

I'm Sue—Fly Me To Homecoming

Photo by Feeney

What's Coming

A Spectrum Of Productions

by Marc Donner

"Billy the Kid is coming!!" No — don't get down the rifle or barricade the door. *Billy the Kid* is the name of a ballet which is coming to Beckman Auditorium on Friday, October 20 and Saturday, October 21 at 8:00 p.m. This ballet is the first genuine ballet to be created by an American. Eugene Loring choreographed *Billy* and Aaron Copeland wrote the music. The Los Angeles Dance Theatre is bringing *Billy* and two other works (one of them a world premiere of a new work by Eugene Loring) and is being directed by Loring himself and by Paul Gleason. If you're interested in a beautiful experience (or even if you're not) go see *Billy the Kid*.

Piano music lovers already know that Gary Graffman is coming to Beckman Auditorium to give a recital on Saturday, October 28; so this is to give notice to all the rest of you that you'd better get your tickets soon, or the Great Pumpkin will never let you flick again. Besides that you'll miss some of the best piano music you'll ever get to hear. His program includes Beethoven's Sonata in C minor, Opus 13 ("Pathetique"), Ravel's "Gaspard de la Nuit," and Brahms' Variations and Fugue on a Theme of Handel.

Everyone will enjoy this — starting Tuesday, October 31 (Halloween to us lesser mortals) Beckman will present silent movies with Chauncey Haines at the organ. The Halloween show will include *The Unholy Three* (1925) and *Variety* (also 1925). Tuesday Night at the Silent

Movies continues on November 21 with *Michael McGivney* and *The Student Prince in Old Heidelberg*.

Remember that Spectrum's production of Brecht's *Pantila and Matti* is soon coming and it promises to be fantastic. For all Caltech students it will cost only \$2 and will run five nights — Tuesday, October 24 through Saturday, October 28 in Ramo Auditorium.

News Briefs

From Greenstein To Schmidt

Dr. Maarten Schmidt, who first discovered large red shifts in the spectra of quasars, is succeeding Dr. Jesse Greenstein as executive officer for astronomy in the division of Ph, Ma, & Ay. Dr. Greenstein, 63, chairman of the committee that just completed the National Academy of Science's report on astronomy's future, is relinquishing the administrative work after 24 years to devote more time to observing and research.

Dr. Schmidt, 42, will head the distinguished astronomy group and sees his primary job as retaining the momentum built up in the group by Dr. Greenstein.

"The string of discoveries over the past ten years has added much more rapidly to our problems than to our knowledge," he said. "There are still more questions than answers. And each 'answer' leads to another question.

"But that is very healthy—and very exciting."

Watson Lectures Start

Colorado River In Beckman?

by Bob Kieckhefer

The Earnest C. Watson Caltech Lecture Series opened Monday night with Dr. Eugene Shoemaker, professor of geology, talking about "Canyons of the Colorado: The Consequences of Catastrophe." The Monday evening series of lectures at Beckman has now been named after the late Dr. Watson, who incidentally eight years ago gave the first of the Monday night lectures (about liquid air).

Monday night's program began with a tribute to Dr. Watson by

Dr. J. Kent Clark. He described Watson, a physics professor at Tech from 1919 to 1959 and dean of the faculty from 1945 to 1959, as "devoted to the pursuit of knowledge" and "loveable." During his 40 years here he played a major role in transforming Throop Polytechnic Institute into the modern Caltech, and was admired and loved by both faculty and students.

Dr. Shoemaker's lecture began after Dr. Harold Brown gave a short discussion of Caltech's responsibility to disseminate know-

ledge. The lecture, which outlined the results of a 1968 expedition down the Green and Colorado Rivers, held the standing-room-only audience spellbound for over an hour.

Following Powell

The primary purpose of the expedition was to trace the route of John Wesley Powell's expeditions of 1869 and 1871-72, investigating changes in the river canyons which have occurred in the past century. Powell's second expedition had taken 1000

Continued on Page Two

The CALIFORNIA Tech

Volume LXXIV

Pasadena, California, Thursday, October 19, 1972

Number 5

The Mudeo Will Be Here On Sunday!

by Rik Smoody

The pigs of the class of '75 will meet the spirited class of '76 in the 46th almost-annual Mudeo Classic this Sunday at 2 p.m. The event, to be held just west of the football field, is jointly sponsored by the Caltech Alumni Association, ASCIT, and the Deans' Office.

Last year, the present Sophomores came from behind for an upset victory over the Class of '74 in a benumbing frigid December contest. There was considerable complaint over the apparently unjust calls of the referees — and the fact that they managed to escape unscathed from the event. This year's judges — Rik Smoody, John Steubs, Marion Movius, Rob Olshan, and Frank Hobbs — promise that they will judge

Continued on Page Three

BOD Successful At Last Quorum At Third ASCIT Meeting

by Bob Schaff

For an hours worth of laughs, tear-jerking anecdotes, and other general rot, those of you who have not been attending ASCIT BOD meetings really should stop by Winnett Lounge on a Tuesday afternoon at four or so. At that time, the famous, (or infamous), leaders of our student body get together in the general interest of causing what seems to be the largest amount of disorder and confusion possible, relative to the general state of things around Tech, of course.

Opening with a quorum for the first time this year, this week's meeting ran like the script from a "B" grade production of Charles Dickens' *A Christmas Carol*, i.e., the closing scene when old Scrooge finally becomes generous. Joe Morin, ASCIT Pres., and his cohorts proceeded to listen to the requests for money from no less than ten separate student groups. This seems to indicate one of two things: a) all the students here are completely broke, or b) everyone has the BOD sized up as an easy hit. Notwithstanding the comment however, many

requests came in as follows: 1) Hockey Club — \$300, 2) Co-op Housing — anything available, 3) Young Republicans — organizational expenses, 4) Student Shop — \$250, 5) Karate — \$200, 6) CEAC — \$200, 7) Totem — all they wanted was the money budgeted them last year, 8) Gay Discussion Group — \$175, 9) Scuba Club — \$225, 10) Black Students Union — \$200.

