



**T
BIG
T**

1964





BIC

T

Ref
T
171
C216
B5
1964
W.C.

HUMR

PKA

F.O.E. 26

A.L.F. 27 JWP

A.H.W. H.C.A. 25

B.G. EVANS

Hayman 24

R.P. Evans 27 GTM

RC-26

J.W.H. 26

W.W. 25

F.A.L. 25

PI

EPSTEIN

W.C.W. 27 - A.M. 24 E.E.W. 25 R.S.B. 20

R.LOHSE 27 R.H.

NEILL 26

HAYTON 24

CAS 27 R.E.H. 24 G.R.M. 24 B.PAYNE

T.S.S. 27 E.J.R. 28

LEB 25

IRWIN 24 A.S.L. 26

BRAN 24 MICHAEL 24

V

H.A.S.P.E.R.O.M. 27 H.T.M.S.C. 27 E.C.B. G.N.P.

BILL HATCH

RAP 25

HACKER

1964

F.H.B. 25

SIGM

5026

H.E.H. 2

BETA 26

STAFF

Editor

Bob Levin

Business Manager

John Turechek

Faculty Editor

Tom Pucik

Activities Editor

Dimitri Papanastassiou

Sports Editor

Doug Gage

Seniors Editor

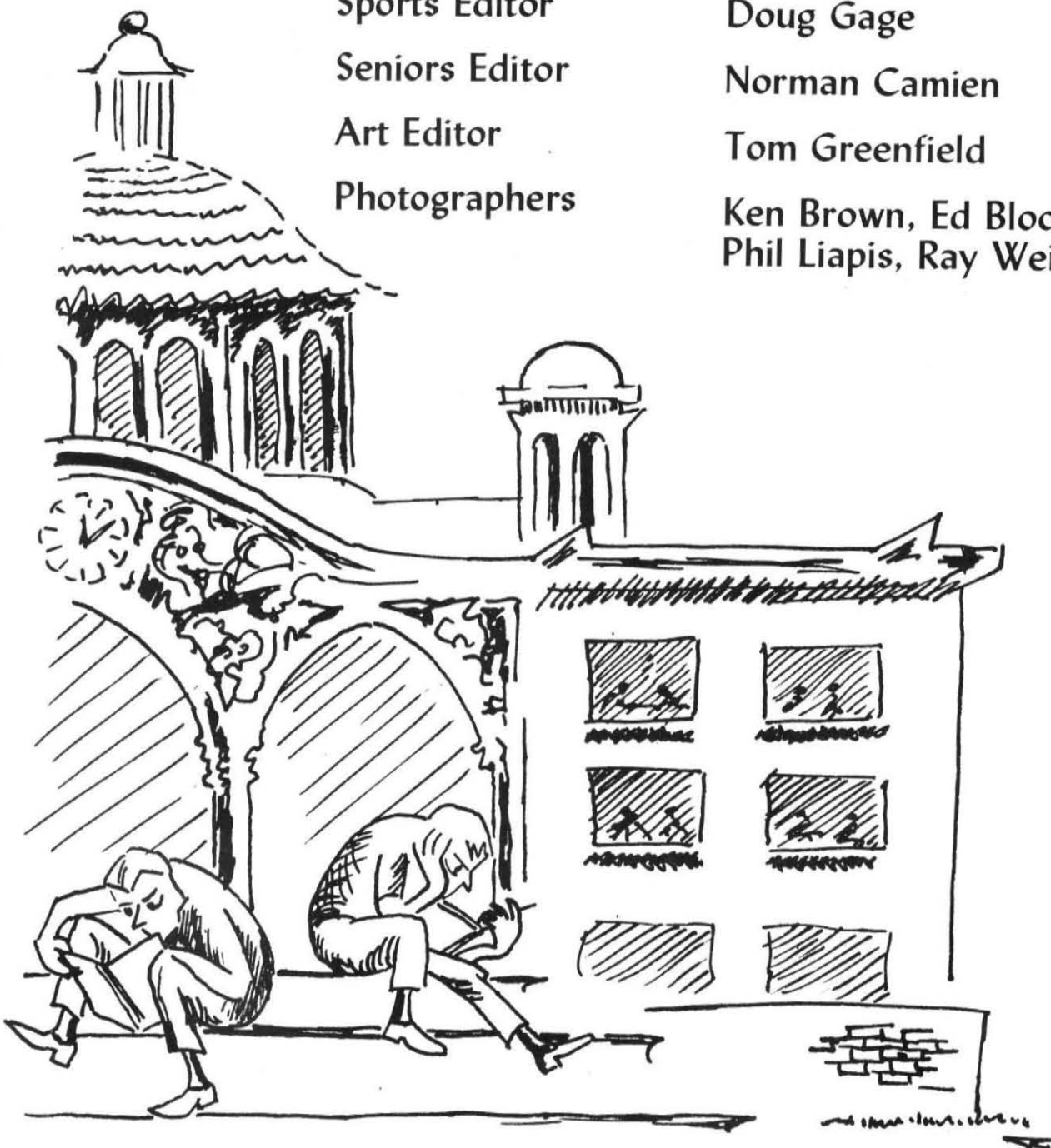
Norman Camien

Art Editor

Tom Greenfield

Photographers

Ken Brown, Ed Bloomberg,
Phil Liapis, Ray Weiss





IN MEMORIAM

William C. McDuffie

Theodore Von Karmen

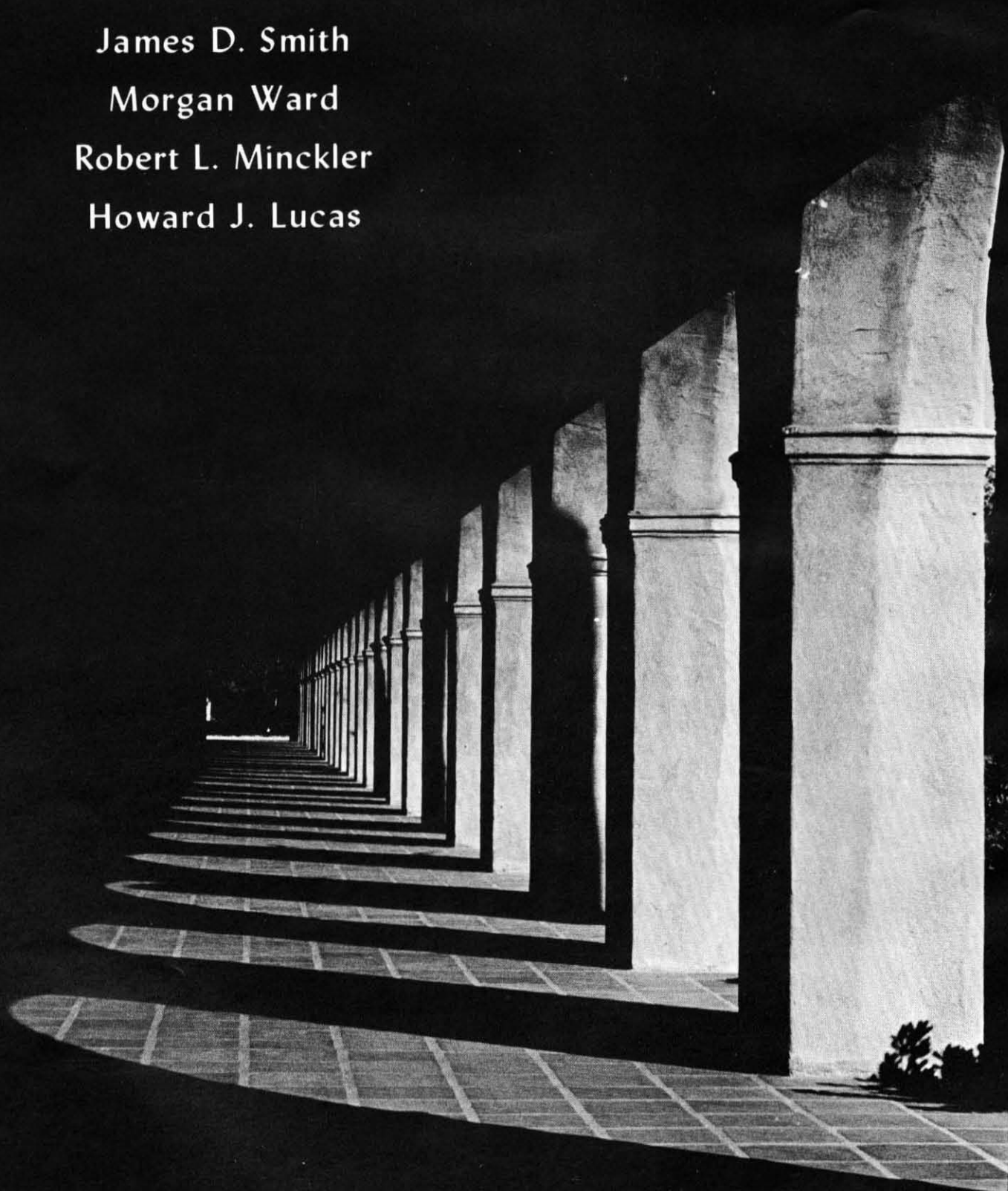
Gordon A. Alles

James D. Smith

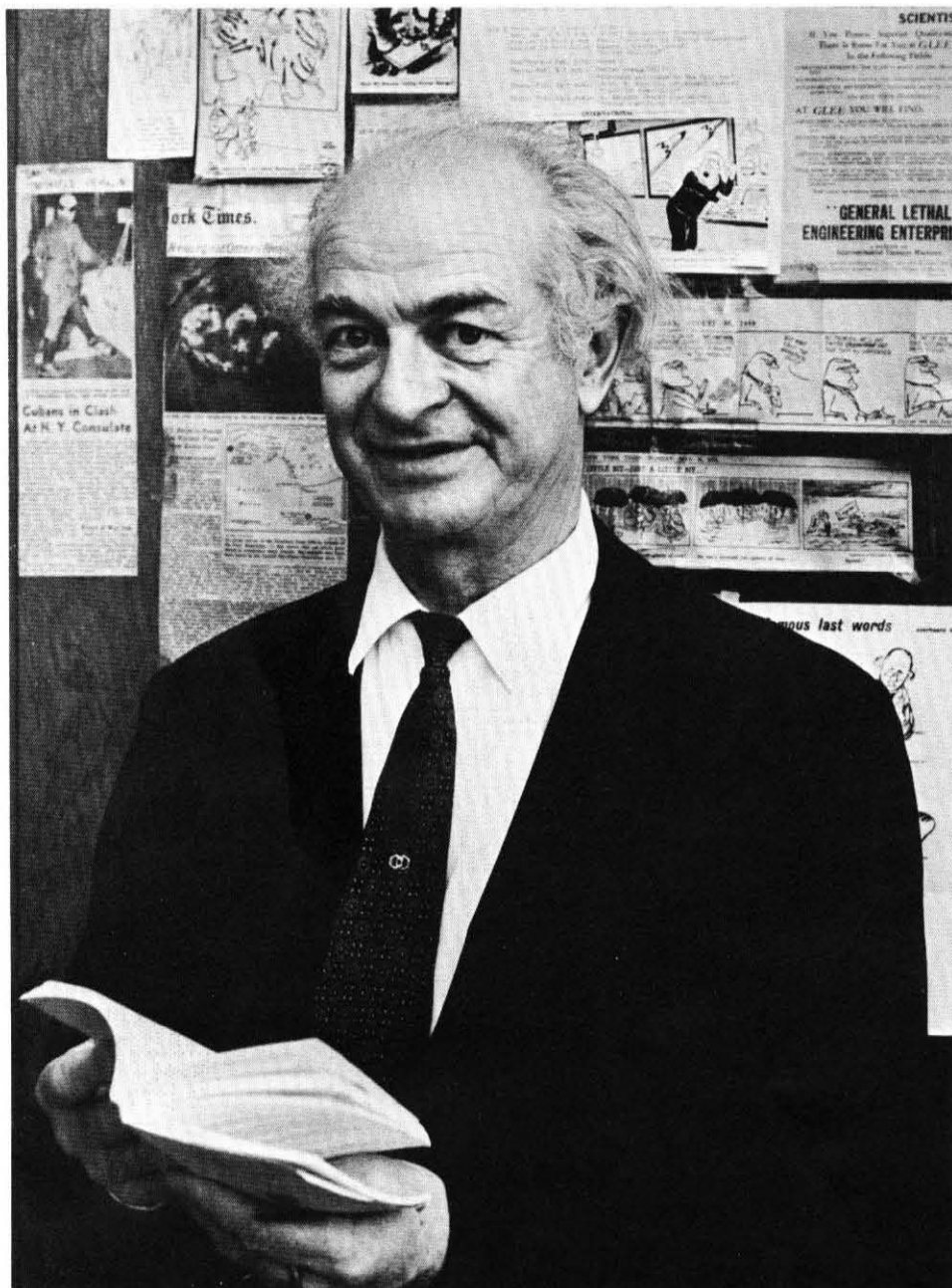
Morgan Ward

Robert L. Minckler

Howard J. Lucas



**NUMBER
TWO!
NOBEL
PEACE
PRIZE,
1962**



DR. LINUS PAULING

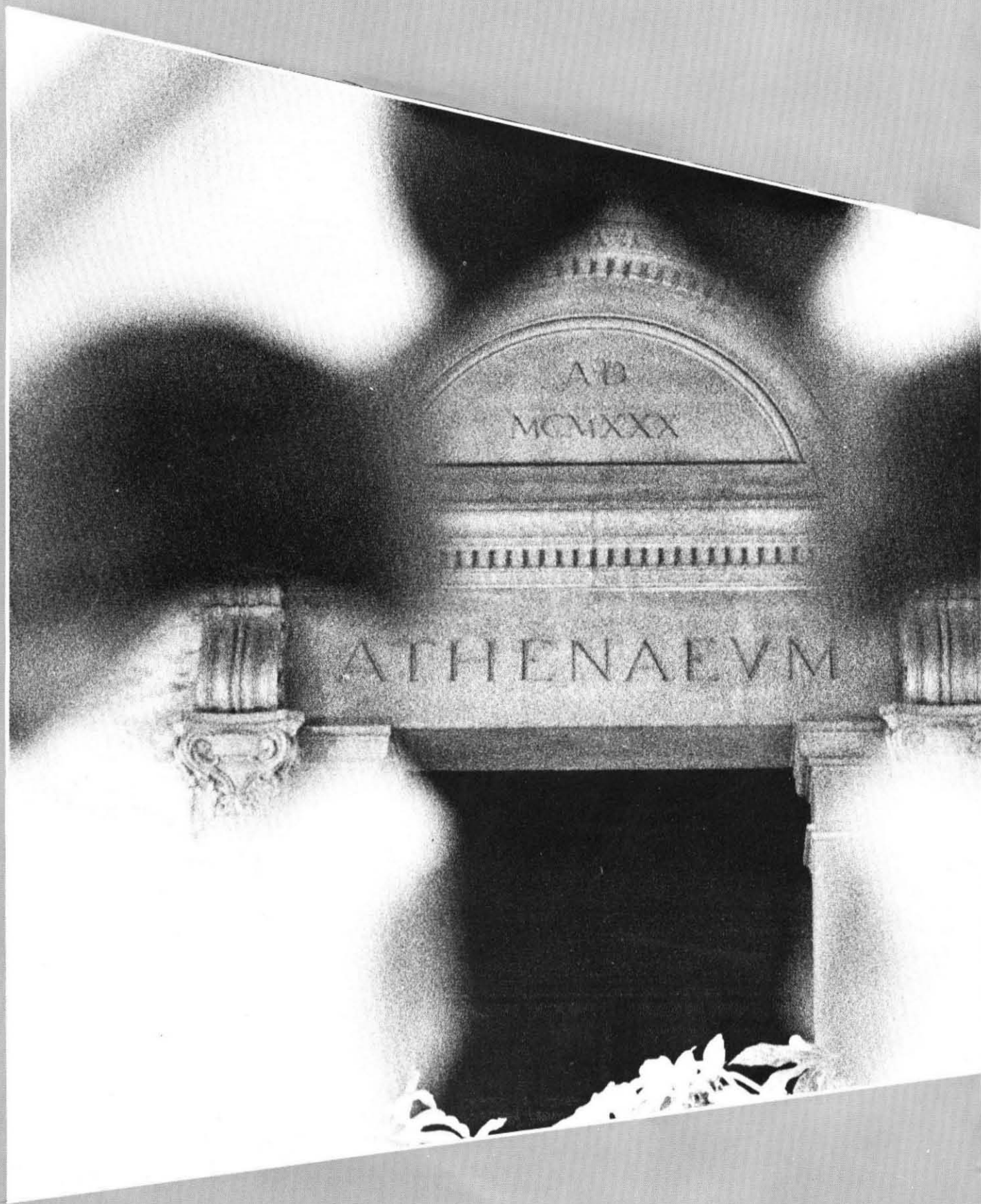
Nobel Laureate—1954, 1962

Dr. Linus Pauling, Professor of Chemistry at Caltech since 1931, was awarded the Nobel Peace Prize for 1962. This award, coupled with his 1954 Nobel Prize in chemistry, makes him the first person in history to receive two individual Nobel Prizes.

Dr. Pauling has fought a ceaseless battle against nuclear testing. He believes nuclear weapons present a grave danger to humanity, not only through their immediate destructive power, but also through the long-range effects of radioactive fallout. The Nobel Committee's announcing the award on October 10, 1963, the day the nuclear test ban treaty formally went into effect, seems to vindicate his efforts.

The staff of this annual, on behalf of the Associated Students of the California Institute of Technology, take great pleasure in congratulating Dr. Pauling for this unique honor.

Photograph by Ray Weiss.



I
FACULTY





Lee A. DuBridge, President

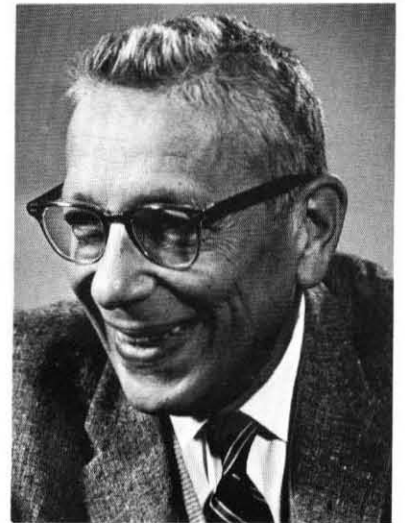
DEANS



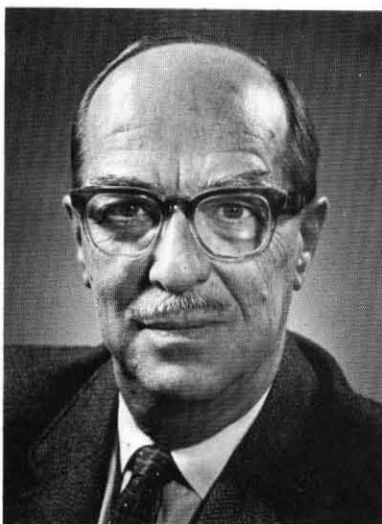
ROBERT F. BACHER
Provost



HENRY I. WEITZEL
Registrar



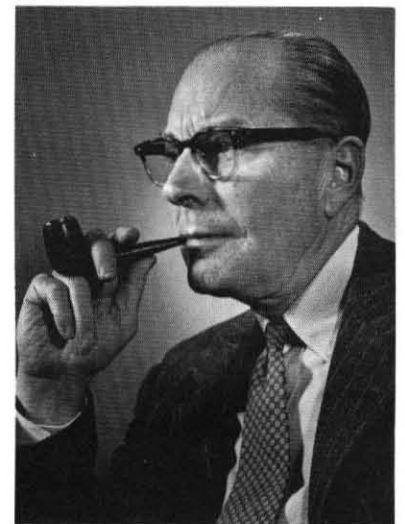
H. FREDERIC BOHNENBLUST
Dean of Graduate Studies



FOSTER STRONG
Dean of Freshmen



PAUL C. EATON
Dean of Students



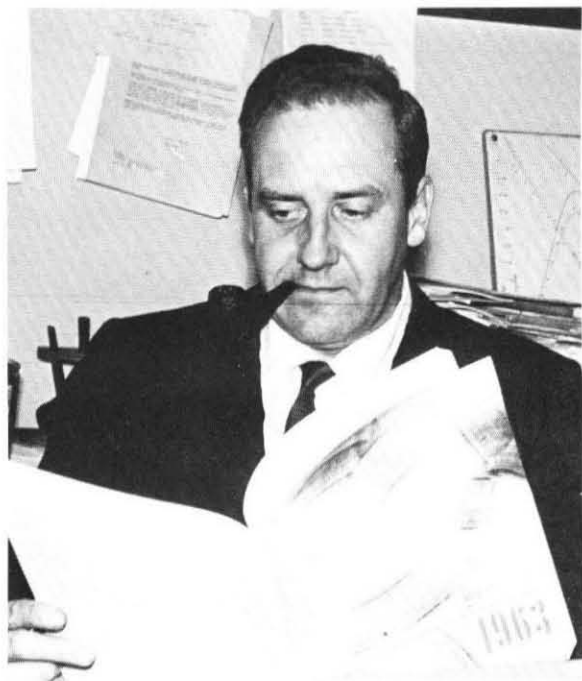
L. WINCHESTER JONES
Dean of Admissions

(Photograph of President DuBridg by James McClanahan.)

BIOLOGY



LEFT TO RIGHT: S. Emerson, A. van Harreveld, A. J. Haagen-Smit, R. D. Owen, A. Tyler, H. Borsook, G. Attardi, M. Delbruck, A. J. Hodge, R. L. Sinsheimer, C. J. Brokaw, R. S. Edgar, R. W. Sperry, N. H. Horowitz, E. B. Lewis.



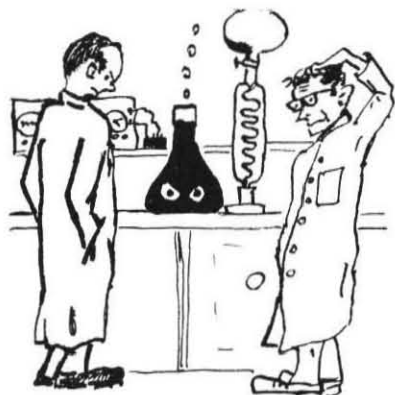
RAY D. OWEN
Chairman of The Division of Biology



CHEMISTRY



FRONT ROW, LEFT TO RIGHT: R. M. Badger, S. I. Chan, R. M. Pitzer, E. W. Hughes, J. D. Roberts. SECOND ROW: L. Pauling, A. Kuppermann. BACK ROW: J. H. Sturdivant, R. E. Dickerson, F. C. Anson, H. M. McConnell, O. R. Wulf.

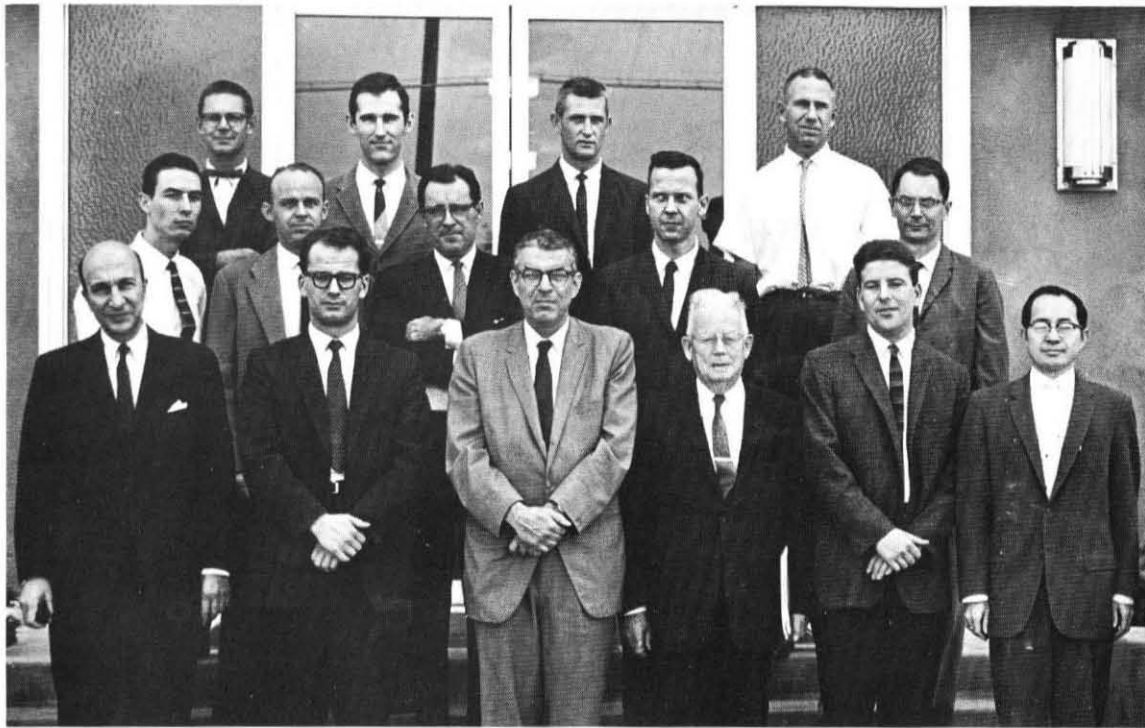


FRONT ROW, LEFT TO RIGHT: B. S. Malone, R. G. Rinker, B. H. Sage, C. M. Knobler. SECOND ROW: G. N. Richter, W. H. Corcoran, P. A. Longwell, R. C. Seagrave, H. H. Reamer.



JOHN D. ROBERTS
Chairman of the Division of Chemistry & Chemical Engineering.

CHEMICAL ENGINEERING



E
L
E
C
T
R
I
C
A
L

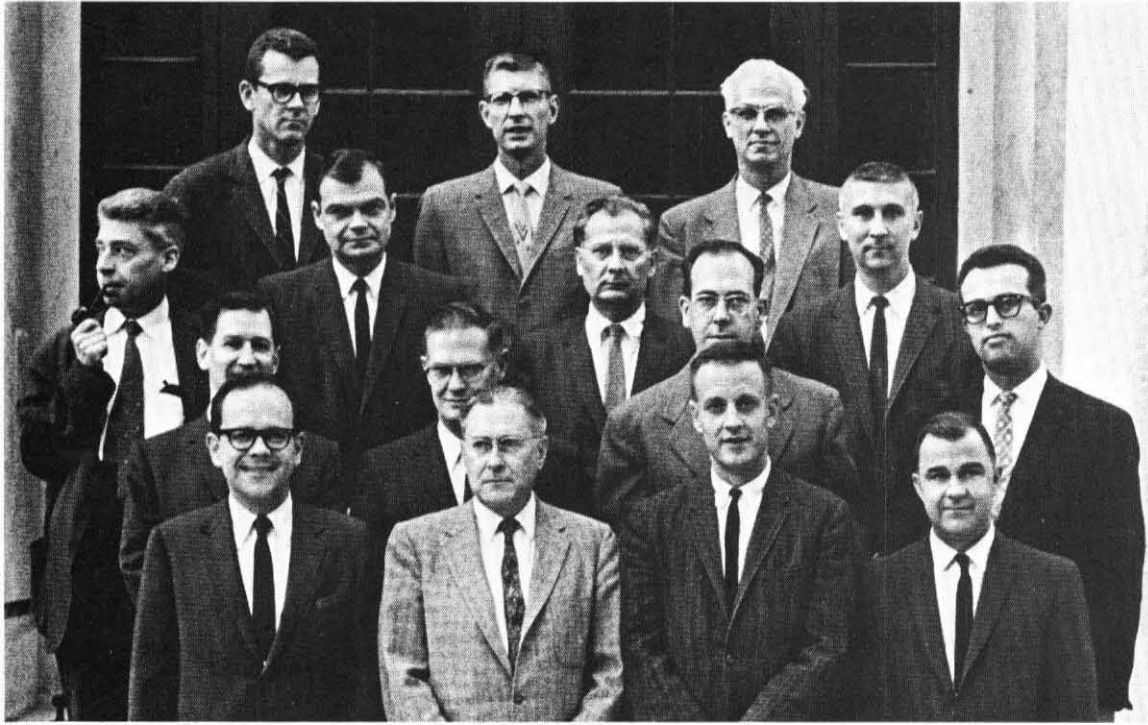
FRONT ROW, LEFT TO RIGHT: C. H. Papas, P. Daly, R. V. Langmuir, R. W. Sorensen, R. Sivan, R. F. Soohoo. MIDDLE ROW: C. A. Mead, M. A. Nicolet, G. D. McCann, H. C. Martel, P. V. Mason. BACK ROW: F. B. Humphrey, G. D. Swanson, T. L. Grettenberg, C. H. Wilts.

ENGINEERING AND



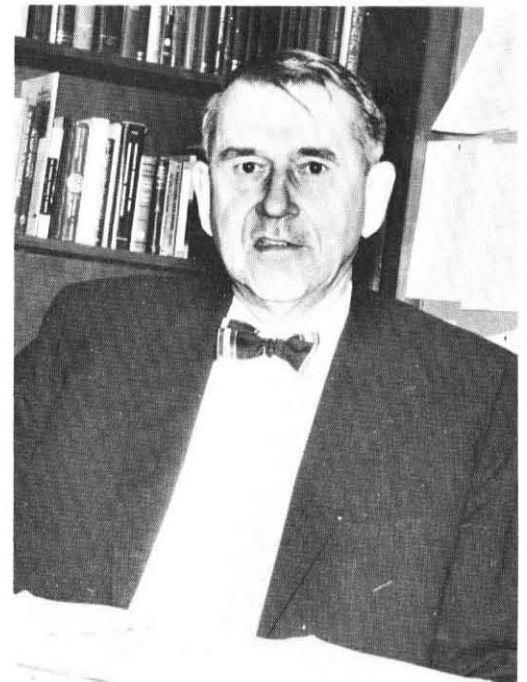
C
I
V
I
L

FRONT ROW, LEFT TO RIGHT: G. W. Housner, F. Raichlen, V. A. Vanoni, J. E. McKee, F. C. McMichael. BACK ROW: A. N. Schofield, N. H. Brooks, R. F. Scott, C. W. McCormick, W. Samples, S. Cherry.

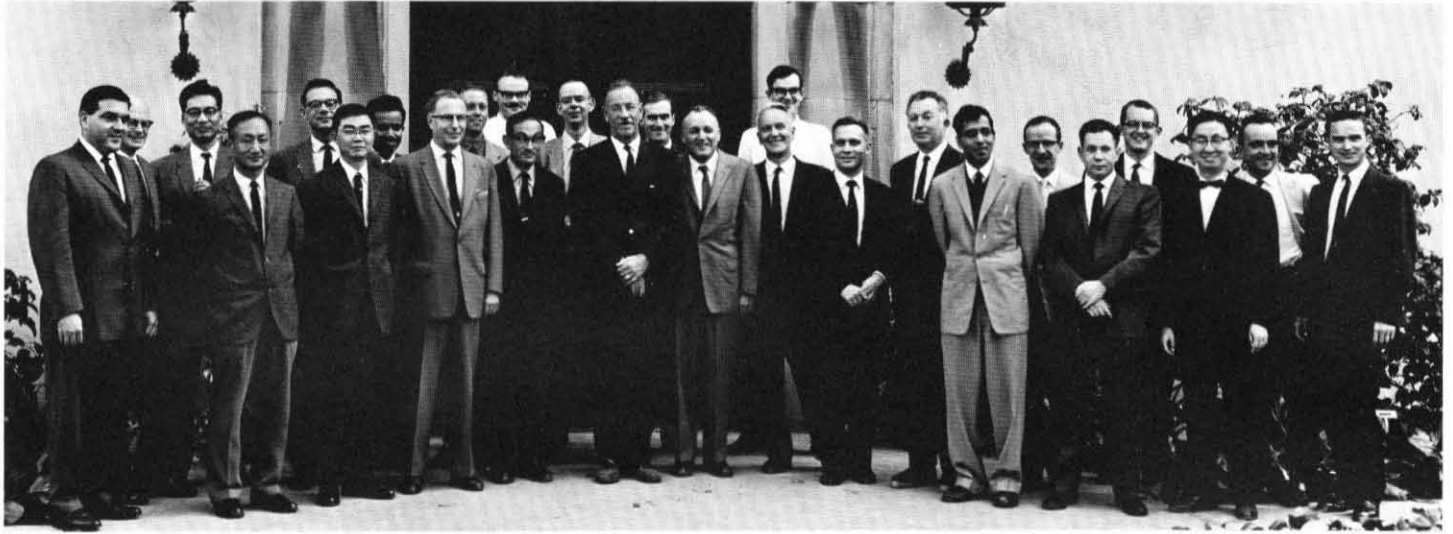


FRONT ROW, LEFT TO RIGHT: J. Franklin, J. H. Wayland, J. K. Knowles, D. F. Welch. SECOND ROW: H. Lurie, D. E. Hudson, T. K. Caughey, R. H. Willens. THIRD ROW: P. Duivez, R. H. Sabersky, F. S. Buffington, J. Miklowitz. BACK ROW: A. J. Acosta, T. Vreeland, C. E. Crede.

APPLIED SCIENCE



FREDERICK C. LINDVALL
Chairman of the Division of Engineering
and Applied Science.



FIRST ROW: R. Stearman, H. D. Krumhaar, Y. C. Fung, I. Chang, J. D. Cole, T. Kubota, R. Narashima, E. E. Sechler, B. Sturtevant, H. Groenig, H. W. Liepmann, D. E. Coles, C. B. Millikan, G. B. Whitman, L. Lees, P. Lagerstrom. SECOND ROW: R. Watts, J. K. Kevorkian, H. J. Stewart, S. R. Valluri, A. F. Messiter, S. Kaplun, B. L. Reeves, H. W. Lier, A. Demetriades, G. Benkowski.

AERONAUTICS

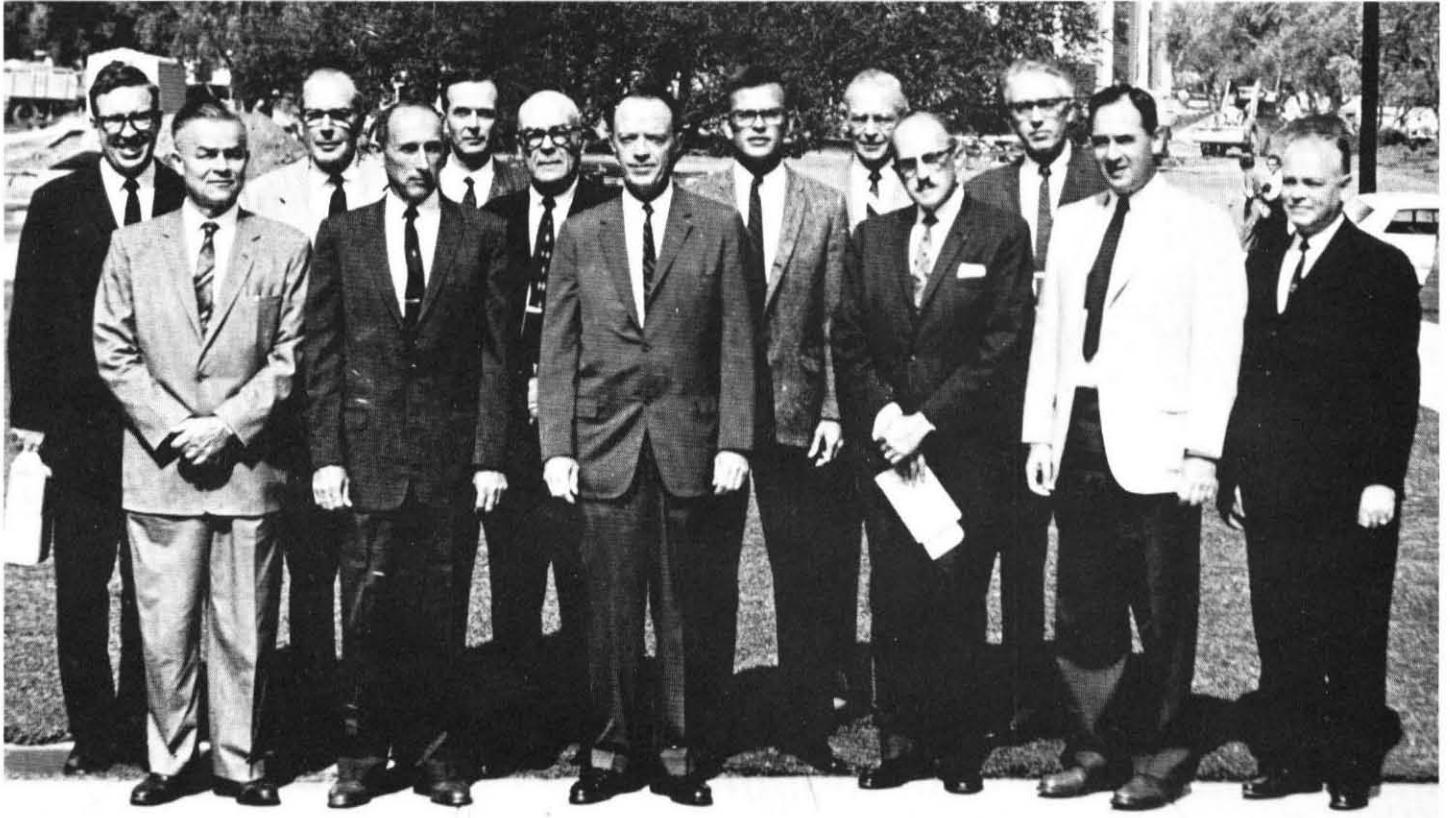


AIR SCIENCE

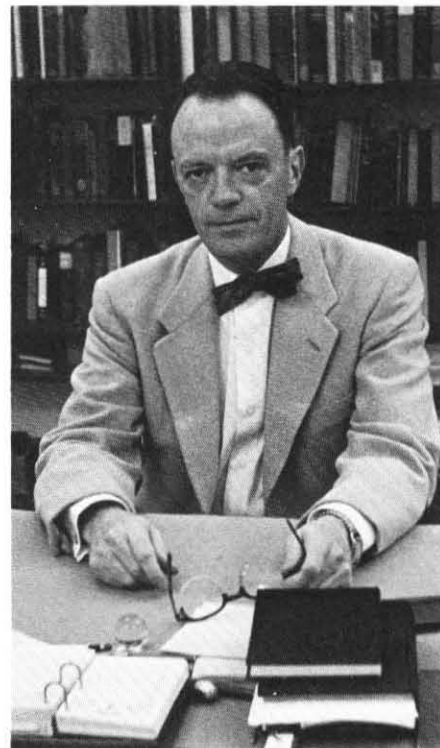


LEFT TO RIGHT: Major W. R. Knight, Captain D. L. Stearns, T/Sgt. W. E. Lacher, T/Sgt. R. E. Stafford, S/Sgt. A. F. Ventimiglia. (Absent-Major L. T. Woods.)

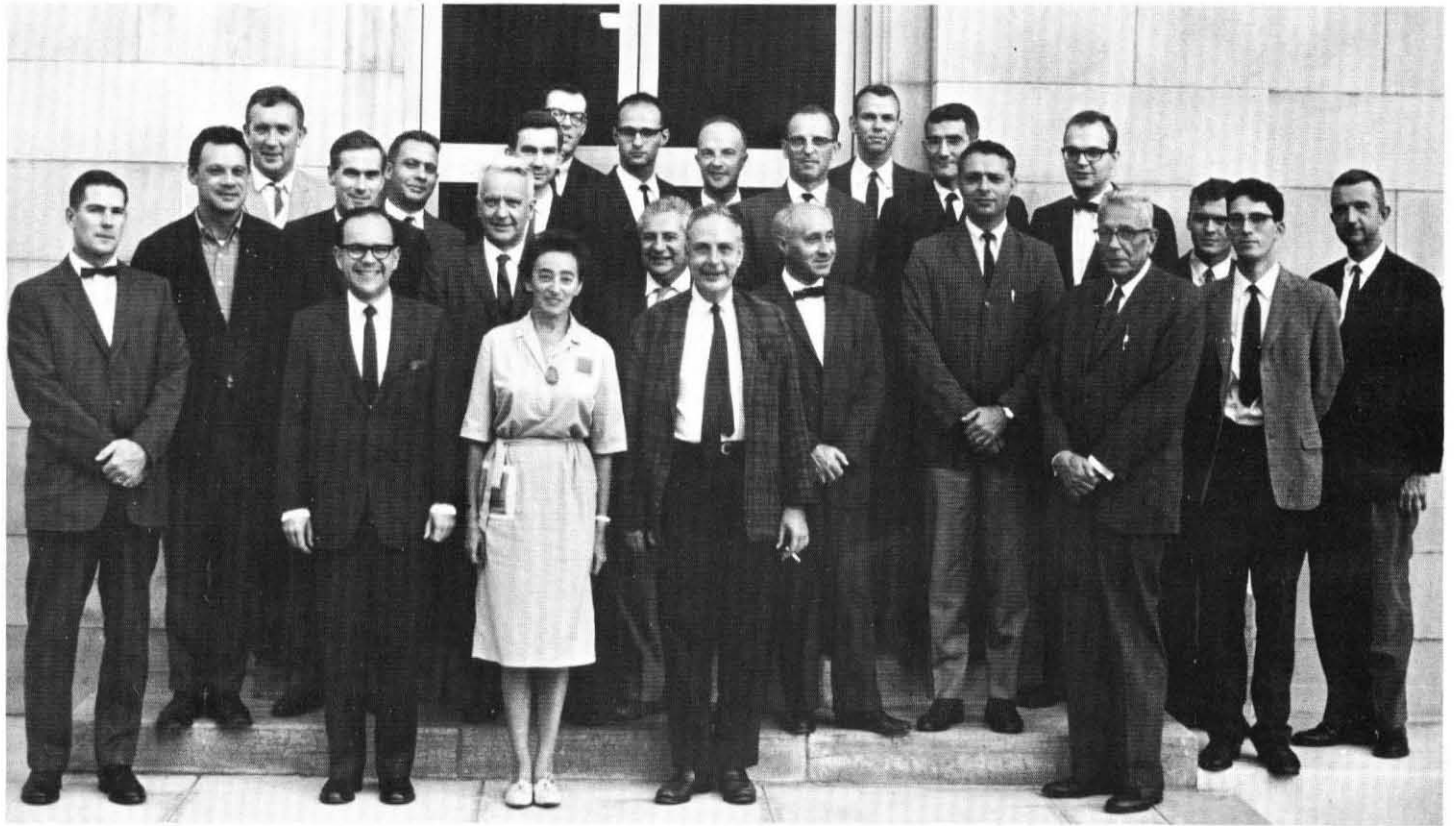
HUMANITIES



LEFT TO RIGHT: E. S. Munger, H. N. Gilbert, L. W. Jones, J. Weir, R. W. Paul, H. Eagleson, H. D. Smith, J. Zeigel, R. E. Untereiner, A. Stern, R. Wayne, R. A. Huttenback, H. Booth.

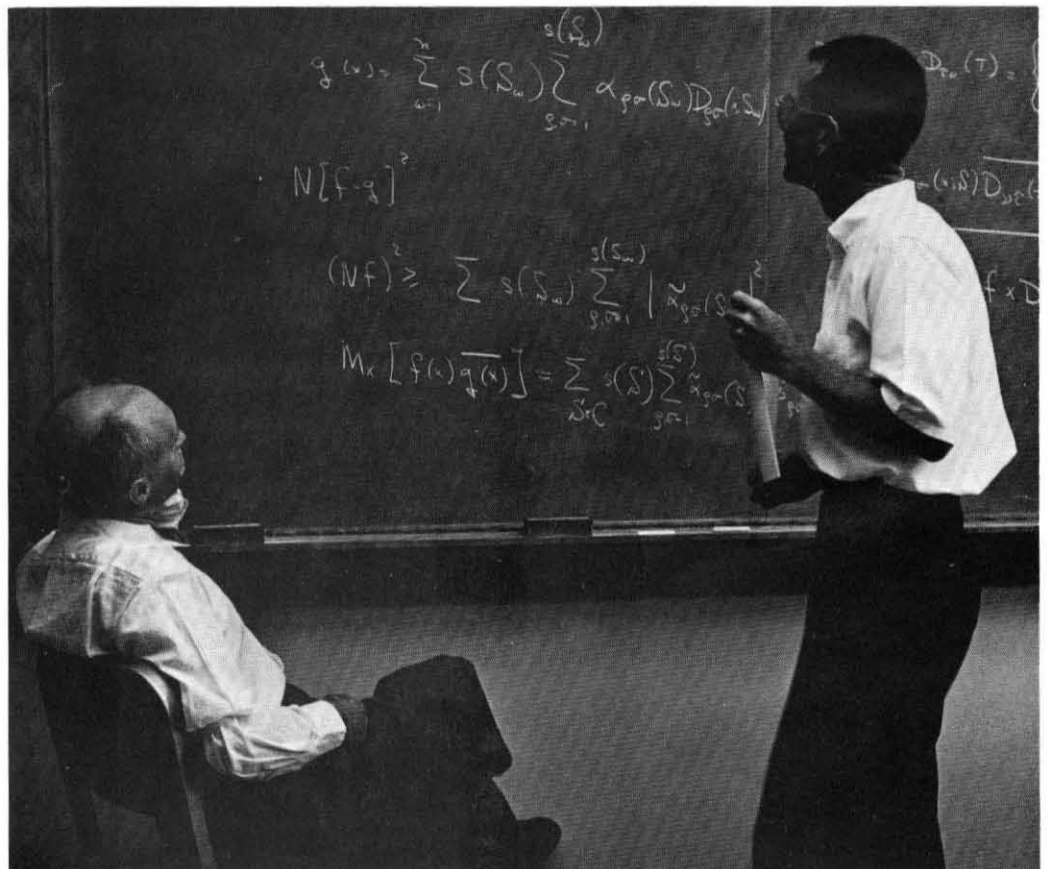
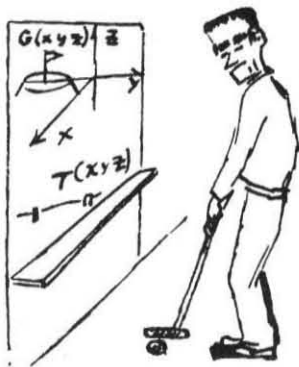


HALETT D. SMITH
Chairman of the Division
of Humanities.



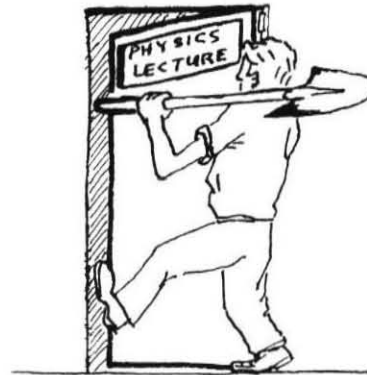
LEFT TO RIGHT, FRONT ROW: G. E. Collins, J. N. Franklin, O. T. Todd, M. Hall, Jr., F. Bohnenblust. BACK ROW: J. D. Cole, J. Todd, G. B. Whitham, S. Kaplun, P. A. Lagerstrom, J. D. Dixon, R. E. Block, J. D. Halpern, C. R. DePrima, W. A. J. Luxemburg, A. Erdelyi, R. P. Dilworth, P. L. Crawley, T. M. Apostol, M. Lees, D. E. Knuth, E. C. Dade, C. W. Cryer, R. A. Dean.

M
A
T
H





FRONT ROW, LEFT TO RIGHT: W. G. Wagner, Y. Hara, R. Atkinson, C. A. Barnes, L. A. P. Balazs, A. F. Hildebrandt, J. N. Bahcall, C. C. Lauritsen, M. Gell-Mann, J. H. Mullins, J. Mathews. BACK ROW: F. B. Morinigo, E. W. Cowan, A. J. J. L. Boury, J. deBoer, Y. Ne'eman, F. B. Estabrook, P. A. Seeger, R. P. Feynman, R. F. Christy, L. Davis, R. B. Leighton, W. Whaling, W. A. Fowler, J. Pine, C. Heusch, W. R. Smythe, F. Boehm, C. D. Anderson, J. O. Maloy, R. Vogt, N. I. Moise, R. Walker, H. G. E. Kobrak.

