

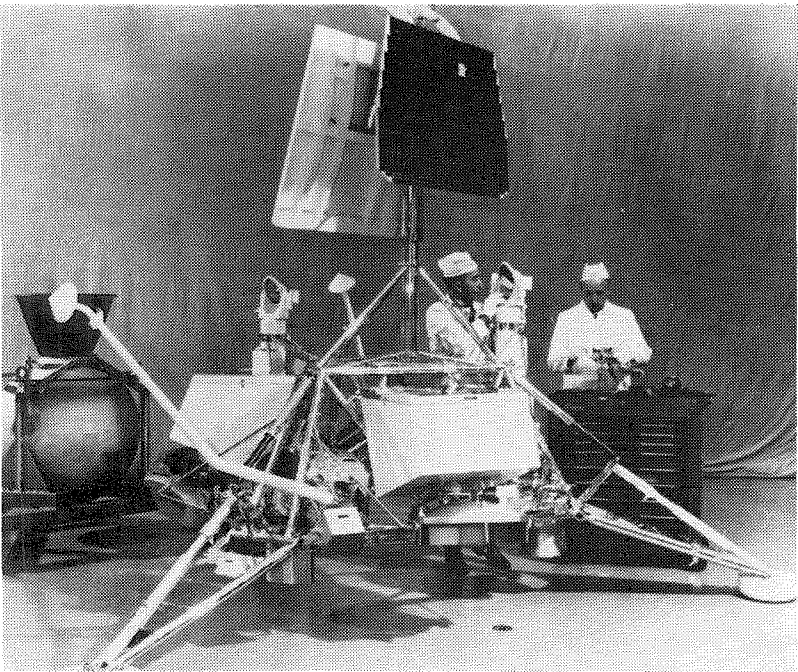
California Tech

Associated Students of the California Institute of Technology

Volume LXVI.

Pasadena, California, Thursday, January 28, 1965

Number 15



—photo by Auntie Semite

B & G technicians examine new highly-complicated spotlight for use in Beckman with \$500 rental fee. Due to its prodigious size the spot will not fit in the lighting booth, so ten rows of front balcony seats will be torn out to install it. The spot focuses a ten-million candlepower death beam on the performer's left retina.

Frosh Elect Mob In Two Runoffs

Last week, a secret raid of the ASCIT Bomb Squad uncovered some rather strange operators who center their activities under the sinister shadows of the Athenaeum. A report reached this office through our files in Washington of some of these charac-

Whan Zephirus eek

Merrill Wind Tunnel Hides Long History

BY JUAN LARGO

Over the old archway between the Synchrotron and the central shop there lies a long, low building which houses the Merrill Wind Tunnel. Almost completely shrouded from view by the giant Oak tree, the wind tunnel laboratory has been used by graduate students since 1950.

Albert Merrill, in whose honor the tunnel was named, was one of the early pioneers of aviation in America. He graduated from high school in 1892, when he delivered a graduation speech entitled "The Progress in Flying." According to Dr. Clark Millikan, director of the Graduate Aeronautical Laboratories, Merrill was a close friend of many pioneers in aviation. Among these was Octave Chanute, who worked with Merrill on gliders and later became the president of the Boston Aeronautical Society in 1900.

Hot Wind Tunnel

Merrill came to Caltech shortly before 1917 as an instructor in accounting. This was soon to change, for in 1917 Todd Ford gave the Institute funds for building a wind tunnel. Merrill worked on the tunnel, along with Dr. Arthur L. Klein, professor of aeronautics, and the late Dr. Robert Millikan. The tunnel was located approximately at the site of the present Thomas Laboratory of Engineering. It operated quite satisfactorily until the early 1930's, when it burned down.

Merrill had left the Institute in the early 1930's to return to the East. When he returned, he built a wind tunnel at Pasadena Junior College. In 1940 a large tunnel was built at the College. These tunnels were used for graduate research by students of both Caltech and PJC.

However, by 1948, PJC (pres-

(Continued on page 6)

ters, and it seemed imperative that a warning be spread immediately to the endangered public.

The Syndicate is running the Frosh Class. Although elected openly only last week, this group is DANGEROUS and all are sought by the FBI. The ring is headed by Greg Kourilsky under the title of Frosh President, of all foolish names. His Chief Henchman, Rich Flammang, is the organization man. The Bookmaker is claimed to be Bill De Wert, however no books of this ring have ever been found. The Armory Guard is Hank Thacker, the same Thacker who took his fifth before the HUAC. The last one sought is the leader of the underground goon squad, Jay Chapyak. All these men have been known to be armed with slide-rules, so approach them with care.

Luckily, national security does not seem threatened. They are doomed men. Class elections are only two months away.

Scrippsies Attract Techmen

Tomorrow, Friday, will be your first and last chance to sign up for this year's Caltech-Scripps Conference, which is being held in the San Bernardino Mountains over the weekend of February 26-28. As usual it is anticipated that many more people will sign up than can be accommodated at the Conference (last year 75 wanted to go and there was only room for 50), but preference will be given to the first 40 to sign up. So remember to be at the Y not later than 12 noon with your \$5 deposit and get your Wanda P. Overholt down on the list.

This year the theme of the conference (for those who take this into account) is "Creativity," and Dr. Richard Feynman is to give the key-note address. Other Caltech faculty who will be there include Drs. Rochus Vogt, David Smith, John Wier, Robert Huttenback, Dick Dean, Charles Newton, and Kenneth Eells.