All the groups mentioned had interesting stories to recount and their retelling would no doubt make interesting reading, but space does not permit our printing what would certainly take up column space of a small novel. After all groups had been heard from, Joe Morin (in absence of Steve Wat — ASCIT Treas.) added the figures and informed the BOD that total requests came to \$1550. Because of the aforementioned absence of Steve Wat, no one could actually come up with any figures that might apply to the balance of the ASCIT bank account. However, Jim Hugg (ASCIT Secretary) reasoned that all the money they had to begin with couldn't

Continued on Page Five

Friday Noon



CASEY ANDERSON'S CONCERT, sponsored by the Caltech Y, was the first in a series of noontime diversions. Next concert tomorrow. Photo by Ray Feeney

Grad Student Seekers Descend on Campus

Representatives of three graduate schools will be here during the remainder of first term. Tomorrow (Oct. 20), United States International University will be here for the fields of business administration and human behavior. Carnegie-Mellon University's Graduate School of Industrial Administration will appear for that field November 8. The Stanford Graduate School of Business will talk to people on December 5. If you are interested in discussing possible admission with these representa-

Continued on Page Eight

Southwestern Rejoices

[*Front lawn? Front lawn? What front lawn? — Ed.*]

Continued on Page Eight

Subscriptions . . . \$1.50 per term
\$4.00 per year
Life Subscription \$100

by Phil Frank



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LITTLE MURDERS

Mudeo

Continued from Page One

fairly for the first time in recent history.

Unbiased polls give the surly sophs, who have already demonstrated their prowess, a 50% edge in the Mudeo, but there will undoubtedly be many surprises in store for the participants and observers of this year's event.

General Rules:

1. People out for sports are expected to follow their coach's recommendations on whether to compete or not.

2. Clothing must be of a nature as to insure the safety of all contestants. Shoes must be worn to protect feet from sharp objects. No spikes or cleats will be allowed.

3. Unnecessary roughness is forbidden. (The judges' judgement shall prevail as to what is necessary.)

Failure to comply with these rules shall be grounds for the expulsion of a contestant or the disqualification of his class in that event. In all disputes, the decisions of the Junior judges shall be final. Judges' decisions shall be made in conference undisturbed by the raucous proximity of any contestants.

In previous years, losers have cast the judges into the pit. If such attempt is made, the winning class is expected to protect the judges. If, after an hour, a Judge is uncaptured, open season will be closed on said Judge. The Judges may not try to leave the field until the end of the final event. Upperclassmen may give aid to the Judges only by supplying transportation.

Contests

1. Tug of War (1 pt.)

Each team shall have the same number of men.

At the outset, each team shall exert a small pressure on a 100 foot rope.

The teams will pull on each side of a mud pit, starting with the first 5 men on each team in the pit.

At the blowing of a whistle, the tug of war shall commence and shall not terminate until one team is pulled completely across the mud pit.

Choice of direction shall be

made by use of a coin.

2. Sack Race (1 pt.)

Each relay team will consist of 10 men.

Five men from one team will be stationed on one side of the mud pit while the remaining five will be on the other side of the pit.

At the starting signal, the first man of each team on one side will travel the width of the pit.

After hopping from the pit, he will give the sack to the next man on his team who will attempt to repeat the performance.

Forward progress can be made only when erect and when at least one hand is holding the top of the sack.

The first team having its ten men finish will be declared the winner.

3. Wheelbarrow Race (1 pt.)

Relay teams shall consist of 20 men each, working in pairs.

At a warning, one member of a team shall lie on his stomach and his partner shall pick him up by the feet and move into position at the starting line.

At the starting signal, a pair from each class shall proceed wheelbarrow fashion across the pit until the man on hands reaches the end of the pit.

At this point, the pair shall reverse positions and proceed back to the start. Upon reaching the starting line, the second pair shall proceed as above.

This shall continue until the tenth pair crosses the starting line. The first team having its ten pairs finish will be declared the winner.

4. Horse and Rider (2 pts.)

A team shall consist of five pairs.

A pair shall consist of horse and rider. The rider shall be mounted on the horse's hips and the horse's arms shall be around the rider's legs with his hands clasped in front.

The purpose of the contest is to unhorse the entire pair of opponents. A pair shall be considered unhorsed when (1) the horse's hands shall at any time become unclasped, or (2) the pair fails to regain combat position after a fighter's count of 60.

Combat position for a pair means that the horse is on both feet.

Any pair attacking an oppos-

Editors:

The queer behavior of the two boys from Ruddock House who burst noisily into the Ricketts House dining room Wednesday night was totally out of the question.

The disruption of our evening meal was disturbing enough. But the resulting mess in our dining room and courtyard was completely uncalled for.

We would appreciate a complete apology, and feel it is not unreasonable to expect a few members of Ruddock House to help clean our courtyard.

-Alfonso Bedoya

Ricketts

ing pair which is not in combat position and any pair not in combat position which attacks an opposing pair, shall be disqualified.

The team having the most pairs standing after 10 minutes, will be the winner. In case of tie, the contest will be continued until one more pair is unhorsed.

Queen Jumping Contest

(1 or 2 pts.)

Each class will select a Queen

and a Princess candidate.

At the warning, the princess of each team shall enter the mud.

At the signal, the Queen shall leap frog over. This shall continue across and back.