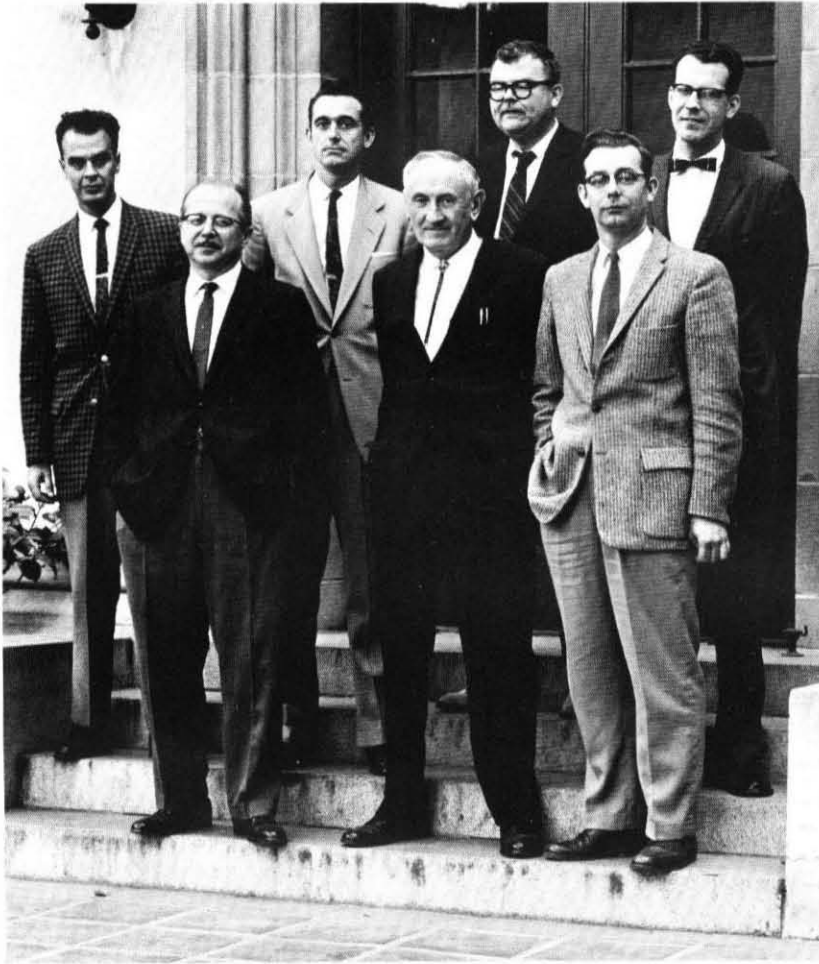


P H Y S I C S

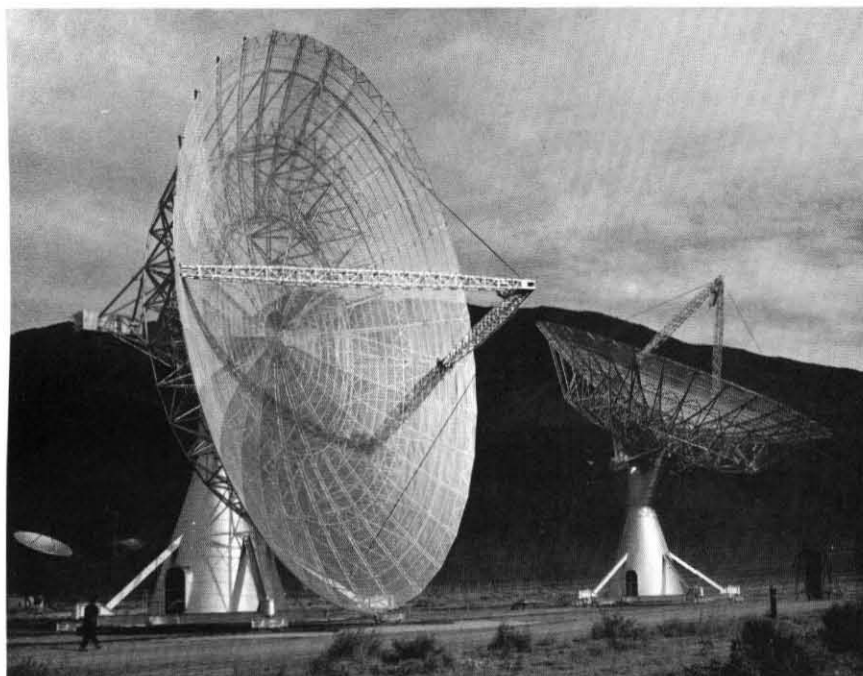
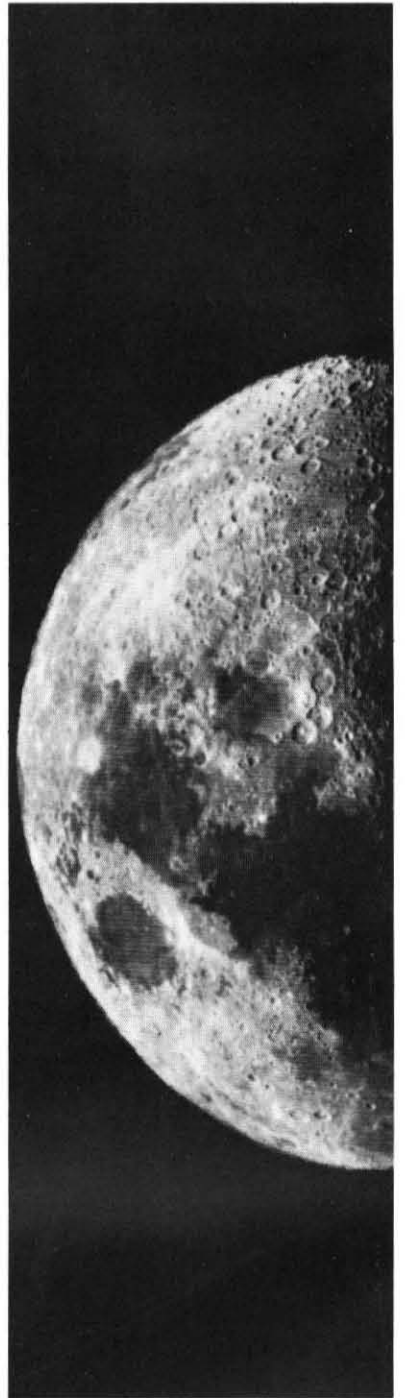


CARL D. ANDERSON
Chairman of the Division
of Physics, Mathematics, and Astronomy

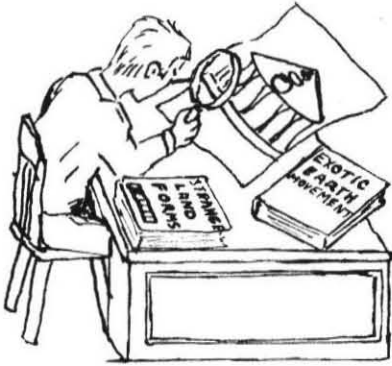
ASTRONOMY



LEFT TO RIGHT: G. Munch, J. Greenstein, H. C. Arp, F. Zwicky, O. J. Eggen, J. B. Oke, M. Schmidt.



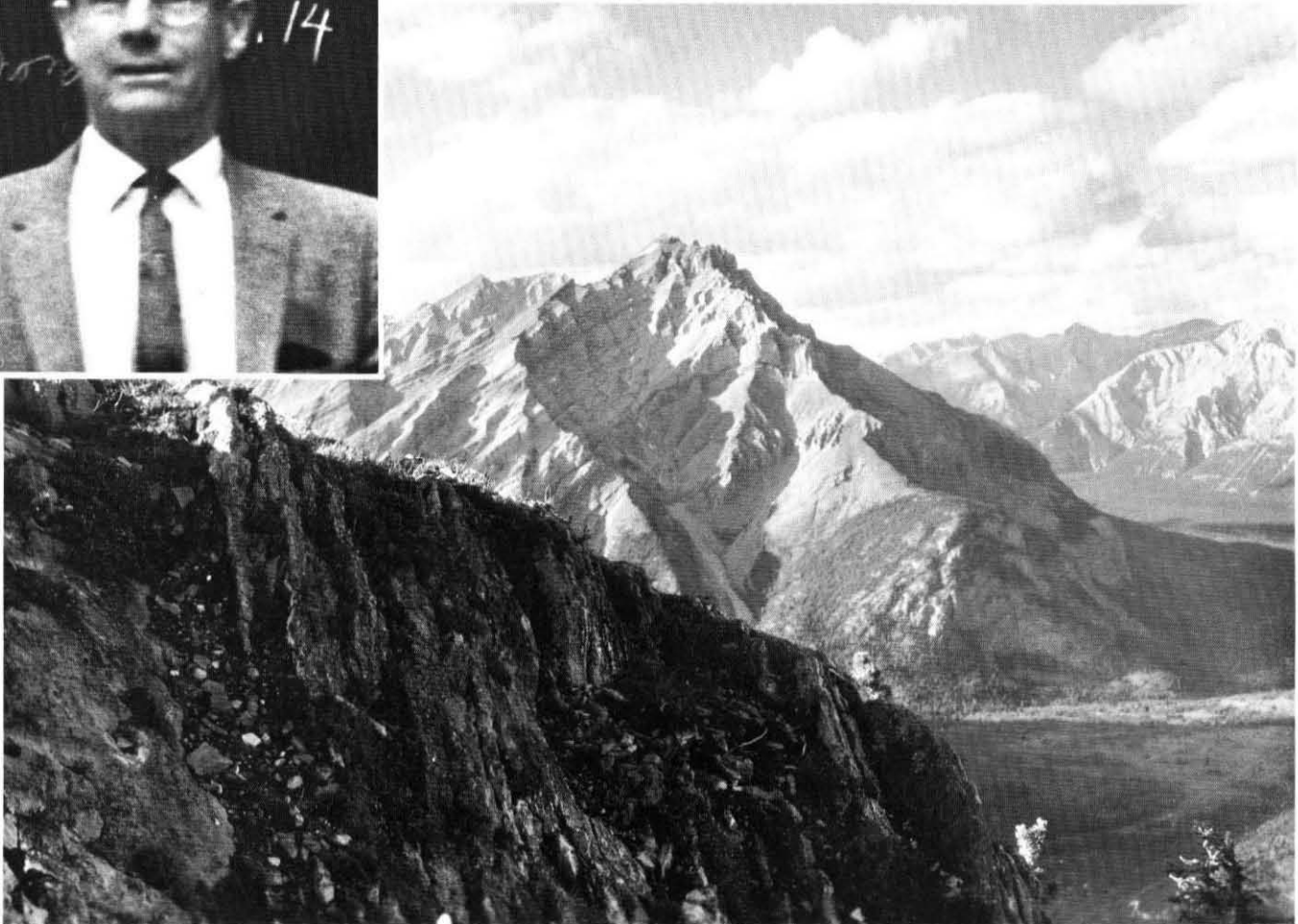
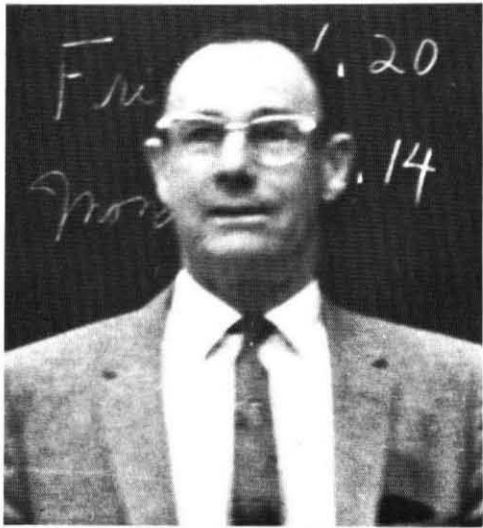
GEOLOGY



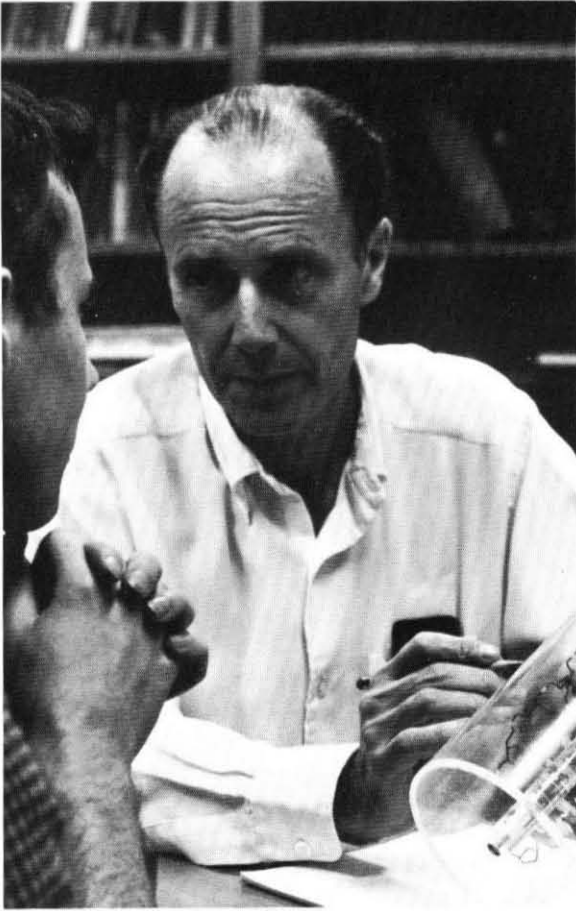
ROBERT P. SHARP
Chairman of the Division
of Geological Sciences



FRONT ROW, LEFT TO RIGHT: R. P. Sharp, G. J. Wasserburg, D. Anderson.
SECOND ROW: A. L. Albee, H. Brown, S. Smith, E. T. Degens, S. Epstein.
BACK ROW: L. T. Silver, B. Murray, H. P. Taylor, C. R. Allen, C. C. Patterson.



Campus Personalities



What are faculty members really like?, that is, when they're not sleeping in the Athenaeum or in their labs? Our candid camera, coming for 2 o'clock appointments at 1:45, has finally caught them in their moments of truth. Glance only quickly, for you'd better look out for their horns.

You put your finger on it again and I'll really jab it!

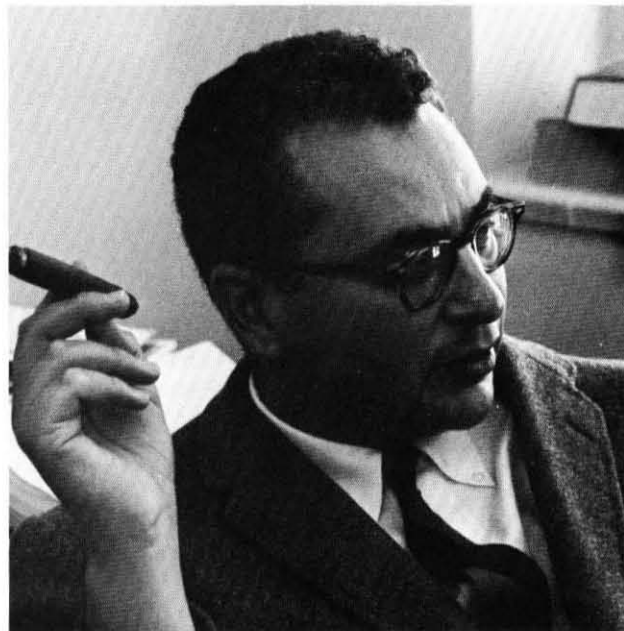
Norman Davidson
CHEMISTRY

Photograph by Ray Weiss.



Ha. ! You blinked first.

Jesse Greenstein
ASTRONOMY

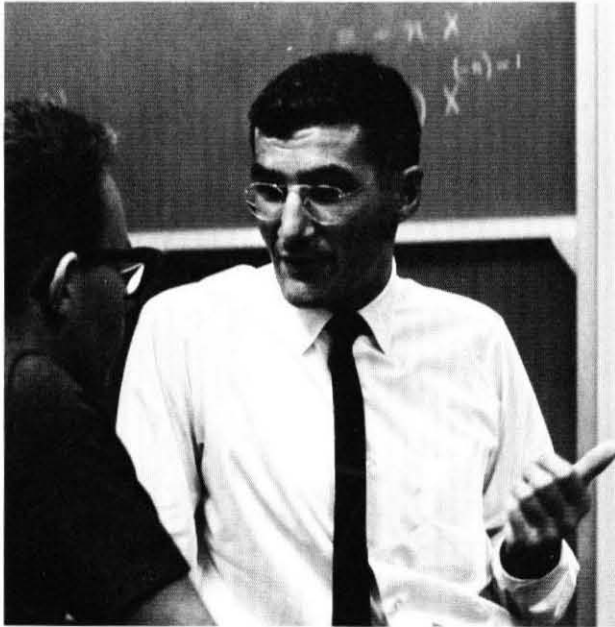


So that's what DEI means!

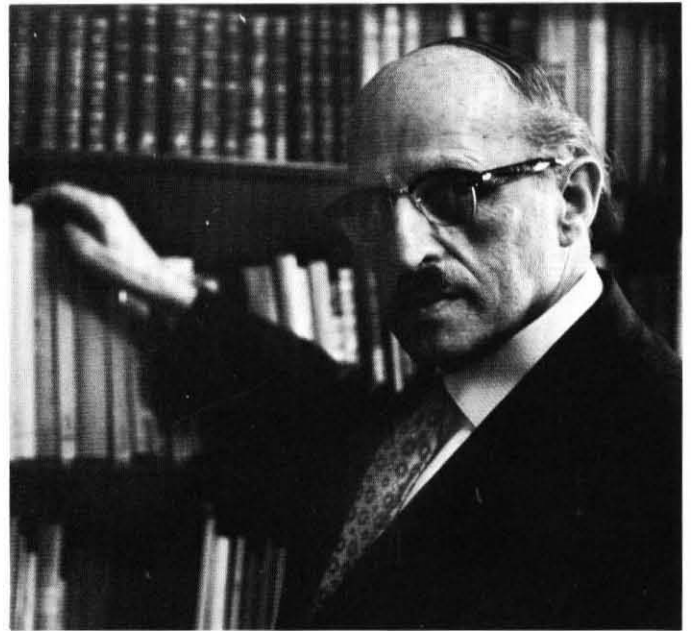
Murray Gell-Mann
PHYSICS



Yum! Yum! Chem E's are best
with salt and pepper.



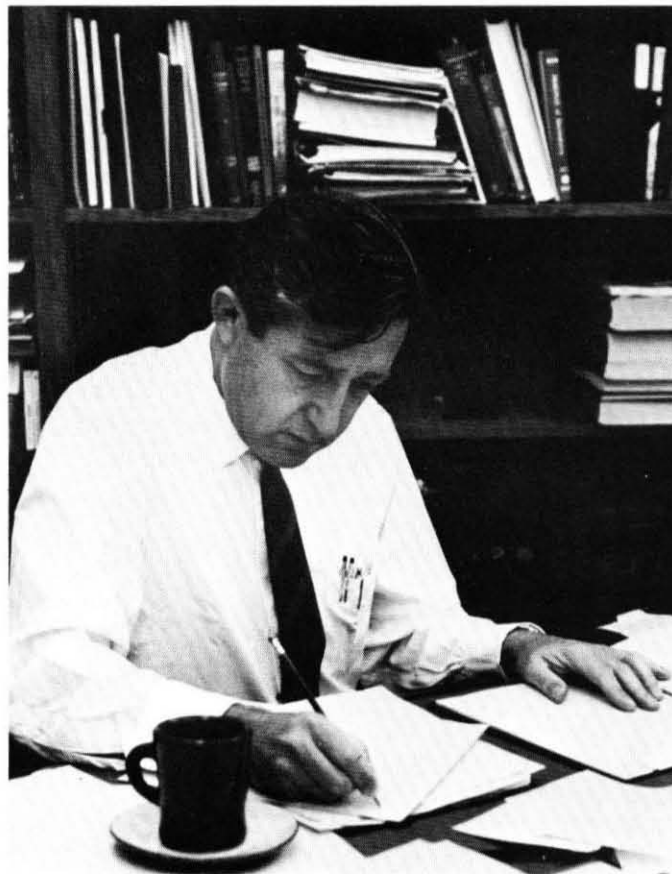
Step outside and say that!
Tom M. Apostol, MATH



Now that they're gone, I'll get the booze.
Alfred Stern, HUMANITIES



There--it's all back together again.
Norman Horowitz
BIOLOGY

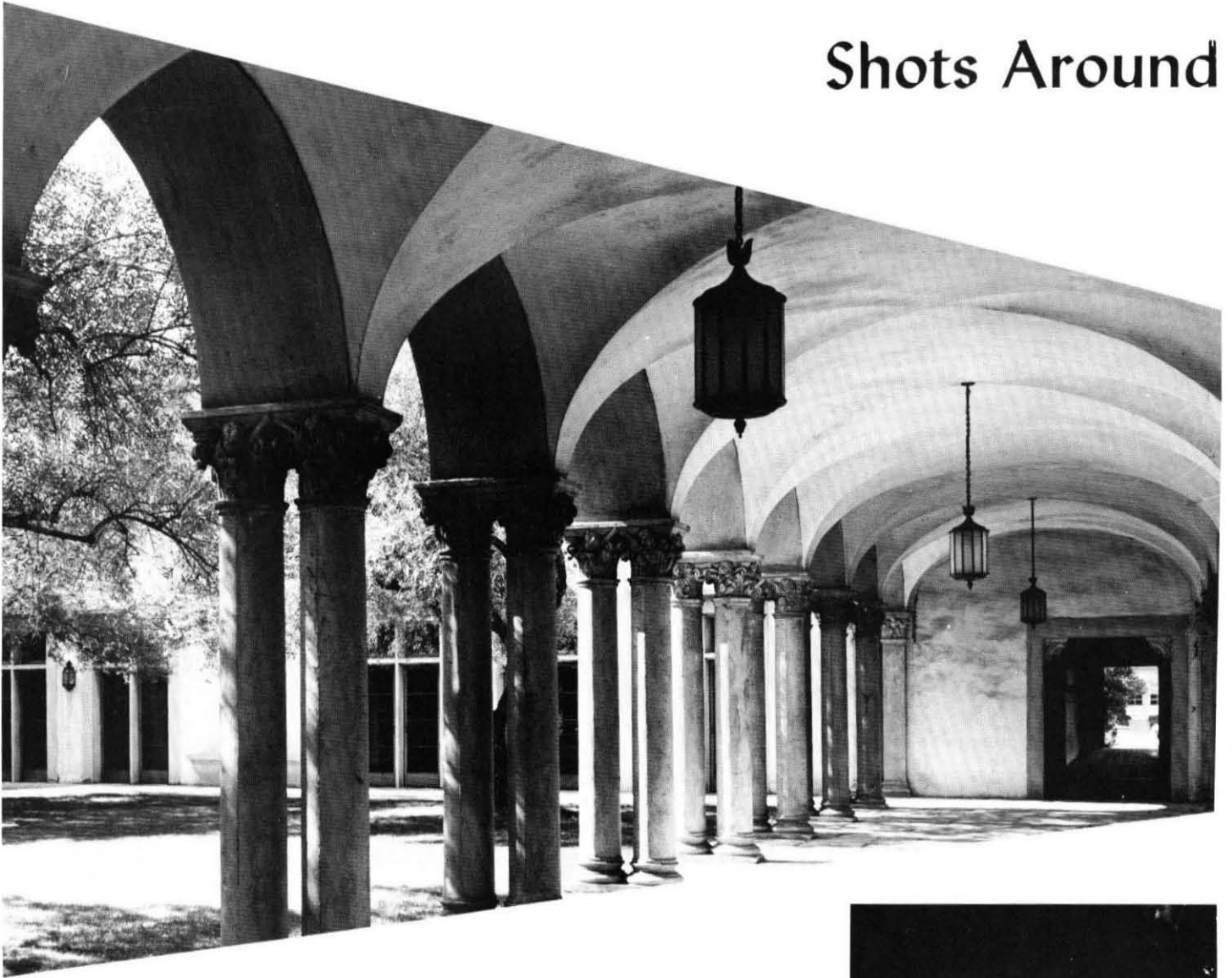


Where the hell did that damn 2 come from?
Harrison Brown
GEOCHEMISTRY

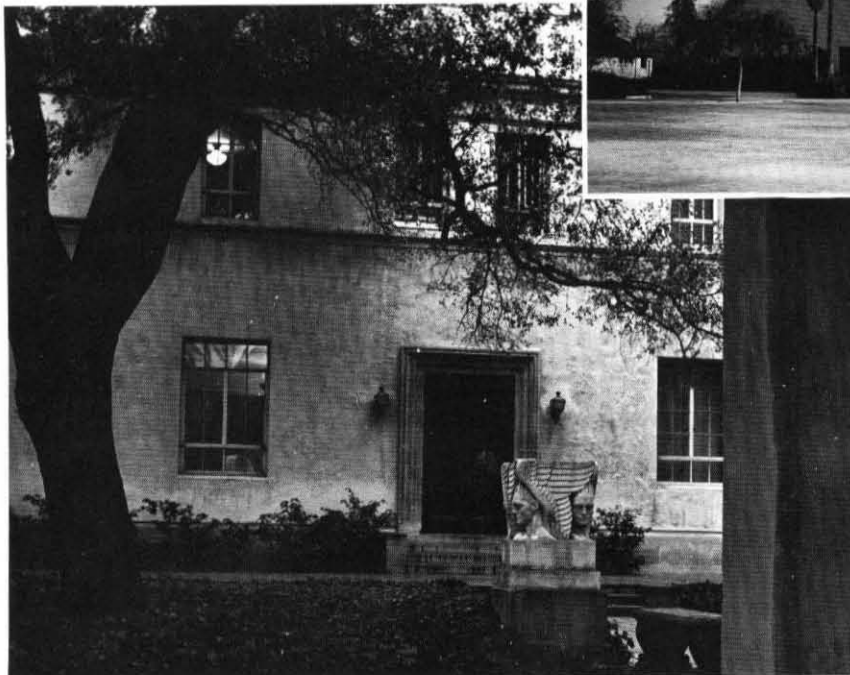
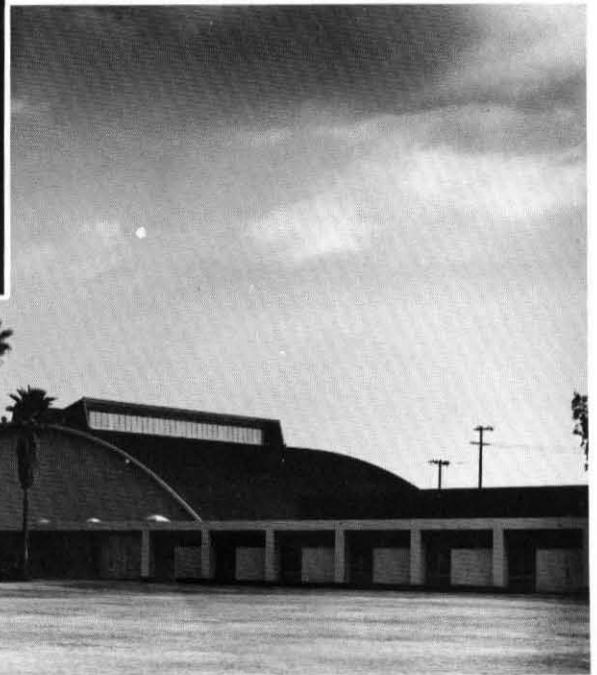


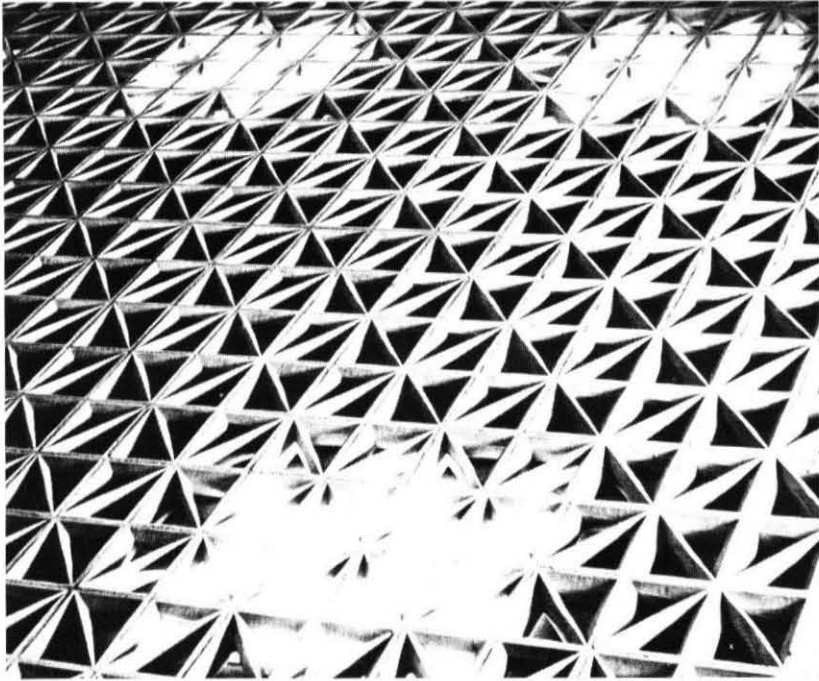
Damn commercials!
Robert Langmuir
ELECT. ENGINEERING 21

Shots Around

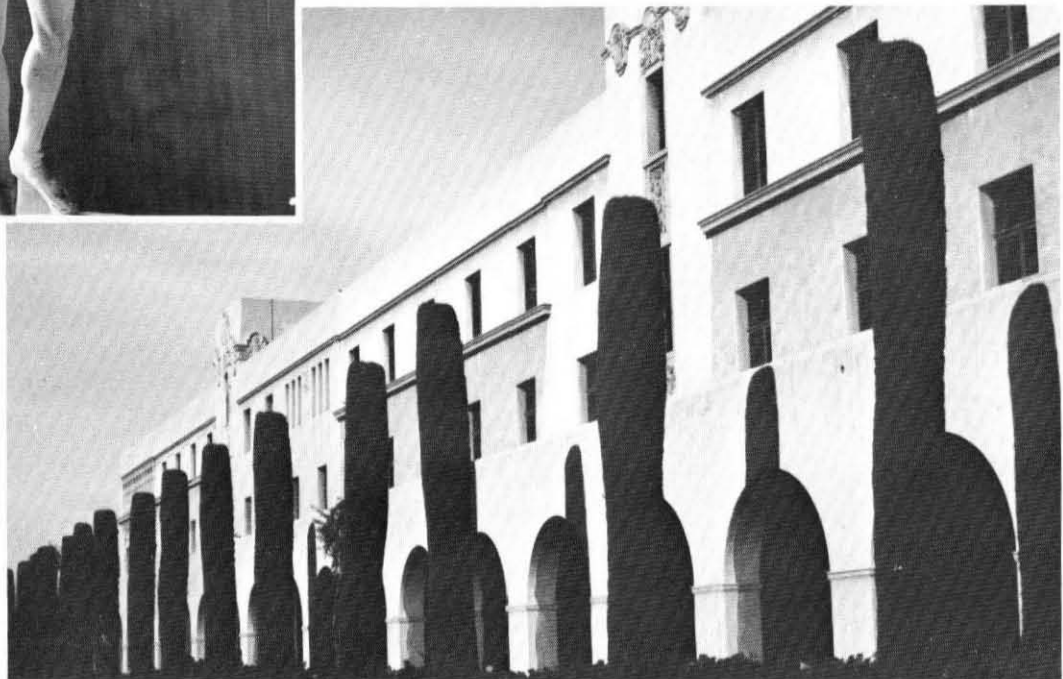


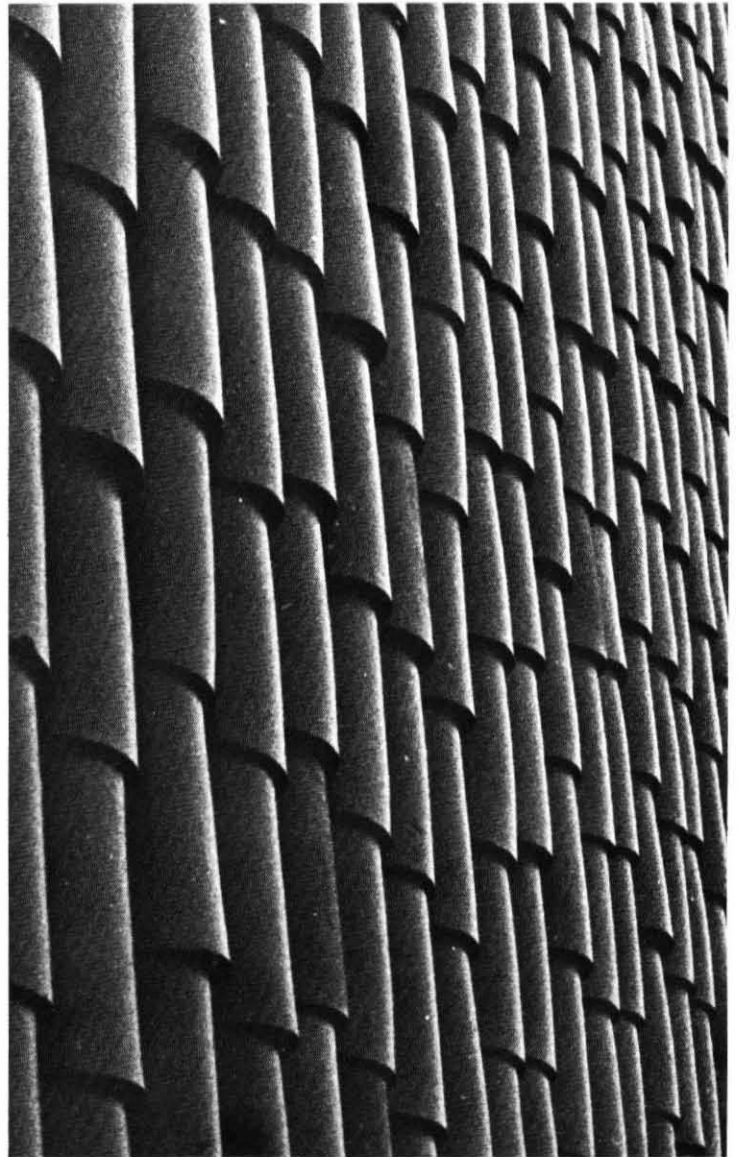
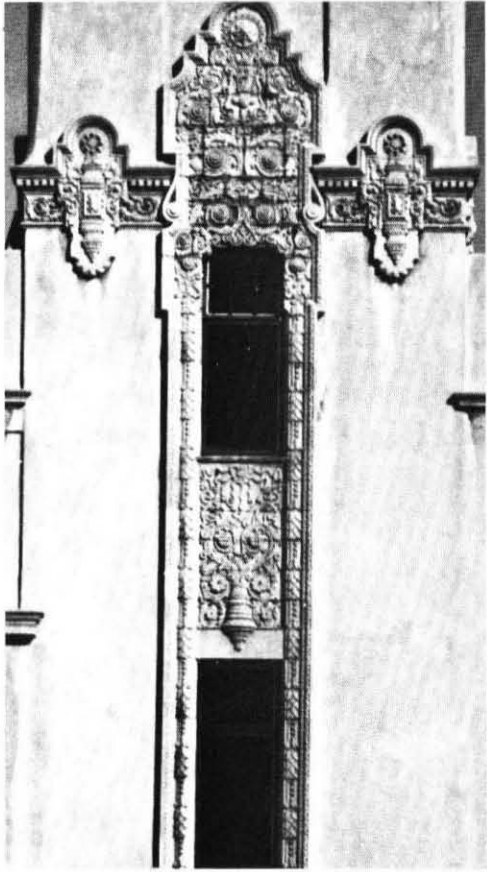
Campus





Photos by Ed Bloomberg





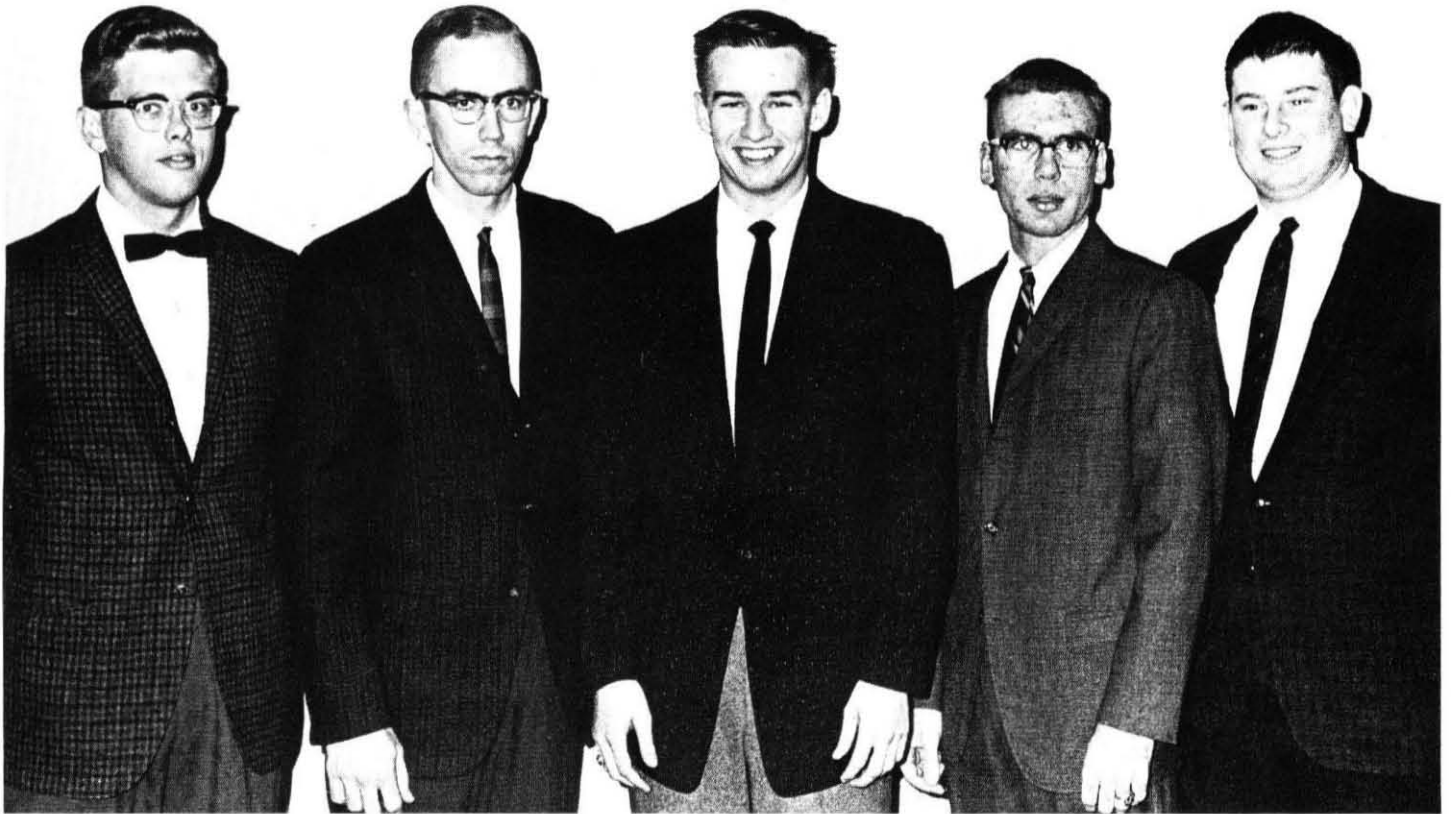


Caltech Mountain

SENIORS



Senior Class Officers



ELLIOT HARRY, Treasurer



RICHARD KARP, Athletic Manager



ART JOHNSON, President



FRANK WINKLER, Vice-President



JOE WEIS, Secretary



SENIORS

Contrary to wide-spread rumor, the several changes in the editorial policies of the **Big T** did not extend to the elimination of the Senior Section, as praiseworthy as such would have been.

But many innovations have been introduced in the nature of the presentation, and in the degree to which additional material has been included. In addition to the commonplace picture of campus and super-science, various curious photos have been inserted as struck the fancy of the Senior Editor.

Should you observe that many pages are what can only be described as crowded, maybe you should look again and find the reason.

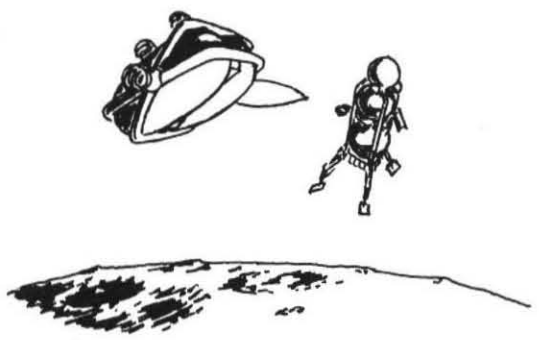
For the interest and edification of no one in particular, a list of those persons originally enrolled in the freshman class of 1960 but who are not graduating this year, whether they graduated a year early, obtained a leave of absence, transferred, or just flunked out, are listed on the last page of this section.

Happy Hunting!

Senior Editor



Astronomy



John R. Burke

John came to Millikan's Monastery with a passion for astronomy and German marches, and discovered water fights. This in no way detracted from his ability to integrate "like any machine"; and the path of integration now leads East, where he hopes to continue his studies at Harvard. He will be long remembered as one of the only chimney-climbing snakes in existence.

DABNEY



Floyd L. Herbert

Floyd came from the wilds of La Puente and the rigors of Thatcher with the confidence that characterizes many a budding chemist. But the rugged Tech life and a surly chem TA took its toll and so Floyd turned reluctantly to astronomy as an honorable way out. For two years he tried to convince those around him that he was really serious by burying himself in **Stellar Atmospheres**. But when bigger guys started to throw sand in his face, Floyd decided to take courses in Japanese instead. Despite ridicule by others, he persevered, even to the extent of skipping lunch and taking three times the normal PE load. His dedication produced immediate results; he is now in the second grade and turning the tables on his surly chem TA.

The humanities program has really helped Floyd to blossom out. He has left his early obsession with Bach and has begun to appreciate the beauty and greatness of surf and stomp music. Although he has discovered another reason for looking at the stars, Floyd hopes Dean Strong will overlook this new discovery and admit him to graduate school here so that he can study more astronomy while working for his black belt in the new Fundamentals of Movement curriculum.

LLOYD



John Clinton Webber

An iconoclast from the Body of Christ, John came to Tech full of energy, eager to interact with the physics or biology options. Absorbed by physics, he was later re-emitted and gravitated to his true love, Astronomy. John, once more full of energy, hopes to be absorbed by Princeton and soon to wed the girl back home.

FLEMING



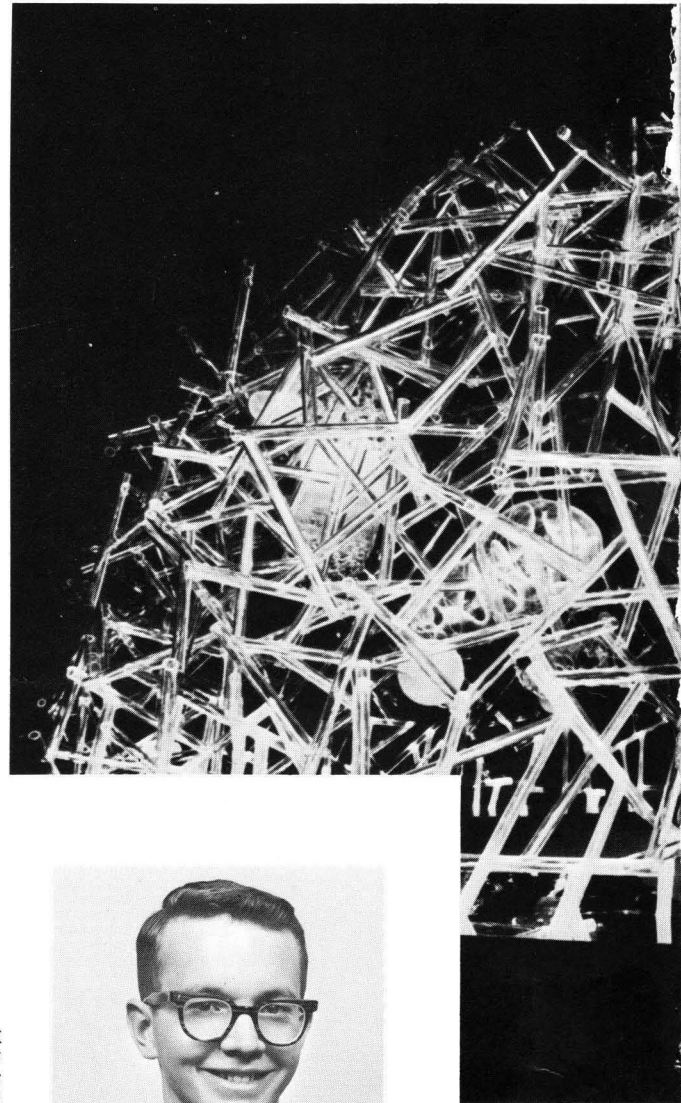
Biology

Lynn TenEyck

FLEMING



Steve Green FLEMING
Steve's most outstanding characteristic is his professorial magnetism. One of the many who came into Fleming when the credo was "really care," he became very active in House athletic and social functions. Breaking through the then prevalent lethargy, he became an ASCIT officer and worked on EPC. None of us suspected the true motive behind all this activity. Not satisfied with casual relationships with his professors at EPC, our hero managed to round up the Bio departments Big Men through nefarious projects and bull sessions. His winning smile, or ear splitting grin, nascent when his bachelorhood ended, has helped him in his quest. Steve plans to continue work in psychology at some great eastern institution.



Terence Murphy

RICKETTS

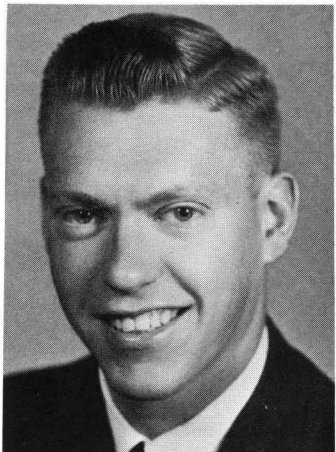
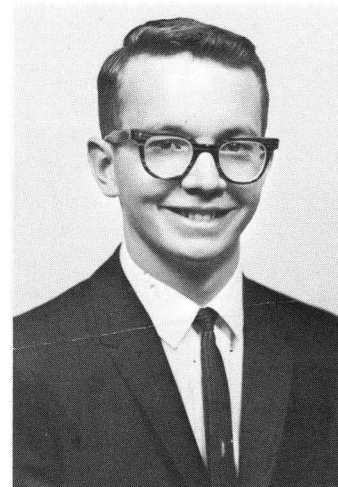
Murph made a glorious name for himself at Ricketts House as a lush who sang and painted abstract pictures. Three years of continual parties were accentuated by daredevil flaming activities. However, two years on the BOC made him so incredibly moralistic that in his senior year he decided to exclude women from his social life entirely. He turned to biology instead (?) and took to managing a home for wayward Ricketts men. Signs are that he plans to continue this ascetic life at the University of California in La Jolla.



Don Terwilliger

RUDDOCK

Coming from Oregon, Don apparently was prepared for the snow he found at Caltech; He maintained a strong academic record despite a heavy extra-curricular work load. An ardent and talented musician, he has been President of the Caltech Glee Club and musical god of Ruddock House, directing both the House Chorus and Dixeland Jazz Band and leading the Ruddock House quartet to a consistent first place in competition. Don took time out to do exceptional jobs as Junior Class President and Ruddock Vice-President. Not one to worry about studies, he can also be depended upon to be dating at least one girl at any given time. Despite all his activities, "Twig" manages to be a good friend to all who know him—and everyone knows him.



Charles Leonard

PAGE

Four years of anonymity East of Throop, and being known to his friends only by his irrepressible comments in all his classes, have led Chuck to a desire for participation and fame, which he will seek at Columbia Medical School, in daily contact with his colleagues and with Manhattan.



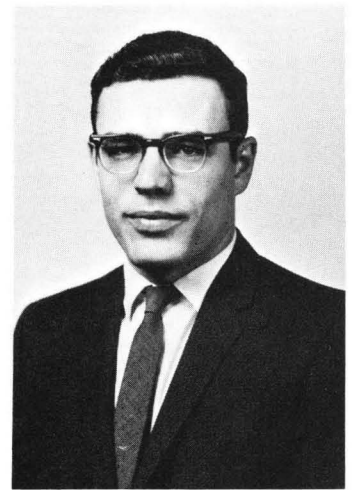
William Henry Howard

Bill has an affinity for math, girls, music and biology. After studying (sic!) dilettantism for three years, he took a leave of absence to the University of Cincinnati where he studied math, girls and music, then to return to Caltech to finish up a degree in biology. His activities have included swimming (three letters), frosh water polo (only one), three years with the glee club, some TV soccer, and twice elected to the BOC.