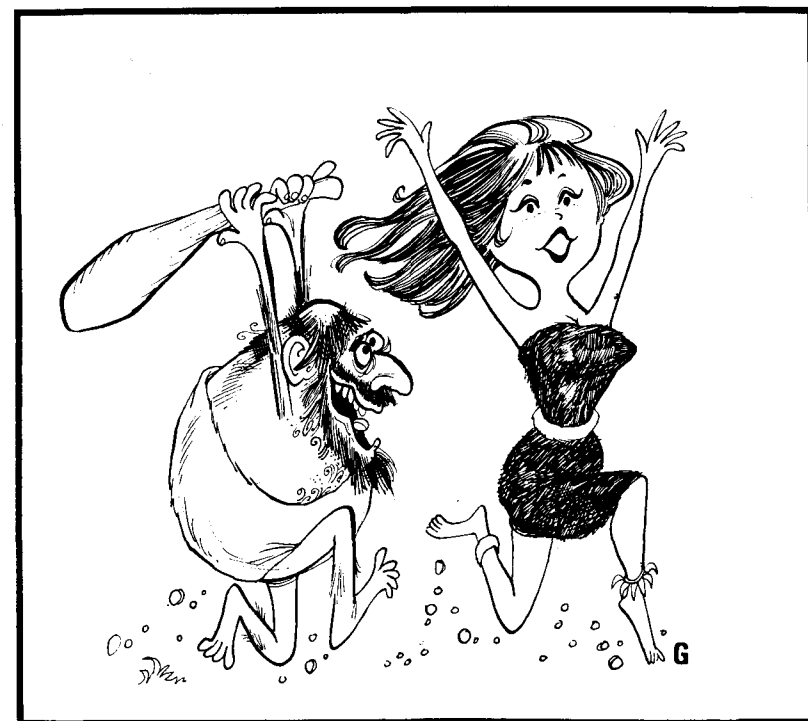
Girls Read "Candy" Too

Creativity will be analyzed on many levels. Einstein's experience of education led him to say "it had such a deterring effect upon me that, after I had passed the final examinations, I found the consideration of any scientific problems distasteful to me for an entire year." In keeping with this, the Conference will be talking about the conditions which

foster or inhibit creativity as well as the processes of creativity itself, creativity in personal relations and the ethics of creativity. There is meat for men of many tastes.

But since in previous years the major reason for most people's attendance has been "social," it could be emphasized that the in-

formal atmosphere of the Conference has always promoted a feeling of closeness not merely "intellectual." Camp Oaks was selected again this year owing to the great success of the last Conference when a snow storm kept the 100 or so participants confined to a pleasantly crowded cabin.



The Scripps Conference will give you an excellent opportunity to investigate the forces which give rise to the many manifestations of creativity!

Vogt Describes Physicists

BY MICHAEL MEO

"One should not be so darned narrow-minded and short-sighted to think only to the next ten years," said Physics Professor Dr. Rochus Vogt at Chandler Dining Hall last Friday. One hundred sixty frosh eagerly leaned forward in the crowded Frosh Diner's Forum to catch every word of his talk on "Physics as a Way of Life."

Vogt, whose research deals with high-energy properties of the solar system and galaxy, stressed his great concern for the future of the human race. He suggested that the greatest danger to the continued existence of mankind is not the population explosion but thermonuclear warfare.

Albert E.

The philosophy that we should rather be dead than red frightens Vogt. He hopes that we can learn to live with whatever comes along instead of committing worldwide suicide. His cosmological training leads him to look towards the long-range prospects, he commented, rather than the minor considerations of the moment.

Concerning scientists caught up in the cold war, Vogt cited the example of Albert Einstein, who called for civil disobedience to fight the McCarthy menace. Rationality, instead of passions, should judge moralities in this changing world.

Quotable Quotes

After the speech was over, Vogt showed his democratic spirit by refusing to get his meal ahead of the students, as is the precedent so far. Then, once everyone had consumed his luscious \$1.35 of Saga food, an interesting question-and-answer period followed, in which topics from the solar wind to this reporter's physics marks were quite originally examined.

On the subject of a humanities option, the freshman instructor wondered whether "any God-fearing American can be against it." Unable to translate his frequently-used "naja" for the benefit of his lectures, Vogt explained that

it was a colloquial substitute for the erudite German lecturer's grunt.

"Listen once to a real German professor lecturing," Vogt advised. "There is a grunt after every word."

ROTC Course Begins

Significant changes in the Air Force's traditional on-campus Reserve Officer training program were announced this week as the Air Force began implementation of its new program under the provisions of the recently enacted Public Law 88-647.

Of primary concern to students at Caltech is the new two-year feature of the law which integrates a six-week Field Training Course, conducted at an Air Force Base, with a two-year Professional Officer Course conducted on campus.

Students who have two or more years of academic work remaining until the awarding of their degree, either at the baccalaureate or graduate level, are eligible to apply, providing they can complete such work by their 28th birthday.

Gimmick

Students applying for the two-year program must pass the Air Force Officer Qualifying Test and a medical exam prior to April 30th, 1965, for entry in the fall of 1965. Applications are now being accepted, according to Major William R. Knight, professor of Aerospace Studies, for the two-year enrollment.

Fully qualified Professional Officer Course students will benefit from the new legislation, which authorizes a monthly retainer pay of \$40. Other changes brought about by the legislation include a maximum of three hours per week of classroom time and a

totally new and updated course curriculum. Students will receive travel pay to and from the Air Force Base conducting the six-week course in addition to the \$120 pay for the six weeks.

Interested students are urged to contact Major Knight at the ROTC building adjacent to the athletic field as soon as possible to begin the necessary testing and application procedures.

Notices

MOBILE ECONOMY RUN

Students who are interested in participating as observers in the 1965 Mobil Economy Run breaks should register in the Industrial Associates Office, 7 Throop. Registration will take place for ONE WEEK ONLY: Monday, February 1, through Friday, February 5, from 8:30 a.m. to 4:30 p.m. Students will be paid \$2 per hour (runs are a maximum of five hours), plus box lunch and transportation to the impound. Runs will take place from late February through spring vacation.

CQ CQ CQ DE W6VE

There will be a meeting of the Caltech Amateur Radio Club today at 7:30 in Clubroom 2. The club station is in operating condition now with an Eldico SSB-100 exciter. Everyone interested in joining the club is invited.

STEVE & ERIC

the popular campus folksinging duo, will appear again at the Ice House, 24 N. Mentor, Sunday afternoon at 4.

PLAY BASEBALL, YA BUM!

All baseball players meet with Coach Preisler et Wednesday, Feb. 3, at 11 a.m., in the lecture room at the gym. Bring any new umpire-baiting methods.

SANE CALTECH SCIENTIST STUDIES BIBLE!

Dr. Peter Ruest, Caltech biologist, will tell why he cares, tomorrow noon in Chandler at the Caltech Christian Fellowship meeting. Meals transferred.

FROSH EAT

at the Frosh Diner's Forum tomorrow at 6. Come hear Dr. Sharp and get in good for next year.

COLLEGE AGE FELLOWSHIP

Come on out to the College Age Fellowship meeting every Sunday evening at 7 p.m. at Knox United Presbyterian Church, 225 South Hill Ave., just one block north of Tech.

COFFEE HOUR

There was a coffee hour in Winnett yesterday at 3. Why weren't you there? But do come next week.

COAT FOUND

Will the person who left his coat in the Tech office last term please claim it.