The first of the Queen candidates to stand on the bank shall possess the coveted title of "Mudeo Queen" and her partner shall be "Mudeo Princess".

The Queen's class shall receive 1 pt. In the event that one of the candidates is not female (examinations to determine sex shall be the responsibility of the judges) the other class automatically wins this event. In the event one class forfeits, the opposing class shall receive two points.

6. Tire Spree (2 pts.)

The tire spree will be held on the mudded course with a goal line 25 feet from the center line and on each side of it. Eleven auto tires will be placed on the center line.

Each team of 15 men will line up at its own goal line.

The contest will start with a signal and will continue without intermission for six minutes.

At the end of the six minutes, the contest will cease on a signal. The team which has at that time

Big Braves

YMCA And The Little Brave Program

The fatherless boys of most communities are left out of many activities due to their family situation. The Pasadena YMCA recognized this fact a few years ago and began an ever-expanding program which is designed to help fatherless boys regain some of their lost opportunities. It is called the Little Brave Program and consists of volunteer high school, college, and graduate students being assigned to a fatherless boy, aged 6-8, and becoming a companion and model for him, helping him to adjust to social situations by providing him with new and varied social interactions.

The program has been extremely successful, and has been taken up by about 50 YMCAs across the U.S. Every year there is a greater demand for sponsors as fatherless boys are eager to join the program. This eagerness is no doubt due in part to the various activities which are included in the program, such as an annual Thanksgiving dinner, a snow trip, trips to sporting events and special attractions in the area, as well as bimonthly club meetings which include games, skill projects, tutoring, etc.

Sponsors of the boys receive complimentary YMCA memberships, including full use of the downtown Y facilities as well as a three acre estate in Altadena which includes a pool. Transportation for Little Brave activities can be provided by the Y, and other organizational types of services are handled by Y-coordinators so the sponsor spends most of his time in the program with his Little Brave.

The program was begun under the direction of Larry

the greatest number of tires behind its own goal line, will be judged the winner.

A tire going out of bounds will be thrown in again by the judges at the point of departure. A tire going into the goal zone is not in play.

The goal zones of each team lie directly behind the ends of the mud pit.

Owen of the Central Community Branch in Altadena who has presented it at four national conferences, and has written it up in three national publications. Larry receives inquiries weekly concerning the program from YMCAs around the country. This evidences both the popularity and the need for such a program as this.

The success of the program is illustrated convincingly by the mothers of fatherless boys. They report that when someone cares about their boys, spends time with them, and is concerned enough to include the boy in his own life, positive changes begin to occur in their boys' lives. One mother reported, "David has two sisters and no brothers. He has practically no personal contact with males outside of the Y Little Brave Program. He has a very difficult time relating to people either individually or in groups. I think the exposure to an older male and to the other boys in the tribe has already helped him to feel more at ease around people. He's not nearly so much loner any more." Boys also become "more responsible", more interested in school, more understanding, and more self-confident, according to their mothers, and this is what the program is all about.

As another mother said, "... in this day and age when it seems that no one is willing to give something for nothing, it's refreshing to see high school and college young men giving unselfishly of themselves to help others."

Representatives of the program are currently enlisting interested male students on the local high school and college campuses. If you are interested in serving the community in a crucial way, or belong to a club that would like to make a contribution to our community, please see one of these representatives or call Larry Owen, or Rick Sizer at the Pasadena YMCA, phone 798-1516, or 793-3131 extension 40. This could be the start of a worthwhile relationship for you.

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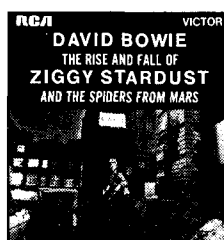
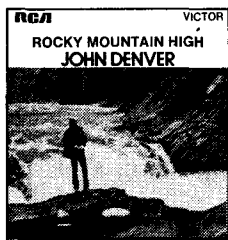


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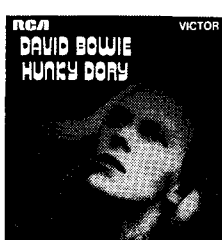


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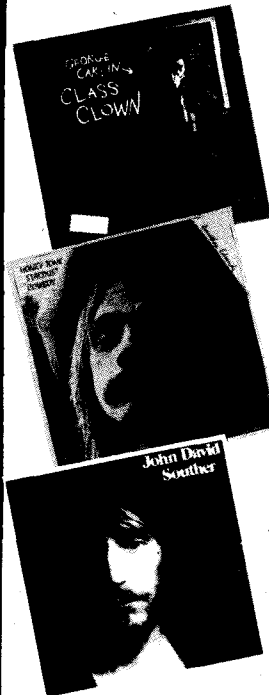
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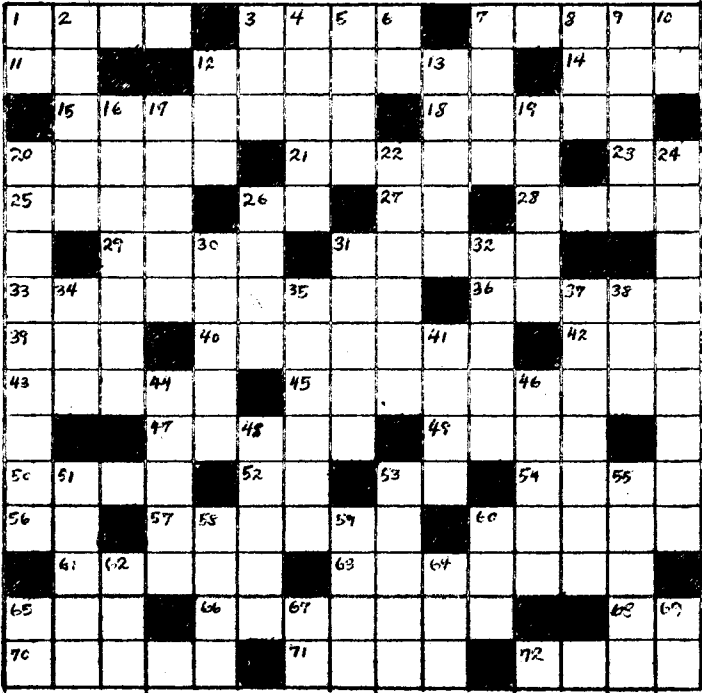
Conference Calls Available

