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ASSOCIATED STUDENTS OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA CALIFORNIA

forword

From morning 'til midnight the eternal strains of music flow from the student houses and homes about Pasadena—it's High-Fidelity, the favorite and most prevalent pastime of the Techman. Records, tapes, Heathkits, speakers. It's all there—from the most technical intricacy to the acme of aesthetic listening. In recognition of this pastime, the Big T devotes its theme to ''Hi-Fi.''

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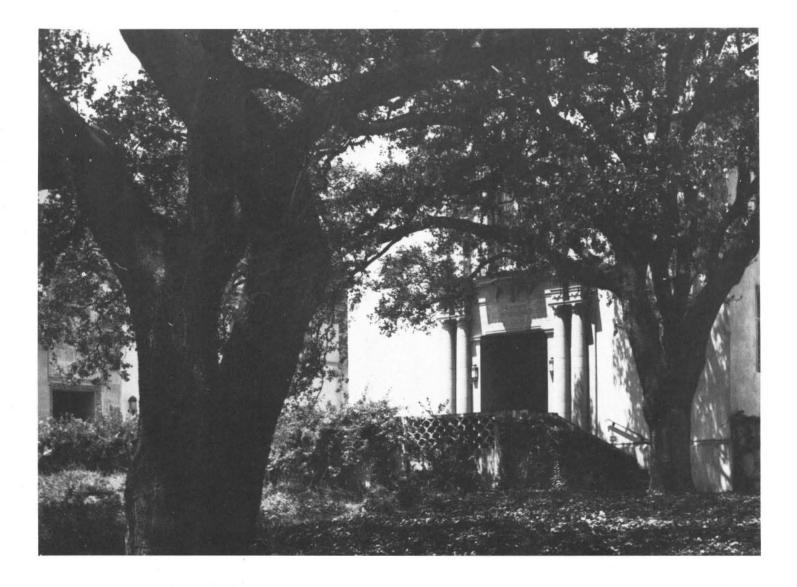
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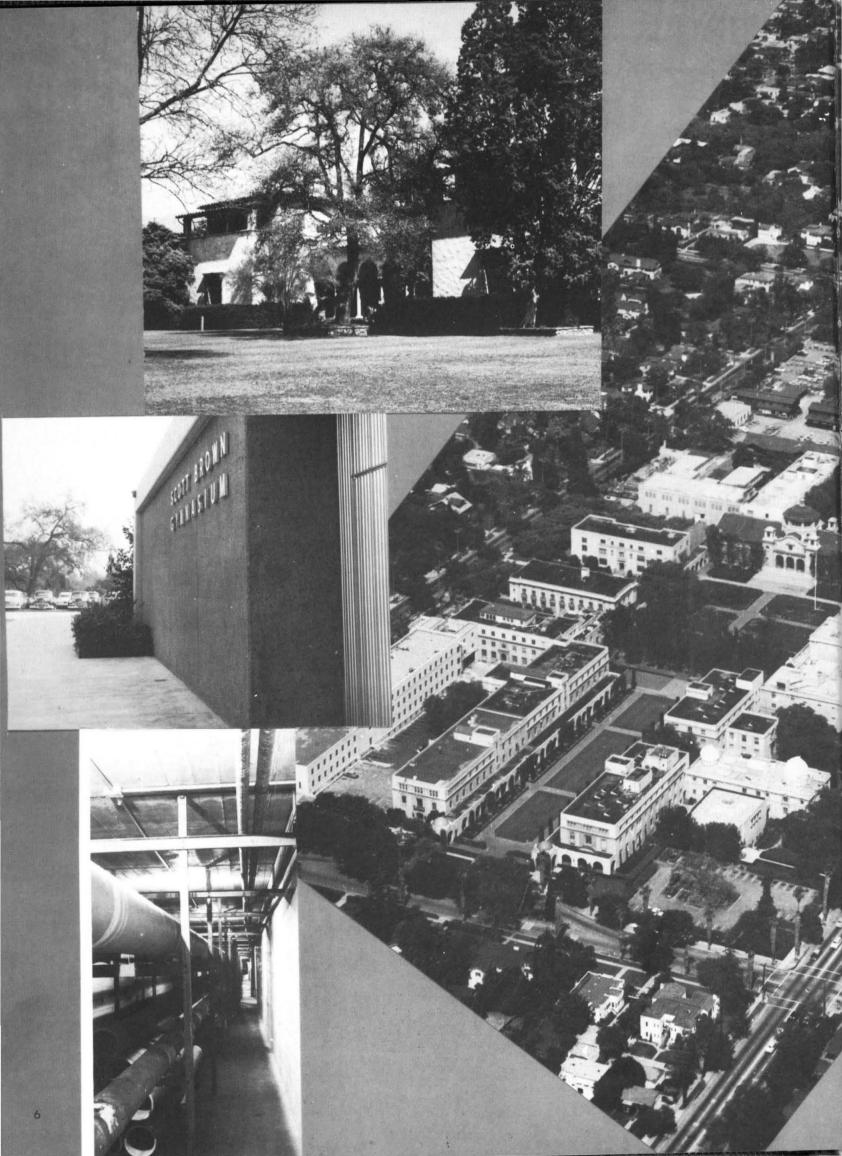
Deserving of credit are the many students who helped with the detail work putting the book together. Credit must also be given to Mike Roberts Color Productions for the color work and Parker-Condax Studios, for the portraits. Special mention should be given to the staff of the Yearbook House, Inc., Monrovia, Calif., for their patient cooperation in completing the book.

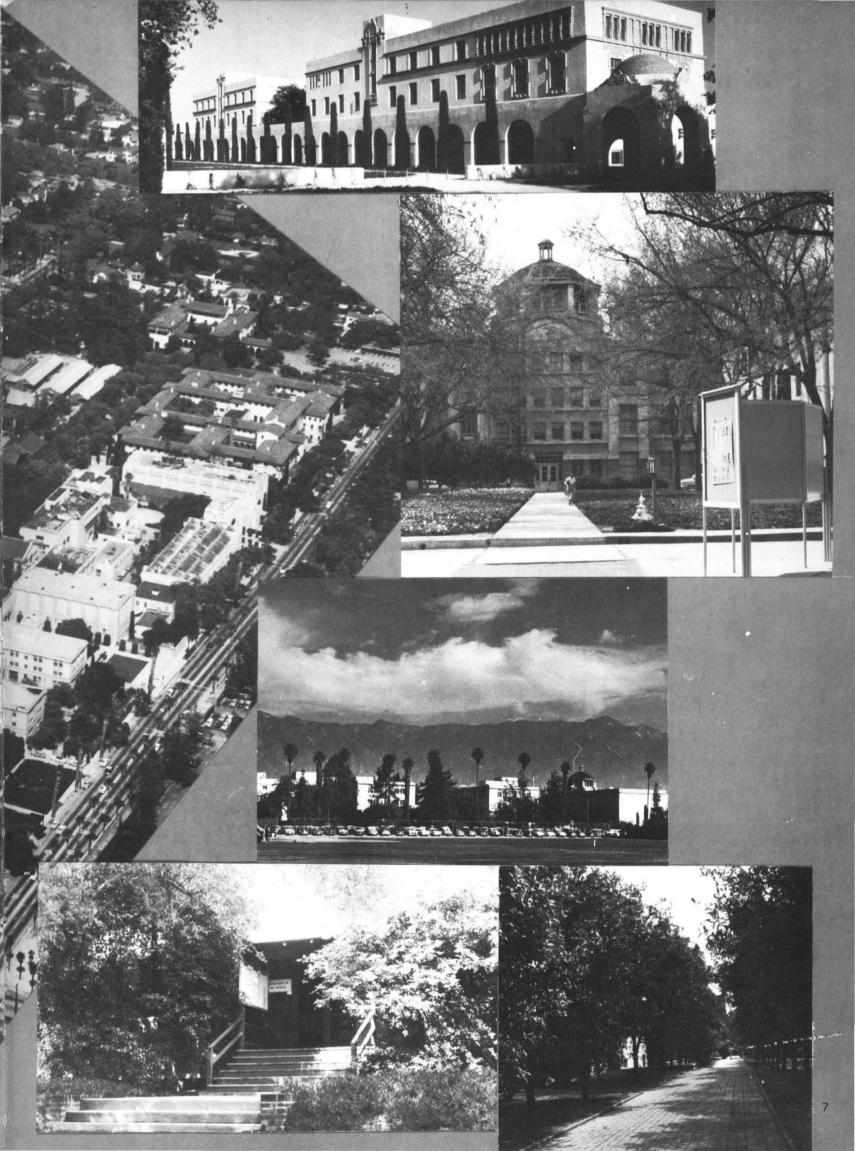




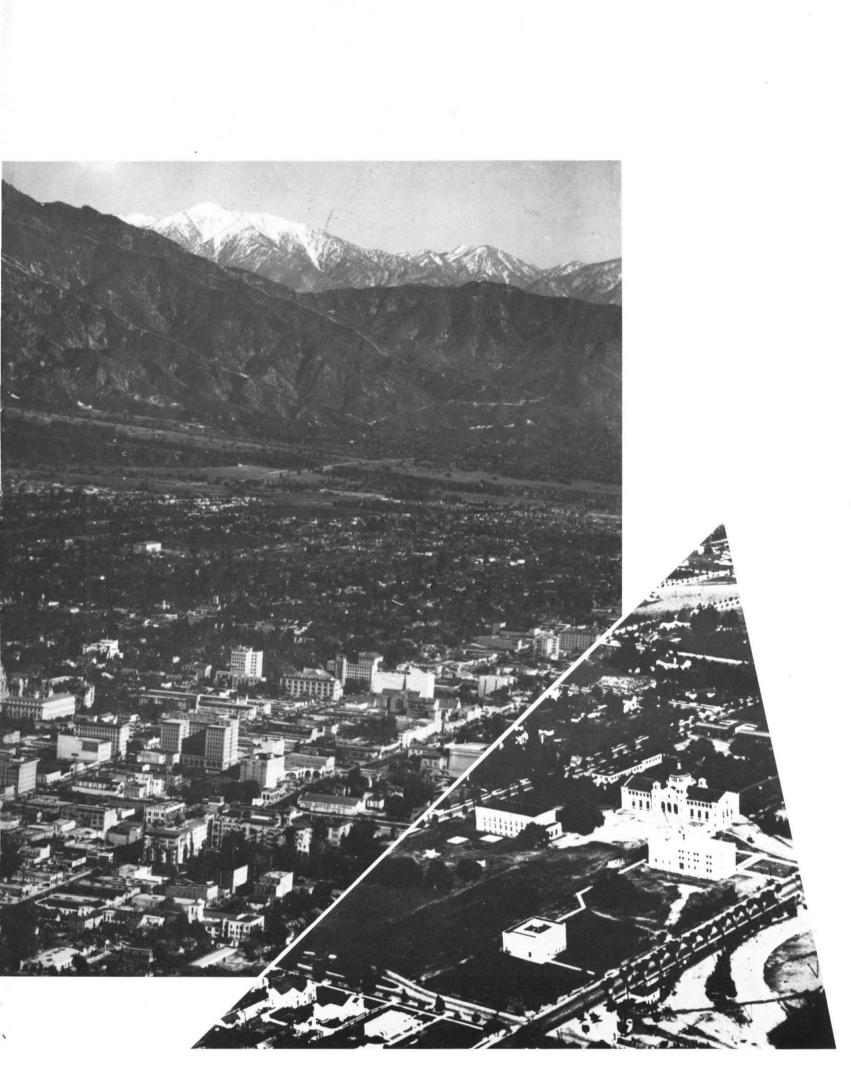
in memoriam

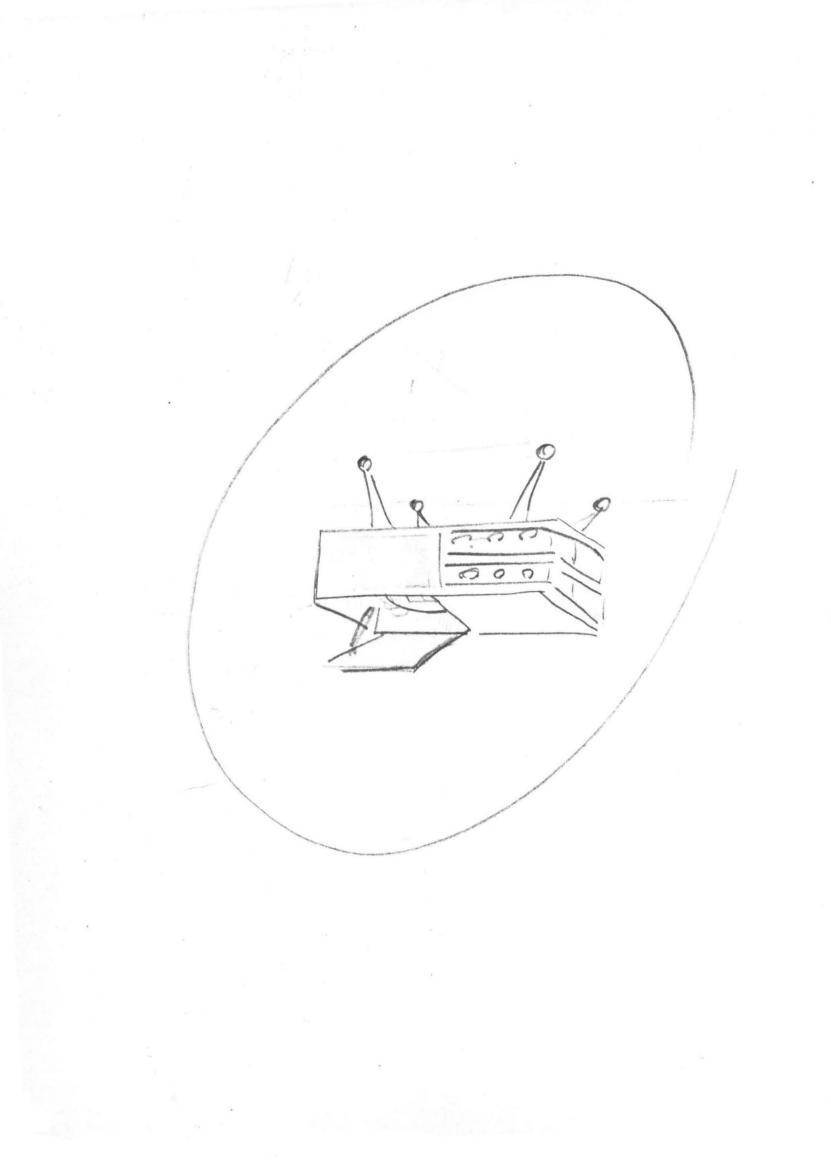
WALTER S. ADAMS, astronomy SAMUEL J. BARNETT, physics BEN R. MEYER, trustee ALDEN G. ROACH, trustee

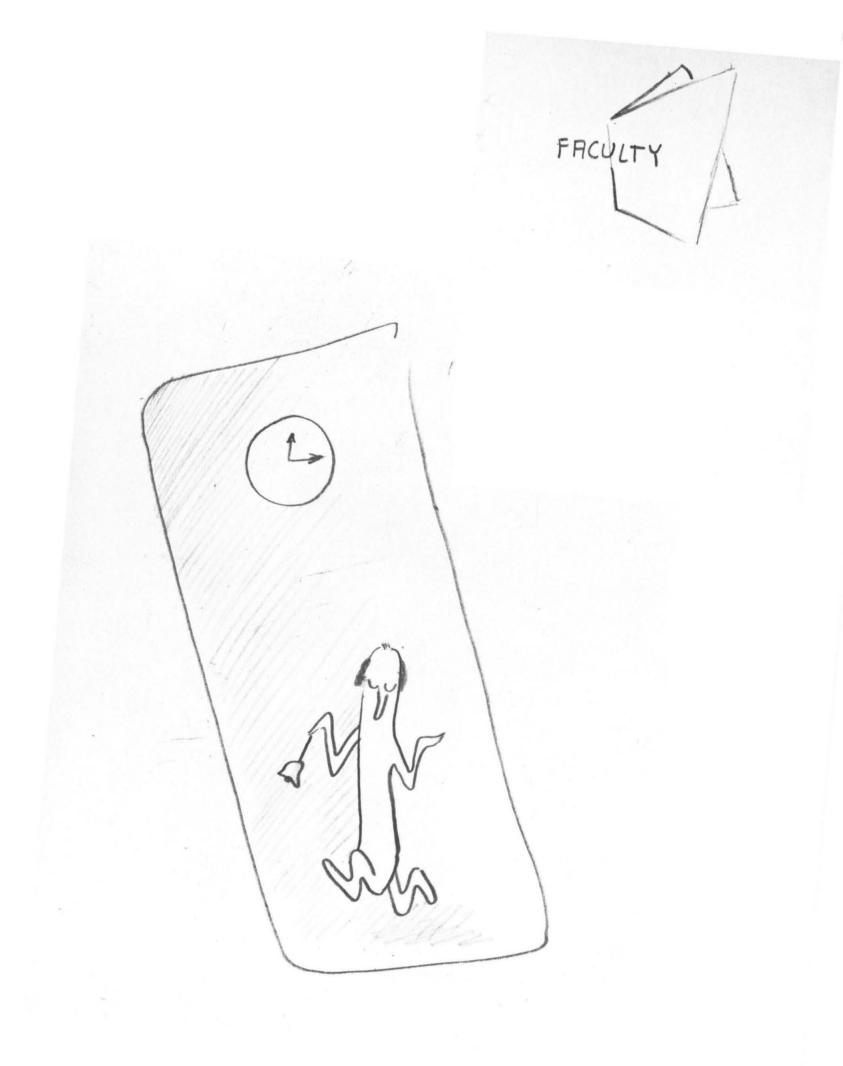














DR. LEE A. DUBRIDGE, President of the California Institute of Technology

deans



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Ruth Toy ME Secretary

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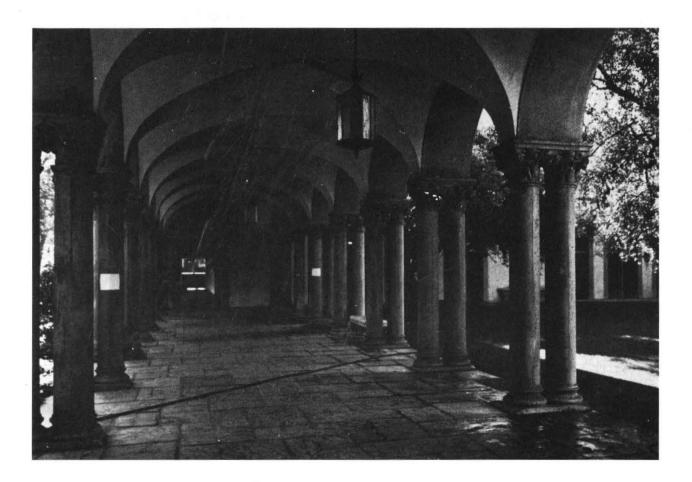
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Kermit Jacobson Purchasing Agent



Charles W. Easley Safety Director



Will C. Mayo Fire and Safety Inspector



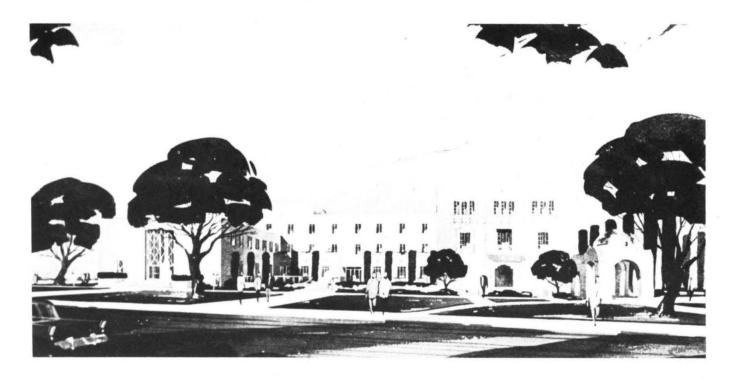
Donald Laird ME Shop

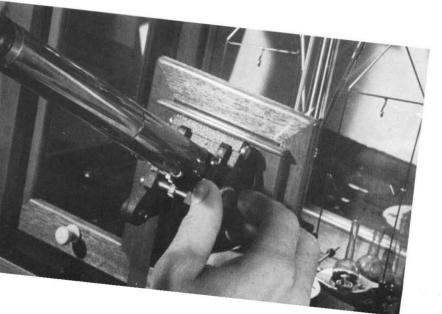


Bill Estabrook Chemistry Stockroom



Seated: Graham Hoyle, Cornelius Wiersma, James Bonner, Anthonie Van Harreveld, George Beadle, Harry Rubin, Renato Dulbecco, Edward Lewis, Herschel Mitchell. Standing: Roger Sperry, A. H. Sturtevant, Jacob Dubnoff, Albert Tyler, Max Delbreck, George Laties.





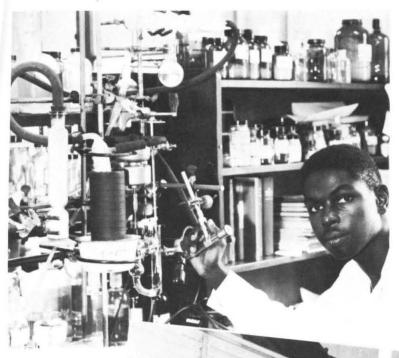
biology



GEORGE W. BEADLE Chairman of Division of Biology



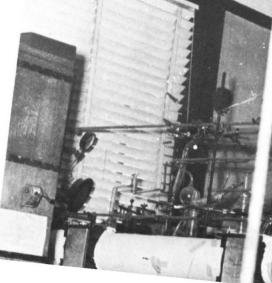
Linus Pauling, Dan Campbell, Jerome Vinograd, Edward Hughes, Ernest Swift, J. H. Sturdivant, Richard Badger, John Roberts, Carl Niemann, Oiver Wulf, V.F.H. Schomaker, R. B. Corey, Johnston, W. A. Schroder, Howard Dintzis.

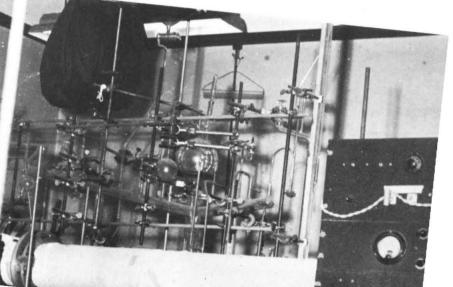




LINUS C. PAULING Chairman of Division of Chemistry

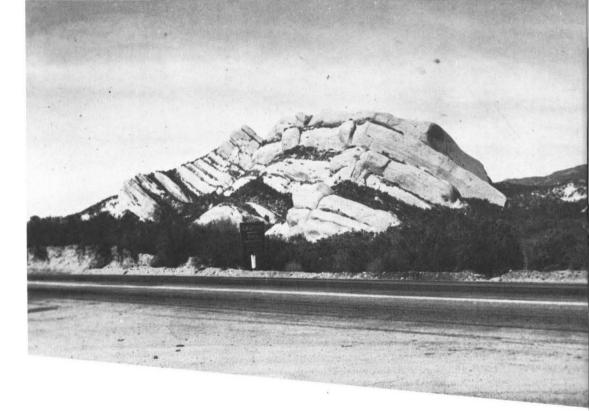
chemistry







ROBERT P. SHARP Chairman of Division of Geological Sciences





geology

Front row: Leon Silver, Beno Gutenberg, Charles Richter. Second row: Charles McKinney, Robert Sharp, Heniz Lowenstam. Third row: Harrison Bown, Ian Campbell, David Raup. Back row: E. J. Engle, Claire Patterson, Frank Press, Clarence Allen.



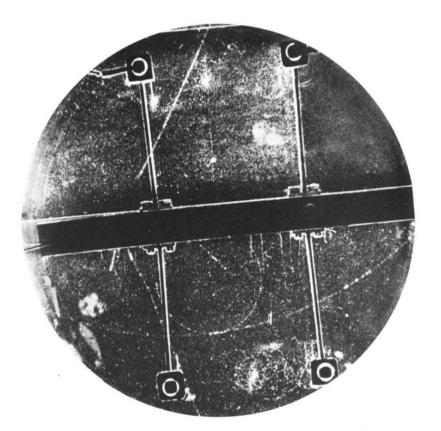


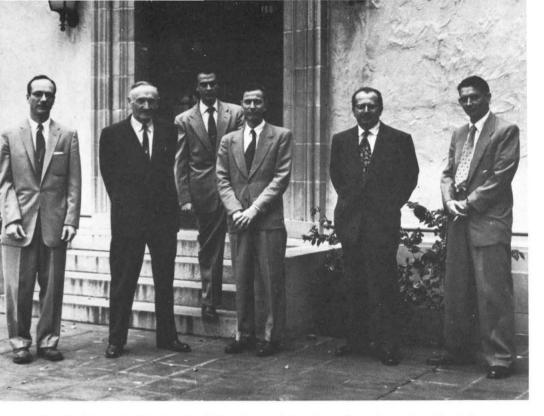
Front row: John Alder, Bill Wapstra, John Pellam, Robert Bacher, Jesse DuMond, William Smythe, C. C. Lauritsen, Thomas Lauritsen. Middle row: Vincent Peterson, Ward Whaling, Henry Roos, Robert Leighton, Robert Christy, Leverett Davis, Jr., Carl Anderson, Charles Barnes. Back row: Felix Boehm, J. Leite Lopes, Berthold Steck, Aage Winther, Murray Gell-Mann.

physics

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JESSE GREENSTEIN Chairman of the Department of Astronomy

Donald Osterbrock, Fritz, Zwicky, Guido Munch, Arthur Code, Jesse Greenstein, John Bolton.

astronomy

mathematics

Front row: Jerome Sacks, Robert Dilworth, Frederic Bohnenblust, Brock Fuller, Calvin Wilcox. Back row: Robert Finn, Frank Spitzer, Morgan Ward, Tom Apostol, Richard Dean.





FREDERIC BOHNENBLUST Chairman of the Department of Mathematics

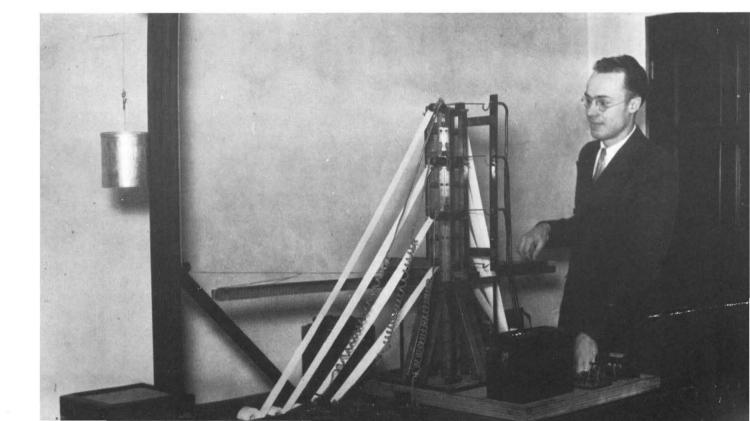


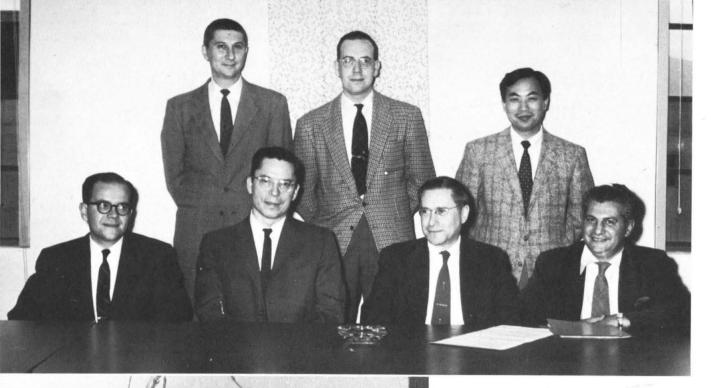
Front row: Frederick Converse, Jack McKee, Romeo Martel, Vito Vanoni. Back row: Alfred Ingersoll, George Housner, Marshall Alper, Caleb McCormick, Norman Brooks

civil

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Joel Franklin Julius Milkowitz George Housner Thomas Caughey J. Harold Wayland Theodore Wu Charles DePrima







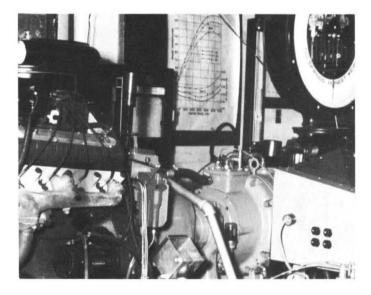
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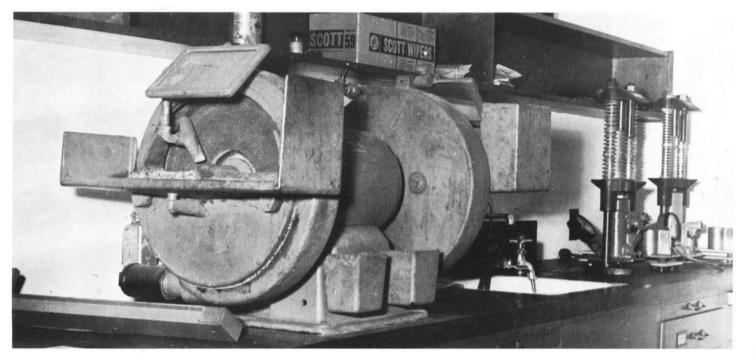
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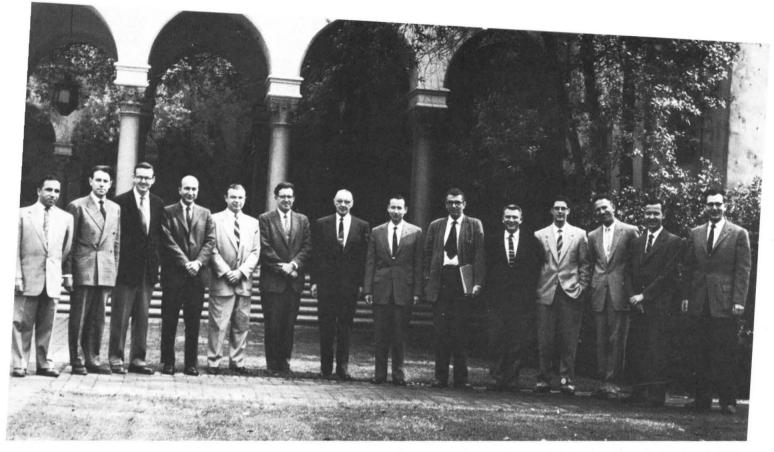
Frederick C. Linvall Chairman of Division of Engineering

Peter C. Kyropoulos





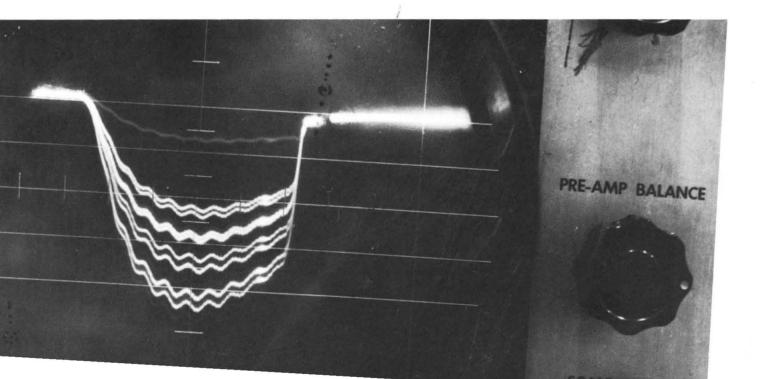




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Robert Wayne Harold Fowler Hunter Mead Heinz Ellersieck Peter Fay Horace Gilbert Robert Gray Alan Sweezy

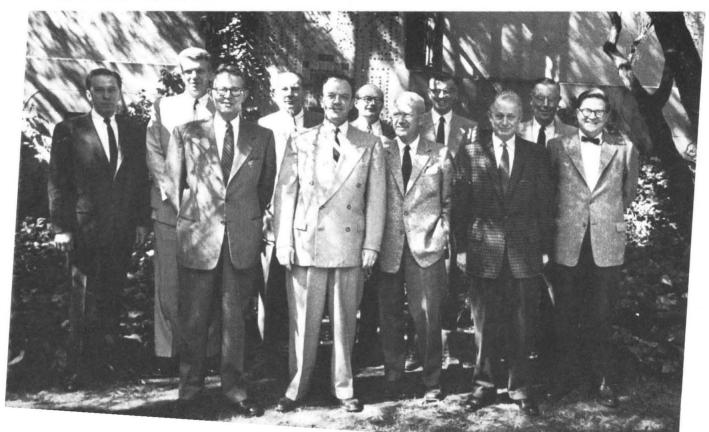


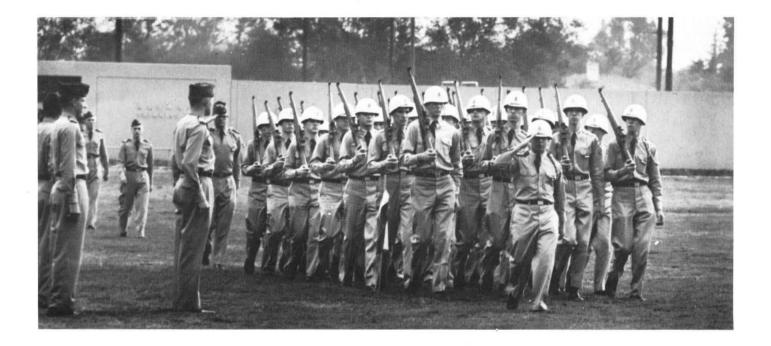




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LT. COL. LYLE F. JOHNSTON



Lt. Col Lyle Johnston Major Arthur S. Cooper Captain Leonard A. Zorne Captain Henry L. Lanman

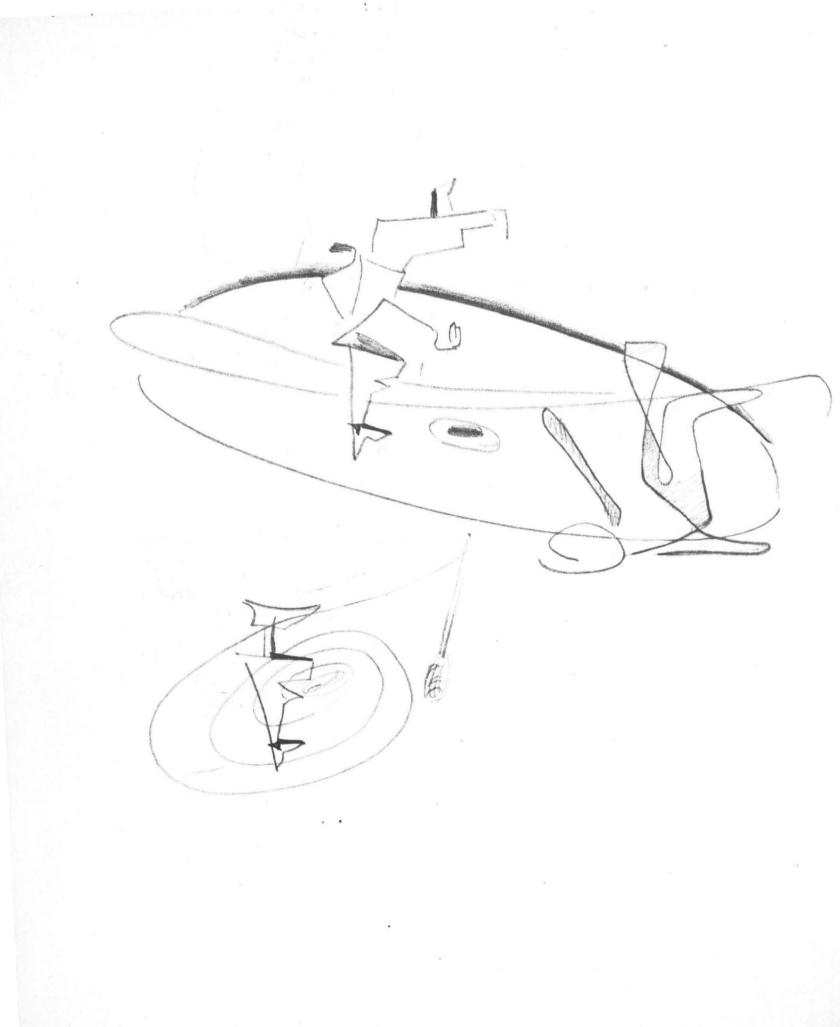
M/Sgt. Leon E. Bemus M/Sgt. Eugene K. Justus M/Sgt. Robert W. Freeman



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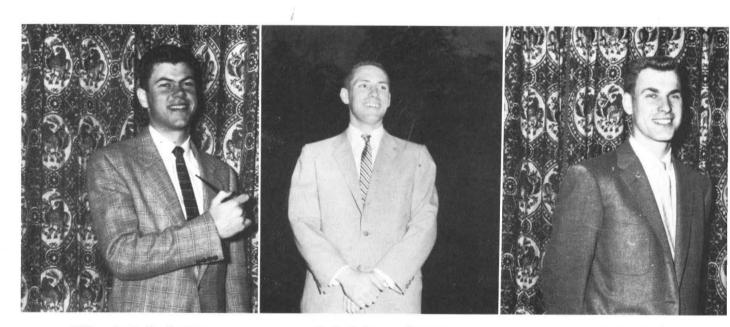
Robert Gelber, President

In September of 1953 there converged upon Camp Radford in the San Bernardino Mountains a group of 164 young men. Overshaowing the great heterogeneity of this group was a common binding factor — these young men had all elected to seek their higher education in the unique atmosphere of the institution known to the world as Caltech.

These few orientation days at freshman camp marked the first in a series of experiences which, over a period of four years, were to mold this heterogeaneous group into the class of '57. Commencement Day saw a new group of men walk across the graduation platform. As a result of their activity in both scholastic and extra-curricular spheres while at Caltech, these men were moremature and capable of facing the outside world than were those who had entered four years previously.

Campus politics brought to the front many men who displayed unusual leadership ability in representing the student body, the class itself and the student houses. Rube Moulton, Bob Gelber, Larry Whitlow, Mike Bleicher, Pete Finley, and Marty Tangora, to name a few, proved themselves worthy of recognition in this field of endeavor.