WANT TO REPRESENT CALTECH

in the Intercollegiate Tournament at UCLA February 4-6 in bridge, chess, or table tennis? Sign up for the CIT preliminaries on the sign sheets in Winnett Game Room or the Winnett office.

Editorials

Beckman Costs

Following up last week's editorial on the use and expense of Beckman Auditorium, we thought the students should know how much money and to whom their money was paid for the Brothers Four concert last Friday. According to the expense sheet the Beckman office sent ASCIT, the total expense charged was \$276.72.

As examples, some of the items were a parking attendant who was paid for 2 hours at a rate of \$4.25 per hour, a stage manager for \$13; and two doormen and a ticket-seller for \$9.10 each. The Ticket Office charged \$48.88 for the printing of the tickets. This was originally estimated at \$12 less. ASCIT could have gotten it done for \$35.

A follow spot was rented for \$50 plus \$10 for B&G to move it from a truck into the auditorium. We have learned that the auditorium had a spotlight last year. What has happened to that one—why did a new one have to be moved in? To top things off ASCIT paid \$10.72 for "staff benefits." Of course the charge included items like \$65 for posters and \$8.50 for a lighting man (as required by contract) which ASCIT would have had to pay anyway. But ASCIT estimated that they could have saved about \$100 by doing it themselves. ASCIT lost from \$200 to \$400 on the concert. In theory, and according to the expense sheet, \$151.87 of the cost was absorbed by the Institute; but that amount cleverly matches the infamous \$150 "use fee"—and so in effect ASCIT paid for all the attendants and sundry helpers.

The crime of the situation is that any worthwhile student organization that wants to present a production in Beckman and must charge admission, gets stuck with these charges. If an Institute department uses the auditorium and the fee is paid, then in effect the Institute pays itself, making only a transfer in the accounting books. But when the student community uses the auditorium and pays the fee, the students must pay real money. We feel that as a part of the Institute, and by the fact that we already pay tuition, Beckman Auditorium should be a free service like the use of any other building on campus.

—Wally Oliver
Stuart Galley

House Dues Increased?

If anyone bothered to look through the last four-page conglomerate IHC minutes, he would find as the last item: "Starting first term 1965 (next fall) Student House dues will be \$10 per term. approved 6-0-0."

There was no mention of discussion; much less were there any reasons given. Not even were there representatives of all Houses present. The attitude the IHC presented was that they would take the action and see who complained. This is really not in the spirit of a representative body.

We realize that some Houses have incurred large debts and that they must find some way to get money. But it is also true that some Houses have constitutional restrictions on raising House dues. This is a matter for discussion and in some cases a House vote.

Because the Institute accounting department does not want to charge different dues for each House, the basic fee must be the same. Reportedly the IHC has in the past changed the basic fee, but the ultimate responsibility remains in the individual House membership.

Get serious guys.

—Wally Oliver
Stuart Galley

Letters

Secret Movie Showing Bad

Editors:

Something less than 200 English 7 students, gate crashers, and assorted faculty members scattered themselves among the empty seats in Beckman Auditorium last Tuesday evening for the film presentation of Shakespeare's "Richard III." I deplore the lack of foresight which caused the English department to shroud this presentation in the deepest secrecy. Their action contrasts with the glowing catalogue description of the opportunities in the humanities at the Institute. It appears to run afoul of one of the intents of the Faculty in eliminating frosh grades, namely, to allow the interested freshman the opportunity to develop his special humanistic or scientific interests. And it contrasts most strongly with the action of Prof. Huttenback and the Caltech Y who purchased a discount admission for Caltech students for the Esquire Theatre's "culture" movies.

Surely Beckman could have welcomed the entire student body at only a meager increase in cost!

Peter James Lingane



Billed as a dynamic young folk-singing group which has thrilled audiences across the nation, the Brothers Four came to Beckman last Friday night.

At first I could not see why this group deserved such praise, for the concert started slowly. The group sang well enough, with the exception of one solo in which the vocalist flatted well over half of the notes, but a lack of verve in the delivery rendered their numbers lifeless. The Brothers soon managed to inject a measure of excitement into their performance, but it lacked the dynamic and inspired quality I had anticipated.

100 . . . 99 . . . 98 . . .

Expecting the rest of the evening to follow this trend of somewhat dull entertainment, the Brothers Four surprised me completely when they returned from a short intermission. The fifteen minute metamorphosis transfigured them into the dynamic, energetic group I came to hear. Their

Bayne Explains Modern Italy's Foreign Relations

"Italy and the Atlantic Community" was the topic for Edward A. Bayne's lecture to the H5ers Tuesday. Bayne, an expert on economic and social development in post-war Europe, discussed the recovery and emergence of Italy since the war.

In 1945 Italy was an exhausted country. She owed one billion dollars to other countries, but her national banks had a total of 60 million dollars available. Two-thirds of the industry was destroyed. And the regional differences that had existed since Italy's unification were still there.

Immigrants Galore

All of her colonies were gone, and Italians were streaming back to the motherland. About four million nationals started to pour into Italy; these had to be absorbed and put to work. The situation was tense; there were 4 1/2 million unemployed out of a total population of 48 million.

Thus, for the first few years after the war, Italy's goal in foreign relations was to give away as many Italians as possible, to provide labor for development

projects in Africa. But soon she found that there was work enough at home. Since the war, Italy's Gross National Product has risen from 12 to 38 billion dollars. But some signs of the post-war surplus of Italians still exist: nearly half of Europe's migrant labor force is Italian.

Revolt

Also until 1955, Italy was receiving large amounts of US aid—a total of some 2 1/2 billion dollars. Of course Bayne explained, this made Italian foreign policy somewhat subjugated to the wishes of the US. Even after the end of aid, close ties have existed, due both to the millions of Italo-Americans and to the large amount of trade carried on between the two nations. But recently she has been showing more independence in foreign policy.

Foreign policy is to a large part determined by the home political situation. Recently, there has been an attempted left-wing coalition of the Socialists and Christian Democrats. This urge to unite has actually split both parties, for there are some in each party who don't want to go along. Both parties have been for European unity, as this is the key to Italy's prosperity. But both want unification on their own terms.

De Gaulle in Italy

The Socialists are anti-NATO, for a strong alliance might be able to defeat the USSR, which is against the Socialist aims. They believe that co-existence is possible, and, according to Bayne, they applauded Kennedy's sanction of peaceful relations with the Communist bloc. The Christian Democrats, largely controlled by the Catholic Church, have been opposed to the Communists, both because they represent atheism and because they represent a group challenging the Church's political hegemony.

