

Professor Arthur P. Banta Dies Suddenly of Heart Attack

Expert Sanitary Engineer, Winner of Bronze Star, ASCE James Laurie Award, Survived by Family

Arthur Perry Banta, 44-year-old associate professor of civil engineering at Caltech, died last Sunday at his home in Pasadena, of a heart attack.

Born in New York

Professor Banta was born in New York City, received his A. B. at Stanford in 1926, and his M.S. at Caltech in 1928. He served with various engineering firms, and was a sanitary engineer of Los Angeles county. Between 1938 and 1941 he was an assistant professor at Caltech.

Bronze Star

During the war, Professor Banta served as a lieutenant colonel in the U.S. Army Corps of Engineers, and in 1945 was awarded the Bronze Star for his work as chief of the engineering planning section of the Pacific Theater.

Associate Professor

In 1945 Banta was made associate professor of sanitary engineering at the Institute. He was a trustee of the Neighborhood Church, and a member of the Pasadena Rotary, New Century Club, Sigma Xi, Tau Beta Pi, and the American Society of Civil Engineers. He was well known in the field of sanitary engineering, and during his life received many professional honors, including, in 1941, the James Laurie Prize of the American Society of Civil Engineers.

Survived by Wife, Children

Professor Banta leaves his wife, Elizabeth Richardson Banta, and four children, Margaret Elizabeth, 16; Richard Perry, 13; Betsy Ann, 12; and Norman Perry, 5. The remains will be shipped to Arlington National Cemetery for interment.

More Balloting Due In Frosh Elections

A runoff election will be held in the near future to make the final choice of the freshman class president and vice-president.

Frosh will decide between John Nobles and Burt Snider for president and Bud Pallakoff and Jim La Fleur for vice-president. These candidates survived the preliminary election last Monday.

At Monday's election, Dick Jones was decisively elected secretary-treasurer from the three candidates running, and Leon Michaelson, who was unopposed, was elected as athletic manager.

EE's Offered Posts In Communications

The Federal Telecommunication Laboratories, Inc., at Nutley, New Jersey announce positions available to Electrical Engineering seniors in their trainee program next June. The projects at these laboratories involve frequency modulation, pulse time modulation, pulse code modulation systems, color and black and white television, and radar.

Those interested are asked to give their names to the placement secretary in 120 Throop as soon as possible.

Campus Calendar

- THURSDAY, JANUARY 27—
 - 12:00 Upperclass Luncheon
 - 12:15 Throop Club Meeting
 - 7:30 Dancing Class
 - 7:15 ASCIT Board Meeting
 - 7:15 Y Cabinet Meeting
- FRIDAY, JANUARY 28—
 - 11:00 Assembly "Soaring and Gliding" Culbertson
 - 8:00 Fleming Theater Party
- SATURDAY, JANUARY 29—
 - 6:45 Caltech Frosh vs. Occidental at P.C.C.
 - 8:15 Caltech vs. Occidental at P.C.C.
- SUNDAY, JANUARY 30—
 - 7:30 Caltech Musicals, Dabney Lounge
- MONDAY, JANUARY 31—
 - 11:00 Sophomore Class Meeting, 201B
 - 4:20 Interhouse Bowling
- TUESDAY, FEBRUARY 1—
 - 12:00 Y Frosh Luncheon
 - 7:30 Band Practice, Culbertson
- WEDNESDAY, FEBRUARY 2—
 - 4:00 Alumni Placement Talk, Dabney Lounge
 - 7:30 Fencing, Dabney Dining Hall
 - 7:30 Orchestra, Culbertson
 - 9:00 Glee Club, Culbertson

"Production" Is Alumni Topic

By Dick King

Next week will again be the engineers' week at the Alumni-Beaver placement lectures. The subject, "Production and Manufacturing", is the most important one to any future executive. Discussing at the Wednesday afternoon affair will be Mr. O. N. Anderson, Chief Chemical Engineer of the Long Beach Plant of Proctor & Gamble Co.

Experience

Mr. Anderson fills the standards required for the speakers, having had wide experience in production and chemical engineering with Proctor & Gamble Co. He has held the position of General Production Supervisor, which means he has been in direct contact with the problems and methods of production. Also he is a past secretary of the American Institute of Chemical Engineers.

The usual time and place will prevail, Dabney Lounge at 4:30, afternoon time.

Beavers Hold Evening Meeting

Last Wednesday night the Beavers held their monthly evening meeting, this time being hosted by Dean L. W. Jones. The rain kept several members away, and the group had to wait for the Dabney delegation to drop in from a dinner exchange to have a quorum even approached.

Schuster Presides

Prexy Woods was on the ailing list, so second man Schuster took over the guiding reins. The first item of discussion was the High School Orientation Program, which has been going full blast this last month. Reports indicate that in general the efforts to spread the good word about Tech around "sunny" Southern Cal have been well received. With the exception of one school, the Techmen have been given warm welcomes and ample opportunity to inform prospective college students about science in general, and also mention that Tech is not just a grind.

All This and More

However plans were made to carry on the good work next year, and also to promote visits from interested schools this year, to give them an inside glance at what Tech is like. The visits will include a meal at the student houses whenever possible, to add color. Muehlberger immediately stated that the visitors should be kept as far from Fleming as possible, but the cold stare he received from "Goon" Saltman refrigerated him for the rest of the discussion.

Referees and ticket takers were next on the list, with Schuster announcing that Don Hibbard had taken the job of procuring interhouse referees, and hoping that not too many mix-ups would occur.

Glamour Book

The previously proposed Glamour book was brought up next, with Dean Strong and Jones informing the group that it might be along next year, but that work was definitely being done on it.