The class of '57 established a remarkable scholastic record which is undobutedly unexcelled in Tech history. Ten members of the class received N.S.F. Fellowships while one received a Fullbright Scholarship and several others obtained graduate fellowships. Even though these men achieved a great deal of success academically, most of them found time to enter many campus activities. This clearly illustrates the fact that the class of '57 is composed of well-rounded men.



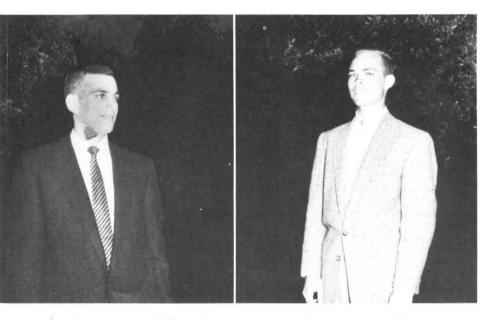
William Hecht, Vice-President

Martin C. Tangora, Secretary

Several athletes from the class of '57 received all-conference recognition as a result of their outstanding performances. Larry Whitlow was named first-team all-conference and Joe Lingerfelt made the second-team in football. Ed Nelson and Ed Berry were awarded first-team all-conference births in baseball. Some others who distinguished themselves in intercollegiate athletics were: Charley Malone, football and baseball; Jim Welsh, basketball; John Lukesh, track and football; Chuck Luke, track; and Ed Park, swimming and water-polo. These men contributed to their alma mater, not only on the athletic fields, but also in many other areas of campus life.

Socially, the class of '57 has enjoyed many fine functions as a class in addition to the usual large number of house and student body affairs. In addition to the annual Frosh-Soph Dance and the Junior-Senior Prom, the sophomore year was highlighted by a/very successful picnic, and class ski parties were held in the freshman and junior years. Senior Ditch Day drew a large majority of the class to Huntington Beach to frolic in the sand, while Life photographers prompted evil-doings back home. The fact that this class supported its social functions so well is indicative of the unity which cut across all house barriers.

It may be said of many classes at Caltech that they entered as a unit and left as a unit, but during the four year interim they effectively ceased to exist. The members of the class of '57 will be quick to point out that this statement does not apply to their class, and that their four years at Caltech have been greatly enhanced by the friendships of fellow classmen. These friendships will linger long in the memories of the class of '57 and undoubtedly will help to associate fond memories with the years at Caltech.



Howard Bloomberg, BOC

Howard Rumsey, BOC





MICHAEL B. DUKE Throop, T2

Threep, 12 The presidency of Threep Club was the high point in the college career of this Techman from Los Angeles. Mike is a devoted geologist, rating girls and geology just about even in importance. Mike has spent a great deal of time behind a cather's mask, having played frosh basketball, is a member of Beavers and IHC, and is also a loyal Threep troop, having served as social chairman and very active inter-house sports participant. After staying in his native California just long enough to attend grad school, Mike plans to abandon the States for foreign oil exploration work.



LAWRENCE S. GRIFFITH Ricketts

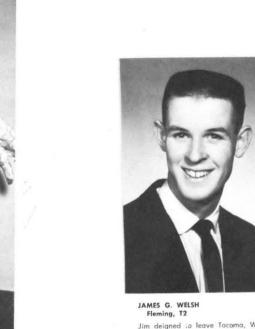
Ricketts A dyed-in-the-wool geologist from Amarillo, Texas, "Griff" has managed to keep himself well occupied the past four years. As social vice-president of Ricketts, he has kept the Rowdies hopping from one party to the next. In between field trips, he managed to work in time to hold down key positions on many interhouse teams of almost every sport. It's a rather good bet that "Griff" will return to Texas to put his four years of study to good use.



HARRISON H. SCHMITT Dabney, T3

Dabney, T3 Dabney House's only Senior Geologist, Harrison came to Tech from Silver City, New Mexico (Land of Enchantment), One of the more "stabilizing" forces in House meetings, Jackie, as he was also called, served as UCC during his senior year. Besides this, Harrison was active in Glee Club, Interhouse Sports, and earned three Varsity letters in Golf, A National Science Foundation Fellow and a Fulbright grantee, Harrison plans to study at the University of Oslo, Norway, for one year, and then 'return to complete his studies toward the Ph.D.

geology



Fleming, T2 Jim deigned is leave Tacoma, Washington, for an education at Tech, and he has never let the world forget it. Dabbling in Fleming House politics as vicepresident, UCC, president of the WAE club, and a maintsay in interhouse sports, Jim also found time to become one of the key men on the varsity basketball team, holding a captain's position his seniar year. Other activities included Beavers, Geology Club, IHC, and sometimes geochemistry. Jim's future intentions appear to center around Air Force Meteorology School.





biology



WARREN A. FURUMOTO Fleming

Fleming "Goook" leapt from Honolulu to a hectic career in Fleming House, where he took over the presidency in his junior year, then decayed with the emission of a good deal of energy into athletic manager and House cynic. Besides firing up the Big Red Team, the Small Korean indulged in the vice of baseball enough to get him-self a letter. As he departs to pursue his biological ambitions ("at least 20 con-cubines"), "Horny Worny" leaves an impression on his House and the Institute that will not soon be forgotten.



TRUMAN E. LONG Dabney

Dabney This well coordinated Biologist and Dixie-land fan came to Dabney House from Los Angeles, California, and has been active in Interhouse sports, the Caltech Orches-tra, and the YMCA. Orchestra Manager in the days of the Orchestra, YMCA Pub-licity Manager, and Dabney House UCC, Truman lists Hi-Fi and Volleyball as his spare-time hobbies. For the future, Tru-man plans to devote his energies to Med-ical School and to remaining a bachelor as long as possible.



DONALD P. NIERLICH Dabney, Honor Key (2)

Dabney, Honor Key (2) An intense interest in biological phenom-ena led Dan to choase his option in one of the most interesting, though least pop-ulated fields here at Tech. For four years, this happy, cheerful bursting-with-energy Santa Monica (one of those) lad, a famous Dabney House Benjo, has been a serious worker. Don has been ASCIT Treasurer, Editor of the Big T '56, a mem-ber of the Beavers, Student Shop, the Y, and has been active in Interhouse Sports. Despite this, he has found time for pho-tography and ham radio. A National Science Foundation Scholarship winner, Don is planning to begin graduate studies in Biochemistry at Harvard next year.

mathematics

MICHAEL BLEICHER Blacker, Honor Key

Blacker, Honor Key Climaxing a jam-packed college career by serving as president of Blacker House, Mike has also been a top winner in debate, an actor in ASCIT plays, a Beaver, UCC, and also a Y cabinet member. Besides belonging to the Math Club, Mike was one of the perpetuators of Blacker's own math club which met nightly to experiment with the laws of probability. Contrary to popular notions about people from midwestern towns like Omaha, Mike has done all right in his studies and expects to go on to graduate school.

ALAN E. FARLEY Blacker

Fearless AI, Blacker's connoisseur of good music and unimpeachable treasurer, comes to us from San Juan Capistrano, California, Assistant news editor of the Calif. Tech, representative to the Southern Calif, Symphony Assoc., UCC, member of Musicale, math club, and so forth. It's quite clear from this impressive list of activities that AI has spent his leisure time to good advantage during his stay here. Grad school beckons to AI for the coming year.

GARY Y. BREITBARD Ricketts

Interested in applied math only as it has to do with the laws of probability concerning drawing to an inside straight or of a three-two split in hearts, this San Diego chap intends to go to grad school a career in teaching math awaits. As a Techman, Gary was an active member of Sailing Club and Math Club as well as a familiar figure on Rickets' tennis or volleyball teams. He also used a column in the Calif. Tech to spread the good word about bridge.

HOWARD C. RUMSEY Ricketts

Ricketts A favorite UCC with underclassmen in need of tutoring in math, Howard will be leaving them to attend graduate school in math at Berkeley next year. Besides distinguishing himself as a capable mathematician, he has held down a position on every Rickett's tennis teom and participated in other interhouse sports. As a junior he served on the Board of Control for a term. After grad school this Long Beach product plans a career teaching poor unfortunates everyting he knows about mathematics.

PETER CRAWLEY Ricketts

Ricketts Graduate school at CIT on a National Science Foundation Scholarship awaits this pradigy from Alhambra next year. A member of the Math Club and married, Pete, like all goad mathematicians, is an avid bidge fanatic. The exigencies of married life and living off-campus has prevented him from being real active in interhouse sports and other activities, but this in no way indicates a lack of interest. After grad school, Pete will probably make his way teaching math in some college.

MARTIN C. TANGORA Ricketts, TB II, Honor Key (3), T6

Ricketts, TB II, Honor Key (3), T6 Versatile Marty has given excellent service to the Caltech community these past four years. His first year he was selected as the outstanding freshman. As a math major Marty has achieved honor standing every year. In the sports scene he has been a varsity footballer and trackster. He's been Ricketts House president, a member of the glee club, served as editor of the California Tech and Farrago. Marty lists piano playing as his main other interest, but his friends believe that his life motivation comes from hot fudge sundaes at Bab's.



JOHN R. VELMAN Blacker

John came to us from Fontana, California, and has been on the debate team and a writer and editor of Farrago. He has also seved as a secretary and cosocial chairman of Blacker as well as secretary of the Alpine Club. During his stay here, John also managed to collect a coupe of honor certificates and to get uncertain except for a sint of three years with the Air Force.





This is the NGC 5194 Spiral nebula in Canes Venatici, Messier 51, photographed by the 200 inch Palomar telescope during the recent study on galaxy formation - Courtesy of Mt. Wilson-Palomar Observatories.

astronomy

ROBERT HENRY NORTON, JR. Fleming, T5

Fleming, T5 Bob journeyed all the way out here from Bethany, Connecticut, four years ago to begin his study of astronomy and west-ern women. Four years' study in each of these fields seems to have done little but whet his appetite for more of the same. He plans to continue his study next year at either Harvard or Caltech, and he also looks forward to marriage within a year or so. Bob has been active in the sports of soccer and track, earning letters in each of these and being captain of the soccer team this year. Bob also plays a fine plano, and for the past three years he's been Glee Club accom-panist.

ROBERT L. WILDEY Throop

Threep Bob, who hails from Sierra Madre and transferred to Tech fom Muir, finds re-lease from the staid atmosphere of as-tronomy by playing a mean trumper in professional jazz bands and jam sessions in general. He plans to play as much professional jazz in the future as possible, having already gained a good deal of experience playing with such local pro-fessional groups as "George Lewis New Orleans Stompers" and "Hot Damn Jug Band." But jazz is just an avocation, and Bob has his eye on a staff position with the Mt. Wilson and Palomar observatories after completing grad school here at Tech. Along with huntin, fishing, and bullfights, he's very definitely interested in marriage, but the right little lady just hasn't wandered by yet.



physics

CHARLES H. ANDERSON Fleming

Fleming An effin smile, an inexhaustible supply of firecrackers, an ability to climb un-usual objects; that's Charlie. Charlie's dedication to physics brought him all the way from Briarcliff Manor, New York, and netted him honor standing two years in a row. Somehow he also managed to get a frosh letter in swimming. Branch-ing out, Charlie joined the Glee Club and the Physics Club, of which he was sec-retary-treasurer, and tried his hand as Big T sports photographer. Still undis-couraged by four years at Tech, Charlie intends to try for a Ph.D. at either Co-lumbia or Harvard.







Dabney, 12 A physicist from River Forest, Illinois, Norm returned to Tech after a few years layover in the Army to become Dabney House Social Chairman. During his first stretch, at Tech, Norm was very active in sports, winning two Varsity Letters in Swimming, and one in Water Pole. Be-sides having been a Dabney House Li-brarian, Norm is also an exponent of "Fourth" and bridges the gap in his spare time by reading, hi-fi, and women. His future plans are centered around work.













FRANK J. KOFSKY Ricketts, Honor Key

Ricketts, Honor Key Originally from Tujunga, Frank evidently came to Tech to have a try a every op-tion in the place while achieving credit-able grades and participating in campus activities. Frank was Rally Commissioner, co-aditor of the California Tech, on the Leaders of America committee, and Bea-ver secretary. His days as Rally Commis-sioner were rather controversial as Frank introduced modern jazz to the campus. And then, or course, everyone remembers the Kofsky beard. His strong interest in contemporary philosophical psychology leads him to studies in the East.

WONYONG LEE Fleming

Wonyong came to this country from Seoul, Korea,, after the end of the Korean War, in which he fought with the ROK army. He came to Caltech and to Fleming House in the fall of 1955 as a transfer student. Wonyong's first love is physics, and his future plans include graduate school for continued study.

DANIEL R. MACK Dabney

Dabney One of the top exponents of "Fourth!" at Tech, Dan came to Dabney from Sher-man Oaks, California. Besides being a member of IRE, the Alpine Club, and the Ski Club, Dan was also active in Inter-house Sports and other House activities. Occasional "Big Brother" to the House, Dan was also Dabney House Computeller, UCC, and for two years was a Social Vice-President, besides being chief "all around" crew man and Crew Captain. Dan plans to return to Tech for an MS in EE, then to go to industry.

J. HOWARD MARSHALL, III Ricketts, TB 11

Ricketts, TB II During the winter Techmen might have noticed an Indian coming to school Mon-day morning. Well it was not really a Redskin, only Howard coming back from his Arrowhead home, around where ski-ing is certainly available. Besides skiing it might be sold that Howard likes to tinkered his way to nearly the top of his class scholastically. He has been a member of the program committee of the physics club. Next year Howard will take grad studies at Tech and most certainly will receive his Ph.D.





EUGENE M. BARSTON Blacker

A product of North Hollywood, Gene has helped his house to several victories in interhouse tennis and Tech to victories in frosh and varsity tennis. An honor student and varsity tennis, An honor student and well fixed financially by virtue of serving dutifully as junor class treasurer, Gene plans to take graduate work in EE. Where? At Tech, where else?

BAIRD H. BRANDOW Fleming, T1

Fleming, T1 Baird, product of Vista, California, is a well-rounded Techman from the stand-point of being one of the tap men in the class. He's been active in Fleming activi-ties, and he's done a real top-notch job this year as YMCA president. His athletic career began with frosh swimming and water polo, but this year he left the water to become a cross-country man, and netted himself a letter. As a Glee Club member Baird hos enjoyed several delicious dinners in the company of fe-males from Scripps. His well-planned graduate study program will include study of physics next year at Cornell University.

DAVID BRUST Off-Campus

From Fairfax High School, Los Angeles, this quiet, industrious chap plans to go east this summer to work. The call of the amighty dollar being what it is and industry being what it is nove plans to make his career in industry. Not being the type to let four years of Tech dis-courage him, Dave remains a physicist.



THOMAS E. GIBSON, JR. Throop

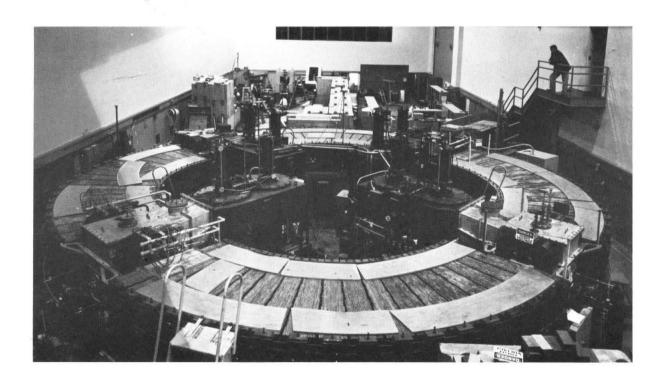
Throop Tom is a Glendale boy, and living near the foothills seems to have helped him develop an avid interest in mountaineer-ing. Tom's been a member of the Alpine Club, the Physics Club, and the Newman Club, holding the offices of vice president and secretary in the last organization. Next to mountain climbing Tom likes electronics. His future include grad school at the University of Colorado.

RICHARD O. HUNDLEY Ricketts, TB II

Ricketts, TB II Joliet, Illinois, can claim former residence to Dick, a physicist who has stuck to it with honor standing every year. Last year the California Tech came out with his name in the masthead as co-editor. This year he has served effectively as physics club president. Interspersed with these activities Dick has worked on the Leaders of American program and the YMCA. And then Dick can almost drive to Oxy with his eyes closed (this isn't to be recommended to the novice). Wonder what makes Tech the site of Dick's grad-uate studies, with Oxy a close second.

KANAU KAWASHIMA Throop

Throop This pleasant chap did his prep work in his native Yokahama, Japan at Hama-matsu School. He is quite a judo fan and holds a brown belt in the sport. This loyal Throop trooper is constantly being amused by the many "strange" American customs. A transfer from LACC and from ME to Physics, Kanau's inquiring mind seems to destine him for a brilliant ca-reer in his chosen field of research.









Coming to Tech "from somewhere near Hollowayville", Illinois, Don has carved his own unique place in Dabney House. A keeper of immaculate rooms, this fearless courser of the Freeways cauld usually be found in his room in one of his next express positions. While roots usually be found in his room in one of his most common positions—typing cross-legged upon his bed or half prone upon his desk. Aside from being a Physicist, Don has managed to capture the Conger Peace Prize and has been active in the Caltech Y, the Leaders of America Pro-gram, and speech activities at Tech, having been a Veep of Phi Kappa Delta. Don hopes to complete Grad School, and then to "see the world", by one means or another.

RICHARD W. MICHIE Off-Campus

Dick is a transfer from Glendale J.C., and is also a native of Glendale. He's made a fine scholastic record here at Tech, holding honor standing in the class. He plans to return to graduate school next year to continue his study of physics.

CHARLES H. MOSHER Off-Campu

Off-Campus Coming from Scotia: New York, Chuck's main interest in life is electronics in general and hi-fi in particular. He has helped many of the fellows in Blacker with their hi-fi problems. In addition to his interest in hi-fi, Chuck has served as Student Shop secretary, and he achieved honor standing during his freshman and sophomore years. Chuck plans to continue in this field by attending EE grad school at MIT—provided the draft doesn't get him first. him first.

BERNARD H. MUELLER Blacker, T3

Backer, 13 A mainstay on Tech Tennis teams, Bernie calls Running Springs, California home. Besides tennis, he is an accomplished skier and professes an avid interest in music. Having survived the undergrad-uate school in physics with flying colors, Bernie intends to try his luck with grad-uate school next year.



physics

HARRY PATAPOFF Fleming, TB II, T2

Fleming, TB II, T2 A wide-eyed freshman from Roosevelt Union High School, Los Angeles, in the fall of 1948, Harry lost the battle with Uncle Sam and spent a stretch in the Army. After a five year vacation, he re-turned to finish what he'd started and this he did in fine style, well enough to graduate with honors. In his first stay at Tech, Harry was a familar figure on the hardwood, earning two varsity letters in basketball. Graduate work in EE at good old Alma Mater awoits this married veteran. veteran

WALTER A. PETERSEN, JR. Dabney, Honor Key (2), TB II

Dabney, Honor Key (2), TB II Coming to Dabney from that glorious City of Roses, Portland, Oregan, Walt brought Tech his expansive ideas about free enterprise and capitalistic practises. Chief entrepeneur of Dabney House, Pierpont Petersen was quick to expand into ASCIT dealings as Big T Business Manager for two years. Not letting money with anything, Walt was President of the Caltech Newman Club, was a member of Tau Beta Pi and Beavers, and held honor standing for two years. His interests include wine, women and music, and Business. He plans to work for Hughes, then act upon one of his many schemes. schemes

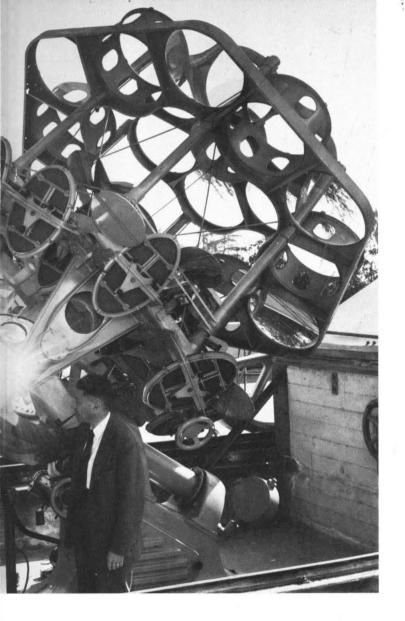
JOHN W. PROSS Off-Campus

A product of Venice High, John now claims Monrovia as home. This 26 year old married vet qualifies as one of the older members of the class and also as one of its more industrious students. John may always be recognized about campus by his informal dress and cheerful smile.

SEYMOUR A. RAPAPORT Dabney, TB 11 Dabney, TB 11 A physicist from Los Angeles, Seymour brought many things to Tech — he held honor standing for four years, had an unquenchable thirst to know things well, and owned many, many clocksl Also a member of Sigma Xi and Tau Beta Pi, Seymour was a member of the Election Committee and was a sturdy regular on Dabney Interhouse Football Teams. A very enthusiastic rock climber and hiker, Seymour also is interested in reading and in 35mm photography. He will enter Johns Hopkins Medical School next year, and eventualy hopes to pursue a career

and eventualy hopes to pursue a career in Research and Practice in Medicine.





JOE E. STUTEVILLE Ricketts

Ricketts The major proccupation of this fellow from the sleepy little hamlet of Haw-thorne, California has changed from elec-trons, positrons, and neutrinoes to some-thing a little more inspiring and esthet-ically pleasing, namely women. He claims the distinction of being one of the few physicists who belong to geology club. AFROTC cadet, Joe plans on entering flight training after he receives his sheep-he may go on to school in psychology, medicine, or business but definitely not physics. physics.



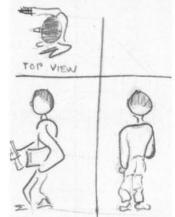
JOHN R. THOMAS Dabney, TB II, T2

Dabney, T8 II, T2 John came to Tech from Seattle, Wash-ington, but since then lists Vashon Island as his home address. A Dabney House UCC, John has 'perked up' the place by his jaunty shirt collection (mostly ivy league) and cheery smile. His four years of honor standing are capped by his being a member of both Sigma Xi and Tau Beta Pi. Besides this, John was ac-tive in the Caltech Glee Club and in Swimming and Water Polo, having earned two varsity letters in Swimming. His out-side interests are eating (he is a rare gourmet) and boats. John is planning to return to Tech ta continue his physics studies. 1 studies.

ROBERT J. TUTTLE Off-Campus

A native of Los Angeles, Bob has spent most of the past few years here at Tech studying physics. His future plans are somewhat uncertain right now, but it's pretty certain that he's in the same boat with the rest of us—facing the decision between the drudgery of grad school and the enticing qualities of the long green.





ATTILA I. SIMANYI Dabney

Dabney This physicist and devoted TV fan came to Dabney House from Detroit, Michigan, via Germany and Hungary. One of the most amiable guys around, you might also have found half of the Humanities Library checked out to Attila, a most avid reader in his spare time. Besides reading and TV, however, Attila is also interested In music, opera, hi-fi, photography, ten-nis ,and bridge. His future plans are specifically to return to Tech and study EE.

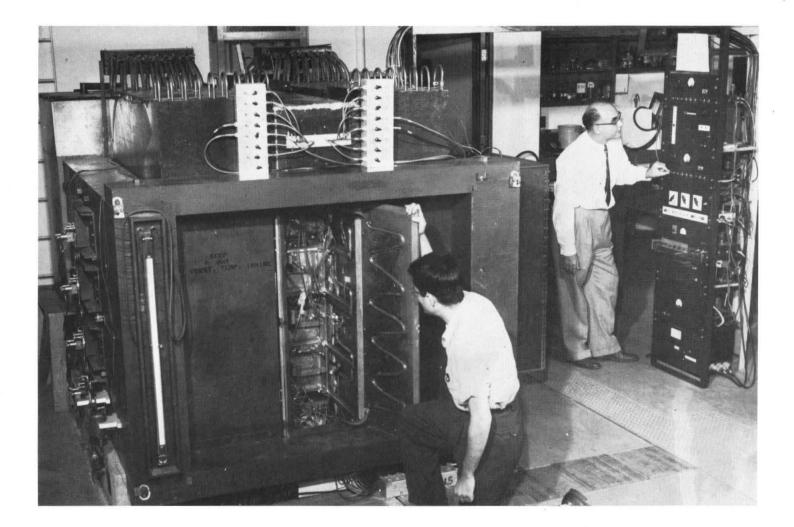
EDWIN B. ROYCE Off-Campus

A local favorite son, Ed has consistently managed to stay in honor standing while taking the physics option. In the interest of good music he belonged to the Or-chestra, and being a physicist, he nat-urally belonged to the Physics Club, which he has served as program chairman. A hi fi fanatic and an ardent musician, Ed nevertheless plans to return for grad study next September.



A. STUART RICHERT Ricketts, TBII

Ricketts, TBII From Wichita, Kansas, we have this pleasant physicist. The type of fellow who is always getting into the fun, Stu was quite active in house activities and in interhouse sports while "cooling" the tough physics option. As a freshman, Stu tried out the game of football, but found it a little rough on his light frame and gave it up for games more suited to his stature. A good job undoubtedly awaits this friendly middle western chap after arad school.



physics



RAYMOND VIRZI Throop

Throop Ray comes from over in Los Angeles. He's been an active member of the Newman Club, acting as the club's off-campus representative, and he's been practically a permanent fixture on Throop interhouse athletic teams. Ray claims an interest in people (mostly feminine), music, art, and good literature, as well as physics. He's been thinking pretty hard about grad school, but hasn't yet made up his mind. It seems pretty certain that one of the schools in the area will get his nod be-fore next September, though.

RAY H. WHITE Fleming

Ray came all the way from Green Bay, Wisconsin to join the men of Fleming's Alley 5. Since this wasn't enough to keep him busy, he became a track man-ager and also studied physics in his spare time. In adition, he maintained a keen interest in bridge and the "Green Feather." Still not disillusioned about physics, Ray plans to go to grad school after he graduates from Tech.

DAVID E. YOUNT Fleming, T5

Fleming, T5 Dave calls sunny Scottsdale, Arizona, home, and has certainly exhibited a va-riety of interests and activities. In var-sity athletics he has won letters in tennis, cross-country, and water polo. Dave made numerous contributions to the Tech literary world as a writer for the Pendulum and contestant in the McKinney Essay Contest. He also served a year each as librarian and treasurer for Fleming House. Physics has been his major preocupation, and he plans grad-barkeley, while not pursuing such inter-ests as psychology, philosophy, and writing.



ROGER W. CAPUTI Off-Campus

PETER P. GASPAR

Fleming

Off-Campus From nearby Burbank, Roger is a real gone Chemist, even confessing to the ownership of a private chemistry lab in his home. His devotion isn't entirely con-fined to chemistry, however, since he also claims to be a devotee of fine foods and of Tom thehr. A member of ACS and the Chemical Engineering Club, Roger plans a career in the chemical industry.





ROBERT S. DEVERILL Dabney

Dabney From Hilo, Hawai, Bob is also an old timer at Tech and Dabney, having taken off three years for Uncle Sam's Navy, during which time he "dabbled and did-dled" at electronics, fine wines, and finally, for an extended time, at Las Cruces, New Mexico [White Sands Proving Grounds]. A truly catholic scholar, with an unusual fund of interests and talents, Bob was one of the leading spirits of the now. "legendary" Pendulum. In the future, Bob plans to continue his Bio-Chem studies for a Ph.D.

CHARLES V. GOEBEL Throop

chemistry

Originally from Harrington Park, New Jorsey, this aspiring young chemist has served as secretary of the ACS and has been active in all ACS and Chem En-gineering (Jub activities. Unconvinced of the merits of California, Chuck plans to return to the East to attend grad school.



PETER C. H. JORDON Fleming, TB II

Fleming, TB 11 On the road from Hollywood High, thru Tech and hence to Yale, Pete has not been forced to break stride. While cool-ing the chemistry option, he has never-theless managed to develop his other interests — music, politics, sports. He especially likes to ski, as attested to by his striking post-vacation branzes. His virility and lovable nature, amang other things, were given suitable recognition. He also achieved a measure of notoriety thru his experimentation in mixed drinks, Our hope is that Eli's college quickly realizes the folly of tampering with him and, so, presents the doctorate as soon as possible.

Fleming A proud alumnus of Beverly Hills High, Pete also shares his loyalites with UCLA, where he took his junior year. His broad interests include literature, music and politics (an unreconstructed liberal), with such side projects as Scientific Games of America, the Green Feather Movement, fomentation of revolutions in reactionary banana republics and a red Alfa Ramo. As an accomplished cabana cowboy at the pool of the Beverly Hills Hotel, Pete has managed to cultivate the acquaintances of some interesting speci-mens of femininity, who are mostly from the East where, oddly enough, he plans ivy league graduate work in physical organic chemistry.

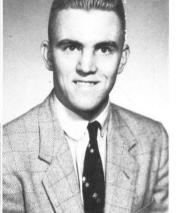


RICHARD L. KAUFMANN Fleming

Fleming "George", who hails fram Sarataga, Cali-fornia, has maintained that his athletic prowess at Tech can be summed up by the phrase "vigorous application of no talent", but nonetheless, he outjumped everybody in interhouse track. George has distinguished membership in the "Party Begins at 3:00 Club", and holds the "Le Tourneau Electric Eraser". Uncle Sam has an Air Force career already planned for George. After that he plans to return to grad school.







JAMES M. SHORT Blacker

Blacker Blacker's original toastmaster and a fel-low with a stature to fit his name, Jim comes from far off Kansas City. A con-sistent performer on interhouse teams and a man ever ready to add a word of cheer at the supper table, Jim's interests have been turning increasingly to some person by the name of Phyllis the last couple of years. Here's hoping Jim finds married live even more interesting than he's tried to make Tech life during his sojourn here.

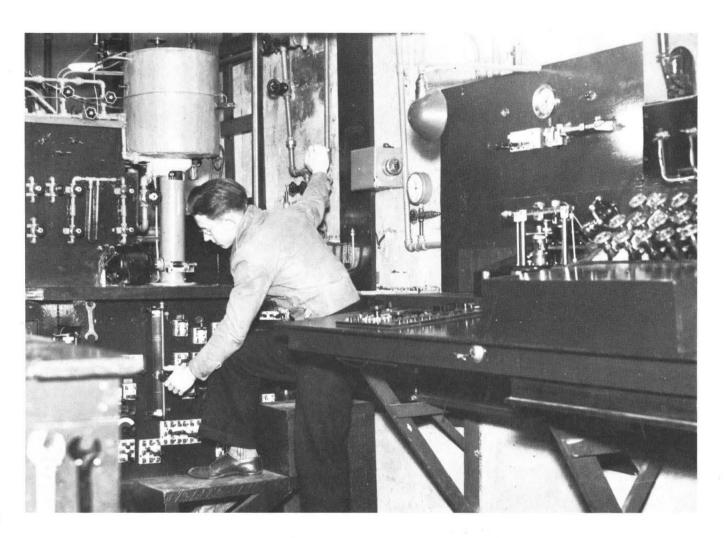
LAURENCE B. MARANTZ Throop

Larry, who comes from Los Angeles, has his sights all set upon high future goals; he plans to pursue the study of chem-istry all the way to a Ph.D., then to do research in the field of rocket repel-lants. Larry has been active in the Chem Engineeing Club and is a member of the student chapter of ACS.

JOHN O. STEVENS Blacker

Blacker From sunny Albuquerque to smoggy Pasadena — so went the fortunes of Blacker's foremost connoisseur of Model A's, "Steve" Stevens, Since he has an avid interest in the social whint, Steve decided to share his interests with the less enlightened Techmen, and did just this as Blacker social chairman. A shrewd businessman, Steve utilized his talents to help establish, direct, and gather half the profits of the Blacker monopoly known as Double-JJ Enterprises, Unincorporated. An excellent volleyball player, he was a mainstay on Blacker's championship team this year. Steve plans to go to work after graduation.

chemistry





ROBERT P. CHAMBERS Dabney

Bob's immediate future centers around a Bob's immediate future centers around a baby (expected in August) and graduate school in chem engineering here at Tech (expected in September). Bob has been quite active on campus, serving as Big T business manager, social chairman for his sophomare class, secretary for the ACS, and on the ASCIT Rally Commission. A stalwart on Dabney's athletic teams, Bob's been a familiar figure on the interhouse softball diamond and football field.



GILES R. COKELET Off-Campus, TB II

A junior transfer from PCC, Giles hails from nearby Arcadia and is a veteran of two years in the service. A member of ACS and the Chemical Engineering Club, Giles plans to go north to Richmond and work for Stauffer Chemical for the sum-mer after which graduate school and a^r nice fat scholarship await him at his Almo Mater. Not a one-sided chap, Giles has an avid interest in photography and the game of bridge.



ROBERT C. CURLEY Dabney

Dabney A chemist's chemist, Bob was one of those rare and fortunate souls with a great deal intuitive understanding, with "the feel" for it. Tall, quiet, and delib-erate, Big Bob came to Dabney from the Garden Spot of Southern California, Inglewood. A man of many talents, Bob has been a member of the Student Shop, the Chem. Eng. Club, the Caltech New-man Club, and ACS, being a vice-presi-dent of the latter organization. Aside from eating, sleeping, and keeping his car going, this Applied Chemist plans to concentrate his future efforts on work.



ROBERT J. DEFFEYES Blacker

Bob, who has dipped his fingers into everything around here, is another one of those follows from Casper, Wyoming, He is a member of ACS and the Student Shop, and was a writer for the old Pen-dulum. Bob was president of the Chem-E Club, NSA district representative at large Club, NSA district representative at large, A UCC, and treasurer of Blacker. He has also found time to earn a letter in junior varsity soccer and to get an honor cer-tificate. Bob's "just for fun" interests include manuscripts and lettering, tropical fish, and the French horn. After gradua-tion, Bob plans to work in industry until Uncle Sam comes crying for him.

applied chemistry

CHARLES M. FINLEY Dabney, Honor Key, T3

Dabney, Honor Key, T3 This intrepid seniar, withstanding the tribulations of a one year "constitutional" layover in Lincoln Nebraska, returned to add his name to the illustrious ranks of the Class of '57 and of Dabney House. Here he served as Dabney House Presi-dent, and managed besides, to earn varsity letters in football and golf. Also a winner of an ASCIT Honor Key, he was a member of ACS and Beavers. "Pete" claims his-main "outside" interestes are electronics, bowling, and women, "not nec. in that order". Not content with these accomplishments, Pete sued for greater glory — and as a chemist "hav-ing seen the light", he will return to Tech for a degree in EE.

ALLAN M. GOLDBERG Blacker, T1

Blacker, T1 Marriage in the romantic month of June awaits this hometown boy from Los An-geles. A mainstay on Blacker's inter-house tennis teams, Al has the distinc-tion of having won his division for four years. In addition to his tennis Al has consistently turned out for varsity base-ball where his strong pitching arm has won many games for Tech. A member of ACS and the Chem Engineering Club, Al served on the planning board of the latter organization. Al also professes an interest in bowling, squareddancing and contemporary music. Next year will find Al back at Tech going after a master's degree... degree.









WILLIAM A. MOEUR, JR.

Off-Campus, T3 The unexciting but necessary pastime of work awaits this fellow from Tempe, Ari-zona, after graduation. Having deserted Blacker for a house of his own in the middle of his frosh year, Bill now has a wife, a young daughter, and a younger son to add to his accomplishments dur-ing the past four years. Bill's been very active in athletics here at Tech, especially in football, where he's anchored the end of the Tech line for three years. Bill's friendly ways and athletic skills will not be soon forgatten by those who knew be soon forgotten by those who knew

Jerry arrived here from the sleepy hamlet

Jerry arrived here from the sleepy hamler of Los Angeles, California, and immedi-ately parked himself in honor standing. Nontheless, he has managed to find time for varsity baseball and the Catech Y. He has also been secretary of the Chem-ical Engineer's Club and president of the local cell of the American Chemical So-ciety. However, his absorbing interest lies in the field of medicine, hence four years of medical school at U.C.L.A.

GERALD KLAZ Blacker

Off-Campus, T3

JON ROBINSON Fleming

A fellow not content to stay in one place all of his life, Jon has managed to get around a little in his lifetime. Born in Copenhagen, Denmark, he graduated from Kodukanal School in Kodukanal, South India. Maybe as a result of his extensive travels, Jon has become a real photo bug and served the Big T in the position of photo editor last year. He also is a member of ACS and looks for-ward to a job in industry upon granduaward to a job in industry upon grandua tion



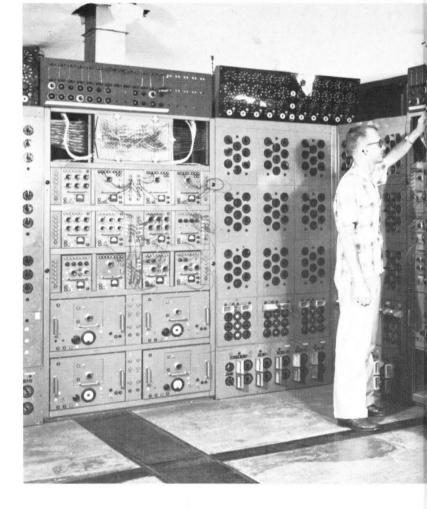


PETER K. ABBEY Dabney, T3

Dabney, T3 From sunny San Diego comes this sunny dispositioned lad. Deliberate and easy-going, Pete has been a mainstay on the Varsity Golf team for three years, two of which he served as captain. Pete has also been a Dabney House Co-Athletic Manager and an Election Committee Chairman. Always dependable for "house doings", Pete was also adept at hi-fi, bowling, ping-pong, and women. His future plans center around graduate studies in EE at Tech.

JAMES D. ACORD **Off-Campus**

The class father, Jim began his Tech career in the fall of 1938, his sophomore year in 1939, his junior year in 1948, and his senior year in 1956. This 37 year old vet is a member of IRE-AIEE, is married, and calls Altadena home. For the future he plans to go on making a living like he's been doing for the part 20 years. a living like past 20 years.



electrical



DONN A. ALLEN

DONN A. ALLEN One of the more distinctive men in the class, by virtue of a certain unmistakable physical attribute, is mighty little Donn from Huntington Park, the "Greasys" best student customer and good friend of all female secretaries on campus, Donn claims that a close association with electronics equipment is vital for all EE majors, and he proves his point by snaking as he watches TV and pursues higher Fi. At any rate, Donn's methods have placed him high in scholastic stand-nig in the class with honor standing. Next year he plans to continue study in grad school, probably here.