During Pope John's reign, there was a move towards communicating with the Reds. Pope John felt that the earth is "all God's world; some are merely more misled than others."

Right-wing Italian parties accused the Church of "going soft" on Communism because of relations between the Vatican and Moscow. However, by this time it is fairly well realized that the

(Continued on page 3)

By Rick Briggs

numbers took on an air of excitement which rivaled the animation of the Smothers Brothers. They not only maintained an extremely well-paced delivery, alternating serious numbers with spoofs and humorous interludes, but also selected a wide range of material, keeping free from over-performed and insipid songs. At the same time their delivery loosened up. Ad libbing and clowning about, John (the one who usually sang on the right) managed to kink up the group with laughter several times.

On the whole, the Brothers Four performed excellently. They gave themselves to the concert, and their singing reflected this giving. Treating their serious material sensitively, they made such melodies as "Greenfields" linger in my memory. Rejecting the overused in humor, they tickled my inner ear with songs such as their rendition of "John Henry." Exuding vitality and excitement, their performance fully justified the advance advertising.

NEW BLACKER PREXY

Blacker House last week elected a new president to fill the vacancy created when Guy Jackson was wed. Taking over the duties from acting president Bob Sweet is John Eastment, who defeated Larry Anderson and Jerry Austin in order to serve for the next year.

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Believe it or not!
Larry Miller got a
2.9 last term

California Tech

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Managing Editor

Rick Briggs

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Bob Berry, Les Fettig, Les Fishbone, Michael Meo, Craig Nelson, Dick Tezak

Photographer: Kim Gleason

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Norton Greenfield
and staff

Business Staff

J. C. Simpson, Manager

Circulation: Stewart Davey

R. F. Whitlock, Ascot

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The first time I saw the Greenwood County Singers at the Ice House I said they were excellent, though they lacked the technique and polish to equal the New Christy Minstrels. Having seen them four times I'm ready to admit that they have now surpassed the Minstrels and all the similar groups about at present.

The Greenwood County Singers are easily the best group to appear at the Ice House in the time I've been reviewing. They have a superb and individual style and put more enthusiasm into their act than any other group I've seen. Their arrangements (except "Seven Daffodils") are excellent, and they can sing almost anything. Sandy Mosby, the banjo picker, is great in his own right

and almost equals some of the real greats in the game with his banjo breakdowns. Their specialty is semi-ragtime numbers ("New Frankie & Johnnie," "Cake Walkin' Baby", "Cholly's Slide Trombone").

As you can guess they're one show you definitely shouldn't miss, so get down to the Ice House before they leave Sunday night.

Supporting the Singers are Pat Paulsen and the Pair Extraordinaire, both of whom I reviewed two weeks ago. My opinions remain the same.

Clamadge & Jones

Starring at last Sunday's hoote-nany was that "popular campus folk-singing duo," Steve & Eric.

(Continued on page 6)

From Other Campuses

By Richard Karp

"The Interfraternity Council at the University of Rochester has passed a resolution outlawing sex in facilities operated by members of the IFC," states an article in a recent Tufts Weekly from Medford, Mass. The article continues by noting that the resolution "especially prohibits sexual intercourse in any fraternity house or (non-house) lounge." The council's resolution adds that they do not "want to legislate on the morality of sexual intercourse, but must prohibit such acts in fraternity houses and lounges' because of possible injury to reputations."

"Student opinion varied concerning the university administration's new so-called 'bedroom rules' which prompted the IFC resolution, but one student commented: 'If you take a girl in your

room, you should be able to entertain her any way you see fit.' " what the girl sees fit?

Along the same vein was the following ad which appeared in the LSUNO Driftwood: "Part-Time Jobs for Co-eds — Are you interested in earning? Here is a chance. This is not temporary. Hours to suit your schedule. — If you are interested in excellent part-time work with the possibility of a rewarding career, and are 18 years old or older, contact Edgar Burks, Dean of Student Services, Administration Building." The full page ad did not go into greater detail as to skill required or pay, but whatever it is it must be safe — the administration approves it!

Ars Gratia Artis

For the benefit of poetry fans everywhere, the following poem is repeated in its entirety from the South Dakota Tech.

THE SOVIET UNION

By Joyce Holdaway

I sought and sought and sought,
But nowhere could I find a thought.
I searched the crannies of my mind,
But no where, NO WHERE, could I find,

A thought of knowledge free.
I searched and searched the burning sand,

But nowhere could I find a man,
Willing to turn the truth to hand,
Willing to save this tortured land,
Willing to make it free.

How timely! Just after the death of T. S. Eliot! Presumably the author is aiming for the high position of poet laureate of South Dakota.

More Sex

Under the headline of "Nutritional Masturbation — Bates Ties Freud to Eating" the following article appeared in the Antioch College Record:

"Freudian psychology applied to eating habits may indicate that chewing gum is a form of nutritional masturbation, according to University of Michigan biology professor Marston Bates.

"Bates, whose . . . talk was entitled 'Gluttons and Libertines,' said that the relation between food and sex in society has afforded him a fine excuse for field studies.

"The question of 'who eats whom' said Bates, is just as significant for the biology community as 'who sleeps with whom' in terms of reproduction of the species."

Q. E. D.

To close I'll yield to the "quote of the week." The following is taken from a labor grievance filed by a workman against the Rocket Chemical Company claiming that he was unlawfully skipped over for promotion on the grounds that he did not possess the proper qualifications:

"Mr. Tompkins, a union steward, then delivered a lengthy dissertation on the fact that Jesus Christ, the world's greatest carpenter, had no training whatever, yet He created the world in six days . . . Q.E.D."