ASCIT Nomination Assembly Set

Friday, February 11, is the day of the nomination assembly. Nominations for the following offices should be presented at this time: President, Vice-President, Secretary, Treasurer, Athletic Manager, Publicity Manager, First Representative-at-large, Rally Commissioner, Yell Leader, Editor of the "California Tech," Business Manager of the "California Tech," Editor of the "Big T," and Business Manager of the "Big T." The elections are only a short time off so start thinking of your nominations now. For information regarding a particular office contact the present holder of that office or check the "Little T."

Holder Of Two International Soaring Records To Speak

Third Sex Talk Ends Y Series

"Remember, little man, it takes time", was the principal thought of the lecture, entitled "The Sociology of Sex", which Dr. Paul Popenoe gave last Monday night before a roomful of Techmen. In this, the closing talk in the Y sex series, the director of the American Institute of Family Relations stressed the importance of adequate acquaintance and adjustment before marriage.

Two Factors

Dr. Popenoe introduced his subject by pointing out the two factors necessary in choosing a mate wisely:

- 1) You must have an adequate standard by which to choose.
- 2) You must have something to choose from.

Most people, the speaker said, realize the importance of the first factor, but very few people provide themselves with the second necessity. The average man goes with only six different girls before marriage, and that number is wholly inadequate.

Engagement

On a statistical basis, he said, a long acquaintance, a long engagement, and a formal marriage ceremony are big helps toward a successful marriage. The importance of the engagement period cannot be overlooked, since it permits a final decision as to whether or not you wish to marry, it provides a period during which the couple can adjust to one another's tastes, and it serves as a stimulus to the maturation of the individuals in question.

Dr. Popenoe discussed premarital intercourse, both during engagement and otherwise, at considerable length, and not only gave concrete reasons why this practice does nothing but harm to a subsequent marriage, but went further by presenting statistical proof that such intercourse very often ruins later marriage.

Discussion

The last portion of the lecture was devoted to a discussion of the barriers against large families which are imposed by the present economic system, and a possible solution to the problem.

Exchanges Mark Blacker Weekend

Men of Blacker enjoyed one of the most successful exchanges in months as members of the fairer sex from the ranks of campus lovelies here at Tech and John Muir joined us for dancing last Friday night. Thanks to Dr. and Mrs. Kyropolous, Blacker House was introduced, at the same time, to a piping hot variety of spiced tea that hit the spot. Believing that variety is the spice of life, the social committee has decided to leave this weekend free, with the exception of a Saturday night Open House after the Oxy defeat. This gives everyone an opportunity to plan for the event of the term a week from today—the Blacker Snow Party. Without a doubt, this particular winter get-together will be a stupendous affair.

Pioneer Flyer Also On Program

Dr. Wolfgang Klemperer to Speak on "Contributions of Gliding and Soaring to Aeronautics," Movies Also Set

Although the sport of gliding and soaring is often thought of as a minor and unexciting part of aeronautics, a group of air minded Caltech students will give a very persuasive demonstration to the contrary in tomorrow's assembly at Culbertson Hall. The now organizing Caltech Soaring and Gliding Club is a group of enthusiastic men interested in motorless flight, and one of its supporters, Paul MacCready, Jr., a grad student recently captured an international altitude record at 29,700 feet. He is at present National Soaring Champion, and holds a 230 mile² international distance record which bests a previous mark held by Russia.

Klemperer to Speak

The assembly tomorrow will start with an address by Dr. Wolfgang Klemperer on "The Contributions of Gliding and Soaring to Aeronautics." Dr. Klemperer was the first man to build a sailplane and a former holder of the world endurance record. He is now Vice-President of the Soaring Society of America, and a prominent aeronautical engineer.

Knapp to Entertain At Fourth Y Fireside

As the fourth in this term's Y Sunday night fireside series, Dr. Robert T. Knapp, Hydraulics professor at the Institute will entertain a group of Caltech students in his home this coming Sunday evening. Dr. Knapp, while he holds a weekly graduate seminar in his home, is very anxious to get acquainted with some of the undergraduates.

Working in close association with the Navy's \$350,000 typhoon laboratory in Azusa, Dr. Knapp has been one of the key men in designing a model of the harbor of Guam and studying the effects of waves and large storms on the harbor. Life Magazine covered this project in the August 23rd issue of this year.

Some fifteen Caltech students enjoyed a very pleasant evening this last Sunday at the home of Dr. and Mrs. Robert A. Millikan. Over very delicious donuts and punch, a comparison of each man's family tree, brought out the fact that many of the group were genealogically related through early Swedish, Dutch, Russian, English, Scotch, and Irish settlers in the East. The ancestral co-incidences were quite astounding.

Sophomores...

A class meeting will be held in 201 Bridge at 11:00 A.M., Monday, January 31. This is your opportunity to air your views, express your opinions, and direct the path for the Class of '51. Topics of primary discussion will be: Social Calendar, Athletic Program, Budget, and Future Projects. Don't miss this meeting — it's your class and your money!

Local Girls Visit Fleming Exchange

Local girls were the guests of Fleming House at a frictionless exchange dance last Friday night. Flemingites scoured all parts of Pasadena handing out cards to desirable women inviting them to the dance.

About 40 of those asked turned up to make a very pleasant dance for both themselves and the Techmen there—Fleming and otherwise. Quite a few foreigners were lured to romantic Fleming Lounge by the beauties. The hosts, displaying their usual magnanimity, gladly shared their guests with the visitors.

The next offering of the Fleming social season will be a theater party tomorrow night to the Pasadena Playhouse. The opus to be presented is "The Bunner Sisters." Then the following weekend will feature the tremendous Snow Party at the Caltech ski hut.

Next Paul MacCready Jr. will speak on his record altitude flight of last December, and of the possibilities of a 40,000 foot flight. His talk will be illustrated by some slides of his recent record flight over Bishop.

Color Films

Next, color films of the 1947 National Soaring Championships at Wichita Falls, Texas, will be shown. These films show the exceptional beauty of the sport more effectively than it can be described.