Across

- 1. Consumer.
- 3. Peter for one.
- 7. Tie the knot surreptitiously.
- 11. Senor's assent.
- 12. Scientific unit.
- 14. Revolutionary group.
- 15. A chip on the shoulder.
- 18. Compare.
- 20. Instrument.
- 21. Bear witness.
- 23. Printer's measure.
- 25. Mellifluous mixture.
- 26. French article.
- 27. Kipling's poem.
- 28. Pacific isle.
- 29. Grant.
- 31. Companion of gate and physics.
- 33. Leonard Wood's comrade-in-arms.
- 36. Rearward.
- 39. Musical syllable.
- 40. Indian chief.
- 42. Diamond gal.
- 43. Nome dome.
- 45. Plastic.
- 47. Going up in the world.
- 49. Actress May Oliver.
- 50. Upton Sinclair's scheme of reform.
- 52. Adv. comb. form.
- 53. Latin abbr.
- 54. Linguist's prefix.
- 56. Compass direction, abbr.
- 57. Chem. compounds.
- 60. Eur. river.
- 61. Time to visit England.
- 63. Stern rejection yields fewer in June*.
- 65. Habitat, comb. form.
- 66. Part.
- 68. Chem. element, abbr.
- 70. Theft.
- 71. Companion of center and stable.
- 72. Mountain denizen.

Down

- 1. Pronoun.
- 2. Leningrad's plight.



- 3. Chem. comb. form.
- 4. Upper material.
- 5. Before room and after penny.
- 6. Postal abbr.
- 7. Ivy leaguers.
- 8. Lyric poem.
- 9. Adjudication adjunct.
- 10. Adj. suffix.
- 12. Position.
- 13. Avian milieu.
- 16. Fuel.
- 17. Mountain range.
- 19. Skewer item, var.
- 20. Contributes to a sinking fund.
- 22. Plant part.
- 24. Obscure article clinches holiday decor*.
- 26. Sinister prefix.
- 30. Terminal.
- 31. Church feature.
- 32. Hied.
- 34. Association, abbr.
- 35. Animosity.
- 37. Satellite country.
- 38. Thread in Nice.
- 41. Nautical station.
- 44. Mr. Levant.
- 46. Neg. charged particle
- 48. Talus.
- 51. Chamberlain's ill-timed purchase.
- 53. Key.
- 55. Subject of play by Calderon de la Barca.
- 58. Cant.
- 59. Excuse or duck.
- 60. Horologist's abbr.
- 62. Hawaiian dish.
- 64. Sp. article.
- 65. Old timer's inquiry.
- 67. Weight, abbr.
- 69. Follows 39 across.

*be sure to read between the lines.

Θε Μυθεο Ισ Κομωγῃ!

22 Οκτοβερ, 2:00 p.m.

(Pretty please?)

Firebomb the Tech

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of August 12, 1970; Section 3685, Title 39, United States Code)

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I certify that the statements made by me above are correct and complete.

Marvin R. Mandelbaum
Business Manager

Food Riot Manners

Throw It Or Throw Up

"The Food Riot", a social gathering peculiar to certain technical schools in the United States, derives from the more conventional 'bon-voyage' or 'going away' party.

This function is intended to provide a gentle farewell for members of student housing kitchen staffs. It thus combines joyful commemoration with a unique opportunity for improving the local cuisine.

If invited as a guest you might want to take, as an appropriate 'hostess gift', cases of soft fruit, eggs, or other foodstuffs suitable for throwing. Although informal attire is the general rule, formal place-settings and fingerbowls should be provided.

After the guests have been led into the banquet hall, seated and served, a short invocation may be delivered. This is followed by the ritual 'inversion of vessels'. Each member of the company present, in the order of his social rank, upsets his plate and allows the contents to spread evenly over the table top.

This having been accomplished, affairs procede at the individual discretions of the participants. It is considered a point of form, however, to aim more at the walls and ceilings than at the floor, since the loose foodstuffs may impair footing. If soup is served, it should be thrown by the ladle-full. Casting soup by the tureen, although a mark of social grace, requires much practice to perfect. Beginners should content themselves with hurling small portions of the entree and an occasional side-dish. If you desire a dish at the far end of the table, you should ask that it be passed. If you reach for it, you may disrupt the aim of your table-mates. Paper napkins, if wadded and saturated with iced tea, become ideal projectiles. Heavily buttered dinner rolls are also very good. Let your imagination run wild.

A complete treatment of the proper approaches to beverages would require several pages. While there are several schools of thought on this subject, most experts agree that iced tea, coffee, milk and chocolate should be cast by the glass-ful. Iced water, being more

plentiful, may be thrown from the pitcher by friends of the family.

The throwing of heavy silverware, glasses or goblets, although traditional, is considered gauche by moderns.

The move from the banquet hall is signalled by the upset of entire tables. As an optional part of the ceremony, members of the waiting staff may receive ritual ablutions at this point.

This fascinating and little understood observance is ended with a solemn processional by torchlight as offerings are conveyed to the offices and places of business of the responsible parties.

Excerpted from Emily Post on Etiquette, 69th Edition.