LLOYD

Lawrence R. Gowan

FLEMING

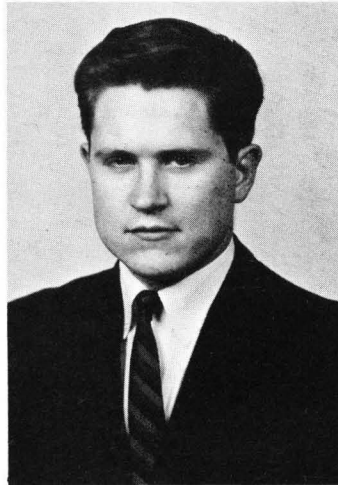


Frank S. Rhame

FLEMING

Steve A. Hillyard

FLEMING

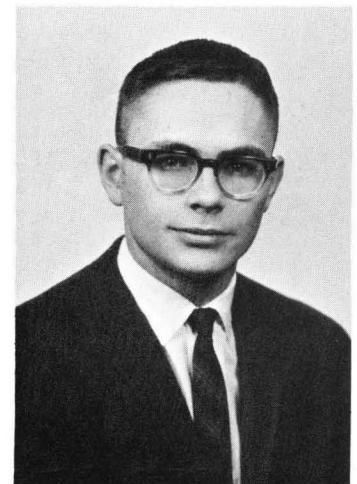


Kenneth Manly

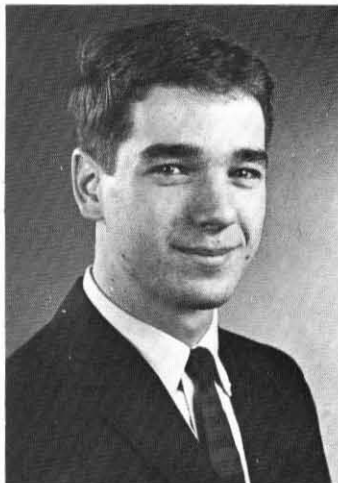
Ken started his Caltech career a year earlier than most of the members of this class. During the last old-style rotation, he chose Dabney and lived there a rather ordinary freshman year, waterfighting, feuding with the freshmen upstairs, and painting the Ricketts pot green. At the end of that year he joined the minor exodus from Dabney to Ruddock, and in that new house he survived a sophomore year in an especially neurotic sub-society known generally as Alley Six. In the next year he confused everyone by moving off campus and then abruptly going home on a leave of absence. When he returned he brought with him a wife who, to this day, has kept him off campus and out of mischief.

PAGE

Al, who entered Caltech with visions of nuclear physics dancing in his head, leaves as a contented and confirmed biologist, recently awakened to the wonders of humanities. Majoring in Psychobiology, he found time to conduct psychobi research, play Varsity Tennis three years, backpack in the Sierras, frisbee, work on Interhouses, play interhouse football, be a UCC two years, be Page Rotation Chairman, occasionally fence, and even raise his grades. "House Surly" for three years, Al successfully indoctrinated several underclassmen and took the ultimate step, becoming a waiter. Al, sporting a genuine French Burgess-bought beret, leaves for graduate studies in physiological psychology.



Engineering



Richard R. Green

BLACKER



Thomas W. Latham

BLACKER

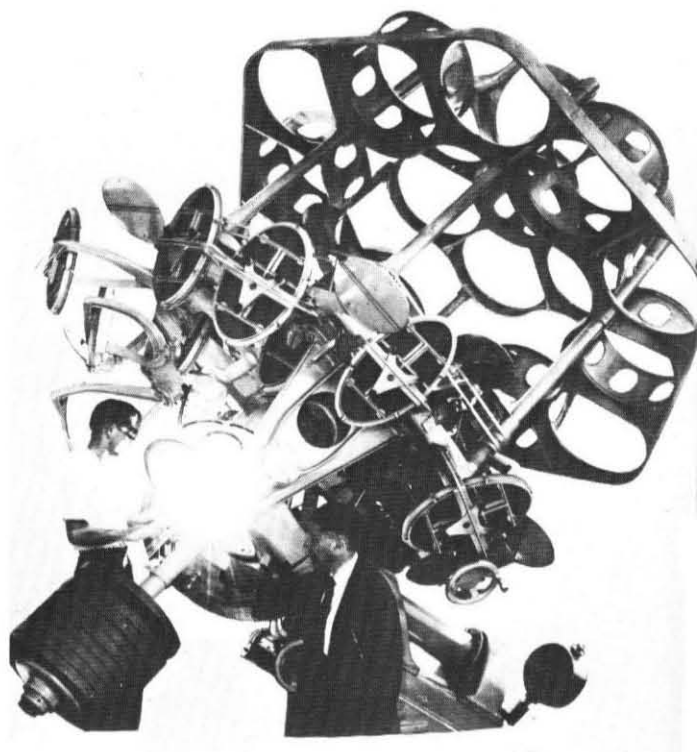
Tom, a native of Boston, naturally came to Caltech a confirmed backroom politician, and wasted no time in exercising this talent. He proceeded to run in both house and class elections, and to hold many different offices. In Tom's junior year this pattern of existence changed abruptly. He assumed an elder statesman role, and later became Y president. Although Tom has been active in athletics, in the house, and on the campus, he has maintained a high GPA, disproving a theorem of some sort. Because of his wide interests, his ability, and perhaps most of all his sincerity, Tom has always been highly respected at Tech.



Bruce R. Beeghly

RUDDOCK

Realizing soon after his arrival here that he was repulsed by the idea of being a scientist, Bruce pursued his studies in EE with such vigor that he became renowned for getting homework done early. Although enjoying many happy times here, including playing on Ruddock's basketball team, he will be one of the happiest to receive that diploma in June.



David H. Seib

PAGE

Dave came to Caltech from the metropolis of Exeter, California. While attempting to learn something of EE, he found solace in the waters of the Alumni Pool, earning five varsity letters in swimming and water polo. As a Junior, he served on the BOC and Student Shop Committee. Dave will journey to Stanford University next year to pursue an advanced degree in Solid State Electronics.



Daniel C. Paxton

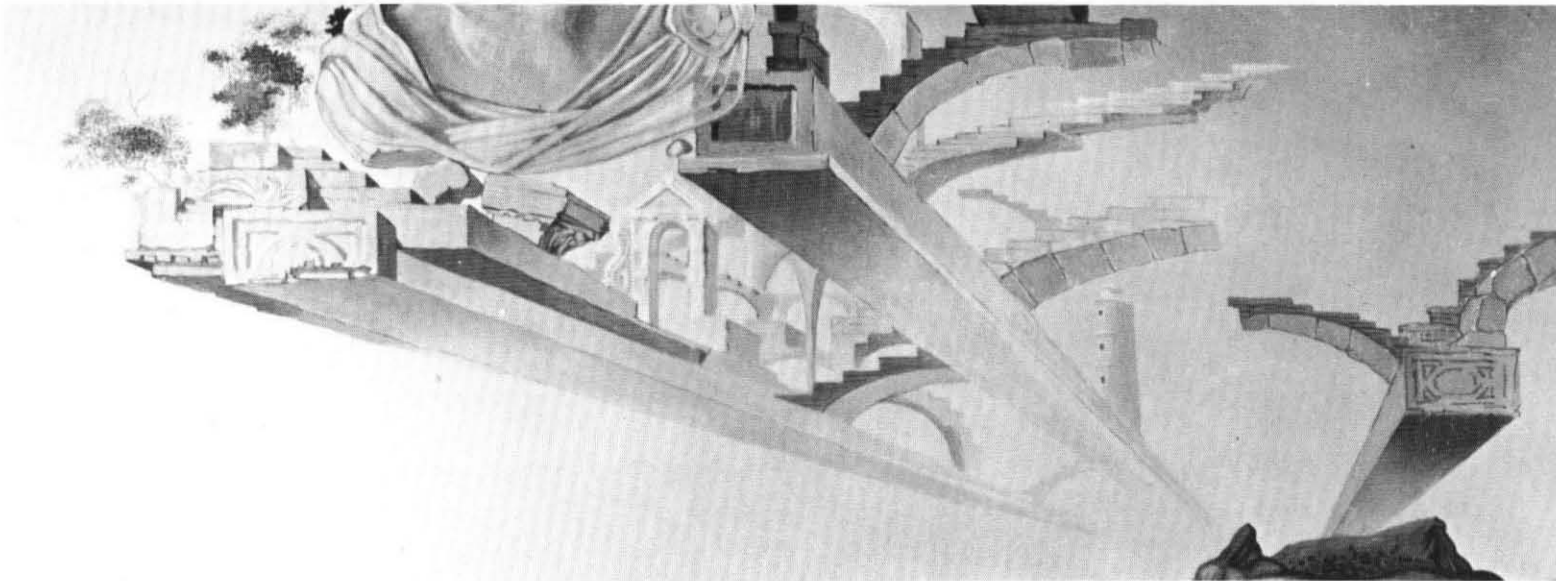
RUDDOCK

Infamous advocate of the early-to-bed-early-to-rise creed, Dan unfortunately achieved little more than health. Sacrilegious, he did not believe in either Southern California or Photons. He was a reluctant but qualified denizen of the Boor's Nest.

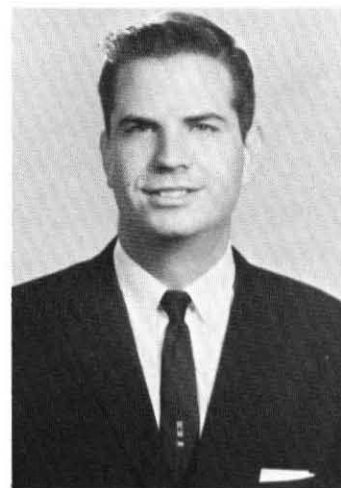
David R. Lambert DABNEY
 Hailing from "Anywhere, U.S.A.", Dave has spent four years brest-stroking against the currents of Techism, stopping at times to radiate into the outside world or to stab an opponent with his foil. Now as he finally reaches the shore, he hopes to use his experience as an aero-modeler and a member of the AE option to soar through meteorology at MIT Grad School.



Hans G. Mattes FLEMING
 Hans came to Caltech from nearby San Marino, sharing the intentions of all Tech Frosh—to be a nuclear physicist. This abberation was quickly corrected however, and he settled down to his true research interest—the design of exotic high-fidelity systems. The remainder of his time was divided between the EPC, The ExComm, his two girl friends, and an occasional EE class. He will be best remembered for his artistry, his ability to hold down three places on the Fleming House Crew Team, and his cheery smile.



Albert E. Cosand FLEMING
 Al Cosand arrived at Fleming House looking too innocent to be true, and his interest in small intricate devices did little to alleviate fears. His major activities in the fields of hydrodynamics and micro-mechanical engineering strangely never appeared in his record. Al liked large grundling machines too, and became Emperor the Student Shop toy room. Always a Grade-A sidewalk superintendent and connoisseur of ancient and modern architecture, he could be seen studying into the late hours of the night with his sketch pad, slide rule, and nylon rope. Al was so much of an Engineering enthusiast that he even squeezed a few EE courses into his physics curriculum. Al is now looking for a grad school with no morning classes.



John H. McCoy FLEMING
 John spent his first year at Tech snowed under like all good Frosh. Come Sophomore year, though, he decided to get out and see the real world where he was promptly snowed under, but this time by a much pleasanter subject, Kathy I(a,b,c, . . .). After putting up a good fight for a year, he finally gave in and decided off-campus life offered more than the boys in Fleming. John hopes to go on and get his masters degree in his minor field, EE.

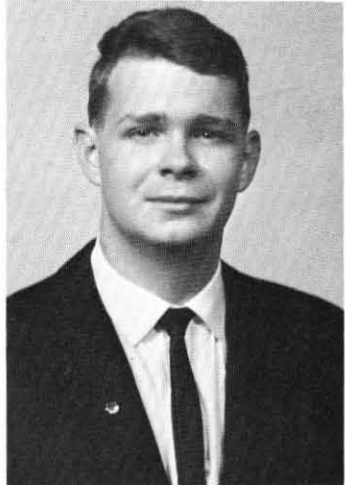
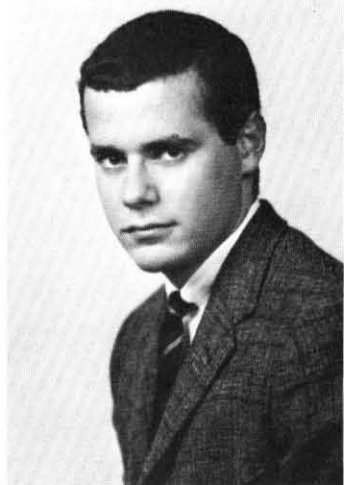
George L. Scott LLOYD
 George thought he wanted to be a mathematician, but CIT soon told him differently. A second guess EE, CIT has questioned that choice but has not vetoed it. However, in his permanent "summer" job, he found that he was really a computer programmer and was often seen there—after chuckling while crouched over a computer console. Thanks to that same "summer" job, he was one of the last two undergraduate members of Throop Club—the founding body of Lloyd.



Mason L. Williams FLEMING
 Upon arriving in Fleming House, Mason began demonstrating those moral and spiritual qualities which have made him the acknowledged leader of the Fleming House Mickey Mouse Club. As such he was largely responsible for many expertly lighted social events and many thoroughly dampened strolls. He was also house printer, house historian, and a UCC, ruling Alley Six with an iron hand and a loud police whistle. His outside activities included IEEE, Shop, and ROTC. Nevertheless, as a dedicated engineer, he will avoid working for a living until after Grad School.

Arthur D. Lipson

PAGE



Michael Ball

BLACKER



Douglas W. Hill **DABNEY**
 Doug came to Caltech from Portland, but while he was here, his home town changed to San Diego and then Chicago. He has been active in Dabney House as treasurer, head-waiter, and house stationwagon. His campus activities included band and student shop. Doug was so avid an ROTC man that they made him squadron commander in his junior year. Before going on active duty, Doug will attend grad school, hopefully on Air Force funds.

Howard Elliot Harry, Jr. **RICKETTS**
 There was a time in Ricketts when "men were men and gods walked the earth" but since that time the forces of darkness and evil have taken control. But look yonder at that spark of hope—it's the Elliot Harry. A spark created from energy in the form of sound. With his help Ricketts men may once again deserve their title of rowdies. The battle is a difficult one against the UCC and other conservative forces and may become costly. But regardless who the victor may be, his legend will live on in the memory of true Ricketts men for years to come.



Michael J. Cosgrove **RUDDOCK**
 Grove devoted most of his years at Tech to Judy Bear and football. A neck injury kept him from playing football after his soph year, during which he lettered, but he stayed on with the team as manager. Unfortunately for his studies, Judy Bear and midterms usually arrived at the same time, and letters had to be written before time could be spent on homework. The work load was never enough to keep Her Big Silly from leching of Peggy Bod, Anne Bear, and other willing maidens in red dresses. His years at Tech were not completely wasted, however, and he always will be remembered for his prime phenubies and the dancing bod. His academic achievements include an A+ in Ge 1 while flunking Russian and H2a, only to be followed the next term by an A+ in French, a D in Bi x I and an F in Ma 2b. The Clique will always remember that JBLHBFO-SMBWHHPFMBNITGCWClaude.

Clarence S. Fuzak, Jr. **LLOYD**
 Clarence Fuzak spent 3 years trying to find an option. Since F=ma proved too difficult, he finally settled in EE where he has mastered Ohm's Law. He is heading for grad school, where he will tackle Kirchoff's Laws. He is best known for his tremendous drive to change the name of one of Lloyd's alleys, formerly known as Alley Three. It is now not known.



Daniel A. Brogan

DABNEY



William G. Spring

RICKETTS

Robert J. Howenstine

LLOYD

Serene is the moon
in the still pool



James W. Hole

RUDDOCK

Ann Arbor's golden-haired boy, Jim joined the ranks of the Glee Club and the Republicans in his frosh year, and has remained loyal to both causes ever since. In addition, in his senior year Jim also joined the Glee Club's madrigal group. As a frosh, Jim earned numerals both track and cross-country, but did not go out the rest of his years here, convinced that his athletic prowess was robbing him of his customary ten hours' sleep each evening. Electrical Engineer Jim lists his interests as "girls (Mary), and computers," probably in that order. He hopes to attend grad school in the Big Ten with future plans leading to work in computer research.



William J. Schoene

FLEMING



Ronald W. Larsen

Ron Larsen was shot into orbit at Tech with an oblique 3/2 entry from oblivion (Oxy). Although a Dane he was strictly Greek at Oxy-Kappa Mu Epsilon, Sigma Pi Sigma, and Phi Beta Kappa. An infinite snake, he maintains a 3.8 at Tech and wears dark-rimmed glasses. Succumbing to his first love Ron arose to the situation and walked the aisle with his one and only, hereafter known as Joan Larsen. Ron now majors in EE and minors in family life. A myopic book-worm, his only relaxation is listening to transistor noise. A glutton for punishment, R.L. will stick around Tech for grad school and try to keep his vintage Ford running.



Joseph D. Taynai

RICKETTS

Boonton's gift to California, Joe came west looking for success, women, and "science." The first came early as House Librarian, and Joe followed this up with being UCC (and thereby earned the nickname "Close your Transom" Taynai) and a football player during Junior and Senior years. Finding the right woman took until Junior year, but when he did, he did it up right (scheduled for the day after graduation, no less!). Joe hopes to continue in EE (he decided he didn't like science) at Princeton.



Wayne E. Covington

RICKETTS

Quiet, competent Wayne hails from Southern Oregon. Despite his keen interest in and enthusiasm about EE, he still found time in his busy schedule for the Student Shop, the Karate Club, the IEEE Vice-Presidency, and miscellaneous activities and projects. His future plans include graduate school and a fruitful career in solid-state electronics.

Lee L. Peterson

RICKETTS



John H. McKinley

RUDDOCK

Jack achieved what was considered impossible in 1963 when, as editor of the Big T, he got the yearbook out on time. What free time his editorial responsibilities and classwork left to him was divided among a part-time job, playing bridge, and courting Vivian (whom he will marry the day after graduation). Bye, Bye, busy bee.



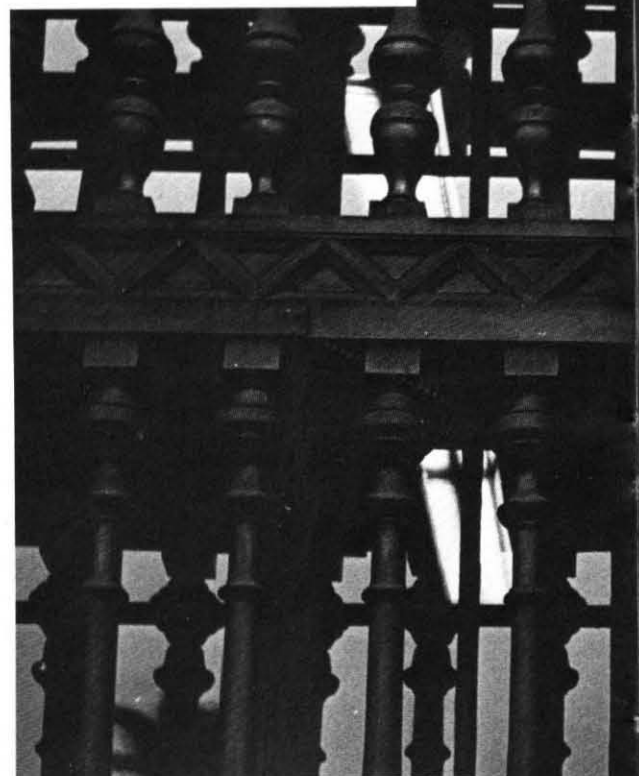
Roger L. Minear

FLEMING
Coming to Caltech from Portland, Oregon, Roger spent much of his time here assembling a magnificent hi fi system, building useless gadgets in the student shop, grading math papers, and serving as chairman of the EPC and the Election Committee. He may even have learned some EE, if the recurrent cries of "Hey, Rog, how do you do the 106 homework?" are any indication. Despite snaking "as little as possible," he has maintained honor standing throughout his years here. Not knowing when to quit, Roger intends to return to Caltech for more of the same.



William R. Ricks

RUDDOCK



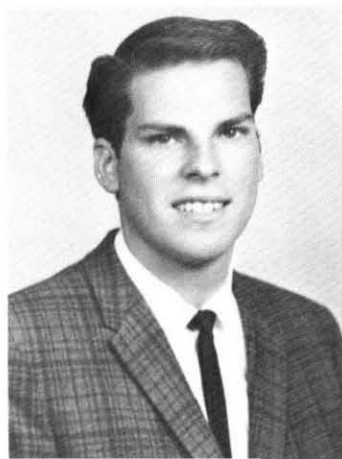
Bruce R. Julian

PAGE
Bruce firmly disbelieves in the word unclimbable and was suspected of rape when discovered in a local tree. A lie detector disposed of that idea, but since then he has retired his climbing to areas unharassed by Pasadena police. As a member of Page house, he took an active interest in most everything and would rather work on Interhouse than study, especially if the distraction is nocturnal in nature. High among his interests is public affairs—he is a member of the ACLU and an avid reader of the New Republic. He was converted from KFWB to the Three B's after he was driven by Saga to seek the off campus life.



Ronald G. Findlay

LLOYD
Ron came expecting to leave Caltech as a nuclear physicist. Sometime during first term his frosh year, he suddenly remembered that he had always wanted to be an electrical engineer. He hasn't changed his mind since. Ron will be remembered by Lloydmen for his love of (loud) organ music, his interest in high fidelity and record collecting, his liking for large quantities of uncommon teas, and his knack for avoiding letter writing—hmmm—and the Y Religious Emphasis Commission. Future plans include working a few years and then picking up a masters in EE.



Dennis R. White

FLEMING
"Big D" served three long years inside the ivy covered walls of OXY for being too hep. In June 1962, he made his break, only to be recaptured and sentenced to serve time in one of the most dreaded institutions in the country—Caltech. Here he became known as a troublemaker, inciting riots in the Fleming mess hall, wooing on fellow inmates, and failing to conform to normal Caltech behavior patterns. Time has mellowed "Big D" though, and Tech has taught him a trade. Now an old man and soon to be leaving, he looks forward to a quiet life of hep women, fast cars, Jazz, and booze. May he rest in peace.



Thomas C. DeKlyen

RICKETS

Alvin Young

Reluctantly leaving his 60 watts of **Saber Dance** home in Honolulu, this beaming **kane** arrived in his strange new home, where water is the only fluid that flows down mountainsides. To add to this cold reception, the P.E. Department gleefully discovered that this bronzed beach needed to learn to swim. This was so upsetting that he sought to compensate by becoming the fiercest player on the Lloyd I.H. football team, a boisterous committee already known for its ferocious methods. Encouraged, he became a UCC and began to spread the doctrines of Hawaiiism and Fingalism. All opposition was met and defeated by the inscrutable one with but a smile and the holy word "yeah." Then, seeking to extend his dominion over nature, he took up EE, but his hopes were destroyed by the discovery that he couldn't solder. Returning in disgust to athletics, he idled awhile with tennis and Saga waiting before finally sounding the golden gong with karate. 1964 will probably see him return for his M.S. in EE (perhaps learn to solder) and his black belt in karate.

LLOYD



George R. Cannon, Jr.

PAGE



Richard W. Uhrich
(ALL AMERICAN BOY)

DABNEY

After being "most out of it" frosh and an off-campus sophomore, Rich leaped back into Dabney House Activities. Fully equipped with a set of wheels (the wreck), he started off Junior year as a UCC and ended up as house Veep. Although Rick looks like an athlete, a knee injury acquired as a frosh in Interhouse football has prevented him from engaging in sports. By talking to softspoken Rich one would never guess his future ambitions which include a motorcycle, sports car and surfboard. If you asked anyone who knows Rich about him, you'd probably get the reply that he is "the nicest guy around."

Arthur Turner

DABNEY



William S. Meisel

Bill hails from El Campo, Texas, which is just east of Winslow, Arizona. In spite of his handicap, in his four years at Caltech, Bill has succeeded in both his academic and extracurricular efforts. A bright EE and humanities snake, he is a member of Tau Beta Pi. As UCC of Alley One, he led the most gung-ho alley in Ruddock history. To an unprecedented year-long tenure as GOLV'S, Meeting Big T, deadlines as Activities Editor, rehearsing for a Westridge play, and his everactive social life as a junior didn't stop him from making a GPA of 3.7. In his senior year Bill has settled for the sedentary life of a Ruddock Social Chairman, spiced with academic overloads and Jo. The future will find him in EE grad school still looking for a morning class that he won't go to sleep in.

RUDDOCK





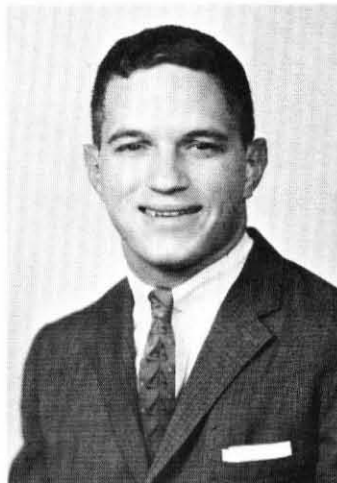
Geology

Richard D. Maxson DABNEY
Rick came from Michigan with physics on his mind. A few desert outings soon revealed the true light, and so he will graduate in Geophysics. He has served Dabney as historian and UCC, and has served the Darbs as a waiter for almost three years. Searching for the ideal passtime, Rick tried football, band, karate, and studying, but wound up commuting to San Diego. These sojourns resulted in wedding plans between graduation and graduate school.

Leon A. Thomson DABNEY
"I came to listen, but I stayed to scoff." Ben Franklin's words are a fitting summary of the Caltech career of Leon "Goose" Thomson. He was a scholastic success, rising from Dean Strong's Blue Slip list to Dean Eaton's graduation with honor list. He was an athletic success, assuming the role of the jock strap in more ways than one. But sometime in his junior year, something went wrong: his gentle humor turned bitter, his quiet smile became a sneer. His remarks became predictable: "House spirit is a crock!" or "Americanism is a crock!" or "Culture is a crock!" Even as he took leave of Tech forever, he renounced her most sacred tradition with a mocking "Cynicism is a Crock!" That was the unkindest cut of all.



David A. Hewitt PAGE
Dave is one of the "nicest" athletes who ever came out of New York. Also a devoted geologist from the first, he could never be coaxed into discovering the finer things in life. A car in his sophomore year went without use. Given up upon, by his buddies, as a born misogynist, Hewitt fooled them all by falling for a certain young miss at Oxy. Next year brings Grad School, rocks, and cold winters again.



Robert C. Liebermann RUDDOCK
Remembered by Ruddock men as "the Beaver", Bob quite possibly holds the distinction of being the only 5' 5/2" ASCIT president ever. It all began when Bob took time off from physics in his sophomore year to become House Athletic manager. The next year he became ASCIT athletic manager followed by his victory in a hard fought campaign which made him student body president, earning such titles as "House political machine" in the process. Bob was unhampered by dating during his college years; he remained true to Barbie, who was from three to six thousand miles away during Bob's studies here. The extra time he gained by not dating, Bob devoted to becoming starting quarterback on the football team, lettering three times in baseball in addition, finding vents for his bubbling enthusiasm, and getting "P.O.ed." As ASCIT president, Bob got to know many faculty members by their first names—at least behind their backs. He especially got to know most of the shining lights of the Geology department, with the result being that he became a devoted geophysicist. It is in this field that Bob plans his graduate studies. When asked, Bob professed to ignorance about his life's ambitions in the distant future (beyond one year). All that the Patchogue, New York "Beaver" would keep admitting was that "in any event, I'll be married."



Francis A. Dahlen, Jr. RUDDOCK
Living proof that the Admissions Committee can ferret genius from the most regions of the earth, Tony came to Tech from the culture center of the world, Winslow, Arizona. He arrived looking like a clean cut athlete, but soon took up surfing. Without time or money for the actual sport, he did his best by growing blond bangs. Tony's background of fighting the savage Navajos adequately prepared him for his years on the Ruddock and Tech football teams. During his free moments, he studied Geophysics and soaked up a little culture. A summer in New York has left neon signs glowing in his desert eyes and he plans to go to Columbia next year.



Chemistry



Edward M. Medof

LLOYD

Roderick C. McCalléy

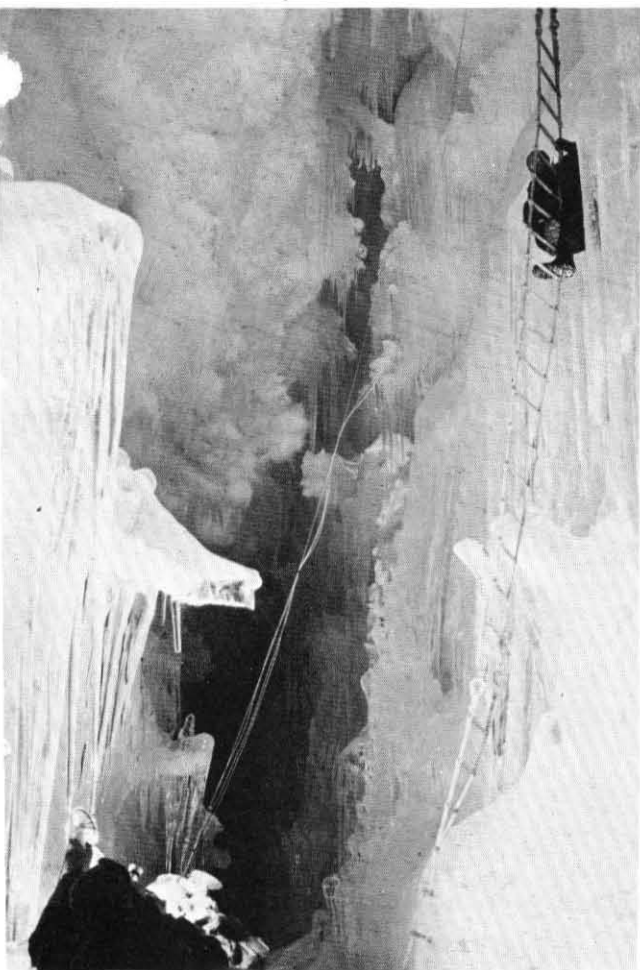
RICKETS



Keith T. Gillen

Keith came to Tech from the Beverly Hills Ghetto on the footsteps of the prophet Abarbanel. Here, in the idealism of his youth, he applied himself diligently and finished his freshman year with honors. As the years passed, his horizons broadened, and he developed his well-known wry sense of humor and cutting cynicism. He dabbled in politics, becoming an EPC member, Junior Class Secretary, and UCC of Ruddock House. He socialized long enough to get mono-nucleosis, and he was the first Tech student to hand in an assignment nine months late. He fell into the habit of solving his problems in euphoric sleep while dreaming of the High Sierras. Yet underneath it all, Keith remains a talented and devoted scientist and a self-appointed member of the Intelligencia. He looks to Wisconsin or Illinois for graduate school to study physics in the Chemistry department.

RUDDOCK



Volker M. Vogt

The second Vogt to attend Tech began as a typical withdrawn snake, but ended in a flurry of activities athletic (basketball), house, ASCIT (BOC and EXCOM), and YMCA. Inexplicably, his GPA's remained constant enough to give him three years honor standing. As one of the self-styled "responsible" (conservative) bastions in the house, Vogt contributed for several years to the running battle of attitudes and manners endemic in Lloyd. But it was his involvement in the Y that provided the stimulus to expand horizons and find a frame of orientation in the world. His equal interest in the humanities not having abated, Vogt's future is not fully clear. A year in Europe will probably be followed by grad school in biochemistry someplace in the non-West.

LLOYD

Stephen A. Gorman

Steve, "Super Frosh" Gorman is an example of the Renaissance gentleman misplaced in time by a quirk of fate. His romantic nature has lead him through the athletic fields of West Point, to the fraternities of UCLA, to the cloistered halls of Caltech, where he finally found temporary roost in the Chem option after trying engineering and biology. His Renaissance character lead him to be an athlete, an athletic manager, an accomplished guitar player, and a music critic. Unfortunately, Tech robbed Steve of some of his zest for life and left him with a semi-persecution complex. But, the future looks brighter, for Steve plans to bless the beaches of Hawaii or the ski-slopes of Colorado with his dimpled smile.

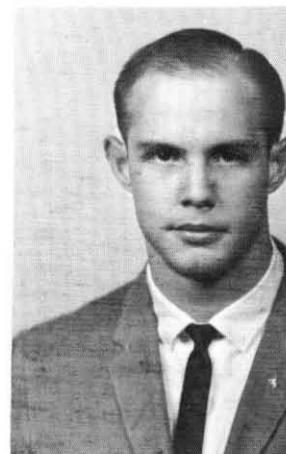
RUDDOCK



Robert D. Bruner

Bob was a local boy, coming here from nearby Alhambra. Once here, he found Tech a great place to cultivate an interest in music, and to maintain a study of Chemistry on the side. Deciding that Chemistry is worth a little more work, Bob is now bound for grad school: location unknown.

DABNEY





Ray F. Weiss

Ray arrived at Caltech very exhausted from his bicycle trip through Europe, he wished to point out. Immediately, however, he regained his vitality, asked Dokken if he was a freshman, invoked the wrath of Karl Pool, (Mr. Weiss, Mr. Pool would like to float you.), and was one of the very few Tech frosh to get a date at the (understuffed) President's Tea. From then on, Ray's romantic endeavors were among the most varied and interesting in the student houses—so nobody was much surprised when he was elected house Social Chairman his Senior year. Ray was also interested in photography, water polo and swimming, javelin throwing, and time wasting. A geochemist of sorts, Ray will probably end up at La Jolla grad school next year.

RICKETTS



Richard R. Burgess

Dick, constantly praising smogfree Seattle, came to Caltech a tall, double-jointed, chemist. His interest has since turned toward Biology and he is planning on grad school at Harvard in Biochemistry and a future in medical research. His activities include three years of Varsity Basketball, Page House vice-President, UCC, and Interhouse Dance Chairman, ASCIT Excomm and Permanent Publicity Committee, Corresp. Sec'y of Tau Beta Pi, and DuPont Junior Travel Prize Traveler.

PAGE



Robert R. Gilman

Some five years ago, the "wanderlust" kid from Long Beach entered Tech as an aspiring chemist and a social member of Dabney. He followed the exodus to Ruddock a year later and began to pattern himself in the Donnelly image. His flair for sharp dressing and his "savoir faire" netted him the social reins of Ruddock and a plethora of poetic woes. The '55 Chevy soon became the House car. Closely affiliated with the so-called Clique, he soon tired of bucking its machine and became the patriarchal patron. "Flash" earned two letters in varsity baseball, played on the House touch football team, and was elected to the Beavers. The Naval Lab in San Diego commandeered his services after his junior year for a nine month tour of duty and while there, Betty commanded him for a different type of service of unlimited duration. He returned to graduate with the Clique and have one last flail at the hardball, after which he plans to do graduate work in chemistry beneath the celestial Colorado skies.



Russell D. Hageman

Russell, who came to Tech to avoid snow and the rigors of Iowa Winter, managed to avoid only the latter. After a generous sampling of the potpourri offered, he was finally claimed by the art of Chemistry. During his stay he became one of the Geology Club faithful and contrived to muscle his way into the secretaryship of the Chemistry Club. It is expected that Russ will soon be heading back into the midwestern regions of blinding blizzards from whence he came to begin the pursuit of the Ph.D. and x elements.

RUDDOCK



My name is Curtis Atkin
My father is a plumber;
We keep your toilets running
In winter and in summer.



George N. Reeke, Jr.

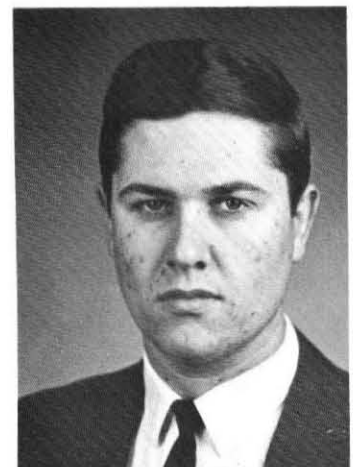
Smart George came to Caltech from Green Bay, totally unenthused about the Packers, but totally enthused about nearly everything else. Within several months of his arrival, honors-at-entrance Reeke had learned the secrets of the steam tunnels, mastered lock-picking, and lost the Ricketts House Gong (for the first of many times.) A good piano player, (by dint of hard work—the same way he was good at many things) George consistently refused to play anything but Chopin, except around Interhouse Sing time, when he gritted his teeth and played whatever Bloomberg (a Beethoven fan) wanted. George came to power in his Senior year—he was Newman Club president, election committee chairman, TBY member, and room-stacker extraordinaire. Although Caltech never was the intellectual challenge George hoped it would be, he never worked hard enough to get a G.P.A. higher than 4.1. Things won't be quite so much fun with George gone.

RICKETTS

Jesse L. Beauchamp

Since arriving in the big city from the broiling plains of Needles, Jack has occupied most of his time with hi fi equipment, goofing off, losing and gaining weight, and Chemistry, not necessarily in that order, though. A casual observer would have a hard time deciding whether he was enrolled at CIT or OXY, as he found Diane better company than science. Having time to do this and still attain the honor roll, his artistic ability and genial nature gave Page House some of its best social calendars when he served as Social Chairman. A past SAACS president, he is now going to see what he can do for Harvard. If his qualities are not appreciated there, he has applied to fourteen other schools to remain in the good favor of his hero, Dr. Roberts.

PAGE





Arthur E. Johnson **BLACKER**
Due to his nomadic studying habits and easy-going manner, Art is widely known in our class. His freewheeling style was illustrated on the occasion when he picked up a girl on Colorado Blvd by turning around and asking if she was following him. Underneath this casual exterior, Art takes pride in doing his work completely and well, as exhibited on the athletic field. His responsible attitude and his unusual ability to listen have earned Art the respect and personal confidence of fellow housemembers.

Carter G. Naylor **BLACKER**
One would hardly expect that someone from Lingle (wherever that is)—Oh, Yeah, it's somewhere in Wyoming (wherever that is)—to go to college, much less a "science school". But Carter came to Tech, and managed to weather it out. He also achieved distinction outside the science world—in the Glee Club, the Madrigal Singers, in pushing Richard Green around, in going to class for Art Johnson, in getting married (soon), and in making lots of friends . . . Now if they could only use a chemist in Lingle.



Ralph H. Young
The first time a person meets Ralph, he never fails to notice his beaming smile and hand-waving greeting. Although he lives off-campus, he is very successful in making friends. Ralph has a very strong interest in other languages, in particular, Indonesian. "Memorize words as if they were chemical formulas" is his motto. Surely enough, he is among the top ranking Phy-Chem majors of his class. As a dedicated Christian, he has a definite aim in life. He wishes to go "East"—either the east coast or Far East—for his graduate study.

David Holtz **PAGE**
During his four years in Page House, Dave came to believe in the Easter Bunny, caused a Matzoh riot one spring, and was the only man ever elected to House office because a waiter slopped butterscotch pudding on his sleeve. Besides being House Treasurer and a UCC, Dave managed to serve on the EPC for a year and be elected to Tau Beta Pi in his junior year. An avid organic chemist who took mostly physics courses, he plans to continue in graduate school somewhere in the East next year.





Thor P. Hanson PAGE
 "A jack of all trades, master of none" well describes Thor during his stay at Caltech. Rearing from nearby PHS he settled down for an active life in Page House where he was House Librarian, House Treasurer, Interhouse-cleaner-upper, and alley juggler. On the sports scene, he won varsity letters in football, track, and cross country. He also was sports editor, a member of Beavers, and a honor certificate winner. Not particularly interested in anything, Thor became a frustrated Chem E with dreams of becoming rich someday. After graduation he plans to get a job and stay out of the army.

CHEM E's
 are the salt of the earth! (?)



Malcolm Morrison FLEMING
 When Malcolm arrived at Fleming House from Lubbock, Texas he radiated a disarming naivete coupled with an irrational reverence for the Lone Star State. That the picture was far from complete some became clear when it was revealed that his hometown sweetheart was actually his clandestine wife, thereby causing much embarrassment among those who had chided Malcolm for his lack of worldliness. Since then he and Julie have been busy raising Malcolm Jr., now 2 1/2 years old and one of the most beautiful children in the world. While at Tech Malcolm has forsaken the academic world in favor of the more realistic goal of monetary return and was therefore a natural for the Chem E. option.



George T. Preston RUDDOCK
 B.A., as he is affectionately known to his Ruddock House comrades, came to Caltech from the wilds of Wyzetta, Minnesota. An avid Chem E, he has been the mainstay of the option both academically and spiritually. He has been the pillar of the glee club for four years, and his "impeffect pitch" can still be heard giving the first note. He spent the latter part of his Caltech life off campus, and was recognized during his senior year with his trusty motorcycle. His future entails a master's degree from Cal and some more frequent trips down to Stanford.

Richard J. Shlegeris RUDDOCK
 Shlegeris, whose name is derived from old German words meaning "wood-cutter" or "slayer," came to Tech from the armpit of the Bay Area dedicated to the proposition that Chem E's are the salt of the earth. Big Dick was married in his sophomore year and will become a bigamist this summer. He was active in Ruddock as an obstinate SOB, UCC, treasurer (his term was the most profitable in Ruddock's history), and a veteran leader of two campaigns against Saga. As pledgemaster he set a new record for the trip from Long Beach to Pasadena wearing only a sheet. He starred in IH volleyball, basketball, and softball, and directed Interhouse Dance construction from the top of a ladder. In spite of being a two-time loser with Officers Fagin and Faulstich of the PPD, Dick has decided on the straight and narrow and has a promising future, with plans for a Ph.D. and a CLM.

David L. Hyde RICKETS
 Dave, perhaps unfortunately, will probably be best remembered around Ricketts House for his incredible ability to hold large quantities of cash in his navel. A delightfully silly fellow, (except when spending long and tedious hours at Chem E, a subject he loved, for some inscrutable reason), he walked with sort of a bop, made strange noises, and frequently wore the most ungodly shoes in seven countries (nice Thing!). He was a varsity golf letterman for several seasons, but that didn't stop him from discovering his Irish girl, Kitty. He and she will be wed this summer, and nobody has much doubt that Dave will be a very Successful Chem E. Keep that navel stuffed, Dave!

William S. Smith FLEMING

Joseph Cullen LLOYD
 "NONE DESIRED!"

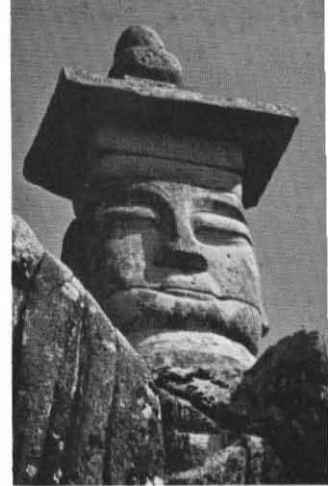


Mathematics

Frank Matthews

PAGE

Although Frank entered Tech as a Flem, he soon became enlightened and became a charter member of Page, the last one still at Tech. He was likewise enlightened about option choice, when after two and a third years in Physics, he decided that math was a far better option. His interest in computers led to a year leave for further study at IBM. Back again he is sometimes seen studying when discussing sailing or engaging in house or alley activities including construction of the Great Page Interhouse.



Kwok Chung-Mo

LLOYD

Kwok Chung-Mo transferred here from Hongkong in his sophomore year. In spite of the fact that he was born in the southern Chinese province of Kwangtung, whose native sons are, according to Time, famous for their pugnacity, Chung-Mo is quite friendly and sociable. In addition to his capabilities as a mathematician Chung-Mo demonstrates his prowess by engaging in karate and soccer, two of his favorite sports.

Encouraged by His Excellency the Fodem to search for the truth, Chung-Mo conducted an extensive survey into the extracurricular activities of American college men and the Terrible Four. Never satisfied by mere talk, he also investigated the cultural life in our friendly neighbor to the south, coming to the earth-shaking conclusion that American college men were often all quite untouched by the temptations of the modern world.

On the pretence of being interested in the representation theory of finite groups and associative algebras, he hopes to get into grad school in the East to conduct further studies in this interesting topic.

David L. Colton

FLEMING

At the end of nearly three years, Dave led the engineering option in class standing as well as in absence from engineering courses; then he finally transferred to the math option in which lay both his interest and his electives. He somehow managed to find time, between intense studying and equally intense reading for someone with whom to double, to become a member of Tau Beta Pi, play interhouse basketball, softball, and tennis for Fleming, and be elected president of the Math Club. Certainly one of the most noted of his accomplishments was his uncanny ability to finish his finals ahead of everyone else. Graduate work in topology is Daves' deformable view of the future.



Thomas MacDowell

Thomas MacDowell came to Caltech innocent, quiet, and studious, a Merit scholar, with Honors at Entrance and dedicated to mathematics. This lasted at least two weeks, whereupon Trowel emerged, awakened to wine, women, and song—well, maybe not song. His newfound interests led him to a year of Gung-Ho Ruddock Social-chairmanship. In spite of superior eyesight, further obscured by a constant cloud of smoke, Mac was athletically inclined—he lettered in Varsity Baseball and starred on Ruddock's interhouse football squad. Trowel is a dedicated musician—he has played the AM radio for eight years, even to the extent of taking finals to the tune of KFWB.

Mac is noted for owning the only Trowelmobile in existence, and will be long appreciated by his fellow Clique-members for the motherly influence he brought into their midst. His plans for the future include a Ph.D. in Math, and the purchase of a copy of Dwight—the only thing that he understands."

Donald O'Hara

DABNEY



$$(1 + e^{-\pi\sqrt{55}})(1 + e^{-3\pi\sqrt{55}})(1 + e^{-5\pi\sqrt{55}})\dots$$

$$= \frac{1 + \sqrt{3 + 2\sqrt{5}}}{\sqrt{2}} e^{-\frac{1}{24}\pi\sqrt{55}}$$

u	v	w	x	y	z
a ₁	a ₂	a ₃	a ₄	a ₅	a ₆
b ₁	b ₂	b ₃	b ₄	b ₅	b ₆
c ₁	c ₂	c ₃	c ₃	c ₂	c ₁
d ₆	d ₅	d ₄	d ₃	d ₂	d ₁
a ₆	a ₅	a ₄	a ₃	a ₂	a ₁

$$= \begin{vmatrix} c_1 & c_2 & c_3 \\ b_6 + b_1 & b_5 + b_2 & b_4 + b_3 \\ a_6 + a_1 & a_5 + a_2 & a_4 + a_3 \end{vmatrix} \begin{vmatrix} u - z & v - y & w - x \\ d_6 - b_1 & d_5 - b_2 & d_4 - b_3 \\ a_6 - a_1 & a_5 - a_2 & a_4 - a_3 \end{vmatrix}$$



Charles L. Vinsonhaler

RUDDOCK

Chuck's first love at Caltech was football, followed in order by Lynn, English, Kay, golf, Connie, econ, Deanna, basketball and math. As captain of the '63 Caltech football team Chuck led an injury-plagued team to its best season in recent years. Only a smashed knee kept Chuck off the All-Conference team, and his teammates rewarded his efforts by presenting him with the coveted Wheaton trophy. In basketball Chuck was the seventeenth leading scorer in the conference as a junior, and during the senior year he became the star of Coach LaBrucherie's three o'clock golf class. By studying at halftime and at the training table Chuck easily made honor standing. A letter from his draft board first term helped him to decide to go on to graduate school for further work on his golf game. And despite being a three time loser, Chuck is still waiting for the right girl to come along at the right time with the right-sized check book.



Mike McCammon LLOYD
Coming from Hawthorne, California, the "City of Good Neighbors," Mike saw the swimming pool and liked it, so he stayed. After a disastrous freshman year (academically), he returned to play more water polo and by the end of the sophomore year was a starter. In his Junior year Mike was elected to the All-Conference Water Polo team as a guard and even managed to earn a letter in swimming when the first backstroker broke his leg. He expanded his activities in the senior year to include frosh camp as a counselor and membership in the "Secret Seven" of Lloyd. The highlights of the year, however, were his election as co-captain of the water polo team and the winning of the Coach's cup. He will graduate in the math option and hopes to do graduate work at UCLA before entering the real world.



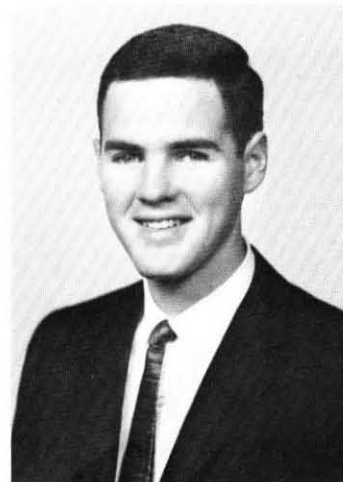
Gary E. Dahlman BLACKER
"Oregon" Dahlman has done a great deal to further the Terry Baker image here at the institute. Though slightly stubbier and not quite as bald as his idol, Gary has demonstrated comparable prowess with three letters in basketball, following in the footsteps of such former Tech greats as Roger Noll; two letters in baseball, with All-Conference honors as a senior; and a letter in golf. Well-rounded Gary also managed to maintain a respectable B average. Upon graduating he plans to marry his Eugene Queen and enter the Actuarial profession as a rising young executive.



Robert J. McEliece RICKETTS
The week Bob McEliece came to Caltech will not soon be forgotten. In this short time Bob became one of the outstanding members of his class to obtain a date with a hostess at the Freshman Tea, asked Dokken if he was a frosh, and secured the coveted title of Superfrosh. In the following years Bob remained in the midst of Ricketts House activities, first as Social Chairman, and then as house President. Bob was amazingly able at all weird skills, both physical and mental. Having studied with the old-time masters, he could spin trays with the best. Always willing and usually able to find humor in any situation, the hard-luck kid was one of the few ever to lose a high man bet with a 4.0 G.P.A. Bob's plans for the near future include graduate study in abstract algebra, explains Jeannette marrily.