"Orlik" Displayed

The Polish built "Orlik" in which Mr. MacCready made the flight into the stratosphere will be on display in front of the Greasy all day Friday. Of particular interest are the instruments and accessories necessary for such a flight.

Omnibus

This assembly is presented for the whole student body and is planned to be entertaining for all. This is a fine opportunity to hear about this unique sport from men who really know it, so be in Culbertson at 11:00.

Y Lunchers Begin Religious Series

The Y.M.C.A.'s Upperclass Luncheon Club initiated its "Religious Series" last Thursday. The popularity of the topic and of the speaker was evidenced by the capacity group present at the training table. Mr. George Hill, minister of the First Baptist Church, formulated a background for the future topics of the "Series" in a "two minute per century" talk on "Christianity in Perspective."

Catholicism Today

Today the first of the denominational discussions will take place as Catholicism and its tenets are discussed by Father O'Reilly of St. Phillip's Church. This review will doubtless propose questions and arguments which will form an interesting background for the discussion on Protestantism by the Rev. Curtis Beach Thursday of next week.

The Upperclass Luncheon Club invites all to its weekly Thursday meetings. If you cannot make it for lunch, drop down and pull up a chair around 12:25.

Interview Schedule

- FEB. 1 AND 2— U. S. NAVAL LABORATORIES—Re-interviews. Details later.
- FEB. 4— WESTINGHOUSE ELECTRIC CORP.—GROUP DISCUSSION at 4:30 p.m. in 206 Dabney Hall—Seniors and graduates in Electrical and Mechanical Engineering and Industrial Design. All men who expect to be interviewed must attend this discussion.
- FEB. 9, 10 AND 11— DOUGLAS AIRCRAFT COMPANY, INC., Santa Monica, Calif.—Mr. C. LaVene, interviewer. Details announced later.

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Musical Masterpieces

KFAC 4-5 p.m. daily 2-5 p.m. Sunday Presented by the Slavick Jewelry Company THURSDAY, JANUARY 27 Le Roi D'Y's "Overture"—Lalo Concerto No. 2 in C Minor for Piano and Orchestra—Rachminoff. Cyril Smith, Pianist; Sir Malcolm Sargent and Liverpool Philharmonic Orchestra Meadow to Mayfair—Coates Eric Coates and London Symphony Orchestra FRIDAY, JANUARY 28 Il Guarany Overture—Gomez Arthur Fiedler and Boston "Pops" Orchestra Carnival of the Animals—Saint-Saens Leopold Stokowski and The Philadelphia Orchestra "Carnaval" (Ballet Suite)—Schumann Eugene Goossens and London Philharmonic Orchestra Batue—Fernandez Hans Kindler and National Symphony Orchestra SATURDAY, JANUARY 29 Overture in The Italian Style in C Major—Schubert. Sir Malcolm Sargent and Liverpool Philharmonic Orchestra Gedichte "Song Cycle"—Wagner Eileen Farrell, Soprano; Leopold Stokowski and Symphony Orchestra Dances Concertantes—Stravinsky Igor Stravinsky and Victor Chamber Orchestra SUNDAY, JANUARY 30 "CONCERT FAVORITES"—2:00-3:00 P.M. Der Freischutz—Overture—Weber; Sir Thomas Beecham and the London Philharmonic Orchestra Nocturnes—Debussy Sidney Beer and The National Symphony Orchestra with The Luton Choral Society Nutcracker Suite—Tchaikovsky Andre Kostelanetz and His Orchestra "STAGE MELODIES"—3:00-4:00 P.M. Dardanelle, Deep Night, Tamourin, Chi-nois, Temptation; Ray Bloch and His Orchestra Someone To Watch Over Me, So This Is Love, I'll Never Leave You, Solists: Harrison Knox, Mary McCoy and Evan Evans; Harold Sanford's Chorus and Orchestra When Johnny Comes Marching Home Again, Baa Baa Black Sheep, Ta-ra-ra-Boom-de-ay, Ten Green Bottles, Tom, Tom, The Piper's Son; The BBC Variety Orchestra Conducted by Charles Shadwell "A Medley of George M. Cohan Favorites" Vocalist: George M. Cohan, Jr. La Finta Giardiniera "Overture"—Mozart "MUSICAL MASTERPIECES"—4-5 P.M. Bruno Walter and iVenna Philharmonic Orchestra "Harold in Italy"—Berlioz Wilfiam Primrose, Violinist; Serge Koussevitzky and Boston Symphony Orchestra On The Shores of Sorrento—Richard Strauss Frederick Stock and Chicago Symphony Orchestra MONDAY, JANUARY 31 Zampa Overture—Harold Eftrem Kurtz and Philharmonic Symphony Orchestra of New York Symphony No. 4 in F Minor—Tchaikovsky; Leopold Stokowski and N.B.C. Symphony Orchestra Tales from the iVenna Woods Waltz—Johann Strauss Leopold Stokowski and The Philadelphia Orchestra "By Reuest The program for Tuesday and Wednesday was not available at press time.