RICHARD ALVAREZ Fleming

Fleming Dick came down to Tech from San Fran-cisco. Although he's a native Californian, he cares little for the Southland and regrets that Tech wasn't located closer to the San Francisco area. Dick played frosh soccer, and he's been a member of the IRE and of the Musiale. His chief interests include music, high fidelity, fiddling with broken-down electronics, and hiking and camping. His scholastic ability is exemplified by his honor stand-ing in the closs last year. At the present time Dick is thinking about grad school, but hasn't quite made up his mind.

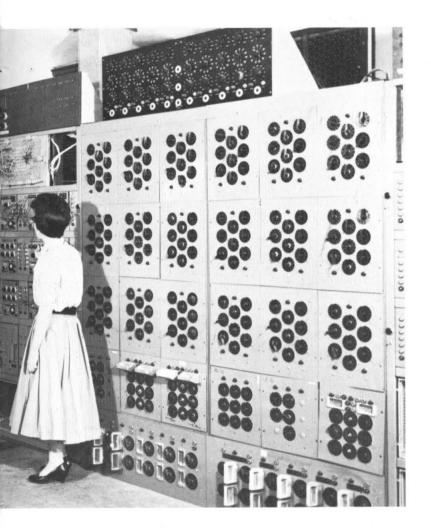


STANLEY W. BAKER Dabney

Dabney This phenomenon from Fillmore, Caifor-nia, has never ceased to astound the troops at Dabney by his amazing feats of mental agility. As sleeper of the "odd shift", and perhaps the top authority on "book searching" techniques, Stan has managed to develop his skill as a bridge fan, his interests in music and hi-fi, and has become a connoisseur of fine foods. All these interests blend to give him a bland, savoir-faire manner. A member of the IRE, Student Shop, and the Photo Club, Stan has also gained the distinction of being this year's Big T editor, and next year plans for EE grad school, or for work.

EDWIN X. BERRY Dabney, T4

Dabney, T4 This senior from Sacramento, California, started off his career at Tech by being chosen as Freshman Athletic Manager. In the four years he has been here, Ed has collected four varsity letters for him-self, two in Soccer and two in Baseball. One of the senior mainstays in AFROTC, smilling Ed was also a Dabney House Co-Social Chairmon and lists his main interests as just plain people. Ed plans to do missionary work for two and one half years after graduation, and then he plans on marriage and "helping out" Uncle Sam.



engineering





J. WILLIAM BURROW Dabney

Dabney Soft-spoken, this Whittier lad hails origi-nally from San Antonio, Texas, whence comes his sometimes languid and quiet manner of speaking. An avid commuter, Bill fled southward and homeward every weekend, until the true spirit of "the nature of things" descended upon him. From this time forth, Bill became a firm exponent of the Eastward Pigrimage. Thus it was that Scripps was added to his other interests, which include music, history, literature, fine foods, and plenty of sleep. What the future holds for this EE is uncertain within the limits of Uncle Sam, work, and grad school.

JAY B. CLEARWATER Throop

A local bay and a junior transfer from PCC, Jay's chief interests are spear fish-ing and high frequency radio communica-tions. For the past two years Jay has been an active member of Throop Club, holding the office of athletic manager for one year. Jay can't bear to leave this land of many large fish and KWKW, so he plans an engineering career in the area with work to follow graduation and an M.S. at some later date.

ARTHUR W. CROWELL Dabney

Dabney One of the "old timers" in Dabney, Art Crowell came to Tech from Monrovia, Calif, Between a couple of school terms, Art served in the army, and serviced IBM's in France. With his return to Dab-ney, Art brought with him a touch of the fabled "old school", and despite his interest in the Humanities, especially His-tory, he has EE'd several IH dances. Always think up new gadgets, he in-stalled a gearshift lever in his car which permits left-handed shifting — perhaps a carryover from his Boy Scout days. But the call of ocean and white, bird-like sail are strong in Art, who plans for the future to "EE" and to skim the waves in his own "fifteen-footer."



HAROLD R. DESSAU Fleming

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A product of Encino, California, Hal's in-terest in things electronic will probably lead him into the electronics industry following, of course, another year or so in school. A member of IRE and AIEE, Hal also professes an interest in inter-house sports and in travel. As a result of the latter interest, Hal has managed to see the biggest portion of the United States. States.

DUANE D. ERWAY Throop

Graduate school at Tech followed by a Graduate school at Tech followed by a career in the electronics field awaits this junior transfer from Chaffey Junior Col-lege. The proud father of a bouncing baby boy, Duane pleads guilty to filling a class room so full of cigar smoke that no one could see the slides on the screen. Since Duane is such a hom and elec-tronics bug, everyone was surprised that Junior appeared without a build-in an-tennae. tennae.

JAMES N. GILES Throop, TB II

Throop, TB 11 Jim came all the way from West Covina to join the ranks of the AFROTC and the EE option slaves here at Tech. Jim was a member of the AFROTC Drill Team and has received the Distinguished Cader Award, He's a member of the IRE and has been active in interhouse sports, par-ticuarly in tennis. He also finds time to be active in church activities and to be a Scoutmaster for a local B.S.A. group. A demon for punishment, Jim will retum here next year for am K.S., and then will "accept" a three-year tour of duty in the Air Force.



JOHN HARVEY GLEIVER Throop, TB II

Throop, 18 11 John comes from Van Nuys, and has taken a total of nine years to get through Tech. Figuring that the first two years of Tech was reason enough to take a nice long vacation, John spent four years with the USAF in Georgia, and after that particular region of hell, John really appreciates the good points of smag and Caltech. He professes a devotion to transistor circuits, since they use low (nonshocking) voltages. If John's efforts to train his wife, Ruth, to keep their new body noiseless proves successful, he plans to return to grad school next year.

TMOMAS C. HAYS Throop, T3

Whenever he can pull himself off Southern California's beaches, Tom makes it a point to drop into Tech for an education. A native of North Hollywood, Tom has been a real mainstay on Tech tennis teams, holding three vorsity letters and a team captainship. As AFROTC Group Commander this year, he's really been cracking the whip over the underclassmen cadets, and he's spent considerable time on the organization of the military ball held with AFROTC groups from Layola nad USC. A year of grad school either here ar at Stanford will be followed by a tour of duty in the Air Force.

WILLIAM H. HECHT Ricketts

Cool, suave Willy has been doing all right at Tech since immigrating from the Pacific Northwest. As gentleman athlete he has contributed his provess to frosh varsity basketball and also the interhouse sports program. If during the past two years your favortie candidate hasn't won in ASCIT elections, see Bill, the ballot counter.

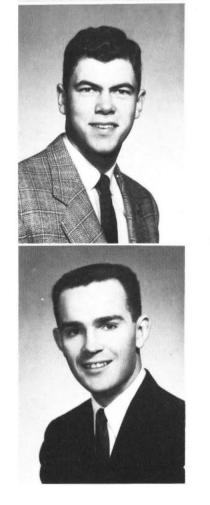
won in ASCIT elections, see bin, me ballot counter. He has also been vice-president and secretary of his class. Bill's main anxiety right now is whether he'll get a sports car now or after EE grad school at Tech, After the M.S. degree perhaps Bill will get a MRS., or go on Med School.

NEIL H. HERMAN Off-Campus, TB II, T1

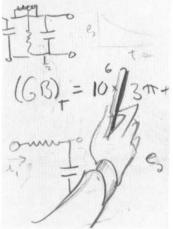
A Junior transfer from Pomona under the three-two program, Neil brought his baseball talent along with him, earning a T to replace a similar emblem from Pomona college. This EE is also interested in sports, music, and his wife (not in order of preference). If his wife (not in order of support him as she has done for the past two years, Neil will in all probability return for grad work in EE.











ROW A. JENSON Blacker

Blacker Blacker's own inimitable head waiter hails from Merced, California, and doubles as chief ham for the MARS radio station on campus. Buddy's chief extracurricular activities center around church work where he has held various offices during his stay here. Besides heading up different youth organizations, study and social groups, Buddy is currently engaged in missionary work. After graduation, Buddy plans to return for a year of graduate work in EE.

CLARENCE H. LARSON, JR. Off-Campus

Charace started his Tech career in 1950, completing the first 3 years in the normal period, A year of work and a short term with Uncle Sam's Army interrupted his pursuit of knowledge at this juncture, but not to be discouraged by all this he returned this fall to complete his undergraduate work. This Altadena lad expects to be employed by some enterprising company after graduation.





BERNARD B. LÓPEZ Dabney

Dabney Hailing from the glorious Center of the Universe, Las Vegas, NEW MEXICO, Bernie quickly distributed his long, lean length soon becoming known as a prominent "man of letters", and a firm advocate of the US Postal System. A member of the Dabney basketball and volleyball teams, he was also a member of IRE, and president of the Caltech Newman Club. A holder of the Don Shepard award, Bernie plans to enter grad school with a major in English.

STEPHEN MAK Fleming, T3

"Saki Sam" lent a touch of his native Hang Kong to the peculiarities of English as spoken in Fleming House. He also was out for soccer three years in a row. Ambitions? Well, there's Lotus Blossom . . . He's going to grad school, too.

CHARLES L. MALONE Throop, T4

Throop, T4 This soft spoken chap came to Tech as a sophomore transfer from S.M.U, in Dallas, Texas (wherever that is). Chuck filled a first string halfback position for two years, making many valuable yards for Tech football teams. During the spring terms you can find this fellow out on the baseball diamond. A Beaver, member of IRA-AIEE, Radio Club, and Throop's own Math Club concerned with probability in a 52 unit system, Chuck has managed to fill his extra time. He plans to return to Tech next year for his MS in EE.



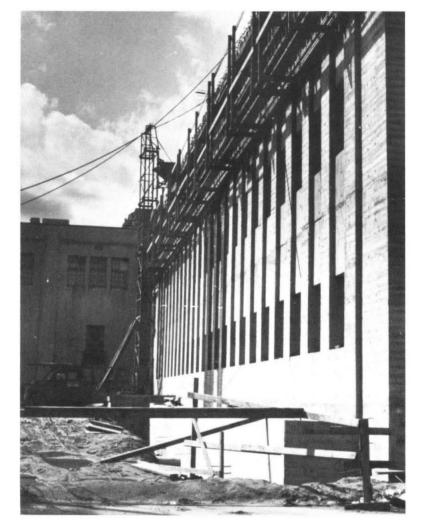
WILLIAM T. McDONALD Blacker, TB II, Honor Key

Blacker, TB II, Honor Key Nothing intrigues this red-headed chap from North Ben, Oregon, more than hunt-ing and fishing in the wide open spaces, but he plans to suppress these interests for at least another year to attend grad school at his dear old alma mater. No shut-in during his stay here, Mac has served as ASCIT Second Rep, BOC mem-ber, and activities editor for the Big T, while also being a Beaver member and playing varsity basketball for a year. His dreams of the future include becom-ing wealthy enough to endow Caltech with enough money to move to Oregon.



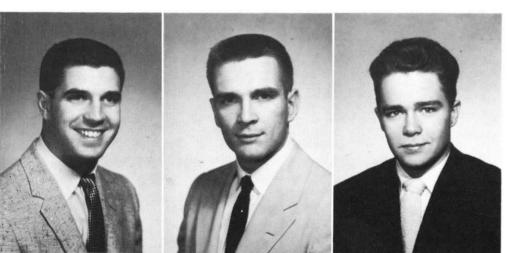
ROBERT R. MARSHALL Fleming

A native of Pamona, "Bobert" spent a good deal of his time here immersed in EE, hi-fi and the IRE. He also devoted considerable effort to taking pictures, climbing mountains, and displaying to the members of Fleming House a perpetual frown. He's gaing to work now and will possibly return to grad school later.



electrical

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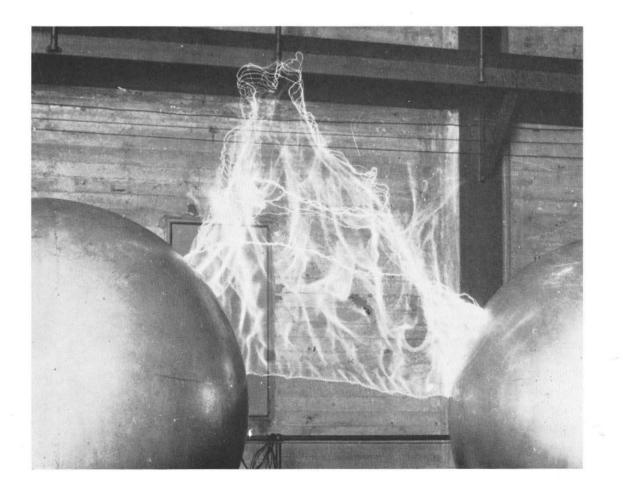


ROBERT T. MOORE Fleming, TB II

Fleming, TB II Pittsburgh, California, is the home of this likable electrical engineer. When gold panning in the Sierras didn't pay off, Bob decided that a career in engineering and teaching was more lucrative. But four years here in Pasadena have not weakened his love of the great outdoors; he's an ardent fisherman and hunter. This stalwart of Fleming's Waiter's Union has been a water skier and amateur geologist in his spare time. He's raised his voice on many occasions with the Glee Club. His future plans include a Ph.D. at Stan-ford, and then a career in teaching.

EDWIN D. NELSON Ricketts, TB II, T6

Ricketts, TB II, T6 Big Ed Nelson hasn't had much trouble with the EE option these four years. An LA, product, he has spent three years as varsity end on the Tech football squad. After winning all-conference honors as center-fielder on the baseball team, Ed, this year, has assumed the role of first pitcher on the squad. Not exactly the boisterous type, Ed successfully withheld any information of his having a sister until she recently appeared on the cover of a national photographic magazine. He will probably drive his Bel-Air Chevy to Tech grad school next year, before he takes it to work.



ROBERT L. SIMPSON Ricketts

Ricketts Bob, who hails from Inglewood, Califor-nia, is another one of the married men in the class. Among other interesting things, the future holds a son or daughter for Bob soon after graduation. He's a hi-fi fan, as all EE's should be, and just for kicks, he's interested in history too. The future is a little uncertain for Bob, but the responsibilities of a family will probably determine a career in pro-fessional engineering for him soon after graduation.



DON M. PINKERTON

Blacker Blacker's chief agitator and champion of Blacker's chief agitator and champion of minority group hails from nearby Bur-bank. An active member of the Y, he has been at various times national repre-sentative (twice) and vice-president. His forte is social science, but he also dis-plays an interest in flying, camping, hik-ing, and travel. No informal lounge dis-cussion is complete without "Pinky's" contribuion. Although he is a native Cali-fornian, it is quite likely that Don will accept employment abroad — that is if he can avoid the gredy local capitalists.

HERBERT E. RAUCH Fleming, TB II, Honor Key (2), T2

Fleming, TB 11, Honor Key (2), T2 To say that Herb has been active in ac-tivities here at school would be a master-piece of understatement; the big boy from Tucson, Arizona, just couldn't seem to find enough to do. He's held the of-fices of ASCIT Secretary, house treasurer. Drama Club president, AIEE-IRE president, and IHC secretary. He's been active in speech and debate and he's lettered in basketball and baseball. To top it all basketball and baseball. To top it all off, Herb has maintained honor standing all four years, and was Tau Beta Pi Honor Juniar. He plans more study of EE and his avacation (females, fun, and food) in grad school either here or at coeducational Stanford.



DON G. ROBERTS Throop

Don is a devoted electroniker from Glen-dale, but he soys he looks forward to leaving the area for grad school, prob-ably at Cal.Berkeley. Don's been active in the Physics Club, the IRE, and the Student Shop. Besides electronics, his in-terests include music, sightseeing, and a devoted interest in the art of goofing off.

F. DONALD RUSSELL Dabney

Dabney One of the greatest "Joshers" in the game, and a canfirmed used of "trivial" and "foolish", Don at once infuriated lin a mild way, if such is possible) and enlightened his fellow Et's by his handy explanations, which were often more complicated than Chinese jig-saw puzzles. Now from Denver, Colorado, Don origi-nally hailed fram Arizona, one of a long line of "Phoenix kids". "Hey, better watch it Sam!" was a hallmark of this staunch mainstoy of many Dabney inter-house teams. Don was also Co-Athletic Manager of Dabney and a member of the Y and the Inter-Varsity Christian Fellowship. He plans for CIT grad work and for a June wedding. and for a June wedding.





DANVER SCHUSTER Off-Campus

Off-Campus A graduate of Manual Arts High School, Darver storted his Tech career with the Navy's V-12 program in 1942. He re-turned again in 1947, left after a year, then returned to finish this year. A mem-ber of IRE-AIEE, Darver now lives in San Bernardino. At 33 he does his part to bring up the average age of the EE option to the highest in the class.







WALTER A. SPECHT, JR. Blacker, TB II

Biacker, 18 11 Hailing from Long Beach, Walt's special interests are radio, hi-fi, and bike riding. Walt's activities at Tech include running the Square Dance Club during his juniar year, membership in the Glee Club, treasurer of TB II, and playing frosh and varsily baseball. After graduation, Walt will be commissioned to three years ac-tive duty with the U.S. Navy. Walt then plans to come back here for grad school.



RICHARD D. STARK Blacker, T1

Blacker, T1 From the "Hub of the Inland Empire", Spokane, Washington, Dick has spent four active years spreading his talents around the campus. As librarian of Blacker House, he spent one year seeing that Blackermen passed their finals with flying colors. Another year was spent as social chairman seeing that the house members had so many good social events to attend that no time was left for studying. A mainstay of house athletic teams and a jolly waiter, Y member, and UCC, Dick will not be soon forgotten around his Alma Mater.

LUIS B. SOUX Fleming, T2

Fleming, T2 Claiming to have come from Potosi, Bo-livia, Luis has spent a very active four years at Tech as a member of the AIEE, IRE, SAE, and Newman Club, to say nothing of Glee Club service as secretary-treasurer and librarian. Besides fran-tically waving his hands at the Phlegms during Interhouse Sing and distinguishing himself by copping the regional IRE award, Luis has actively pursued his in-terests in music, flying, drinking (Ba-livian equivalent of Kickapoo Jay Juice), and women. After grad school he plans to apply his engineering knowledge to the development of South American in-dustry. dustry.

THOMAS C. SORENSON Throop

Ihroop A junior transfer from nearby PCC, Tom also claims the distant city of Pasadena as home. Besides his interest in the sex life of electrons, Tom professes an in-terest in sailing and sports. To back these claims he can point to his membership in the sailing club and his consistent turning-out for interhouse sports. Not satisfied with just a B.S., Tom looks for-ward to continuing his studies here at Tech. Tech

R. MICHAEL STALEY Throop, TB 11

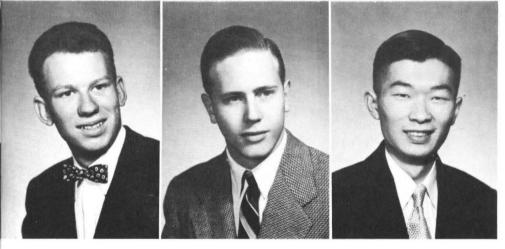
Inroop, IB II Since coming to Tech from Whittier Mike has acquired an education, a wife, and two children, in part from the Institute and part on his own initiative. He is a member of TB II and has been a stalwart on Throop's interhouse teams. After grad-uation Mike plans to seek his fortune in inductor, the loc Angeles grad. industry in the Los Angeles area.

electrical

engineering

Dabney Four years, and never a dull momentl Harper, an L.A. boy, is one of those people destined to be center about whom many legends and fables grow. A very 'usual type' looking guy with a rather unusual type imagination, Harper has affably captured the applause of his fel-low Dabneyites. Not lettig EE studies dominate his schedule, he has mode extensive friendships in other student houses. An ardent locksmith and hi-fi fiend, he has also managed to become adept at odd jobs such as plumbing, car-pentry, interior decorating, and parrot calling. A member of Student Shop and IRE, Harper plans to continue his EE studies in grad school.

HARPER J. WHITEHOUSE Dabney



JOHN A. WISE Fleming

Fleming By some strange quirk of fate, John skilled through high school in Beverly Hills and landed at Tech. He's never been completely satisfied with the EE course and his coustic comments at the expense of pertinent instructors have made other-wise dull lectures entertaining. Mad about Mozart and bewitched by Brahms, John belongs to a large crilection of classical LP records. Although a member of the AFROTC, he hopes to stall off the Air Force long enough to complete two years of graduate study at the Harvard School of Business, after which he'll pay his three year debt to Uncle. three year debt to Uncle.

CAVOUR W. YEH Fleming

Preming Besides giving the frosh in his alley a rough time and setting new and enviable record for the largest number of phone calls per unit time, this bay from Nan-king, China, likes to spend most of his free time playing tennis. Cavour has had little difficulty "cooling" the undergrad EE courses, and he plans to apply his academic abilities to graduate study next year. year.

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HOWARD W. BLOOMBERG Ricketts, Honor Key, T3

Arriving at Tech under his real name, Howie might leave the campus with an assoriment of harmless but rather mysterious nicknames. But nevertheless, his record here will be very commendable. He has served as vice-president and president of his class, Students Day chairman, BOC member, and a member of the Leaders of America Committee. Athletically Howie has played varsity basketball for three years. He finally got a car this year, and with it intends to go to work.

WILLIAM H. DIETRICH Blacker, Honor Key, T3

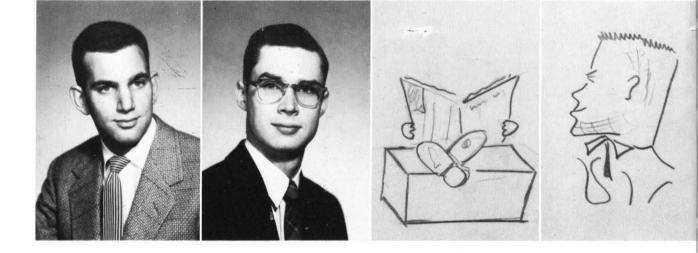
Afraid to return to Albuquerque, New Mexico, where he escaped from high school, Bill now claims Morristown, New Jersey, as his home. Never a man to fritter away all of his time "snaking". Bill has spent four busy years taking part in the Glee Club, YMCA, and AFROTC activities, as manager of cross-country and baseball, and taking care of unmanageable Blacker frosh as a UCC. He plans to continue to utilize his managerial skill in industry, after escaping from the Air Force, of course.

THOMAS S. DODGE Ricketts

A sophomore transfer from San Diego State, Tom has flooded the Tech scene with a lot of Dago slang. Activity-wise the lad has been business manager of Farrogo and co-editor of the California Tech. He also has developed a slight interest in economists; he is Ricketts House librarian for the Harvard Business Review, Fortune, and the Wall Street Journal. Tom will work for awhile before he is snatched up by the Air Force. After that he will see G.M. and apply for the presidency.

CRAIG T. ELLIOTT Ricketst, Honor Key (2)

Craig has managed to become known around campus, probably the result of the ASCIT publicity managership. Impressed by his achievements, the AFROTC boys made him commander of the drill term and laso cadet group commander. A Beacer, soccer player, and what have you, Craig often mumbles about the wonders of Wyoming but claims South Pasadena as home. If his wife can keep him happy, Craig will return to school next year.



mechanical engineering

ROBERT T. GELBER Ricketts

Ricketts Big Bob with the ready smile has had no real trcuble making friends during hist stay at Tech, as witness his two terms as class president, first as a sophomore and again as a senior. Born in Belgium, Bob now claims Los Angeles as home. Besides his interest in campus politics, Bob has been active with the ROTC, where he was on the drill team for two years, and in house activities. His future plans include a provision for what his military bosses might have to say but eventually include a place in industry.

JAMES E. HALL Fleming

Fleming A leading candidate for the title of class father, this tall Texan from Abilene has two doughters, Linda, age 3, and Sharon, age 1 ½. It would seem that seeing to the welfare of his doughters and his write, Nancy, and keeping up his schoolwork wouldn't have left Jim much time for activities, but he's found time to exercise active interests in the SAE and ASME and in racing and designing sportscars. Although his future plans haven't definitely solidified, they undoubtedly include further pursuit of automobile engineering and plans for the growth of his young family.



GEORGE HALL Blacker, T1

George started out as a top football prospect until a shoulder injury forced him to turn to soccer after his sophomore year. George has been involved in any number of other activities about campus culminating in a year's service as vicepresident of Blacker House. A sports car enthusist, George may often be seen driving his white Jag. Work beckons George after graduation.

KIRK S. IRWIN Throop

Throop A fellow unashamed to admit that Los Angeles ih his home, Kirk's activities have includes ASME, interhouse athletics, and the Caltech Christian Fellowship. Between time allocated for these activities, AFROTC, and keeping the minutes for Throop Club, Kirk finds time to be interested in golf and records, and occasionally to study. After a stretch in the Air Force, he plans to make an engineering career for himself in the aircraft industry.

JOHN W. HARFORD Blacker, Honor Key

Blacker, Honor Key Jon came to us from sunny Phoenix, Arizona, and proceeded to make himself a place in the sun here as well. Jon has been involved in practically commissioner, First Representative, and Blacker House Social Chairman, and also membership in Beavers. He is very fond of music (he plays a mean set of bongos) and of sking, and is one of the perpetrators of the Blacker House Sports Car Club. In his spare moments Jon has been known to take an interest in the Opposite Sex. If he doesn't fulfill his threat to join the Foreign Legion, he will probably begin a career in industry.

WILFRED D. IWAN Throop, TB II

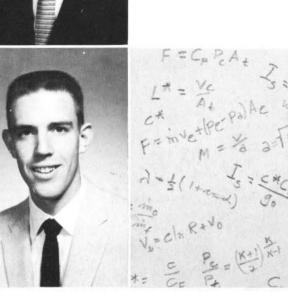
Bill (a native of Altadena) is another of the students who plan marriage this summer. Besides Tau Beta Pi membership, Bill's outstanding scholastic record netted him the AFROTC Distinguished Cadet award, the AFROTC Scholastic Award, and the Republic Aviation "Air Power" award. Bill also has been Executive Officer for his AFROTC Cadet Group, and in off-campus activities he's been active in various musical groups and president of a local college-age church group. Besides marriage, his future plans include working toward an M.S. degree in ME.

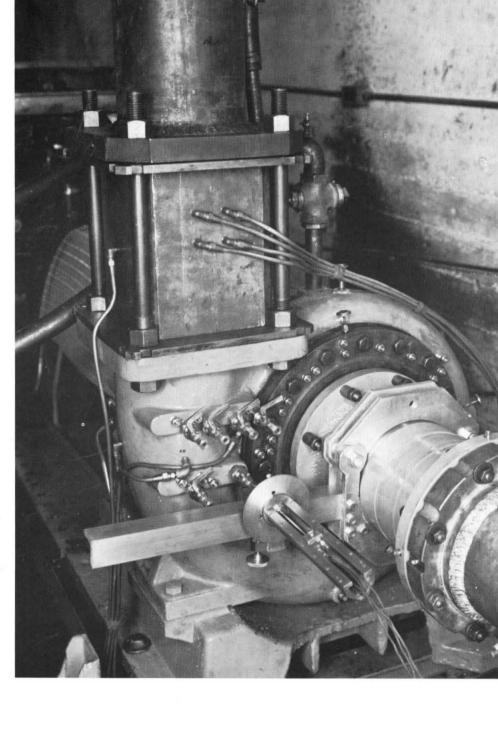
CHARLES GORDON FULLERTON Fleming, TB II

Fleming, TB 11 Fleming's interhouse athletic mainstay hails from Portland, Oregon. Not content to be a "coolie" athlete, he managed to get himself elected "boss" of Flem-ing's athletic fortunes. After maintaining a fine scholastic record and serving as commodore of the Sailing Club, captain of the Rifle Team, and president of the IAS, Gordy (or AFROTC) has decided that the flyboys have the right idea, and plans to join Uncle Sam's Air Force to become a jet jockey after graduation.











THEODORE E. LANG Blacker, T3

Blacker, T3 From Salinas, California, Ted transferred to Tech as a sophomore. A consistent point winner in track, Ted holds the school's present discus record of 142' 6''. He's also played varsity football and has been active in interhouse sports. His other interests have centered around Stu-dent Shop activities and the study of rocket development as a hobby. Ted, who is also one of the married men in the class, plans to attend grad school here next year to gain himself an M.S. degree in ME, then on to develop many, many rockets.

JOE E. LINGERFELT Blacker, Honor Key, T3

Blacker, Honor Key, T3 The tiger from Shelby, Montana is going to be missed on the football team where he has held down the position of center ofr three years, earning an all-conference position this last year. A man of widely varied interests, Joe has been an active member of the glee club, serving one year as president, a member of the Big T staff, a delegate to the Model UN, house athletic manager, UCC, and on down a long list of activities. Willing to sacrifice for the benefit of science and stay away from his nate state for one more year, Joe intends to return to grad school next fall.



CHARLES A. LUKE Fleming, T2

Fleming, T2 Chuck came to Tech from Bellingham, Washington, as an Alfred P. Slaan Scholar. He likes athletics, having lettered two years in track. He's been a partici-pant in Tech's most successful sport, jave-lin throwing, and he's been a stalwart on Fleming interhouse sports teams. As a Slaan Scholar, Chuck ejoyed a free trip to New York during his senior year. Hi sintrest in physical metallurgy has guided his future plans toward the field of research and development in engineer-ing metals in industry. ing metals in industry



BRUCE A. NEVELLI Blacker

An active member of ASME and SAE, Bruce professes a major interest in auto-mobiles. Not the narrow-minded type, though, he plans a future in the aircraft industry after grad work in ME. An ardent sports fan, Bruce has been a con-sistent participant on Blacker's interhouse teams. A native of Partland, Oregon, Bruce carries a major part of the Narh. Bruce carries a major part of the North-west around with him in the form of some very excellent color slides he has taken.



JOHN W. PARKS Blacker

Blacker An unmistakable personality about, the campus by virtue of a certain distinguish-ing physical characteristic, Tiny's first love seems to be classic cars. (He wons 4 with a total cylinder count of 44 not including broke cylinders). So as not to be too partial to 12 cylinder cars, he also owns a 0 cylinder vehicle, namely a racing bike which moves like it had 12 and JATO units attached when Tiny gets in competition. Not being able to avoid it forever, Tiny expects to go to work after graduation.

MARCY C. MALCOLM Off-Campus

Marcy matriculated in the fall of 1951, but somehow managed to get the worst end of a fight with his draft board which ended in a two year interruption in his education to appease Uncle Sam. The interuption did not seem to affect his ability to study, however, and after graduating with flying colors, he expects to find a nosition in industry. to find a position in industry

DOUGLAS G. RITCHIE **Ricketts**

Although he arrived at Tech from some place in Missouri, Doug now claims Es-condido, California, as home. An active member of Ricketts, Doug has found time for interhouse sports and house social activities. Willing to spread his social ability around a bit, Doug served as class social chairman during his junior year. An active member of ASME and SAE, Doug is looking for a place in industry upon graduation.

mechanical

engineering



REUBEN B. MOULTON, JR. Ricketts, Honor Key (3), T2

Ricketts, Honor Key (3), 12 Rube's a pretty big boy, but even then his number of activities per pound is still higher tha naverage. Renown as the Hanfard pile (Hanfard, California), Rube has been ASCIT veep, house social chair-man, on the Board of Control, head of the Little T publication. He can pro-duce one of the really fine tenor voices around the school. Rube has won na-tional honors under the colors of the Caltech debate squad and has put in time as soccer manager. With really not too as soccer manager. With really not much to fear in the world, Rube throw in his lot toward industry as summer commences. not too will



ROY T. STAKE Ricketts

Ricketts Roy hales from Pedra, but one would never guess it from observing his relaxed nature. Although interested in automo-biles, Roy has still found time to explore the non-scientific aspects of undergrad-uate life. At Ricketts house he assumed the role of house treasurer. The Glee Club has been a strong interest for him during the past four years. Scholastically Roy is close to the top of his option. Next year will find this young man in industry, preferaby working on some aspect of the horseless carriage.





JEROLD L. SWEDLOW

Jerry has had quite an influence on the Jerry has had quite an influence on the Cattech scene. In his junior year he helped the Rowdies put over a successful social program as social vice-president. The final year, Jerry has exhibited quite a head for the business world. And cer-tainly if business is looking for good heads, then they should take note of him. Being eligibile in most all respects, he will take on a job after graduation, and free from the burdens of school will go for the first million.

L. ROBERT TALBOT Throop

Throop Coming from La Crescenta, Bob has busied himself the past four years deciding upon an engineering option, passing courses, and snowing one female PCC troop whom he plans to marry in June. Bob played frosh tennis, and with another Throop member won the interhouse tennis dou-bles the last two years. Like all good ME's, he is a member of the ASME. Marriage in June and a Hawaiian honey-moon will be followed by more mundane life in Westwood, where Bob can pursue engineering work and night school at UCLA business school.



JAMES H. SNYDER Fleming, T5

Fleming, TS "Spider" came to us from Lynhurst, Ohio, and proceeded to make himself a main-stay of every team he went out for, which included varsity football and baseball. Jim succumbed to the wiles of Cupid and moved off campus after three years of keeping the morals of Fleming House on a proper level. Not the type to overspe-cidize, Jim has been taking almost as much EE as the EE's, but he plans to graduate and work as an ME.







PETER M. MORETTI Blacker

Biocker Santa Barbara's gift to Tech is this suave Continental gentleman with the Corvette. Count Peter's interests include classical music, jazz, bicycling, hi-fi, and upon occasion — the fairer sex. The ME side of Peter's personality shows through in his interest in sports cars and in his participation in SAE and ASME. Upon graduation, Pete looks forward to a relaxing sojourn in Europe, followed by a not-so-relaxing sojourn in grad school.

RICHARD F. SMISEK Dabney

Dabney This ME from Maple Heights, Ohio, is one of those fellows who seems to have gotten a little bit of everything while here at Tech. A member of Glee Club, Dick was also a member of ASME, Vice President of his Junior Class, and Treasurer of the Senior Class. Dick was also a regular on Dabney Interhouse teoms, as well as a Dabney UCC and ASME House Chairman. As a crowning achievement, Dick is the proud father of a new baby gir. Grad school here at Tech, and then service in the Air Force precede any other plans this ROTC member has.



STANLEY G. TAYLOR Throop

A staunch ASME man, Stan calls South Pasadena home. Expecting to continue his life of ease after graduation, Stan plans to retire in about ten years after revolutionizing the mechanigal engineering field with one of his brighter ideas. But if this descrit pan out, he does admit he may have to go to work!

WALTER F. WEISS Ricketts, T3

Ricketts, T3 One of the most popular boys of his class, congenial Walt calls La Paz, Baivia, his home. Well he did before that girl from IHC stepped into the picture. The marriage is this summer. He used his musical training to lead his house to victory in the Interhouse sing campetition. Walt has been known to spend some time at the harbor with the sailing club. In Ph e kicked the old soccer ball around for three years. After he grabs hold of his ME degree, Walt will begin working in this country.

CLINTON L. WEST Dabney

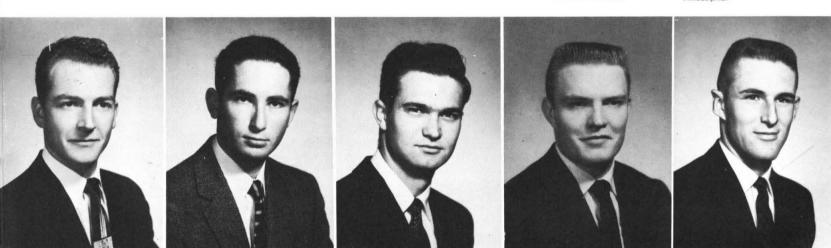
Winsome West has been one of Dabney's most inspiring personages, especially to Freshmen. He has literally smilled his way into many young, eager hearts. A disciple from the sub-center of the Universe, Marysville, California, Clint has carried the diversified arts of this cultural center to the great walls of Tech. A firm supporter of Masconi, Clint is also a strong Interhouse supporter, being one of Dabney's best "all around" players. Clint also is a member of the Caltech Band and is interested in classical music.

LARRY G. WHITLOW Fleming, Honoy Key, T3

Fleming, Honoy Key, T3 Larry left behind in Pocatello, Idaho, one female to whom he's been faithful these many years. The big day is coming in July. He was captain of the football team this year and was first team All-Conference tackle last year. He's been a member of the Beavers, the Glee Club, and the Drama Club. Larry has held the Fleming House offices of athletic manager and president. Other extra-curricular interests include guns and games of skill (poker, bridge, etc.) Larry plans a future in the field of nuclear research.

JAMES W. WORKMAN Ricketts, Honoy Key (2), TB II, T4

Ricketts, Honoy Key (2), TB II, T4 Ji mhales from Orange, California, and is certainly one of the more versatile Tech seniors. His grades have given him eligibility into Tau Beta Pi where he is now President. Sportwise Jim has garnered varsity football and basketball letters. He served on the BOD as the ASCIT Athletic Manager. Intensely interseted in automobile design, it is perhaps ironical that Jim was the Ione Ricketts senior without a car this year. Evidently interested in exotic femininity, rumor has it that Jim has a girl stashed away near Philadelphia.







HAROLD C. DALE Dabney

A real Californian from nearby Manhat-tan Beach, Hal has been a landmark at Dabney House for four years. In this time, he has managed to acquire an ASCIT Honor Certificate for his various activities here at Tech. One of the origi-nal "first members" of the Interhouse Gameroom Committee, Hal has also been a Social Chairman of Dabney House. This AE plans to devote most of his time in the future to working in some aircraft industry, and to his hobby, Hi Fi.

aeronautical engineering



1 5

RONALD F. DETTLING Fleming

Fleming During his stay at Tech Ron, an ME who hails from Lincoln, California, never al-lowed his studies to curtail his outside interests and activities. While at Tech he participated in interhouse sports, stu-dent shop, and SAE, and was president of the IAS for one year. Besides these activities, he maintained an interest in automobiles and swimming, During his senior year. Ron was the head waiter in Fleming House until he finally saw the light and quit the Waiters' Union. His future plans center around working for a company that builds or tests high per-formance misslies.

ALBERT E. GAEDE Off-Campus

A junior transfer from the University of Arizona, Al is majoring in ME-AE. Swim-ming occupies the spare time of this mar-ried senior who also claims the distinction of being enrolled in grad school as well as the undergraduate school. The future holds a position in the aircraft industry for this rather industrious fellow.