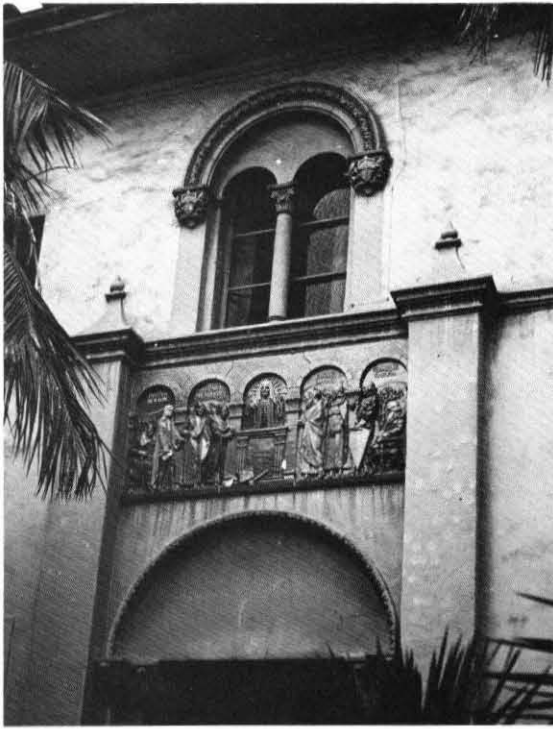
Michael J. Lambert PAGE
Kept company by his own personal jungle-in-a-pot, L'Bert lived quietly in Page House. Sensing his true calling, he undertook the challenge of Social Chairman. Never forgetting in this connection that "All Women Are Bitchin'," Mike became a prime mover in Page's most successful social team ever. As a UCC and charter member of the YFC and G society, he dissipated the extra energy derived from all that Yummy Chocolate Fudge by singing softly for Mr. Frodsham and working hardly for the Math Department. He plans to do graduate work in Applied Math, perhaps turning Easterner for the experience.



Richard Karp RUDDOCK
Shortly after his arrival here, Dick joined the California Tech staff. An enterprising cub reporter, he rose rapidly up (?) the ladder past ever-increasing competition to become editor and then business manager. Dick (and his options) always carried a lot of weight on campus. As IHC Chairman he busted himself coordinating rotation, writing memos to F.E. Taylor, and filibustering at B.O.D. meetings. T.P. will best remember him as Senior Class Athletic Manager. An L.A. man since infancy, Karp turned world traveler at twenty, as he spent his last summer on a whirlwind tour of Europe. Future plans center around grad school in math wherever they'll have him.



Robert R. Meyer
With a dislike for physics and chemistry, Bob is left with math and Barbara, whom he married after his sophomore year. He made the honor roll, so the influence of a wife has not been a negative one by any means. Bob was probably one of the quietest people to roam Page House, and is remembered as becoming vehement only when confronted with the Koh faction. Foreign movies, folk music, and anything classical except a piano concerto occupy his cultural interests. He plans to raise his son Jeffrey as a good Catholic mathematician and feeds him Apostol for breakfast every morning.



Samuel R. Gordon

BLACKER

David Helfman

RUDDOCK
 Dave, who used to refer to himself as Caltech's only music major, joined forces with his lovely Judi during his Sophomore year, and they soon turned into Caltech's main extracurricular activities majors, accumulating the following activities together—Little T editors (2 years), Glee Club Student Director (3 years), ASCIT Activities manager, YMCA Cabinet member, Lukas Foss Leader of America Chairman, and voting delegate at the Regional Assembly, Ruddock House Interhouse Sing Director (3 years), Member of Beavers and Alpha Phi Gamma, Contributors to the *California Tech* and *Totem*, Holder of an Honor Certificate and an Honor Key, founder and chairman of the ASCIT Permanent Publicity Committee, etc. David and Judi will be wandering into wider pastures after graduation, when they go east to grad school in Philosophy, unless he really does decide to go into music.

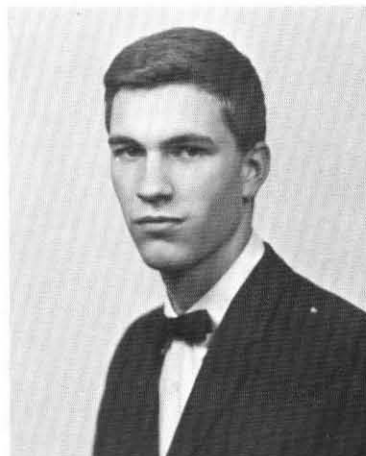


John B. Hunter

RUDDOCK
 On a dark September day in 1960 Bockett Hunter descended on us from Mexico City. Since that gloomy day he has become famous for his many novel ideas. Among these must be included turning room 114 into a refrigerator (average temp. 55°), and chasing unwanted visitors out of sight with deadly weapons. When he was still an unsuspecting Sophomore Bockett made the mistake of electing the worst of all possible options, and has been suffering ever since. He has indulged in many recreations to alleviate this suffering, among which must be listed band, crew and flammers, swimming, and women (or should I say woman?). Apparently these diversions did the job—you'll find him next year in graduate school busily grinding away in that same (unmentionable by name) option.

Richard McGehee

RUDDOCK
 Dick came to Caltech dedicated to mathematics and his Pomona sweetheart. His Apostolism brought him top grades and his untiring labors as chairman of the (IH Dance procuring committee earned him the keys to Ollie Seeley's car. Not content with scholarship and sex (is there anything else?), he helped to found the wrestling team and argues with Elmo E. "Bud" Taylor about House breakage. His fetish for guitar-playing grew out of long hours of solitude while circling the globe with Scripps (not the "finishing" school) during the fall of his junior year. In spite of all this, Dick still managed to earn his TBP "bent". The crystal ball predicts that Dick will be the first person to earn his Ph.D. in the applied mathematics of Keynesian economics.



Alan Hindmarsh

RUDDOCK
 Al came to Tech from the Bay Area as a respectable math snake. However, under the guidance of Ruddock's "Clique", he came to see the light. He then expended his prodigious energies in creating such wonders of Interhouse Dance as the half-sized Sphinx (and with his other rib he erected a medieval drawbridge). Between these projects and numerous trips to Oxy, Al put in four years of work with the Glee Club, a year as UCC, and, being totally devoid of literary talents, he found himself also on the staffs of the *Tech* and the *Big T*. Future plans begin with grad school in math—anywhere except Caltech.

Fred W. Dorr, Jr.

RICKETTS
 With only minor twinges of conscience, Fred took time off from that "Chosen of All Options" to play golf, interhouse athletics, and house politics. Using his UCC-ship as a stepping-stone to higher political office, the red-headed lad from Portland benevolently watched over the house as its Vice-President his senior year. Still, seeking more than knowledge and political power, he made his intentions known with a diamond ring. Thus motivated, proving he was second to none, he scheduled his wedding scant hours before that of his own UCC on the day after graduation. Grad school and the academic world beware, this is not a man to be trifled with.



Physics



James C. Whitney

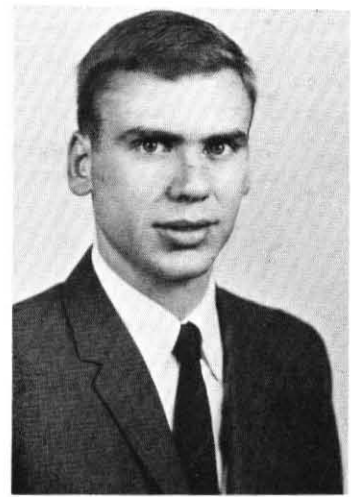
Jim is an example of the self-improvement which is possible through a college education. Four years ago he roared into Tech on his chrome plated motorcycle looking like a hood from Brooklyn. The years have wrought a remarkable change. He now plans to go to Grad school in physics, and is one of the few men alive to be Dabney Social Chairman for four terms. He will long be remembered for his opinions on the Tender Trap, and his cry "Four parties each weekend or bust!!" This June the mature, urban sophisticate, Jim Whitney will roar out of Tech in his chrome plated Cadillac convertible, looking like a suave, debonair hood from L.A.

DABNEY

Frank Winkler

Frank came from Chillicothe, that's right, Chillicothe, Ohio, to study physics, but it was obvious that he was destined for better things. His fertile wit and loud, obnoxious ties were a source of inspiration. During his stay he participated in a fairly impressive list of campus activities, serving as comptroller and Social Chairman of Dabney House, Beavers President, a member of the ASCIT Excomm, and Senior Class Vice President. As UCC of Elitevia, he led his alley in red licorice eating, beer can rolling, and the eventual overthrow of the House. Meanwhile, he found enough time for studying to consistently achieve honor standing and to win a summer's trip to Japan via the Junior Travel Prize. Come June, we expect to see Frank heading to graduate school, strumming his samisen and smoothing his yard-wide hand painted tie.

DABNEY



Joseph H. Weiss

RUDDOCK

From the booming metropolis of Coulee Dam, Washington (pop. 1,000) came a man destined to be one of Tech's most successful physics snakes. As a stalwart on the basketball team, Joe was a Vesper Trophy winner and captain of the '63-'64 squad. Active on the judicial scene, Joe avidly applied the proverbial "big screw" as a UCC and BOC member. Joe's versatile talents and his ability to snow pros netted him one of the coveted Junior Travel Prizes. His major political triumph came in the hotly contested race for Senior Class secretary. The future features grad school—hopefully after a year in Europe.

Bob L. S. Ching

LLOYD



Herbert H. Chen

BLACKER





Philip H. Bowles



WILLIAM E. SCHOKNECHT

William E. Schoknecht
Wild William covorted in from the wilds of Wisconsin four years ago, and Caltech has felt his presence ever since. When not normalizing a wave function or some such activity, he could always be seen (or rather heard) shooting the bull in philosophical discussions in the Blacker lounge. Now he is planning to go to graduate school, and hopes to win his Ph.D. by either disproving the second law of thermodynamics, discovering the magnetic momopole, or determining the age of the universe correct to 137 significant figures in fortnights.

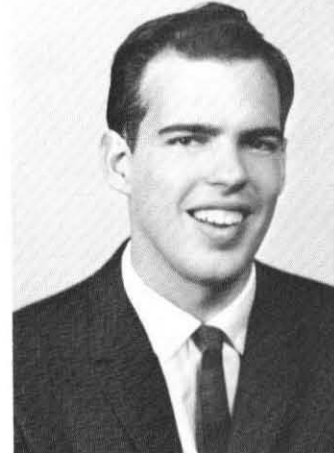
John P. Slonski

LLOYD



Richard H. Stanton
Dick turned to science from the sun and sand of Santa Monica. He did well in science climbing toward the top of his class, but retained a preference for body-surfing. Dick maintained a respectful attitude toward, but not a respectful distance from the opposite sex. Tall, dark, and handsome, he has chosen to have an active social life. Dick has kept busy with important things such as varsity baseball, but will soon be lowered to the mediocre work of earning his doctorate.

RUDDOCK



Dennis Ross
(As seen by himself at the age of fifty while herding llamas in Peru)—I think changing options at the end of my junior year started the whole thing. If I had remained a nice quiet chemist instead of becoming a physicist, I would never have discovered the death ray in graduate school. Of course it was very helpful in moving up the academic ladder since vacancies just ahead were always conveniently available. My ambition then got the best of me I guess. The plan was to first conquer the earth and then move to set up an intergalactic empire. The first step was to conquer Sog Island off Alaska. This turned out badly since I found it necessary to eliminate the population, one hundred and four seals. This was a mistake since the U.S. Department of Seal Preservation set out after me suspecting I had something to do with this hideous crime being the only person on the island (outside of my wife and nineteen children whom I somehow acquired in eight years here and there along the way). The wrath of the entire country of naturalists being up in arms, I thus found it necessary to flee to this miserable place. Mama mia! What a Caltech education can do!

PAGE



Herbert R. Flint

DABNEY

One bright autumn afternoon four years ago an unassuming fellow arrived at Caltech from the badlands of Nevada. With quiet confidence he proceeded to muster a truly impressive grade point and astound his housemates with his philosophical depths. And then the metamorphosis. Out of the Western sunset comes the muffled roar of the great pink Cadillac. In rapid succession Herb became UCC, socialite, and finally Dabney House President. For the future he looks forward to a career as a graduate student, where his philosophical nature may again take command.

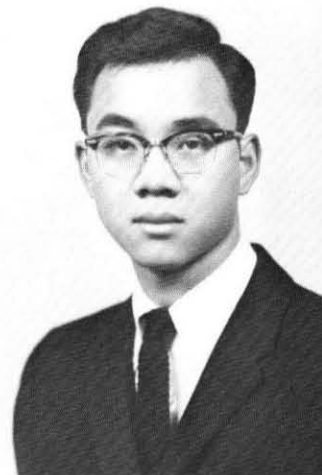




Spicer V. Conant PAGE
 Spicer came to Caltech from Exeter as a baby-faced aspiring physicist. Leaving as a baby-faced physicist, he has deftly exercised the art of winning friends and influencing people while at Caltech. During these formative years he has been a Board of Control member since his frosh year, Page House President, ASCIT Vice-President, and an outstanding member of the YCF & GS. A man with unsurpassed savoir-faire and a Mercedes-Benz, Spice will leave behind a string of beautiful and snowed girls as he goes to grad school ("You can't get there from here") in fluid mechanics, from whence he will step into a job in Big Management.



William S. Cheng BLACKER
 From childhood's early steps at home in State College, Penn., the pathway meanders through Phillips Academy, Andover, Massachusetts to alleys of Hell and Heaven in Pasadena. Then memory respites briefly in recollections of physics and economics, guitar and karate. Hopeful trailing clouds of imagination will follow intimations of graduate study in business administration, science, and languages.



Duygu M. Demirlioglu RICKETTS
 Duygu came to Ricketts a foreigner and unpronounceable, but his spirit and active interest in the House made these faults forgivable. The fastest butterfly in 6391 years of Turkish history (and a three-year letterman), flamer drinker par excellence, a water-fighter and lounge-rioter more famed and feared than any Sultan of old, D.D. has truly earned the nickname "The Terrible Turk". He has served as UCC, physics-problem-solver-at-large, and EPC chairman. Many have entered his pagan temple joyously, happily—only to exchange their souls for the relentless, insatiable pursuit of knowledge. When his soul is in the same black hands as is Faust's may there be a few torches lit by Duygu in the vastness that is theoretical physics.



Terry S. Mast RUDDOCK
 Hailing from Beverly Hills and a high school career filled with glittering Van de Graff generators and cloud chambers, Terry's arrival at Caltech was apparently the long-awaited answer to the physic department's dream—a truly diligent and dedicated physics snake. His four years at Tech may best be summed up as a concerted effort to dispel any notion that he would one day be the world's greatest physicist. Terry did stop dodging slide rules long enough to be elected to TBP in his senior year, but around Ruddock House he will be remembered for other things. Terry was not the man to whom all frosh automatically took their physics problems, but was rather a true would-be intellectual who talked of nothing but philosophy, literature, art, and European Traveling. (whew!) Terry served on the BOC and as a Ruddock UCC, but he feels that his major achievement here has been his taking of two courses from Dr. Stern in his senior year. Terry seems to be cut out for better things, but he plans to give physics another chance next year. He will do grad work at Harvard.



Willes H. Webber RUDDOCK
 Wet Willie, wise in the ways of wine and women, came to Caltech from the wilds of Sin City in Northern Nevada. His activities centered around his three loves—Bods, Beer, and Baseball, which he pursued with quiet but forceful aggressiveness. The initial Glo in his eye was soon washed out by a full variety of blondes and brunettes. Many of his drinking feats stand out in the memory of all Ruddockmen, from the days of prohibition to the foggy nights spent looking for our dog Pie. His talents in these fields led him naturally to unprecedentedly successful terms as Social Chairman and Comptroller, while his skill and enthusiasm in baseball earned three varsity letters and a Most Valuable Player Award. Web, who minored in tennis, skiing, and advanced literature, has a major interest in Physics, which he intends to pursue while being pursued by Kathy II.





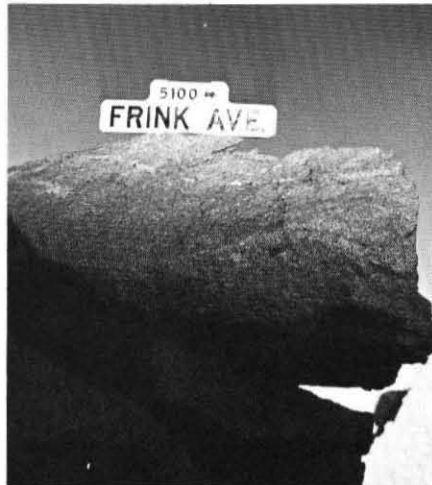
Michael T. Wauk LLOYD
Trying very hard to become involved in nothing, Mike spent his frosh year commuting from Covina. After running the wheels off his Austin, he moved into Lloyd at which time course work began interfering with his education and the GPA fell to a more reasonable level. Futile excursions into chemistry and baseball resigned him to accept physics and women as the only answers to the world's problems. Meanwhile, as UCC of the Inferno and Sleepy Hollow, he combatted the forces of evil and maintained quiet so his hi-fi system could be heard. Mike solidly states that he will do graduate work next year at some far away university.



Kwok-Chu Leung BLACKER
Coming all the way from Hongkong as a math major to study EE, Ray (a name Leung picked up after he was here, because his name was difficult to pronounce) ended up in the physics option. He is quiet in public but not so among his close friends. Having spent a number of years in subtropical climate, Ray finds the "snow" at Caltech enjoyable, though discouraging. He spends his time in studying, Christian Activities, talking in Chinese, and in hobbies like Chess and Music.



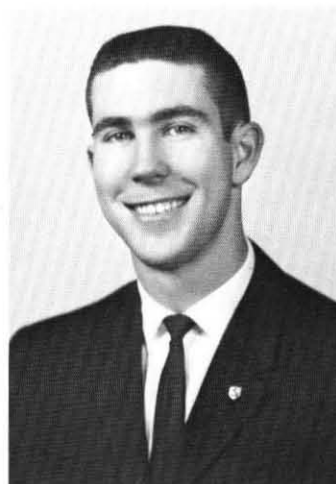
Roger W. Leezer LLOYD
Roger Leezer likes to play games. He came to Caltech and played bridge, poker, tennis, and dead. To make himself more well-rounded, Roger learned to shoot pool, stay up all night, sleep all day, and to smoke and drink. And to play his favorite little game—"How little work can I do and still pass?" He played at being Lloyd House President, and he still isn't sure who won that one. Presently Roger is playing a new game—"Grad school, grad school, who'll let me into grad school?"
Rot's of Ruck, Rog.



Ray E. L. Green RUDDOCK
In retrospect, it appears that Ray came to Tech to learn to climb. It started in the notorious Alley Six of Ruddock's first year with alley walking (moving down the alleys without using the floors) and staircase racing (without using the stairs). When these fads died, their champ had to vent his talents elsewhere, so Ray took up rock climbing, and eventually showed almost as much skill at it as enthusiasm for it. While at Tech, Ray also acquired two other rather unusual characteristics—a fondness for late night visits to Tiny Naylor's and an ability to consistently be the last one through with dinner—as well as becoming an aficionado of the scourge of bridge. Along more conventional lines, Ray played interhouse volleyball, and basketball for Ruddock, and also served a year as house librarian. He maintained a very respectable GPA and was elected to membership in TBP. As a physicist, Ray is somewhat uncertain of details, but he will do grad work in some phase of physics.

Charles H. Holland, Jr. PAGE
Chuck enrolled for his second year as a freshman after spending his senior year in high school loafing thru CIT's Ph I and Ma I.5. Since he had finished all the interesting courses by the end of his freshman year, he spent his last two playing with computers during the week and sailing on the weekends. Chuck counts himself as one of the campus' luckiest physicists. Starting physics as a high school senior he got under the line by one year. Among his many other activities during his last year, Chuck was a member of the team which constructed the greatest interhouse ever and then wouldn't think of a name for it.

Steven J. Goldner FLEMING
Steve, or the Arab, as he is known to some, was one of Fleming's more active, and frequently successful hunters of the pleasures derivable from the fair sex (female, that is). Witness the examples of stray females searching him out—in his frosh year, one is reputed to have come to his room, lost, and to have left . . . at any rate, the physics department being what it is, Steve found himself with less time than he would like for frivolous pursuits, and found comfort in his one true mistress, the old trolley lines.





George A. McBean RUDDOCK
 McBoob was one of the greatest swimmers and rationalizers ever to come to Tech. (sniff). Despite a severe whiplashing during his junior year, he set a conference record in the 100-yard freestyle. However, he lacked experience in the breaststroke. (sniff) When not in the pool, Geo spent his time working on his semi-competition T-Bird, and became adept at arching and de-arching rear springs and at removing and replacing the carpets. (sniff) His other activities included BOC, Clique member, McBean machines, and chasing women from Mississippi to Elsinore to Washington. (sniff) McBane plans to get a Ph.D. in physics (!) at any school that will accept him. (sniff)



Peter O. Mazur

BLACKER



Richard D. Hake, Jr.

LLOYD

Gerald H. Thomas PAGE
 A physicist from the word "wave function", Jerry has led Page house to victory as house jock for one year and Chief Executive for another. During his sojourn at Caltech he has performed as a second tenor of note in the Glee Club for three years and commuted to Berkeley almost as often. A physicist even in the summertime, he has organized beach parties and supported many similar cultural activities in his search for a conjugate truth. Jerry's secret calling, that of a philosopher, comes out in the open at occasional moments of inebriation, and his profundities will undoubtedly be purveyed with success to his fellow grad students next year.



Donald W. Davies FLEMING
 Don spent a quiet frosh year merely destroying alley cans. Then he set out upon the great pursuit, pursuing all the way to New Jersey. After becoming an n-time loser, however, Don settled down his senior year to maintaining quiet in alley four, snowing frosh, and raising GPA's. He hopes to rise out of the basement of Bridge to great heights in physics, particularly at a coed grad school.



"Which is the Scripsie?"
—Anonymous Techman (Honest!)



Eliot Bradford LLOYD
As serious a frosh as ever left home and girl to join the techers, Eliot lost interest in tennis before he could letter, lost interest in physics long before graduation, but was not quite fast enough in losing interest in girls. To avoid being elected Lloyd House Social chairman. Having rediscovered a long dormant interest in thinking, he plans a grad school major in philosophy and a strictly non-scientific career.



LeRoy Sievers DABNEY
LeRoy arrived at Tech from Denver and immediately started after the title of Dabney House jock by playing football, and baseball inter-collegiately, and everything else for the house. His career was ended when he went to Finland to spend 2 1/2 years spreading Mormonism. The three year absence changed him into a snake, but he still took an active role in interhouse athletics and the Glee Club.



David Hearn
Petite Dave Hearn, sharing his erstwhile roommate, Barry McCoy's deep appreciation of the nude female form, devoted much of his undergraduate career to the pursuit of a rational emotional life. Hyborean Dave's quest ultimately led him to a safe daily routine of four parts physics and one part model railroading. Finding the strain too much for his health, he decided to limit his extracurricular activities to the discussion of homework and the aesthetic qualities of the form divine. He plans to continue his studies of experimental physics and theoretical life at a fortunate, but as of this writing unsuspecting, institution of higher learning.



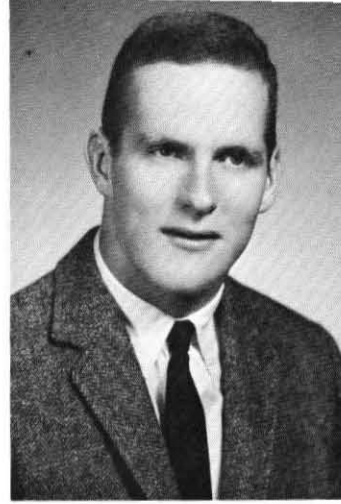
David A. Hammer RUDDOCK
Behold DH, braver of darts, painter of walls, lover of Margo, snaker of chem.
Descend DH, to the depths of alley one, to love all, to snake all. Ascend DH, bring eros to the house of frink, force light and love and life into the pit of the snake, partake of veryneater, of the juice of the barley, of the sound of the string.
Behold DH, leader of frinks, builder of dams, holder of bent, lover of life, singer of songs, snaker of little.
Cease not, DH, advance to the school of the graduate, to the world of the real, to the life of the dedicated, to the home of the grave.



R. Allen Moline

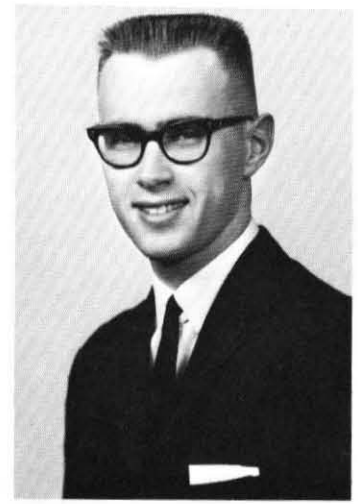
Tom C. Lubensky

RUDDOCK
Nurtured on the character-building influence of Foreign Service life and parties, raised to be a music connoisseur, and trained in the delicate art of French horniness, Tom seems to be a poor candidate for a physics career. Nevertheless, he possesses the important qualities of dedication, perseverance, and concentration that make for a good scientist. At CIT these qualities paid off by giving him a perpetual place in the Honors Standing List, membership in TBP, and an ulcer—while still leaving enough spare time for Tom to become band secretary and manager, a UCC of Ruddock, a classical guitarist, and a slave to "Martyal" law. Next year, assuming he doesn't "flunk" any more physics tests, Tom will be working at Harvard for his Ph.D. in physics. If he can ever stop worrying about the rest of the world catching up with him, chances are that it won't.



Robert F. Christie, Jr.

FLEMING



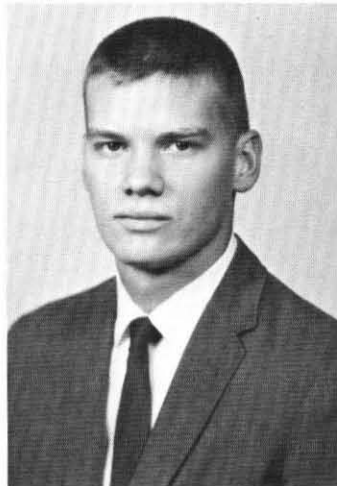
Martin E. Weiner

FLEMING



Guthrie Miller

BLACKER



Mark N. Gurnee



LLOYD



John F. Clauser

DABNEY
Johnny came to Caltech from Baltimore as bright-eyed and eager to study non-linear theoretical mechanics as ever a young man could be. He was the latest of a veritable plethora of Clausers, a family which seemed to include half the country's physicists and Nobel Prize winners. He was soon to develop for himself the unchangeable image of the original Dabney House Pollyanna, complete with banjo and unicycle. John went on to become Social Vice President of Dabney and threw all his energy into a social program which dropped the house to last place in academic standing after only one term. In his years at Caltech, Johnny has discovered that girls are more than creatures who dance backwards, and he has even managed to learn some physics, but he has kept his boundless energy and enthusiasm. He is moving on to graduate school and some day a Nobel Prize of his own.



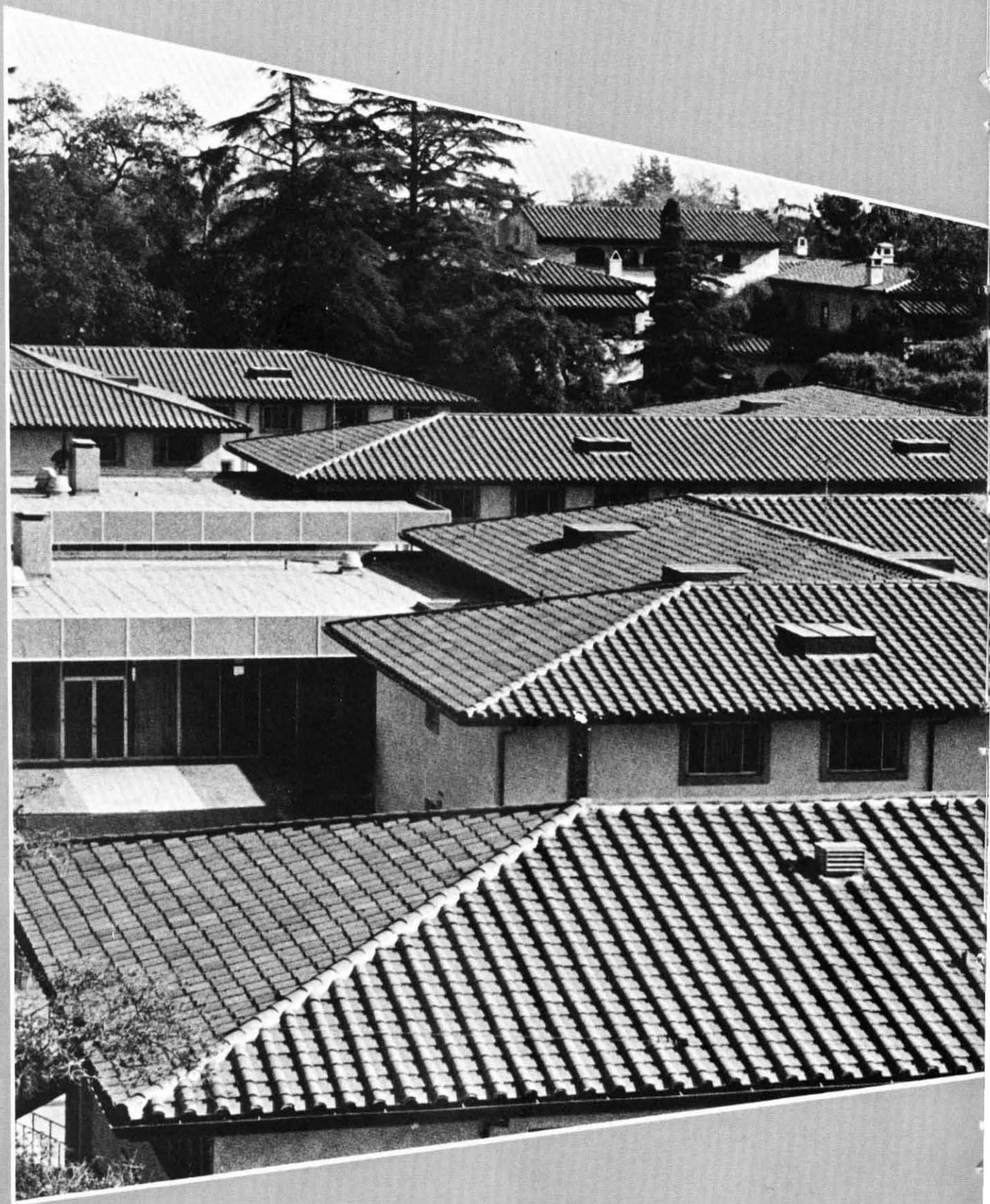
These Really Care

Angel, Edward S.
Card, Roger E.
Carter, Bruce A.
Crocker, Thomas H.
Dick, Donald E.
Diller, Robert W.
Farber, Steven M.
Gillespie, Allen R.
Harlow, Donald J.
Knutsen, Wallace D.
Krueger, Thomas E.
Lee, Edward P.
Lu, Ponzy
Madey, John M. J.
Mager, George E.
Radke, George E.
Riblet, Roy J.
Rosenberg, William J.
Seide, Laurence I.
Sorvari, John M.
Storwick, Robert M.
Tarby, Theodore J.
Teigland, Steve C.
Williams, Anthony B.
Yeagley, Lawrence

3 Out of 7

Abe, Douglas K.
Baumgartner, James E.
Berger, Robert H.
Bolon, G. Craig
Bush, William L.
Cady, George M.
Calma, Jacques M.
Dacon, Thomas A.
Dickson, David L.
Divoky, David J.
Dixon, James D.
Dunne, Charles P.
Entingh, Daniel J.
Estlin, William R.
Fellner, Eugene O.
Follansbee, James C.
Goldberg, Barry L.
Greenwald, Robert A.
Grissom, Robert L.
Hansen, Stephen C.
Holt, Dennis G.
Hootnik, Lorne
Horning, Richard A.
Howard, Michael S.
Jacobs, Glen K.
Kaufman, Marc T.
Knapp, Charles F. III
Leonard, Kenneth Warren
Luskin, Allen T.
McClellan, John L.
Michaelian, James P.
Monell, Howard L.
Nathan, Harold D.
Neilson, Robert J.
Nicholson, William H.
Perdew, Paul M.
Petrie, Harold L.
Reining, William H.
Rosen, Harvey D.
Ruebel, Gayle T.
Schmidt, Allen E.
Sconce, William J.
Sipherd, Ronald K.
Sokolove, Phillip G.
Sorenson, Robert M.
Thacker, Charles P.
Wallace, Robert W.
Walters, Arden B.
Weaver, Oliver L.
Wheeler, John P.
Whittington, James K.
Wiesner, Stephen J.
Wise, Jefferson K.
Woebecke, Carl H.
Wogan, Terrence L.
Zook, Peter R.





I HOUSES





An Editorial

Rotation and the Houses

Four years ago, the construction of three new undergraduate houses drastically changed campus life. Every student could now live on campus. But it was no longer an honor or a privilege to live in a specific house as it had been. In order to remove

stigmas on certain houses' reputations, the Master of Student Houses eliminated rotation. He hoped to avoid a "politician's house" or a "varsity house" in order to balance participation in school activities among the houses. He made house selections so that the houses might be brought to a mean level and thus provide a foundation from which a new Caltech was to be built.

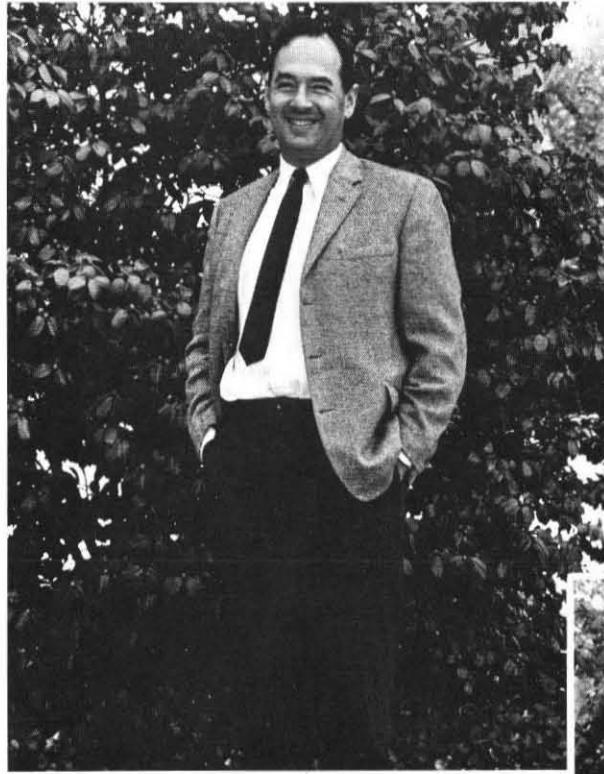
All school activities fast felt the blows of this change. Participation in interest clubs such as Physics, Chemistry, and Engineering, dropped markedly. House spirit overshadowed school spirit. When one house controlled the paper or the annual, support was assured, but during Huttenback's reign, house officers no longer urged gung-ho frosh to write an article for the glory of the house. ASCIT elections soon saw fewer and fewer candidates. When each house developed from a study center into a closely-united social center, ASCIT social events drew even fewer of the remaining stragglers. Thus Caltech spirit and campus interests plunged to a new low.

But the four years of de-emphasis have only brought a shift of power. Instead of only green or red coats in the fancy chairs, baby blue is now appearing in increasing numbers. No single house now unanimously controls any important Caltech activity and in this sense Dr. Huttenback's plan has provided "equality" of opportunity. The Tech is no longer the "Ricketts Rag", but the interest clubs may never regain their former stature.

But reaction has now followed the revolution. The regime has finally liberalized and rotation has returned with wide-spread approval. Every house president feels that his house has benefited because of rotation and every freshman is happier that he had a choice. There is no sentiment that rotation was not worth the trouble, but there is an opinion that the present system is not the best. This year's rotation should be considered the first stage of an experiment to find the best arrangement. The next step is to vary the factors. Since the houses dominate campus life, they should have more choice about who lives where. There should be a longer period for rotation so that both the houses and the freshmen can learn about each other.

Rotation is back, but it must be improved.

Master of Student Houses



Robert Huttenback, Master of Student Houses.



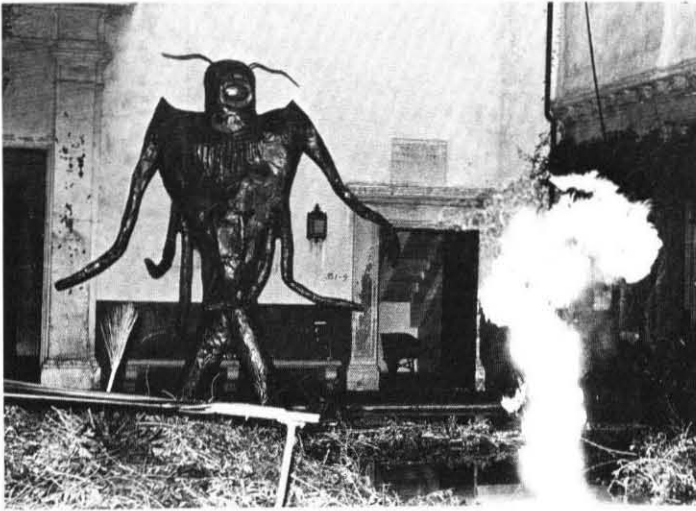
Ned Hale, Secretary to the Master, and Friend to All.

Everyday is
a fine
Day!



Manager of Student Houses

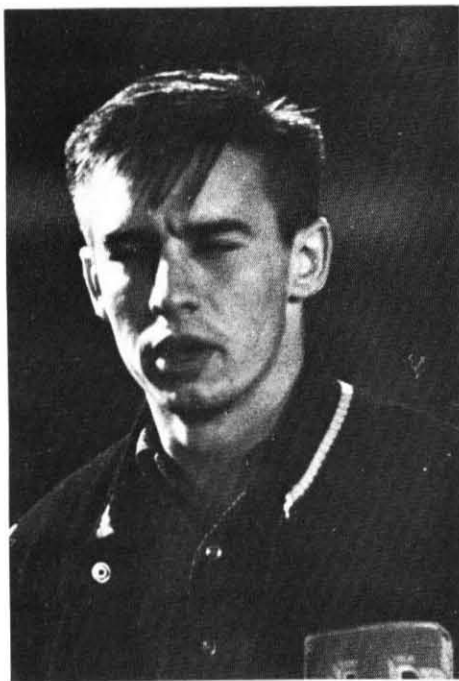
Elmo E. Taylor, and Staff.



The Blacker Interhouse Monster (or Freak) at Home...



... moving ...



Coach Johnson showing great pleasure and joy as Interhouse football team wins.

Calling Ben Bella in Algiers.



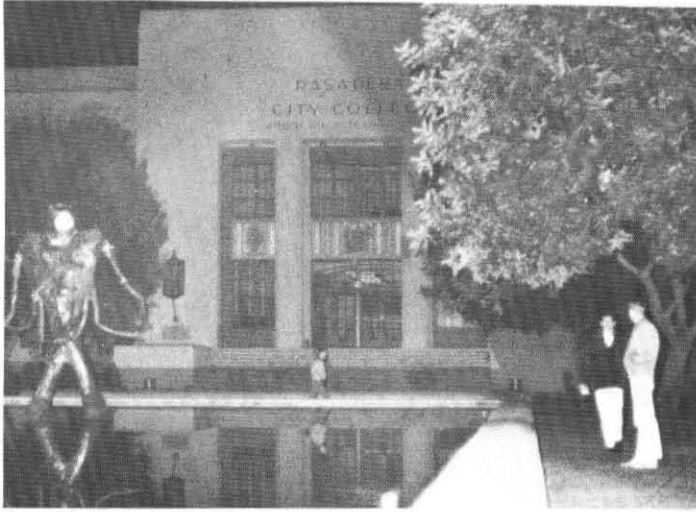
Ah. . . one's first view of Blacker House: the grey, dirty walls (unpainted in years); the large courtyard with its three scraggly trees and the painted badminton and hopscotch (what interesting things they do here) courts; the lounge, with its very tasteful, decorative, and modern chandeliers; the dining hall, with that one pad of butter still stuck to one of the ceiling rafters; this random room with the door open, revealing a (mess)²--obviously Zame's room. Yes, a decrepid, but very peaceful looking house (house?). But, underneath this calm exterior is a hotbed of seething emotions and great passions. . .

Headwaiter Lu vs. (rarely--) waiter Jackson; Naylor and Motherhood--vs. Bachelorhood; Diebel and Bliss vs. Gordon; Shoknecht vs. Christianity--and everything else; Brady vs. The English language; Dinius vs. the USC Phantom; Sorvari vs. Caltech; Carter vs. German; Amos vs. Choudhry; the world vs. Choudhry; and so on.

And repercussions are evident everywhere. Kurata's hi-fi at 106 db's, is disintegrating Doc's and Puballeys; Foster's little yellow ball is bouncing incessantly; there is at least one heated argument in the lounge; Gordon is wrecking the piano (and everyone's eardrums); there is a smell of smoke in upper P; Crocker (trained by the Fleming Waiters Union) is dumping food on Shoknecht, George Williams is hitting his head against the sidewalk; Cheng Et Al. are throwing used napkins towards Johnson; and someone used a harsh expletive in describing a Ph 125 test (the act is perfectly understandable, believe me, but. . . Rimmel?!!)

But Blacker Men are venting their emotions in more ways than those referred to above: The poker table is full, as usual; Serafin and Bauer are engaged in a crap game (Zame only watches now). Lu and Diller are hustling Jackson in Ma-Jong. Cheng is at the Pink Pussycat again. Amos and G. Miller are trying to talk the innocent and naive Messrs. Bauer and Johnson into joining them in their weekly survey of the Pasadena pubs (Johnson, of course, refuses to go). Lot "Anything For A Quarter" Ensey is upstairs trying to produce. Cunningham is out looking for an ant to replace the one that just died. And Choudhry is getting six-man-lifted for the second time (some people just never learn).

BLACKER



... and in the home of nearby aliens.

And in even more ways: "Honest Al" Tyrrill is trying to sell Urey's car (cheap!) (call SY 3-9865) to Brady (little does he know that Brady refuses to "Buy American"). Mazur, having given up model airplanes and "creepy-crawlers", is trying to repair the damage that Mitchell did to his motorcycle. Bauer is running in another election. Jackson is breaking pop bottles in the courtyard. Joanie just shoved her fist through the window. Mike Ball is working hard on his campaign to set a record by flunking H5 (of all courses!) for the third time. And Bliss is once again "Serenading" Gordon during announcements.

One important thing to consider, of course, is the effect that the great passions and desires of the Men of Blacker have on the Men of Blacker. Well, Mazur turned prostitute, selling his bottle to go on his first date--and for only a fifth of gin (cheap!) (call SY 3-9877). Gary, John, Ron, and Dave imbibed at the party following our glorious double-victory in the Interhouse Sing Contest. Josephson had an automobile accident (he later stated that "Ishwash summ drunc dash hish me. "). During the waiter's party, someone tried to jump into the Phillipino courtyard from the lounge balcony. And there was a wild (!) party at Drummond's pad. Sherlock and date were stomping. Nearly everyone was sailing along at least three feet off the ground (notably Judy, Joanie, and Linda), and Bliss' girl fell through the window.

Happenings such as the party just mentioned had the Church of Blacker, which rules the world, into an all-out effort to control the raging passions of the Men of Blacker. First of all, in order to isolate the problem(s), the Pope issued a Purity Test (which became the standard of the campus--Ricketts borrowed it to use in preparing their test). This did little but reveal that some impure and mysterious senior got a 22, and that an even more mysterious frosh (!) got a 26. The Pope then

consulted with John Madey, President of the Physics Club and therefore one of the most important men on campus, and they decided that the Church must keep a closer watch over its faithful members. Consequently, the pure and trustworthy laymen, Lathem and Johnson, were sent to spy on Eastment and his girl to see if the relationship met the Church standards. They did (spy) (continuously, and it was (O.K.). . .

The Church also decided that the freshmen should be initiated so they could see "the right" more easily. So, under the direction of John Bopfart, who reigns supreme in Blacker House, the frosh (referred to as "Farters", naturally (embarked on a training schedule even more intense than the one the John Birch Society uses. The frosh were not allowed to use their left hands for eating, for drinking, or for any of the other necessities of life. If they wanted to turn left, they instead had to make three right turns to end up moving in the desired direction. They were only allowed to use naughty swear words like "liberalism", "Earl Warren", "Nernst", "Socialize", and so on down the list of the Bopfart Blue Book. The frosh were sent out to put down the Communist Menace to the north (the big red) (ha!), which they did with ease in an illegal water fight. After this victory, they joined with the converted Scurv frosh to demolish the liberalists in the new houses. Hendrickson was sent to Pershing Square to speak out against the Communist Menace, and he did a magnificent job, proving himself to be a True American.

Though the Church was successful in some instances (e.g. Diebel turned down a date with a beautiful waitress at Bob's). It--on the whole--was unable to control the urges and desires of the Blacker Men. Consequently, the Men of Blacker were encouraged to channel their energies into worthwhile activities. Sorehead George Williams immediately responded by taking out a beautiful, petite Social Chairman (female) from Whittier and trying to seduce her after first getting her inebriated. Result: she got drunk, then sick (all over his car), William's plan was thwarted, and relations have since been suspended between Caltech and Whittier.

Dinius and Bliss, also caught up in the new spirit of enthusiasm, ran as a team on a program of pure apathy: "If elected, we promise not to bring any guests to the House, not to go to any ExComm meetings, to support any movement to eliminate room preferences after the Vice-Presidents get

Seniors



FIRST ROW: Ponzy Lu, Mike Ball, Dave Hearn, Steve Teigland, Steve Farber. SECOND ROW: Raymond Leung, Bill Schoknecht, Carter Naylor, Al Tyrill. THIRD ROW: John Madey, Guthrie Miller, Art Johnson, Pete Mazur, Tom Kruger, Bob Diller.



Officers

LEFT TO RIGHT: Dave McCarrol-Librarian, Bill Zame-Athletic Chairman, Gary Smith-Social Chairman, Guy Jackson-Vice President, Ed Robertson-Librarian, Jerry Brady-President Associate, Bob Sweet-Treasurer, Art Johnson-President, Barry Dinius-Social Chairman, George Williams-Social Chairman, Gary Scott-Social Chairman, Tom Latham-Librarian, Jerry Austin-Secretary.



Juniors

FIRST ROW: Vern Bliss, John Miller, Bob Sweet, Gary Thompson. SECOND ROW: Ron Rimmel, Guy Jackson, Gary Scott, Barry Dinius, Bill Zame. THIRD ROW: Amos Levin, Ed Bauer, Doug Josephson, John Diebel, Dave Sherlock.



Frosh

FIRST ROW: Duke Sun, Lot Ensey, Tim Hendrickson, Frank Pate, Stan Caldwell. SECOND ROW: Bill Simpson, Dan Erickson, York Liao, John O'Pray, John Williams, Greg Bourque. THIRD ROW: Clyde Staley, Hu McCulloch, Roger Fajman, Jim Soha, Gary Little, Ben Cooper, Arlin Peters, Joseph Kinkade, Raschid Choudrhy, Howard Thaler, Bob Miller, Eric Wogsberg, Mike Plouf, John Foster, George Kurata. FOURTH ROW: Gary Smith, Phil Graul.

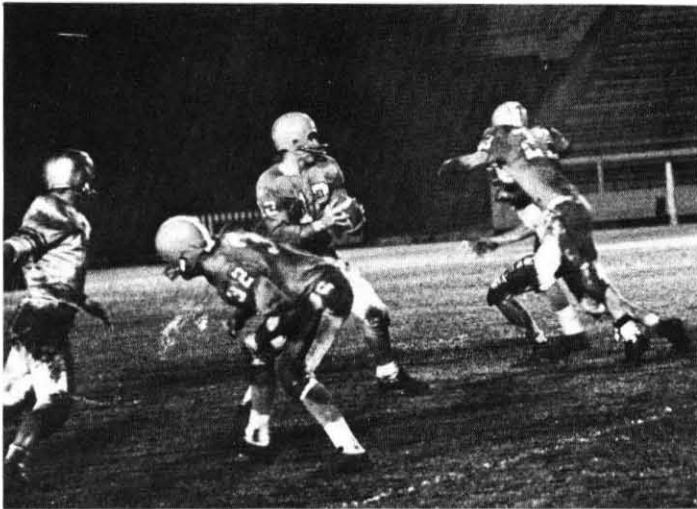


Sophomores

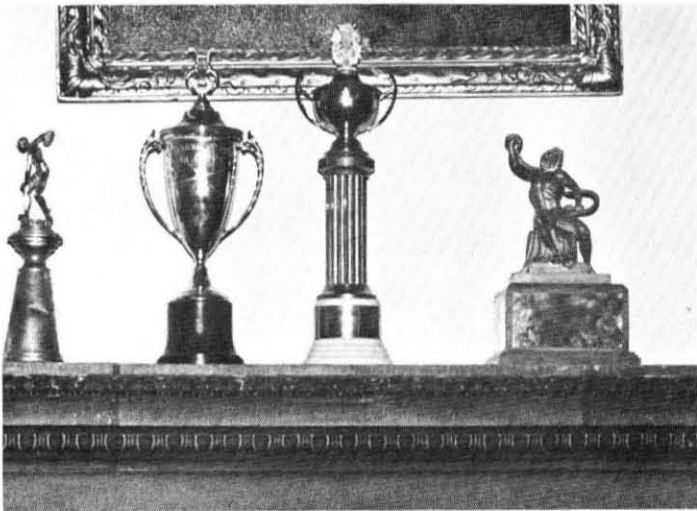
FIRST ROW: Larry Anderson, George Williams, Gerry Austin, Steve Clamage. SECOND ROW: Phil Coleman, Mike Aschbacher, Rich Quint, Norm Uyeda, Al Holm, Ben Dembart, Mike Cunningham. THIRD ROW: Wayne Pitcher, John Eastment, Eric Jones, Dave McCarroll, Ed Robertson, Tim Stephens, Gary Smith, Phil Graul.