The Evening Concert

KFAC 8-10 p.m. Presented by the Southern California and Southern Counties Gas Companies THURSDAY, JANUARY 27, 1949 ABDUCTION FROM THE SERAGLIO—OVERTURE, by Mozart. London Philharmonic Orchestra conducted by Sir Thomas Beecham (6). EIGHT SYMPHONIES, by Boyce, New York Sinfonietta conducted by Max Gobermann (51). MADRIGALS AND SELECTED WORKS, by Monteverdi. Vocal and Instrumental Ensemble conducted by Nadia Boulanger (40). LES PLAISIRS CHAMPETRES, by Montclair. Society of the Ancient Instruments conducted by Henri Casadesu (15). FRIDAY, JANUARY 28, 1949 Classic Recordings of Yesteryear JEUNE HENRI—OVERTURE, by Mehul. Lamoureux Orchestra of Paris conducted by Albert Wolff (10). SYMPHONY NO. 4 IN E MINOR, by Brahms. London Symphony Orchestra conducted by Felix Weingartner (37). JOSEF WOLFFHALL, VIOLINIST. CONCERTO IN D MAJOR FOR VIOLIN AND ORCHESTRA, by Beethoven. Berlin State Opera Orchestra conducted by Tierfelder (40). NAMOUNA—BALLET MUSIC, by Lalo. Lamoureux Orchestra of Paris conducted by Albert Wolff (23). TO A WILD ROSE AND TO A WATER LILY FROM WOODLAND SKETCHES, by MacDowell. Chicago Symphony Orchestra conducted by Frederick Stock (5). SATURDAY, JANUARY 29, 1949 DIDO AND AENEAS, by Purcell. Solists, Chorus and the Philharmonia Orchestra conducted by Constant Lambert (58). THE RAPE OF LUCRETIA, by Britten. Solists and Chamber Orchestra conducted by R. Goodall. MONDAY, JANUARY 31, 1949 FATINITZA OVERTURE, by Suppe. Boston "Pops" Orchestra conducted by Arthur Fiedler (7). SYMPHONY NO. 3 IN F MAJOR, by Dvorak. City of Birmingham Orchestra conducted by George eldon (37). NICOLAI MEDTNER, PIANIST. CONCERTO NO. 2 IN E MINOR FOR PIANO AND ORCHESTRA, by Medtner. The Philharmonia Orchestra conducted by Issai Dobrowen (32). METAMORPHOSEN, by Richard Strauss. Vienna Philharmonic Orchestra conducted by Herbert von Karajan (28). THE PHOENIX—MARCH, by Bliss. The Philharmonia Orchestra conducted by Constant Lambert (6). TUESDAY, FEBRUARY 1, 1949 PHEDRE—OVERTURE, by Massenet. Paris Conservatory Orchestra conducted by Jean Fournet (15). SYMPHONY NO. 4 IN F MINOR, by Tchaikovsky. National Symphony Orchestra (England) conducted by Sir Malcolm Sargent (40). GEORG KULENKAMPFF, Violinist. CONCERTO IN A MINOR FOR VIOLIN AND ORCHESTRA, by Dvorak. Berlin Philharmonic Orchestra conducted by Eugen Jochum (31). ALSO SPRACH ZARATHUSTRA, by Richard Strauss. Chicago Symphony Orchestra conducted by Artur Rodzinski (32). WEDNESDAY, FEBRUARY 2, 1949 DON PASQUALE—OVERTURE, by Donizetti. La Scala Orchestra conducted by Carlo Sabajno (7). SYMPHONY NO. 2 IN D MAJOR, by Sibelius. Philadelphia Orchestra conducted by Eugene Ormandy (40). JAN PEERCE, Tenor (42). VESTI LA GIUBBA FROM PAGLIACCI, by Leoncavallo. PARMI VEDER LE LAGRIME AND LA DONNA E MOBILE FROM RIGOLETTO, by Verdi. O PARADISO FROM L'AFRICANA, by Meyerbeer. MA SE M'E FORZA PERDERTI FROM THE MASKED BALL, by Verdi. AH! MIMI TU PIU FROM LA BOHEME, by Puccini. Leonard Warren, Baritone. SOLENNE IN QUEST'ORA AND INVANO ALVARO FROM LA FORZA DEL DESTINO, by Verdi. Leonard Warren, Baritone. THE BIRDS, by Respighi. Chicago Symphony Orchestra conducted by Desire Defauw (16). POLIFEMO—SYMPHONIC IMPRESSION, by Davico. Symphony Orchestra of Radio Italian conducted by Arturo Basile (7).

CAMPUS BREWINS

This week was one of expanding horizons, broadening experiences, and general shuffling of attitudes and acquaintances. "All is flux."—That's Heraclitus. Take Throop Club up at the Ski Hut this weekend: Supremely indifferent to the most magnificent snow of the year. Throopites concentrated on the large number of female snow bunnies—not their own dates, of course. It was impossible to tell who was dating whom—check that syntax—except during such functional periods as dinner-time. Veteran skiers found one odd guest at breakfast running around under foot, trying to dispose of Throop Club's surplus pancakes. Tex McKenny offered a somewhat impractical suggestion. All considered, Throop is to be congratulated on the highly decorative value of its guests. Enjoying winter sports nearer the Skip Inn were Ricketts stags Friday night. At an ice skating party, they discovered a number of unspoiled, unattached, sweet, and friendly young things. Dan King was quite captivated by a most graceful skater of 13. Fleming is sold on the personal invitation routine. After handing out several hundred post cards to Pasadena girls ("You have been chosen on the basis of personality, beauty, h.s.") Eschner found himself with so many gals clamoring to dance with the so-called men of Fleming that calls were sent out for reinforcements. (Fox, Hendrickson, and Knoepfler graciously obliged). Results: Goldman clutching at frightened does a la Snake Pit, Terriere badly smitten, nearly everyone escorting home someone else than whom they brought. Woods and Englar got together in a quiet corner as the rest of the house demonstrated their warm affection for Cynthia and Miriam—that's the trouble with bringing a good woman around; maybe Long has the right idea. DRINK Jim Hendrickson has been boasting of a week-end coma. His anxious friends will be pleased to hear he is now resting comfortably. Invalid Hugh Carter was making up for lost time, we noticed. Ah, it's fine to be ASCIT treasurer! FOR YOU KNOW NOT Among the millions of Dabney couples at the Playhouse Friday night were MacKenzie and Don Royce's date. Of course, he brought her up to ailing Don's room after the show. Dot's nice—don't fight!