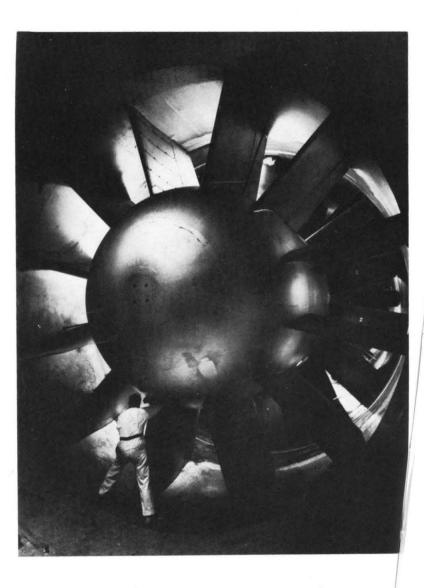


JOHN S. LUKESH Fleming, T4

Fleming, T4 This speedy little man from Alhambra, California, has been a consistent point winner for Tech track teams in the sprints and as a member of the relay team. His exceptional served him and Tech well as he ran from the halfback spot on the football team. During his junior year. John decided to abandon the bachelors' club and got himself permanently hitched. Now he really has his hands full as he and Mickey are the proud parents of a bouncing baby girl. A job in indus-try awaits John after graduation.

JERRY C. PECK Dabney

Dabney Only a little behind his former room-mate (Smisek), this guy from San Diego via Chicago returned to Chicago and re-turned (here, of course) with one of his long- time interests. Jerry plans to devote his life's work to pursuing his other main interest in life, Aeronautics. An old re-liable in Interhouse Sports, Jerry was also a member of the Institute of Aeronautical Sciences, was a Beaver, and served as both Librarian and then as Vice-President of Dabney House. In the future, Jerry plans for grad school in Aero here at Tech, and then working for an aircraft company in Southern California.



ITIEL "IKE" HAISSMAN Dabney, TB 11

Between trips to Scripps, Ike has found Between trips to Scripps, Ike has found enough time to serve an the YMCA cabi-net and Leaders of America committee. The ASCE vice presidency, Undergrad Lunch Club presidency, and Frash Tea Dance chairman have seen his hand. Before settling down to more serious things like building dams in India, Af-ghanistan, and Uganda, skiing the Alps, climbing the Himalayas, taking a kayak down the Nile, and just bumming the world, this boy who came from Halfa, Israel, plans grad study in hydroelectric engineering at Cal-Berkeley.

GARY N. DIETRICH Dabney

Somewhere in the paleolithic past, "Deke" was sprung from the mines of Butte, Montana, into the smag of "sunny" Southern California. After spending four years sacreef y seeing the sun, "Deke" plans a career as a professional engineer in hydraulic engineering. After two years as ASCE secretary, it is quite pos-sible that he has finally found a place to acquire a suntan, Let's hope so.







JERRY W. EGGLESTON Off-Campus

This future bridge builder graduated from high school in Great Falls, Montana, but now claims Pasadena as home. Just to show his diversified areas of interest, he has been known as a radio ham and belongs to the SAE and ASCE. He has spent the last year juggling the books of the latter organization, but unable to make enough to retire, he plans to attend grad school instead.

civil engineering



THOMAS W. COOPER Off-Campus

OH-Campus From the land of poker chips and high stakes (Gardena, California) came Tom to become one of those elusive Techmen that everyone hears of, but no one knows much of: A civil engineer. Tom served a year as president of the ASCE student chapter here at Tech, and he plans to continue his study in graduate school next year. next year.

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PAUL H. KING Throop

Throop Paul came to Tech from Glendale and has since served Throop Club as athletic manager, the ASCE as corresponding sec-retary, and the CCF as vice-president. Paul and another Throop member to-gether won the interhouse tennis doubles both last year and this year. He often takes time to be active in church youth work, and in his spare time likes to play golf and tennis. He can't quite decide between grad school and work.



JACOB LUBLINER Off-Campus, TB 11

OH-Campus, TB 11 This Los Angeles chap list his interests as "music, science, comics, philosophy, politics (Democrat), girls, television, the-atre, and languages." Besides supporting this shipload of interests and placing him-self in high scholastic standing, Jake has found time to write criticisms of music for the California Tech and to maintain membership in the ASCE. Contemplating a scholarly life as a perennial student, Jake will begin graduate study next year.



EDWARD R. PARK Ricketts, Honor Key, T5

Ricketts, Honor Key, T5 It hasn't been proved that Ed really is less excitable than the Egyptian Sphinx, but at any rate his perennial calmness has been welcome relief from the harried Tech atmosphere. Ed likes cars. He's had a Madel A, a '46 ford, an M.G. and recently he got himself a Jaguar. So Ed really ony likes sports cars now. Water polo and swimming have taken a lot of his time, but he's also had time to busi-ness manage the California Tech and be Ricketts house secretary. Right now the Air Force is looking longingly on this gentleman from Orange, California.

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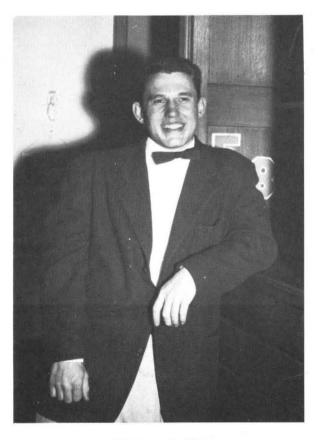


v. i. p.

John Adams Bill Below Letch Bennett Ira Bernstein Marv Beinstock Ashton Brown Jack Clark Vanderlip Conway Phil Cramer Kim Craney Frank Cress Ron Doctor Dick Duda Don East Jerry Gallagher Brent Gossage Robert Hamson

Larry Harvill John Hennessy Mick Holliman Grant Hudlow Warren Hultberg Dick Hunter Russ Hunter Roger Johnson Randolph Kallas John Kennedy Dick Krick Tony Lopez Norm Marsteller Jay McBride Ed McKnight Dick Miller Cornelius Morley Harold Morris Dick Morse Blaine Navroth John Patterson George Probert Walt Ravicz Chuck Smith Frank Steger Steve Stewart Carl Strobel George Tacka Arlen Taylor Dan Wenger Leonard Wiener Merle Wyatt

juniors



Dick Baron, President

The Junior Class, surmounting EE 1, Ph 106, and En 7 themes, came through with a resoundingly good year in all aspects of student life.

Going right into the social swing, the juniors started the year with a beach party on the sands of Laguna. During the basketball season the juniors were the first class to sponsor an aftergame dance, courtesy of Bob Walsh and his henchman, Dick Baron. Also, the Junior-Senior Prom was ably produced by the juniors (assisted by the seniors, of course).

As usual, the members of the class were active in student politics, holding down four offices on the BOD; R.I.P. Chuck Bonwell.

For the juniors, Mudeo was extremely successful since the sophomores, who won last year's Mudeo, lost this year to the freshmen. The irate sophs, who had been disqualified for "swimming" in the wheelbarrow race, expressed their opinion of the decision by bathing judges Kay Sugahara and Sonny Nelson in the mud, but fortunately Glenn Converse saved the juniors' honor by outrunning the avengers.

Wayne Nelson, Secretary Phil Reynolds, Vice-President

Ed Krehbiel, Ath. Mngr. Frank Nowak, Treasurer Bob Walsh, Social Chr.

Vince Taylor, BOC Sonny Nelson, BOC





Bill McClure, John Conover, Gus Akselrod, Russ Pitzer, Mike Milder, Jerry Arensor

sophomores

The class of '59 returned to burst in force onto the campus scene with their talents, energy, and enthusiasm. The class was led by John Conover, president; Gus Akselrod, veep; Mike Milder, scribe; Jerry Arenson, treasurer; and Bob Ingram, r.i.p., athletic manager. Bill McClure and Russ Pitzer represented the class on the Board of Control.

With characteristic altruism, the sophomores decided (in the interests of freshman morale) that the frosh be allowed to win the Mudeo. The Junior judges agreed reluctantly, in spite of tradition. The Frosh-Soph Dance was assured of being in competent hands.

Seven sophomores sought high political offices in the ASCIT elections, and five of them will grace the BOD next year; Mike Godfrey, Tony Iorillo, Bill McClure, Don Owings, and Russ Pitzer. Many more provided leadership in House offices, campus organizations, and intercollegiate teams.



Dave Butterfield Carl Morris Ron Arps John Cooper Lee Hood



Dave Butterfield Ron Arps Charles Slocum Lee Hood

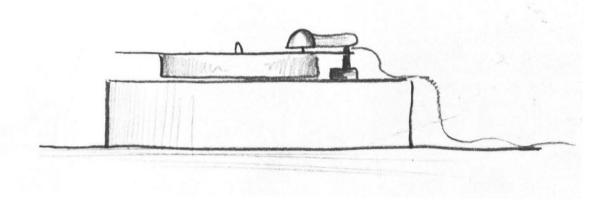
freshmen

The class of '60, under the leadership of President Lee Hood, has made a name for itself in many ways. Due to its unity, enthusiasm, and ability, it has been one of the strongest freshman classes that Tech has yet had.

Frosh Camp started off the year. About 180 freshmen, who arrived looking dazed and bewildered, were subjected to two days of sports, bull sessions, and lectures. When the men returned to Pasadena, they felt themselves part of a close group, and they were ready to begin the academic year.

This year's Mudeo was extremely close, finally ending in a 4-3 victory for the frosh. By their triumph, the freshmen earned the right to be the guests of the sophomore class at the Frosh-Soph Dance given in May.

The frosh have found a place for themselves at Caltech, and their class will probably be one of the best in Caltech history.







Don Neirlich, Dick Kirk, Rube Moulton, Craig Elliott, Herb Rauch, Dick Van Kirk, Glenn Converse, Dave Leeson.

board of directors

Craig Elliott, ASCIT President



The Board started to work enthusiastically right after elections. The first major problem was the "Open Forum" question. After some controversy, the Board authorized this group of undergraduates to organize their program of speakers with "divergent" views.

The new school year was ushered in with the usual excitement, and our Homecoming Dance was improved, with the Queen and her attendants selected by the student body. After receiving a plea for emergency aid, the Board gave a thousand dollars for the relief of Hungarian refugee students, and the student body responded by donating a record three thousand dollars to the Consolidated Charities Drive.

Dr. Wallace Sterling, president of Stanford, spoke at the annual Fall Sports Banquet. The ASCIT Winter Formal was held at the famed Beverly-Hilton Hotel to put ASCIT in "High Society". The Board equalized athletic awards by eliminating the difference between major and minor sport awards. The students voted to change the ASCIT fiscal year — and then it was all over. The Board had done its best.



Herb Rauch Secretary



Don Neirlich Treasurer



Glenn Converse Athletic Manager



Dick Van Kirk Rally Commissioner





Rube Moulton Vice-President

Dick Kirk Publicity Manager



Dave Leeson First Representative

Doug Carmichael Second Representative





Clark Rees, Brad Efron, Tony Iorillo, Russ Pitzer, Dick Kirk, Mike Godfrey, Gene Cordes, Bill McCure, Don Owings.

new officers



yell - leaders

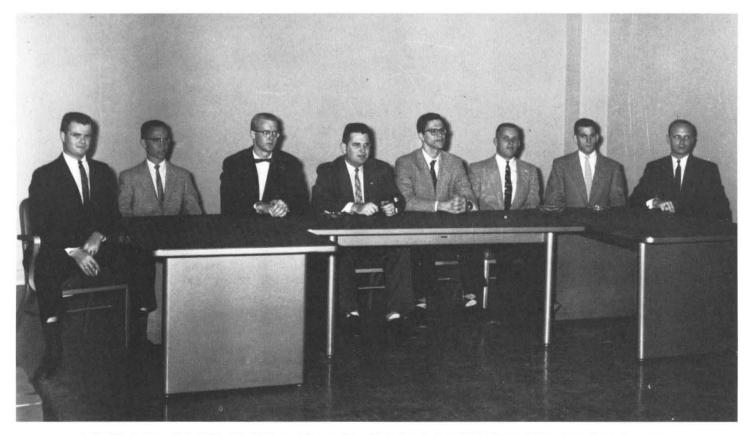
Yell-leaders: Mike Talcott, Brent Banta, Jim Cribbs, Head Yell-Leader, Sol dePicciotto, Bill McClure. Song Queens: Joanne Pegg, Virginia Gonzales.



election committee

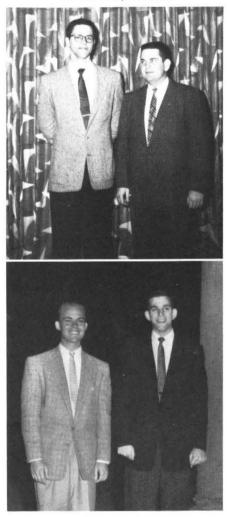
John Kleiderer, Roy Stake, Seymour Rapaport, Bill Hecht, Chairman, Ron Parkinson, Don Meyer.





Craig Elliott, Dave Butterfield, Bill McClure, Rube Moulton, Herb Rauch, Russ Pitzer, Howard Bloomberg, Frank Greenman.

Herb Rauch, Secretary Rube Moulton, Chairman



Howard Rumsey, Senior Rep. Howard Bloomberg, Senior Rep.

board of control

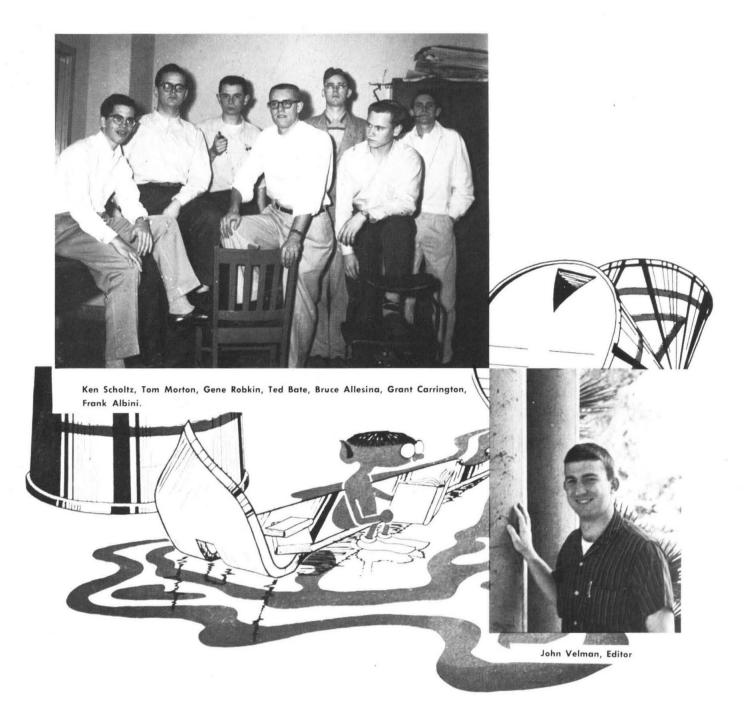
For the forty-seventh consecutive year, the Tech student body used the spirit of the Honor System as a standard of conduct and an aid to maturity. The principles of the Honor System were learned by the incoming freshmen and were found to provide interesting new concepts in the development of selfdiscipline and personal honesty. These same principles were reviewed by the upperclassmen throughout the year, maintaining interest and vitality in Tech's most outstanding tradition.

More than merely a code of behavior governing scholastic activities ,the Honor System also applies to extra-curricular activities and to student-faculty relations.

Headed by the Board of Control, the responsibility for the conduct of the Honor System lies solely with the student body. This responsibility provides not only an excellent means of regulating campus society and the opportunity for personal development, but also provides an attitude of frankness and honesty in the student body that creates an atmosphere conducive to the development of the well-rounded individual.

FARRAGO

FALL 1956 - 35c



The California Tech California Institute of Technology

Pasadena, California, Thursday, February 7, 1957

Volume LVIII

Shymen drop Tom Dodge, Co-editor

Frank Kofsky, Co-editor

with

Bob Walsh, Managing Editor

Ravenholt acquaints students

Burstin

Current research being done in polio by the Biology departquires human blood or experimental use, the supply of serum ently been exhausted, order to continue rehe department is offer-oken fee of five dollars of human blood. Unate volunteers can give ood next Wednesday Irsday at the Health

growth of the Philippine Labor Movement, and United States relations with the governments of the Western Pacific.

Number 15

ines

Today at the Lunch Club and this evening in the Athenaeum he will discuss the sur-vival chances of modern China 'independent of the Communist mold, a talk in which he will evaluate some of the processes at work between ancient Chinese civilization, the present administrations, and the future. (Continued on page 5)

onal Geophysical Year

11/1/14

Photo by D. Groce nk Press, shown working on experimental seismograph. by D.

y Brad Efron

(Continued on page 3)

ts from twelve major

versities will soon be

erally, to the ends of n, to find out more

mysterious phenome-cosmic rays. Heading rnational Geophysical ect is Caltech's Dr. H.

Dr. Neher, an experi-ctic traveler, will rctic traveler, will editions to the North

er will lead ICC plans holiday dance in Ontario c travels

The ICC Dance, presented an-nually by the Inter-College Council, will be held this year at the Ontario Armory near Pomona College.

The popular orchestra of Jerry Fielding will provide the music for this Washington's Birthday shindig. The dance, which is exon Friday, February 22. Dress will be semi-formal—suits and ties for men.

their last of the game. Then the Caltech fast break began to shatter the HCD dofe Newman, Converse. jump on ers several ins. Larry ter, orgina tech fast ling the de

With ten game, Calte 43-30 lead, moved back fense patter Riverside 1 ing the ra shots, and row the ga Riverside

again, and Caltech pulled away to a ten point margin to put the game on ice

Four play figures for man score Welsh 12, Kraus scor but had control of game.

Chari ends

The ASC ends tomor chance for graduates campus charities. General chair-man of the drive is Rube Moulton, ASCIT

The four this year ar Service, the Society, the sociation Community

One The World is supporte dents with munities. throughout in Asia. AS vanced \$1,00 drive to aid The hous the most m dinner by the

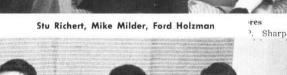
vided with other entertainment. February 25.



John Lango, Al Carlin, Jerry Hansen

Howard Weisberg, Lance Wallace, Al Berg





(Continued on page 2)



Houses try "Hangtown Gals" in Interhouse Sing Monday

Announcements FORMAL REMINDER

Offices uncontested

Don Wiberg, Brad Efron, Dave Singmaster, Kay Sugahara, Tony Leonard, Dick Van Kirk, Ed Krehbiel. Each house's rend melodious "Hangto

plus one or t house's own cide who wil house singing

Kirk pr platfor for pre

There are a student b and demand seems to me these is repre

Since it is 600 members to serve on trol, Board of Alumni Boarc ulty Relatior the Athletic dent must sei the student b ings. The pr poration's ch

to the "outsice" and to the Act Roger Quilter: Ricketts, "Halle-ulty. I hope that my two and dent activities will give background necessary to sent you well

I hope to enthusiasm i bers of the Student Body larged ASCIT ticular, I ho Homecoming crease the st planning th houses and s courage the ASCIT social that student 1 cation at the ASCIT backin age Board n ideas, because that student a better ASC

I would lik of ASCIT Pro that I will be responsibilitie if you vote : Thursday.



activities.

joys

mining their policies

istrating their affairs.

name Gene Cordes.

And it would be si

preciated if on election day you

would cast your vote for capable

and mature student government

by marking your X opposite the

Gene Cordes

Bids for next Friday's ICC Dance are now available from BOD members Dave Leeson, Dick Kirk, and Herb Rauch.

The dance, held this year on George Washington's Birthday, will feature the music of Jerry Fielding and his orchestra. Dancing will begin at 9:00 p.m. at the Ontario Armory, 950 No. Cucamonga Ave., Ontario; the Armory is located approximately five miles south of Highway 66 in the city of Ontario.

The bids, costing \$2.00 per couple, have been prepared for the ICC by the artistic talents of Scripps. The eight members of the Inter-College Council are Caltech, Chapman, Claremont, Occidental, Pomona, Redlands, Scripps, and Whittier. Tech's delegates to the ICC are BOD members Craig Elliott, Glenn Converse, and Leeson.



Howard Weisberg, Dave Gilson, Brad Efron

"heir play, "No Ti eants," will be pi the following T ing to the fa

ROC who could be candidates Howard Weisberg, Mike Milder, ^{3sident.} Dave Leeson, Al Carlin ntence:

athout the help of the former reasurer who has graduated.

Following speeches and adver-Throwing specifics and development tising during the coming week, undergraduates will vote next Thursday to fill at least nine contested ASCIT offices. Voting booths will be set up in the five student houses at noon time and another will be maintained in front of Dabney Hall between 9 a.m. and 4 p.m.

As of press time, there were no candidates for two offices, Business Manager of the California Tech and Editor of the Big T.

There are two candidates for each of the other offices, except President, Athletic Manager and Yell Leader, for which there is only one candidate each, and Second Representative, for which there are three.

Candidates are permitted to post campaign signs between Throop Hall and Throop Club beginning at 10 p.m. Sunday. On the following three days, candi-dates will give two minute speeches in each of the four residence houses at lunch and dinner, and in Throop Club at noon.

Candidates nominated on February 7 included:

President: Dick Kirk. Vice President: Gene Cordes, Andy Perga.

Secretary: Mike Godfrey, Mike Talcott.

Treasurer: Clarke Rees, Reed Saunders.

First Representative: John Conover, Tony Iorillo.

Second Representative: Brad Efron, Lee Hood, Jerry Siegel. Publicity Manager: Stu Goff, Bill McClure.

Athletic Manager: Russ Pitzer. Rally Commissioner: Kent

California Tech Editor: Al California Tech Editor: Al Carlin-John Lango, Bob Walsh. California Tech Business Manger: No candidates.

Big T Editor: No candidates. Big T Business Manager: Martin Conneally-Pete Smith, Den-

nis Kuli-Lewis Linson. Head Yell Leader: Michael Gospe.

BOD meets, honors given

Recipients of honor keys and certificates were determined last week by the ASCIT Board of Control, headed by Rube Moulton. 19 keys and 19 certificates were awarded. Two Techmen will receive their third key and four will receive their second.

Key winners are: Brent Banta, Mike Bleicher, Keith Brown, Glenn Converse, Bill Dietrich, Craig Elliott (2), Pete Finley, Dave Gilson, Dick Kirk (2), John Lango, Dave Leeson, Rube Moulton (3), Don Nierlich (2), Ed Park, Herb Rauch (2), Reed Saunders, Marty Tangora (3), Dick Van Kirk and Larry Whitlow.

Certificate winners are Wally Baer, Howard Bloomberg, Mike Duke, Al Forsythe, Kent Frew-ing, Mike Godfrey, Dave Groce, Joe Lingerfelt, Keith Martin, Wayne Nelson, Andy Perga, Walt Peterson, Roy Stake, Vince Taylor, Phil Thacher, Walt Weiss, Don Wiberg, Jim Work-man and Dave Yount.



good job and I hope you will consider me when you vote for ASCIT V ice President next Thursday.

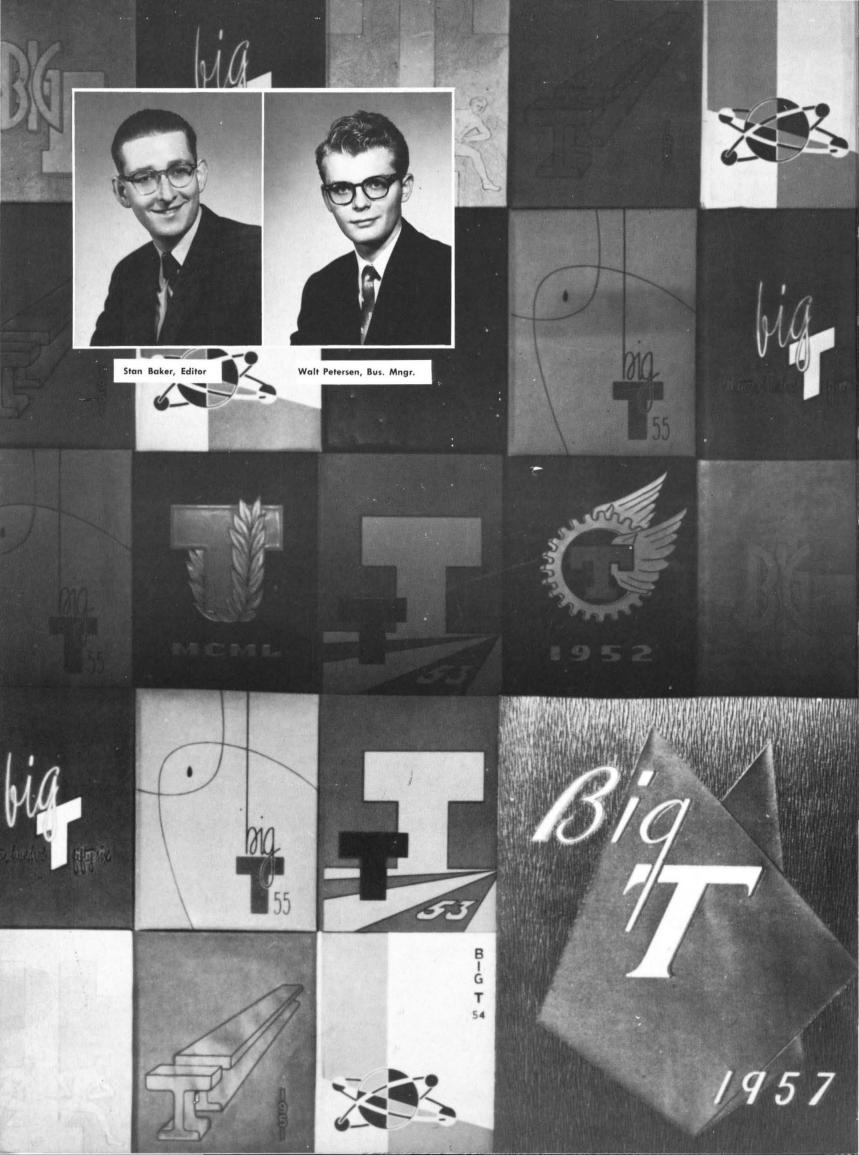
Carnival

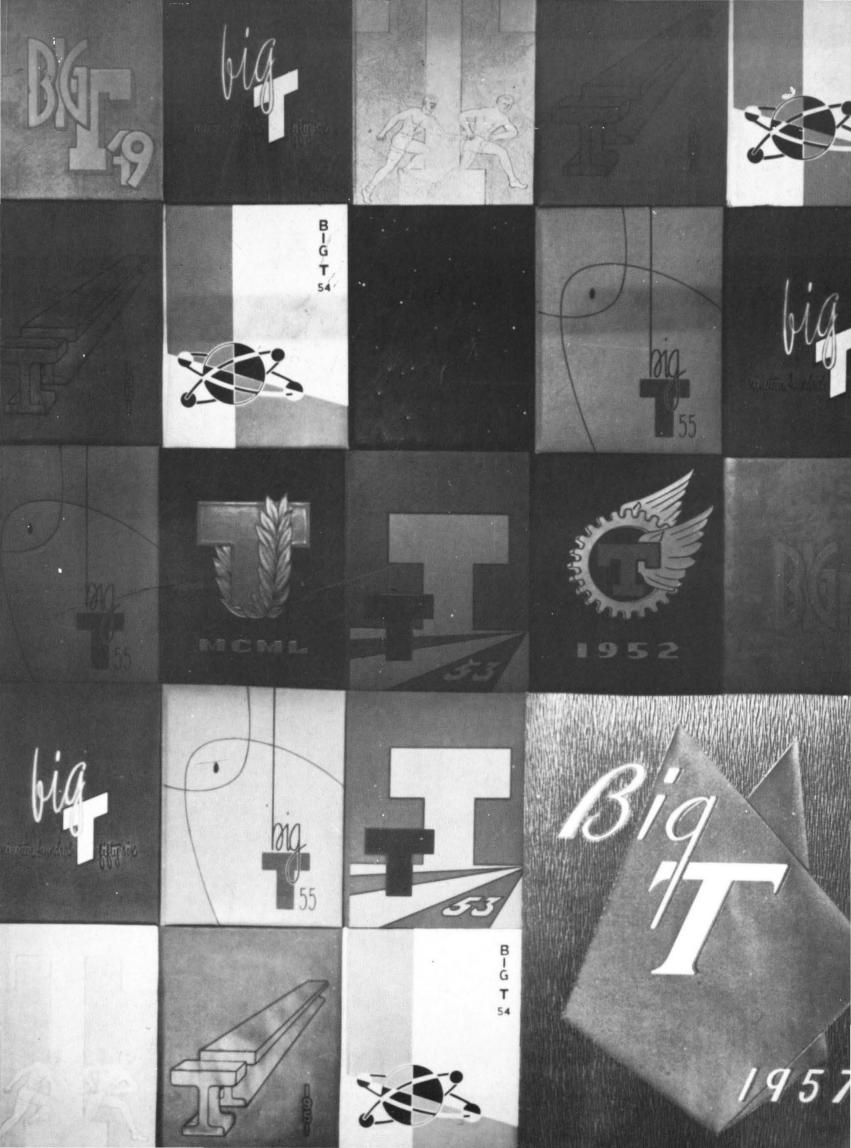
nght at 9:00 o'clock, Club sponsored val Dance will be ney Lounge. Bids 0 with the profits r Hungarian Relief. purchased from: Conover; Dabney, Fleming, Larry Pierre Sund-Ray Virzi: and off McKeon, or at the

Carnival Dance e music of Tony his band. As an on, a door prize and free refreshserved.

Carnival Dance the normal social function for the four student houses and Throop Club this Friday and is scheduled on their calendars. Bernie Lopez of Dabney House is this year's president of the Newman Club.









Brent Banta





Mike Bleicher

Howard Bloomberg



Keith Brown





Bill Dietrich



Craig Elliott



Pete Finley

Dave Gilson



Mike Godfrey



Dick Kirk



John Lango















Dave Leeson

Rube Moulton

Don Neirlich

Ed Parks

Herb Rauch

Reed Saunders

Marty Tangora

72



HONOR KEY COMMITTEE-Dave Leeson, Rube Moulton



honor keys



Dick Van Kirk



Jim Workman President



Bob Moore Vice-President



Herb Rauch Secretary



Walter Specht Treasurer



John Thomas Cataloguer



Frank Albini



Baird Brandow



Gordon Fullerton

Bill Iwan

Jake Lubliner

-8 198



Ike Haissman



Dick Hundley



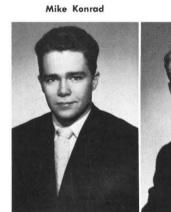


Bill McDonald



tau beta pi

ТВП



Ed Nelson

Walt Petersen

Dave Leeson

Stu Richert

Marty Tangora

74



First row: Pete Finley, Jim Workman, Don Neirlich. Middle row: George Hall, Mike Bleicher, Dave Gilson, Rube Moulton, Bill McClure, Marty Tangora, Dick Van Kirk, Ed Krehbiel, Frank Kofsky, Dave Leeson, Craig Elliott. Back row: Sonny Nelson, Baird Brandow, Herb Rauch, Glenn Converse, Jim Welsh, Larry Whitlow.

beavers

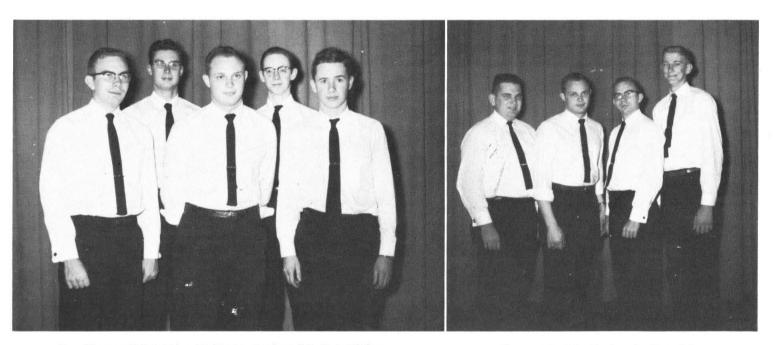
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Front row: Long, J. Scott, Galt, Blandford, Tangora, Norton, Akselrod, Fineberg, Weiss, Wallace, Backers, Front row: Lingerfelt. Second row: Arps, Schinnerer, Sundborg, Schenter, B. Lang, H. Schmidt, Freeweil, Willow, Lingerfelt. Oakberg, Kern, Dietrich. Third row: Moretti, Rees, Forsythe, Mitchelly, Freiweil, Dinwiddie, Thomas, Oakberg, Kern, Dietrich. Third row: Moretti, Rees, Back row: Greenman, Fielsch-Byme, Fineman, Elmore, Blakeley, Thacher, Moulton, Johnstone, Brown. Stake, Sugahara, Coe, Martin, Moore, Klose, Anderson, Frasier, Specht, D. Lang.



Director Olaf Frodsham



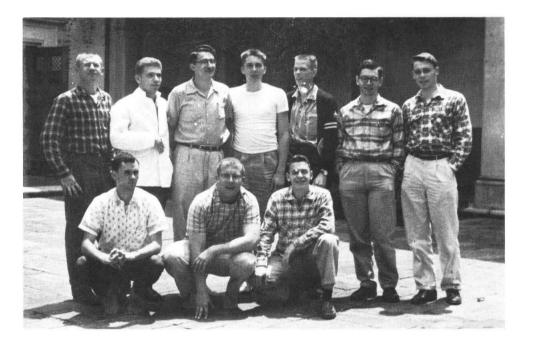
The officers — Ted Oakberg, Bill Dietrich, Joe Lingerfelt, Gerhard Klose, Tom Jovin.

The quartet—Rube Moulton, Joe Lingerfelt, Ted Oakberg, Ron Arps.



Ken Adams, Dave Butterfield, Frank Malony, Jim Neane, Tom Bergstresser, Tom Brown, Al Forsythe, Lloyd, Kamins, Clint West, Mike Geyer, Dick Johnson, Barry Bass, Don Pinkerton, Jim Wooster, Gordon Long, John Cooper, John Deichman, Director.

orchestra





Front row: Larry Elmore Tim Harrington Tom Jovin Back row: Bill Kern Gus Akselrod Jim Lovelady Tom Keil Reed Saunders Mike Thomas Ty Jacobson



Standing: Jim Workman, Joel Greenberg, Barry Clark, John Lango, George Hall, Ike Haissman, Don Meyer, Barry Bass, Don Owings, Mike Bleicher, Bill Deitrich, Perk Eislan, Jim Weaver, Dave Gilson, Dick Kirk. Seated: Don Reiterman, Truman Long, Don Pinkerton, Baird Brandow, George Oetzel, Bob Blandford.

у. т. с. а.



Wes Hershey Executive Secretary



Donna Newcomb YMCA Secretary

Whenever the Beaver found time on his hands, a trip to the Y, a cup of coffee with Donna, and a bull session in the Y lounge fixed that. Issues of the campaign were cussed and discussed, with faculty and politicians, ending in an old-fashioned political deabte. Drs. Pauling and Fay were pitted against Gilbert and Corcoran while Dr. Piper refereed. In spite of all the silver shoes, the troops still liked Ike, as the Beaver found in his poll. Almost before the dust of the campaign had settled, he was delighted to welcome two distinguished visitors, Laborite George Thomas, Member of Parliament, and Miss Jean Fairfax, recently returned from Africa.

Again the troops gathered at Asilomar — as, beautiful Asilomar — to decide the fate of the world with some co-eds, absorbing a painless liberal education from all the interesting people they met.

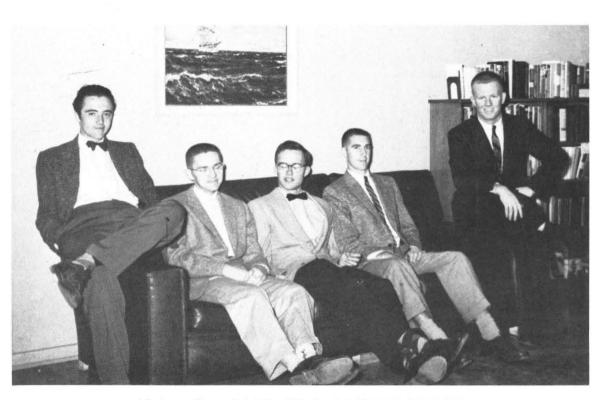
In January, the Fortnighters began, a Sunday evening group for Techmen. Men like Floyd Ross, Hunter Mead, Ernest Becker and Wes Hershey got us off to a good start. Early in February, the Beaver threw his sleeping bag in the car, picked up a few buddies, a prof or two, and headed up the coast to Camp Hess Kramer. He found what he had suspected since Frosh Camp, the professors are a lot more fun to know outside of class. Finally, the "Death of a Salesman" film arrived.

Dr. Oppenheimer introduced a more serious note as he amazed many with his profound ideas. His broad knowledge, his great love of learning and his precise comments gave us a new conception of what it means to be educated.

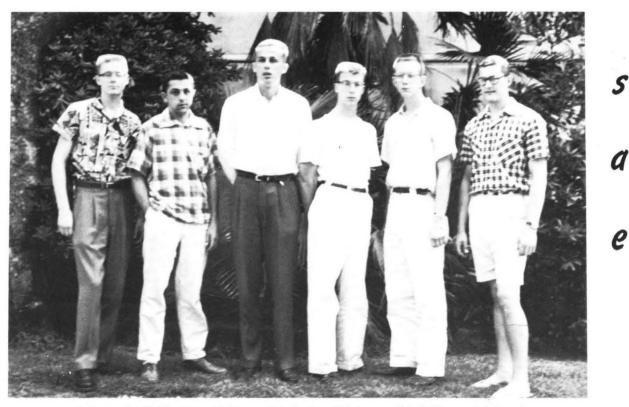
The Y, the Danforth Foundation, and all the houses joined in entertaining five students of theology. These Holy Joes turned out to be a great bunch of guys. As the weather got balmier, young men's fancy turned to Camp Seely. The conference title was appropriately, "Pushbutton Marriage, Love in Our Modern Society."

The Beaver has many happy memories of this year, and not the least of these is Donna Newcomb. A bright, gay part of the campus is leaving us, but we all wish her a very happy future as Mrs. Tony Demetriades.

For next year, the Beaver is counting on President Jim Weaver, and his capable crew of John Lango, Alan Berg, Tom Jovin, Nelson Byrne, and Kent Frewing.



John Lango, George Oetzel, Don Pinkerton, Baird Brandow, Truman Long.



Officers: Dick Fiddler, Doug Christman, Dick Cowley, Dick Cooper, Bob Pailthorpe, Bob Smoak.

Officers: Ted Oakberg, Kirk Irwin, Doug Ritchie, Dick Smisek, Stan Taylor.

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Allan Porush, Gene Beisman, Jerry Hansen, Read Warriner, Steve Emanuel, John Tibbitts, Art Stacy, Hugo Fischer.