Interhouse football team in action.



Truly, a beautiful sight.



And only 2 days to Interhouse...



their preferences, to screw everyone but ourselves in the UCC committee, and finally, to be so apathetic as to ignore all our campaign promises." Had they won, they would have been too apathetic to take office.

The Hebdomadal Society was reorganized, and brought more guests to the House than the Vice-President (the ratio Heb. guests to Veep guests nears infinity). But the condition in which they sent the guests off... And the many "discussions" led by sober, clear-thinking Ed Bauer that almost resulted in bloodshed... and divorce?

Floyd House challenged Blacker to a drag meet. However, they later finked out, probably because they heard about Jackson's 1960 Falcon getting shut down by an n-owner car straight off of Honest Al Tyrrill's Used Car lot (it was a 1940 Buick) (Cheap!) (call SY 3-9865.)

To replace the piano-smashing fad that Blacker House donated to the world, Staley, the yo-yo champion from Eugene (wherever that is), Oregon (wherever that is), started a yo-yo fad. This finally culminated in a 102.5 foot yo-yo that could only be yo-yoed (or whatever) off a bridge on the Angeles Crest. After a TV station took pictures of this super yo-yo and broadcast them, the fad died out.

But a new one reared its ugly head almost immediately. Flexi-racing, initiated by light-fingered and since-departed Phil Graul, was brought to new heights and speeds by Pate and Lu as they zoomed down the mountains north of Tech. Ostensibly a safe sport, Lu almost got creamed in an indecisive moment trying to decide whether or not to pass a Volkswagen on a curve on Chaney Trail.

YMCA Leader of America Ralph Helstein speaking to interested Blacker audience.



Yes, living in a House with Men who have great passions and have great and varied interests is obviously rewarding. And once again, this low pressure, do-what-you-want-to-do House of Individuals has proved itself the best House on campus.

Blacker House also had its first annual Christmas party and gift exchange, presided over by Santa Serafin, who was in a very appropriate costume. Sign-ups for the gift exchange were slow until Green and Mazur, infused (or confused) with the spirit of the season, "persuaded" people to sign up. Gifts were cheap, but appropriate Pate showed new book on sex techniques to Johnson. The grateful Johnson offered Pate one of his newly received road apples in return.

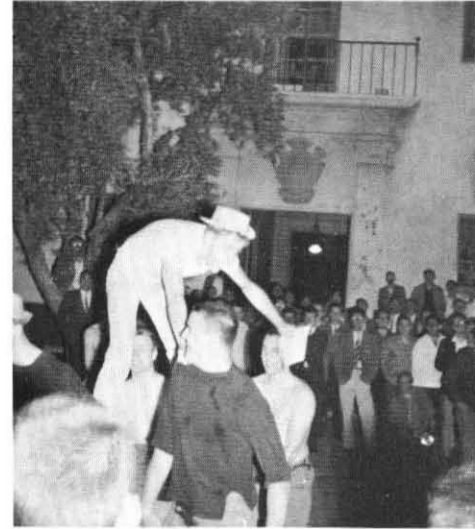
The R. T. Blacker Foundation was founded, and it tried to call Algeria's Ben Bella for some obscure reason. A State Department (somebody's) was looking for him in Algiers, but he happened to be out of (or on) the town that evening. And in a letter written by the Director of the French Cabinet, De Gaulle "very graciously" declined the Foundation's "Award for World Improvement" (a plaque depicting an elephant's head with two swords stuck through the head, etc.). Adenauer refused the award simply by telling "the boys" to "go study."

For the Interhouse Dance, Blacker had a space motif, featuring a lovely monster and a "creepy-crawler," and once again, the theme was very successful. The monster eventually ended up in the wading pool at PCC; the rest of Interhouse was--surprisingly--cleaned up in only a week.

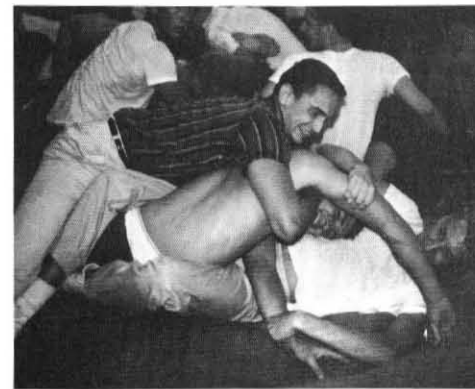
Blacker continued to control the YMCA as Latham turned the presidency over to Sirelson; Josephson was a frequent stand-in for various AFS guests that failed to show up; Dinius made all-conference in football; Ensey took one of the Rose Bowl Princesses (cheap!) (call SY 2-7049) to the Coronation Ball; and after a beer party, a random group--unable to walk--showered Gordon instead. Also, during the dry season, someone went into the Athenaeum lawn with a heavy bowling ball and proceeded to lower the sprinkling system by six inches. This was done in the interest of water conservation, and no water was wastefully sprayed into the air from the sprinklers in weeks.

In sum, the policy of diverting the seething mass of undirected bodies into various activities has worked amazingly well, and the past year has been a very successful and great year for Blacker. The House started by winning the Discobolus trophy

Fearless Leader and Everybody's Friend Phil Graul taking a ride.



Ah... smell that pit.



Doc Engleson's annual party (excuse the spastic photographer).



We do everything in Blacker...



What'd I say?



and finishing second in Varsity Rating. It tied for first in the Interhouse Bridge Competition, and held the Interhouse Bowling trophy for half the year. To show its exceptional competency in all fields, Blacker also won the Scholarship (Snake) trophy. Then it pulled off perhaps its most satisfying coup by winning both the House Chorus and House Quartet trophies in the Interhouse Sing Contest, squelching the obnoxiously over-confident competition.

Rotation with seven degrees of freedom? With an unprecedented absence of the familiar really care, the men of Dabney tackled the new rotation process determined to come out on top. Leaping into the arena of human (?) relations, we began frantically sorting out the frosh from the lions and Christians. After careful sorting, froshlings were meticulously cleansed (with well-placed towel tosses and shaving cream), then were processed and packaged by the Terrible Ogre from the West and a resident of the happy hunting ground. With an attrition rate like that, we could appoint 20 pledgemasters for next year and thereby provide everyone else with second team singles. All in all, the new frosh seem to have given the House a shot of enthusiasm in the arm, or some other strategic location.

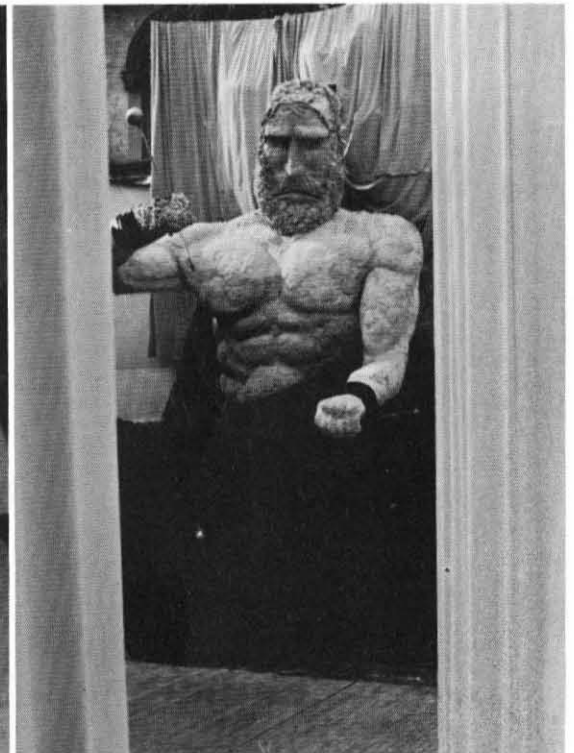
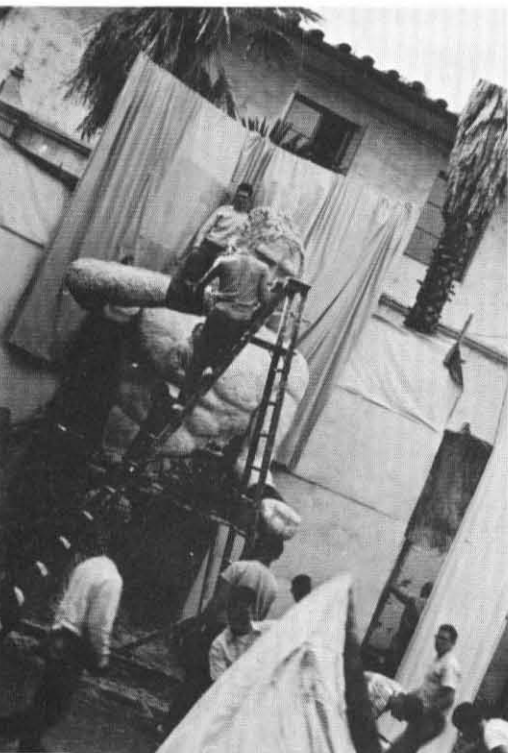


Clauser tries a new angle at Darb party.

Interhouse, -3 hours.

Shultz dances on.

Dabney builds men



Marching to Elitevia? Yes, the members of the Alley Two home for unwed fathers staged a temporarily successful secession from the United Alleys of Dabney House. The high points of the revolution were the football game with Alley Seven and the annexation of the new R.A. to the Alley with full social membership privileges. Are you sure he's an Aryan, boys? After an unsuccessful sorting out attempt by the pyromaniacs of Alley One, the Alley movement began to deteriorate from within its ranks. Probable causative factors include a series of 3-4 hr. local phone calls made by one eager froshling and a problem with the veritable wall of odor created by another alley member's feet. Always watch out for the Enemy Within!

Kicking off the fall social calendar was the traditional game room floor cleaning party. Please pass the pretzels! After all the foam was either consumed or used in floor cleaning operations, the men of Dabney followed the star in the north, making the traditional pilgrimage to the Home of the Big Boy. Then there was the Grand Amalgamated Exchange--a veritable plethora of bod, someone for you and me. Hold it, Milstein, with 200 girls at Winnett, why steal Reiland's dance partner? That's certainly a night that Rock gathered no moss. By the way, Pawl, how's your GBH? Made any phone calls lately? The Party-Party at the Schusters convinced the upper-classmen that the frosh were social lions, even if they spent their spare time chasing their own tails. Blackboard charades were fun, but by the end of the night no-one could read the board, and some were asking which one. The M & M mixer was the first house exchange of the year, much complicated by the lack of a chaste euphemism to go with the initials. Then came interhouse. Interhouse is garbage cans of hot papier maché, wastepaper baskets of plaster of paris, Clauser breaking tiles on the roof, and Whitney's Greek equivalent of King Kong. Interhouse is colored columns of cheese-cloth sewn together by house seamstress, John Simpson. Interhouse is the dance that you plan for weeks in advance and are almost too tired to attend when it comes. The first term barn dance was held in an extremely large refrigerator, thereby providing motivation for square dancing and consumption of stimulants. I wonder if Jim Grothever did find the House, much less his room of bed.

Juniors



FRONT ROW: J. Yee, I. Lok Chang, J. Hsu, S. Christman, N. Wright, B. Scott. BACK ROW: P. Swatek, C. Dalton, J. Gowen, R. Davisson, J. Comly, L. DePriest, G. Repasy, L. Fraas.

Sophomores



FRONT ROW: F. Shultz, A. Kampe, B. Schaar, M. Westbrook. SECOND ROW: R. Couture, D. Dumont, J. Vitz, P. Chaikin, E. Mugambe, J. Milstein. BACK ROW: A. Lundgren, H. Powell, S. Solomon, E. Reiland, S. Elliot, J. Mady.

Dal



FRONT ROW: M. Bartlett, G. Tucker, J. Eycler, D. Blair, J. Fishbein. SECOND ROW: K. Gleason, J. Groth, D. White, M. Satterthwaite, M. Foley. THIRD ROW: C. Elms, S. Langton, R. Touten, R. Keel, L. Powers, R. Moore. BACK ROW: R. Harshlem, T. Beard, B. Milton, F. Williams, H. Suzukawa, M. Ehrich.

Frosh



FRONT ROW: Paul Chaikin (Historian), Rich Urich (Vice-President), Herb Flindt (President), Jim Whitney (Social V. P.), Bob Scott (Soc. V. P.).
 BACK ROW: Frank Winkler (Soc. V. P.), Earl Reiland (Secretary), Jack Conly (Treasurer), Doug Hill (Headwaiter), Paul Swatek (Athletic Manager), John Clauser (Social V. P.).

Officers

Whitney

FRONT ROW: Rich Urich, Dan Brogan, Jim Whitney, Herb Flindt, Dave Lambert.
 BACK ROW: Larry Yeagley, Rich Maxson, John Burke, Frank Winkler, Doug Hill, John Clauser.

Seniors

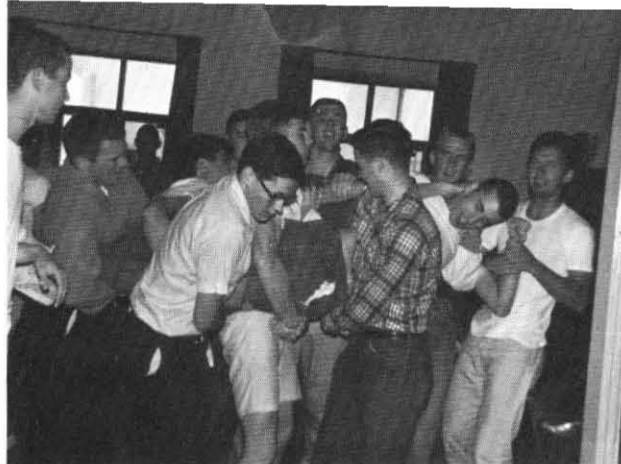


Given any random time, take the absolute square of the probability amplitude and you will find the odds are high that: Powell is explaining a physics problem to Dr. Wilts, Beamer is seeing double or nothing, Flindt is going to go and do something, Touton is on the phone, Gliders and bottlecaps are sailing in the courtyard, one and one-half games of Scrooge are going on in the lounge, Yee is in the lounge, Gowen hasn't returned to register yet, Wright has changed his hairdo, Christman is playing "Pipeline" on the piano, Reiland and Enrich are in Cupid's clutches, Milstein is talking, Alley Two is blasting, Alley Four is snaking, Alley Seven is re-enacting the Iwo Jima flag scene, Scott is baking sardines on his radiator, The Grove (Brueckner, Burke, and Madey) is not shaving, and the APCD is pouncing on Dabney House for making the sky black with oranges. We wonder if B & G has only recently discovered the private Dabney game room. They certainly seem to be making an effort to keep the facilities from gathering dust. Here comes Santa Claus! Frosh Elf Gleason demonstrated hitherto unknown heights of incompetence (and laughter) in handing the same package to Santa five times. Ridolphi, the Red-nosed Santa made a futile but gallant attempt to ascend the chimney rock without the aid of the powerful rumble.

What has happened to Dabney this year? It's moving, although too early to tell in what direction. The frosh were athletic, socially minded, intelligent, and as naive and gung-ho as ever. Without that, we might never have seen the seven man lift of first term. The sophomores continue to exert a strong leveling influence on the house GPA, but remain as calm, collected, and behind as ever. The juniors are a schizophrenic class, with no one to bridge the gap. The seniors (bless their little 32 unit hearts) are leaving for the educational and financial rewards which should rightly follow four years at tech.

Now that Christmas vacation is over, we can stop pondering all these things in our heart. The

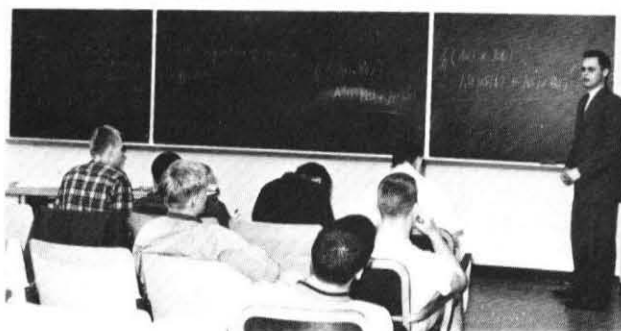
Play it "cool", Bob...



Dabney Cleansing Ceremony



This is serious, frosh!



Time out for school--frosh seminar.

Excerpt from "Swan Lake"



all Campus Mixer provided another increment of bod and again demonstrated an almost forgotten phrase: "The party is always at Dabney". A four headed social chairman and a spark of enthusiasm gave Dabney the best social term it had experienced in recent years. Did your date for Monte Carlo night keep asking who the handsome bearded croupier was? "Green Onions" went to the couple with the most confederate money, but everyone seemed to win at this party. Then came the French party at the Day's. Spirits and aspirin bills were high that weekend. Aside from Mr. Zorthian's art work, the barn dance was a complete success, with Dabney bringing home the Flamer's Trophy in grand style. What to do on a Saturday afternoon? Hop on up to Erdmann's for a barbeque and a quick dip. Make that a frozen dip. After which comes the snowiest weekend of the term! Skiing is for party poopers, right Schaar? In the first performance given in the concrete mushroom. Bud and Travis managed either to consecrate or desecrate the place depending on your point of view. The term finished with the Dabney House social institution, the Party-Party, a real success with its punch and well-timed food.

We wonder what would have happened if: Nobody had bothered to bet Rich Unrich off the wall of the courtyard, John Vitz would have scaled the palm tree to retrieve the volleyball, Kampe had showered Whitney alone, Burke's pants had never been retrieved, Harslem had changed his socks, Langton had flunked out, Chaikin had actually lost those extra pounds, and the Alaskan Earthquake had occurred a few thousand miles south of Alaska.

An epidemic of chain letter fever fell upon the student houses during a period of low resistance (Low resistance is defined as that time when your allowance has just arrived). Even the house was infected for a short period of time. Antibiotics in the form of other potential "marks" were soon to remedy the situation. I wonder if you realize that action starts with AC. The great holding company pyramid under the able architecture of John Burke collapsed with a stonishing speed when it was learned that the foundation was sand. Possible epidemics in the future include: orange spotted fever, caused by venturing out in the courtyard in early spring; sleeping sickness, caused by not sleeping; and apathy, spread by carrier John Vitz.

As we watch another year flying to a close, we wonder about those questions which Feynman never bothered to answer in Physics I and II. What can you do with a tarnished shovel? Whose was the big green elephant in Mr. Dabney's past? Is the plaque in the entrance-way really level? Will Dynamo Bob and his gang save campus from apathy by sicking our elephant on E. E. Taylor? Is the Saga Manager's wife a good cook, or will he begin to slowly waste away? Was your brother an only child? Only time and your hairdresser know for sure, and only time will tell. Hi-O Dumbo, Away!



Quoth Santa "Nevermore"



Thinker Darb turns statesman.

Scene--lunch in the Fleming House dining room on the last day of rotation. In the course of the meal the visiting freshmen are thoroughly ignored, except when waiter Chidley spills a bowl of soup on one of them. President Bill Schoene spies a lull in the general roar and siezes it as an opportunity to expound upon the virtues of Fleming. He rings the house bell and appears from behind a pool of milk at the head table.

Schoene--"I guess you've been noticing our casual attitude toward living around here." (Much laughter.) "But the hallmark of the Fleming way of life is that we know how to behave as gentlemen when the occasion calls for it." (At this point Owens reaches past Gillon and Green to steal Jarvis's dessert, tipping over a pitcher of milk on Scott in the process. Scott swears loudly and vehemently. Peace is finally restored as headwaiter Card reminds Owens he is to keep both feet on the floor at all times while he is reaching for his food.)

Schoene continues. "Here in Fleming we pride ourselves on our individuality; no one is looked down upon for any unusual hobbies or ideas he might have." (At this point Elliot Zais stands up to

announce the current visiting YMCA theologian--his third try this week. He is greeted by a hearty chorus of boos, sits down, and is promptly floated.

It is now 12:15, and Schoene decides that lunch has lasted long enough, and he closes his speech with a reminder to the frosh not to believe "any of those nasty lies you've been hearing about us."

Rotation Fleming House style, under the able direction of Schoene and Hillyard, proved a huge success as the virtues of Fleming were presented honestly and effectively. Unity through individuality was stressed, and as a result we obtained a highly diversified and gung-ho frosh class. The year began as Frosh persecutor Gerry Haven and his sophomore sadists imbued the freshmen with the proper attitude of subservience to Fleming and belligerence towards just about anything else. The bewildered frosh, who were led to believe during rotation that Fleming thought of them as normal human beings, now found out otherwise. Frosh resistance (which may be collectively described as a high, whining voice saying ". . .but I never had to polish brass for Mommy and Daddy") manifested itself briefly, but evaporated when an industrious band of sophomore locksmiths completely dismantled all the locks on frosh doors. Each frosh was left with a pile of parts on his desk and the right to "go fish" in the grab-bag of master cylinders in the lounge. The formerly fearsome frosh, now deprived of their ability to lock their doors and hide under their beds when they smelled trouble, quickly fell into line.

Those frosh who managed to snake their way successfully through Fleming's first place victories in Interhouse softball and swimming got their first look at Fleming in action at Interhouse Dance time. Choosing a theme provided the traditional entertainment. The perennial suggestions "womb" (in which the lounge would be painted black and heated to 98.6 degrees) and "Columbia River" (in which Techmen and their dates would swim up the flooded alley 2 stairs to spawn) were rejected for various reasons, and "Ancient Rome" was finally decided upon. For some reason it was unanimously agreed that this required building a fountain in the courtyard. The finished product, built out of



Iron-man McQuillan and his raiders discover something lower than a Fleming Frosh.

Gowen demonstrates the 12-man lift.



A nearsighted Fleming Frosh

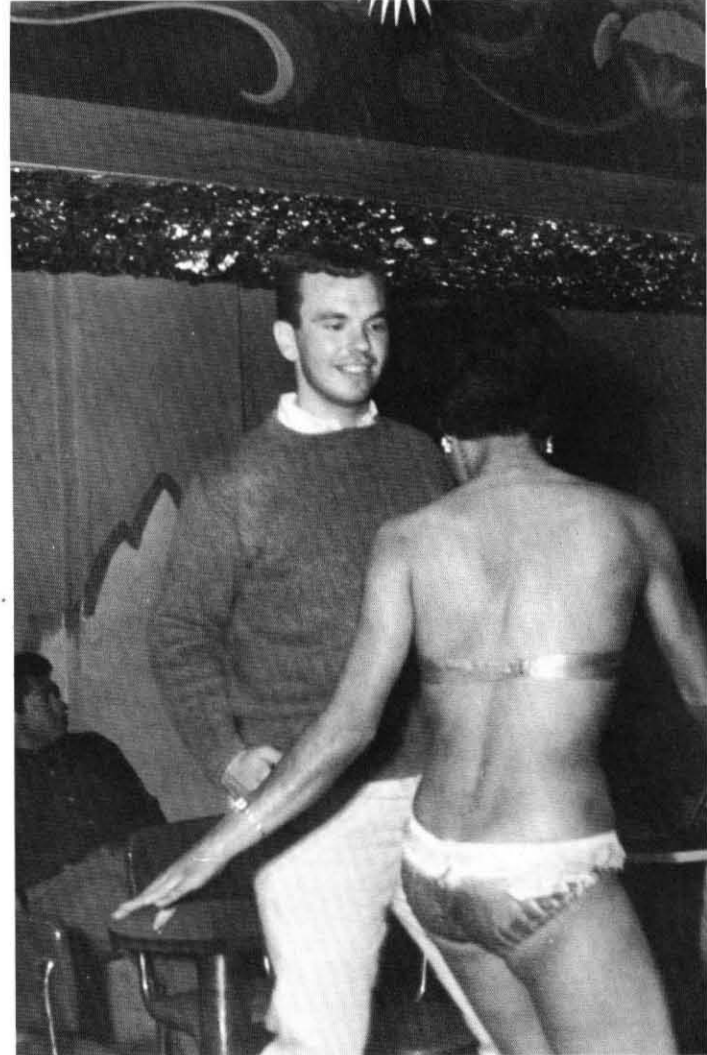


FLEMING

large chunks of rock, pipe, and the House treasury by Mike Scott and his chain gang, featured a sequential series of water-jet displays, each accompanied by its own array of colored lights. The approach in the interior was somewhat different; Rome was suggested surrealistically by creating walls and columns of crete paper. In keeping with its tradition of providing entertainment for the dance, Fleming put on a show featuring singing star Judi Thor and a short play, "Oedipus Rex." The completed job was so suggestive of ancient Rome that Holford managed to bring a date to the dance and not find out what the theme was until a week later. Or didn't you ever make it to the dance, Doug?

As the year went on, various personalities asserted themselves and flourished briefly. Nady attended some sort of clinic in TJ and returned several of his physiological processes remarkably modified. Dave Colton's four year career as House announcer of math club meetings drew to a close, much to the relief of everyone. Manolo Huerta learned the difference between an abortion and a miscarriage--without having to endure either--and earned the privilege to speak in polite company. Third term the entire senior class save Weber, White, and Harlow moved off campus and grew beards. White finally gave in to irresistible popular demand "Weber, White, and Harlow!" and went home to mother. Jim Simpson ended an exciting year as "horniest sophomore" and faded into obscurity. Walt Davis gave up the position of "House Sheep" to gain the treasured Horns trophy. Lanky Dave Jarvis won a date with a Whittier girl by describing himself over the phone as "about nine feet tall." To her chagrin, she found out later, that he was. Russ Brill finally threw in the towel and turned over the chore of pimping Whittier to Gordon Myers. IHC became firmly established as the place to go for "quite good looking" blind dates. Finally, the Fleming House Micky Mouse Club achieved new heights of romance, intrigue, and nausea. Lerry and Jould, self-appointed guardians of Beckman, discovered in one of their many exploits that the hollow ball at the top of the circus tent ceiling was removable. Naturally, they removed it. While Jould was busy filling this with sand in the basement, one of Tech's fearless, ever-vigilant, 104 year-old guards discovered that the ball was missing from its normal position. The next day the building was sealed off under lock and chain. Since Lerry is the person on campus who could possibly be mistaken for a B & G troll, he grabbed his army helmet and clipboard and supervised the rehangng of the ball.

Men of Fleming visit Aunt Jane, who is recovering from a recent illness in a quiet border town.



Willing-student Gillon learns rapidly in Fleming House dance class.





LEFT TO RIGHT: John Webber, Bill Schoene, Don Davies, Bob Christie, David Colton, Steve Hillyard, Mason Williams, Steve Goldner, Bill Smith, Roger Card, Frank Rhame, Dennis White, Alvert Cosand, Rodger Minear, John McCoy, Larry Gowen.

Seniors

Officers

FRONT ROW: Pete Wyatt (Social Chairman), Gordon Myers (Social Chairman), Pete Clark (Social Chairman), Bob Gillon (Social Chairman), Ed Perry (Secretary). BACK ROW: Dick Essenberg (Treasurer), John Nady (Athletic Manager), Bill Schoene (President), Steve Hillyard (Vice-President), Roger Card (Athletic Manager).



FLEMING

FRONT ROW: M. Isler, M. Huerta, S. Ross, R. Brill. SECOND ROW: R. Essenberg, J. Holte, M. Scott, L. Corl, P. Clark, R. Roberts. B. Hawk, B. Burket, B. Gillon, D. Green. BACK ROW: J. Eder, J. Simpson, D. Jarvis, J. Chidley, J. Nady.



Juniors



Sophomores

FRONT ROW: H. Williams, D. Underwood, M. Creutz, P. Wyatt. SECOND ROW: L. Newkirk, E. Zais, J. Gibson, D. Kubler, E. Perry, B. Karski, G. Myers, L. Sherman, W. Davis. BACK ROW: G. Haven, D. Holford, J. Saunters, C. Tedder, W. Owens, R. Stanley, D. Chu.



Frosh

FRONT ROW: K Bryant, G. Christoph, C. Marshall, A. Horvath. SECOND ROW: G. Sharman, E. Kelm, D. Juster, D. Eardley, T. Warren. BACK ROW: C. McQuillon, S. Ignace, M. Pollock, B. Miller, M. Squires, A. Beveridge, L. Goldberg, P. Krause, J. Gould, B. Parker, L. Perry, B. Firmage, D. Weaver, J. Akinrimisi, S. Swenson.



To everyone's dismay, the two somehow managed to avoid arrest and life imprisonment somewhere.

No account of life in Fleming during the year would be complete without at least one atrocity story, and so the following is included:

Beak currently sees visions of events concerning five residents of Plumbing House who made a trip last Saturnsday week to our glorious neighbor to the South, specifically to visit Aunt Jane. But scarcely had the four-wheeled roach found a resting place on a small, dark side street and disgorged its occupants, than did two Guardians of the Peice come perambulating by in their fuzzmobile. Quickly sizing up the obviously beneath-board intentions of the phlegms nosing around the roach, one fuzz deautos and orders lineup of participants.

STERILITY PAYS

After inspecting shoes and noting presence of liquid in street, the fuzz adeptly frisks one named Odor and throws him into the fuzzmobile's

An authentic roman column is created for the Interhouse Dance.



Jarvis hangs himself after second term finals as alley three looks on sympathetically.



screened-in and locked back seat, accusing him of depositing nephral products upon the sacred cobblestones of his majesty's sterile thoroughfares, said offensive offense being worth a 200-bit fine or a frigid fortnight in the pokey.

Odor's frail companions vainly try to explain the impossibility of paying such a fine, but Guardian remains steadfast to his noble purpose of protecting the local citizenry, until the passing-by of a car with an impressive number of seven-foot UCLA studs, shouting random greetings and waving and gesticulating madly, gives Guardian the impression that said studs are bosom freunts of our protagonists, with the laughable idea reinforced by some adroitly-placed comments by the Five Minus One.

INFLUENCE

Finally, as member-of-the-group Gallon slowly produces two U. S. monetary units, and as various ideas filter down through the labyrinth in the Guardian's head, the latter suddenly decides that one dozenth of the fine is probably sufficient, and Odor is disgorged. Thus ends the chilling saga.

The middle of second term brought election time, and with it lofty promises and repugnant speeches. The new House officers, much to the disgust of everyone, were

- Jim Eder, President
- Don "The Beak" Green, Vice-President
- Manolo Heurta, Secretary
- Uncle Bob Gillon, Treasurer
- Pete Wyatt, Gordon Myers, and Bob Firmage; Social Chairmen
- Dave Jarvis, and Jim Simpson, Athletic Managers
- Luther Perry, Librarian

Four things were decided in a big panic house meeting to discuss the election results. One, the new president would be maintained relatively sane, at least until the end of rotation. Two, sleazy Bob Gillon could not be trusted with the house money, and he became the first treasurer in the history of Fleming to be deprived of the right to sign house checks. Three, the social chairmen were requested not to have any more exchanges in which they forget to invite girls. Four, it was unani-

Highly-spirited sophomore ('65) take early lead in olympiad 10-man relay, which they went on to win.



mously agreed that three Mormons on anybody's executive committee was too many.

It was in the arena of athletics that Fleming came into its own this year. Again and again Big Red stormed across the fields and courts of TP, and when the dust settled at the end of the second term, the Men of Fleming had competed in seven consecutive Discobolus games, each in a major sport, and had seven times emerged victorious. The win streak set a new Institute record (the old one being held by Fleming) for consecutive victories. In addition, it was the first streak in which all six of the other houses were defeated. Fleming took possession of the trophy in late January, by challenging and defeating Ricketts in football, 34-19. Co-athletic managers Roger Card and John Nady, and later Simpson and Jarvis, provided the "Big Red Machine" with great leadership as each of the other six houses challenged in turn and each was turned back defeated. A week after the Ricketts victory, a talented football team lead by Bob Christie edged Lloyd 32-25. Next Ruddock fell in Soccer 1-0, to a highly spirited team captioned by Jibayo Akinrimisi. A week after this Fleming added three more points as Page was defeated in softball 10-5. Next came the thriller of the series, as Blacker fell to Big Red in basketball, 40-38, in overtime. Then Dabney passed its challenge, and Fleming beat Ricketts in Volleyball. Finally, Dabney challenged in tennis, and emerged on the losing end. Meanwhile, Fleming has been in first place from the start of the year in the Interhouse sports arena, winning softball and swimming, and placing second in volleyball. Those athletes who were not being used to maintain Fleming's first places in the Discobolus and Interhouse races set out on a quest of their own to bring the new Varsity Rating trophy to Fleming, where the old one has spent so many happy years, unblemished by the name of another house. As third term opened, they were in an excellent position to do just this.

Though the House has no illusions that its athletes represent an entirely invincible machine, it is clearly determined that they not be second to those of any other.

The sophomores start the day off right by winning the shot put, the first event in the Fleming Olympiad.



Portrait of typical Tech students as seen by Pasadena Police.



Industrious Fleming Frosh makes a night deposit in a local bank.



Portrait of a typical Tech student as seen by local businessmen.



The men of Fleming are many and varied. Consider this mohawk Indian for example.

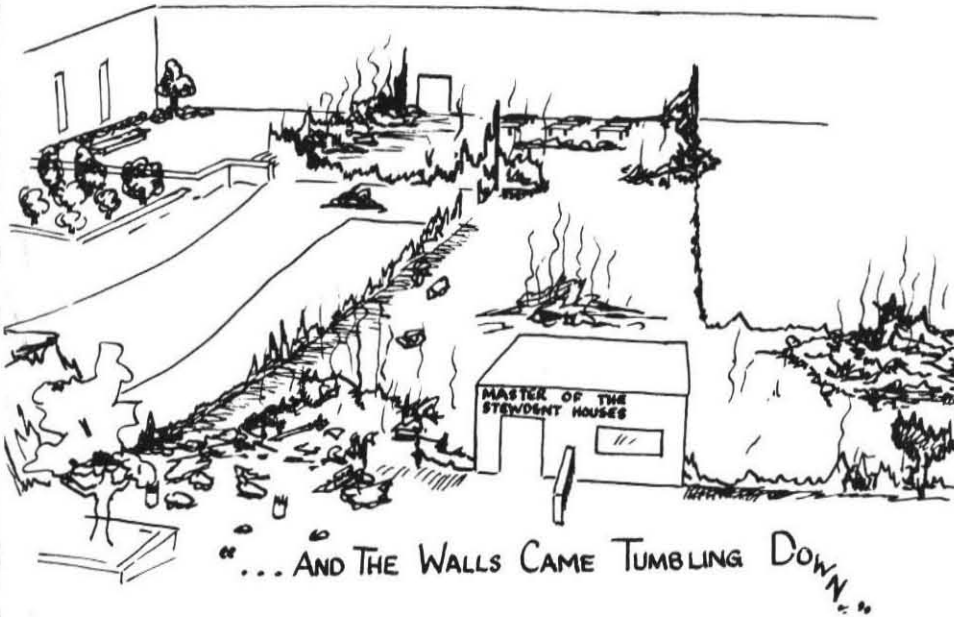


He looks so fierce!



Act V
THE HOUSE DRAGS

Act VI



Act VII

Bud and Travis were great . . . the new auditorium is all right for an oil tank . . . Techaco . . . belchhharghurph-ughh --- S.H.

Act VIII

Anybody wanna buy a beer mug named Peggy or Nancy? . . . Ah well, girls are another type of thing . . .

Act IX

Scene: Fingal's Cage and the Patch

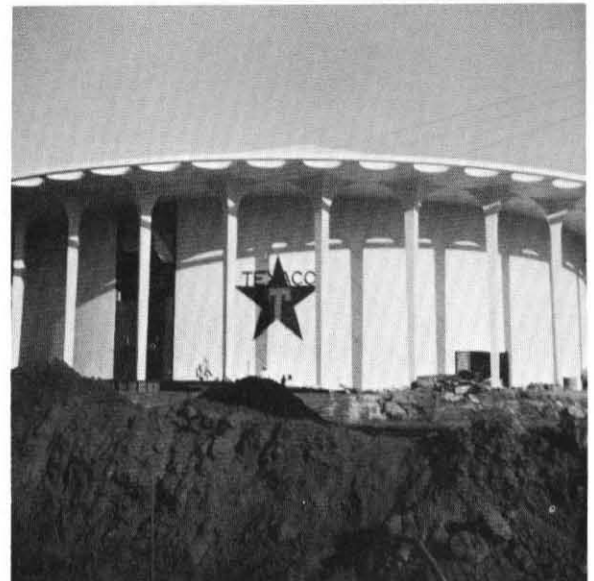
Time: Any night after 10:30

Guffrey, Peterson, and Bell enter running at mach 2 chasing Lippa, who is naked. They catch him and shower him for the twelfth time that night. Card runs by trying to get a blind date for someone: he is showered. Piccioni stops making popcorn and fills the candy and cigarette machine. Bell begins screaming and Berman, who is in his room wrinkling up shirts to wear to dinner, hears him and enters the scene. Misheloff comes out of his room. He is wearing plaid madras bermudas, a green shirt, black socks, and black shoes. He is carrying a slide rule filled with Walter Raleigh and a pipe. The frosh attack him and begin to pull the hair out of his legs. Alvin, startled by the noise, solders his hand to a tube chassis and runs out. He accuses Berman of making noise and calls a UCC meeting.

... whereas in the crowded old Houses...

LLOYD

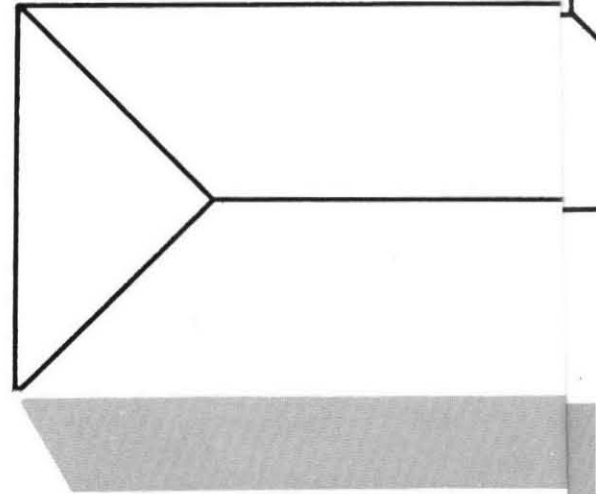
Techaco



Seniors



FRONT ROW: Eliot Bradford, Floyd Herbert, Mike Wauk, Mike McCammon, Bill Howard, Volker Vogt, Alvin Young. BACK ROW: C. S. Fuzak, Nordic, Mark Gurnee, Roger Leezer, Kwok Chung-Mo.

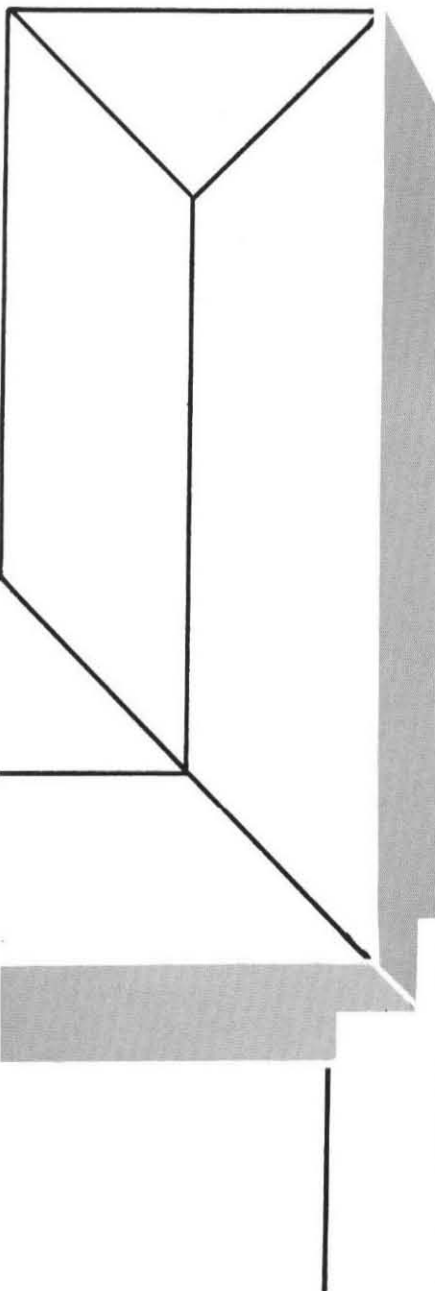


FRONT ROW: Marshall Hall (Athletic Manager), Dave Redell (Librarian), John Walter (Social Chairman), Mike Beeson (Librarian), SECOND ROW: Lynn Melton (Comptroller), Ed Medof (President), Bill Pence (Secretary), Al Gillespie (Athletic Manager), Bob Howenstine (Social Chairman), BACK ROW: Steve Hall (Treasurer), Jim Crabtree (Athletic Manager), Larry Seide (Athletic Manager), Eliot Bradford (Social Chairman).

Officers



LLOYD



Juniors



FRONT ROW: S. Hall, S. Watson, W. Pence, M. Misheloff, R. Villecco. BACK ROW: T. Jenkins, S. Frenk, J. Crabtree, R. McCowan.



Sophomores

FRONT ROW: J. Grodnik, C. Palmer, L. Fisher, C. Murphy, E. Ma. SECOND ROW: B. Perry, R. Williams, M. Erle, L. Melton, J. Walter, L. Miller, S. Deichelmann. BACK ROW: K. Kimball, R. Gajewski, C. Eklof, D. Bigelow.



Frosh

FRONT ROW: B. Gold S. Abramson, M. Greenberg, V. Kovacevic, D. McClure, B. Piccioni, J. Manke. SECOND ROW: R. Russell, F. Benford, D. Osheroff, D. Redell, M. Beeson, J. D. Simpson, S. Brown, G. Guffrey, E. Lipa, T. Buckholtz, D. Hackathorn, R. Peterson, M. Hall. BACK ROW: D. Bell, S. Card, W. Bricken, G. Berman, A. McKay.



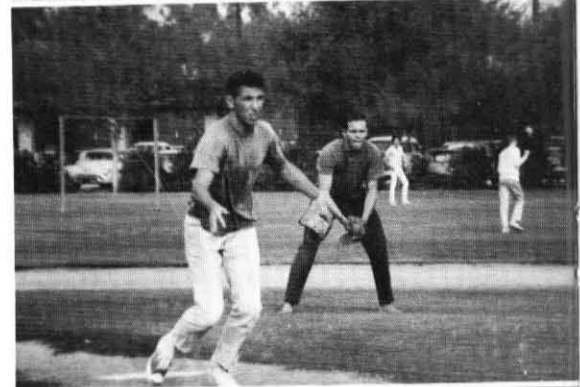
Kovac takes on the House.



Quick somebody, get a cross!



Slippery-fingers Slonski and Greasy-Glove Gillespie



Guffrey actually won.



... which twin has the toni?



C'mon, get to the playmate.



I bat .006 but Allen loves me...



Act X

Palmer's gone sosh, and Frenk is horny. Him? That's Mr. 193. And Him. He's one of the three. . . er two. . . He's the horseman. Where the hell is the Interhouse Trophy?

Act XI

Scene: Lloyd Lounge—2:00 a.m.

Props: Palmer and Kovac wrestling, Howenstine jumping on and over sofa, breaks same; Gold doing the Gold with Wilson; Bradford reading PL; Leezer and Perry watching the Late Late Show; Villecco bothering Bradford.

Bradford: I don't think so

Villecco: sure, why not?

Howenstine: philosophically speaking

Kovac: Not that bad

Gold: Wilson look, the minimum path . . .

Perry: 1937, an oldey but goody, (sarcasm)

Leezer: Oh, Goodeey

Perry: Jean Harlow

Leezer and Perry: ohh, (orgasm)

Kovac and Palmer: ooooh (orgasm)

Gold and Wilson: f=ma (orgasm)

enter Stallard skipping

Stallard: say, who want to go eat? (silence)

Act XII

Basketball 1963 Angel's got the rebound. . .Aw, get up Eddie. Bailey shoots---swish, great. WE'RE LOST. . .Send in the scrubs. Lucas has it under their basket! How the hell is he gonna get outa there? . .Oh, I see, he puts it in, IN THEIR BASKET!! argh.

Tennis 1963 What fool lobbed it up to Bradford? There's "Poop ball" Gillespie wearing out another one. . .Whaddya mean we only took second. . .Oh. . .really?

Softball 1963 Whaddya mean strike three? Oh good, Leezer got a hit, no. . .the right fielder threw him out. Ah, Hake's got that one--no, he dropped it. Allen told me there would be days like this. . .We won? HOW?

Swimming There they go. Williams is leading. There's the flip turn--where'd he go-- We lost.

Football 1964 RAZZLE DAZZLE. . .Hake hikes the ball to Gillespie who fades back. . . they've got him. . .No. . .he lateralled to Crabtree. . .running. . .No. . .he passes to Bradford. . .Bradford runs brokenly. . .Ah, he's in for the score! Gillespie passes to Howenstine for the point. Crabtree kicks off the third time. . .Peterson makes the tag. Roland intercepts? Game's over. WE WON.' . .you can't beat luck, and razzle dazzle.

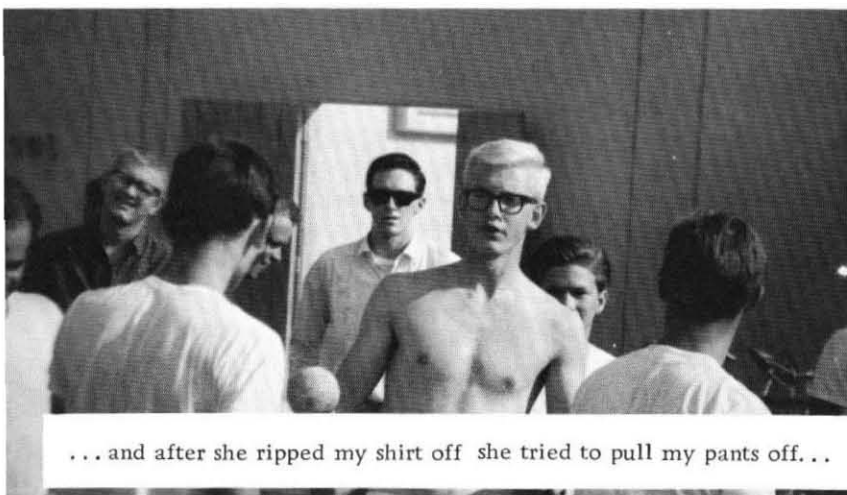
Track 1964 Hey, the track meet was yesterday. . .whaddya know. Did we enter? It's not clear. Where'd we place? Third. . .whaddya know. . .It's not that bad.

Volleyball 1964 What the hell is volleyball?

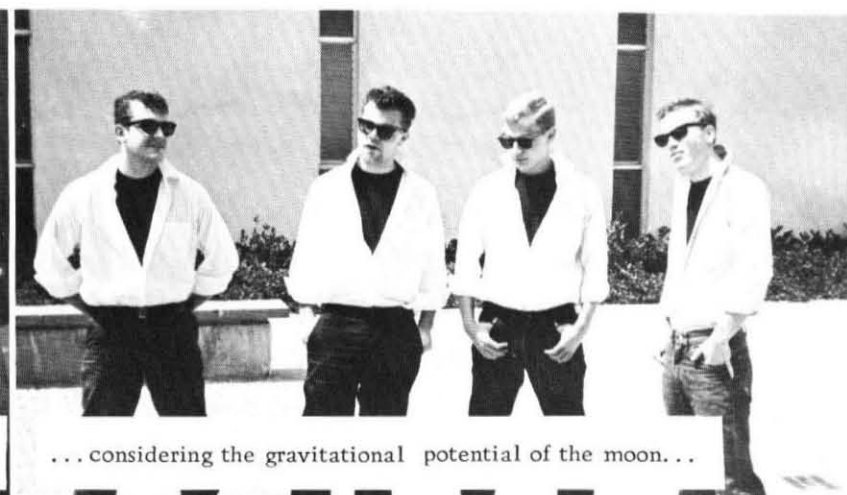
Act XIII

It's the big game folks. Inferno vs. Fingal's Cave. Second half, Leezer sends Pence and Beeson in to get Alvin. They've got him boxed. . .Beeson dives. . .why is Pence's nose bleeding? Where is Alvin. . .get up Beeson! The Inferno wins. . . Live evil.

It's the Beer Barrel Classic. Roll out the barrel. . .where is everybody? We won the Discobolus game. . .what? Baseball 15-14 oh. . .The scnooks challenged in bowling. . .hoo boy. . .damn crooked alleys. . .



... and after she ripped my shirt off she tried to pull my pants off. . .



... considering the gravitational potential of the moon. . .