The Front Burner

Hal Martin has been trying to figure out which campus woman comes next. Last week he did what a lot of people have been thinking about — dated the library blonde. WHENCE YOU CAME Wilcox and Schroeder were rudely awakened while studying in Rickette lounge Friday night by some refugees from the Blacker exchange. Stoutly defending Blacker manhood, Wilcox sent the pair back whence they came. But word spreads and soon not two, but four young ladies were prowling around Ricketts court. Wilcox and Soule gallantly escorted them home. Well, you know how stories grow; by Saturday night there was one more than that required by simple geometrical progression—that is, nine Muirites were swarming on Ricketts. We have it—they heard about van Lint! Good Acting This fresh humor is provided mainly by the characterizations of "Oiwin" Trowbridge, the verse-writer, played by Leo Martranga, and the three touts and their "goil"-friend, played by James Ashton, Len Gumley, Alexander Constant and Peggy Baday. "Oiwin" looks, acts, and talks more like Eddie Cantor than Cantor could himself; the three race track gamblers come straight out of the pages of a Damon Runyon story, and Mabel is the typical New York dumb blonde. In an effort to really get into the spirit of the season, The Playhouse offered with its program, a tip sheet by "Oiwin" on the next day's races at Santa Anita. Any person betting on "Oiwin's" sure things, would have lost his shirt. Plays to Come This week the Playhouse offers once again a "never look a gift-horse in the mouth" world premiere. This time it's the "Bunner Sisters" adapted from the novel by Edith Wharton. All those who appreciate the honor and prestige of having a play presented to them which probably couldn't get a premiere in the East may attend. The foregoing constitutes an editorial comment on this Playhouse practice. A stage event to look forward to is the coming presentation of "Dark of the Moon," a legend with music. Written around the famous legend of Barbara Allen and her witch-boy wooer, the play received very fine reviews during its New York run. U. C. "Daddy, are there any skyscrapers in heaven?" "No son, engineers build skyscrapers." IT PROBABLY WON'T SNOW ALL YEAR Get your spring sport shirts now at tremendous savings. Sport shirts of distinction by Hollywood Sportogs. MARKOFF AND HEDRICK Agents Dabney 11 and 12 All styles and colors, and we've got so damn many on hand. HAROLD O. GRONDAHL Representing NEW YORK LIFE INSURANCE COMPANY 234 E. Colorado St., Pasadena Phone SY. 2-7141

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When a Fellow Welcomes Hospitality

Illustration of a waiter serving a man and woman. Coca-Cola "Coke" 5¢ Ask for it either way . . . both trade-marks mean the same thing. BOTTLED UNDER AUTHORITY OF THE COCA-COLA COMPANY BY COCA-COLA BOTTLING CO. OF LOS ANGELES © 1949, The Coca-Cola Company

Illustration of a weather vane on a roof. "WILL IT RAIN TONIGHT?" ... everyone wants to know, but military and air-line pilots must know and know promptly! To help transmit this information, the Bell System maintains the largest facsimile transmission system in the world . . . a network nearly 20,000 miles long. Over these wires the United States Air Force, in cooperation with the United States Weather Bureau and other government agencies, is able to send up-to-the-minute weather charts and maps to many points simultaneously. Each receives a faithful reproduction of the originals. The chance for error is eliminated, valuable time is saved. This network is a part of America's vast communications system—the finest in the world. The job of maintaining and improving this system, of keeping the cost of telephone service as low as possible, never ends. BELL TELEPHONE SYSTEM

Talkin' It Over With The Goon

Noticed that the sports writers on the big newspapers have started their annual campaign against the boys in the black and white stripped shirts. They have even gone so far as to compare them with certain members of the animal kingdom of like coloring. It seems as if the refs aren't letting the players have a chance at the ball game and are turning basketball into a free-throw contest. The big example lately was the SC-UCLA riot where 55 personal fouls were called. The major portion of these was for pushing or hacking during shots.

There are three views on refing: the players, the refs, and the spectators. Let's look at each one separately.

If a team is well coached in the fundamentals of defense they will commit very few personal fouls providing the game is kept under control. It is, therefore, the main desire of the player that the refs keep the fouling to a minimum by calling very strictly from the opening whistle.

From the standpoint of a ref the game is another way of picking up a few bucks. It is true that there are a few refs who are really conscientious about the game and want to see it played right, but by and large they will call a game right, if they do, only because they want to be back refing the next game.

Joe Fan who played his buck at the box-office has another opinion. Just as in football, boxing, hockey, and most other

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Chapman Runs Wild, 56-36

Coach Carl Shy's basketballers played one of their poorest games of the season last Saturday night against a very good, alert Chapman five on the latter's home court. The game was never in doubt after the start of the second half and the game ended 56-38 in favor of the boys from Los Angeles.

Few Gifts

Tech displayed its usual brand of shooting from the free throw line, missing far more gift shots than they made. The Beavers also seemed confused by the small court and continually passed the ball away. The small court should have been ideal for Tech's zone defense, but it was no problem for the Chapman sharpshooters.

Early Lead

After getting off to a quick 4-0 lead, the Beavers were soon out of the lead and after ten minutes the game was never tied up. Coach Shy substituted freely after starting Cox and Sereno at guards, Butler and Brewington at forwards, and Saltman at center. Brewington was high point man for Tech with nine points. The only other men worthy of mention are Bass and Saltman who both accomplished the difficult feat of fouling out with only a few minutes gone of the second half.

In this game as in previous games this year, Tech lacked scoring punch. With Saltman handcuffed in the center slot, no one could hit consistently from outside, although both guards and forwards were getting good

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Beaver Sports

Off-Campus Men Move to Second Position in IH

The eleventh week of bowling in the Interhouse League at the Pasadena Bowling Courts found Throop breaking its second place tie with Dabney by winning five points to the Darbs' four. Ricketts also came through with five wins to maintain its 16 game lead over second place Throop. The Blacker kегlers gained four wins, while Fleming was able to salvage only two out of eight.