More H5

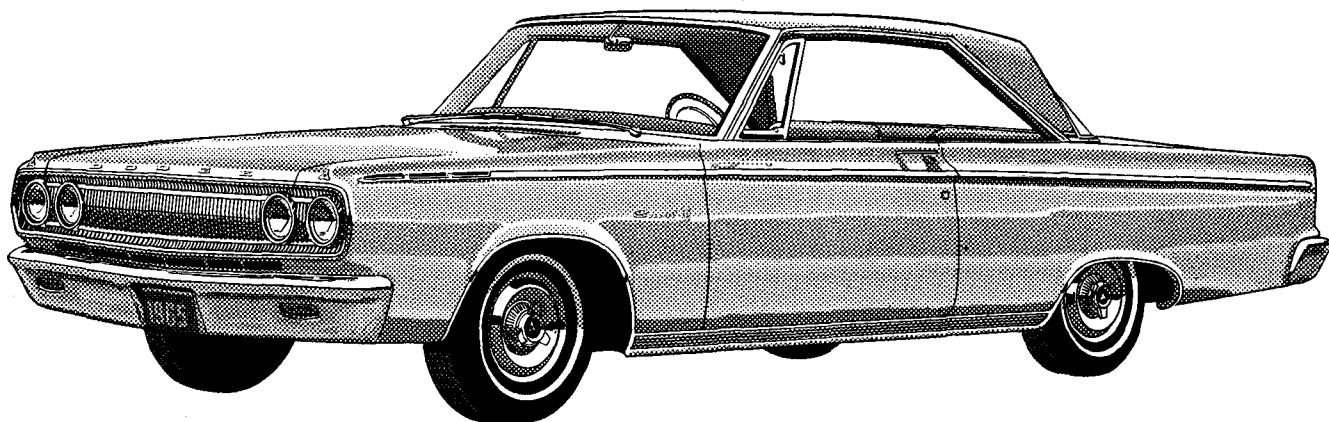
(Continued from page 2)

Church is still as opposed to the Reds as it ever has been. This has prevented a real coalition to the left as of this date.

Bayne feels that if such a coalition were to take place, it might lead to a great reaction, led by the Church, perhaps resulting in a nationalist, De Gaulle-in-Italy situation. Future Italian foreign policy will depend on how her internal conflicts resolve themselves, but Bayne believes that Italy will remain favorable to the West in any event.

I didn't think Charlie was that kind of guy...

<p>He's always been sort of a well, you know what.</p> <p>Yes, I know. Wide ties, wide lapels and all.</p>	<p>That car he's driving tonight... bucket seats, carpeting, console, vinyl trim, big V8.</p> <p>Frankly, I don't think he can afford it.</p>	<p>Yes, who does he think he's going to impress?</p>	<p>Hi, Charlie.</p>
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SPORTS

Trophy Standings

INTERHOUSE

House	Points
Ruddock	39
Fleming	37½
Blacker	24
Page	19½
Dabney	19½
Ricketts	15
Lloyd	13½

DISCOBOLUS

House	Won	Lost	Points
Fleming	5	1	16
Blacker	2	2	8
Ricketts	1	2	5
Dabney	1	1	4
Ruddock	1	1	4
Page	1	1	4
Lloyd	0	3	3

Wrestlers Rout Biola, Lose To LBSC 18-16

BY G. B.

Once again it is time to praise those worthy men of the mat, the Caltech wrestling team. Featured today is last Tuesday's 37-2 destruction of Biola.

Starting off at 123 pounds this week was Larry Gorbet of the famous Oye-Gorbet tag team, with a decisive forfeit. Mark Hayamizu, 130 pounds, then pinned Miller of Biola in 2:05 of the second period, increasing the team score to 10-0. At 137 pounds Frank Fujimura, after amassing a fantastic 15 points, including two near-falls worth three points, finally pinned Biola's Moore.

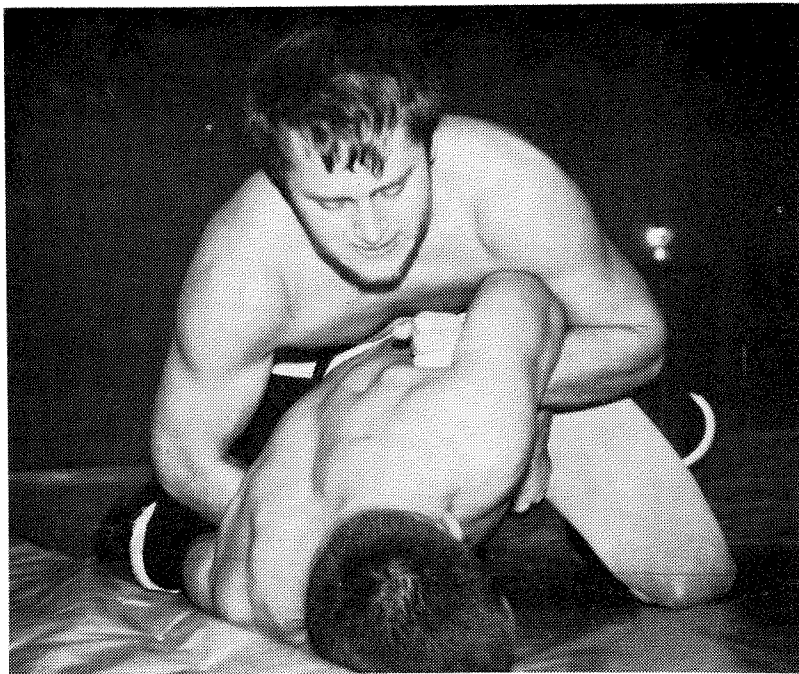
Phou . . . Thwa . . .

Orr of Biola, an extremely good wrestler, managed to last 1:02 of the second period before succumbing to the irresistible reversal pin of Dave Faulconer. Thus the team at 20-0 stood on the brink of an absolute wipe-out victory 40-0.

Jim Woodhead of Tech won by forfeit, Anderson of Biola being afraid to show after reading about Woodhead in last week's Tech. Russ Crenshaw, Caltech's 167-pound representative, fought a long battle against a determined Eberhardt. Crenshaw was unable

to pin his opponent until only 12 seconds remained in the match. Howard Powell, however, had no such trouble, pinning Simpson in

(Continued on page 6)



—photo by Kim Gleason

Andy Kampe tries to set up his Long Beach State opponent for a pin.

Interhouse Trophy Race Widens

BY JOSE

With the Interhouse sports season almost half-way completed, the race is down to three teams, and the future indicated that the gap between the "have" and "have-not" teams will continue to widen.

Fleming, Page, and Ruddock have taken first, second, and third in two of the three sports played thus far; however, Page has much ground to make up because of a horrendous swimming team that finished dead last while the two other main contenders for the trophy finished one-two. At the moment Fleming has a slight lead over Ruddock in the overall race, but some of Page's strongest sports have yet to be played.

The next Interhouse sport is track-and-field. Traditionally Ruddock places high in this sport, which is not even recognized over in Fleming. Once again this year it looks like Ruddock at or near the top with most of the competition furnished by Page. The Flems should be able to scrounge up enough athletes to finish in the middle of the heap.