A Quorum Of Fools?

Continued from Page One

have been spent already (Sharon Spivak noted that our credit at the bank was probably OK, anyway), so in a sweeping mood of generosity Morin reassured those present that they would, in all probability, get what they asked for (excepting Young Republicans, on the basis that ASCIT must remain neutral). Though this was never made official in the form of a motion, everyone seemed happy and content to wander home with the BOD's lofty promises ringing in their ears.

Following this charade the BOD received Rick Krueger's report on Academic Reforms for CIT, completed over the summer, put off some random business concerning Cinematech, decided to continue the TGIF's in the Lounge (remember last Friday?), and finding no other issues to confuse, adjourned for the evening. No doubt the insanity observed in the first few BOD meetings will continue throughout the year, so drop by on a Tuesday at four and see the amazing Bod — in action — in person.

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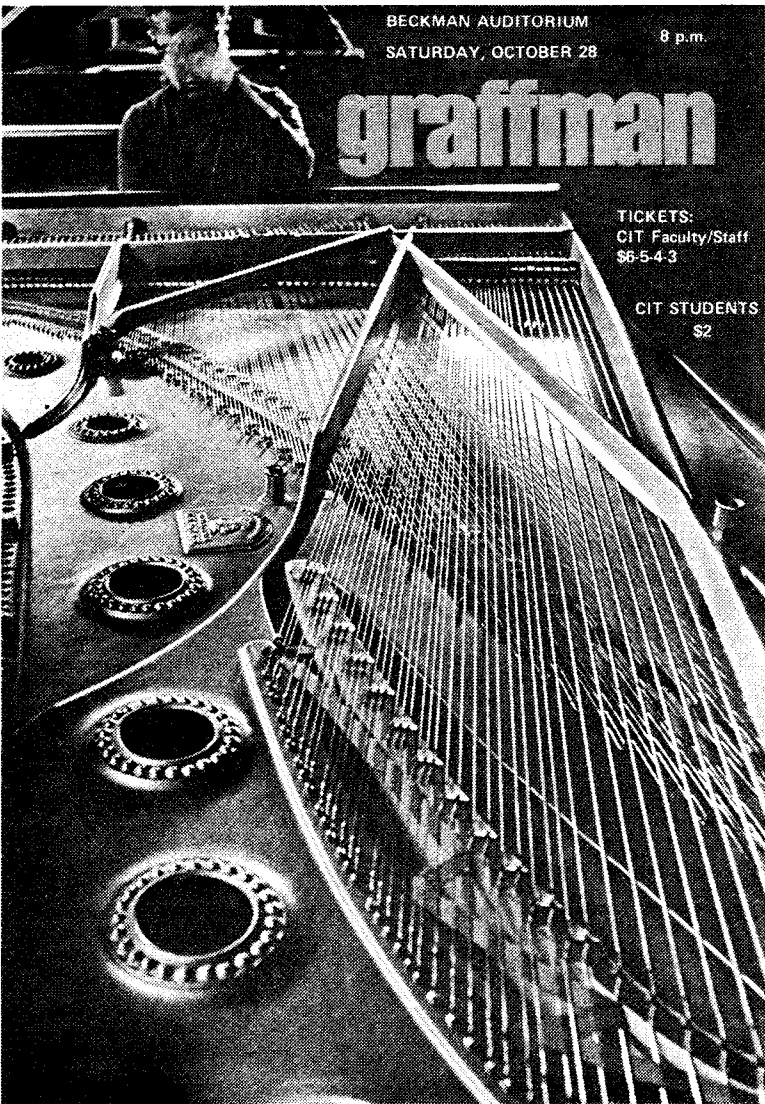
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Garble Tom Headweak

by David Miller

There are days, thought Garble Tom Headweak, when it is a definite mistake to get out of bed. Unfortunately, there is no early warning system. This morning, for instance, he had been going to his office at noble Matador College when he saw a young man who did not look much like a Matador College student prowling around the buildings. So he went up to the young man and said, "Can I help you? Are you looking for someone?"

And the young man replied, "Nah. I'm casin' the place. Gonna hijack it to Algeria."

"I'm afraid you're a little confused. This is Matador College, and we don't have any airplanes here. Besides, such an act..."

"Doesn't matter. Gonna hijack the whole place."

"But a college can't fly!"

"That's the brilliance of the scheme. The FBI will never suspect until it is too late."

"Brilliance!?"

The young man made a gesture reminiscent of Johnny Carson quieting his audience. "Please, no higher praise is necessary."

Garble Tom thought very fast. "All right, go ahead if you must, but I sure wish you wouldn't. You see, we do a lot of biological research here, and we have a lot of delicate plants and animals that couldn't stand flying at high altitudes in unpressurized laboratories. If you hijack us to Algeria, it will be a terrible loss to our campaign for religiously pure science."

"Oh. Gee. I didn't know. But what'll I do? I gotta hijack somebody."

"Well, over on the other side of town is a place called Cow Tech, and at Cow Tech is a place called Dabless House. Darwin Millstone says their slogan is, 'You can eat anything you want at Dabless's restaurant,' and he says they fly pretty high over there, so why don't you try hijacking them?"

"Thanks, I will," and he was off.