Present Team Standings:

House	Won	Lost	Avg.
Ricketts	62	26	151
Throop	46	42	146
Dabney	45	43	127
Blacker	37	51	134
Fleming	30	58	128

Benton Leads

Bob Benton of Throop rolled a 514 series to lead the individual efforts. For the second consecutive week Sid Stone of Ricketts gained the charmed "500" circle, this time with a 512. Howard Cohan of Blacker hit 209 for best single game of the afternoon, followed by Carl Fox of Ricketts with a 192.

Throop High

Throop Team No. 1 compiled the high team series of 2042, while Blacker No. 1 rolled 778 for high team game.

Fleming Team No. 1 put together the oddest coincidence seen in a long time when its members Abell, Pardee, Smith and Malonski each showed the same point score of 95 in the seventh frame of the second game.

Individual Average to date:

Name	House	Avg.
Bob Benton	T	161
Andy Check	R	160
Carl Fox	R	155
Sid Stone	R	154
Ralf Ericson	T	151
Bill Culbertson	D	151

(Continued on Page 4)

Interhouse Tennis

Cynics were surprised last week when a few matches were actually played off in the trudging Interhouse tennis race. Blouke Carus of Ricketts rushed out during a break in the weather to down Dabney's Jack Ottestad, 6-2, 6-3. There was time for another match before the rain resumed, but Ed Welch couldn't find his racket.

The season's I. H. tennis schedule took rain checks for 2 weeks, and the teams more seriously considered Blanchard's suggestion that they play it off in ping-pong. But intermittent spasms of dry courts permitted several games to be played over the week-end and early this week.

Fleming took an early lead, with Edwards beating Dessler of Ricketts, Drury of Blacker, and Dabney's Jim LaFleur. Also Bill Woods beat Blacker's John Heath.

Ricketts made a good showing, with Bier beating Fleming's Carl Price, and Soule and Van Lint waxing Price and Edwards. The standings

	W	L
Ricketts	3	1
Fleming	4	2
Blacker	0	2
Dabney	0	2
Throop	0	0

Throop Retains Discobolous After Scare From Dabney

Throop's possession of the Interhouse Discobolus trophy was threatened last week. Dabney mustered nearly nine men and challenged in baseball. The game was, of course, called because of rain.

Bevo Five Seeks Revenge Saturday

Haas Leads High-Scoring OXY Five; Engineers Gunning For Second Win

The unpredictable Beaver five will again face the Oxy cagers this Saturday. The Engineers started out strong at the beginning of season with a win over Redlands; then everything seemed to go wrong and the Shymen have suffered three straight defeats. But the hoopsters will be gunning for Oxy; the last meeting saw a fiery hot Bengal five walk all over the Engineers.

Haas Again

Coach Anderson will depend a great deal on the scoring ability of his ace forward Gene Haas. To date Haas has poured through an average of eighteen points per game. Teaming up with Haas will be Bob Olsen, another speedster with tremendous scoring ability. At center will be Jim Tunney who gave the Beavers plenty of trouble when he dropped the ball through the hoop for sixteen digits. In the guard slots will be "Swish" Crandell and Jackson. Against Caltech and Whittier, these two lads have been hitting a frightening number of long shots.

The Tigers are a high scoring outfit. In their last three encounters, they have scored 63, 74, and 60 points. They put on a show of wide open, fast basketball. Oxy is a team on the upgrade and will be plenty tough.

Engineers Win?

The Beavers enter the fray as definite underdogs. Too many defeats, collapsing under pressure, and a not too potent offensive are factors which do not give the Engineers too many votes for a victory. However, Carl Shy has a mighty fine defense when the boys buckle down and play ball. In fact many coaches advocate that a good defense is a good offense. If the Engineers can hold down Oxy's long shot artists, a victory is almost certain; but it is a big "if."

In the forward wall will be Paul Saltman at center, Bass and Bowen at forwards. When these big men control the backboards, the points really start building up. At guards will be Al Sereno and Bill Cox.

At Oxy's gym Friday, Ed Preisler and his five will face the Tiger babes. In their last encounter the Beaverbabes lost but the game was a thriller all the way. Game time is 4:30.

There will be a preliminary game to the varsity game Saturday at 6:30 between the reserves and an unnamed opponent. Varsity tip-off at 8:15.

Line-ups:
 Oxy: Haas, Olsen, Tunney, Crandall, Jackson
 Caltech: Bass, Bowen, Saltman, Sereno, Cox

WARNING

There is NO PARKING on North side of Blanche St. (South of PCC gym). Tickets will be given for violation.

Caltech students should enter West door and sit in West half of gym at Saturday night's game.


Frosh Sports Roundup By Leon Michaelson

Taking a rest from league competition this past week, the Frosh basketballers journeyed to Los Angeles only to be dealt an unsuspected defeat by the Chapman College JV squad. Deep in the last half the little engineers were ahead 33 to 32, but could only muster up one more point to the opponent's nine through the remainder of the game. Locals, 34, Chapman JV, 41.

Hustlin' Harry Patapoff again took high point honors of the evening dropping in four field goals and a pair of free throws. The Beavers seemed to find it difficult in hitting normally easy shots and lay-ins, where the boys from Chapman pulled several "rafter grazer" shots that made the situation all the more annoying.

The Lineup:

Caltech (34)	(41) Chapman JV
Patapoff (1).....RF	(9) Laugee
Michaelson (6).....LF	(8) Raab
Grey (4).....C	(8) McBride
Tautz (4).....RG	(7) Dolby
Snider (3).....LG	(4) Miller
Scoring Subs:	
Tech: Stewart (4), Granger (1), Peters (2), Chapman: Lee (5).	