My God, I've been phynorqued!



What d'ya mean, Four No?



Dr. Westbrook Pegler Larcome, Msgr. Erich Friedrich Wilhelm Ludendorf, and Spats Logan, a random troll from the PCC art Academy: "I don't know what I like."

This being a history of the House for one year, it shall not be limited to the events of the school year 1963-1964 only, but will also include the ennobling events of the third term of the Third Year of the House, the Year of the Pangolin.

The most famous of the events of the Third Term of Year Three was the Great KSMPAWYAP (Keep San Marino Police Active With Your Antics Party). As recorded in Brewins, the antics of the House, while perhaps not keeping the San Marino Police active, certainly kept several other sections of this noble metropolis busy. Besides the theft of the Oxy Tiger (which Oxy didn't really care about), at least one toilet in Lloyd House was turned into a mold for Saga gelatin.

The tribulations of the 69 Masked Wombats at the International Airport, trying to rig a trap for any tiger-philous Oxy men, were of interest; it is with regret, however, that the trolls were able to escape, and not get caught in the Theme Building Lobby until morning, mainly because they never showed up.

Other than this noble and enlightening social event, third term was devoid of happenings of note (except Dr. Hall's House party, and will therefore be consigned to the grave of history.

* * *

"Dulce et decorum est, for sein haus hacersetonto."

This bit of wisdom from the lips of Lao T'ze has long been cherished by the members of Page House. For in the beginning there was del-cross-frosh; and the curl was not equal to zero (which is not equal to nothing), and the frosh did go around in circles. And the result was $20/34$, plus $14/34$ - $34/34 = 1$.

Rotation (excuse us Doc Clark) was of great interest. Armed with the McEliece scheme of random walks and the Johnson scheme of random grabs, and the Anonymous scheme of random comments, there resulted a group of 34 of the finest (or perhaps 32 of the finest and two of the worst) frosh in the House.

Of all the events surrounding the return of rotation to the campus, perhaps the most inauspicious was the night Dr. and Mrs. Hall dined with us. Having imbibed of Jim Davis' notorious Tijuana sherry, she was understandably willing to push a pie in her beloved spouse's face. . . cooler heads prevailed and the night was saved.

The Service Academy of Page rose into existence in a few seconds, as 34 T-shirts again consumed six packages of fuchsia dye, and a can of black spray paint. These noble garments were soon rarities, for the rest of the campus had been forwarned by the two previous years and was only too anxious to defower these robes of our own vestal virgins. A faculty inspired drought prevented the annual washing of Fleming's alley 2, but there was a certain amount of the typical in the Lloyd waterfights. The old sparkle wasn't truly there, though, since it takes a fire hose to really bring out the ire and blood lust in people. To dance in the stream of a fire hose, screaming obscenities at the wielder is the world's greatest emotional catharsis, contrary to the teachings of the noble Aristotle.

PAGE

For the record, the late Dennis McMahon (1.0, 0.9), bested Herbert Jubin in the Oberg Memorial Bust-busting Contest. Requiesce in pace. Mens sana in corpore san.

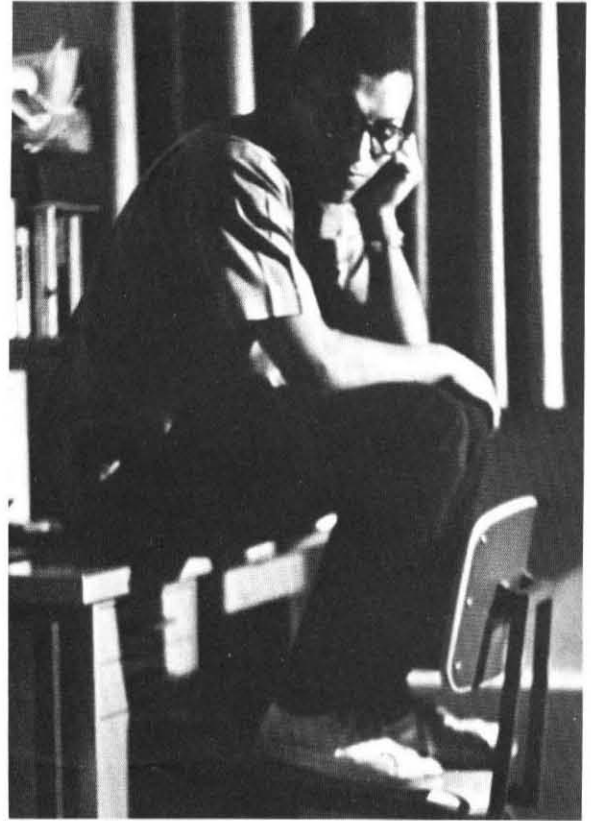
The acme of the Marry-Off-Jim-Davis term's social program was our fabulous Interhouse. Under the watchful eyes of Chief Construction Engineer Holland, EE Gordy, and Frosh Merithew (who even had Lloyd frosh working away), Page House was once more a mass (or is it mess) of tunnels and caverns. The inside of the lounge was transformed into a cave, complete with Das Sparklenmitglowenunddrrippendunkel Cavern and the Punch Stalactite. The outside featured a hot springs (honest to goodness, hot water!), paint pots, and that great natural wonder, Old Blowhard Geyser (with real B&G steam). The surprising thing was that we actually finished construction early, so we could worry about snowy fine details.

Oh, how the paper-mache glopped all over the chicken wire. Staples stapled, nails went in (crooked), wire was strung, but surprisingly everything worked! The geyser stole the show, its secret control device changing it from blurp, blurp to a fountain of steam that was visible all over campus, even in Blacker. Snow flew everywhere.

The rest of the term happened, then came that infamous week known as Finals. The Frosh snaked diligently, but soon found out that it was futile.

Second term saw a rise in popularity of board games, as bridge lost attendance to Risk, Diplomacy, Monopoly, and others. The entity known as the Rat Pack started the fad by seducing unsuspecting frosh into playing Diplomacy, a game which usually lasted several hours.

The social program second term was more of the same. There was, however, one major difference: the Page House Art Party. The prospective artists and dates were supplied with paper and paints, and told to create. The paintings hung in the lounge, to be judged by a distinguished panel of judges, Msgr. Erich Friedrich Wilhelm Ludendorf, Dr. Westbrook Pegler Larcome, and a random troll from the PCC Art Academy. Ludendorf kept losing his monocle, which was cleverly designed to look like a sea urchin, and attempting to run people through with his sword, but was restrained by Dr. Larcome. The prize was awarded and everyone was happy except Hendrix, whose masterpiece, an abstract piece depicting the viral infection of a treble-clef sign, was demolished by the mad German and his wild rapier.



"Physics Bites"

"Suck in your gut, Whitlock"





Sophomores

FRONT ROW: P. Ash, J. Lau, R. Nielson, B. Hoerner, J. Brooks, L. Gordy, J. Pearlman. BACK ROW: R. Greenwood, F. Mayer, C. Scandella, R. Silver, J. Aries, T. Miller, R. Bunker, D. Radcliffe, L. Newman, T. Resney, R. Bernstein, D. Close, R. Weatherwax, W. Colglazier, J. Mowery, J. Trijonis, J. Kabell.

Juniors

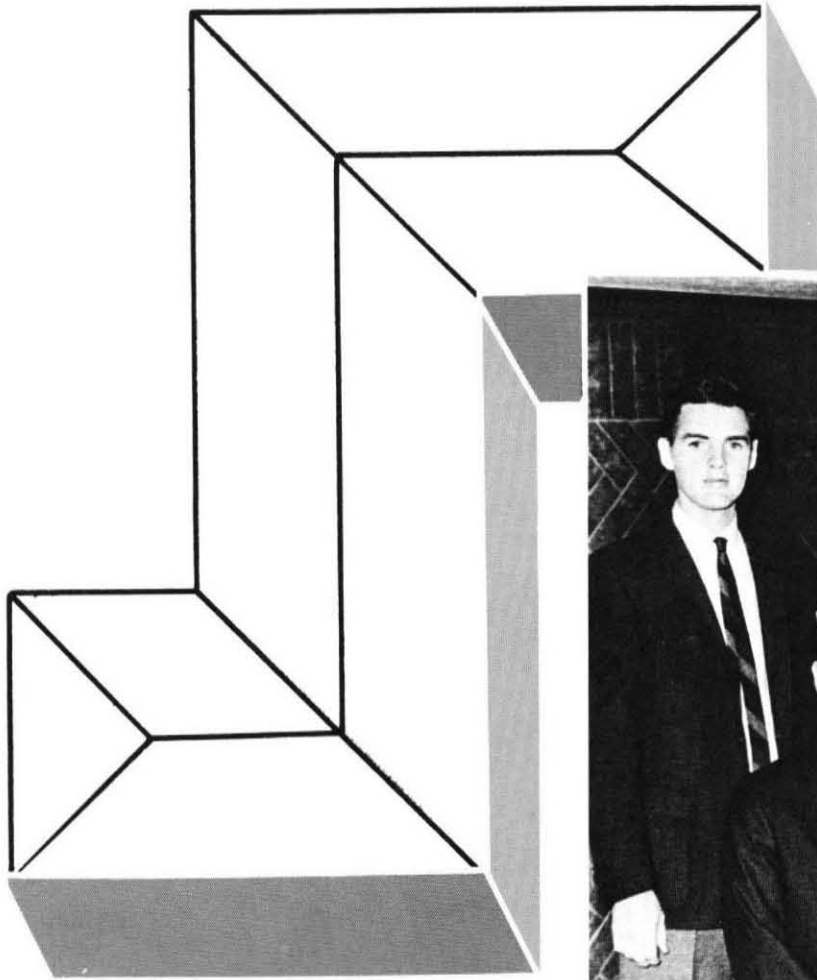


FRONT ROW: S. Garrison, R. Whitlock, W. Ryback, J. Harkness, P. Ryan, D. Levy. BACK ROW: D. Oberg, R. Hendrix. NOT SHOWN: D. Payne, D. Price, R. Lane, D. Hixson, L. Hall, G. Fitzpatrick, J. Follansbee, K. Kunen, T. Simpson, D. McCreary, T. Menzies, J. Radin, N. Wilson



Frosh

FRONT ROW: C. Carlyle, D. Goodman, D. Rud, P. Balint, P. Theisinger, L. Merithew, T. Beale, M. MacDonald. MIDDLE ROW: A. Porter, P. Sheng, K. Nordsieck, M. Mandell, B. D'Ambrosio, G. Engebretsen, G. Schnuelle, T. Fujimoto, J. Hoshor. BACK ROW: L. Karr, R. Dickinson, W. Rippel, R. Ligon, J. Dessinger, D. McMahon, J. Pomney, K. Gibson, R. Schor, G. Swartz.



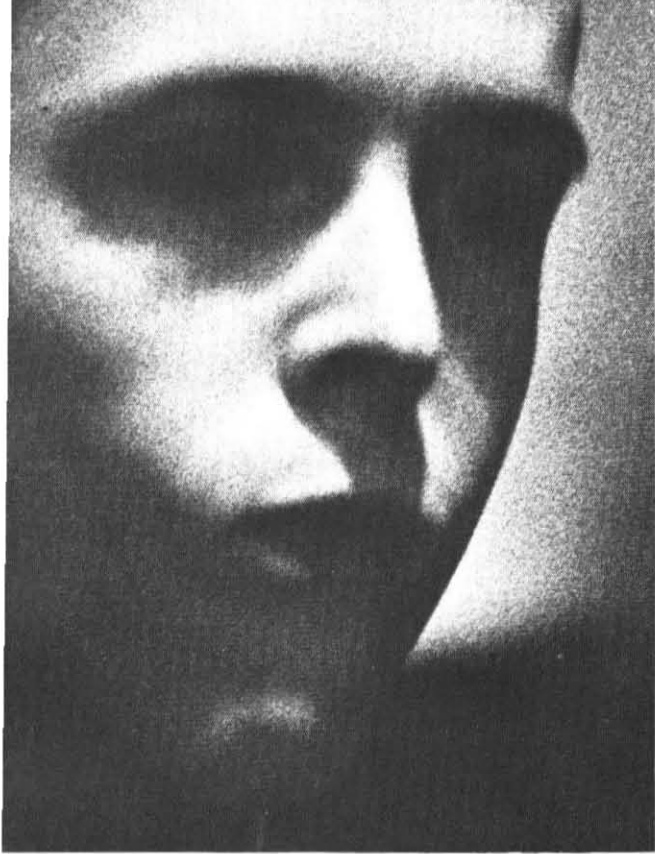
OFFICERS--

FRONT ROW: Johann Lau, (Secretary), Jerry Thomas (President), Chuck Holland (Social Chairman). BACK ROW: Mike Lambert (Social Chairman), David Posner (Librarian), Roger Hendrix (Social Chairman), Tom Resney (Athletic Manager), NOT SHOWN: Dick Burgess (Vice President), David Holtz (Treasurer), Jack Beauchamp (Social Chairman), Bob Bunker (Athletic Manager).



Seniors

FRONT ROW: Mike Lambert, Howard Ono, Creature, Dave Hewitt, Chuck Holland, Spicer Conant, David Holtz, Jew Extraordinaire, Barry Peterson. BACK ROW: Frank Matthews, Thor Hanson, David Seib, Alan Limpo, Jerry Thomas.



As midterms came around, strange sounds started emanating from the Page Lounge after lunch and before dinner. One close examination, a tone-deaf listener might conclude that it was singing. But he would be wrong. For it was the Page House chorus bellowing their way through "Hostias" (from Berlioz's "Requiem") and "O, Welche Lust" (Beethoven's opera, "Fidelio"). Led by Roger "Frodsham" Hendrix and featuring our hero, Jim "Magnolia Mouth" Davis as half the first tenor section, the group faked out the judges at Interhouse Sing and walked out with their third straight second place. For this great feat, Hendrix reigned supreme as honorary House Hero for a week.

The last few weeks of second term heralded that great change in House personality known as House Elections. Random trolls and house bad apples suddenly reformed and started trapping people in their rooms, trying to convince them that they were really great guys and wouldn't I be great as House Troll? Then came campaign speeches, when we find out that R. Troll is imbued with house spirit and really has more talent that we can see obviously. Radcliffe ran for President, Vice-President, Treasurer, and Athletic Manager, but lost all of his write-in campaigns. Random election results: Dickinson won the House Rabinowitz-Fellner-Whitlock-Dickinson Award, Whitlock was House Beatle, and Davis (to everyone's dismay) became House Good Guy.

Speaking of elections, Whitlock came through as ASCIT Activities Chairman, and Page again reigns supreme on the BOD, due to the election of Garrison; as Conant's successor as Veep.

Since this traumatic split with the old, one would think that the house would undergo great and profound changes. But it didn't; nothing has happened since elections and nothing seems probable in the near future except the big break between this term and the next.

As an example of our great zeal and drive, consider our fabulous standings in Interhouse Sports. We started the year tying for fifth (which means last) in softball, then we captured last all by ourselves in swimming. Second term was not much worse. Our football record was another tie for fifth (this time, next to last). We captured another last in track, and then broke our great string by taking fourth in volleyball. Maybe basketball will be our game.

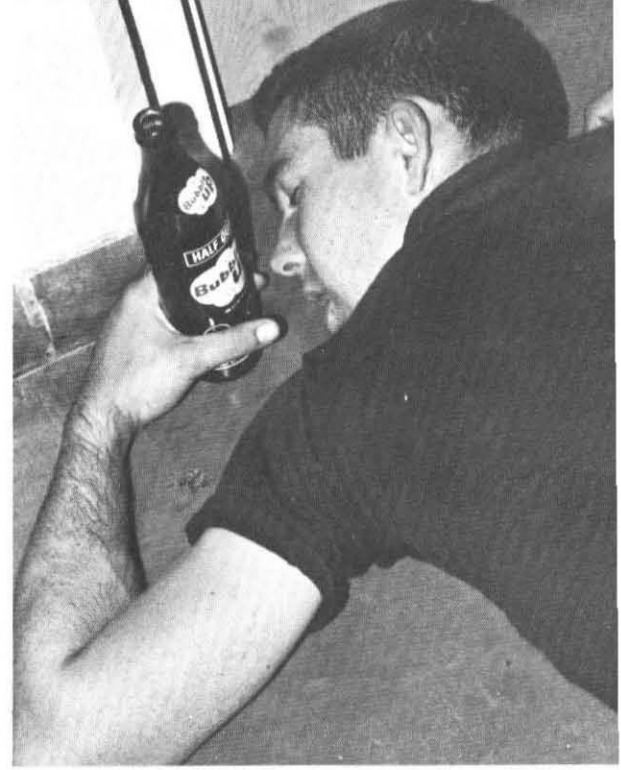


"How was your date, Dennis?"

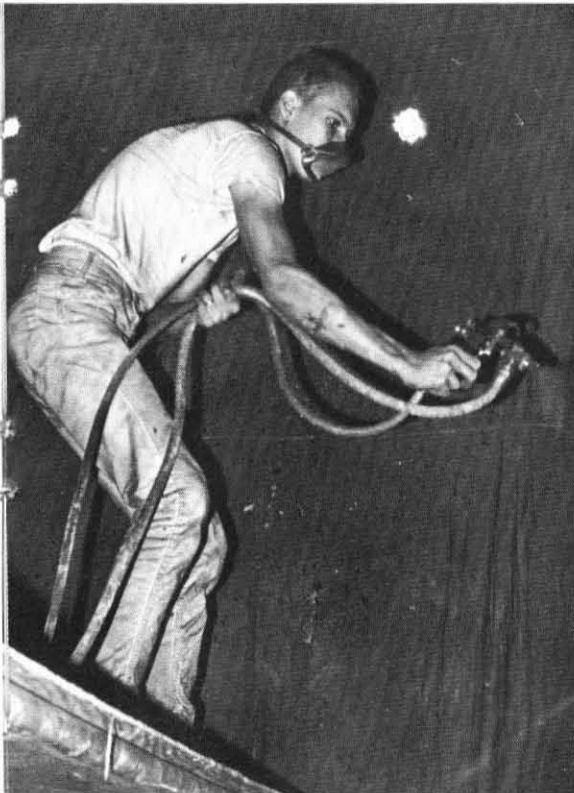
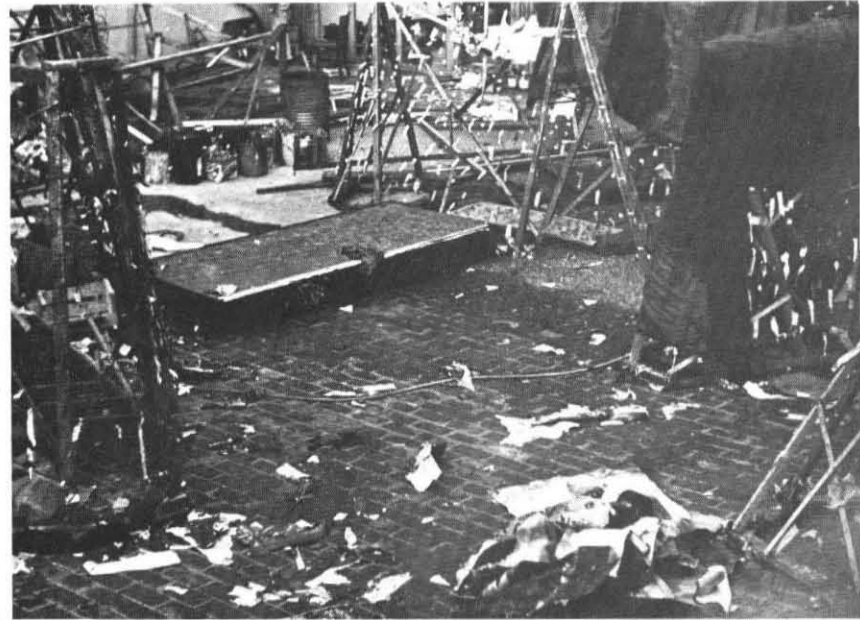
"Hm, I wonder if Picasso started this way."

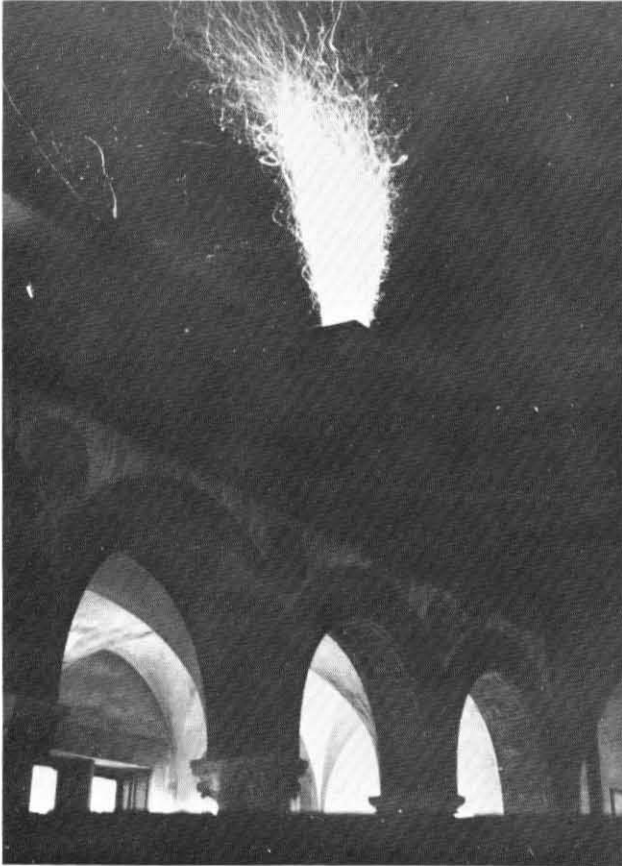


A Elbereth Gilthoniel,
silivren penna miriel
o menel aglar elenath!
Na-chaered palan-diriel
o galadhremmin ennorath,
Fanuilos, le linnathon
nef aear, si nef aearon!



A day of infamy... the post-dance chaos.





Boom!

... but no spinach on the ceiling.



1963 was the year the legendary Ricketts Rotation Machine was put back into operation after years of disuse. In contrast to the storied cut-throat tactics of old, no attempt was made by the House to "run down" any other house; Rather, simple reference was made to the indisputable fact that Ricketts is the only house in which it is possible to live for four years and not become a pervert, a boor, or an idiot. With this soft-sell approach and after a lengthy, democratic house meeting at which it was decided which frosh were better than which other frosh. President McEliece and Resident Associate Townes attended Dr. Huttenback's meeting, took the freshmen they wanted, and merrily watched to find out who was going to get stuck with numbers 180-190. The next week was a heartbreaking one for Ricketts as freshman after freshman begged to be let in. But there's only so much room at the top, and all requests were, regrettably, ignored.

Although, as indicated, the freshmen Ricketts got were, to steal a phrase from Kloke's, the "best obtainable," nevertheless, they were, as usual, miserable specimens of humanity. The long process of building men (Ricketts build men, in case you hadn't heard) began with the traditional initiation foolishness. One freshman (whose name is being withheld, but whose initials are Pete Cross) seemed to think it was funny to antagonize certain highly placed house officials by brandishing a pitcher brimming with ice water in order to avoid being floofed. (If he thought he could scare those redoubtable upperclassmen, he certainly was right.) Also, there was a rumor that one freshman (whose initials are being withheld, but whose name is Vern Poythress) might get excused from Ma 108 (ha) and who, at any rate, was probably a pretty smart fellow (ho); but the pledge-master asked Vern to do a simple division on his slide rule (he was to compute the decimal equivalent of $23/33$), and he took ridiculously long to reach an inaccurate answer. So once again it was a matter of a freshman trying to snow the upperclassmen (ha, ho). (As a matter of fact, a little later in the term, he stood up after one meal and admitted that he had been wrong a week earlier. This brought down the house.)

There have been many systems of self-defense invented throughout the ages; Karate, Judo, playing dead, etc., just to name a few. But none has been so successful as Ricketts' own system, developed into an art in the 1963-1964 school year: Armpit Elbowing. The subtle maneuvers of the "Chicago Roll," the brute force of the "Denver Smash," etc., would tame even the most accomplished Judo or Karate master in the world, but delivered with the grace and finesse that only Bob Landis or Mike Baskes can do, an armpit in



RICKETTS

the elbow is a work of art. (It's also a lot of fun: overheard from Landis while he was elbowing freshmen. Phil Paine: Oh, oh, I'm in deeper than I've ever been before.)

Ricketts had the coldest damn Interhouse Dance display in history first term '63-'64. Although old graduates claim that nothing interesting ever happens in the student houses anymore ("well, in the old days, when men were men, and giants walked the earth," the saying goes.), it seems doubtful that anyone ever skied in the courtyard before. More than once during the night of the dance, a group of people would stand dumbfounded before the snow scene. When asked, however, why they were watching so long, inevitably the answer came back, "We're waiting for the monster to appear." It may have been a tame Interhouse, but it was cold.

Other first terms happenings of little or no interest: The softball team should have done better, but finished 2-4 (or 3-5 counting Discobolus)... Ricketts became the campus comic book center- there were more Spider Man fans in Ricketts than in the whole rest of the campus (and maybe the world)... It was considered great fun to get Turk and Saltzer to pay their house dues, but no one ever succeeded; in an unprecedented open executive committee meeting, things were confused more than ever -the final decision seemed to be "pay, or we don't like you any more". Barro got engaged, but promised to wait until after senior year; strange rumors were rampant about Constable... Pete Cross claimed he would hitchhike home for Christmas.



"Duck!"



Wetter but wiser.



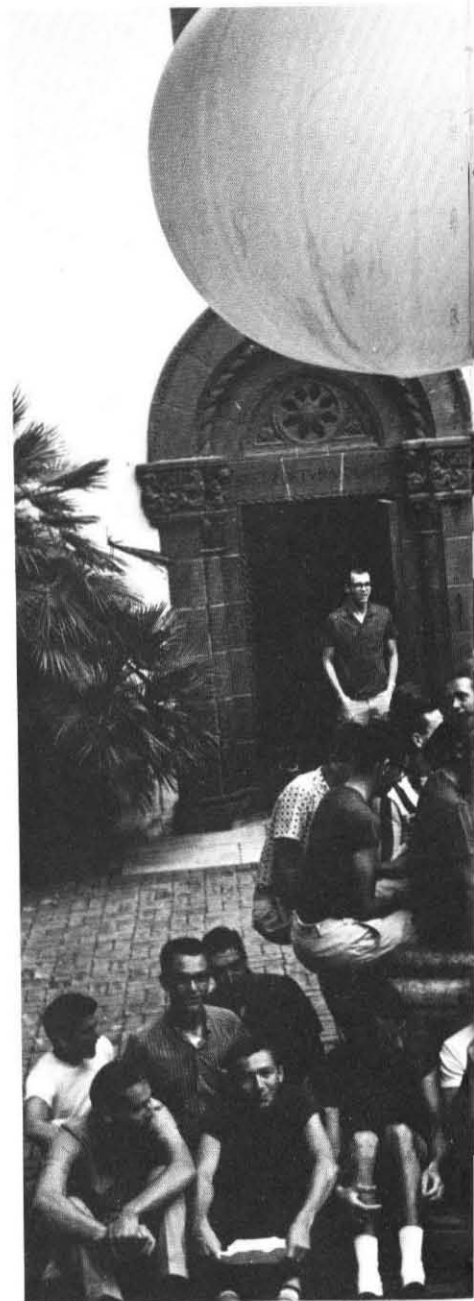
Must be his birthday.

RICKETTS

Seniors



FRONT ROW: Smart George Reeke, Joe Taynai, U.F.O., Fred Dorr, Bill Rosenberg.
SECOND ROW: Wayne Covington, Ray Weiss, Bill Spring, George Radke, Elliot Harry,
BACK ROW: Ron McCalley, Dave Hyde, Bob McEliece, Roy Riblet, Tom DeKlyen.



Ex Com

FIRST ROW: Ray Weiss (Social Chairman), Fred Dorr (Vice President),
Bob McEliece (President), Dave Jackson (Social Chairman), SECOND ROW:
Ed McCullough (Librarian), Mark Gingold (Treasurer), Roy Riblet (Head-
waiter), Elliot Harry, Bob Landis (Athletic Manager), Bob Barro (Athletic
Manager). MISSING: Hugh Maynard (Athletic Manager), Sven Anderson
(Social Chairman), Ed Bloomberg (Secretary).



Juniors



FRONT ROW: R. House, C. McGruder, T. Oberjat, P. Kochendorfer. SECOND ROW: S. Lipshie, B. Barro, M. Baskes, D. Jackson, H. Rosenthal. THIRD ROW: D. Blumenthal, M. Gingold, B. Landis, R. Douglass, N. Puckett. BACK ROW: B. O'Neill, Y. Hirschi, M. Olson, R. Drake, B. Satterthwaite.



FRONT ROW: T. Smith, J. Austin, J. Adams, L. Nagel, J. Hall. BACK ROW: G. Ratner, T. Carlson, J. Vollbrecht, R. Blazer, R. Woolsey.

Sophomores



Frosh

FRONT ROW: D. Eaton, M. Robel, T. Oberjat, D. Woodward, S. Hayes, P. Cross, SECOND ROW: P. Paine, J. Evans, G. Ihas, J. Beall, L. Dillehay, R. Sparks, THIRD ROW: T. Gharrett, L. Gorbet, D. Metlay, M. Oiye, J. McKenna, A. Bersbach, I. Herskowitz, R. Landy. BACK ROW: G. Jaegers, G. Jahn, H. Hoffman, M. Dowd, B. Neveln, W. Innes, V. Poythress, G. Edwards.

During second term, the freshmen wanted to get the brakedrum, thanks to Ray Woolsey, who joined the ranks of Terry Murphy by having the thing discovered in his room. Actually there weren't really enough sophomores left at that time to comfortably carry the drum, so maybe it was for the best after all.

Ed Bloomberg tried his best for six weeks to teach the house Beethoven, but all to little avail, as Ricketts finished a disappointing third in the Interhouse Sing Competition. Oh, well, "Emitte Spirite Tuum." (That means "Wait till next year" in Latin.)

By far, the most interesting things second term were the various elections. The ASCIT Social Chairmanship continued in its Ricketts nepotism as Jackson, promising to do "wonders for your egos," was elected to that high office. But most astounding was Randy Cassada's election to ASCIT President, the general reaction in the house was something like, "Oh God, you mean Cassada's going to be President?" It just seemed hard to picture Randy as the most powerful man on campus. For rep-at-large, Pete Cross advertised, "Don't get mad, get Cross," to no avail. The campus got mad. House elections were also very. The presidential race was not an unopposed one in '64, but Bob Landis was the winner. In his campaign, he promised to run the house by the "Chortling approach," whatever that means. Keep chortling, Bobby. It didn't take long to flunk out a social chairman, as R. Drake became defunct before he ever became funct.

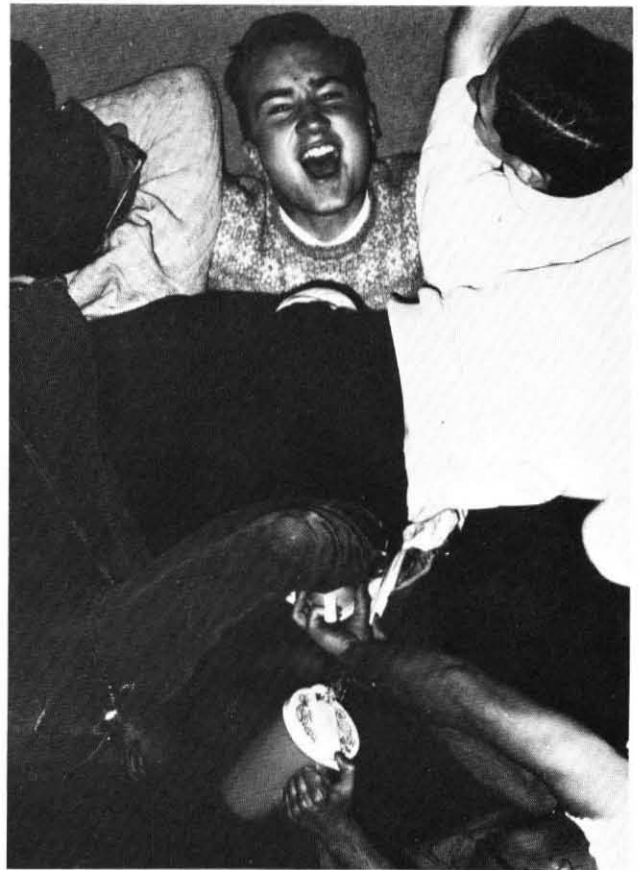
Other second term goodies: Ratner's Freshman Activity Program met with great success and contributed to the well-rounding of the frosh... The angry hordes sort of did it to the "Red Raiders" legend but a 12-6 record for three years isn't bad... The track squad led by Walt Innis made mincemeat of the rest of the world, and the volleyball team had a good chance to do the same, but blew the big ones... The crew team finished their "Heidy, Deidy," before Dabney and Lloyd finished drinking, in a warmup match before third term's encounter with Ruddock... Doug Eaton's (frosh class President Eaton's) blood-curdling pleas for blood ruined seventeen meals in a row.

This yearbook went to press very early in third term, so there's little to report about it, but Bloomberg just brought out his purity test (have you ever been what by an anteater?). Dick House seems to have gone down the tubes woman-wise,

Nice thing to do!



Gimpy Ed McCallough is leading the house basketball squad, Nervy Bill Satterthwaite is plugging the Carnival Party, and the House is getting ready to lose good old Harry Townes.

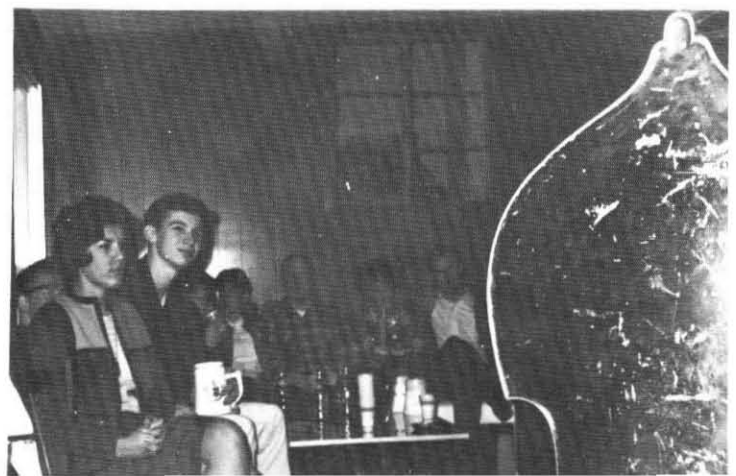


"Five men? No kidding!"



The cool get cooler.

The hot get cooler.





Another McBean Machine grinds away-- this time the draw-bridge.

One day many years ago while the great god Frink (José to his friends) was relaxing over a zombie, he turned to a companion and said, "Frosh are good for naught save work." Since Frink said it, of course it was true, and no one, least of all a Ruddock man, would dare to deny it and risk the wrath of Frink.

But Ruddock *does* believe that, despite their worthlessness, frosh do have some potential, however slight. Faced with the prospect of only 20 frosh, the lowest frosh class in Ruddock history, the house organized for rotation with unique spirit. Luckily, the House was well able to impress frosh as it still held an imposing number of prestigious campus officers. Liebermann, Brunswig, Helfman, Karp and Blackinton gave Ruddock an absolute majority on the ASCIT Board of Directors, who somehow remained sufficiently honest to avoid awarding ASCIT's budget to the House social program. The House also still maintained its editorial and financial sway over campus publications. The Helfmans were in their second year as editor of the Little T and JC Simpson was repeating as head of the California Tech, with Dick Karp as business manager. Bob Levin had succeeded Jack McKinley as editor of the Big T and John Turechek was handling the money, or lack of it.

Open, Sez me!

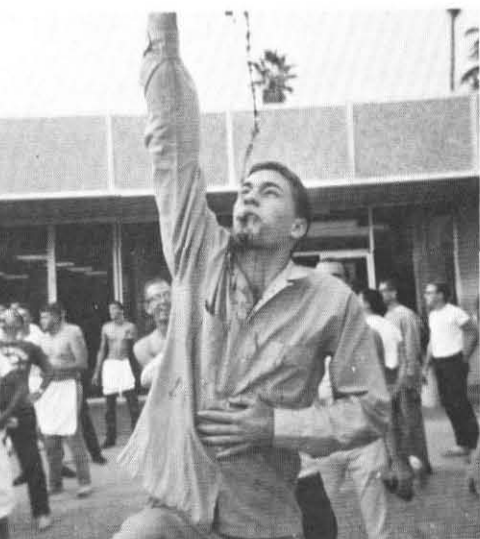


The day all beavers dread.

In addition IHC Chairman Karp was arranging Tech's first rotation after a three year lapse, and simultaneously proving his physical prowess as senior class's most unathletic athletic manager.

To prepare properly for the onslaught of rotation, President Hammer called the House officers and UCC's together to devise a sufficiently complex system of red tape. This they did in record time and soon the House underground press was issuing vast quantities of interesting index cards for upperclass use only, and then churning out copies of "Ruddock House--Slayer of Dragons and Sundry Creatures of Evil" by Robert C. Liebermann, which Karp quickly revised to "Why We're Neat."

Guess What, Al?



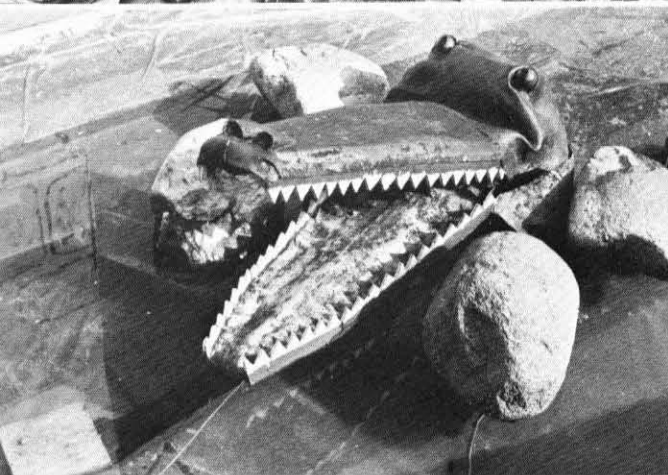
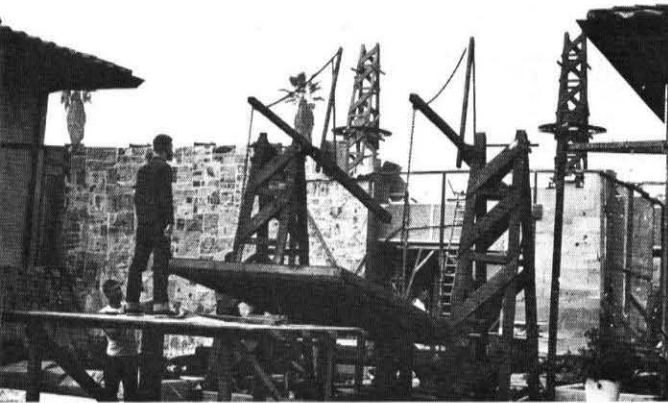
The Galley-Gator strikes again.

To keep up with the infinite red tape spewing from the Excomm, Karp and the IHC spewed forth infinite frosh, who had just tired of snowing each other at their mountain retreat and had returned to snow the rest of Tech. What they encountered, however, were countless upper-classmen who were spewing even more snow, at a rate which can be learned only from that greatest snowman of all time, R. P. Feynman.

Finally, it was over and Ruddock settled down to training what it considered the 20 least worthless frosh on campus. They were indeed enthusiastic, as had been desired, but the selection had been somewhat inefficient in another way, as they were not the smartest frosh on campus. There were not to be twenty for long.

"Let me in," says Ken Brown deliriously.

RUDDOCK



The frosh took to initiation with a rare zeal and took everything the sophs could throw. Johnson borrowed a bathroom in San Marino, then used it to take a shower. Berry tried to commit suicide by jumping off a five-foot high ledge in downtown Pasadena. And, when asked what he was carrying in the sack slung over his shoulders at midnight in San Marino, he calmly told the Chief of Police, "an elephant." Which proved to be true.

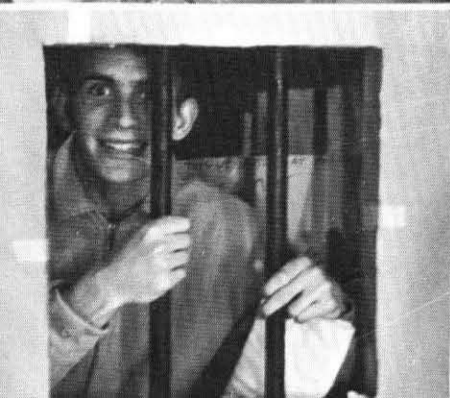
Soon after, the House was finally impressed by the great white father of the impossibility of further abductions, and made yet another contribution to the "New Student Houses Library Fund." But the frosh struck anyway, and initiation ended for Fearless Leader Bruswig in a closet in Arms.

The real year started as always with Interhouse, and Ruddock began traditionally by throwing away Interhouse softball for the third year in a row, but came into swimming with a vengeance, and qualified more men than any other House. Though Bruce Johnson starred in the meet, however, Ruddock finished a few points behind Fleming for second in a close contest.

The juniors prepared for Interhouse with a bang by spending a weekend in placing the House's Frink Ave. sign on top of Mount Caltech, thus claiming it as home of Frink and his fellow gods, and a far more glorious successor to Mount Olympus.

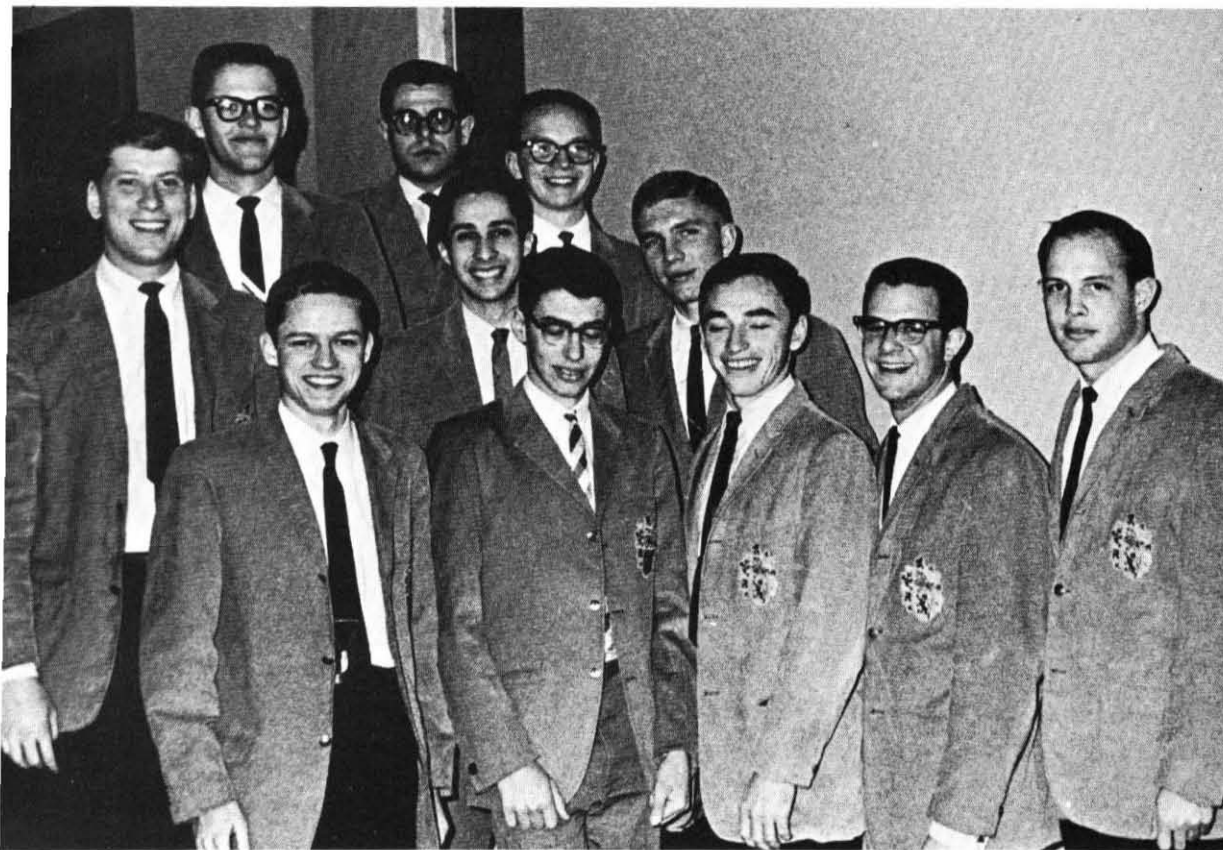
Then came Interhouse Dance, and all the snakes who had survived this far were destroyed utterly. After settling "definitely" on at least four definite themes, the men of Ruddock finally set out to convert the barren courtyard to a Medieval fortress. This was ultimately successful despite a Friday downpour which wiped out five days of work and set the whole House frantically working to repair the damage before Saturday evening.

When 8:30 came around, however, the multicolored lights streaming from four stained-glass chapel windows revealed several massive instruments and a manually operated drawbridge to let crowds into the courtyard. Lola looked down from one of the twin 45-foot towers (taller than the Sphinx yet) onto a genuine bagpiper who provided musical accompaniment from the ramparts. Inside, Neidengard and Levin created a banquet hall and Greenfield provided a five-foot House crest, which was later relegated to the library. But the major attraction



Ruddock

Executive Committee



LEFT TO RIGHT, TOP ROW: Bill Broste, Dimitri Papanastassiou, Don Terwilliger. SECOND ROW: Murray Sherman, Bill Meisel, Bill Weber. FRONT ROW: Stu Davey, Phil Liapis, Mike Cosgrove, Dave Hammer, Steve Gorman.

LEFT TO RIGHT, TOP ROW: Al Hindmarsh, Jim Hole, Dick Stanton, Russell Hageman, Bruce Beeghly, Tony Dahlen, Ray Green, Jack McKinley. FOURTH ROW: George McBean, Dan Paxton, Joe Weis, Tom MacDowell. THIRD ROW: Dave Hammer, Bill Meisel, Bockett Hunter, Keith Gillen, Steve Gorman. SECOND ROW: Terry Mast, Bill Weber, Mike Cosgrove, Don Terwilliger, Dick Karp. FRONT ROW: George Preston, Bob Liebermann, Lola, Tom Lubensky.

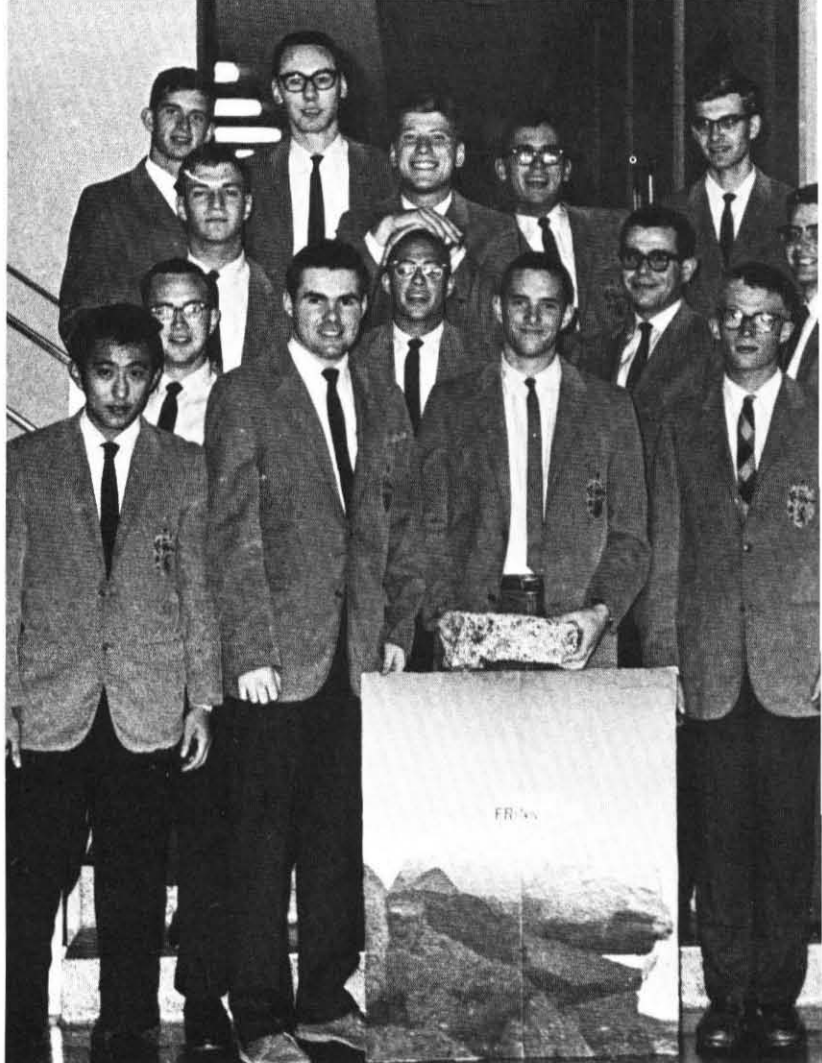
Seniors



HOME

Juniors

LEFT TO RIGHT, TOP ROW: K. Brown, M. Roshbash, T. Pucik, M. Sherman, J. Turechek, E. Kuplis. MIDDLE ROW: S. (Mole) Chapman, A. Niell, D. Papanastassiou, T. Greenfield. FRONT ROW: F. Nakamoto, L. Neidengard, G. Blackinton, P. Freeborn



With a rock from Caltech Mountain.

