Andrei Sakharov and his wife Yelena Bonner was still unknown as the Soviet news agency Tass implied that Sakharov had given up his hunger strike. The dissident, a Nobel Peace laureate, started his hunger strike after Soviet authorities refused to permit his wife to go to the West for medical treatment. In reaction, the Russian government detained the couple and it is believed that they have been forcibly hospitalized.

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## announcements

### Cycling Keys

The Caltech Cycling Club will be issuing keys to its repair shop for the summer. If you are interested in using the shop this summer or you would like more information about the club, contact Irene Replogle, mail code 1-54 and phone number 578-9918, or write to the Caltech Cycling Club, mail code 218-51.

### Alum Questions

Graduating students: please remember to turn in your Career Development/Alumni Association questionnaire to the Career Development Center, Mail Code 8-31, x6361, before you leave campus.

### Pop Evening

The Pasadena Community Orchestra presents "An Evening of Pops," directed by Wayne Reinecke, tonight, June 1, 1984 at 8:15 pm. The program will be presented at the First United Methodist Church, 500 E. Colorado Blvd. in Pasadena. Music by Offenbach, Kodaly, Gershwin, Reznicek and Handel. Admission is free.

### 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.

### Midsummer Concert

"Forward-Looking Infra Red," Sandra Loh's new buoyant, surrealistic, rap-talking performance piece about military weaponry, with funk music by Chad Edwards, will be premiered at 8 pm on Friday, July 13 at Dabney Hall. This will be part of a concert featuring jazz fusion sextet *Slow Burn* and new music by Sandra Loh. A donation of \$2 will be accepted at the door, and there will be wine and general socializing for everyone afterwards. Caltech people and friends are especially welcome. For more information, call The Caltech Y at x6163.

### Keep Millikan Open!

Library attendants are needed Monday through Friday 5 pm to midnight, and weekends 9 am to midnight, during the summer. No graduating seniors and must be on Work Study. Stimulating work and great working conditions. Apply at Reserve Desk, first floor Millikan.

### Next Step Toward The Final Frontier

The L5 Society presents a lecture by Mr. Warren James of Jet Propulsion Laboratories, discussing how the problems involved in long duration manned space missions may be solved through developing the space station. Mr. James, Imaging Systems Science Coordinator at JPL for the Galileo Mission, will discuss the technologies needed for manned interplanetary exploration and demonstrate the impact of the space station on the means for man to travel to the planets and the stars. A full-scale mock-up of the Voyager Spacecraft will be on display at the lecture. The lecture will be held on Wednesday, June 20, at 7:00 pm at JPL, Von Karman Auditorium, 4800 Oak Grove Drive, Pasadena. The lecture is free and open to the public. Call (213) 374-1381 for more information.

### Dragon's Tale

*The Dragon's Tale*, a comedy Arthurian style legend written by Mike Pettersen, will be presented in Braun Court (between Church and Noyes) on June 2 at 2:30 and 5:00, and June 3 at 2:30. The tale involves the usual characters from Camelot, including Merlin and King Arthur, as well as a neophyte Knight and a Dragon named Noopers. But the puns and jokes fly faster than the swords in this story of medieval England. Admission is \$1.00 for Caltech students and \$3.00 for the general public. Tickets can be obtained through the Office of Public Events.

### Millikan Calling

Please return all library books before you leave for the summer.

### Scholarship

The Ebell of Los Angeles Scholarships, outright gift-spayable per month during the school year, are being offered to students whose home residence is in Los Angeles County and are U.S. citizens.

The scholarship considers moral character, scholarship, financial need, and leadership.

Only upperclassmen (sophomores and above) are eligible, and students eighteen years or older must be registered to vote. The minimum acceptable GPA is 3.25.

For more information, go to the Financial Aid Office, room 10 Parsons-Gates.

### TQFR Time

Now that finals are coming up soon, it is TQFR time. Here's your chance to praise and/or criticize the courses which you are taking. You should have received TQFR Course Evaluation Forms in the mail by now. If not, you will get them soon. Please fill these out, before you forget, and send them in. Additional comments about courses are appreciated.

### The Totem

The *Totem* should be available in the student houses today. Extra copies will be available for undergraduates in the student publication office in Winnett. All contributors (including non-undergrads) will be sent a copy next week.

### Clubs

This is your last chance to get your club or activity mentioned in the *little t* if it was not included last year. We are especially looking for descriptions from: chess club, debate club, juggling club, Numismatic society, Russian language workshop, scuba club.

Those clubs which were included last year and wish to update their entry should also send their corrections as soon as possible. Send information to *little t*, 107-51.

### Advocate Health

Applications for the 1984-85 Health Advocate program are now being accepted. If you would like to become a paraprofessional member of the Health Center trained in health education, common student health concerns, standard first aid and CPR, applications are now available at the Health Center. Any student from any major may apply who is interested in helping other students with medical self help, health information, informal counseling, first aid and referrals. No experience is necessary. The course is a three term commitment, September 27 through May 23, and offers three units of credit (P/F) each term. One hour per week is spent in lecture/discussion, and one hour internship at the Health Center. Return applications by June 7 to Health Center, 1-8.

Four students successfully completed the course this past year and are presently providing peer health services on campus:

Stephen Brown - Ricketts  
Hideki Garren - 1116 Lura  
Scott Lewicki - Page  
Marc Turner - Blacker

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**HELP WANTED.** Test question writers. \$5-\$20 per question. Mechanical comprehension, data interpretation, and general science, Call Psychometrics at (213)829-0248. Ask for David or Pat.

#### HOUSING—

**HOUSING WANTED:** Room or apartment wanted for summer 1984. Call Mark at (301)366-3559 evenings, (301)338-8375 days, or (814)536-5882. I am a summer engineering student.

**APARTMENT FOR RENT:** Unfurnished 2 bedroom upstairs apartment (no pets) at 600 S. Mentor. \$550/month. Call 796-4160.

#### TYPING—

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