Following track-and-field this term will be volleyball. The Big Red have their second-place team of last year intact and more experienced with a chance to get even with Ruddock, last year's champions, who upset them for the title. It looks like a Fleming-Ruddock-Page one-two-three finish again but the order is far from certain.

Predictions

It is a bit more difficult to predict what will happen third term, due to the loss of last year's stars. Page appears to have basketball wrapped up with a chance to pick up valuable ground on both Ruddock and Fleming. Neither of the latter two teams will have nearly as good a team

as they had last year, but the other four Houses have the same problem. Ruddock and Fleming should be able to come in third and fourth, respectively, at worst.

If you have been following so far, you will note that Ruddock should be slightly ahead of Fleming at this point; Page should be a not-so-distant third. Then comes tennis. Ruddock lost its first and second singles men, along with half the doubles team; Fleming

came in rather low in tennis last year and their doubles team graduated. Should Page come up with a top-notch tennis team, their deficit could be obliterated.

The winner of this year's Interhouse Trophy probably won't be decided before tennis. If either Ruddock or Fleming can strengthen their weak sports, the race should be reduced to two teams by then.



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Fri.	Jan. 29	6:30 p.m.	UC Riverside at Riverside
WRESTLING			
Fri.	Jan. 29	3:00 p.m.	Tournament at Cal Poly (Pomona)
Tues.	Feb. 2	7:30 p.m.	Biola at Caltech

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Discobolus Returns To Its Owner

BY THE MAD LOBBER

The Big Red of Fleming stepped in last weekend to win back their trophy, the Discobolus. Doffing their red shirts, the Fleming waterpolo team tromped Ricketts 11-1 for their fourth consecutive waterpolo win in the last four years.

Fleming's scoring was started as Pat Miller beat goalie Mike Baskes on two right-handed hooks in the first quarter. In the second quarter Dave Jarvis put in one of his patented off-the-bottom bat shots and Marvelous Mel Stephens threw in a goal too.

In the third quarter Jim Gibson broke and scored. Finally in the fourth quarter Gibson lobbed in a goal, Walt Davis threw in two, Miller scored his third and fourth goals, and Bob Gillon capped it off by casually pushing the ball into the goal. Baskes tallied a goal off Goalie Jarvis in the fourth quarter for Ricketts' only score.

Fleming will open its second term defense of the trophy with a challenge from Dabney.

Frosh Win in Second-Half Battle

BY LES PISCIOSS

Well, you win a few and you lose a few. But when do you start playing the game? After watching the frosh basketball team strive valiantly against the powers of the conference, and after patiently waiting for the time when it would again meet competition of its own caliber, this writer was terribly disheartened on observing the debacle against Biola last Friday night.

In what had to be their worst game of the season, the Beavers blew a 69-68 overtime squeaker to the men of the Bible Institute. The score sheet read 32-29 against Caltech at halftime, but this does not quite tell the story, for the frosh were then splitting the nets at a torrid 10-for-47 pace from the floor. The second period was no better, and ended in a 60-60 deadlock; a five-minute overtime

sounded the death knell. Even though four men reached double figures, Jim Stanley leading with 23, Caltech just could not pull it out.

The next evening brought a welcome change. Home to Rio Hondo, Coach Keith Jensen started his second unit to see what it was capable of. The re-

sult was a 17-point deficit at half-time. Happily though, the final period saw an enraged group of freshmen succeed in carrying away all the marbles with a 62-57 victory. Terry Bruns and John Frazzini did excellent board work as scoring was well distributed except for, again, Jim Stanley's high of 17.

Fleming Approaches Title, Squashes Ruddock 27-0

BY BIG RED

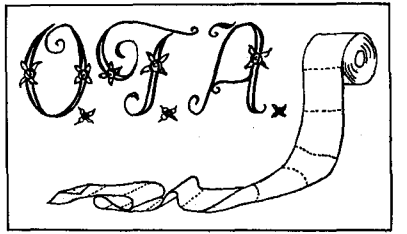
In an impressive display of defensive power and offensive finesse, the men of Fleming soundly defeated the Ruddock Blue in the year's key football game last Friday, 27-0. Each team entered the fray with a perfect 4-0 record, but only Fleming emerged unblemished. The Fleming team which had shown touches of brilliance before rose to its finest moment to capture the Interhouse football crown.

A large amount of credit for the victory must be given to

Fleming's defensive six. While performing well enough in the past, in the crucial game the defense played as a smooth and relentless team.

The forward wall of Myers, Baze, and Harslem continually harassed Ruddock QB Sherman in his own backfield and completely contained the "flashy" offensive threat of the Men-in-Blue. The defensive backfield of Vitz, Eder, and Green adlibbed brilliantly in stopping Ruddock drives again and again with fine aerial

(Continued on page 6)



J. K. EVANS

Since the NFL Hall of Fame made its selections last week, I think it's time that we here at Caltech had our own Hall of Fame. From time to time I will apprise you loyal readers of the current selections from the bumper crop of fabulous athletes that we produce here at Tech.

To start off, I nominate a great football player, Bernard Skodiak. Playing quarterback, Bernard was absolutely outstanding, even though he had never stepped foot on a gridiron before coming to Tech. For three years, he completed over 70% of his passes, connecting for an average of three TDs per game. He was also an outstanding runner, averaging over a hundred yards per game on the ground. There was just one trouble. He played for Fleming, not for the varsity.

Caltech Ideal
Second, I nominate Joe Troll. In four years at Tech, he never saw an athletic contest, varsity, interhouse, or discobolus. He passed PE with a D— by showing up fully dressed and doing five sidestraddle hops, then going home. He kept a 4.3 in math and would have graduated magna cum laude except that he died of a heart attack brought on by the exertion of climbing the steps to receive his diploma.

Third, I nominate Eli Whiffenpoof, who was a hell of a good guy. In his frosh year, he played football and went out for basketball. Evenings, he bowled, played pingpong, or shot pool; before breakfast, he went for long runs to keep in shape for the cross-country meets. On weekends he never failed to get in a round or two of golf, always in the low 70's. He played bridge and cribbage, too, and he excelled in all these sports and others that he never got a chance to indulge in at Tech because he flunked out at Christmas with a 0.3 (he got 3 units of A in PE).

Horrors

Finally, I want to mention as honorary members two of Tech's inimitable faculty.