Sophomores

TOP ROW: S. Hopkins, J. Tucker, B. Orr, T. Williams, B. Broste. THIRD ROW: W. Oliver, P. Miller, M. Wolf, S. Galley. SECOND ROW: G. Steiner, D. Heider, D. Gage, A. Harris, S. Davey. FRONT ROW: F. Brunswig, M. Hunsaker, G. Bornzin, V. Wang, J. Rouse, P. Liapis.



Hey Phil, What's Froggie doing now?

Frosh

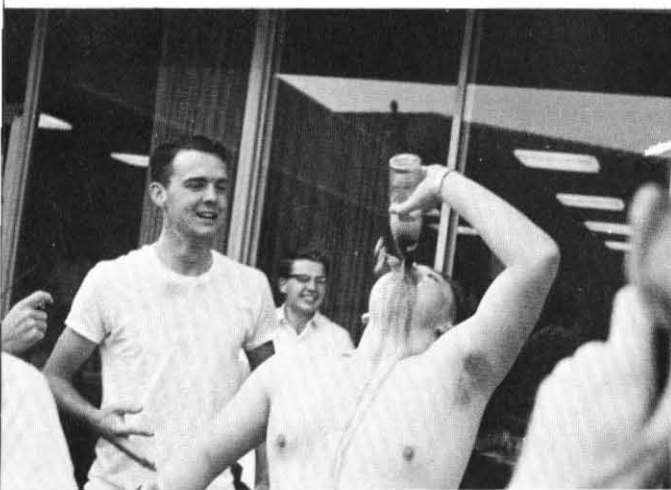
TOP ROW: B. Johnson, E. Young, K. Overbeck, M. Hess. THIRD ROW: B. Berry, T. Astin, Norton Greenfeld. SECOND ROW: G. Shuptrine, M. Smith, G. Williams, D. Barbosa. FRONT ROW: E. Peterson, R. Dickenson, J. Held, F. Lamb.





The Beatles strike again!

The gin sponge soaks something new-



Walt Deal shows anyone can wear cords
in Alley Six

Mr. Ruddock at the library dedication



was John Turechek's Holy Grail which sat majestically in mid-air all evening and happily burbled punch for the befuddled masses in the lounge. Then it was over and Liebermann's gang set yet another record in demolition Sunday morning and House members awoke to find themselves transported back to the harsh reality of impending finals.

Finals were the usual levelers as Ruddock lost twenty per cent of its none-too-bright frosh class, and the future of the other 16 looked none too bright either, as they returned to try and survive second term.

Meanwhile the profligate Grik's iron rule over the dining room (I'm not righteous, I'm right!) was finally drawing to a close. And also finally Lola was captured from Alley one, to eventually reside in Alley Six, which promptly instituted a new custom and kept her in the library, where she could now be "checked out like a book" for the gratification of all House members.

Having been satisfied with the initial advantage it gave the other Houses, Ruddock men took the Interhouse field with a vengeance, warming up with a second in football and track, both higher than had been predicted by the scandalous Ruddock Rag and, finally hitting its studs, upset Fleming to take first in volleyball by consistently demolishing every team it met (though the team seemed to have a fetish against winning two games in a row that made almost every contest a close one). As second team athletics ended the Interhouse Trophy Race had shaped up as a battle between Ruddock and Fleming and the men in baby blue were looking forward to third-term basketball and tennis.

All was not rosy, however, as doom came with Interhouse Sing. Despite coming up with the largest group in the contest, the chorus in blue finished a lowly fourth and the quartet finished a close second, losing the quartet trophy that had been in Ruddock since its inception.

Next the House decided to dedicate the "new" library that had been in the House since the beginning, and the formal dedication boasted Mr. Ruddock and a star-studded cast. Saga too was quite impressed it seemed, as they put on their best show in four years on campus in an effort to show Doctor DuBridge and others what Student House food was really like.

Came ASCIT elections and Ruddock was at it again. Fred Brunswig moved up in the world to treasurer, and was succeeded as ASCIT rep by ambitious frosh Eric Young, who won his office in a field of five in the record run-off. After two years as Tech editor, in which he proved that Chem E's are truly the rulers of the world, J. C. Simpson followed in Karp's great (sizewise) footsteps to become both IHC Chairman and Tech Business Manager. Stu Galley and Wally Oliver assured Ruddock



Our masterworks drew large crowds



Clem and Clarabell with a present for Shlegeris



Steve always wanted to be a senior

another year of editorial dominance by assuming control of the Tech (jealous of the glory of their predecessor (ahem!), they began a ridiculous spite campaign against Chem E's which failed miserably). Mike Rosbash triumphed too and assumed his new job as BOC secretary alongside newly appointed member Marty Smith.

The survivors turned immediately to House elections, where Kendall Brown became prexy in a three-way contest. Tom Greenfield brought artistic excellence to the office of Veep and Shelby (the only good mole is a wet mole) Chapman proved that even a mole could be Ruddock House Secretary. John Turchek proved he was the biggest bitch in the house and became treasurer, while an incompetent triumvirate of Greg Shuptrine, Phil ("I feel good") Laipis, and Doug Gage were elected to do the House's pimping. Pseudo-Jock Martin Smith combined his managerial experience with Rob Dickinson's ability to take the office of House Jock, and a little innocent Lamb became the new librarian. In commemoration of their unselfish work for House and Tech, Brunswig and Boss Liebermann were awarded the titles of House half-ASCIT and whole-ASCIT respectively.

As third term opened Bruce Johnson proudly posted his 1.9, thus proving to all skeptics that he could indeed survive another term, and alley six adopted a new member - a wee babe guaranteed to provide high spirits to what was assuredly the best senior third term of all. They and the rest of the house reveled in wine, women, and song till the time came to pay their due, and ditch day brought inevitable ruin as the seniors took like lemmings to the sea. But Fink had been somehow angered and sent his wrath in the form of finals upon the unprepared victims. Those who survived eagerly greeted the summer to heal their scars.



The New Booth Computing Center

The handsome three-floor Willis H. Booth Computing Center building and the large IBM information processing facilities contained there in were dedicated during all-day ceremonies before guest watching through the medium of closed circuit television Monday, December 9, 1963.

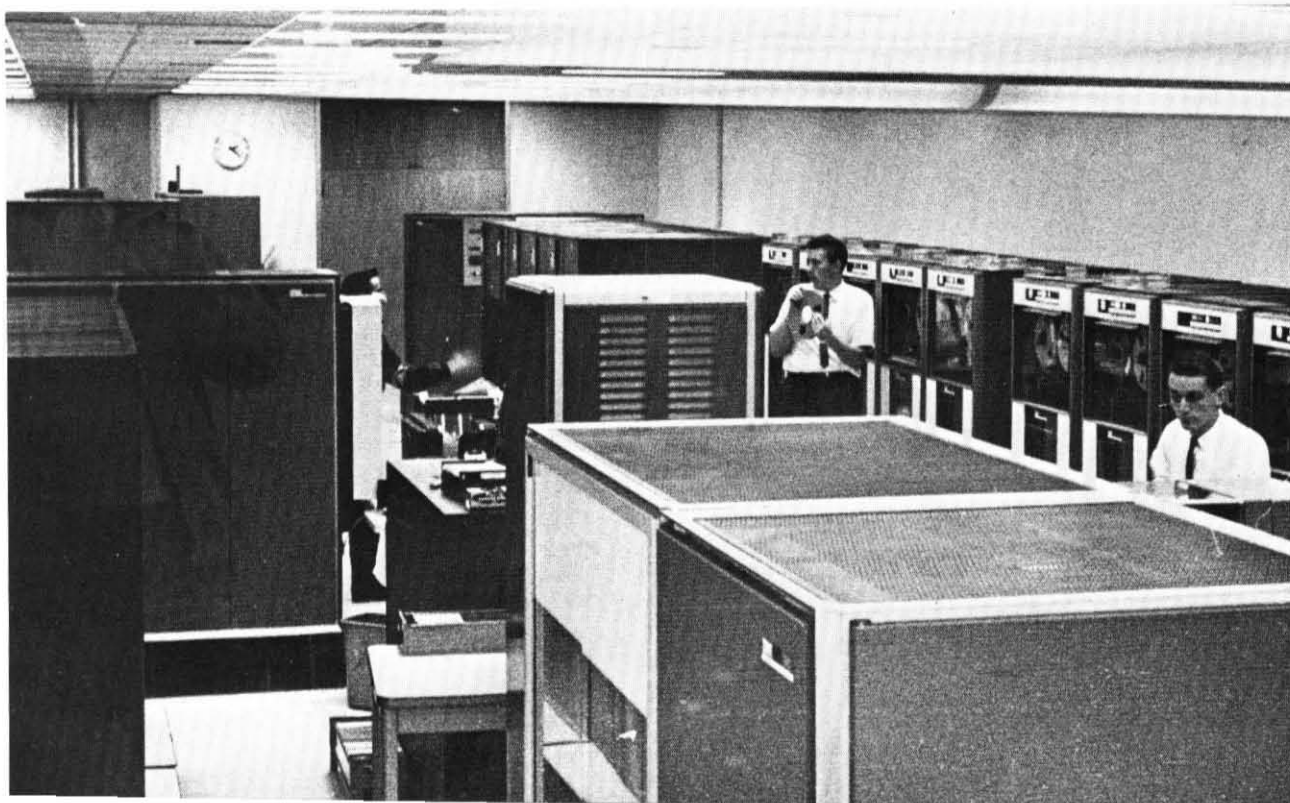
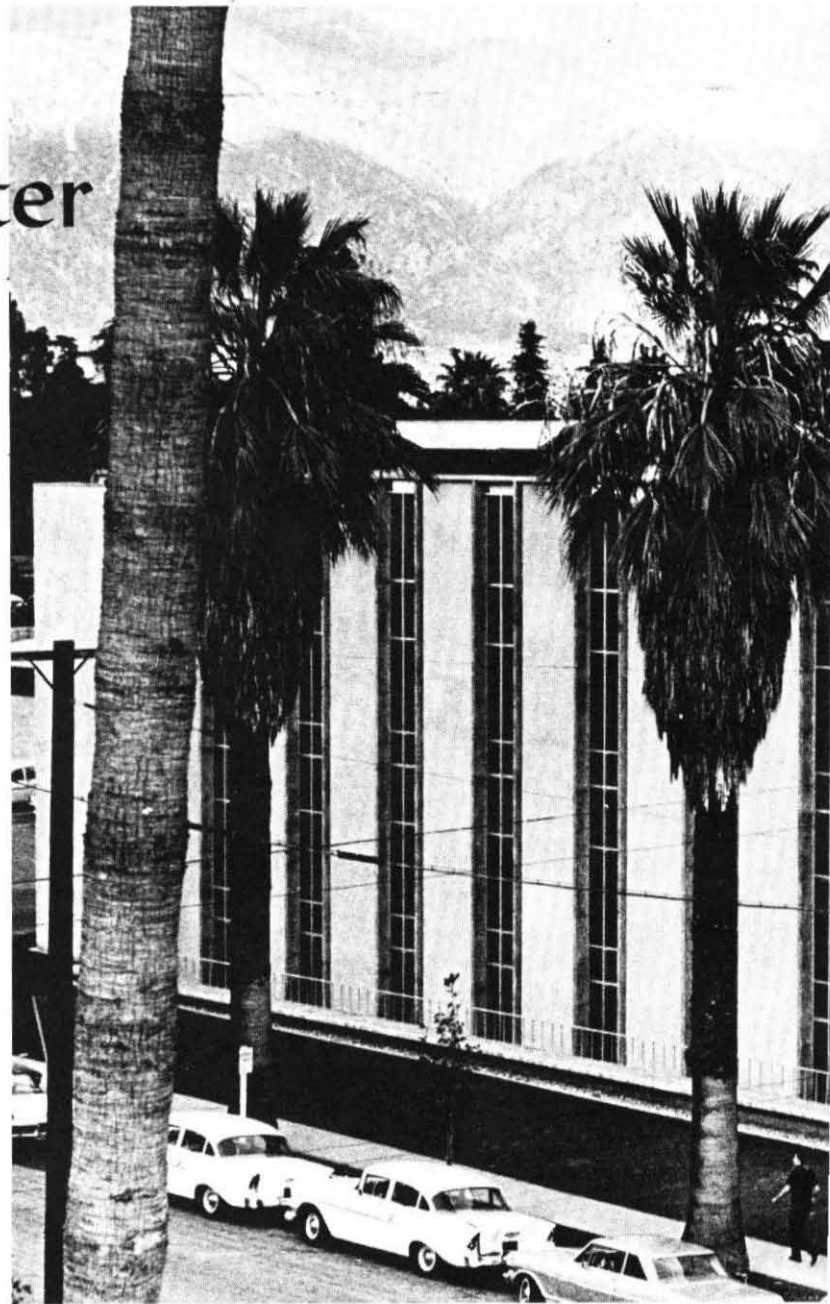
The computer complex, capable of remembering 43 million computer words, will enable students, faculty members, and research facilities to make full use of the system at any time. The heart of the computer complex is two IBM computers, the 7040 and the 7090. Caltech engineers and IBM engineers worked together to join the two so that the 7040 monitors input and output, leaving the larger 7090 free to do more complex calculations.

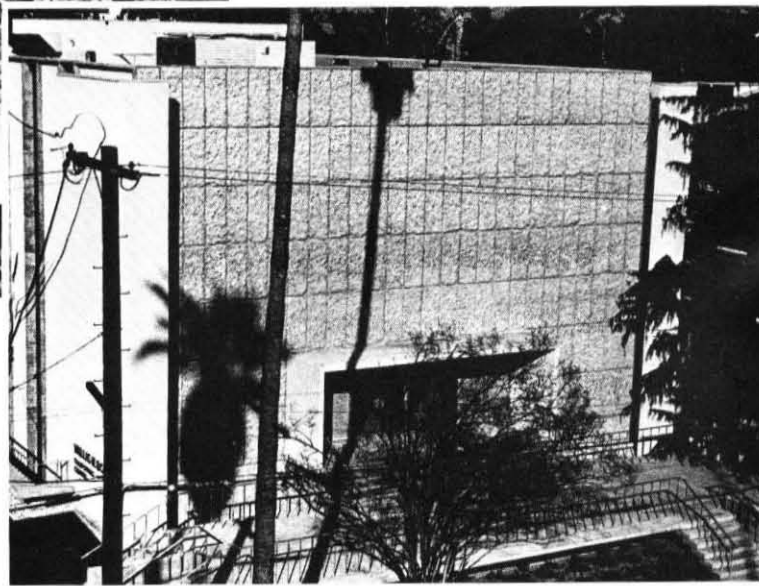
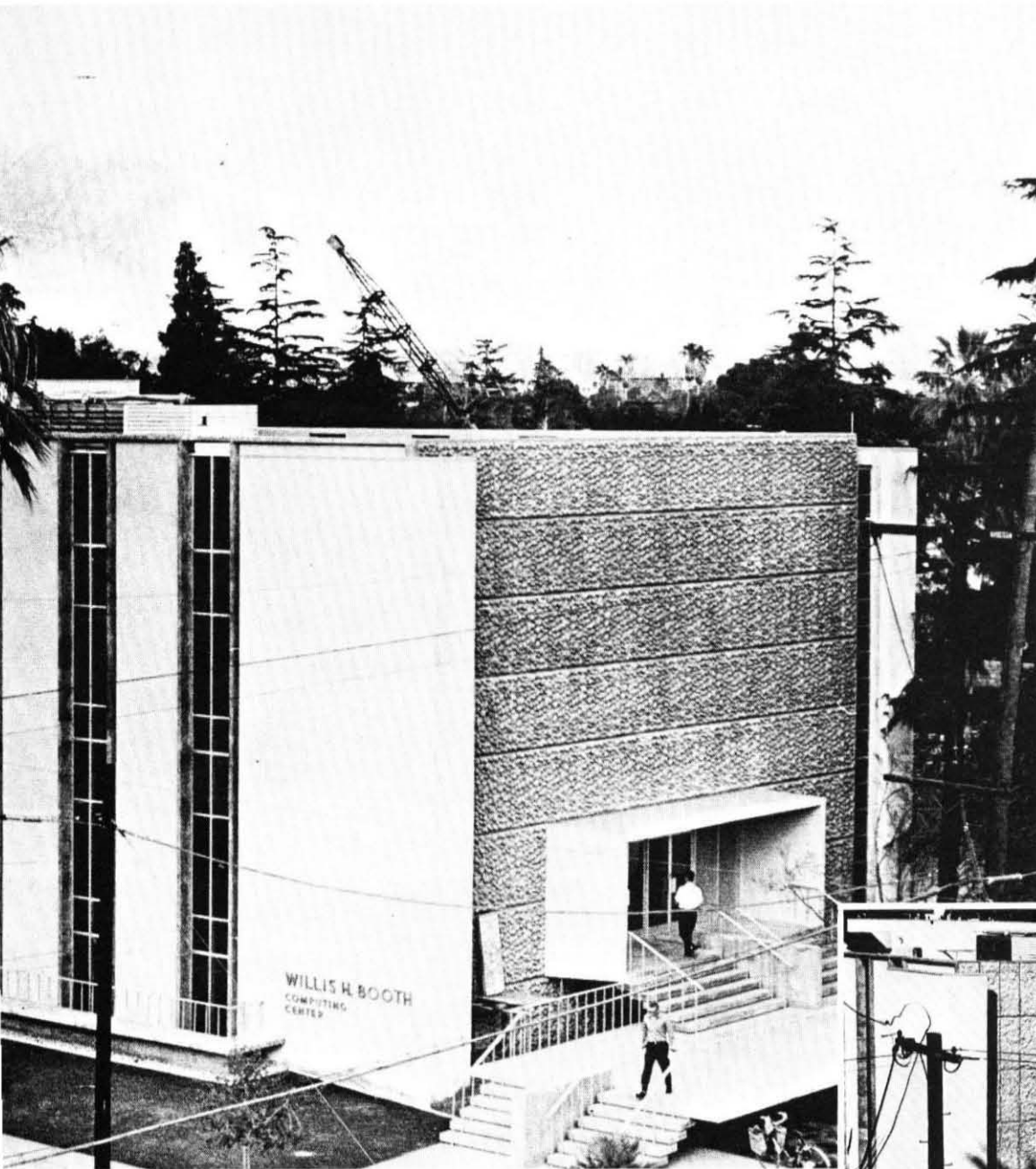
Communications to this "heart" of the computer complex are handled by an IBM 7288 Multiplexor. This device links the 7090-7040 complex to other units on campus, such as the Burroughs 220, and data-gathering units capable of controlling and gathering data from experiments.

The system is designed to handle a wide variety of problems simultaneously. Data fed into consoles is relayed to the complex, where it will be reassigned to either the Burroughs, the 7040, or the 7090. The 7040 may stop the 7090, direct it to a more pressing problem, and then re-direct it to resume the original work.

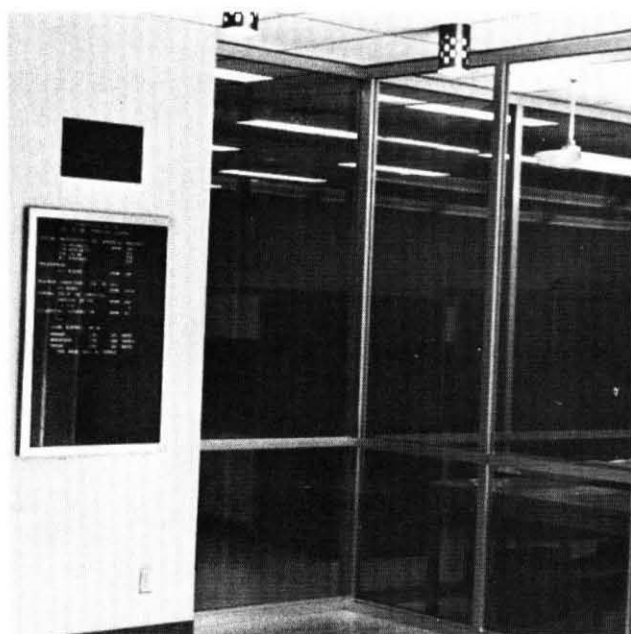
The computer system is simple to use, for it is designed for easy programming and corrects its own mistakes. When operating at full potential, it will be available to any of Caltech's 800 research projects. Eventually the system will be linked with Mount Wilson and Palomar and the Radio Observatory in Owens Valley.

The new building was made possible by gifts from the Booth Ferris Foundation and the NSF.





After a bone-chilling knocker-lifting job--Wow!
What an improvement!



The Beckman Auditorium

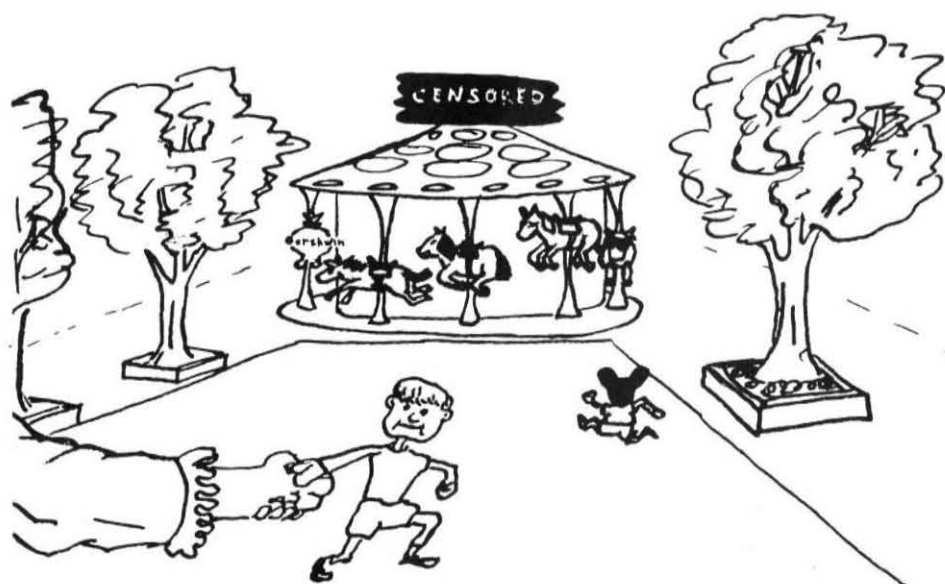
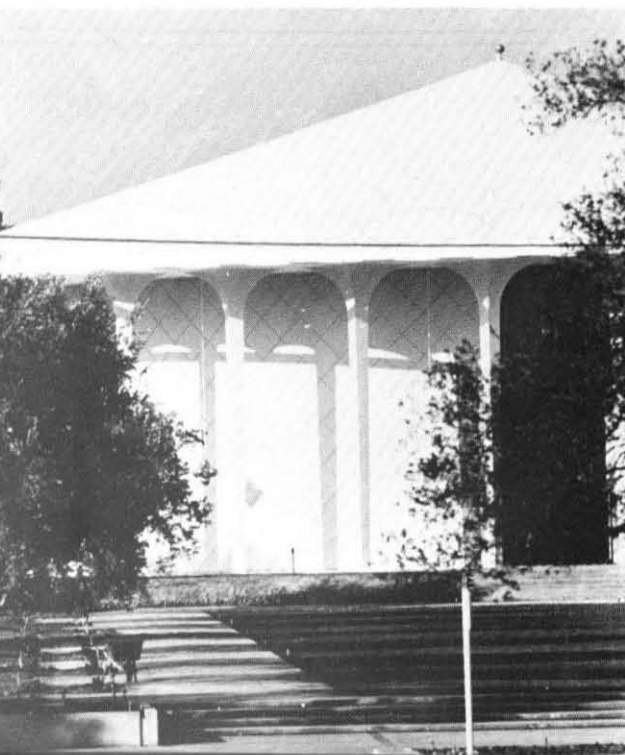
Arnold O. Beckman Auditorium is perhaps the most impressive new addition to the Caltech campus. The Auditorium, which contains 1171 seats, cost one and 45 hundredths million and took 18 months to complete. It is 60 feet high and 120 feet in diameter. Topped by a conical roof of concrete with 32 gracefully tapered columns which splay out to support the exterior overhang, the Auditorium has truly deserved its 1963 Pasadena Beautiful Award. The roof is decorated with gold-clustered circles, and is topped by an 11-foot-high finial mounting two clusters of perforated brass spheres 14 inches in diameter. Clusters of six spheres are suspended from the colonnade ceiling to provide outside illumination.

Beckman has been in active controversy since the first plans were announced. An early addition to its questioned beauty included a large Texaco star, courtesy of Lloyd House. Further additions are planned for the future. The mushroom has also picked up a large range of pet names such as Carosel, The Gas Tank, The Pregnant Missile, and, courtesy of Bud and Travis, Lazy Suzan. The pristine white walls, the glittering gold ceiling, the crimson carpeting, the striking mall, and the various gadgets on the roof have all helped maintain an active student interest.

The dedication took place amidst a capacity plus crowd on Tuesday, February 25, 1964. President Lee A. DuBridge presided over the one-and-a-half-hour proceedings, which he called the "most important event in Caltech history," and which included addresses from Dr. Beckman himself, Dr. George W. Beadle, and honest Bob Liebermann.

The first major event held in the Beckman Auditorium was the Bud and Travis Concert. The tremendous crowd was held in awe for over two hours of folksinging climaxed by three encores. Numerous cracks about the new building were among the festivities of the evening. But overall, the expansive new building took its baptism of fire sparkingly.

In spite of all the haranguing, I guess we have to admit that it is pretty staggering. Although periodic arguments have arisen concerning policies, everything seems to be working out. We all must really agree that Beckman is beautifully suited for whatever it was designed.





--photo by Kent McCaulley

Dr. and Mrs. Arnold O. Beckman at
the dedication of the auditorium.





II ACTIVITIES





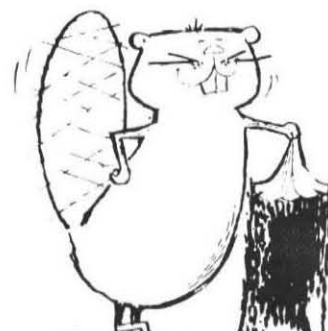
STANDING: G. Blackinton, Athletic Manager; D. Helfman, Activities Manager; R. Karp, IHC Chairman; F. Brunswig, Rep-at-large. SEATED: R. Essenberg, Treas. ; R. Liebermann, Pres. ; S. Conant, V. P. ; R. Brill, Secretary. ABSENT: R. Cassala, Soc. Chairman.

B O D

Despite the usual shenanigans and tomfoolery, the BOD enjoyed an unusually successful year with that great economy-sized quarterback, Bob Liebermann, at the helm. The team got enough financial boost from a by-laws amendment to curtail the debt and put ASCIT back on solid ground, and also clean out a lot of dead wood from last year's budget. At times, the going was rough, but the long meetings yielded two smashing concerts, a new Helfman-Student-Faculty Coffee Hour, increased usage of Winnett Center as an integral part of the campus activities, and many other valuable services to the students, whose never-ending praise engulfed evenmodest BOD in a wealth of power which they wield with the firmness of a tyrant, and the gentleness of a mother. Faculty-Student relations were at an all-time high, with much credit going to Lieb and Spice for their conscientious efforts on all fronts. Karp threw his weight around as much as ever, his finest hour being when he took over B&G for a week to make up a seven-week delay in the construction of Beckman and insure its completion in time for Bud and Travis.

Helfman used his silvery tongue to convince BGT to come to Caltech between Friday and Sunday engagements in New England, and persuaded Lukas Foss to write a trilogy of symphonies for the Caltech band. Brill managed to complete the summer contacting program without fouling up rotation, and subsequently convinced the IHC not to have him drawn and quartered. Brunswig was late to every meeting, but managed to create an image of himself as a paragon of the old college try. Grant tried to grow a bigger beard than Helfman, but finally gave up in disgust. It seems Helf and a magic toothbrush that stimulated hair growth. Beaver Bob pacified them both with his usual dole of lifesavers.

Randy ran his social program cool-ly, highlighted by the Catalina Party, which he spent huddled under a blanket with his date. Another high spot was the Altadena Country Club Washington's Birthday Winter Formal (The Cherry Stomp). We're still trying to figure out how he spent \$300 less than his budget. . . Tricky Dick (Jim to his friends), as the world's first bifurcate Treasurer, managed to balance the books for ASCIT and Fleming House together, using only an order of magnitude. As a final gesture of goodwill, the ruling BODY pocket vetoed a proposed referendum to have all Beavers castrated forthwith in the interests of public health and safety.





The Beaver



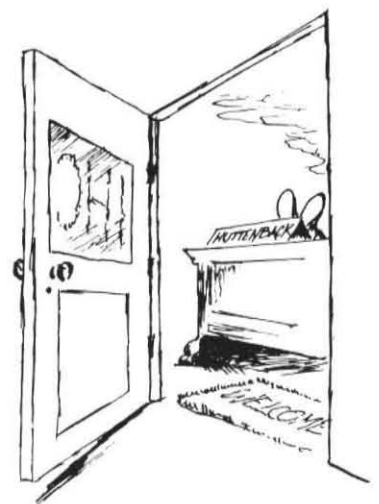
LEFT TO RIGHT, SEATED: Bill Schoene, Fleming; Dick Karp, President; Ed Medof, Lloyd. STANDING: Bob McEliece, Ricketts; Art Johnson, Blacker; Dave Hammer, Ruddock; Jerry Thomas, Page; Herb Flindt, Dabney; Rodger Whitlock, Secretary (absent).

IHC

"What's the matter, don't you trust us Johnson?"
 "No, I don't trust you."

It was on this note of mutual respect and realism that the Interhouse Committee carried out its duties. For the first time in four years, freshmen were selected by the seven houses. Although under a system somewhat different from the old one. It took only two and a half hours and several six-packs for the great seven to divvy up the frosh for mutual benefit. "Blacker!" "Un, let's see, I think, R. Troll." "R. Troll says yes, Blacker has R. Troll." "Hey, that was number 179." "It was our number 190, wheel!"

Other triumphs of the Mighty Seven included the acquisition of original jurisdiction in disciplining houses, the first three color minutes in some years, and the decision that the athletic department was not omnipotent. It may be said that for the first time under an elected president the IHC actually got things done, to the immense satisfaction of all, what with the above mentioned three color minutes, and Karp's little rotational love-letters.





LEET TO RIGHT, SEATED: Volker Vogt, Spicer Conant, Chairman, Terry Mast, Steve Green, Sec.; STANDING: Roger Davisson, Ron Douglass, Terry Murphy, Tom Latham; NOT SHOWN: Steve Brown, Robert Burket, Steve Garrison.

BOC

For the fifty-third 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 self-discipline, personal honesty, and social responsibility. These same principles were reviewed by the Upperclassmen throughout the year, who maintained a vital interest in Tech's most outstanding tradition.



Spicer Conant, Chairman

As a code of behavior based on respect for the name of the Institute, its property, and all its personnel, the Honor System applies to extra-curricular activities and student-faculty relations as well as to scholastic activities.

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



Steve Green, Secretary 111



E
P
C

CLOCKWISE: Frank Winkler, Roger Minear, Sec., Duygu Demirlioglu, Chmn., Louis Newman, Steve Brown, William Satterthwaite, Leon Thomsen, Joe Weis.

The Educational Policies Committee is a semi-organized bull session which meets weekly to sample greasy food and discuss all matters of interest in the Caltech undergraduate curriculum. This year's EPC witnessed an unusual number of concrete accomplishments. The reduction of the PE requirements to two years was one notable success; some slight changes were made even in Chem 41 and 46. The EPC's perennial favorite targets. The new Physics program was talked about at great length with encouraging results. A major project was the development of an instructor and course evaluation poll. Whatever the final outcome of this year's deliberations, committee members agree that an interesting and thought-provoking time was had by all.

EX-COMM

The Ascit Executive Committee serves as the study and planning body of ASCIT. It is the scene of semi-random bull sessions, where problems of long range and even some of short range interest are discussed, and occasionally a suggestion is tendered to the Board of Directors or the IHC.

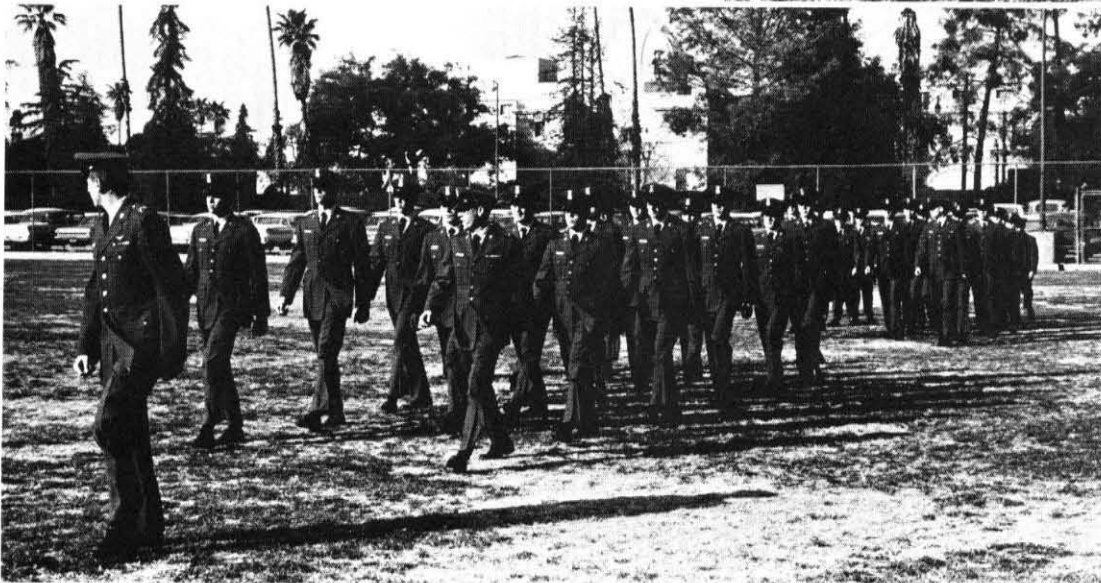
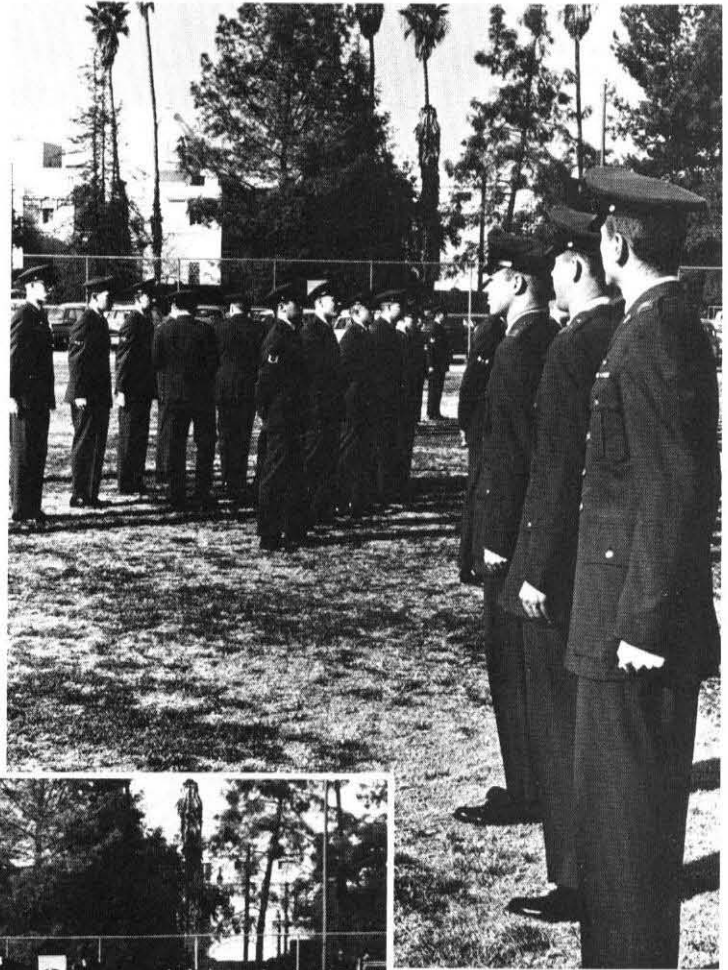
Thanks to former Ex-Comms we were spared the problem of planning rotation. Subjects such as the Student Body Polls, Humor Magazines, student and House Freedom, and the ICH were dealt with, but by far the most important concern was that of scheduling meetings so that Whitlock couldn't attend.



LEFT TO RIGHT:
John Radin,
Rodger Whitlock,
Dick Burgess,
Volker Vogt,
Art Johnson,
Bob Liebermann, Ex-officio.



R
O
T
C



If these guys would only stop marching they might get somewhere.

California Tech

Published weekly during the school year by the Associated Students of the California Institute of Technology, Incorporated.

Editors-in-Chief

J. C. Simpson, Don Green

Managing Editor

Bob Berry

News Staff

Andy Beveridge, Mike Ehrick, Stuart Galley, Bob Gillon, Tim Hendrickson, Ray Keel, Wally Oliver, Phil Liapis, Ken Brown, John Williams, photographers

Feature Staff

Rodger Whitlock, Editor

Ed Bauer, Alan Campbell, Rashid Choudry, Phil Liapis, Gary Schnuelle, Bob Schor, Steve Schwarz, Hank Suzukawa

Sports Staff

Bob Landis, Editor

Steve Blumsack, John Diebel, Larry Dillehay, J. K. Evans, David Jackson, Richard Landy, Tom Latham, Bob Liebermann (Honorary), Dave Seib

Business Staff

Dick Karp, Manager

Circulation: Guy Jackson

California Tech, 1201 East California Blvd., Pasadena, California.
Member of The Associated Collegiate Press
Second Class postage paid at Pasadena, California
Printed by Bickley Printing Co.
Represented nationally by National Advertising Service, Inc.
Subscriptions: \$1.50 per term, \$4.00 per year. Write: Circulation Manager.

The California Tech, as most anyone will tell you, is a weekly instrument. Staff members like to think of it fondly as a news organ and take a certain sadistic pride in making sure that this classic piece of yellow journalism is issued each Thursday to plague the campus.

The Tech's "success" is not due merely to chance. A large part of the credit is due to its two hard-working editors, whose talent was recognized early last year by then ASCIT President Larry Rabinowitz, who remarked sagely, "Irresponsibility and immaturity should combine to make this one of the most interesting papers in years."

Official Tech Madman Rodger Whitlock screens features to assure that nothing worthwhile gets in the Tech, but stays around to annoy the staff. Finally, after Sports Editor Bob Landis has somehow managed to glorify Tech's consistent losses, demon of the night Bob Berry drops by to contrive another truly random layout.

Despite Richard Karp's complete dedication to a bigger and better Tech debt, he nevertheless finds plenty of time to join Whitlock in harassing the true heroes of this yellow sheet's success, the eager(?), articulate(??), and dedicated(???) staff(!?!). These industrious souls, amidst cues of "I quit" and "Let's forget it this week", have nevertheless made it possible to live up to the Tech traditions of "rampant prejudice, editorial irresponsibility, and worthless features, combined with unprecedented energetic and dynamic distortion of the news."



LEFT:
STANDING: D. S. Clark
SITTING: D. S. Clark
LEANING: D. S. Clark
ON FLOOR: D. S. Clark

LEARING: R. Whitlock
LISPING: D. Green, Co-Editor
LONGING: J. C. Simpson, Co-Editor





Bob Berry
Managing Editor



Bob Landis
Sports Editor

"Censored, By Whom?"



LEFT TO RIGHT, EXTREME FRONT: Bob Berry, Stuart Galley, Rashid Choudhry, Steve Schwarz. MIDDLE ROW: Andy Beveridge, Tom Latham, Guy Jackson, Rodger Whitlock, Minerva Schwartz, Hank Suzukawa, Bob Landis. BACK ROW: Don Green, Tom Greenfield, Tim Hendrickson, John Williams, Wally Oliver, J. C. Simpson, Richard Karp.

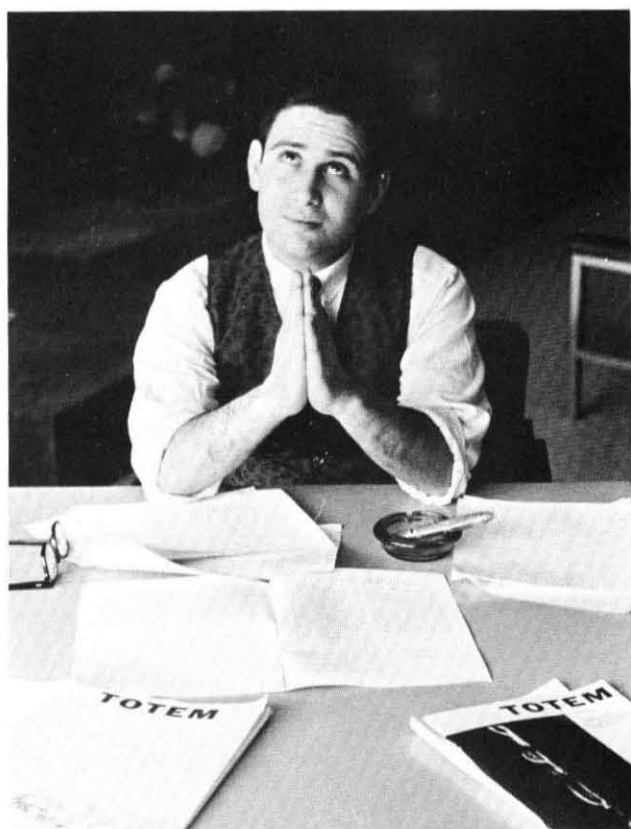
The Birth of the Little T:

'64
Salt
'63

David, Judi, and friend. Note the pseudo-angelic quality of David. Would you marry this man? Obviously not! The true answer—Judi has just married the cake, which David is about to destroy in order to replace himself in her affections (this, of course, is why he is overweight).

Absurdity is the Soul of Wit

David and Judi Helfman



T
O
T
E
M

TOTEM, the campus literary magazine, is a forum for the exchange of non-technical ideas among the students; it also offers you the best opportunity to express your inner, subconscious, repressed, sublime urges. Don't you wish you were at a liberal arts school? Although manuscripts for immediate publication pile up on Editor Saltzer's desk, he occasionally finds himself praying for some new sources of contributions--All Ye frustrated poets come forth!

Ben Saltzer, Editor



T LEFT TO RIGHT, FRONT ROW: Bill Meisel, Ivars Ambats, Dave Hammer, Terry Mast, Tom Lubensky. MIDDLE ROW: Dick McGehee, Guthrie Miller, Dick Burgess, Corr. Sec., Dave Colton, Al Hindmarsh, V. P., Paul Swatek. BACK ROW: Tom Latham, Frank Winkler, Treas., Ray Green, Joe Weis, Rec. Sec., Art Turner, President, Dave Holtz, Roger Minear, Hist., Dick Essenberg, George Reeke.

B Tau Beta Pi is a national fraternity whose purpose is to honor those who have attained high academic standing and have a record of integrity and service. The California Beta chapter represents the only scholastic honor society on the Caltech campus. Members are selected twice each year, and at Caltech the members are drawn from all options except Biology. In order to be admitted one must have academic standing in the upper one fifth of his class.

U The purpose of the Tau Beta Pi is to encourage academic excellence and personal integrity by providing recognition to those students who best exemplify these characteristics. In addition to recognizing juniors and seniors by electing them to membership, the organization also honors outstanding freshmen by presenting the Freshman Award to the member of this class who most clearly exhibits those qualities necessary for Tau Beta Pi membership. Last year it was awarded to William B. Broste.

LEFT TO RIGHT: Bob Levin, Dick Karp, J. C. Simpson, Rodger Whitlock, Don Green.

A Φ Γ

Alpha Phi Gamma is a national honorary co-educational journalistic society. Caltech's chapter, Gamma Lambda, was instituted last year to provide Tech with a much needed organization to provide recognition of the individual contributions to Tech publications and to encourage better journalism here. The six charter members barely provide the needed five officers, but the chapter plans on rapid expansion in the future.





M U D E O



... For long periods of time, all that represented the struggle was a desperate squirming and splashing around in the mud.





GLEE CLUB

DIRECTOR
Olaf Frodsham



The Glee Club this year took a long stride forward on the road to national recognition. Long well known for vocal excellence and virile song in Southern California, the Club enhanced its reputation and experience with an extended tour to the Midwest in the Spring. Despite many obstacles, including the scheduling of the tour during finals week and, of course, financial problems, forty men dynamically led by Mr. Olaf Frodsham completed a successful series of concerts in Wisconsin and Illinois.

Continuing their reputation for the performance of fine music, the Club's repertory included works by Berlioz, Copland, Byrd, Rachmaninoff, and Palestrina, as well as American, and Oriental folk songs. The flexibility of this program allowed the club to continue a full concert schedule before various organizations in the LA area. In addition, the Glee Club again sponsored the vocal competition at the Interhouse Song. The Club once again received excellent comments at the annual Southern California Intercollegiate Music Festival, and ended its concert year with the popular spring concert in Beckman Auditorium.

Mr. Frodsham was aided in organizing this ambitious set of activities by an able group of officers. Chris Dalton, President; Bob Sweet, Manager; Paul Swatek, Secretary; Al Hindmarsh, Treasurer; John Radin, Librarian; Vic Sirelson, Transportation manager; George Brackett, Publicity manager; Steve Elliot, Coat manager; and David Helfman, student director.

GLEE CLUB
QUARTET

Bill Broste
Art Johnson
George Prewton
Tom Oberjat





LEFT TO RIGHT, FIRST ROW: Dave Schochat, John Romney, Bob Burket, Dave Woodward, Stacy Langton. SECOND ROW: Ed Bloomberg, Sec., Dick Essenberg, Jim Evans, George Scott, Tom Lubensky, Manager, Ralph Young, Bob Sweet, Tom Hendrickson, Tom MacKenzie, Bob Parker. THIRD ROW: Richard Quint, Rainer McCown, Myron Mandell, Tim Stephens, Joseph Milstein, Dave Hammer, Bill Broste, Steve Clamage, Don Green, Jay Pearlman, Bob Miller, Russ Brill, Dennis Weaver, Bockett Hunter, Jim Groth, Tom Miller, Larry Oliver, Asst. Manager. FOURTH ROW: Jim Gibson, John Deichman, Director, George Sharman, John Beineke.

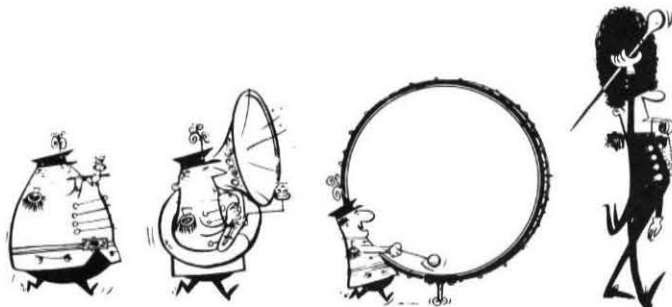
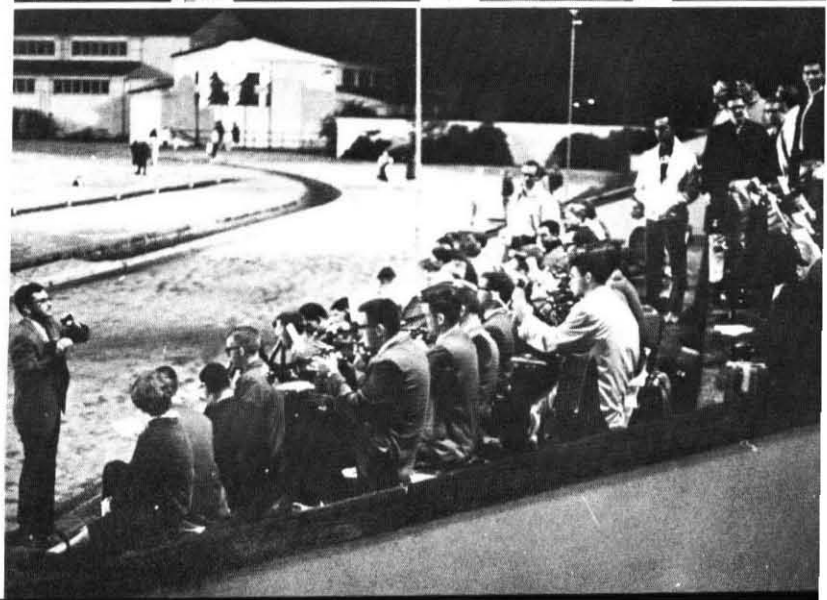
Richard Quint, Lib., Ed Bloomberg, Secy, Tom Lubensky, Mgr, Larry Oliver, Asst. Mgr.