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Who Dealt This Mess

By Carl Fox

There are several interesting points illustrated in the hand below. North handles the bidding well while South uses a holdup to control the timing of the hand and then plays percentages to bring home the contract. Notice the timing of the Heart ruff. Used earlier it would have been worth one trick but, as played it also serves as an entry to another winner.

```

N
S K 9 6
H 7 3
D A K 7 5 2
C 8 5 2
W
S O 4
H O J 10 4
D J 9 6 3
C K 10 7
E
S J 5 3
H K 8 6 5
D Q 10 4
C Q 6 4

```

South dealer, neither side vulnerable. Bidding:

```

S W N E
5 15 P P 2D 3S P P
15 25 P P 3S P P
45

```

North's bidding follows a principle used by most good players. With a holding sufficient for a bid of 'Two and a half Spades' he first bids a side suit to avoid misleading partner. Since his bid is forcing for one round North is sure to get the opportunity to raise. South has no really good rebid so he sticks to his Spades, even though they are not technically rebiddable. To start a new suit at the three level requires more strength than he can muster. After North's raise South, on a close decision, bids the non-vulnerable game.

West opens the top of the Heart sequence as the best available lead and Declarer allows the Queen to hold so that he may control the timing of the Heart ruff. West continues the suit as his least dangerous course and Declarer wins the Ace.

At this point South pauses to evaluate the hand. He has lost one trick and stands to lose three more, a trump and two Clubs. After a short trance he decides against any ridiculous Spade or Club play but rather to play the percentages in those two suits. That is, since the odds are 68-32 in favor of the 3-2 Spade split and 62-38 favoring the 4-3 Diamond split he decides to attempt to set up a long Diamond winner, conceding one Trump trick. Then he will be able to discard two Clubs on the Diamond winners.

But to set up the Diamonds requires four leads and three entries to the board to get back to the Diamond winner. South proceeds with his plan by leading to the Diamond Ace and returns by ruffing the deuce. The Ace and then the King of Spades are taken, a Club discarded on the Diamond King, and the five ruffed. Then the carefully preserved Heart nine is ruffed on the board and the last Diamond led for the vital second Club discard. Now the Club Ace wins the needed trick.

After Diamonds split three times the contract is home. If East ruffs the fourth round Declarer merely discards a Club, the Club Ace and the Spade ten and nine winning the necessary tricks. If East holds up the play continues as above. If the thirteenth Diamond is ruffed South still discards a Club and the Club Ace and Spade ten fulfill a difficult contract.

CAMPUS BREWINS

(Continued from Page 2) experiences with a female M.E. at the exchange Friday night reminded us of a weekend at the Ski Hut when three windows were busted, the woodbox empty, and we had forgotten our sleeping bags.

SUPPLEMENT

T'WAS BRILLIG

It was tea time last Thursday, which in Kerckhoff usually means a great gathering together to discuss electrophoresis of spinach leaves and the next department picnic.

AND THE SLITHY TOWES

But on this day, there was more than the usual fuss. Dr. Beadle even had a coat on, and his sleeves were rolled down. The lab assistants showed remarkable indications of femininity. A festive air, for the new Animal Shelter was completed, and its operation was being explained to the Gentlemen of the Press.

DID GYRE AND GIMBEL IN THE WABE

Dr. Owen removed a rabbit from its shiny cage. Miss Mattison stroked a fat Syrian hamster. All was cool and air conditioned. Rolls of paper were drawn under the rats' cages to catch the droppings. All the containers were efficiently designed for cleaning and flushing. The four sheep bleated at the flash bulbs. The EXAMINER reporters drew their beautiful fur coats daintily about themselves.

ALL MIMSEY WERE THE BOROGOVES

The next day, The TIMES carried a page one, part two article reporting the words of Dr. Beadle, that work with live animals was necessary for a large part of biological research, that operations were generally conducted under anesthetic. The Herald Express likewise quoted the words of Kerckhoff professors, slanted a great deal, but generally leaving the ethical question up to the decision of the reader.

AND THE MOMEATHES QUITE OUT OF IT

"Caltech Opens \$150,000 Labor-

Shavings...

From The Board

Probably by now everyone has been requested personally to contribute to the Infantile Paralysis Fund, and each man is very likely asking just what happened to the decision of the ASCIT Board of Directors prohibiting further personal solicitation. The answer is that the Board, after receiving additional relative information and opinions, reversed its decision pertaining to this drive.

For instance, it was brought to the Board's attention that the Infantile Paralysis Fund has recently contributed the sum of \$300,000 to the Institute for research. The Community Chest, also among those drives on the curtailed list, directly benefitted many of the married students living in the village.

It was also brought to the attention of the Board that the Institute authorities feel very strongly about maintaining good public relations. It was pointed out that with Caltech constantly encouraging endowments of considerably larger sums, the latest decision of the Board was not quite appropriate. Then after the public sees little (sob) Margaret O'Brien cry her heart out in the

atory For Vivisection" ran the headlines in the EXAMINER. Our purpose was "the torture and cruel extermination of helpless animals." Especial attention was given to the incinerator (designed to eliminate any smog nuisance) and the fiendish practice of dehydrating the carcasses before disposal.

But oh, beamish nephew, beware of the day,
If Your Snark be a Boojum! For then
You will softly and suddenly vanish away,
And never be met with again!

—Lewis Carroll.
Let Us Pray.

movies, and some guy half dead in an iron lung, the Caltech refusal to help does look rather poor. At least it was this type of opinion which led the board to reverse its decision.

On the other hand, there's no doubt that the students have a legitimate complaint about the incessant solicitations being conducted, many of them apparently unrelated to student interest. So where lies the solution? Going on the supposition that you can't ignore public relations, here are some suggested possible solutions.

One: We might conduct three drives per year which would be the Campus Y, WSSF, and a third campus community chest which would be doled out to various charity organizations when they ask for student participation.

Second: We might conduct only two drives, the Y and WSSF, and in place of the third, have an additional charge be placed on the tuition which could be divided among the additional drives.

There are, of course, some rather obvious faults to either of these ideas. The main one would probably be that you could never get all the students to agree to the manner of division of the funds.