Officers: Bob Curley, Charles Goebel, Jerry Klaz.

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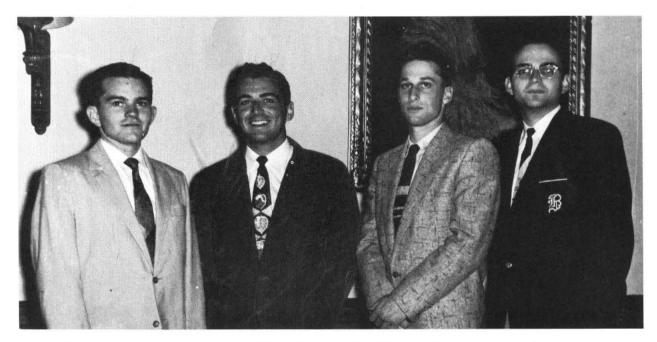
Bob Marshall, Herb Rauch, Louis Soux

ire - aiee



student shop

Andy Perga Walt Petersen Bill McClure John Conover John South Al Forsythe



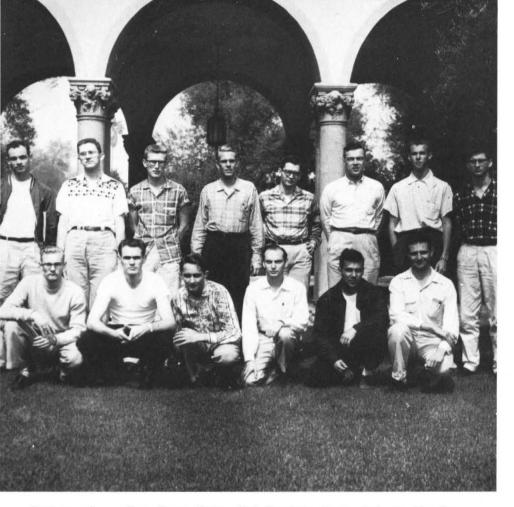
Jim Espenson, Jr. Representative; Bob Deffeyes, President; Al Goldberg, Sr. Representative; Jerry Klaz, Secretary.

chemical engineering club

Joe Fineman, President Bill Graham, Technical Director Goerge Oetzel, Secretary-Treasurer

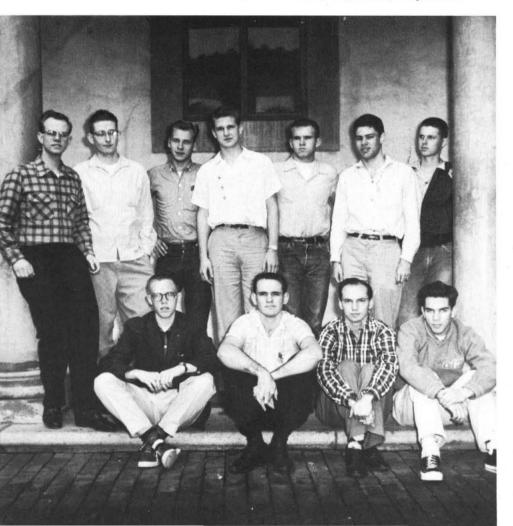
radio club





Front row: George Ilves, George Lindsay, Herb Daugherty, Charles Anderson, Alan Berg, Joel Greenberg. Back row: Bob Blandford, George Oetzel, Pat Burns, Howard Marshall, Mike Thomas, Dick Hundley, Bill Graham, Dave Kipping.

Front row: Tod Whitmore, George Lindsay, Charles Anwerson, Dennis Paull. Back row: Don Neirlich, Stan Baker, Keith Martin, Dave Bailey, Chuck Johnson, Wayne Albin, Doug McLane.

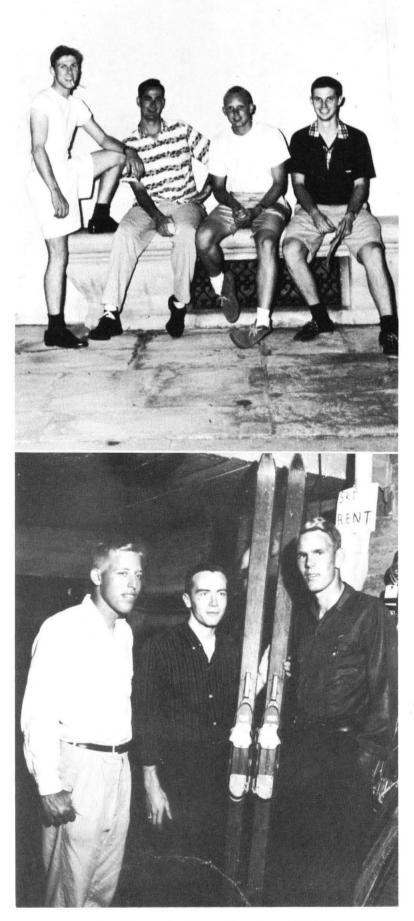


physics club

darkroom club



Officers—Jim Weaver, Jim Sorenson, Gordon Fullerton, Doug McLane.







sailing club



skiing

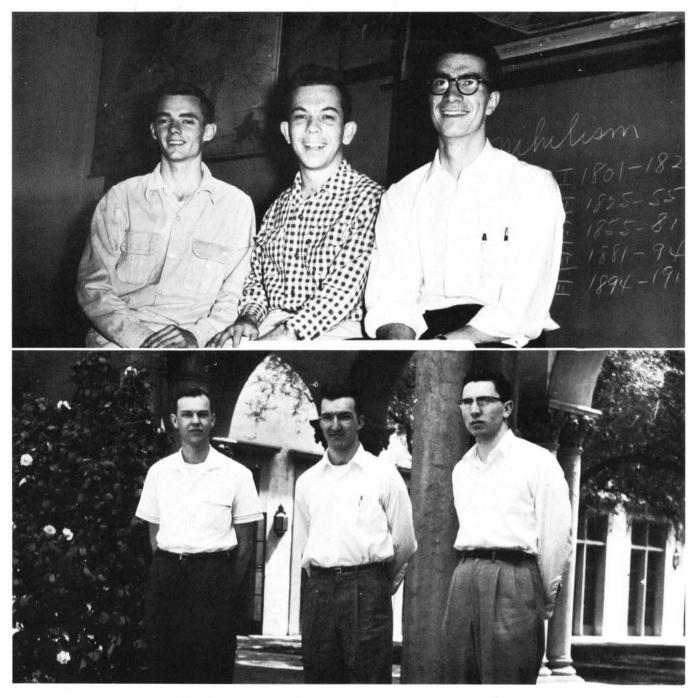
club

newman club





Tom Gibson, Vice-President and Secretary; Bernie Kraus, Social Chairman and Treasurer; Bernie Lopez, President.



Lee Schmidt, Vice-President; Jack Zeilenga, Secretary; Gordon Brown, President.



dance class



Keith Brown, Director



bon vivants

W. Petersen
B. Burrow
B. Deverolle
H. Whitehouse
B. Curley
D. Meyer
B. Lopez
S. Baker

D. Neirlich

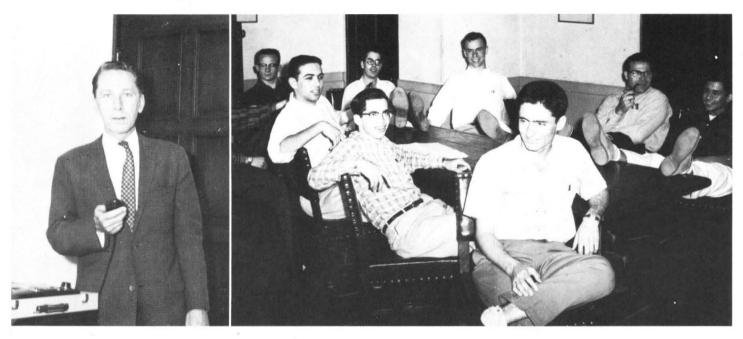


Tom Morton, Ken Scholtz, Fletcher Gross, Dave Jefferson, and Speaker Mike Talcott.



Ken Scholtz, Dwight Thomas, Neal de Gaston, Mike Bleicher.

debate $\Pi \ \mathbf{K} \ \Delta$



Dwight Thomas

Front row: Tom Morton, Al Porush, Ken Scholtz, Dave Bregman. Back row: Tom Gunkel, John Wright, Neal de Gaston, Mike Bleicher, Mike Talcott.

index

Ed Park

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Bob Moore

Eldridge Moores

Pete Moretti Rube Moulton **Clark Rees Bob Schenter Ralph Schinnerer** Harrison Schmitt Jerry Scott Doug Shakel Luis Soux Walt Specht **Roy Stake** Kay Sugahara Pierre Sundborg Marty Tangora John Thomas Marty Tangora Dane Wallis John Walsh Walt Weiss Larry Whitlow INSTITUTERS Reed Saunders, President Jim Lovelady, House Chairman Eric Adelberger Gordon Baird **Bill Dietrich**

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Dan Killoran

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Jerry Eggleston John Everitt Pete Finley Gordon Fullerton Tom Gibson Hal Gier Sam Ginsburg Gary Goodman Bill Graham lke Haissman George Ilves Ty Jacobson Mike Jenkins Dick Johnson Tom Jovin Joe Jurca Lloyd Kamins Urban Kern Dave Kipping John Kleiderer Buzz Koerner Wayne Kreger Ted Lang George Lindsay George Logeman Gordon Long Jim Lovelady Bob Marshall Bill McClure Don Meyer Jarold Meyer Cameron Mosher John Munson Don Neirlich Jerry Parker Dennis Paull **Russ** Pitzer Kirk Polson John Price Lee Renger Don Roberts Dalip Saund Reed Saunders Ralph Schinnerer Randy Schmus John Shier Jerry Siegel Pete Smith Don Stern Don Stocking **Charles** Stone Joe Stupak Chuck Swallow Keith Taylor John Velman David Wallis Jim Weaver **Howard Weisberg** Clint West Milk Wilkinson Jim Workman TAU BETA PI Jim Workman, President Bob Moore, Vice-President Ed Nelson, Corresponding Secretary Herb Rauch, Recording Secretary Walt Specht, Treasure John Thomas, Cataloger Frank Albini Giles Cokelet Dick Fiddler Gordon Fullerton Jim Giles John Gliever Tom Gunckel Ike Haissman Neil Herman **Dick Hundley Bill Iwan** Pete Jordan Mike Konrad **Dave Leeson** Jake Lubliner Bob Marshall Bill McDonald **Dick Neville** George Oetzel Harry Patapoff Walt Petersen Seymour Rappaport Stu Richert Mike Staley Marty Tangora Phil Thacher Martial Thiebaux Jon Valbert



cal tech

Alumni of Cal Tech retain a greater interest in the activities of their Alma Mater than most other alumni. The active Alumni Association has started several activities of such value that they have been taken over by the Institute. The annual Seminar Day on the campus is the largest gathering of alumni, who gather to renew friendships and hear faculty members report on research. Pictured here is a father whose son apparently was also interested in Seminar Day.

Alumni, in appreciation of the Institute's contribution to scientific endeavor, have made contributions to the Alumni Fund sufficient to pay for the campus swimming pool and to endow for full-year undergraduate scholarships.

Dinner meetings of the various chapters from coast to coast are well attended as they present programs on new developments and speakers for general interest from faculty or alumni ranks.



alumni

Readers of the alumni monthly magazines are kept up to date on all Institute activities as well as recent developments in the entire field in Engineering and Science. Pictured here is a photograph from an article on the birth and death of a star from the January, 1957, issue of "E & S".





Donald S. Clark, class of '29, is the active secretary of the Alumni Association, as well as Professor of Mechanical Engineering at the Institute and National President this year of the American Society for Metals. Crowds await the eruption of the Volcorno in Toyland. Others enjoy a quiet moment in the sidewalk cafe of Venice. Some may plan to visit the spaceship and view outer space.



interhouse dance

Three hours of enjoyment culminated the week-long siege of artistry, engineering, and frantic construction that created the successful '56 Interhouse. From the Volcorno, saluting soldiers, balloons, and hippos of Dabney's gadget-filled Toyland one passed to the romantic atmosphere of Fleming's Venice with sidewalk cafe and canals. Then one could visit Ricketts' Arabia with its jinni and flying carpets or Blacker's ''Jack and the Beanstalk,'' complete with beanstalk, clouds, and 30 foot giant. Such travels through time and space were made complete with Throop's sample of outerspace and spaceships.

Aladdin's lamp and flying carpets intrigue many of the people, as does the giant that tried to harm poor Jack. It is not often that one can climb a beanstalk and walk on clouds to dance under the glare of a giant.

The commanding glare of such a jinni as this would cause even its master to hesitate.







directed by Joe Jurca

mudeo

The ancient and venerable tradition of the Mudeo seemed destined to follow the pattern set by the class of '57, as once more a freshman class won for the second consecutive year.

An exhausting tug-of-war opened the event, and the freshmen gave an indication of things to come by scoring the first victory. The sophomores came back, however, with a win in the sack race to tie the score at 1-1.

The sophomores then finished first in the wheelbarrow race, but the junior judges went into consultation. (These

juniors were the second class to lose the Mudeo twice, the second loss being at the hands of these sophomore contestants. Of course, there was no hard feeling.) "The sophs forfeit the wheelbarrow race for swimming," said the judges.

Undauted, the sophomores retaliated with a quick and decisive victory in the horse-and-rider event. Mudeo victory hinged on the tire spree. Both teams scrambled for the buried tires, but the sophomores, tired and dispirited, slowed and stopped. Victory for the frosh!

leaders of america

The Leaders of America program brought Dr. J. Robert Oppenheimer to Tech early in March. Frequent informal discussions proved to be the highlight of the program as the physicist, apparently one of the world's most articulate men, was able to offer brilliant comments on any subject. His soft manner, combined with his status in science, drew throngs of undergraduates to hear him. As he moved from group to group under the guidance of Dick Kirk, friendliness seemed to pour from him. His final address received one of the few standing ovations ever given to a speaker at the Institute.



Dr. Oppenheimer, with pipe always ready, greets the ladies with Wes Hershey, YMCA Executive Secretary.

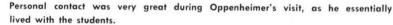


Dr. Oppen heimer relaxes at one of the many (planned and unplanned) chat sessions that were the nucleus of his visit.

His only formal speech, given in Culbertson, attracts overflow crowds.



In the house lounges Dr. Oppenheimer discusses a wide range of topics with the many students.





PRINCESS CECIL ANN ROWE, QUEEN BARBARA COLEMAN, PRINCESS JUDY SMITH.



homecoming

queen

student - faculty camp



The seclusion of Camp Hess Kramer in the recently fire-swept Malibu Mountains above Santa Monica offered an excellent opportunity for students and faculty to become better acquainted and exchange ideas at the Student-Faculty Camp sponsored in January by the Caltech Y. Shown above is the main hall.

Breakfast time found at least half the camp up. Meal times were jovial, and the good food forced critical thinking to lie in other areas. Below middle: free time was divided between bull sessions, ping-pong, volleyball, hiking, and bridge.



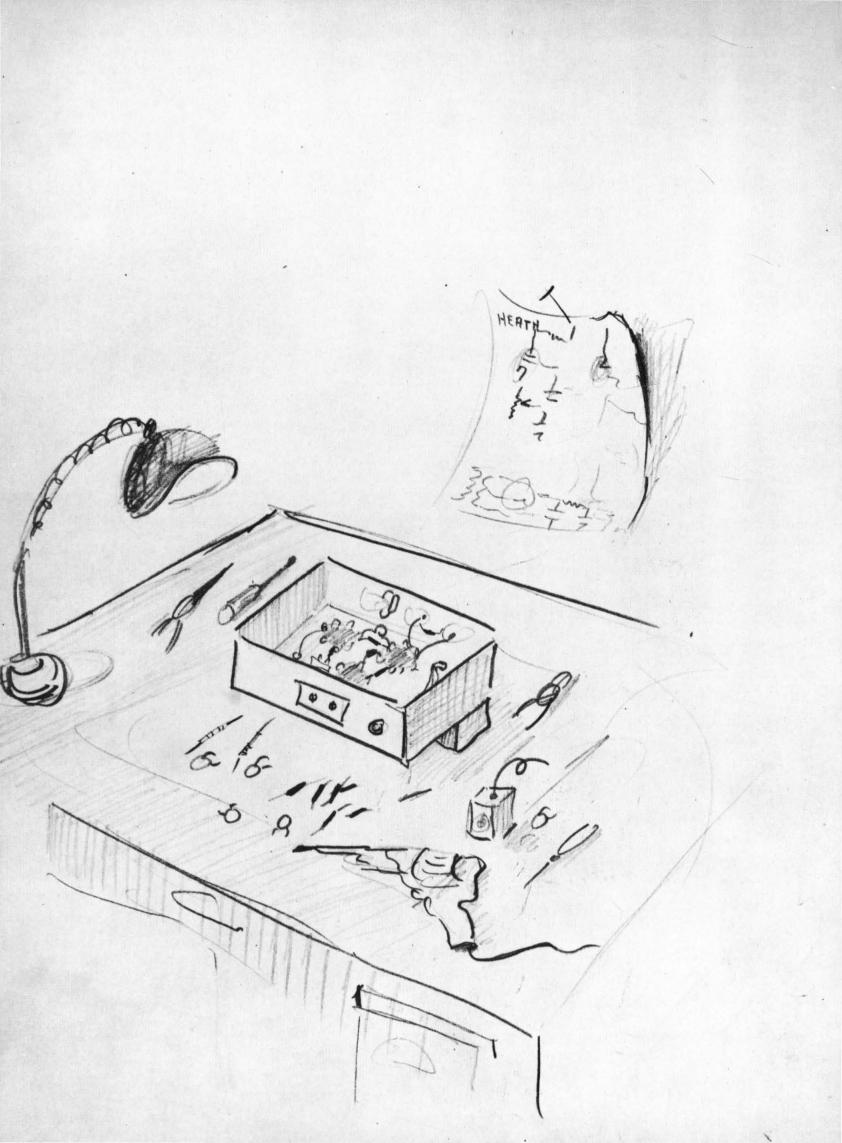


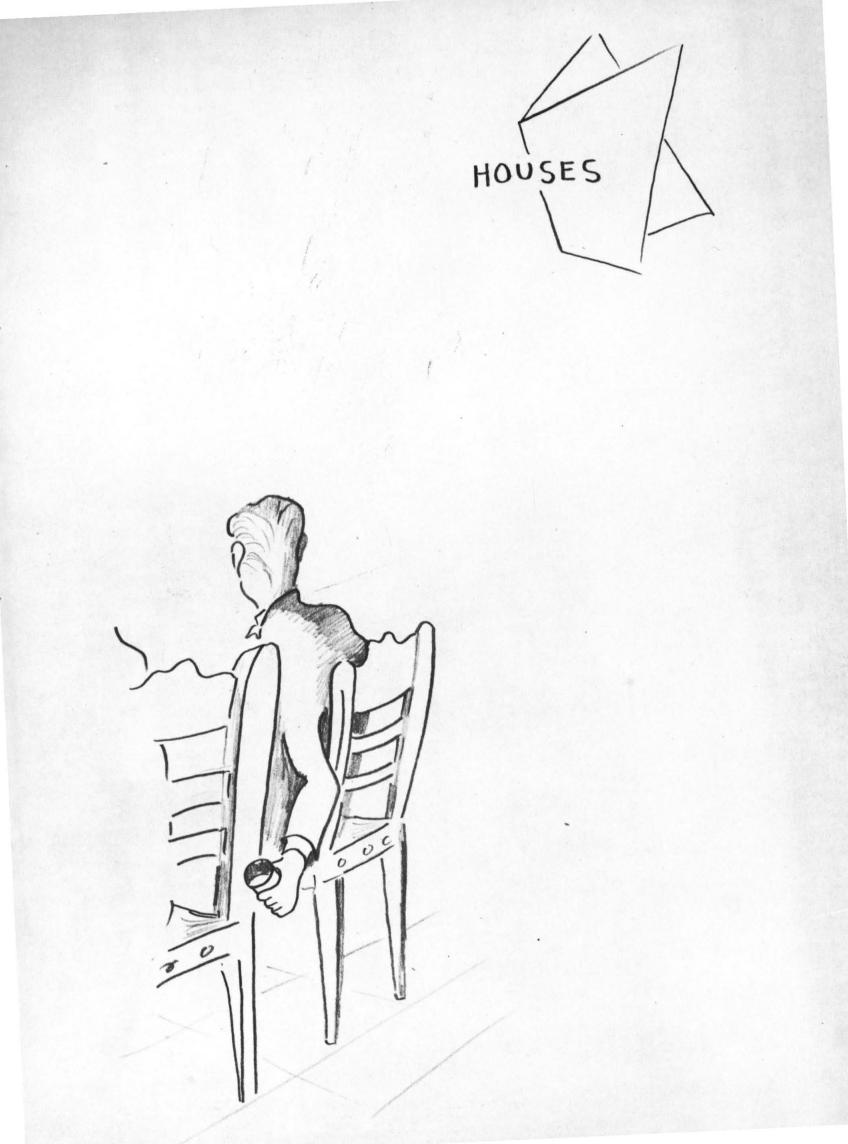


Small discussion groups with lively and searching topics proved enlightening to both students and faculty men.



The closing meeting pointed out highlights of the three-day collection of ideas. Stimulating of creative and independent thinking was emphasized, and associated with that, curriculum, advisors, instruction, and morale were discussed. Also pointed out was the need for non-technical development of the Tech student. This gathering concluded what was acclaimed by most to be a well-spent weekend.







Conover.

blacker

September came, and once again Blacker roared out of the starting gate toward another fine year. Rotation was a howling success, as the House netted one of its finest frosh classes in a long while. Initiation was also a howling success - with the frosh doing most of the howling. McLaughlin, Lawrence, and Harford, noted sadists, struck fear into the hearts of the Blacker neophytes as they carried out the job (?) of co-pledge master with a flair hard to match. The success of their program was soon demonstrated, for the Frosh congealed into a unit that provided a valiant front line defense that fought off all would-be invaders. The frosh rebellion, the official baptismal ceremonies, and official initiation brought an end to a very hectic period and also brought to an end the water shortage in the rest of Pasadena.

But Lo, Interhouse time had come! One night the social chairmen gathered in a dimly lit room, muttered a few chants, and tossed a can of half-cooked

beans onto the courtyard. By morning all knew a miracle had occured, for a giant beanstalk had grown from the spot where the beans had landed. Soon all the rest of the paraphernalia wos observed to materialize — a giant well that gave punch, a king size living room with five foot high chairs and a seven foot high log table for the band to play on, clouds extending up to the level of the courtyard from whence the sky was a uniform deep blue, and of course a thirty foot giant to watch over his domain. To Blacker men, though, these objects did not really materialize; they were the results of a week's voluntary hard—and well rewarded—labor.

Throughout the rest of the term the social program provided diversion and entertainment designed to leave all who partook refreshed and relaxed, ready for the next weekend's activities. A barn dance, an off campus party, and theater parties were but highlights of the program.

Eric Adelberger

Gus Akselrod

Ron Arps

Wally Baer

Gordon Baird

Gene Barston

Al Berg







Bruce Campbell

Clark Carroll



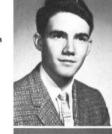




George Davison

Dick Cowley

Roy Currence



Frank Dean



Bob Deffeyes

Bill Dietrich



Jim Espenson

Ken Dinwiddie

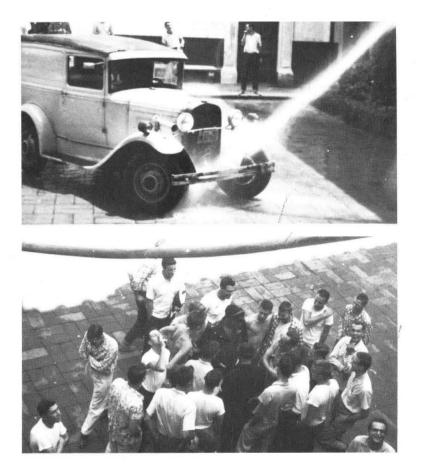


First term also saw much new wiring added to the attics as the Blacker Music Exchange opened up shop. Operating from a central switchboard in Upper Pres, the Exchange was soon providing music to thirty-five rooms. With a maximum of five programs from which to choose, anyone hooped into the system had at his disposal the record collections of all the rooms that broadcast. An extra dividend that resulted from The System was that it is now possible to follow ancient finals week sustom of serenading the house with The Ride Of The Valkyries at seven in the morning while only one broadcaster plays the record, assuring both complete coverage and complete synchronization.

During second term social activities continued at their same pace, losing neither quantity or quality. There were two off campus parties, one at the apartment of past president Myron Black and the other at the home of Mrs. John Buwalda, widow of the late head of the Geology department. A snow party had been scheduled for mid-February, but an unseasonal thaw transformed it into a mountain party. No matter, everyone who had planned to, went and with undaunted laughter at fate and had as good a time as they would have had with snow. Another memorable event was the skiffle band party. (A skiffle band is a Dixieland band supplemented by washboards, instrument cases, wash tubs, and empty jugs.) The lounge was turned into a speakeasy, to which the couples were ferried in Park's '33 Packard.

In interhouse athletics, '56-'57 was another good year for the Blacker strong men. With first places in cross country, tennis, and volleyball, Blacker led the interhouse race at the end of second term. Football and basketball were yet to be played; enthusiasm was high and Blacker stood a good chance to regain the interhouse trophy.

Intrahouse activities also prospered throughout the year. Whispering Cans was atop the alley volleyball ladder most of the year, although the Kremlin and Upper Pres led for a while. In two-man volleyball, Harford and Stevens led most of the way. In an entirely different realm of activity, the Church, generally a source of political unrest, was remarkably quiet this year in that there were no rebellions or attempts by the heretics to seize control. Pope McLaughlin added a certain dignity (if that is possible) to the services, and his rule was noted for the introduction of several trophies, awarded monthly, for participation in Church activities above and beyond the call of duty. However, despite the ab-



sence of internal difficulties, disruptions from the outside heavily plagued the Church. At the end of first term, G. t.b. Lawrence, long time K. of C., took an involuntary two term vacation from the rigors of Tech life. As if this weren't bad enough, the Pope, after being unanimously re-elected, went the way of all good Pope's at the end of second term. At the present time it is not known who will fill this enormous vacuum.

House elections are always a time for selfappraisal and attempts to determine the extent to which the House has lived up to its ideals. This year's session of soul searching came to the conclusion that the Bleicher administration had been a thorough-going success. The House was a tighter unit; spirit was up; there was more satisfaction with the way things were being run and more people took part in House activities. But Blacker had not only done well for itself, is members contributed to all phases of campus life. As usual the Y membership roster showed a highly disproportionate number of Blacker men on the rolls. Don Pinkerton and Bob Blandford served as Y officers, while Al Berg, Tom Jovin, and Kent Frewing were elected to serve during the coming year. John Velman edited Farrago and Blacker men contributed much of the material published. The debate squad, the Institutors, and the



Jerry Keisler Dan Killoran Jerry Klaz Ron Kleban Ger Lawrence

Rick Lindman Joe Lingerfelt Jim Lovelady Bill MacDonald Bill Mock

blacker



Bill McLaughlin





Pete Moretti Tom Morton















Dick Stark







Bernie Mueller Bruce Nevelli Max Oeschger







Jerry Parker Tiny Parks Don Pinkerton Bob Pisani

Lannes Purnell Jan Rampacek Galen Sarno Randy Schmus Ken Scholtz



Carroll Schwartz **Neil Sheeley** Jim Short Chuck Slocum Wayne Smith Walt Specht



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Don Stern

Steve Stevens

Wally Stolz

Chuck Stone

Mike Talcott

Dave Teal







Bob Thompson

Reed Warriner



Mike Thomas



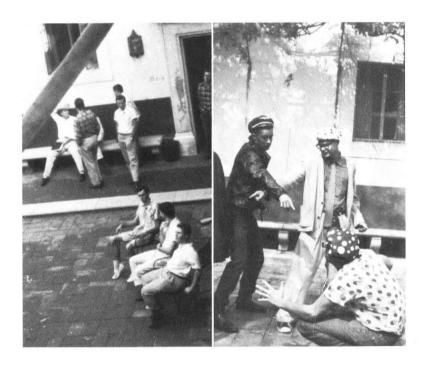
John Velman Al Whitsett

student shop were other organizations in which membership and participation by Blacker far exceeded the House's share. Other activities, ranging from all forms of intercollegiate athletics to class officers and even studying now and then.

House elections featured several close races plus some uncontested ones. Don Stern replaced Mike Bleicher as president. Other changes were: Bob Johnstone for George Hall as vice-president; Tom Jovin for Wally Baer as secretary; Gus Akselrod for Al Farley, as treasurer; Stu Goff, Ken Dinwiddie, and Walt Johnson for Dick Stark, Steve Stevens, and John Conover as social chairmen; Tim Harrington and Bill Kern for Reed Saunders and Don Stern as athletic managers; Max Oeschger for Gus Akselrod as Librarian. In perhaps the closest race of all, the team of Stevens and Harford eked out a narrow victory over Peter Moretti to become the new HHA's.

It is of course impossible to predict what will occur during the annual silly season that is third term. Senior Ditch Day will undoubtedly provide the usual amount of fiendish grins and homeless seniors. And Spring is here; the Blacker men's thoughts will turn lightly to thoughts of love (sex), the beach, water fights, and summer. (For seniors add graduation and a sigh of relief.) But as we look forward to the rest of this school year and on into the next, we can predict that life in Blacker will continue to be rewarding, entertaining, and, most important, always interesting.

—Ken Scholtz







Doug Christman, Dennis Kuli, Joe Jurca, Pete Finley, Bill McClure, Andy Perga, Jerry Peck, Norm Ellet, John Kleiderer, Dan Mack.

dabney

The men of Dabney returned in the fall anxious to spend another year in the atmosphere that has proven itself as one of success and enjoyment. The unity and spirit of the house spoke for itself during rotation. The Interhouse Athletic Trophy, sitting in her usual exotic pose, also spoke clearly from Dabney's mantle as the crafty frosh scanned the outstretched houses. The house gained a great bunch of fellows to join with them in a year of study, campus activities, and futile attempts to outwit the wily human female.

Pete Finley, full time President and part time male animal, led the house ably and well from his important position. High right hand man, Jerry Peck, did a great job as vice president, but found his skill in the other field a little undeveloped. He walked helplessly but happily to the altar during Easter vacation. Ah, diotore Flerigium. John Kleiderer was the jester of the minutes and Andy Perga kept the fast moving funds in view for as long as possible. Also serving the house as officers were librarians, George Logemann and Doug Christman, and historian, Keith Martin. Bill McClure spent a spirited time as comptroller. As the frosh were being shown the way for all good cowboys to act by pledgemastre McClure and his band, the Dabney social program unfolded with a beach exchange. Dan Mack and Norm Ellett led the Dabney men in a social year filled with events that were just what the men



Pete Finley President

needed and wanted. Early in the program the campus was blessed with a modern day Phoenix. Up to minutes before the Interhouse Dance was to begin, the courtyard was filled (all the way up to here) with a pile of rubble that only the Interhouse can accumulate. And then up went the curtain and the house revealed its hidden treasurer. An array of animated inventions that would jolt Walt Disney met the festival's participants. Greeting them as they came was a saluting, talking toy soldier announcing the theme, Toyland. The courtyard was shadowed by a huge rock candy mountain spouting fire and popcorn with noises typical of all good Volcornos. Pete Abbey Guy Andrews Dave Bailey Stan Baker John Bard Jack Bass Bill Benisek

Ed Berry Larry Berry Tom Bjorklund Mike Bogost Pedro Bolsaitis Bill Burrow

Dave Buttefield Martin Carnoy Bob Chambers Berken Chang Doug Christman Jim Coe Martin Conneally

John Cooper Bob Curley Hal Dale Neal de Gaston Sol de Piciotto Gary Dietrich Don Dunaway

Lee Dyke Norm Ellett Pete Finley Al Forsythe Alan Galt Joel Greenberg Ike Haissman



















Phil Helman

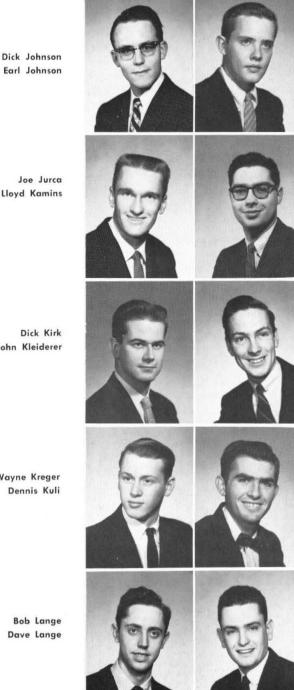
Roger Hoelter

Tony Howell

George Ilves

Tony Icrillo

Mike Jenkins



Beneath the lollipop tree spun a merry-go-round with horses that went up and down (after the dance). As Hansel and Gretel, the dancers entered the lounge through the witch's home to find a playland with balloon ceiling and toys to delight everyone's secret self. And of course the lounge was rounded out with a cup-eating hippopotamus. Of course.

The social program had seen the color of the wonder Dabney tradition, the Party-Party, mixed with the variety and spark that make the social life at Tech such an important part of personal development and immediate fun. A Charles Addams party gave the house a chance to let hidden drives spring forth when poor beheaded Gary Schmidt was led through the room by his black-shirted assassins.

With the athletic trophy under the Green Elephant where she belongs, Dabney began this year with the idea that the lovely lass will stay right there. Under athletic managers Dennis Kuli and Joe Jurca, participation has been especially wide and spirited. Dabney owes her lead in the race to the ability to field a good team in every sprt. In those sports not won by Dabney, the house was able to place high enough to keep her ahead in the big picture. This illustrates an important feature of the smallest house on campus. The Dabney men are not of a single-type, but are able to turn ot varied interests and abilities. Alan Forsythe led the men of Dabney into second place in the Interhouse Sing in the closest race imaginable in such an event. The house is a high bracket contended in every field of combat on campus.

The drive of Dabney men is not just exhibited in house activities. Inter-collegiate athletics has captured the interest of many of the men from Dabney. On all the teams these men are found cooperating with the rest of the school in that necessary part of campus life.

Earl Johnson

Joe Jurca Lloyd Kamins

Dick Kirk John Kleiderer

Wayne Kreger Dennis Kuli

> **Bob** Lange Dave Lange

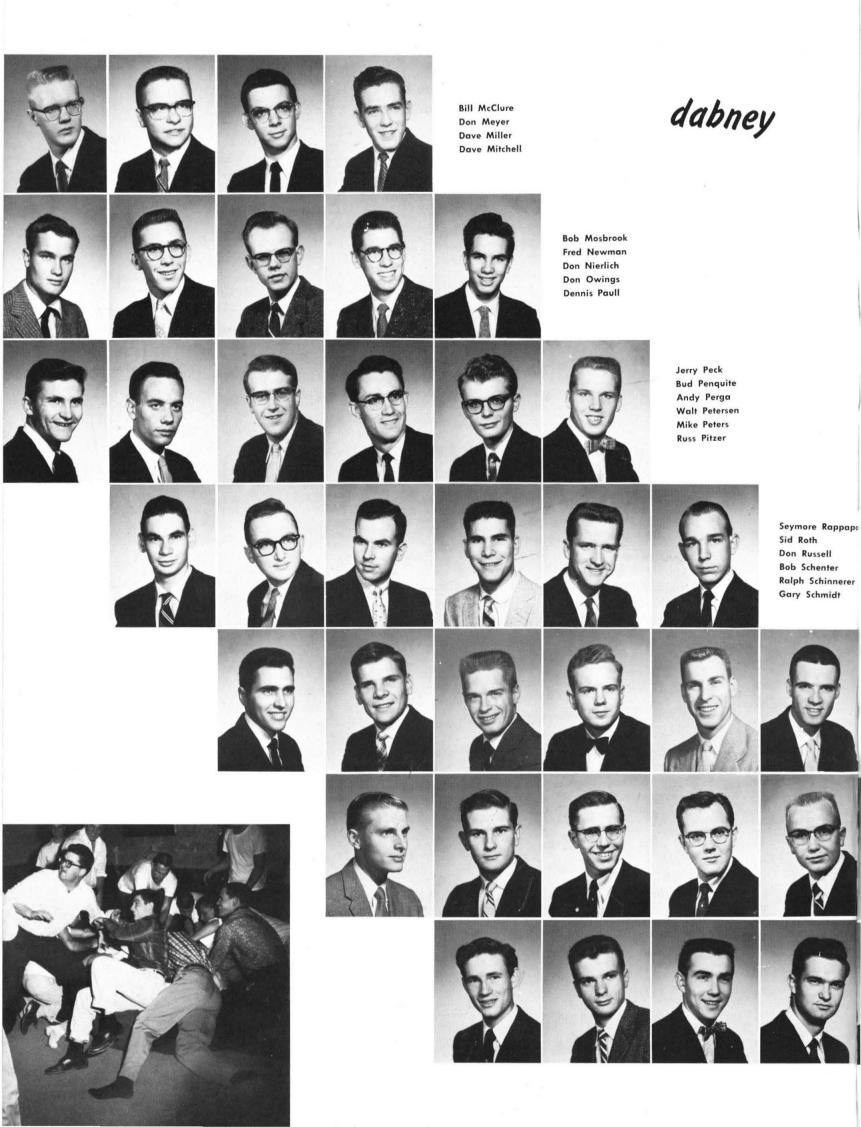
Dabney takes an active part in the other phases of campus activity. Many Dabney men have fun at Glee Club rehearsals studying music and conductors while others spend their time on campus publicatinons. For instance, the Big T is edited and managed by Dabney men. The Caltech Y also finds Dabney men leading its program. John Lango will serve as next year's vice president and Truman Long was publicity manager this year But it doesn't take a big thing to interest a man who wants to have a good time. The small organizations on campus such as band, student shop, and darkroom club find Dabney men interested and willing to do the organizing and pushing.

Dabney also had its men on the ASCIT Board of Directors. Smiling, pipe-clenching, Dick Kirk served as publicity manager and Don Nierlich was treasurer. The Board of Control saw Russ Pitzer, Bill McClure, and Dave Butterfield in action.

This year the ASCIT elections began early to cause excitement in the house. Candidates for all but a few offices began to write speeches, paint signs and design skits, all to capture votes. When the smoke cleared and all the entertaining meals and evenings were over, Dick Kirk was now smiling, pipe-clenching, ASCIT President. The Publicity Manager's slot was passed to Bill McClure while Russ Pitzer had a close but successful election to Athletic Manager. Tony lorillo, the talking giant, was elected First Representative and Don Owings is the new Rally Commissioner.