As he continued toward his office he passed the office of Hilbert Horatio Headweak, his

father and head of the Worldly Church of God. Last spring the old man had vanished mysteriously one day, and had been found semiconscious at Newport Beach the next morning along with a group of Easter Islanders who did not speak a word of English, and could not explain what they were doing so far from their home. A day or two later transmission on all channels of Intelsat's Pacific satellite was interrupted by a message which ran, "Garble Tom, I'm sorry I couldn't keep my promise, but he found those Easter Islanders I ate on my way north, and he started a sermon which was supposed to convert them and save their souls. I'm afraid it wasn't very long before I literally couldn't stomach any more. I'm leaving now, in fact I'm already on my way. If any of you funny little people ever get as far as Achernar, I'll be sure to drop by for dinner. Good-by. Mglafwh-thnulgu." This message was not transmitted from any station on earth, and just at the time the message was received, the satellite's orbit and orientation were disturbed, as if it had been bumped by some large object. It was decided that this was caused by a freak meteor impact, since there was nothing else it could be, and Garble Tom told reporters that he had no idea how his name was included in an otherwise incomprehensible message. So much interest was focused on President Nixon's trips to China and Russia at this time that the West Coast reporters never got around to checking what Garble Tom had said in New York, when he returned from Antarctica, about the creature with the unique name of Mglafwh-thnulgu. Anyhow, Hilbert Horatio was back, and he had decided that during the long period of praying and thinking he would need, Garble Tom would run things as before.

One of the things Garble Tom had been intending to do this morning was to look at a computer print-out of the current financial condition of the Wordly Church of God. But he

knew something was wrong when the first page said, "Program enlarged and confused by an Errorhead Obscuritas subroutine deminimizer." The rest of it was incomprehensible, so he went to the Matador College computer room to try to find Kik-yu Notsohotto, the Matador College computer expert.

She was in the computer room, and when he asked her what was wrong, she took the three cigarettes out of her mouth and blew an impenetrable cloud at the central processing unit, which typed out on the console typewriter, "CHOKES! WHEEZE! GASP!" as she answered, "We figured that if we put the operating system in backwards and the compiler in sideways, it would work faster."

"Sideways? I thought any computer program was sort of a long string of instructions, so how could you put it in sideways?"

"You're right, it isn't easy. Now watch this." Another program was fed in, and a tape was loaded onto one of the tape drives. As they watched, the take-up reel unwound the leader on the end of the tape, which was then sucked down into the vacuum column, disappearing into the intake hole at the bottom as the main reel unwound at enormous speed. There was a chewing, shredding sound, and a fountain of oxide-coated Mylar flakes rose from the top of the tape drive as the console typewriter wrote, "MM-MM GOOD! MEMOREX TAPE IS LOTS BETTER THAN THAT U.S. MAGNETICS STUFF!" and Kik-yu Notsohotto said, "Oops."

Garble Tom just stared for a while, and finally said, "Do you think you could fix it back the way it was? This isn't much of an improvement." Then he left, because it was time for him to do the weekly TV show, "Diving Visions of Whirled Tomorrows."

Well, the show was going to make up for all the rest of the day, because today they were

Continued on Page Eight

Water Polo Upsets PCC; Alumni Game Saturday

by Bob Kieckhefer

Caltech's water polo team scored a major upset last Wednesday by beating PCC, 6-5. The following Saturday the oddsmakers prevailed, however, as Cal State L.A. swamped them, 6-1. These results bring the team's won-lost record to 3-5.

PCC was so confident of victory over the Techers that their second team started the game. Russ Desiderio and Howard Bubb each scored twice for Tech in the first quarter, putting the Lancers behind 4-1. PCC's first team played the second quarter, but could only narrow Tech's lead to 4-2.

Too Bad, Nick

Tech's defense did a good job of defending the deep-end goal in the third quarter, but PCC managed to tie the score at 5-5 by the end of the period. Both teams made many mistakes in this quarter, with a missed penalty shot hurting PCC the most.

Virgil Shields did a tremendous job in the goal, holding PCC scoreless in the last quarter. Desiderio scored on a penalty shot early in the quarter to give Tech a 6-5 lead. PCC's repeated attacks failed to score, giving Tech the hard-earned upset victory.

CSULA = Bad News

Last Saturday Cal State L.A. jumped to an early 3-0 lead, as their faster swimmers completely dominated the sleepy Techers. (Too much action on Friday night in Pasadena?) [What action? — Ed.] Tech held the Diablos scoreless in the second quarter, but could not generate

any offense.

The second half continued to be a defensive contest, highlighted by Virgil Shields blocking a penalty shot. Cal State added two goals in the third quarter and one in the fourth; Tech finally got on the scoreboard when Steve Bitondo scored on a penalty shot with a minute left in the game.

Watch Out, Alumni

SCIAC competition started yesterday afternoon with Tech playing at Claremont-Mudd. Tomorrow at 4:00 the Pomona College team will be in Pasadena, as the Techers hope to revenge their loss to Pomona in the UC Riverside Tournament. Saturday morning at 10:30 Emery's old men (if they're awake) will take on Reck's young punks (if they're awake!) in the annual Alumni game. The water polo schedule reaches a high point next Wednesday, as the Techers will make the traditional pilgrimage to San Diego to take on UCSD.

Softball Scores

Thursday, Oct. 12

Lloyd 10, Ricketts 4

Fleming 3, Ruddock 2

Friday, Oct. 13

Page 6, Blacker 0.

Dabney 9, Fleming 8

Monday, Oct. 16

Fleming 3, Ricketts 1

Page 16, Lloyd 1

Tuesday, Oct. 17

Page 4, Ricketts 0

Blacker 8, Ruddock 4

Wednesday, Oct. 18

Fleming 2, Blacker 1

Dabney 5, Lloyd 4

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AUSPICES OF THE CLAREMONT COLLEGES

TECH Sports

Homecoming Saturday

Gridders LaVerned

by Bob Kieckhefer

Friday the thirteenth was an unlucky day for Caltech's football team, as they lost to the La Verne jayvees, 18-3. John Rogers' 25-yard field goal in the first quarter was Tech's only score.