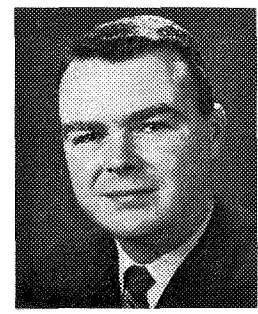
First, Dr. Peter Pansy, professor of Troll Engineering, who firmly believed that all a scientist needs a body for is to manipulate his slide rule. He wanted classes seven hours a day for six days a week with five hours of homework per day and compulsory church for eight hours on Sunday. He died of shock when a student, as a prank, placed a football on his desk.

And last, Coach Hardarm Thighbulge, who, when asked if he thought students should be required two days of PE a week or three, replied, "If I had my way, not only would the students be out here every day but I'd make the faculty put in three days a week."

Karp likes Candy Spot in the eight.
Yep, he's back again.

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Robert Anderson
A.B., Univ. of So. Carolina
M.B.A., Stanford University

It's been written that "variety is the spice of life." But at many companies it's difficult to obtain a wide range of work experiences. A college graduate can join a company, get locked into one type of activity and stay there and stay there and stay there. That's not the way we do it at Ford Motor Company where our young men may work in several areas to develop their full capabilities. We believe that a thorough grounding in many phases of our business is one of the best ways to cultivate management talent. An example: Bob Anderson of our finance staff.

Since Bob came to us in July, 1963, he's been actively involved in five important areas of the Company. As a member of our finance staff, he has reviewed budget and cost programs of a division marketing cars, another manufacturing tractors and subsidiaries engaged in automobile financing and insurance. In addition, Bob was selected to assist in the 1964 national labor-management negotiations. His present assignment is as a staff budget analyst for product engineering and styling. Because of experiences like these, Bob will be able to channel his career toward the activity that interests him most.

As a large automobile concern, Ford Motor Company needs people who can handle a wide variety of assignments. Our college graduates come to us with all types of educational backgrounds. And many of them move into management positions unrelated to their degrees. If a fast-moving career appeals to you, see our representative when he visits your campus. He may have the spice for your future.

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Bell: Early SF

BY BOB BERRY

Ever hear of John Taine? He wrote over fourteen major works of science fiction in the 1920's and '30's. He was also Dr. Eric Temple Bell, professor of math at Caltech from 1926 to 1953.

Bell, president of the Mathematical Association of America, member of the American Philosophical Society, and professor emeritus, was a prolific writer of early science fiction. His contributions to periodicals such as "Astounding Stories" and "Marvel Science Stories" fill a six-foot shelf in the Institute Archives, located in the sub-basement of Arms. His novels, such as **Iron Star** and **Green Fire** are included in anthologies between those of H. G. Wells and Olaf Stapledon.

Bell started writing science fiction to offer his publisher readily saleable material so he would publish his more serious works. (One of these, **Men of Mathematics**, has been a continual best-seller in the popular science field.) He took the pseudonym Taine because his employer had objections to staff members engaged in outside work.

Good Grief . . . It's Daddy!

At a time when writers were concentrating on mad scientists and monster machines, Taine emphasized natural catastrophes and scientific efforts to combat them.

His stories were still hair-raisers, though. Take, for instance, the one about the nude army's battle to the death with the monster crystals of China.

Bell found it easy to write because he was writing with a purpose. He considered science fiction the sugar coating on the bitter pill of science at a time when, as he said, "entire nations are being led by men who fear and hate science because it contradicts their wishful fancies."

After 1940 Bell's interest in fiction declined. He continued to teach at Caltech, however, and remained at his home on the present site of Beckman's mall until his death in 1960.

More Frets And More Frails

(Continued from page 3)

They put over a very favorable impression and seemed to me to be the best of the hoot acts. They have faults, notably their completely stereotyped material and a lack of polish, but they make up for that with excellent guitar work, the fact that they blend very well, and their ease on stage (would a Techman ever bother to be nervous?). Come to the hoot next Sunday afternoon and see them perform again.

The Sunday hoots, if you have

More Wrestling, Less AM 95

(Continued from page 4)

47 seconds.

Now, with the score 35-0 and only Kampe left, what happens? Right, they bring out their secret weapon — a heavyweight named Fisher. After a nine minute waltz, the match score was 1-1 with no riding time superiority; the match was then declared a draw, giving two points to each team. The final score was Caltech 37, Biola 2.

New Match and Results

With this history, we approach the Long Beach State match last Friday. Probably one of the best teams we have wrestled, Long Beach jayvees last year KO'ed Latham as well as trouncing the remainder of the team and walk-

ing off with my AM 95 book.

This year we wrestled their varsity. Again starting fearlessly off, Corbet won by forfeit. Mayamizu was pinned after 45 seconds of the second period by Fore. Old reliable Faulconer was ready for blood by this time, but Stichter, also an avid Tech fan, didn't show.

Woodhead decisioned a struggling, but unfortunate, Pycier 7-0 to bring the score to 13-10 in favor of Caltech. Crenshaw was decisioned by Kalionzes 7-1, followed by Matson of Long Beach pinning Powell after 2:50 of the first period. And finally, in heavyweight, Kampe managed to decision Young, 4-2. The final score was Caltech 16, Long Beach 18.

New Jock

To see action this week will be Jim (the Kid) McWilliams, another Tech hopeful. Having defeated Woodhead in a wrestle-off two days ago, the Kid will wrestle at 157 in the tournament at Cal Poly.

The next home match will be Tuesday, February 2 (note that date, Mole), against LA State, a tough opponent. For thrills and chills be sure not to miss this spine-tingling entertainment in your local Scott Brown Gymnasium at 7:30 p.m.

More Phlegm

(Continued from page 5)

defense and timely interceptions. Fleming's finest moment was its goal-line stand for four plays from five yards, finally holding on the two-inch line.

Outstanding Player Owens

But Fleming could not have won without the offensive leadership of "inexperienced" Bill Owens, who was certainly the game's outstanding player on offense. Time and time again, he proved to the most dubious in the crowd that he could make the big play when it counted. After a scoreless first quarter, Owens connected with a 30-yard touchdown pass to Green; then he completed a beautiful 60-yard pass play to Vitz who scampered into the end zone. Owens added extra point passes to Vitz and Eder, and Fleming was never headed.

After Fleming's goal line stand, Owens put the game out of reach with a brilliant scamper of his own. He added the final touchdown with a pass to blocking back Bill "260+" Mitchell.