Lewis (M) Linson and Dennis Kuli took over the Big T Business Managership from J. Pierpoint (Walt) Petersen, a business manager's business manager. Also turned over to a Dabney man was the job of Head Cheer Leader. John Bard has plenty of new ideas (and arm motions too).

House elections afforded the house a chance to re-evavluate and closely scrutinize the constituents of a successful house. Bull sessions, late into the night began to knit the men into a group of wideawake individuals about to choose their officers. With the activities in ASCIT functions expanding at such a rapid rate, the house realized the need for a strong and spirited administration on the home front.

John Kleiderer was elected to the President's spot, with Dave Lange beside him as Executive Vice-President. Sol de Picciotto and Bob Lange took over the Social Vice-President position and Bud Penquite became Treasurer. Doug Shakel, a shakeler from way back, will spend a year as House Secretary and Lou Toth will be Comptroller. Also among the new officers are Dennis Paull, Historian, and Mike Levine, Librarian. Doug Christman and Terry Teigen will lead the house as it finishes the fight for the Interhouse Trophy.

The spirit and imagination of Dabney has been shown many times this year. The Jim Coe Inter-Alley Trophy has seen contests in pushups, poker and croquet. The men of Dabney have had a good time together this year and look to next year enviously anticipating the contact with these surroundings again.

—Bob Lange

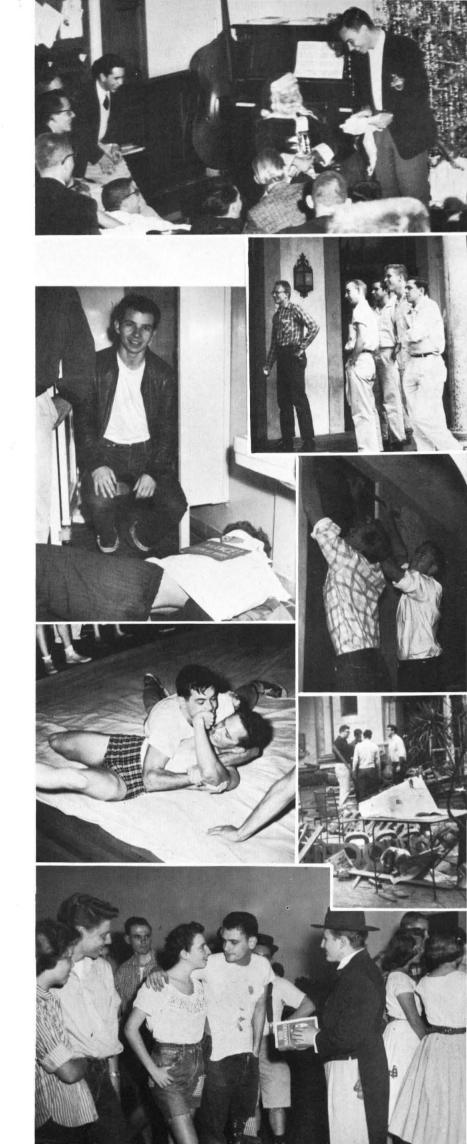
Harrison Schmitt Doug Shakel Jerry Siegel Attila Simanyi Dick Smisek Pete Smith



Jon Stedman Don Stocking Hugh Stocks Terry Teigen John Thomas Harper Whitehouse



Bob Thorton Louis Toth John Van Dyke Clint West Paul Widess John Wilkinson



fleming



Warren Fuumoto, Dave Gildersleeve, Dave Gilson, Dave Yount, Larry Whitlow, Jim Welsh, Gordon Fullerton, Don Wilberg.

This fall Fleming House welcomed a new Resident Associate, John Harding, a well-known low temperature physicist who demonstrated in addition his skill as an alpinist, especially when he led a successful, fully equipped and loaded expedition to Bob's on election night. Altho at the beginning a few of the less



Larry Whitlow President

perceptive upperclassmen mistook him for a frosh and tried to proselyte him, he soon proved to be in need of no persuasion whatever, and has become one of the most popular and competent advisors we have ever been privileged to have.

Under the able direction of President Larry Whitlow the actual freshmen were pursued with on less vigor in the most successfully conducted rotation in recent years. Good organization and effective, honest presentation of the many virtues of the House attracted a fine enthusiastic class. Grist for the mill of John Stevens' Supreme High Authority on Fleming Traditions, whose sophomoric sadists kept thetfrosh in their proper attitude of subservience to Fleming and belligerent toward just about anything else, for the usual 3 days of hell, while Barry Clark's droll announce-

ments gave them a new ritual designation: (censored). Meanwhile the House was started by the arrival of a 3 months' growth of Paul Minning's beard, accompanied by the remains of a motorcycle. Details of this exploit were presented in a special illustrated talk on Alaska Day.

But the really big job that brought the House together was the Interhouse Dance. This year Fleming became Venice. A canal stretched thru the courtyard, which was kept reasonably full by a crew of trolls





Bruce Allesing

Dick Alvarez

Charles Anderson

Dean Anschultz

Al Ashley

Wayne Albin

under the bridge. After the bridge held Ashley's weight, it was judged safe to allow several dozen couples on it to admire the tall, lighted clock tower designed by George Oetzel and furnished with an ingenious operating clock which automatically rang out the hour with electronically produced tones ostensibly emanating from a golden bell struck by two small men on top. When the timing mechanism failed, Jim Neeland became the hero of the evening on the manual controls. A gondola, fabricated under the direction of Dave Yount, floated in the canal, while Dave Wilson and a crew of beautiful women turned the windows to stained glass in various symbolic patterns. Rasmussen saw to it that the Lounge became a typical Venetian street, including the inevitable bar and numerous shops displaying their wares. When everything was over, every Fleming man felt sure of one thing besides his reluctance to cart away the huge piles of debris: this had been the best Interhouse in the memory of anyone here.

But this wasn't the only social occasion the men of Fleming responded to enthusiastically with work and participation; Social Trio Gilson, Goldersleeve









Gene Beisman Ed Berry

Baird Brandow Gordon Brown Nelson Byrne **Grant Carrington Glenn Converse Ralph Cross**

Hal Dessau Joe Fineman

Ron Dettling Dick Dietz Alan Emanuel Dick Fiddler



Arnold Goldford Carl Gottschall Bill Graham

> Tom Gunkle Jim Hall Dick Herlein

Harvey Horiuchi Dick Homeyer Mike Janssen

Bob Jewett Jerry Johnston Larry Jones

Pete Jordan Doug Junge Dave Kipping

Ed Kleppinger Carl Knapp Mike Konrad



& Wiberg kept up a steady round of successful events. Kipping came out on top at the Casino Party with a mere 75% return on his investment, but "Blivot" Whitlow's characterization of an old-time gambler really stole the show. There was also a Theatre Party, an off-campus party, and a Roman Party, or Orgy (enough said), while the Artists Ball gave the troops a chance to try their hand at costuming. Barn dances, notable for Mr. Ashley's phenomenal drinking time, kept Fleming in possession of the Acme Beer Trophy for a good part of the year. And the exchange with Pomona brought an almost embarrassingly large number of women; only a mass turnout at home saved the day. Graham and Gray's program for the crowded spring term continued the traditional Luau and Theatre Party, but spiced things up with a Palladium Party, an Inter-Alley Party (in which the alleys competed in their decorations) and an unusual Thursday-night exchange at Scripps, whose principal attraction was a mixed tournament at jacks.

Not all of Fleming's entertainment is so formal. Announcements at meals continued to be a source of wonderment; among the most remarkable were Emanuel's account of his encounter with a Twin Pines basketball, and the extreme alacrity and efficiency with which Mr. Gunckel's remarks on the subject of bridge led to a suitable dampening. Once Mr. Whitlow was rewarded for his conspicuous table manners by the presentation of a chef d'oeuvre from the biology department in the form of a dead cat. A reputable pyrotechnic expert was said to be responsible for causing the clocks on Throop to differ by 2 hours but average out to the correct time. A fine slingshot was finally dismantled as having achieved its purpose when the RO complained that the drill team had to march past Fleming double time to escape bombardment by streaming rolls of toilet paper. And an interconnection among the hi-fi sets of Alley One, besides transmitting music, also provided the presentation of a "Road Race," to the great surprise of passers-by. The Waiters' Union and the Anti-Waiters'-Union Union continued to swap members to the accompaniment of enormous cheers and boos, while the Jewman Club, under the leadership of "Rabbi" Grossman and Chief Assistant Mohel Emanuel, administered the Purity Test and took over many of the other functions of the old 69th Gospel Church in preserving proper standards of immorality in campus life.

The venerable brass spittoon known as the Austen Trophy was the object of two hilarious contests this year, under the administration of a special committee, the IACCOFH. Alley Six carried it off at the beginning after winning an indiscreet race in the Lounge, but later in the year challenging Alley Three took it away from them by first drawing the attentions of a neighboring House in a Hydraulic Singing and Recitation Contest.



Al Laderman DeWitt Landis Ron Lawler Wonyong Lee Bob Lushene Steve Mak

Bob Marshall Coug McLane Paul Minning Dick Montgomery Bob Moore Jim Neeland

Mike Neville Bob Norton Ted Oakberg

Mike O'Malley George Oetzel Bob Pailthorp

Such antics did not prevent Fleming men from devoting attention to more serious matters. With the Shake Trophy proudly ensconced on their mantle, the people of the House managed to keep themselves in school with remarkable success. Fleming donated and collected money with such diligence as to come out on top in the ASCIT Charities Drive. The faculty waiters at the banquet provided the members with a remarkable program of songs afterward.

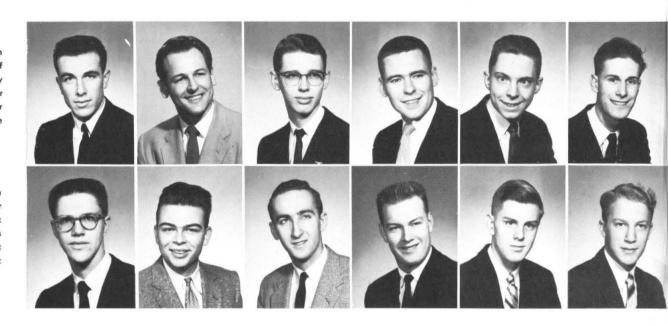
The largest effort in Fleming's year was, of course, in athletics, where hard-working Athletic Managers Fullerton and Furumoto fired the House up for a big drive. After a slow start, it really gained momentum at the swimming meet, where almost 100% participation on the team or sidelines sesulted in a hard-fought and spectacular victory. At the track meet, too, you could tell by the volume of cheering alone when Fleming won an event, which was very often. Dick Herlein, the hero of the day, picked up 14 points in 4 events, and Welsh broad-jumped just short of the Institute record. The House made a strong showing in Discobolus contests, winning easily in basketball, track, and football the last with an



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Ron Parkinson Harry Patapoff Jim Petty Mac Poor Jim Potter John Price

Herb Rauch Lee Renger Dave Resnik Larry Rhodes John Rix Ed Schwartz

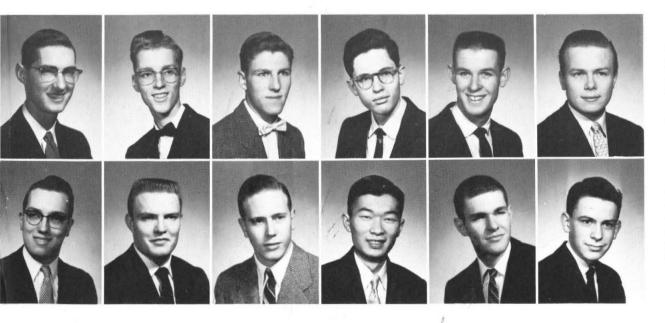






Wes Shanks Jim Somberg Dave Spencer Steve Stephens Tom Tebben





James Vicars Lance Wallace Jim Weaver Howard Weisberg Jim Welsh Jerry Wilhelmy

Ray White Larry Whitlow John Wise Cavour Yeh Dave Yount Gary Zimmerman

excellent team coached by the experienced Larry Whitlow.

Fleming's own elections were, of course, the subject of heated discussion most of second term. The speeches at the election meeting, good indication of the way the House was thinking, emphasized the changes that had come over Fleming in recent years, and pledged conscientious and devoted help as it settled down in its new tradition. The House chose Mike Konrad to lead them thru their next turbulent year; Don Wiberg became Vice President, succeeding Jim Welsh, who had, as Whitlow said, developed that office almost to the status of "co-president." Fleming unanimously agreed on Mike Gray and Bill Graham as being quite capable of all the hard work and good contact needed to run the social program. Joe Fineman was re-elected without opposition for the second time to his perpetual office of Secretary. Dave Yount, whose fine job in controlling the finances of the House had set a new standard for efficiency (and solvency), was succeeded by Nick Grossman, whose mathematical ability and understanding of House members should serve him well. Mac Poor and Al Emanuel will lead the Big Red Team as athletic managers. And Gary Zimmerman, who has already rendered great service to the House in managing Evergreen Enterprises and remodeling the Library, ought to be one of the most lively Librarians it has ever had.

A full-scale revision of the Constitution will give Fleming more direct control over its affair's, and the new Executive Committee, itself singularly attuned to its spirit, promises to provide a model of responsive and efficient government.



It has been a great and active year for Fleming House. Every part of the community has grown; its successes have multiplied and its people themselves have each broadened their interests and matured. As we regretfully part with the Class of '57, those of us remaining have every reason to be able to say again at next year's end, "This is the best year Fleming House has ever had."

—Joe Fineman



Front row: Doug Ritchie, Marty Tangora, Roy Stake, Ed Park. Back row: Brent Banta, Mike Godfrey, Tony Leonard, Vince Taylor.

To remember the atmosphere of Ricketts in 1956-57 is to remember an atmosphere of easy friendliness and of abundant energy. From the October afternoon when friendly Ricketts pledges tied Blacker's pledgemaster into the Cherry Lane showers, until the bright June day when the last furious pot-ball game dissolved from exhaustion, the spirit of Ricketts surged from the house to leave its imprint on Caltech and on the world outside.

The interhouse athletic program was the first to hit a climax when the Rowdy softball team, under Coach Bloomberg, came through for a share in the interhouse competition. But the social program came quickly to center stage with the Interhouse Dance. Goaded by Social Lions Taylor and Godfrey, skillfully maneuvered by Treasurer Roy Stake into observing some sort of budget, the men of the house established themselves as past masters of Byzantine architecture with their theme of **Storybook Arabia**. Based largely on the **Arabian Nights**, the artful display factured Ali Baba's treasure cave, Aladdin's lamp (and large sly genie), and a splendid Eastern palace from the windows of which the exotic skyline of an Arabian city at sunset could be seen.

Meanwhile the Ricketts tradition of supporting the school to the hilt was maintained, particularly in football. Jim Cribbs, as ASCIT Yell Leader, fired the school into some explosive pre-game rallies. Ricketts lettered as many varsity football players as any two other houses, while Fullback Ed Krehbiel so completely dominated the rushing statistics that the SCC coaches voted him the best back in the conference. Quarterback Van Kirk was elected to the ASCIT Board while acting as sports editor of the **Tech** so as to drain off any energy that might be left after practice.

Then a dozen Rowdies lost their scalps at Oxy in an attempt to avenge a hard-fought 21-7 loss by means of a mass attack on he bonfire.

Dave Ackley Dave Allen Jerry Arenson Luis Baez-Duarte Brent Banta Gordon Barienbrock

> Dick Baron Ted Bate Dick Baugh Tom Bergstresser John Berry Graeme Blake

Howie Bloomberg John Bowden Tom Bowman Gary Breitbard Phil Brooks John Brooks

Tom Brown Bob Caldwell John Campbell Doug Carmichael Frank Childs Lowell Clark

> Gene Cordes Pete Crawley Larry Curfman Don Dick Herb Doughty Jim Farmer

Hugo Fischer Ron Forbess Clint Frasier Bob Gelber Clark Gibbs Mike Godfrey

Gary Goodman Bill Gray Dave Groce Dick Gustafson Phil Harriman Bill Hecht





Dick Hundley Norris Huse

Fred Ishihara Chuck Johnson

> Mike Jones Emile Julian

Pete Kastan Urban Kern

Gerhard Klose Frank Kofsky Ed Krehbiel Dave Leeson Dick Long Gordon Long Len Maley

Howard Marshall Zack Martin Bill McLennan Jim Mebust Jarold Meyer Mike Milder Lou Montoya



But it was a moral victory: when asked to say a few words at the bonfire ceremony, the mutilated but dauntless captives responded with a Heidy Deidy for the benefit of the assembled Oxy student body, and the president of the Oxy frosh class spent a couple of wee morning hours scrubbing the bricks of the Ricketts court. And Leeson and Walsh lived up to their reputation by being captured during the bonfire raid, playing it cool for a couple of hours, and finally escaping completely unmolested while the same frosh president was combing the grass of the baseball diamond for Leeson's imaginary lost watch.

Second term started out as second term always does—somewhat disorganized—but before long the energy level rose again to peak.

















Ricketts was proud to host the famous Choir of St. Olaf's College early in February; that superb choral group came over to visit after their Pasadena concert and entranced everyone present with their impromptu but none the less lovely singing. Then, of course, there was the Apache Dance which-what is there to say?-was the Apache Dance! and better than ever; featuring the Beard-Growing Contest, which honored Moulton, McLennan, and Stake, for the neatest, longest, and scroungiest respectively.

Then, before anyone had recovered from the Apache Dance, here was the fourth Interhouse Sing; and Walt Weiss, graduate of the Lyman Fretwell School of Choral Didecting, led the maroon to the fourth Ricketts victory. This also marked the first public appearance of the now-famed soloist, "Blush, But" Gibbs.

And third term-well, the annual phenomenon: in third term things began moving so fast that everything became a blur, so that looking back upon it one remembers only a vague pleasantness and a fuzzy happiness. There was the Friday night of the Oxy formal at the Ambassador Hotel when Efron and Tangora got hold of a live mike in the control room and announced the engagement of a fictitious couple, and then-while confused Occidental couples applauded and gathered around the empty bandstand to try to figure out what was happening-recited Heidy Deidy in unison.

And all year long, too, the "informal activities" which also distinguished Ricketts: pot-ball and pot-basketball in the courtyard, platter-throwing on the Athenaeum lawn (Moulton was acknowledged the world's champ), a model airplane fad in the spring, the





Eldridge Moores Sonny Nelson



Wayne Nelson



Ed Nelson

Dick Neville

Dave Nissen



Frank Nowak



Ed Park



John Price

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Jack Reed Phil Reynolds Stu Richert Doug Ritchie Peté Rony Kent Simcoe

Dave Singmaster Jim Sorenson Roy Stake Pierre Sundborg Jerry Swedlow Marty Tangora

> Vince Taylor Jon Valbert Dick Van Kirk Don Voet Bob Walsh John Walsh

Jim Wooster

Jim Workman

Dan Wulff







0



Walt Weiss

q

Bruce Wilkinson

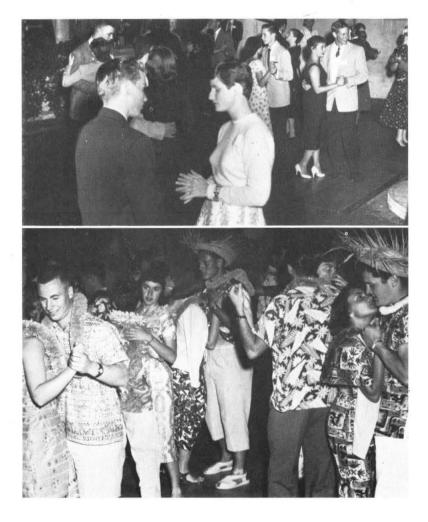
slingshot which still bombards Dabney Courtyard as effectively as ever . . . the brake drum, ruthlessly controlled by the sophomores, whose funniest plan was to hand the drum into Room 12 and then pass out four typewriter cases in quick succession, only one of which contained the brake drum . . . the skill-games trophy, which Prexy lost to Snatch because of a loophole in a loophole when Don Voet forgot to throw the broom right-handed.

But, although the list of things that Ricketts men did was long and impressive, what really made the Rowdies proud to be in Ricketts was¹ the men themselves. There was the traditionally long list of Ricketts men in student-body offices, headed by ASCIT President Craig T. Elliott and his fellow board members Moulton, Leeson, Van Kirk, and Carmichael. (Four more Rowdies will be on next year's ASCIT Board: Cordes, Godfrey, Rees, and Efron.) There were the senior and junior class presidents, Gelber and Baron.

There was Marty "Our Beloved President" Tangora, who also served the student body as president of the Interhouse Committee. There was House Secretary Russ Hunter, and his Ricketts Song Books, that were to be the fulfillment of a campaign promise, but came to be a memorial . . There were the Senior ME's, Ritchie, Stake, Weiss, Swedlow, Moulton, Workman, and Dodge, with their Kyro Reports and all the other mysterious paraphernalia which characterize senior ME's . . . Jazz Producer Kofsky, who played the Bud Shank "Jazz at Caltech" album in the dining room at lunch, only to have some boor substitute "Rock Around the Clock" . . .



ricketts



And all the rest of the Senior Class, Ricketts '57, a class of leadership, of early marriage? and of "The Tidy Fellows Ice Cream Society" annual parties.

There was the Mad Triumvirate in Suite $63 \frac{1}{2}$, Sugahara, Leonard, and Elliott, who would have driven the Cherry Lane UCC crazy except that C.T. **was** the UCC . . . Frank-Pete Albini, Vice-Presidentelect and co-chairman (with Cordes and Pessel) of the Crud Alley Boys, whose GPA continued to defy natural laws . . . sophomores like Clint Frasier, weight-lifting piano player who could pull down the dining-room curtains in a single mighty effort, or Doug Carmichael, who could snap MG axles as if they were toothpicks.

It was an atmosphere of friendliness—not just gregariousness, but mutual interest and concern; an atmosphere of energy—energy that was not dissipated, but directed, seriously if not always solemnly; a blend of youth and maturity, of reflection and of laughter. Ricketts House 1957.

—Marty Tangora



throop

Mike Duke President



Art Rosenthal, Treasurer; Mike Moore, Vice-President; Mike Duke, President; Chuck Malone, Co-Social Chairman.

Standing well secluded behind the olive trees lining the walk from Throop Hall to the Athenaeum is that pillar of campus life named Throop Club. The Club is the organized center of campus activities for Cal Tech's non-resident students. Here the off-campus student finds relaxation and companionship. At noon time on any school day one will find a great variety of games at hand; typical of these are hearts, bridge, pingpong, chess, and gin.

For the first two terms of the past school year, Throop Club was ably administered by Club President Mike Duke and his staff of officers. Mike Moore was vice-president, Chuck Malone and Gene Robkin were co-social chairmen, Kirk Irwin was secretary, Jay Clearwaters was athletic manager, and Art Rosenthal controlled the purse strings.

The Discobolus graced Throop's mantel twice during the '56-'57 school year. The first time around, the club beat Blacker House at football. The second time the Discobolus came into the Club was when Throop beat Ricketts at softball.













Donn Allen

Tracy Atherton

Neville Black

Bob Born

David Bregman

Paul Calaway











P

Bob Chamberlain

Jay Clearwaters

Dick Cooper

Tom Cooper

Mike Duke

(e

John Everitt



Tom Gibson

Jim Giles

John Gliever



Chuck Goebel



Dick Harke

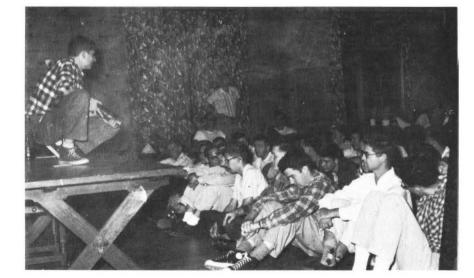


Bob Harmon



Herman Hartung

.





David Himrod

Bob Ingram



Kirk Irwin



Bill Iwan





Mike Jenkens



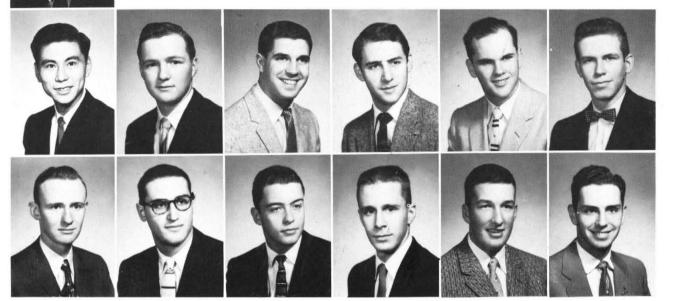
Both times the trophy left the lounge via Fleming House. Throop's athletic prowess was further in evidence when we tied for first place in interhouse softball.

Shortly after the Frosh returned from Student Camp, they went through the good spirited rigors of initiation. Throop Club was well decorated with mementoes borrowed from the other student houses. Throughout the campus, Throop's Frosh, wearing their black bowlers, were in evidence. Topping off the initiation was a big blast, well attended by Frosh and upperclassmen alike.

The highlight of any house's social program during first term is, of course, the Interhouse Dance. Day in and day out for a solid week the members of a house work on the decorations that make an Interhouse Dance a truly fabulous affair. This year the men of Throop slaved hour on hour, and when it was all done, lo and behold! Throop Club had been transformed into a space satellite's observation dome. The viewer looked out into deep space-

Kanau Kawashima

Paul King



Henry Kreissler **Bob Lebovitz**

Chuck Malone Mike Mann

Larry Marantz John Munson

James Nearing **Bob Norton**

Hugh Palmiter Dale Parkhurst

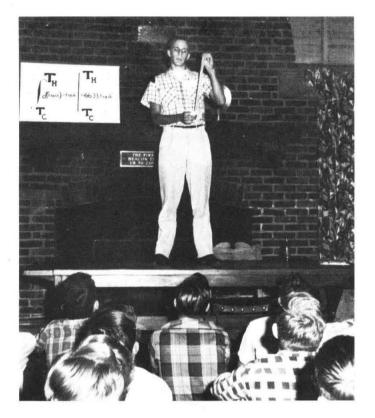


Bob Polansky

Allan Porush

Don Roberts

Jim Rode



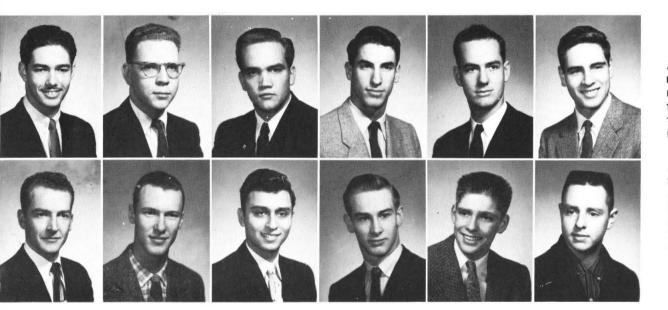
with its myriad of stars and a nearby planet, Rigel IV. The control panel of the satellite, with its maze of switches, indicating lights, cathode ray tubes, and Jacob's ladder, was an impressive spectacle

But the first term's social program was not completely dominated by the IH dance. The term was filled out by a round of barn dances, exchanges, and parties. At the second exchange the girls from ELAJC spiked the punch, and our erstwhile President Mike Duke, purist that he is, poured the punch down the drain.

Third term brought a complete new set of officers. Dick Cooper became the new president; Bob Calaway and Ed Schuster the co-social chairmen; Jim Wilkinson the vice-president; Tracy Atherton the secretary; Jack Peterson the atheltic manager; and Bob Harmon took over the treasury.

The social program- for third term started out with a bang. A bowling party, soon followed by exchanges and a dinner dance at Switzer's Camp were but a beginning to a tremendous third term social program.

This summer Throop will again sponsor a social program for students living nearby, including parties at the beach and the Greek Theater. Any Tech student may participate in the summer's activities.



Art Rosenthal Ed Royce Danver Schuster Tom Schumann Tom Sorenson Bob Talbot

Stan Taylor Jon Tibbitts Ray Virzi Don Walker Bob Wax Hal Yura



off campus



Don Anderson Neil Herman



An exciting intramural season saw the Interhouse championship go right down to the wire, with three teams battling for the trophy.

Bob Emmerling's pitching for Throop was the highlight of the softball season, but Blacker pulled a big upset and forced Throop into a tie with Ricketts for the championship.

Bruce Campbell starred for Blacker as they took the cross-country championship over Fleming and Dabney. Ricketts and Throop did not compete.

Fleming and Dabney dominated the InIterhouse Swim Meet, and Fleming came away with first place. First term ended with Blacker, Fleming Dabney, and Ricketts in a tight four-way race.

Blacker won the Interhouse Tennis Meet, and in another Fleming-Dabney dominated event, Fleming won the Interhouse Track Meet. Then an underdog Blacker team took the volleyball title. Going into third term the field had been narrowed to Blacker, Dabney, and Fleming.

Ricketts' defense shaped the destiny of the football season as the Rowdies played to scoreless ties against both Fleming and Dabney. Fleming took this championship by virtue of a decisive victory over Dabney.

interhouse sports







some

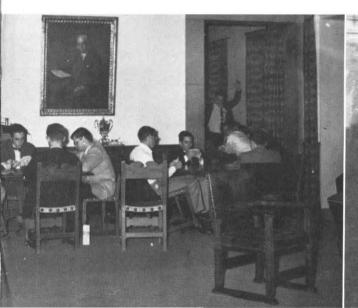








interhouse activities

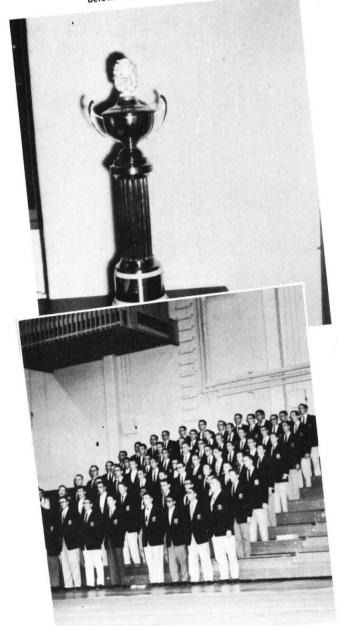






Dabney House choral group, runner-up to victorious Ricketts House.

The sought after Interhouse Sing Trophy Below: Fleming House Choir



interhouse sing

With Dr. Al Ingersoll acting as Master of Ceremonies at the Interhouse Sing, each house sang the required "Hanktown Gals" and added entertainment of its own. Blacker mastered the intricacies of Bach; Dabney blended in "Jesus Walks This Lonesome Valley", a spiritual; Fleming vocalized "Non Nobis, Domine"; Ricketts exulted in "Hallelujah"; and the Ricktette injected some barbershop harmony.

As the judges tabulated scores, the Caltech Glee Club presented a brief concert, and then the combined rose to sing the Alma Mater. Ricketts edged Dabney, glee clubs, over half of the Student House population, 259-258, to maintain its four-year hold on the trophy.



Ricketts House Octet



Jim Welsh, Larry Whitlow, Geoge Hall, Marty Tangora, Herb Rauch, Pete Finley, Jerry Peck, Mike Duke, Mike Moore, Doug Ritchie.

interhouse committee

In the beginning there was the Tangora and the Tangora called for order and the order came and was silent at the feet of the Tangora. Then the Tangora said Let There

Be A Secretary and there was a secretary and his name was Ranch. And in the fourth year of the reign of Tangorus it came to pass that there was an orgy and it was called Rotation and the Greek Senators met to inform each other of the rules and spirit of Rotation. And Bleichervs and Hallvs were appeased. Then spoke prefect Duke, a non-Greek, saying, "How can some frosh be better than others? They are all Frosh!" And the gods were angry, but he offered to sacrifice his Vice-Prefect Moore to appease them. And there was a dance whose fame had spread afar and it was named after the committee. Then up spake brave Finlius and he said that to hold back warriors from alien college would stand his honest slave—Peckius at the Bridge. And there was a Disklobberus and there were rules and there was Welshvs and as was the custom the rules were revised. Then arose Larry Whitly's with one thought and he wished that there be rules for the Acme Beer Trophy. But nothing was said of Richie for he did not like the

minutes and - - -

There is only one Tangorus and Herbus was his prophet. Dettimbus Ylluftcepser

H. Ranch, The Boy Wonder



Hugh Taylor, Ricketts Tucker Gordon, Dabney Dr. Mayhew, Master John Harding, Fleming Ted Flinn, Blacker

associates



student house staff



Frances Dunlap, Asst. Manager; Wilda Southworth, Manager; Bea Leckband, Secretary.

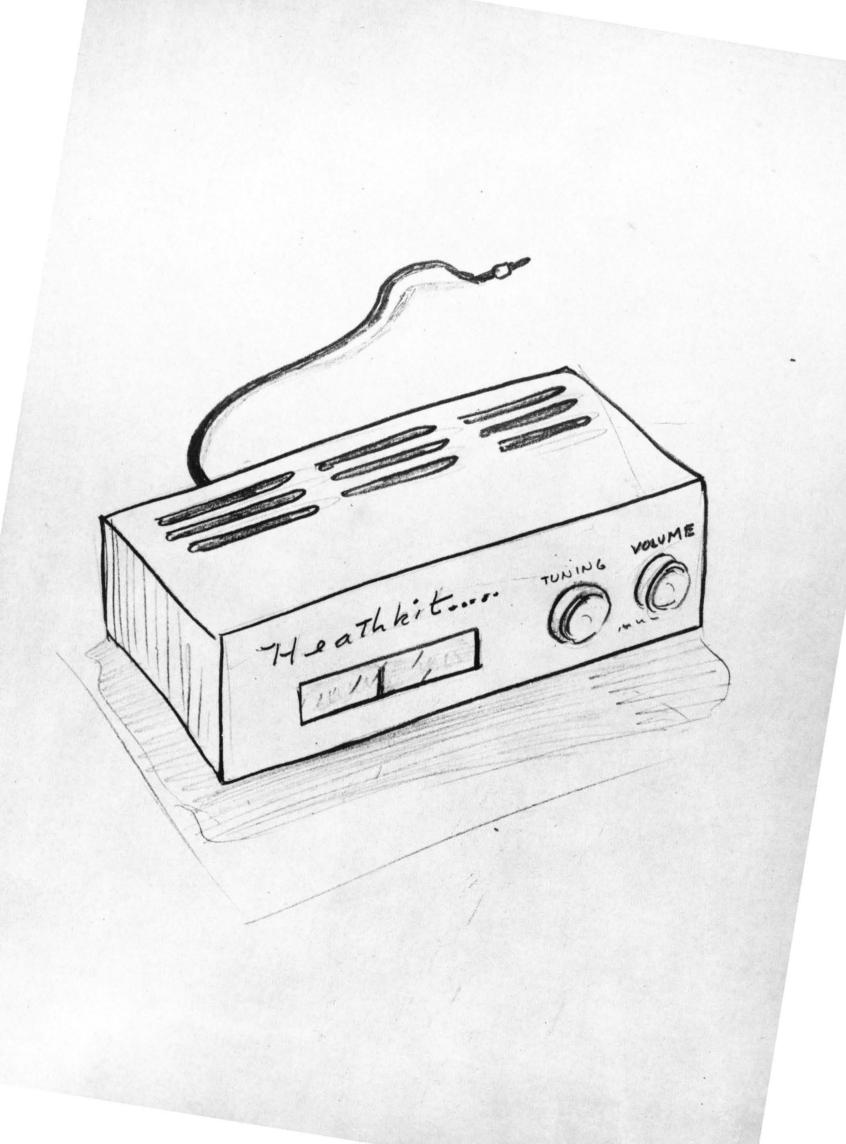


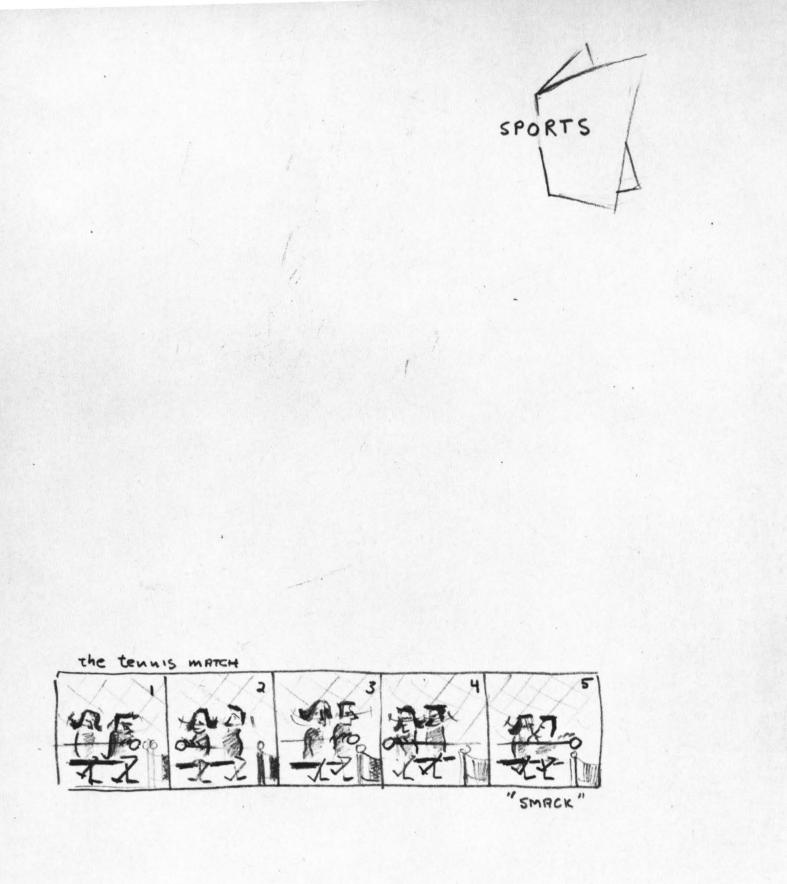
Ned Hale, Secretary to Master



MAINTENANCE WOMEN

Irene Reed Mae Croix Amelia Lang, Housekeeper Mary Townsend Bessie Baker Bertha Reese

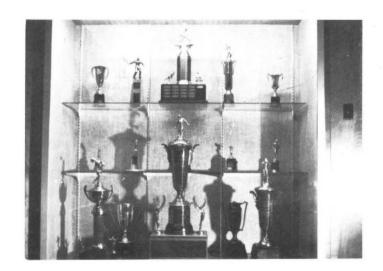






H. Z. Musselman Director of Athletics and Phy. Education

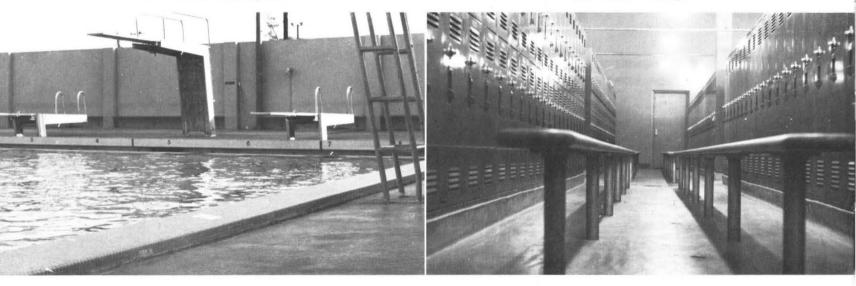




Our well-filled Trophy Case



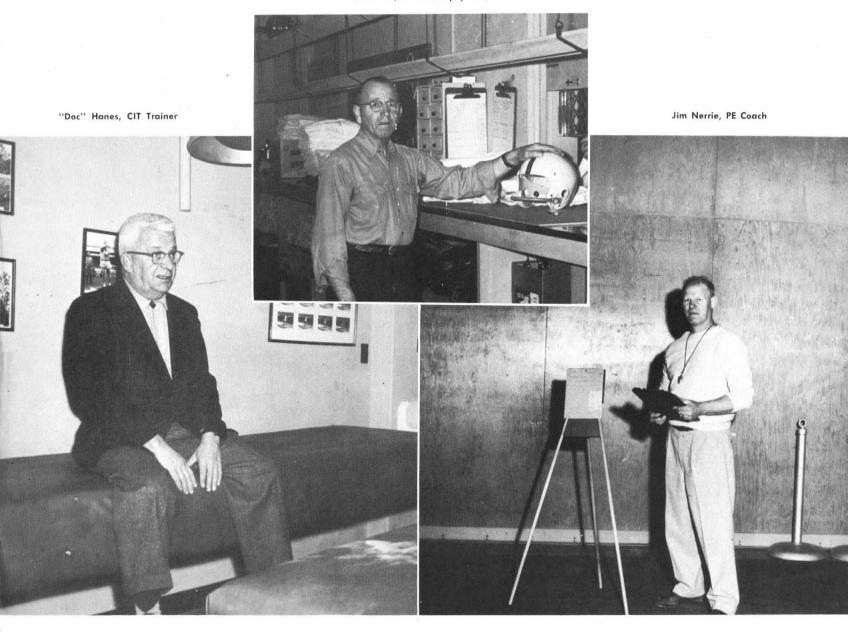
Locker Room of the Gym





SCOTT BROWN GYMNASIUM

Carl Barz, Athletic Equipment



varsity sports . . .