The Beavers were hurt most by fumbles, often triggered by breakdowns in their offensive line. One drive was stopped on the La Verne four when a fumbled handoff was recovered by La Verne. By the final gun Caltech had fumbled three times and La Verne five, but Tech's came in much more critical situations.

No Bonfire

Tech's defense held well against La Verne's rushing game, allowing 115 yards in 33 attempts, except for one breakdown which resulted in a 52 yard touchdown run. The Beaver secondary had a hard time containing the passing game, however, as La Verne completed 9 of 22 for 187 yards.

Bob Bales quarterbacked the team last week, completing 5 of 19 passes for 64 yards. Jack Stemple and Greg Hoit were his prime targets, gaining 34 and 33

yards, respectively. Steve Bisset was Tech's leading rusher, with 33 yards, while John Morton picked up 24.

Come Home, Alumni

Coach Gutman predicts that this Saturday's homecoming game against the Cal Lutheran Frosh will be a tough one. Last year the Cal Lutheran varsity won the NAIA championship, and it is rumored that this helped them recruit many good frosh.

Added attractions at this weekend's game include the Caltech song girls, the marching band, and many drunk alumni. And, if the team comes through as it did at last year's homecoming, there will be a wiener roast at some intersection in Pasadena.

La Verne 6 6 0 6 - 18
Caltech 3 0 0 0 - 3
LV - O'Connor. 51 pass from Mehau.
CIT - Rogers. 25 FG.
LV - Larson. 1 run.
LV - Schneidmiller. 52 run.

	CIT	LV
First downs	9	11
Offensive plays	60	55
Total yards	121	302
Yards rushing	57	115
Yards passing	64	187
Passes Attempted	19	22
Passes Completed	5	9
Passes Had Intercepted	1	1
Fumbles lost	3	5
Yards penalized	48	40

Griffin Strong As Harriers Lose To Claremont-Mudd

The Beavers' cross country team lost a close dual-meet competition to Claremont-Mudd last Friday on the Stags' home course. The final score was 24-31.

Greg Griffin finished second again this week over the course at Mt. San Antonio Junior College. First place went to Wayne Akeyama in a time of 21:27. Griffin finished 40 seconds later in 22:07.

Griffin again ran a very strong race over an extremely tough course. Each meet he continues to show improvement, and this was his best race of the season.

Scott Matthews finished 4th in 23:05, followed in 6th place by Al Kleinsasser, 23:35; Ralph Hayward, 9th, 22:30; and Tom Herman, 10th, 27:52. Erik Horsely, suffering the effects of a cold, finished 11th in 29:08.

Overall, it was a fine showing by the Caltech Harriers. This Friday, the team will host Whittier on its own course for the first home meet of the year.

Except for Kleinsasser, this was the first experience for the team over the rugged Walnut Valley Course reputed to be the most difficult in the area. The experience should be valuable to the Techers as the conference championships will be held at the same location in early November. The team's season mark now stands at 1 win and 4 defeats.

When You Do Your Job Right . . . Bales Throws Up



BOB BALES throws from the pocket against LaVerne. Pass was complete to Greg Hoit for a first down, one of 9 the Beavers made last Friday. Other plays were less successful, however, as LaVerne triumphed, 18-3. Come out and see Saturday's homecoming game against the Cal Lutheran Frosh! Foto by Pheeneey

Five More Softball Games

Thursday	Page	Fleming	Varsity
Oct. 19	Ricketts	Ruddock	Frosh
Friday	Blackner	Dabney	Varsity
Oct. 20	Lloyd	Ruddock	Frosh
Monday	Ricketts	Dabney	Frosh
Oct. 23			



Home team is listed first. Games start approximately 4:30 p.m.

Athletic Cuisine

Friday, October 20			
4:00 p.m.	Cross Country	Whittier	Home
4:00 p.m.	Water Polo	Pomona	Home
Saturday, October 21			
10:00 a.m.	Soccer	Pomona	Home
10:30 a.m.	Water Polo	Alumni	Home
1:30 p.m.	Football	Cal Lutheran Frosh	Home
Sunday, October 22			
2:00 p.m.	Sophs Battle Frosh in World-Renowned Mudeo!		
Wednesday, October 25			
3:00 p.m.	Soccer	Whittier	Away
4:00 p.m.	Water Polo	UC San Diego	Away
Friday, October 27			
4:00 p.m.	Cross Country	Redlands	Home
Saturday, October 28			
0:00 a.m.	Soccer	La Verne	Home
0:00 a.m.	Water Polo	Redlands	Away

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WANTED: RIDE FROM CLAREMONT. For Polytechnic student. Morning-arrive @ 8:00 a.m. Gerry Gollin (714) 626-4285.

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Binkley Interview

Continued from Page Two
our POW's." Binkley stressed his differences with McGovern on this issue, stating that he did not believe in a 90 day pledge or similar completely unilateral action.

He also stressed his differences with McGovern on amnesty: "I believe in two years of national service, as for C.O.'s."

What effect will McGovern's candidacy have on Binkley's race?

"I am running as a Democrat, but with bipartisan support. I am running independent of any other candidates."

Binkley admitted that closely identifying his campaign with McGovern's might hurt him at the polls, but maintained that political considerations were not the only reasons for not tying his campaign to McGovern's. "I don't agree down the line with McGovern, or with Nixon for that matter."

"I respect Nixon for his accomplishments with China and strategic arms limitations." However, Binkley finds Nixon less satisfactory on domestic issues. "I don't agree with him on busing or the economy," Binkley labeled Nixon's domestic programs "divisive."

Binkley criticized both

McGovern's and Nixon's guaranteed minimum income schemes. "They are really the same thing, with different dollar amounts proposed. Congress will play with the figure anyway." His criticism lay in the nature of the plans, rather. "We must provide a positive incentive to work, not a negative incentive to work as we have now."