Certainly the outstanding player for Ruddock was QB Murray Sherman, who produced what offense Ruddock could muster and contributed three fine interceptions in his deep safety spot in Ruddock's defense.

More Wind

(Continued from page 1)

ently Pasadena City College) needed room for expanding its facilities. Unfortunately, the tunnel was right in the way. Caltech immediately began shopping for a tunnel to replace the old one at PJC.

Replacement Parts

Fortunately, the Aerolab Company had designed and produced a tunnel which was based mainly on Merrill's work. One of these tunnels was purchased by the Institute.

The tunnel was dedicated sometime in 1950 when it was built in its present obscure location over the archway. The tunnel therefore has been in use for more than 14 years. According to its supervisor, Bill Bettes, the tunnel has more than paid for itself in service rendered over that period of time.

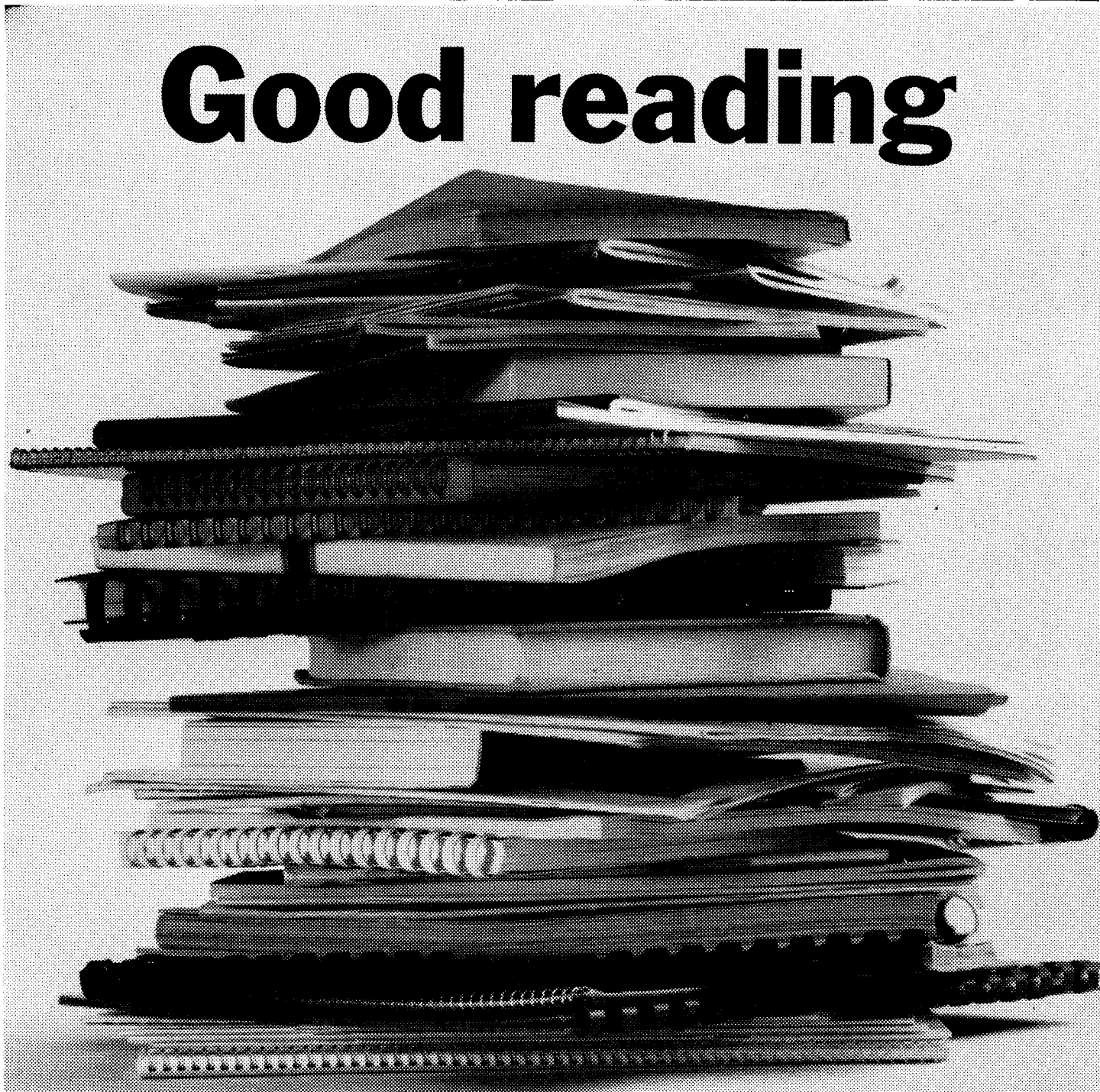
The actual tunnel is laid out horizontally, like a racetrack and is about 40 feet in the stretch. Its three-by-four foot test section can be used for testing at any air speed from 25 to 150 mph. According to Bettes, who is also in charge of the ten-foot tunnel in Guggenheim, the tunnel is extremely simple and can be operated by one man.

Wire and Gum

On the other hand, Bettes has also run into certain problems while operating the tunnel. One of these is the constant necessity of tools. Bettes has found that running the tunnel often involves wearing through the soles of his tennis shoes going up and down stairs in pursuit of bigger and better tools. Furthermore, the tunnel is known by many weather-worn grad students as the hottest — and the coldest — place on campus.

Once again, the distant rumblings of sudden progress threaten the very existence of this tunnel. A new physics building is being considered seriously by the Institute and when a final decision is reached, the Merrill Tunnel and the central shop may go.

It is possible that the tunnel may be moved to the roof of Firestone. However, it may cost more to move the old tunnel than it would to buy a new one. Meanwhile, time and progress (?) march on in their stride and it may not be very long before the fate of the Merrill Tunnel is decided for good.



Good reading

You're looking at the intelligent product of one week's work. (Some might be in your campus library.) They're technical bulletins written by some very talented scientists and engineers at the Jet Propulsion Laboratory. JPL people write over 500 such documents each year. Documents with titles like "Evaporation Effects on Materials in Space," and "Simple Guidance for Deep-Space Booster Vehicles." Pretty heady stuff.

But then designing spacecraft to reach the Moon and

planets is a pretty head-y assignment. And it takes a lot of bright people to make it happen. Where do these bright people come from? Better colleges and universities around the country. Yours, for example. Why not sign up for an interview with a JPL man? Besides working at the most fascinating job in the world, you'll also have lots of good books to read.

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ON CAMPUS INTERVIEWS: February 12, 1965

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