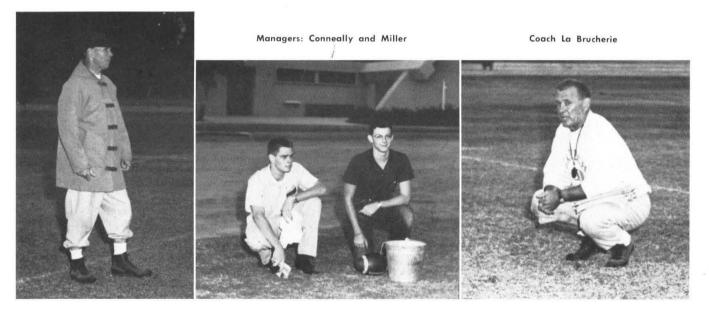


Front row: Jim Workman, Bob Ingram, Dick Van Kirk, Ed Krehbiel, Larry Berry, Don Stocking, Tim Harrington, Tony Leonard, Dick Baron, Marty Tangora. Second row: Fred Newman, Larry Rhodes, Hal Forsen, Eugene Stanley, Joe Lingerfelt, Jim Snyder, Neil Herman. Chuck Malone, Gene Beisman, Dick Gustafson. Back row: Martin Conneally, mgr., Coach Learned, John Kelley, Bill Mouer, Ed Nelson, John Conover, Larry Whitlow, Lance Hays, Tony Howell, Russ Pitzer, Frank Childs, Bert Labrucherie, coach, Dave Miller, mgr.

football



Coach Learned



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Bill Mouer

Larry Whitlow

Marty Tangora

Don Stocking

Ed Krehbiel

Jim Workman

The '56 varsity football season started off with a bang that lasted the whole season. This year's team won more games than any previous team since **1931**, taking 3 of 8 games.

Conference honors went to team captain Larry Whitlow and fullback, Ed Krehbiel. Capturing a second string berth were halfback, Don Stocking and center, Joe Lingerfelt. Head Coach Bert La Brucherie was back again and, with his line Coach Al Learned, did a great job of getting the men in shape and working as a team.

Lettermen returning this year were: Jim Workman, Larry Whitlow, Bill Moeur, Marty Tangora, Dick Van Kirk, Don Stocking, Larry Berry, Ed Krehbiel, Lance Hays, Joe Lingerfelt, Chuck Malone, Ed Nelson, Jim Snyder and Larry Stanley. Adding to this were three valuable members from last year's frosh team: Russ Pitzer, Fred Newman and Bob Ingram. Aiding the team in caring for the uniforms, members, and statistics were: Martin Conneally, Dave Miller, Phil Helman, and George Logeman. For his sportsmanship, moral influence, and scholarship, Russ Pitzer received the Wheaton Trophy at the fall sports banquet.

The Tech team enjoyed a great season this year and can look forward to even a greater one in '57. Caltech 67-0 Cal Baptist

The Beavers opened the '56 season by "mashing, bashing and smashing" their opponents. Nine players scored a total of 16 touchdowns and Larry Whitlow caught a Cal Baptist defender in the end zone for a touch back. Those scoring were: Dick Van Kirk (2), Bill Moeur, Don Stocking, Fred Newman, Jim Workman, Dick Gustafson, John Kelly, Ed Nelson and Tony Howell. A total of 300 yards running and 176 yards passing were recorded. In all, one for the record books.

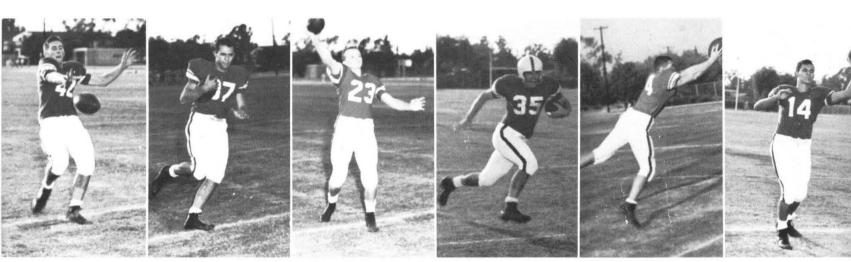


Joe Lingerfelt Russ Pitzer Jim Snyder









Fred Newman

Frank Childs

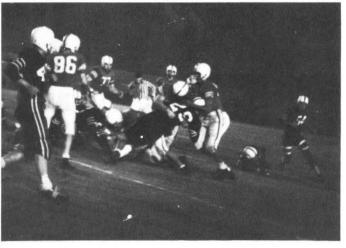
Hal Forsen

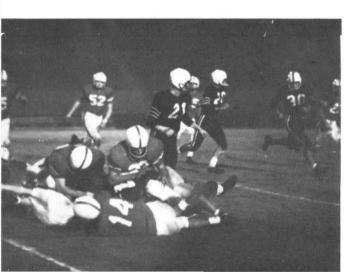
Chuck Malone

Eugene Stanley

Dick Van Kirk







Caltech 7-29 Whittier

Meeting a highly favored Poet team, Tech fought well. The Poets moved fast in the first quarter, scored two, but missed a conversion. From this beginning the Beavers rallied and played a good defensive lasting the first half, leaving the score team, led by Ed Krehbiel and Don Stocking, drove 13-0. Starting the second half, offensively the Tech down the field from the 35 yard line to a goal. Chuck Malone made the conversion. The Poets got away a lucky pass in the fourth quarter.

Caltech 21-20 Cal Poly

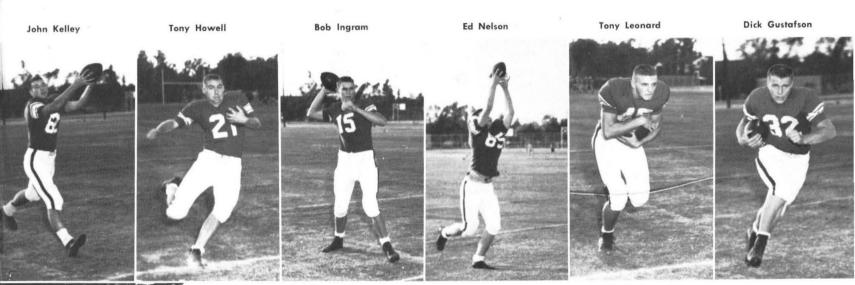
During the day at the Interhouse, the team met Cal Poly on Tournament Park. Beginning slowly the Beavers allowed two touchdowns to be scored; however, on the second conversion, halfback Fred Newman broke through to block the kick. In the third quarter the team really "fired it up", scoring a touchdown through the Krehbiel-Stocking powerhouse. Soon thereafter, the team bulldozed down to tie the score. Fred Newman made a third on an 18 yard reverse. In the fourth quarter, the Broncos scored again, but were held back.

Caltech 0-13 Redlands

Facing a strong and favored Redlands team in the Rose Bowl, the Beavers fought a strong defensive game. The first half consisted of a series of punt exchanges until Redlands recovered a Tech fumble and pushed to a touchdown. The score at the half stood 0-7. During the third quarter the Bulldogs plowed down the field for another. In the fourth quarter Tech moved to Redland's 20 yard line but were stopped by a solid line.

Caltech 7-28 Pomona-Claremont

As the game began, the strong Sagehen team tore to the goal posts and made a touchdown in



the first 51 seconds. Following this, the Beavers took the ball to the 32 yard line where Dick Van Kirk faded to pass, shook his tacklers and ran to the end zone.

Malone made the extra point. The Sagehen scored again and the half score was 14-7. During the second half ,the Sagehens took advantage of a blocked punt and a long punt return to scort twice more.

Caltech 25-39 Barstow Marines

In what turned out to be our greatest offensive game of the season, the Beaver squad faced a strong team topped by a former pro-ball quarterback. Moving rapidly the Marines piled up 19 points before the Beavers began marching. In the second quarter, Tech moved 80 yards climaxed by a 6 yard touchdown by Krehbiel. Having found the method, Tech proceeded to match the Marines' touchdowns, making the final score 25-39.

Caltech 7-20 Oxy

In high spirits the Beavers traveled to Oxy. The first quarter was an exchange of four punts but in the closing seconds Tech moved to the one yard line. The score was made by Krehbiel in the second quarter and Malone made the extra point. By the half Oxy had made up the difference and the score stood 7-7. The second half Tigers scored two more but missed a conversion.

Caltech 45-7 La Verne

The Tech team climaxed a great season at La Verne. In the second quarter, Tech exploded making three rapid touchdowns. Malone scored on a 31 yard run from a pass from Van Kirk. This was soon followed by an interception by Van Kirk and a 16 yard pass to Malone. After the kickoff, halfback Don Stocking took from one of the Leopards and ran 26 yards for a touchdown.

John Conover Tim Harrington Gene Beisman Dick Herlein

Larry Berry Dick Baron Larry Rhodes Lance Hays

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Front row: Galen Sarno, Elliot Leader. Second row: Steve Mak, George Brifford, Jim Weaver, Lewis Linson, Frank Dryden, Glenn Converse, George Hall. Back row: Tod Whitmore, mgr., Phil Thatcher, Kay Sugahara, Nain Boulanger, Larry Tenn, Dick Dietz, Bob Norton, Harry Bingham, Brent Banta, Luis Baez-Duarte, George Ilves, Charlie Miller, coach.



soccer

j. v.

varsity

Front row: Hal Dessau, Walt Weiss, Hugo Fischer, Jerry Black, Ted Flinn, Jerry Arenson, Eugene Robkin, Jim Wilkinson. Back row: Dave Turnquist, mgr., Dick Kaufmann, Al Carlin, John Lango, Ron Phelan, Mike Levine, Don Dunaway, Darrol Fleischmann, Mack Poor, Clark Carroll, Ty Jacobson, Dick MacAnally, Wayne Nelson.



The Beaver Soccer Squad finished the season with a 0-4-2 record in league play, tying the league champions UCLA 2-2 and runner-up Pomona 3-3, only to come in last after dropping two games to Cal Poly and one each to UCLA and Pomona. The final game with the championship UCLA team almost spelled victory until they managed to tie the score with only one minute left to play. In non-league games Caltech bowed twice to USC.

Charlie Miller was varsity coach this year and kept the team in condition and practice. Bob Norton, Tech's high-scoring center forward, was elected captain, and Larry Tenn and Philip Thacher were co-receivers of the Most Valuable Player award. Also outstanding were Elliott Leader as goalie, Steve Mak and Dick Dietz on offense, and Jim Weaver on defense.

The outstanding feature of the Junior Varsity Soccer team's season was their victory over Wabb School in their next to last game of the season. This victory marked the J.V.'s first win since the team was started 3 years ago as a training squad for future varsity players.

Beginning the season with an inexperienced team, the new J.V. coach, Lee Andrews, developed a spirited smooth functioning unit. The team's defensive strength was its strongest asset and only the lack of a decisive scoring threat prevented the team from a winning season.

The outstanding player and mainstay of the defensive unit was the team's captain, Mac Poor. Other stalwarts on defensive were Hugo Fischer, Ron Phelan, Ted Flynn, John Lango, Jerry Arenson, Ty Jacobson and Dick MacAnally.

First string offensive players were Walt Weiss, Neville Black, Hal Dessau, Wayne Nelson, and George Kaufman.



water polo



Coach Web Emory and Captain Ed Park

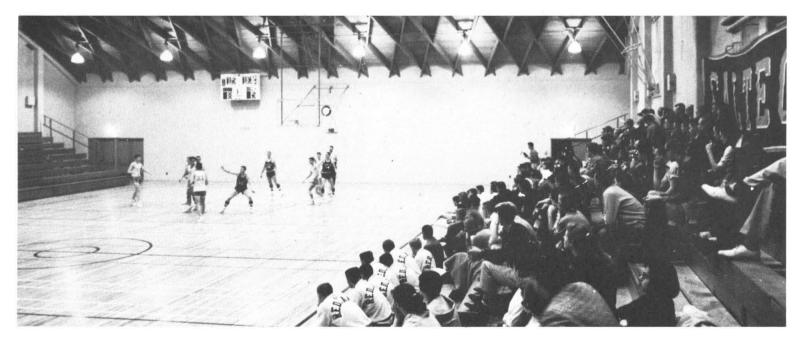
The 1956 season for the Caltech water polo team must be counted as one in which, according to the usual sportswriter's euphemism, a great deal of building for the future was done. The team had lost a number of valuable men from the previous year's successful team and hence had inexperienced players at many positions. The overall record for the varsity was three won, ten lost. However two players were chosen by the coaches for the all-conference team. One was Ed Park, the captain of the squad and the only senior letterman. Ed was a very tough and consistent guard. The other, Clarke Rees, the center forward, was high scorer of the squad with thirty-five goals during the season.

For the three winning games, Caltech defeated Los Angeles State College twice by the scores of 14-6 and 7-2, and squeezed out an 8-7 victory over our alumni in the first game of the season. In general our team improved through the season; the greatest difficulty was a lack of scoring punch. In the final game of the season the team was just edged out by the conference champions, Occidental. They, after trading the lead back and forth with our team for most of the game, scored a goal in the last few seconds to win 7-6.

Thus the Caltech team appears to be really ready for next year. Eight varsity lettermen, Don Wiberg, Vince Taylor, Keith Martin, Bob Blandford, Bob Smoak, Norm Velinty, Keith Brown, and Rees, should return. With these men, plus a number of potentially good freshmen, as a nucleus hopes are bright for a championship team.

Seated: John Price, mgr., Keith Martin, Norm Velinty, Bob Smoak, Don Wiberg, Clark Rees, Vince Taylor, Ted Bate, mgr. Standing: Bob Maltz, Tom Schumann, Lanny Lewyn, Dave Kipping, Mike Milder, Keith Brown, Bob Pailthorpe, Dick Fiddler, Ken Dinwiddie, Don Owings, Dave Luenberger, Carl Maltz, Web Emory, coach.





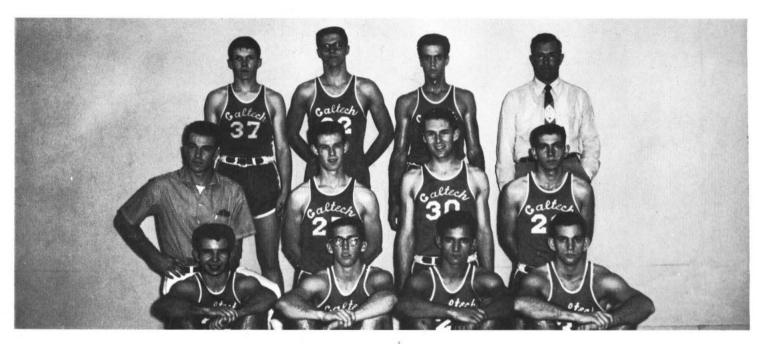
Caltech vs. Redlands in Scott Brown Gymnasium



basketball

Tech scores for two points.





Front row: Ray Magdaleno, Fred Newman, Dick Van Kirk, Howie Bloomberg. Second row: Ron Parkinson, mgr., Jim Welsh, Jim Workman, Jack Bass. Back row: Glenn Converse, Herb Rauch, Larry Krause, Carl Shy, coach.

Howie Bloomberg

VARSITY BASKETBALL

		I DITOTTET DITEE
Caltech	43	La Verne 57
Caltech	35	Cal Poly 73
Caltech	32	Chapman 63
Caltech	43	Occidental 67
Caltech	34	Pomona 61
Caltech	41	Redlands 66
Caltech	35	Pasadena Coi 67
Caltech	46	Whittier 74
Caltech	41	Cal Poly 53
Caltech	42	Redlands 73
Caltech	57	U.C. Riverside 46
Caltech	49	L.A. State 63
Caltech	39	Whittier 73
Caltech	70	La Verne100
Caltech	58	Occidental 75
Caltech	CD	Chapman 82
Caltech	66	Pasadena Col 98
Caltech	51	Pomona 75

Player	TP	Ave.
Fred Newman	239	13.9
Larry Kraus	130	7.7
Glenn Converse	115	7.2
Jim Welsh	105	6.2
Dick VanKirk	93	5.8

The high point of this season's play came half way through the season, when the Beavers came to life with a fast moving offense against the University of California at Riverside, downing the visitors 57 to 46. From this game onward, Tech showed increased confidence in its ability to move the ball rapidly, and cover the backboards. A further boost in spirit came as several of the men began to hit their full scoring stride. Fred Newman garnered 16, Dick Van Kirk scored 14, Jim Welsh, 12, and Glenn Converse, 11. In the final five games, these men more than doubled their averages for the previous games; Newman averaged 25 in this period.

Captain Jim Welsh played steady ball throughout the season and was a sound playmaker all the way. His accurate passing made him a key man in the late-blooming fast break. The driving play of forward, Glenn Converse, combined with good rebounding, and consistent close-in shooting has been a major asset. Larry Kraus, at center, was exceptional at rebounding, and pretty dead with a close hook.

At the other forward, Dick Van Kirk, and Herb Rauch alternated; both playing aggressive games. Fred Newman rounded out the team at guard, with a 13.9 average for the season. In addition, he tied Fred Anson's 33 points in one game record, set in 1954. For his play, Newman was voted to the second all-conference team.

With the return of Newman, Kraus, Converse, and Van Kirk next year, Tech looks forward to fielding a team which has a solid year of working basketball behind it.



Jim

Workman



Jack Bass







CIT scores one from the free throw line.







Ray Magdaleno

Newman sinks one on a fast break.



Dick

Van Kirk



Front row: Keith Hall, Baird Brandow, Danny Wulff, Reed Saunders. Back row: Jerry Hunsen, Dick Stark, Dave Yount, Mike Rusch, Claude Fiddler, coach.



Winning: One, Two.



cross country

The 1956 cross-country team made a good showing, although hampered by numerous injuries. There were never more than three of the top four men in any one meet. After a slow start, the team smeared Pomona-Claremont for a one-two conference record; and then took third in the conference meet.

Reed Saunders, aside from running his best season this year, was elected team captain for his outstanding contribution to the team spirit. This is the first time in recent years that a junior has been elected a team captain. A new figure appeared on the track-this year wearing an Oxy jacket, and who inspired the team with enthusiasm. This was the new coach, ex-Oxy runner, Claude Fiddler.

The man behind him with the stop watch who kept

hollering "hurry up" was Bill Dietrich the team manager.

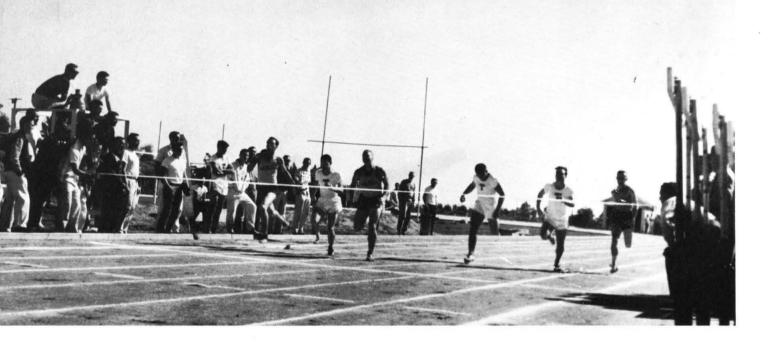
Returning from last year's team were two juniors, Reed Saunders and Dan Wulff, and one senior, Dave Yount. Mike Rusch, a junior, who also ran his freshman year, along with the three returning lettermen, were the first four men. Baird Brandow and Dick Stark, two seniors who had never run before, put in a very good season as did the two new sophomores Keith Hall and Jerry Hansen. With the many returning lettermen and the addition of this year's frosh team the prospects for next year look excellent and should produce a challenging team.

Passing on the Curve



Coach Fiddler and Manager Dietrich





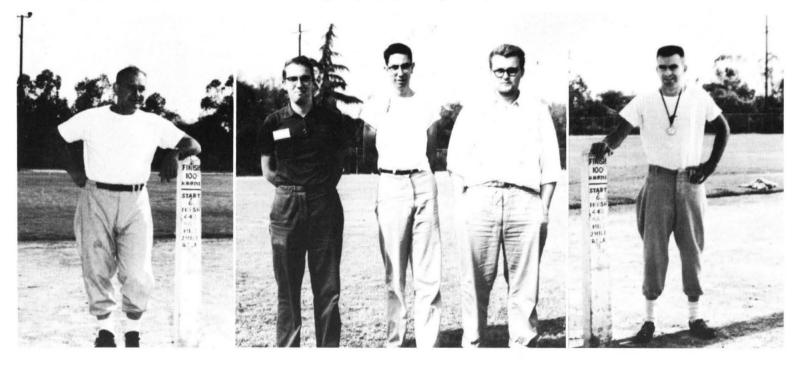


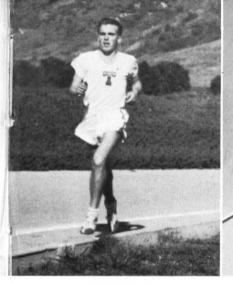
track

Coach Bert LaBrucherie

Mgrs. Ray White, Luis Soux, Al Ashley

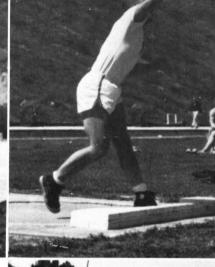
Coach Bert Lamb











Danny Wulff

Dick Herlein

Bob Emerling

Coach Bert LaBrucherie's varsity tracksters, hampered by recurrent rainfalls, got off to a slow start this season, with two of their first four meets called off because of wet grounds. Despite this, the Beaver thinclads looked impressive in their early season meets, taking fourth in the conference relays and rolling up 107 $\frac{1}{2}$ points in their first meet of the year against Pasadena Nazarene, Cal Poly, and Cal Baptist.

Leading pointmakers for Caltech in the opening meets were Dick Van Kirk, junior hurdler, sprinter and jumper, and Vic Johnson, sophomore weight man. In addition, the Beaver middle distance crew of Bob Emmerling, Tony Leonard, Ron Forbess, Mike Rusch, and Marty Tangora was making a big contribution to the point totals for Caltech.

Dan Wulff was the number one miler and two-miler on the squad, also taking time to run the half-mile in relay meets for the two-mile relay team.

Caltech's greatest depth was in the high jump and hurdle events. Larry Kraus, Gordon Barienbrock and Van Kirk were all at or near the six-foot level in the high jump, with Kraus over six-feet two inches. In the hurdles, Van Kirk teamed with Bob Ingram and Ed Krehbiel to give the Beavers one of their strongest shuttle hurdle relay teams in several years.

Krehbiel, Van Kirk, and Forrest Cleveland formed the backbone of Caltech's sprint crew, with Forbess joining the trio for competition in sprint relay events.

With a squad composed predominantly of underclassmen, prospects looked good not only for this season, but for the 1958 campaign as well. Only seniors on this year's squad were Tangora, pole vaulter Bob Norton, and weightmen Chuck Luke and Larry Whitlow.

With competition around the league becoming more and more intense, the Beavers were hard pressed to improve on their fourth place standing off 1956. Pomona-Claremont and Redlands, in addition to ever-powerful Occidental, assembled some of the strongest teams in the history of their respective schools, and these three teams, as the Big T went to press, lookd like the class of the league. Caltech, however, with a weil-balanced squad, loomed as a dark horse contender for third place honors in the SCC for the 1957 season.

Front row: Dick Herlein, Forest Cleveland, Ed Krehbiel, Dick Van Kirk, Chuck Luke, Tony Leonard. Back row: Lanny Lewyn, Bob Norton, Russ Pitzer, Marty Tangora, Bob Emmorling, Ron Forbes.



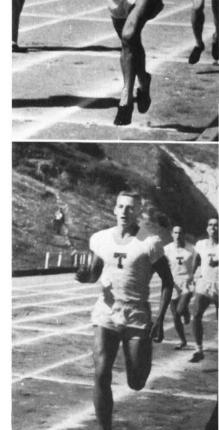
Russ Pitzer



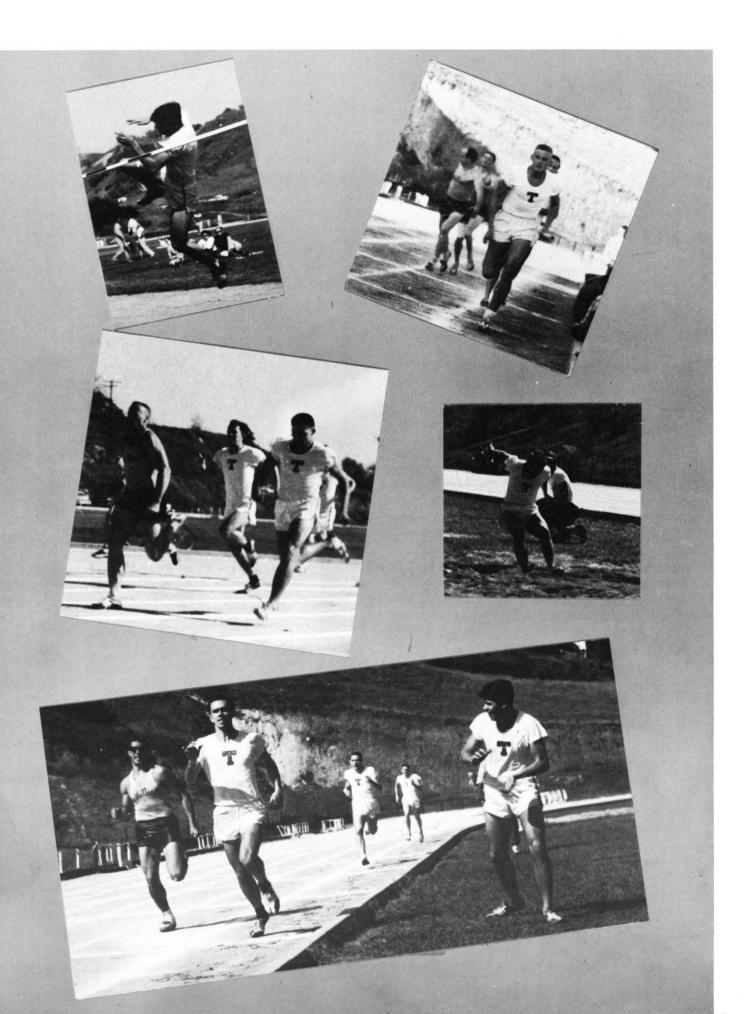
Chuck Luke



Tony Leonard



track



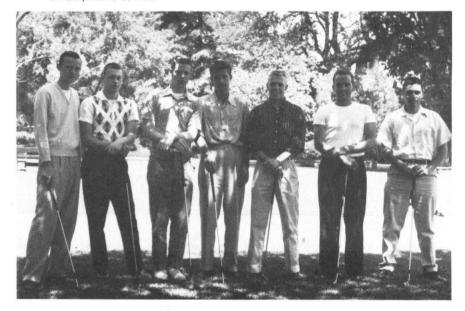


Front row: Frank Cormia, John Lamb, coach, Bernie Mueller. Back row: Bob Tokheim, Reed Wariner, Clint Faisier, Tom Hays, Dave Yount.

tennis



Paul King, Wayne Kreger, Pete Abbey, Charlie Swanson, Pete Finley, Ed Shuster, Jackie Schmitt.

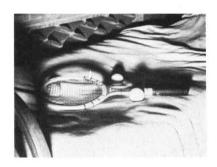


This was a very fine year for tennis at Cal Tech. Although lacking exceptional talent, the Beavers were strong in all positions, and their number five and six men, Bob Tokheim and Read Warriner, could beat any corresponding duo in the SCIAC.

Two tearly season losses to Redlands (7-2) and Pomona (5-4) hampered Tech in conference play, but with victories over Oxy and Whittier, Tech looked good for a second or third place finish. Paz Naz and PCC were also easy victims.

Perhaps the greatest asset of the team was its coach, John Lamb who, thanks to a new conference ruling, was able to coach during matches. His influence was felt most in doubles where many close team victories were decided.

In 1958 Coach Lamb will have to build his squad around three returning lettermen, Frank Cormia, Bob Tokheim, and Read Warriner, as three outstanding seniors, Bernie Mueller, Tom Hays (team captain), and Dave Yount, will be graduating. Clint Frasier, Dave Butterfield, and John Walsh from the Frosh are expected to take up some of the slack.



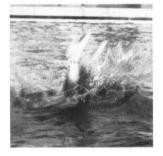
golf

The Tech golf team has been blessed this year with not one but two coaches. With last year's coach Don Turcotte unable to devote full time to the team, the responsibilities of the coach's job have been turned over to Charlie Swanson, par shooter from British Columbia.

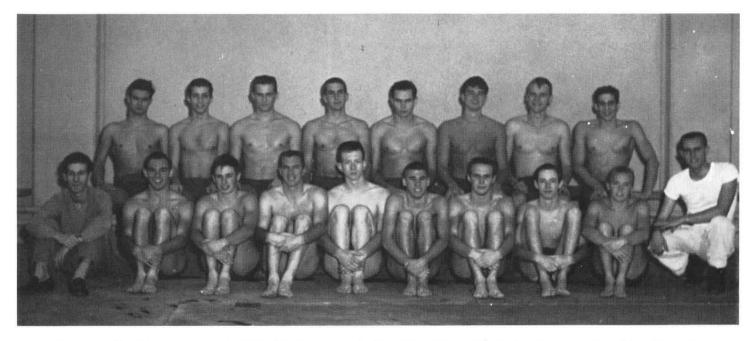
The team this year has consisted of Ed Shuster, Pete Abbey, Wayne Kreger, Jack Schmitt, Pete Finley, Jon Tibbetts and Paul King. Kay Sugahara also played on the team in some of the early season matches.

Prospects in the conference aren't too bright with a strong Pomona team and a renewed Oxy team showing up this year. However the conference tournament on May 17 promises to be a close battle between the three teams.

With four seniors, Captain Pete Abbey, Jack Schmitt, Pete Finley and Paul King all graduating, the team will lose over half of its manpower. Two excellent freshman golfers have appeared and may contribute to an even stronger team next year.



swimming

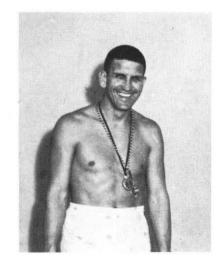


Front row: John Price, mgr., Bob Blandford, Phil Thacher, Ron Dettling, Bob Pailthorpe, Don Owings, Ken Dinwiddie, Gerhard Klose, John Thomas, Ted Bate, mgr. Back row: Clint West, Mike Milder, Bob Smoak, Keith Brown, John Asmus, Clark Rees, Don Wiberg, Norm Velinty.

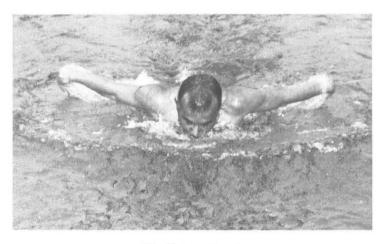
Caltech's swimming team this year faces the problem of defending their championship in a league which has four strong teams. Whittier, Pomona, and Occidental, all are primed to make the Beavers work for their laurels.

The Tech team is not short of talent, however. Leading the way are several outstanding men. Clarke Rees, is the all-event man of the team. This year he has been swimming mainly relays and distance events, breaking more records in the process. Don Owings is fulfilling his promise of last year and has things very much his own way in the breaststroke. Bob Blandford is turning in very good times in the year's new event, the butterfly. Bob Smoak is strong in the backstroke and, like Blandford, holds down jobs on the relay teams. Keith Brown is the sprinter and Thacher, Velinty, Milder, Asmus and Martin fill out a wellbalanced team. Coach "Web" Emery is working hard with the men to have this year's as successful as the last.

The team began the conference competition by winning the difficult Redlands Relays over Oxy and Pomona, winning the final distance relay by feet to gain the victory. In dual meets the team defeated Redlands, then lost a close one to Oxy 45-41. But in an evenly matched conference like the SCIAC in swimming, anything can happen and the Beavers are not going to be caught short by ''letting up'' at the finish.



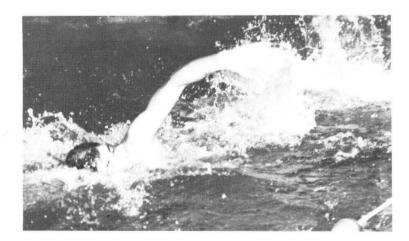
Web Emory, coach



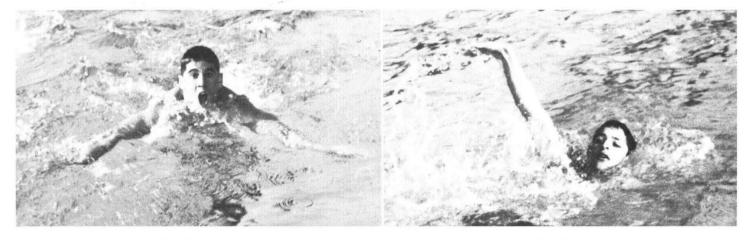
John Thomas, Captain



Clark Rees

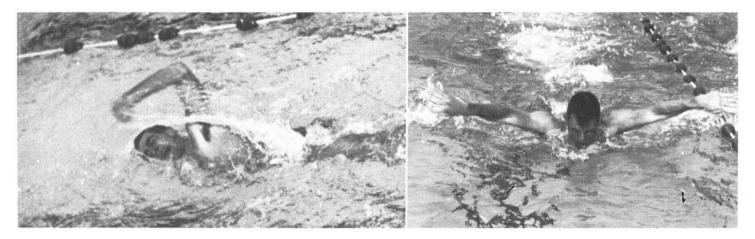


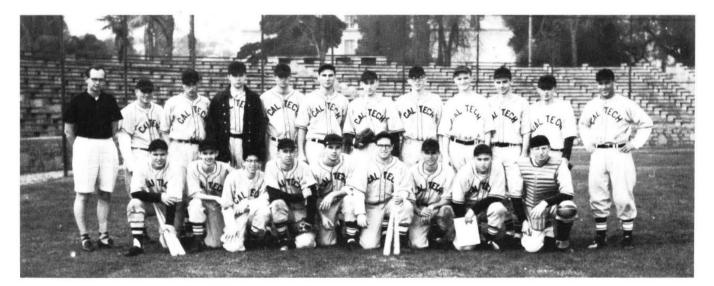
Norm Velinty



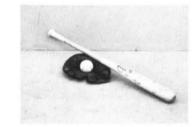
Don Owings

Mike Miller

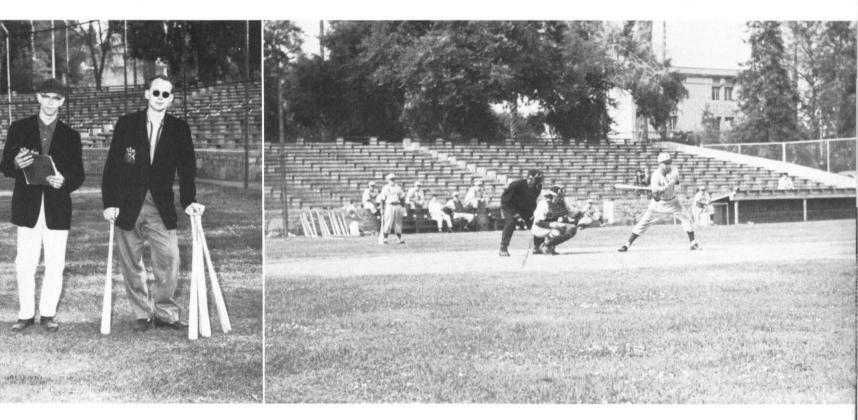




Front row: Ed Berry, Dave Teal, Ken Schultz, Tony Howell, Chuck Malone, Dave Leeson, Walt Johnson, Mike Duke, Bill Kern, Back row: Dick Montgomery, mgr., Walt Specht, John Kelley, Ed Nelson, Howie Bloomberg, Bob Schenter, Al Goldberg, Fred Newman, Cal Callaway, Dale Parkhurst, Dennis Kuli, Ed Priesler, coach.



baseball



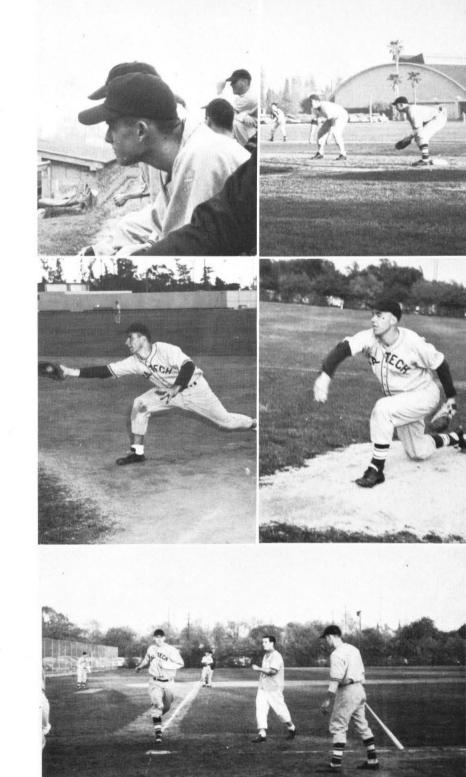
An expanded schedule of sixteen conference games greeted Coach Ed Priesler's varsity baseballers as they prepared for the defense of their 1956 co-championship. The '57 squad which was one of the largest ever to turn out appeared to be stronger offensively but weaker defensively than last year's. The big question seemed to be whether or not the sophomores and new men could fill the gaps left by graduation.