We asked Binkley how his bipartisanship might fare should he be elected to Congress.

"I'll vote the issues... differ with the party, or the administration. Many Congressmen do this, believe it or not."

"People feel when you don't vote the straight party line you jeopardize your power" by not getting good committee assignments, etc. "This need not always be true. Binkley cited several powerful congressmen who often oppose the party."

What are your chances?

"We're probably running very close right now. The 20% to 30% undecided vote will throw it one way or another. ... We have been finding 60% to 70% undecided in Republican precincts."

"The momentum of my campaign is fantastic... For the first time in the history of the district, it's a close race."

Garbled Tom

Continued from Page Six
going to have the most famous member of the Worldly Church of God, none other than the new world chess champion, Baby Flasher, on the show. So he introduced Baby Flasher, who then said, "These lights are too bright. And what do we have to have all these cameras around for?"

"Well, this is a TV show, Mr. Flasher, so we have to have lights and cameras."

"Oh. Yeah." Garble Tom had an obscure feeling that Baby Flasher was trying to be funny.

"We could say your victory represents a triumph for freedom, couldn't we?"

"Yeah. Of course, I knew Boris intended it to be symbolic the way he would stop where the floor was laid out in alternating black and white squares and then step forward two squares, and then just go along one square at a time. I told him that if he made it to the other side he could be something more than a pawn, but he never made it, said there were too many Knights Going Backward. I'm the king, of course."

"Were you ever worried that you wouldn't win?"

ent Colleges of Southern California group will total \$127,200 in unrestricted grants, fellowships and miscellaneous awards. Tech headed the list of recipients for 1973, with \$56,400. Of that total, \$15,000 is in unrestricted grants, \$10,000 for the Environmental Quality Lab, \$20,000 for the Industrial Associates Program, and \$11,400 for scholarships and fellowships.

Child Care Center Holding Open House

The Child Care Center for Caltech Families will hold an Open House for all their friends and supporters on Sunday, November 12 from 2-5 p.m. Visitors will have a chance to meet the staff (Mrs. Sybil Baker, Director, and teacher, Alice Hernandez) and tour the Center. We hope that Dr. James Gardner, noted psychologist and professional consultant to the Center will also be present. The Center is located at 293 So. Chester.

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News Briefs

Continued from Page One
tives, please contact the Placement Office, 8 Dabney Hall, to arrange for an appointment.

Red Cross Wants Your Blood

The Red Cross/Caltech Blood Group is holding a Blood Drive on November 10, 11:00 a.m. to 3:30 p.m., in Dabney Lounge. Sign-up slips are located in the Student Houses. Those who gave last year are invited to give again. For more information, contact John Land (Fleming), Greg Simay (Ruddock), or the Personnel Department, extension 2374.

Presidential Science Advisor To Give Seminar

"The Funding of Science in the Next Decade" will be covered by Dr. Edward E. David, one of President Nixon's science advisors, this Friday. The special seminar is to be held in the Humanities Lecture Hall in Baxter at 4:00 p.m.

Zuma Beach Target of SCUBA Club

SCUBA Club dive this Sunday, October 22, will be at Zuma Beach at 9:00. To get to Zuma go West on the Ventura Freeway, turn off on Los Virgins Road

(Malibu Canyon) to Pacific Coast Highway. Turn North on Highway 1 about 10 miles, get off at Zuma Beach (there are numerous signs). Meet at the main life guard station at the North end of the beach.

Gay Picnic Planned Sunday

The Caltech Gay Discussion Group will have a picnic this Sunday, October 22, at 12:30 p.m. in Tournament Park. We cordially invite you (and a guest) to join us on Sunday. Please let us know, so we'll have enough food! GDG, Winnett Center, 218-51, Caltech, 91109.

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Fibers Replace Metals

Optical fibers carrying laser beams "piggyback" for long distances and around corners will gradually replace metal cables in communication systems, Dr. Amnon Yariv, professor of electrical engineering, declared yesterday. "Conventional wiring will become outmoded for high data rate channels because optical

"Not really. I knew Boris was godounov to give me a lot of trouble, but I figured he was badenov that I could beat him and I was right."

"There are other sorts of chess besides the standard international type you play."

"Yes, there are several sets of rules played in certain countries on the 8-by-8 board, and then there is a game played in Poland on a 10-by-10 board."

"I've also heard of something called 'fairy chess', where you make up your own board and pieces. Do you ever play fairy chess?" Almost immediately Garble Tom realized that he had said something wrong. The feeling grew on him as he watched Baby Flasher turning first red, and then purple. And then he thought of the physical training chess champions go through to withstand the tensions of play. He thought of the way Baby Flasher had worked out with the punching bag at that resort in the Catskills, and Garble Tom decided to run. It was a good thing he did.

fibers can carry vastly larger quantities of information."

"A single, small optical fiber can typically carry an amount of information equivalent to two million telephone conversations simultaneously," Dr. Yariv said. "The fiber diameter is small enough so that thousands of them can be accommodated inside a pipe less than one inch in diameter."

The reason optical fibers can carry so much more information than metal wires is that information capacity increases with the frequency of the carrier wave and the frequencies of optical waves are much larger (by a factor of about ten thousands) than that of electrical currents now in use.

"Glass fibers not only are much more efficient, they also cost much less than copper or aluminum wiring and are far lighter in weight," Dr. Yariv added.

This new mode of communication is now waiting for the development and invention of new "integrated optical circuits" which will serve as the transmitters whereby information is launched onto the fibers, and receivers where it is recovered. These components must be miniature so they can interface with the miniscule fibers, yet be capable of performing the basic optical functions of light generation, guiding, modulation and detection.

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