Somewhere in between we ought to find a compromise solution which would alleviate our problem and at the same time maintain good public relations. Let's kick it around for a while.

Ol' John Kariotis brought the glad news last Thursday night that we may finally get the much fought over amphitheater behind the optics lab.

Due largely to the efforts of Wayne Herzig, Mr. Hertenstein has very graciously offered to build the thing en toto, provided the students really wanted it. Accordingly the Board formed a resolution to be forwarded to Mr. Hertenstein's office expressing the keen interest and enthusiasm of the student body.

Thomas Named As President Of ASCE Last Week

Caltech's Dean Franklin Thomas was inaugurated last week as President of the American Society of Civil Engineers at their 96th Annual Meeting in New York City. This action followed the tabulation of a mail ballot among the Society's 24,000 members. Since the close of the three-day gathering, Dean Thomas has begun a series of five addresses to be delivered while enroute to Tech, and during the current week, will speak in Boston, Washington, D.C., Pittsburgh, Cincinnati, and New Orleans to regional gatherings of the organization. Following this tour, he is expected to return to Tech sometime next week.

TALKIN' IT OVER

(Continued from Page 3) sports, he likes to see a little blood let, or if not blood, at least a little rough stuff. They want to see fast action, and the whistle slows it down. Thus, the fan wants less tweet, the player wants more protection, and the ref wants to get out with his skin and a few dollars on the side.

CHAPMAN RUNS

(Continued from Page 3) shots. Sharp offensive rebounding could have overcome even this handicap, but here again the Beavers were woefully weak. Forward Ted Bowen missed the game, being sidelined with a sprained thumb suffered in practice. The team's second highest scorer, Ted could have made a big difference in the Saturday night fiasco, and it is hoped that he will be ready to start against Occidental this Saturday night.

Y Doings

By Vern Edwards

Have you ever wondered who ran the Y? I suppose that many would say Wes Hershey; considerably fewer would say Wes Hershey and Vern Edwards. But neither of these is very close to the answer.

Rather, the job of determining program and policies of the Y is carried on by some twenty-five or so students who form the Y Cabinet. This group is composed of the heads of the various departments and committees, such as luncheon clubs, forums, fire-sides, and of men that have particular responsibilities, such as publicity, the book exchange, and so forth.

Out of their weekly Thursday evening meetings come recommendations and suggestions on matters ranging from the major concerns of the Y down to the small details of program planning. These meetings are by no means closed sessions, and anyone interested in the organization and programming of the Y will be most welcomed any Thursday evening at 7:25 in the Y lounge.

The Frosh Lunch Club is continuing with its orientation to the campus talks and will have for its speaker next Tuesday Professor Fritz Went who will discuss the plant physiological laboratories on the campus.

OFF-CAMPUS MEN

(Continued from Page 3)

High Series to Date:

Name	House	Avg.
Andy Check	R	584
Sid Stone	R	548
Carl Fox	R	535
Bob Benton	T	521
Mitt Carus	R	520
Duane Neversman	T	510
Dick King	D	509
John Holmes	R	507
Howard Cohan	B	505
Win Soule	R	502
Dave Baron	B	500

High games to date:

Name	House	Avg.
Andy Check	R	224
Bob Benton	T	216
Howard Cohan	B	212
Carl Fox	R	210
Gene Mooring	T	206
John Holmes	R	202

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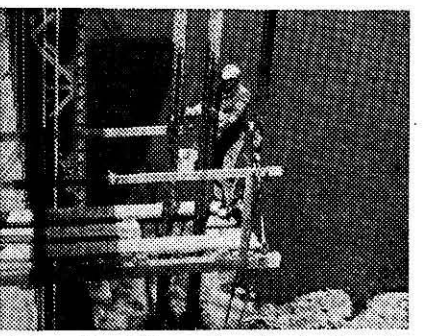
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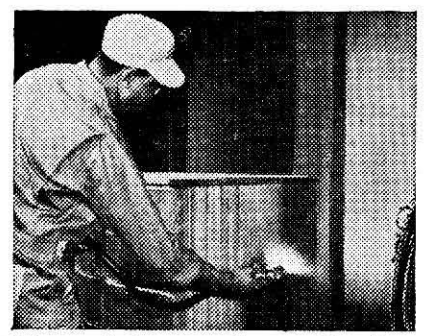


Rust would quickly weaken this structure. Because "Dulux" resists salt water and salt air, it has for years protected many famous bridges.

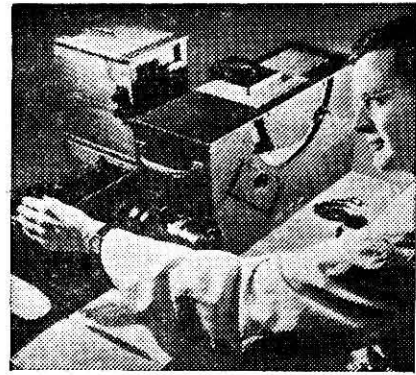
blow won't break. Tests with mechanical scrubbers prove it outwears old-style enamels by more than five times. "Dulux" enamels now guard boats, large and small, as well as petroleum tank farms, machinery and other industrial installations.

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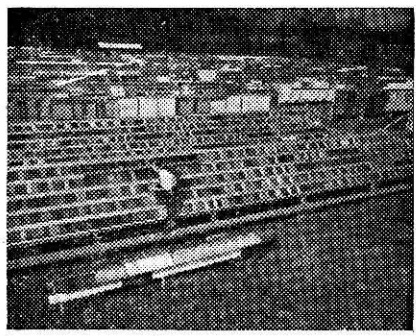
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Mark P. Morse, B. S., Physics, Washington College '40, measures specular and diffused reflection of a sample paint surface with a goniometer, a Du Pont development for obtaining data on gloss and brightness.

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