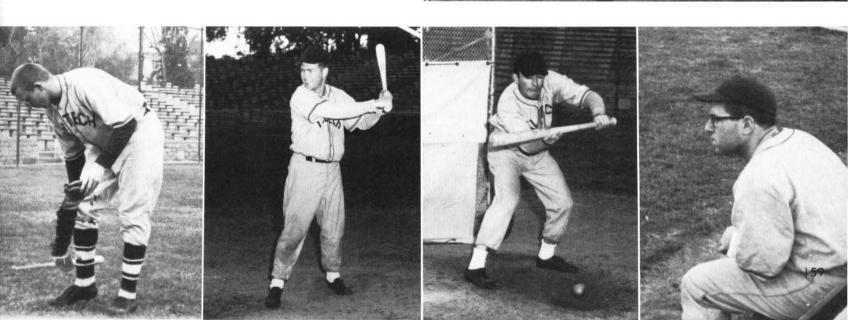
With the sixteen game league schedule which included four double-headers for the Techmen, depth in the pitching was of greatest importance. Leading this year's staff were right hander Ed Nelson who was All-Conference last year as an outfielder and lefty Al Goldberg. Also back from last year's squad was Tony Howellwho showed great promise in early season games. Rounding out the pitching staff were Jim Snyder and John Kelley. This year's catching was to be handled by two year veteran Mike Duke and converted infielder Bill Kern.

Finding the best infield combination seemed to be the biggest problem facing Coach Priesler. Fred Newman had the shortstop position sewed up but the other three positions were still up for grabs. At third base Dave Lesson, Tony Howell, and Lou Montoya were all fighting it out with Leeson getting the early season edge. At second Dennis Kuli was playing most of the early season games but Don Stocking who was second team All-Conference last year and was late coming out seemed to see the majority of action in later games. Dave Teal rounded out the trio of second sackers. First base was being contested for by four men. Bob Callaway, Bob Schenter, Al Goldberg, and John Kelley all showed about the same fielding ability and it appeared that the best hitter would finally get the job.

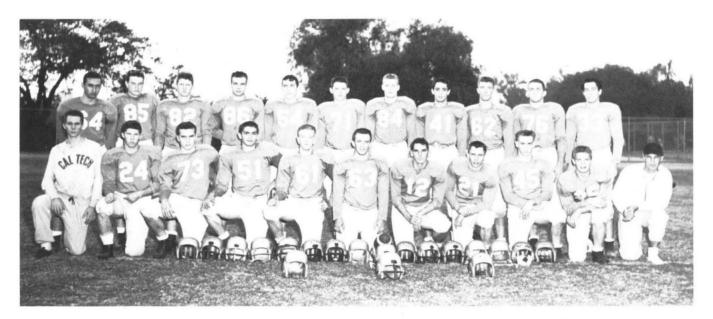
The outfield was one of the best in Tech history. Veterans Chuck Malone in right and Ed Berry in center were early season standouts. Ed Nelson got the call in left when he wasn't pitching with either Ken Scholtz, Howie Bloomberg, and Walt Spect added depth to this department.

At press time the team had won three games and lost four, including a four game stay at San Diego. These games furnished valuable experience and showed the need for quite a bit of improvebent. However they also showed that there existed the available talent for a good team and the conference prospects were bright.



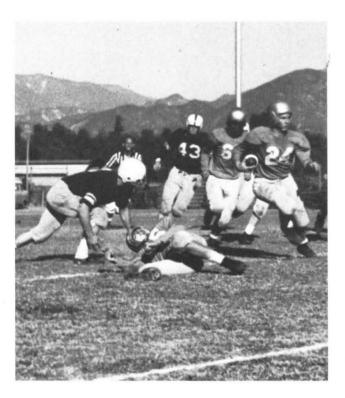


frosh sports . . .



Front row: Tom Bjorklund, mgr., Lannel Purnell, Bill Mock, Randy Schmus, Carl Gottschall, Jon Rampacek, Mel Holland, Wes Shanks, Don Walker, Jerry Siegel, Ed Preisler, coach. Back row: Carl Knickerbocker, Herman Hartung, Sam Trotter, Rick Lindman, John Shier, Larry Long, Lee Dyke, Al Ladderman, Miles McLennan, Jim Sorenson, Jon Kelly.

football



It wasn't a winning season for the California Institute of Technology's freshmen football team. They played four times and lost four times. In three of the games they were completely overwhelmed. Yet, those connected with the team, the players and the coaches, deserve just as much credit as if they had been national champions. More so, perhaps, because it takes a special kind of courage to stay with a losing team.

Head coach Ed Priesler and line coach Hugh Taylor faced the usual big problem, their players' lack of experience. They held many long, grueling practices on the hard and boring fundamentals of the game. Guys like Carl Gotchall, quarterback Mel Holland, Wes Shanks, and many others never missed these practices. Gradually, the team improved, gaining in skill and confidence. And once, they played a really good game. For three happy quarters they pushed the Pomona Sagechicks all over their own field. Lindman looked good that day, and Ladderman, and Holland, and the whole team. Carelessness finally cost them the game, but not the thrill of playing like a winning team. We'll be looking forward to seeing a lot of these men on the varsity teams of the next three years.

basketball

The class of 1960's basketball team produced many thrills and several good varsity prospects; it also produced five wins in nineteen games. What the team lacked in winning ways, though, it made up in hustle and sincerity.

The team got off to a slow start and seemed not to improve greatly until an early season 92-42 loss to Redlands snapped them out of it. The first win of the season came against Cal Poly, when after letting the Polymen tie the score in regular time, the Beavers poured it on in over time and outscored their opponents 14-3. Final score: 56-45. Mel Holland scored 24 points for the victors.

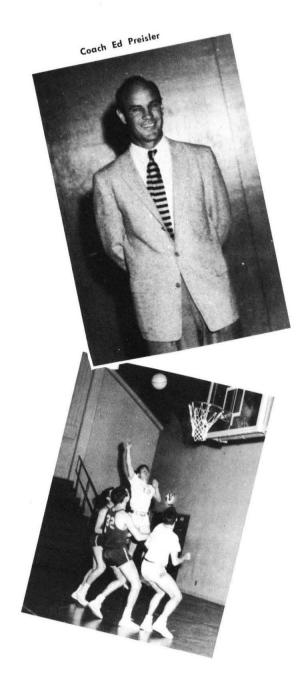
The next win was the first and only win in eight tries against conference opponents. A great defensive game and brilliant ball handling were the Caltech means to a 49-40 end for the fledgling Whittier Poets at the Scott Brown Gym.

The CalBaptist J.V.'s were the victims of the next two Beaver victories. Neither team looked impressive in the 62-56 and 54-41 games.

From this point on, the season was marked by several heartbreaking losses and only one victory.

The first heartbreaker went to La Verne, when Mel Holland's potentially tying layup rolled around the rim and out as the buzzer sounded.

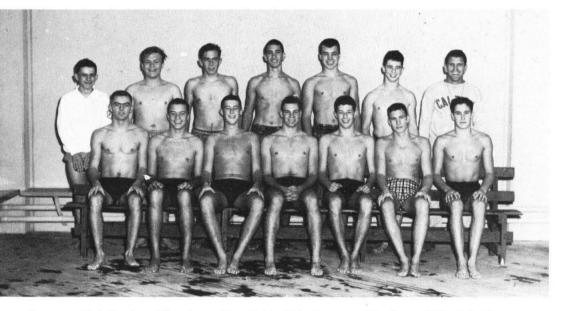
Oxy provided Tech's next disappointment. With five minutes left, the Tigercubs broke the lead Coach Preisler's boys had held throughout the game and won 42-38.



Front row: Jim Farmer, mgr., Sid Roth, mgr., Al Funada, Lee Hood, Mel Holland, Dave Blakemore, Dave Resnik. Back row: John Walsh, John Munson, Dave Singmaster, Ron Arps, Len Maley, Rick Linman, Ed Preisler, coach.



water polo



Fron row: Kent Frewing, Mike Mann, Dave Tucker, Bob Thompson, Pete Rony, Wally Stolz, Doug Dunham. Back row: Gary Zimmerman, mgr., Jerry Wilhelmy, Dave Mitchell, Paul Widess, Dave Singmaster, Don Voet, Web Emory, coach.

The Tech Frosh climaxed their season taking Oxy 9-4. This and the defeat of L. A. State at their hands placed the Beaver Babes in a second place position. Then the unfortunate happened, in their second game the Oxy Frosh caught fire and by the end of the game tied the score. This put the game into "sudden death". The exhausted team held the line for two minutes when an Oxy man got off a lucky shot. The final position of the Beaver Babes—a tie for second.

Under Coach Web Emery's guidance several good players were developed. Outstanding on defense was Dave Tucker, who could also carry the ball where it was needed. On offense the frosh had two excellent players, Pete Rony and Bob Thompson. These men and others will be valuable additions to next year's Water Polo team.

cross country



Front row: Bruce Campbell, Tom Keil, Roy Currence. Back ow: Jon Uncapher, Tom Bjorklund, Neal Sheeley, Claure Fiddler, coach.

This year's frosh cross-country team was led by team captain Jon Uncapher and the consistently first man of the team, Bruce Campbell. They had a one-two conference record and took fourth in the conference meet. Under the able coaching of ex-Oxy trackman Claude Fiddler, the team did very well.

Following Bruce Campbell, the rest of the team, Jon Uncapher, Tom Keil, Roy Currence, and Tom Bjorklund added the needed support to make a wellrounded team. This group of frosh stamina-men offers many promising members ot next year's varsity team.



Tom Kiel



Wes Shanks



Lee Hood



Front row: Lee Hood, Al Ladderman, Mel Holland. Back row: Wes Shanks, John Shier, Mike Magie.

track

This year's Beaver frosh team has had to compensate for its lack of depth and experience through a keen spirit of competition. The Beaver yearlings developed rapidly as the year progressed and promised to provide a real fight in the coming conference relays.

Sprinting chores were evenly divided among Mel Holland, Lee Hood and Tom Keil. Keil also handled the 440 yard run, while Lowell Clark took care of the 880 yard urn. One of the bright spots on the yearling team was Wes Shanks who turned in consistently sparkling performances in the mile and two mile runs. Mel Holland, Al Laderman, Carl Goleschall, and Tom Brown performed the hurdle chores for the freshmen.

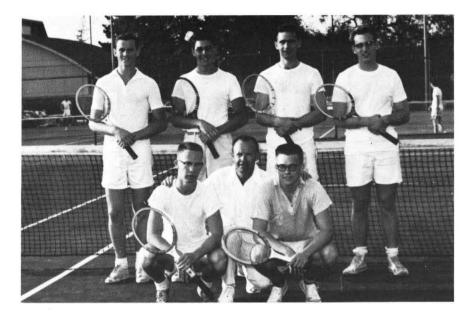
The field men, led by the versatile performance of Al Laderman in the pole vault, broad jump, and shot, certainly played an important role in making the frosh team what it was. Mike Magie turned in consistent point gaining performances in both the shot and discus, while Shier backed him up strongly. Holland handled the high jump duties while Hood shared broad jumping honors. Lannes Purnell did an outstanding job in the javelin, consistently gaining top honors in this event.



Mel Holland, Bruce Campbell



Mike Magie



Front row: Dave Butterfield, Coach Lamb, John Bard. Back row: Carl Morris, Marty Carnoy, John Walsh, Mike Magie.

The 1957 edition of the Frosh tennis team has been considerable more successful than some of its predecessors. Blessed with unusual depth, the team has compiled a record of three wins and four defeats with about half the season gone. Three of the four defeats were by the close score of five to four.

Outstanding played on the squad is ambidextrous John Walsh, who has dropped only one singles match this season while playing both tennis and baseball. The rest of the squad includes: captain Carl Morris, Dave Butterfield, John Bard, Mike Magie, and playing manager Martin Carnoy. Pedro Bolsaitis, Neil Sheeley, and Lou Toth have seen limited action.

With three seniors graduating from the present varsity squad, Coach John Lamb is hoping that some of the members of the frosh squad will be able to take over places on the varsity team next year.

tennis

baseball

Front row: John Peterson, Grant Carrington, Lance Wallace, Dave Blakemore, Tom Jovin. Back row: Sid Roth, mgr., Sam Trotter, Bill Smith, Herm Hartung, Dave Singmaster, John Walsh.

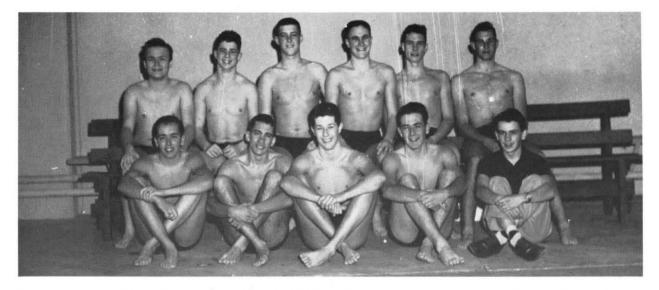


The frosh baseball team, stricken with holes at basic positions, but still possessing potential, is perhaps the biggest question mark among the Tech spring-sports teams. as the Big T deadline approaches.

Coach Jack Peterson has had to pull Dave Blakemore in from third base to fill the hole at catcher, while former center fielder John Walsh took over pitching duties. Whether improvement by these key players at their unfamiliar positions will be rapid enough to enable the Beavers to win some games, only time will tell.

Backing up Wash and relief pitcher Sam Trotter is a noisy, hustling infield, including lanky first baseman Lance Wallace, consistent both afield and at bat to date, and shortstop Herm Hartung, with his rifle for an arm. Hustling Tom Jovine, third base, and second sacked Grant Carrington, bench jockey supreme, fill out the infield.

Adding punch to the batting order have been outfielders Bob Golden, Bill Smith, Len Maley, Dave Singmaster, and Bob Cadwell. Easily the hardest worker on the team was manager Sid Roth.



Front row: Thompson, Paul Wides, Pete Rony, Paul Mitchell, Gary Zimmerman, mgr. Back row: Jerry Wilhemy, Dan Voet, Dave Tucker, Don Dunham, Wally Stoltz, Bob Thompson.

swimming

With their victory over Occidental early in April, the Caltech Freshman swimmers nearly clinched a second place in the final Conference standings for the season. This came after the buoyant Beavers had beaten Redlands and had turned in an excellent second place at the Conference relays.

Coach Emery's pre-season calisthenics and steady-pace training paid off in large dividends when the swimmers actually got into competition. The free-style division of the squad was led by Dave Tucker, who consistantly give the varsity men a run for their money. He was helped in this by Pete Rony, Dave Mitchell, Gerry Wilhemy, and Mike Mann.

Wally Stolz and Doug Dunham swam a back stroke that is going to be a big asset to future varsity teams. Breast strokers this season were Don Voet, Paul Widess, and Phil Brooks. Bob Thompson trained hard to build up his endurance for the butterfly contests. Miles McClennan and Pete Rony handled the diving competition for the freshmen.

Winning relay teams had Stolz, Voet, Thompson, and Rony in the medley event. Tucker, Rony, Mitchell, and Thompson swam the free style relay.

The record of this team, to date, is just an indication of the achievements that are yet to come this season. They are doing a good job in helping Caltech swimming stay in the winning columns on the sports pages.



Pete Rony

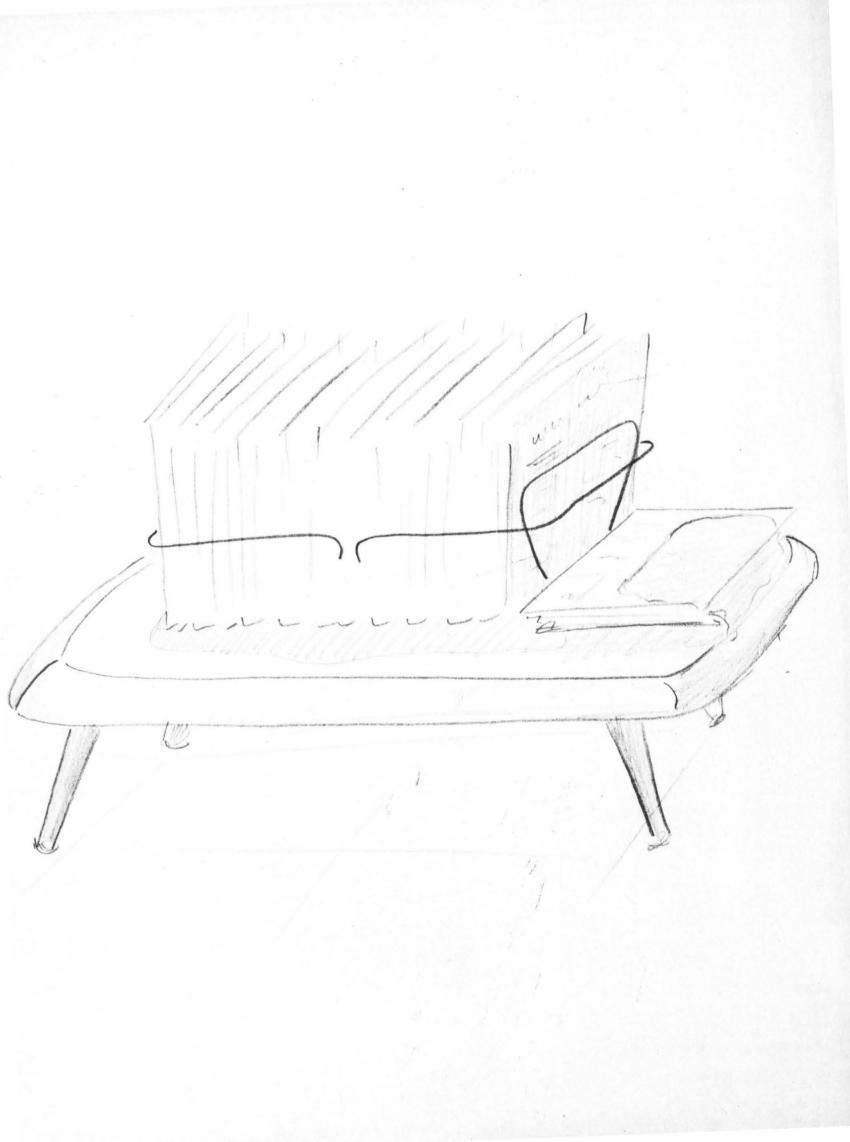


Bob Thompson



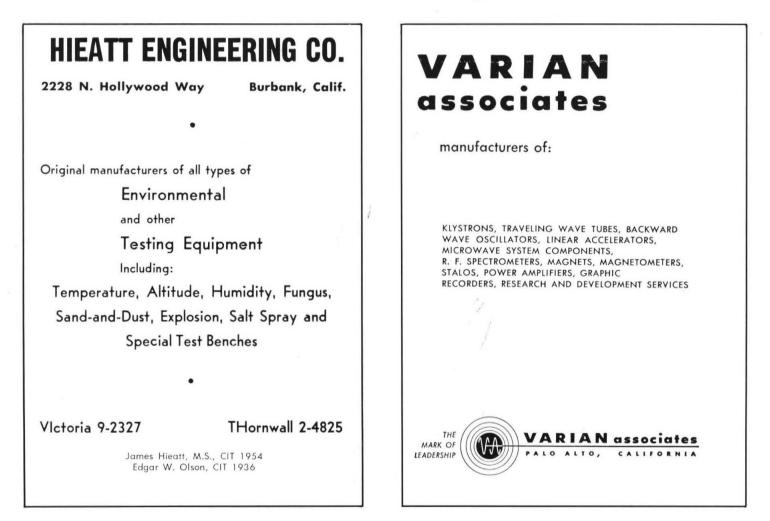
Dave Tucker











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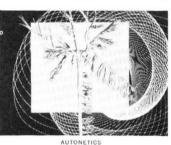
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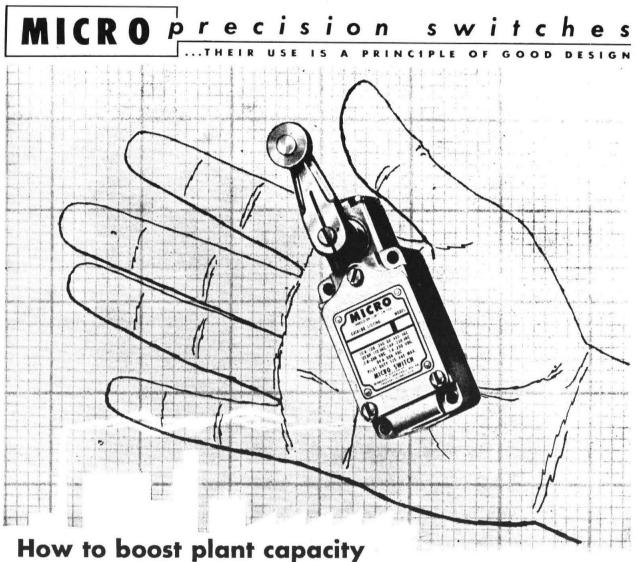
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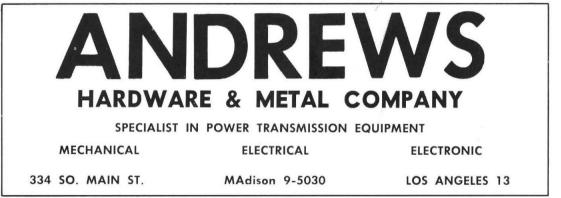
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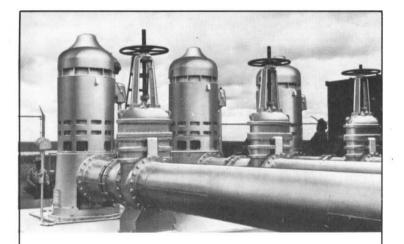
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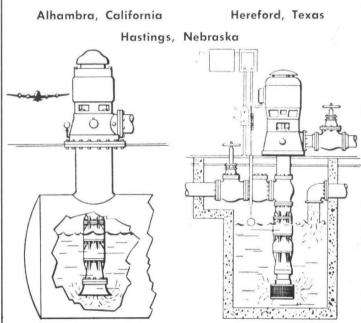
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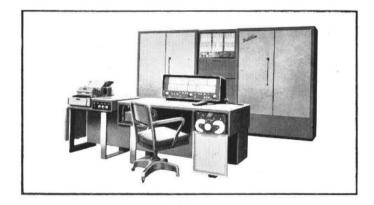
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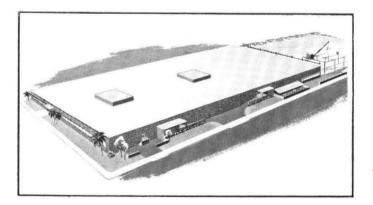
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Dave Hartke, Class of '55 (second from left), joined Electro-Data six months ago after graduating from California Polytechnic. Dave is a respected member of the Datatron team, working with top men in the electronics field. The photo shows a project group led by Director of Engineering L. P. Robinson (M.S. California Institute of Technology, Class of '47).



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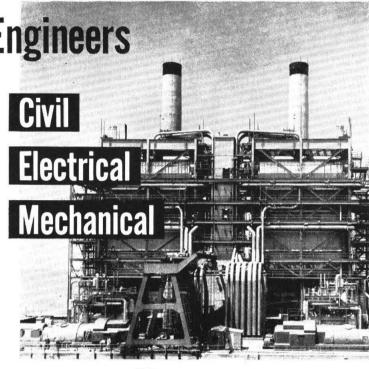
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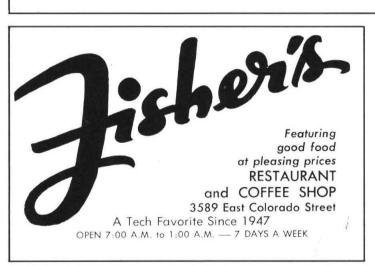
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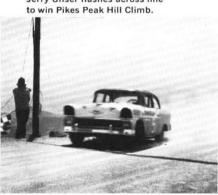
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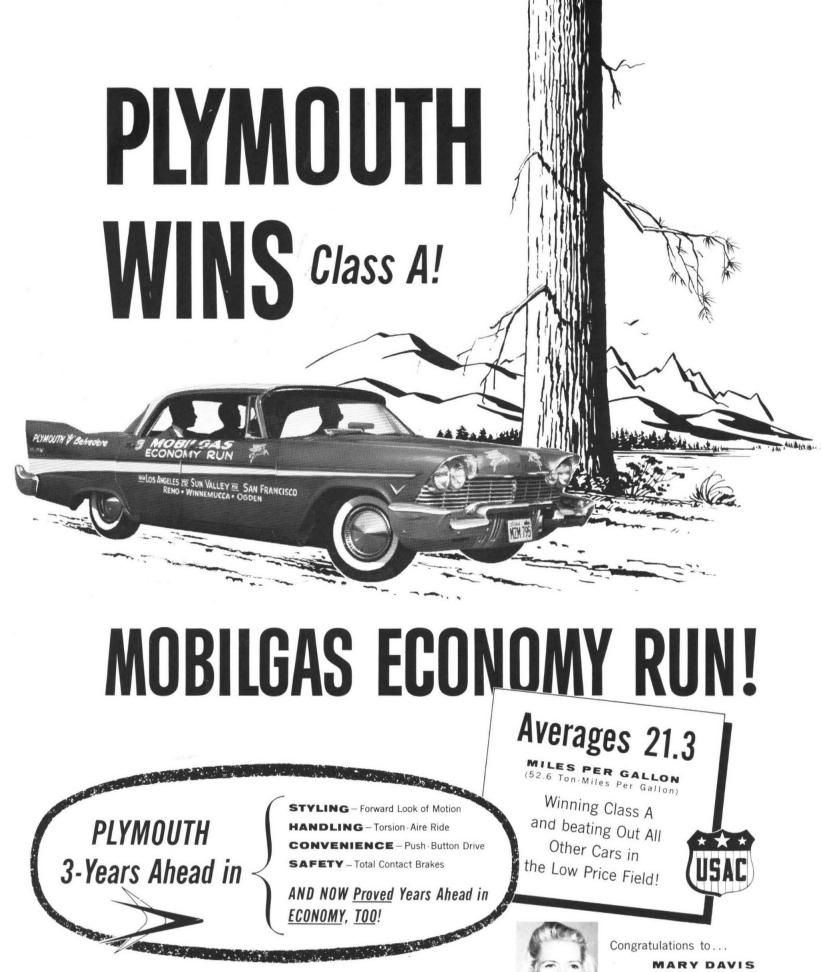
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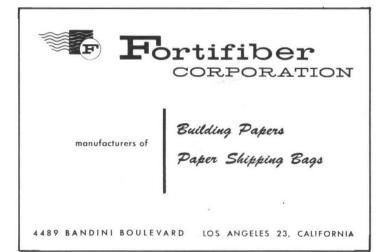
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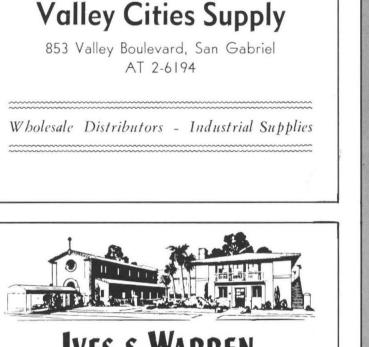


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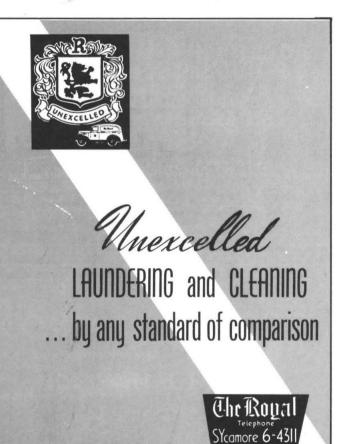
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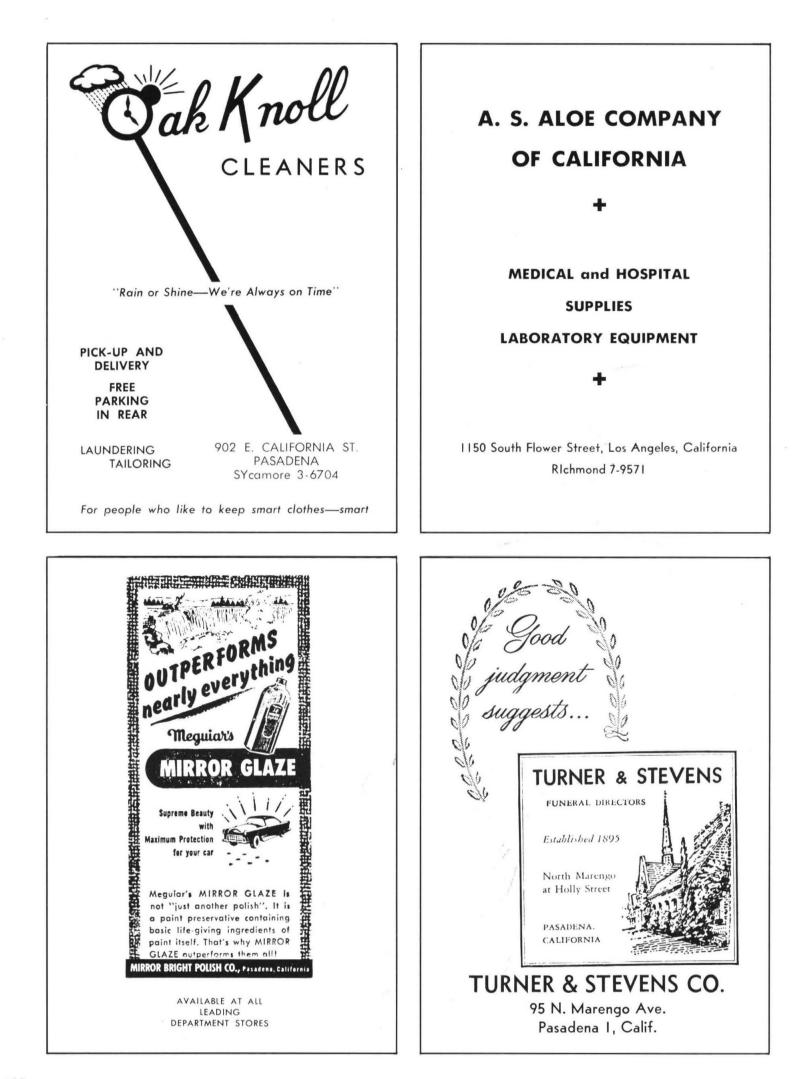
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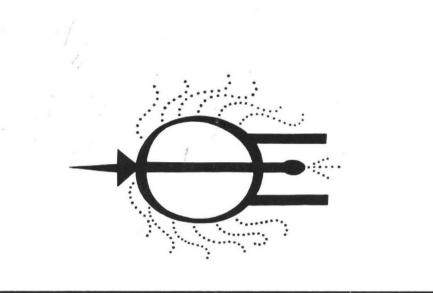


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Electronics Research Engineer Irving Alne records radiation antenna pattern on Lockheed's Radar Range. Twenty-two foot plastic tower in background minimizes ground reflections, approximates free space. Pattern integrator, high gain amplifier, square root amplifier and logarithmic amplifier shown in picture are of Lockheed design.



Mechanical Research Engineer W. M. Watkins (left) directs Research Mechanic Earl Rollo in operating Lockheed's new Hailstone Gun during a test on the effect of hailstones on new types of plastic radome "skin." The gun, which was designed by Watkins and Mechanisms Group Engineer G. W. Louthan, fires up to five hailstones spaced 25 feet apart at speeds ranging from 270 to 500 mph. The hailstones, which are made in the gun, can be varied in size from 3%" in diameter.



Research Engineer Russell Lowe measures dynamic strain applied by Lockheed's 500,000 lb. Force Fatigue Machine on test specimen of integrally-stiffened Super Constellation skin. The Fatigue Machine gives Structures Department engineers a significant advantage in simulating effect of flight loads on a structure. Among other Lockheed structures facilities are the only shimmy tower in private industry and largest drop test tower in the nation.



C. H. Fish, design engineer assigned to Lockheed's Icing Research Tunnel, measures impingement limits of ice on C-130 wing section. The tunnel has a temperature range of -40° F. to $+150^\circ$ F. and maximum speed of more than 270 mph. It is the only icing research tunnel in private industry.

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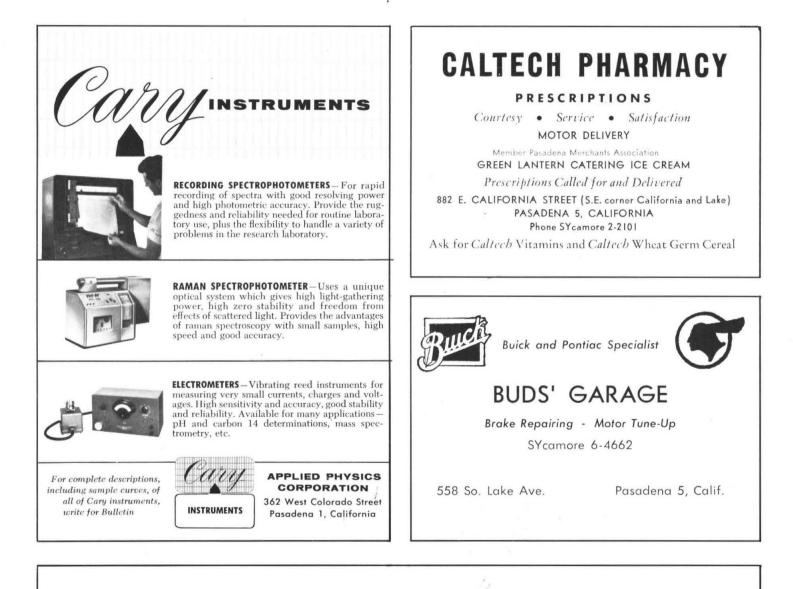


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Both because of the national need and the inclination and experience of the key people, emphasis in The Ramo-Wooldridge Corporation is on the development of products having a high content of scientific and engineering newness. Prominent examples are the Intercontinental and Intermediate Range Ballistic Missiles, Air Force programs for which R-W has over-all technical direction and systems engineering responsibility. Additional examples are advanced work in the fields of modern communications, digital computing, data processing, fire control, and navigation systems for the military; and automation, operations research, and data processing projects for business and industry. All of this development work is strengthened by a supporting program of basic electronic and aeronautical research.

All features of the organization and of the operational procedures of the company are designed to be as appropriate as possible to the special needs of the professional scientist and engineer.

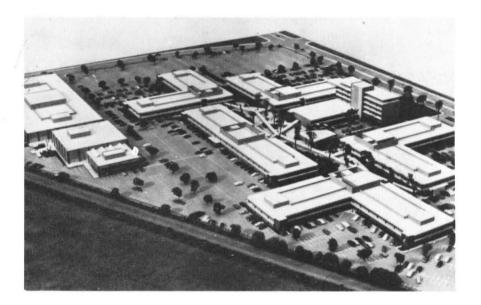
The following paragraphs constitute a brief progress report on the current status of our growth and on the activities in which we are engaged.

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Total R-W employment now numbers 3150, and of these 800 are members of the professional scientific and engineering staff, including 160 Ph.D.'s, 290 M.S.'s, and 350 B.S.'s or B.A.'s. A gratifyingly high percentage are men of broad experience and, occasionally, national reputation in their fields.

Facilities

The company's Los Angeles facilities, located in the International Airport area, consist of eleven buildings totaling 600,000 square feet of modern research and development space. Three of these buildings, completed in the past five months, are the initial units of our entirely new 40-acre Research and Development Center, a model of which is shown above, which we believe will be one of the finest



research and development facilities in the country. Three additional buildings of the Center are currently under construction. Nearby is the R-W flight test facility, including hangar, shop, and laboratories, located on a 7-acre plot at International Airport.

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Adequate financing for our growth, as well as other important corporate advantages, come from our close relationship with Thompson Products, Inc., one of the nation's most progressive large corporations. Arrangements with Thompson include over \$20,000,000 of financing to cover the Ramo-Wooldridge expansion requirements of the next few years.

Manufacturing

Production has been under way in Los Angeles on some projects since the latter part of 1955. To provide for quantity production of electronic systems, a manufacturing plant is now under construction on a 640-acre site in suburban Denver, Colorado. The initial unit of the plant, about 140,000 square feet, is expected to be completed by mid-1957.

Fields of Activity

The technical areas available to a company specializing in advanced electronic systems

and guided missiles work are numerous, and no attempt has been made to impose narrow limits on the areas considered suitable for future planning. Therefore the following list of fields simply outlines the kind of work that is currently under way, and that is expected to continue and expand during the next several years:

- Guided Missile Research and Development
- Aerodynamics and Propulsion Systems
- Communications and Navigation Systems
- Automation and Data Processing
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- Airborne Electronic and Control Systems
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- Basic Electronic and Aeronautical Research

For a copy of our booklet, "An Introduction to The Ramo-Wooldridge Corporation," or other additional information, write to:

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