BAND

The Caltech Band is primarily designed to satisfy the needs and interests of the instrumentalist at Caltech. It provides him with the opportunity to play all kinds of music with a low pressure group, and a further opportunity to play in such ensembles as the German band, the flute trio, and the horn quartet. The rehearsals are held under the able directorship of Mr. John Deichman.

As a campus organization, the Caltech Band is service oriented. It plays at almost all of the football games, and most of the basketball games. Quite often the red coats of the Band constitute half of the cheering audience on the Caltech side of the Rose Bowl. This year the recently formed German band has played several times in place of the entire band.

The Caltech Band offers two concerts a year; one full length concert at the end of the second term, and a second one more informal in the olive walk during the third term.



Coffee Hours

The ASCIT Faculty-Student Coffee Hour this year completed its first full year of existence and enabled many students and faculty members to get to know each other somewhat better. Established as being permanently on Thursday afternoons it moves from Winnett Lounge once a term to the Athenaeum Basement Lounge for a Faculty sponsored exchange, under the encouragement of Dr. Kent Clark. When it is in its normal environment, its permanent fixtures are Judi and David Helfman, serving as a quasi-official ASCIT Host and Hostess, plus Don O'Hara and a number of other helpers. Hopefully the Coffee Hour will take root firmly after this initial year of struggle, and it will not be quite as difficult to get Faculty members or students out in the future.



Don't let your coffee get cold!

Model UN

LEFT TO RIGHT: Guy Jackson, Fred Lamb, Mike Rosbash, Jibayo Akinrimisi, Tom Latham, Co-chm, Marty Einhorn, Don O'Hara, Co-chm, Not Shown: Jerry Yudelson.



Model United Nations is held each spring at some school on the West Coast. This year it was at far away Spokane. Caltech's delegation was, therefore, small and each member carried increased responsibility in planning and performing during the conference. We represented Nigeria, the biggest African country and a leader of the Afro-Asian Bloc. Working in committees, and in the General Assembly we managed to pass sanctions against South Africa, and a resolution on the Angolan question, both areas of vital interest to Nigeria.



ASSEMBLY COMMITTEE: Dave and Judi Helfman, Don O'Hara, Chmn, Jim Davis.

A S C I T



Rita Weill, Pausing between numbers, talks about the neglect of bawdy songs by modern folk-singers.

ASSEMBLIES



Three members of the KENTUCKY COLONELS in the middle of an ethnic bluegrass number.



Gary Unruh conducts a chorus drawn from Oxy, Caltech, and the Roger Wagner Chorale in Bach's "Jesu, Meine Freude."



Honor Keys

SPICER CONANT
DAVE HELFMAN
TOM LATHAM
DON O'HARA
VOLKER VOGT
RANDY CASSADA
DON GREEN
HERB FLINDT
ART JOHNSON
BOB LIEBERMANN
BILL SCHOENE
GRANT BLACKINTON

HONOR CERTIFICATES

DICK BURGESS
JACK McKINLEY
GERALD THOMAS
FRANK WINKLER
ROGER DANSON
STEVE HALL
BOB SWEET
DUYGU DEMIRLIOGLU
ED MEDOF
LEON THOMSEN
KEN BROWN
BARRY DINIUS

DICK ESSENBERG
J. C. SIMPSON
FRED BRUNSWIG
DAVE HAMMER
RICHARD KARP
BOB McELIECE
ART TURNER
RUSS BRILL
KEN EVANS
VIC SIRELSON

JOE WEIS
BOB LEVIN
RODGER WHITLOCK
GORDON MYERS
THOR HANSON
GEORGE REEKE
CHRIS DALTON
TOM GREENFIELD
BILL SATTERTHWAITE
PHIL LIAPIS

BUD and TRAVIS

February 29, 1964--

They came,
They psalm,
They cantered.



Bye, Bye Buckwheat.



Reception
In Ruddock House





LEFT TO RIGHT: Gary Bornzin, Mike Cunningham, Ben Stackler, Rick Hake, Chris Dalton, Vic Sirelson, Dave Helfman, Volker Vogt, Sec., Tom Latham, President, Lynn Melton, Tom Huff, Assoc. Sec., Wes Hershey, Exec. Sec.

Y M C A

The summer of 1963 was one of social unrest, and was characterized by the March on Washington and the Birmingham bombings. Many aspects of the Y program for this year were directed towards the American race problem. At the beginning of the year the Y established a free tutoring program for students in the David Starr Jordan high school, a negro school near the Watts area of Los Angeles. About twenty Caltech students participated in this program. The school administration made arrangements for the tutors to drive to the school and teach the students in the school library.

In addition to the tutoring program, the Y brought speakers to the campus in order to present as many views on the race problem as possible. These speakers included James Lawson, and James Farmer.

The Y Cabinet and the Y Board of Directors both adopted resolutions concerning fair housing in California. These resolutions supported the principle of fair housing legislation and opposed the initiative for the '64 ballot which would make fair housing legislation unconstitutional. These resolutions were preceded by the action taken by the Y Cabinet during the spring of '63 against alleged discrimination in Don Wilson's housing project. Last spring and again this year the Y Cabinet participated in picket lines and other activities



Tom Huff, Assoc. Sec., Janet Stapel, Admin. Sec., Marjorie Covell, Sec., Wes Hershey, Exec. Sec.



Mr. Ralph Helstein addressing the students in the Dabney Lounge.

Ralph Helstein comments on a question during a panel discussion in Winnett. Panel Members are, left to right, Byrd Jones, Helstein, J. C. Simpson, and Dr. Peter Fay. The subject "New Challenges for Labor."



in order to give an expression of direct action to their resolutions.

Another area of program interest centered around religion. The religious Emphasis Commission presented a series of speakers on the world religions. This series was well attended. The Commission also brought William Hamilton to the campus. Mr. Hamilton, who comes from the Rochester Divinity School in New York, spent most of his time in the student houses talking about religion and related topics.

The Leaders of America program brought three men to the campus this year: Ralph Helstein, Lukas Foss, and Roy Wilkins. Mr. Helstein is the president of the Meatpackers' Union. He has long been interested in the effects automation will have on our society. He suggests that we may have to re-evaluate our entire economic way of life in order to cope with the changes automation will bring. Lukas Foss is the Conductor of the Buffalo Philharmonic Orchestra. He is one of the leading musical figures in the United States today, and is noted for his work in improvisation as a means of musical expression. Roy Wilkins, the head of the NAACP, has long been prominent in the negro movement.

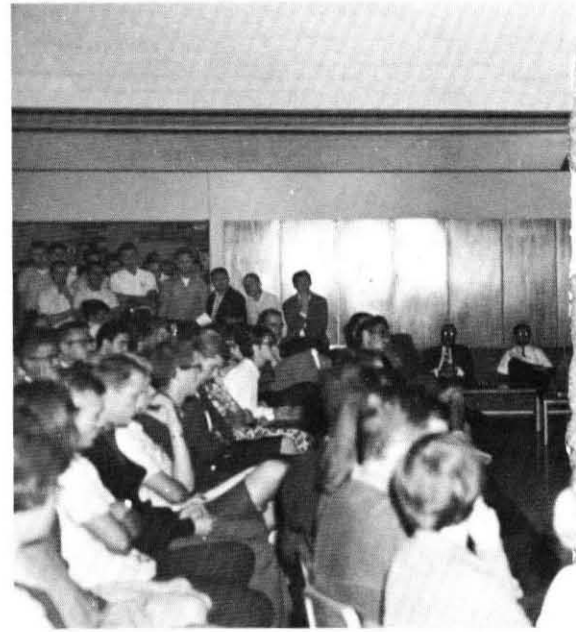
All in all, the year has been an active one for the YMCA, and a rewarding experience for the people that worked for it.



Folksinger Clabe Hangan sings songs of the American Labor Movement.



JAMES FARMER



James Farmer addressing the students in Winnett Center.



Informal Discussion



LUCAS FOSS

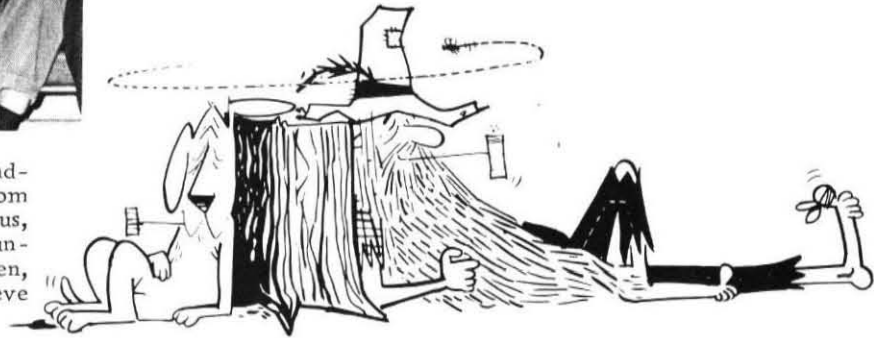


Lucas Foss at the piano
Chuck Smythe, Jim Davis, and Dave Helfman,
Chairman of the Committee, surround him.



B E A V E R S

LEFT TO RIGHT, SEATED: Rick Hake, Vic Sirelson, Alan Hindmarsh, Volker Vogt, Frank Winkler, Pres., Steve Garrison, Tom Latham. STANDING: Dave Hammer, Dave Helfman, Barry Dinius, Thor Hansen, Guy Jackson, Don Terwilliger, Art Johnson, Fred Brunswig, Don O'Hara, Secy, Joe Weis, Bob Liebermann, Jerry Gowen, Spicer Conant, Dick Burgess, Art Turner, V.P., Bill Broste, Steve Hall.



The BEAVERS is Caltech's honorary service organization. This year, as in the past, their most important service activity was the high school visitation program. An attempt to give interested high school students a better idea of Caltech in particular and of scientific careers in general. Beavers also ran the store at Frosh Camp, conducted a campus tour for the Frosh, and helped with Student's Day. But members continued to perform more service to the campus outside the organization. Oh yes, the Beavers also had a party...

Election Committee

The ASCIT Election Committee is an organization designed for what Riesmann has called the "inside-dopester." The chief benefit of membership is getting to know election results a few hours ahead of the rest of the world, and having the power to swing key elections to the side one favors. In exchange for these benefits the members put in long hours of printing, distributing, collecting, and burning ballots. The chairman furthermore gets a neat little ballot-box-key to add to his key chain.



LEFT TO RIGHT: Chris Dalton, Dick Burgess, George Reeke, Roger Minear.



President: Randy Cassada



NEXT YEAR'S BOARD OF DIRECTORS: Fred Brunswig, Treasurer; Steve Garrison, V.P.; J.C. Simpson, I H C Chairman; Doug Josephson, Athletic Manager; Eric Young, Rep-at-Large; David Jackson, Social Chairman. SITTING: Rodger Whitlock, Activities Chairman.

E L E C T I O N S





RUDDOCK HOUSE



RICKETTS HOUSE



DABNEY HOUSE



FLEMING HOUSE



PAGE HOUSE



Interhouse Sing



Blacker Wins

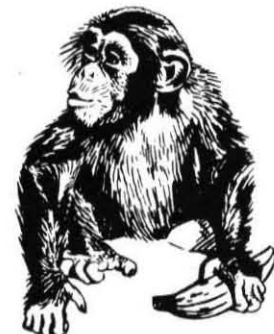
In the new Beckman Auditorium on Thursday, March 5, Blacker House became the disputed "undisputed masters of song". Singing "Soldiers Chorus" from "Faust" and the madrigal "Amo, Amas, I Love A Lass", the Blacker Brigade carried the judges' votes and the first place. Blacker's quarter also won first place with their three numbers, "Whiffenpoof Song", "Little Innocent Lamb", and "September Song". Bob Sweet led Blacker to its grand slam.

Page House came in second this year, singing "Hostian" from "Requiem" by Berlioz, and Beethoven's "O Welche Lust". Roger Hendricks was the conductor for Page House. Their quartet sang the Israeli "Dodie Lee", and finished third.

Third place went to Ricketts house, who were directed by bearded Ed Bloomberg. Ricketts sang two numbers, "Hallelujah" from "Mount of Olives" by Beethoven, and "Emitte Spiritum Tuum" by Schuetky.

Also participating were choruses from Ruddock, Dabney, and Fleming. The soon-to-be-shaven Dave Helfman conducted the Ruddock House chorus through its three numbers. "Little Innocent Lamb", "St. Martin's Canon" and "Sanctus" from "Missa da Requiem" by Verdi. Dabney relied upon humor content in its numbers, "The Elements Song", "A Collection of Rounds", and "Illumina Oculas Meos", Dabney was conducted by Chris Dalton and Paul Swatek. The Flems also provided a round of entertainment through J. Kent Clark's "Chez Les Flamands" and also "There is Nothing Like a Dame"; they were directed by Larry Gowen.

Rotation strikes again!



LEFT TO RIGHT: Mike Hunsaker, Jerry Yudelson, Photo Liapis.

Class Of 1966

The Class of '66 has clearly lived up to the promise of greatness given in its freshman year. The class got off to an early start by assuming the major portions of the harsh and unrewarding task of transforming the dumbfrosh into acceptable Techmen. Having succeeded in washing away part of the overwhelming incompetency of the frosh, the class went on to greater glory.

Laboring under a serious handicap--the treasurer had left for the Promised Land of Berkeley--the intrepid class officers nevertheless made a careful value judgment, and decided that the fee demanded by the Junior officers for consideration of the many factors, besides jock ability, that are necessary to determine the true winner of the Mudeo, was much too high. The dumbfrosh paid, and so won. Their joy was short-lived, when it was pointed out to them exactly who would judge next year's Mudeo.

With this affair disposed of, the class turned to the serious business of snaking it up. The success of this effort is demonstrated by a record 30% of the class receiving blue slips in Feynman Physics.

Disaster again struck the class, when the athletic manager failed to return for second term. Under the able leadership of the remaining officers--Jerry Yudelson, President; Mike Hunsaker, Vice-President; Phil (Photo) Liapis, Secretary--the class continues on to higher goals, and looks forward to next year.



LEFT TO RIGHT: Bob Scott, Ath. Mgr. ; Gary Scott, Treas. ; John Beamer, V. P. ; Guy Jackson, Pres. ; Neal Wright, Secy.

Class Of 1965

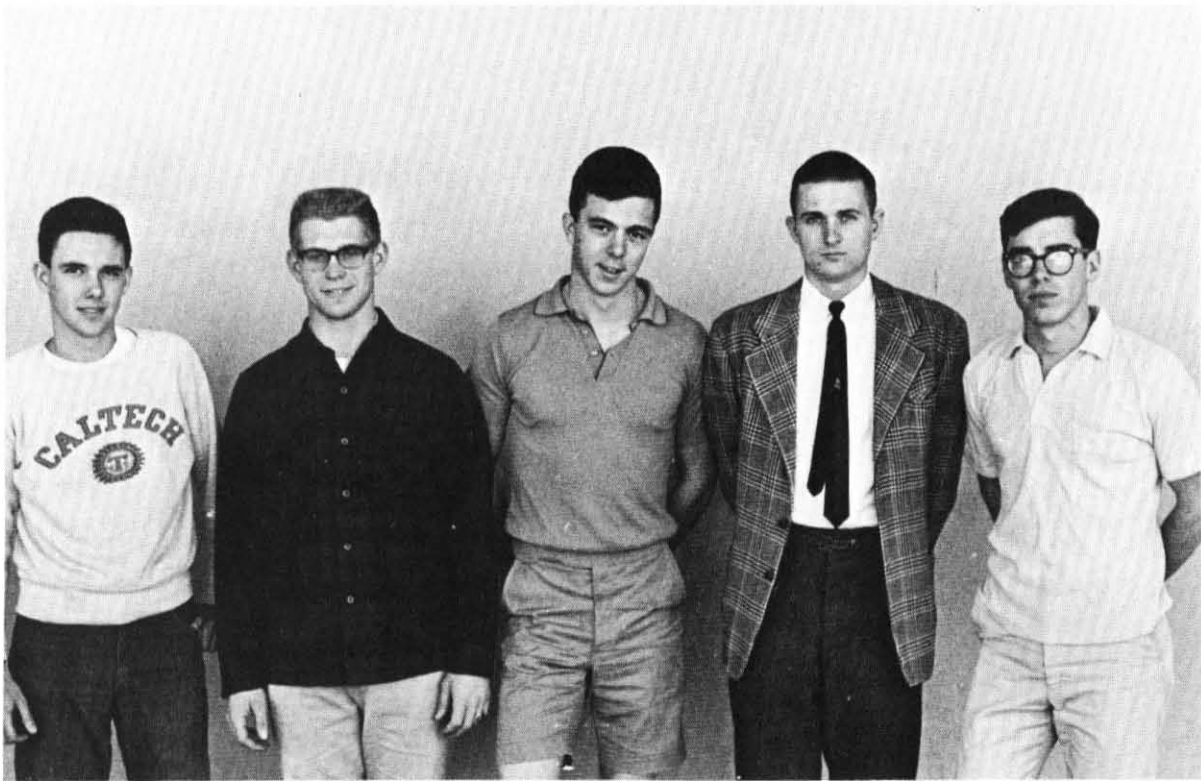
The officers of the class of '65 in its Junior year have come up to all the expectations placed upon it by the members of the class. As the Juniors don't place too much stock in their class, one could say they have even exceeded these expectations. The leaders of the class served admirably in their respective positions. Jackson as President, Beamer as Vice President, Wright as Secretary, Bob Scott as Athletic Manager, and Gary Scott as Treasurer. Notice the important change as Beamer leaves his usual post of the presidency to give Jackson control this year. It seems almost like a system at equilibrium.

The outstanding leadership of this quintet was demonstrated to the fullest during the first term in determining the outcome of the Soph-Frosh Mudeo. From the fruits of the Mudeo the officers feted the members of their class with several B-blasts. The congenial feeling of well-being and comradeship at these occasions led to the recognition of the abilities of these officers by the California Tech in an article headlined by "Are These Men or Gods?" The answer is obvious to all discerning students.

Second term was quieter, but the officers still could taste and enjoy their victory in the Mudeo, "Have some more of Zeus' nectar." The highlights of the third term was the prom. All the Juniors and dates in attendance had a wonderful evening. As the year closes similar leadership insures that the same standards of excellence will be maintained next year.



Gary Scott in Action!



John O'Pray, Secretary, Arlin Peters, V. P., Richard Touton, Athletic Mgr., Clyde Staley, Treasurer, Doug Eaton, President.

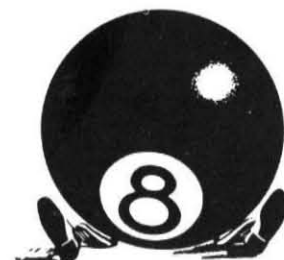
Class Of 1967

The fact that the Class of 1967 is not exactly like the preceding freshman classes became evident at the New Student Camp in the mountains. After surviving their first encounter with Saga food and burrowing out from under the snowdrifts, the Frosh produced a talent show that the faculty and counselors called the best in several years.

The freshmen proved to be somewhat unusual academically. The Class of '67 had the highest average test scores of any entering class in Caltech history, but Dean Strong is still trying to determine why the Frosh first term GPA curve looked more like the back of a double humped camel than a bell.

The Frosh Mudeo victory proved that the Class of '67, unlike past freshman classes, is wise to the ways of the world. The enterprising Frosh not only actually won three of the five events, but also outbid the sophomores for favorable consideration from the Junior judges.

However, the most remarkable aspect of the Class of '67 is that it is actually trying to do something as a class by setting up athletic competition between the freshman sections. If the present trends continue, and obviously they will, the Class of 1967 will be long remembered at Caltech.





Christian Fellowship

KNEELING: Alex Liang, Ralph Young, Kim Gibson, J. Lok Chang. STANDING, FIRST ROW: Prof. Calvin Schoonhoven, A. C. Lundgren, Dr. Rudolph Von Huene, Tom Miller, Stacey Langston, John Miller, Ron Rimmel, Jibayo Akinrimisi. SECOND ROW: Robert Kruse (President), Vern Poythress, Ray Leung, Tom Bos-tick. THIRD ROW: Dave Price, Craig Carlyle, Ted Fiyimoto, Gary Thompson. FOURTH ROW: Dave Togstad, Von Hughes, Dave Sherlock.

Newman Club

FRONT: George Reeke, Father Thomas Dunne, Dick Landy, Dick House. MIDDLE: Ed Bender, Jim Espinosa, Two Grad Students. BACK: Rex Couture, Warren Peascoe.



Christian Science Organization

Richard Teague, Ron Douglass, John Wyndham, David Welch, Advisor, Gary Edwards, George Scott, President, Gregg Shuptrine.

AIChE



STANDING, LEFT TO RIGHT: M. C. Morrison, J. Cullen, J. Barker, T. Chang, C. Wang, Dr. W. H. Corcoran. LEFT TABLE, CLOCKWISE: F. Muncaster, J. Harkness, T. Hanson, R. Shlegeris, I. Cheema, J. McCulloch, Dr. R. C. Seagrave, T. Ernest. MIDDLE TABLE, CLOCKWISE: H. Resnick (Guest lecturer), J. Woodward, G. Preston, W. Smith, D. Hyde, R. Cuffel, Dr. P. A. Longwell, Dr. R. G. Rinker. RIGHT TABLE, CLOCKWISE: M. E. Morrison, D. Graue, E. McDowell, R. Teague,

G. Gowen,
J. Beamer,
J. Hilton,
T. Roberts.



Deseret Club

FRONT ROW: Vencil Skarda, Frank A. Bradshaw, Dan Weller. MIDDLE ROW: George Cannon, Lyle Merithew, Herb Flint. BACK ROW: Robert Kruse, LeRoy Sievers, Bob Firmage.

Chemistry Club

Bill Stwalley, Jack Beauchamp, Russ Hageman.



Math Cl

SITTING: Bockett Huntfeld. STANDING: Dick K Al Hindmarsh, John Holt



Debate: Π κ Δ



G. Gowen,
J. Beamer,
J. Hilton,
T. Roberts.



SITTING: Sean Saloman, Gary Scott, Dave Close. STANDING: Herb Booth, Roger Davisson, Mike Robel, Dan Metlay.

John Madey, Kris Davidson, Ivars Ambats.

Physics Club



Math Club

SITTING: Bockett Hunter, Marty Cohen, Norton Greenfeld. STANDING: Dick Karp, Robert Roberts, Bruce Colton, Al Hindmarsh, John Holte.





FENCING: Carl Paul, John Hsu. STANDING: Steve Morse, Dave Lambert, Clem Chose, Lynn Teneyck, Dan McCammon, Albert Holm, Coach Delmer Calvert.

Fencing Club



Alpine Club

Karate Club



Radio Club



FRONT ROW: G. Reeke, H. Williams, D. Lambert. MIDDLE ROW: A. Bersbach, L. Karr, G. Swartz. BACK ROW: W. Hammer, F. Williams.



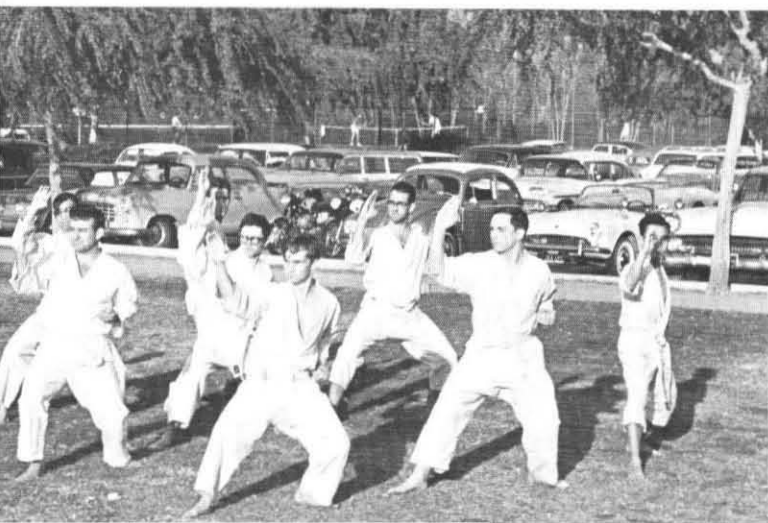
Chess Club

LEFT TO RIGHT: John Radin, Martin Cooper, Dick Stanley. Sponsor: Dr. Fuller.

Chinese Students Association



LEFT TO RIGHT: Athletic Manager Taliang Teng, Secretary Dorothy Tuan, Vice President Jew-Shih Lee, President Francis Wu.



Coin Club



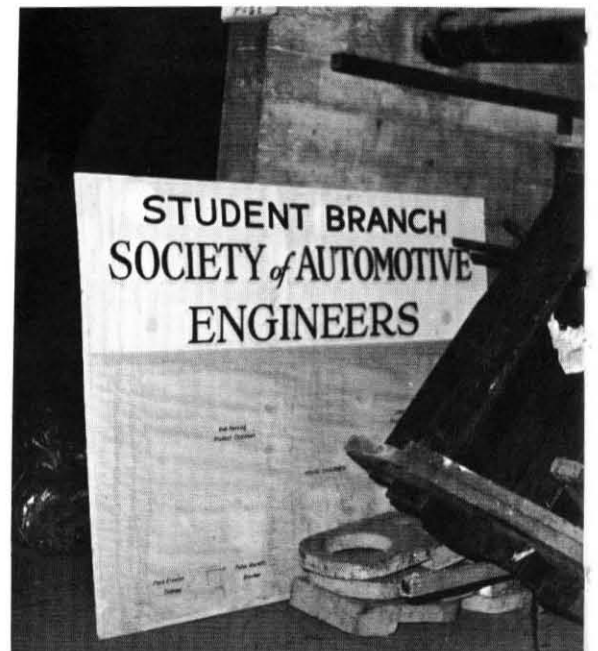
LEFT TO RIGHT: Mike Lambert, Roger Hendrix, Dick Burgess, Spicer Conant, Al Limpo.



LEFT TO RIGHT: Roger Hendrix, Dick Burgess, Spicer Conant, Al Limpo, Mike Lambert.

Y.C.F. & G. Society

Gone





The Caltech Service League is certainly the most valuable service organization on campus. It does more for the student body and is known by fewer students than any other group. They have done so many things for this campus that it is hard to even attempt a complete listing.

In the last few years, they have purchased pianos for the lounges of the three new student houses. Last year, not only did they give the Student Center a Fisher-Chadwick II Stereophonic Radio-Phonograph, but they outfitted the publications darkroom. They also graced the lounge of Winnett with a new baby grand piano.

They have provided boxes of fruit, canned goods, cookies, and other tempting treats for boys who could not go home at Christmas, and at Thanksgiving, extended dinner invitations to students who were remaining on campus.

They give such aid as they may towards the social life of the students. Specifically, it is their pleasure to provide refreshments for the Interhouse Sing, flowers for spring dances, and chaperones for Lost Week-End.

At the Health Center, which the League was instrumental in founding and has done much to equip, they have maintained a light diet shelf for students, kept them supplied with pajamas and other needs, and subscribed to newspapers and a variety of magazines.

Financial help is also given to students who run into unexpected difficulties, and they give \$150 each year to the very active campus "Y". A wardrobe is also maintained where students may borrow dinner jackets and tuxedos as well as obtain and keep various articles of clothing.

For families of married students they maintain a Well Baby Conference. Children up to the age of two are given immunization shots and monthly check-ups by a pediatrician and a registered nurse, free of charge. Another service is the Baby Furniture Pool, where parents may borrow needed items.

With this terrific group, the word "service" means what it says. They are always more than anxious to help the entire campus. It is for this impressive list of the many activities the Caltech Service League has done for us, and especially for the willingness with which these feats were done, that we of the Big T would like to express the gratitude of the entire Caltech family.

Caltech Alumni

The membership of the Caltech Alumni Association for the 1963-64 year totaled 4435, or 49% of the number of living graduates. Of this number 20% are Life Members of the Association.

The Alumni Association contributes directly to student activities through the financial assistance it gives to ASCIT for the Interhouse Dance and the Alumni-ASCIT Assembly Programs. Each spring it sponsors a Seminar Day for Alumni and their friends. In 1963 over 1200 attended this all-day series of lectures presented by members of the faculty on various topics of scientific research, economic problems, political affairs and cultural changes. Social events during the year included the annual Interhouse Dinner-Dance and a February Dinner-Dance. Class Reunions are held every five years at the annual Dinner-Meeting held in June. The Association raises money annually for the Institute through the Alumni Fund. Substantial contributions have been made in the form of the Alumni Swimming pool, four 4-year scholarships, increasing the endowment funds and unrestricted use of the funds.

Membership in the Alumni Association includes a subscription to the alumni magazine, *Engineering and Science*. This publication has gained wide recognition for its timely and interesting articles by authorities in the field of science. It also features news of events on campus and alumni activities. The publisher of the magazine is Dr. Richard C. Armstrong, Class of 1928, and the editor is Edward Hutchings, Jr., a familiar figure on campus.

Caltech alumni are scattered all over the world. Active chapters are located in New York City, Boston, Washington, D.C., Chicago, San Francisco, and Sacramento. Some have regular monthly meetings and others meet once or twice during the year.

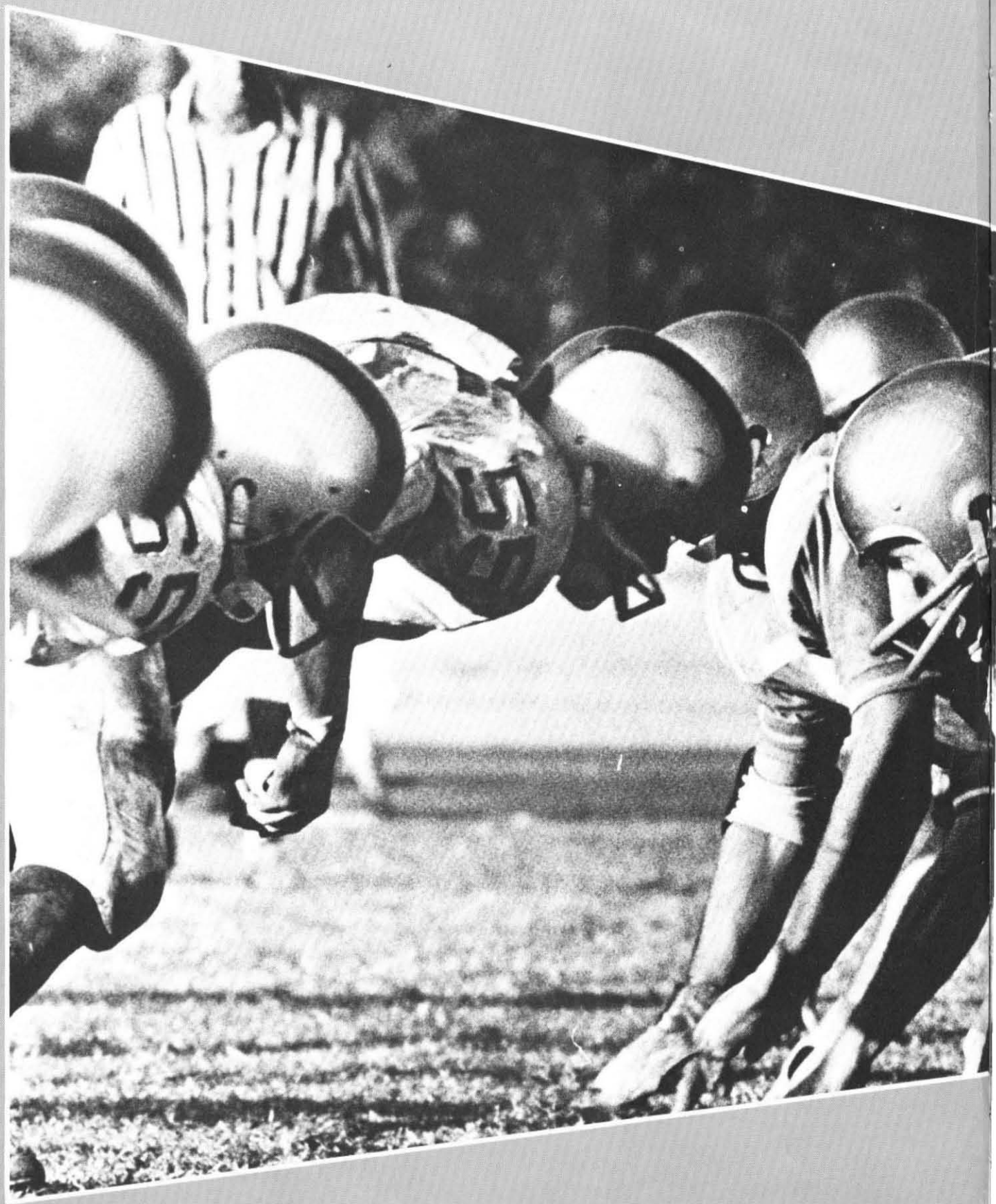
Alumni in the Los Angeles area--almost 4000 of them--participate in the various events sponsored locally by the Association.

The affairs of the Association are directed by twelve alumni elected by the Association to serve as officers and directors. The officers for 1963-64 were Peter V. H. Serrell, Class of 1936, president; Patrick J. Fazio, Class of 1953, vice-president; Donald S. Clark, Class of 1929, secretary; and John R. Fee, Class of 1951, treasurer. Directors are Robert Boykin, '34; William H. Corcoran, '41; David L. Hanna, '52; William L. Holladay, '24; G. Russell Nance, '36; Richard W. Powell, '40; Richard P. Schuster, Jr., '46; and H.M. Worcester, Jr., '40.

The Alumni Association is personified on campus by lovable ole' Donald S. Clark. As secretary, he maintains the records necessary for the Association and organizes many of the various activities that are sponsored by the group.







SPORTS



FOOTBALL



Varsity . . .



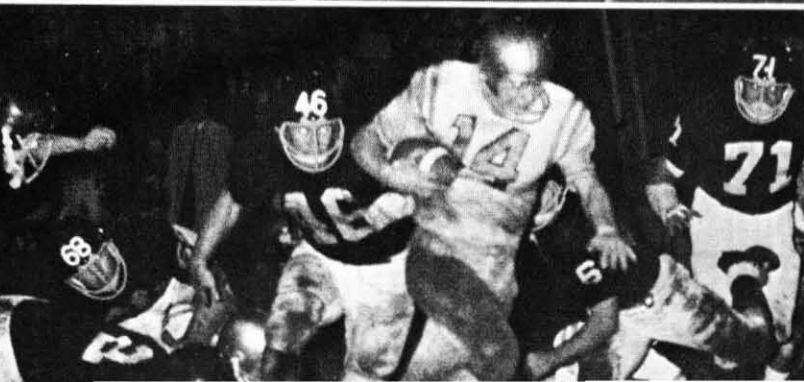
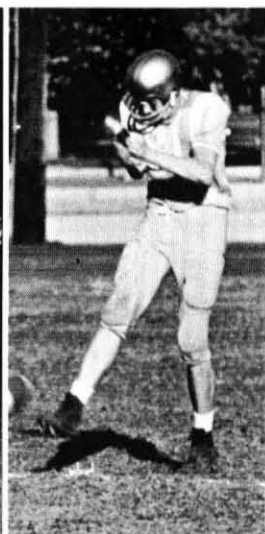
FRONT ROW: Mike Cosgrove (Manager), Bob Christie, Steve Hall, Guy Jackson, Bob Liebermann, Jon Evans, Barry Dinius, Don Green, Bob Scott, Joe Taynai, Mike Roshbash. MIDDLE ROW: Chuck Vinsonhaler, Art Johnson, Leon Thomson, Roger Card, Lee Peterson, Tom DeKlyen, Dave Hewitt, Marty Westbrook, Bill Rosenberg, Coach Calhoun. BACK ROW: Coach Van Kirk, Tony Dahlen, Dave Stolfa, Lee Myers, Murray Sherman, Jud Palmer, Val Ellis, Doug Josephson, Andy Kampe, Coach LaBrucherie. NOT SHOWN: Mike Costello, Gordon Myers, Dave Posner, Bob Serafin.

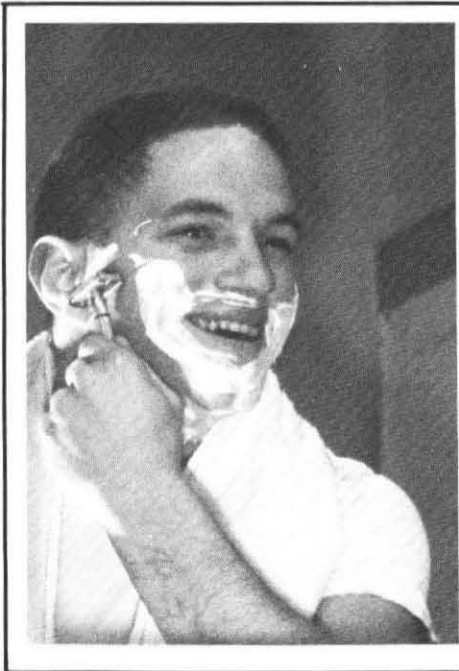
This was the football squad's first multi-win season in recent history. We won 2, beating LA Pacific and UC Riverside, and scared 2, losing to Cal Lutheran and La Verne in the last few minutes of play after leading in both games thru the 3rd quarter. Injuries prevented Tech from having a truly amazing season. With Liebermann at quarterback, and Evans and Dinius in the backfield, we had a potent ground offense that brought scores in all games but one.

1963 VARSITY RECORD

CalTech	32	L.A. Pacific	12
CalTech	14	UC Riverside	0
CalTech	6	LaVerne	9
CalTech	6	Santa Clara	40
CalTech	14	Cal Lutheran	22
CalTech	8	Occidental	32
CalTech	0	Claremont-Mudd	39







After the big game, we talked to Tech grid star Bob Liebermann in his room.

"Say Bob, those big defensive men were really after you today - but you came thru with a cool, smooth performance."

"Right, and here's another smooth, cool performer. It's my new Bick Blade. I get up to 2 shaves per blade. And every one of them is the kind of smooth shave the girls on campus really go for."

And Fresh

1963 saw the continuation of the long standing tradition that Tech frosh never win a football game. Injuries and lack of depth, and experience once again proved decisive factors in the record. Only against Pomona were the frosh held scoreless, however, as they scored against both Oxy and CHM.

Maybe next year

1963 FROSH RECORD

Occidental	33	CIT	6
Pomona	59	CIT	0
CHM	36	CIT	8

FRONT ROW: Chuck McQuillan, Bill Bricken, Captain. MIDDLE ROW: Andy MacKay, Bob Parker, Peter Balint, Bob Piccioni, Gary Ihas, Steve Card, George Kurata, Vic Kovacevic, Gary Little, Lot Ensey. BACK ROW: Coach Baldwin, Les Powers, John Foster, Mike Squires, Bryan Stallard, Marshall Hall, Del Ratzsch, Rich Touton, Gregg Guffrey, Coach Jenses, Martin Smith (Manager). NOT SHOWN: Bo Barbosa.

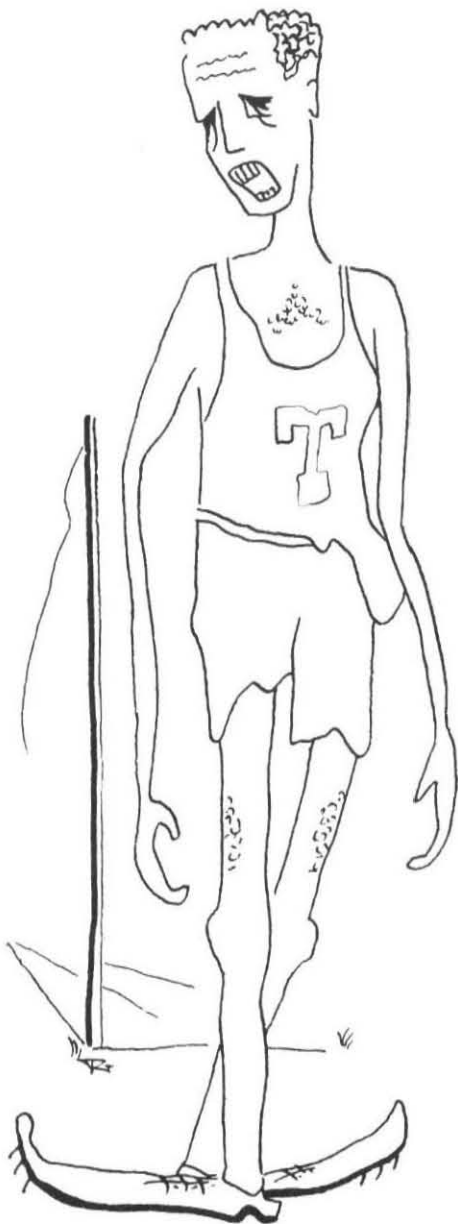


CROSS COUNTRY

1963 represents a nadir in Tech's Cross Country fortunes. What with only 4 varsity men out, and a team consisting of 7 members, we were beaten before we began. It is a tribute to the determination of Captain Ed Lee, Louis Corl, Dick Essenberg, and John Saunders that they gave their time and energy to a sport which has evinced so little interest from Techmen. Next year should see great improvement in our position with several frosh, including Peter Cross, who placed in the Conference Finals, joining the Varsity team.



ABOVE, VARSITY, LEFT TO RIGHT: Ed Lee, Captain, Louis Corl, Dick Essenberg, John Saunders. BELOW, FRESHMEN, LEFT TO RIGHT: Dick Sparks, Fred Lamb, John Horrocks, Larry Dillehay, Bob Miller, Peter Cross, Jim Smith.

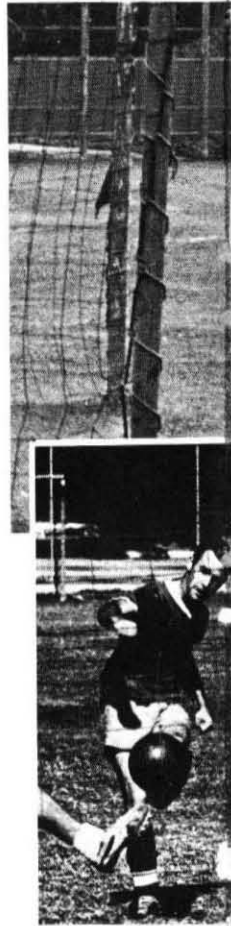




SOCCER

Our 1963 varsity team was vastly improved over last year's. Paced by Dick Wade and Don Wiberg on defense and Dave Gee-Clough on the front line, the team also possessed a depth that kept injuries from really hurting. We were kept from the league championship only by an exceptional UCLA team, finishing second with a 6-2-2 record.

Lack of experience really hurt the JV's, as last year's team formed the nucleus of this year's varsity. The team had to be completely rebuilt, and finished the year winless.



Varsity





LEFT, VARSITY:

FRONT: John Trischuk, Janusz Warszawski, Mike Hunsaker, Bernie Hird, Joel Kwok. BACK: Coach Lee Andrews, John John, Terry Schwartz, George Argyropoulos, John Gallivan, Ed Cline, Dick Wade, Herb Chen, Don Wiberg, Wes Shanks, Dave Gee-Clough.

BELOW, JUNIOR VARSITY:

FRONT ROW, LEFT TO RIGHT: Phil Liapis, John Harkness, Roger Hooke, John John, Peter Rispin. BACK: Dick Lane, Doug Kubler, Jim Vollbrecht, Walt Innes, Zoltan Soos, Dave Jackson, Bruce Kover, Mike. NOT SHOWN: Elton Young and Herb Jubin.

Junior Varsity

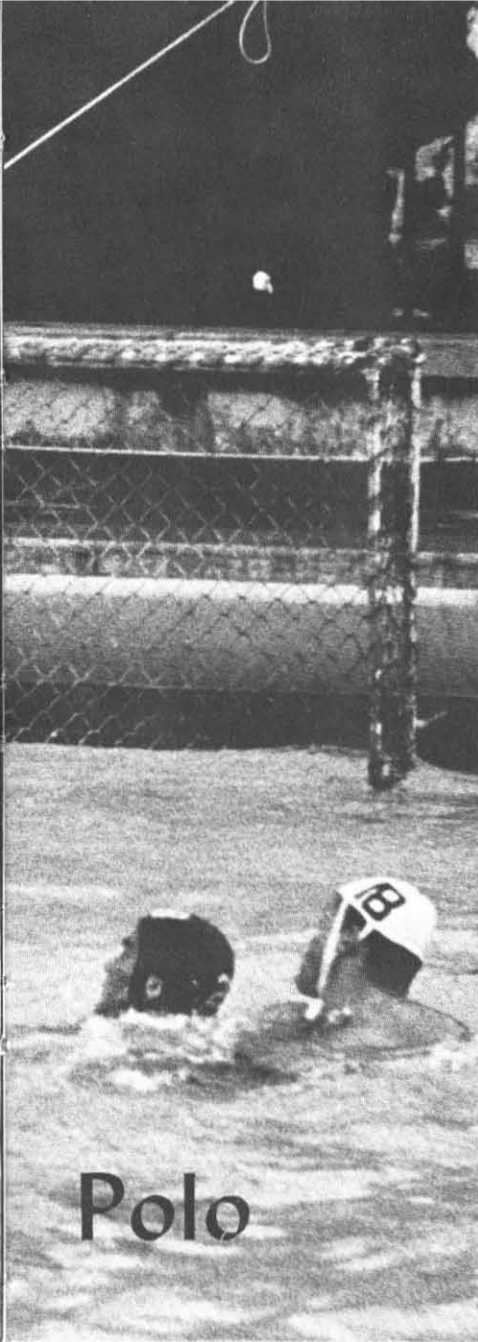




Water

For the second year in a row, Tech's Varsity Water Polo team came within one point of a tie for the SCIAC crown. Winding up the season with a tight 3-2 loss to Oxy, we finished a solid second to them in the conference. The team had no super star as Cheseboro was in '62. The key to its success was teamwork, with players like Tom Crocker, Dave Seib, and Mike McCammon working together to give us a good season. The frosh had a winless year, for a lack of experience seriously hampered their efforts, but players like Jim Soha and Tony Gharrett should contribute much to the varsity next year.





VARSITY, FRONT ROW, LEFT TO RIGHT: Larry Oliver, John Walter, Dave Jarvis, Tom Crocker, Co-Captain, Rich Nielsen, Mike McCammon, Co-Captain, Elliot Harry, Ted Jenkins. BACK ROW: Bockett Hunter, Larry Anderson, Pat Miller, Jim Gibson, Mike Baskes, Hugh Maynard, Coach Webb Emery. NOT PICTURED: Dave Seib, Duygu Demirlioglu, Ray Weiss, Art Turner, Walt Davis, George McBean, Steve Brown, Joe Milstein.



FRESHMEN, FRONT ROW, LEFT TO RIGHT: John Friedman, Chuck Marshall, Jim Soha, Chris Elms, Mike Hess, Kim Gleason, Mike Foley. BACK ROW: Tom Buckholtz, Mark Greenberg, Dick Hackathorn, Tony Charrett, Mike Beeson, Coach Webb Emery. NOT PICTURED: Jimmy Held, Martin Cooper, Henry Suzukawa, Ray Keel, Jim Gould, Manager.



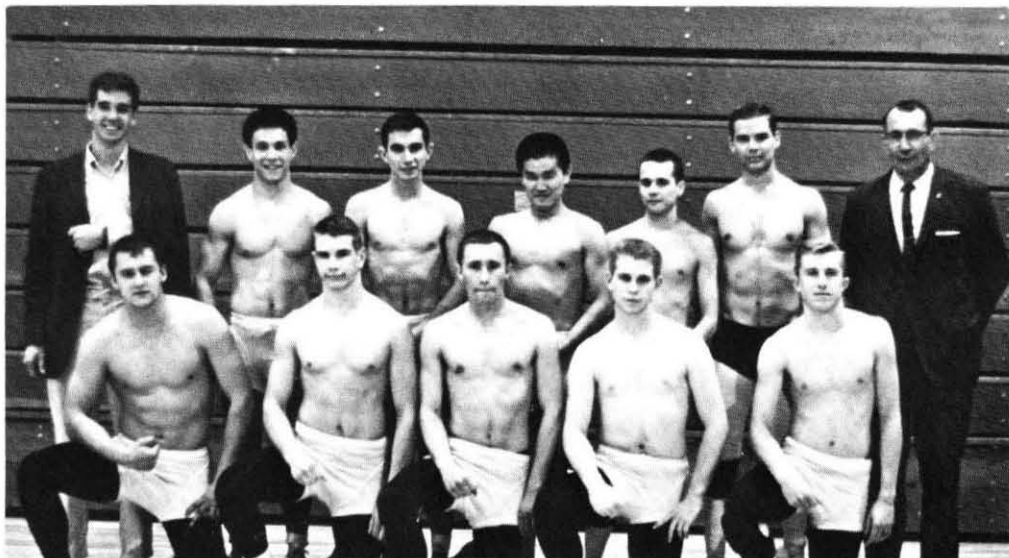
GOLF

"At the present writing no matches have been played, but Tech is certain to have a team of first rank in this conference. . . The Tech school spirit is always to the fore, and we know that the golf team will do everything to uphold the Tech tradition."--says the 1931 Big T. All we can do at this writing is hope.



ABOVE, GOLF: Charlie Vinsonhaler, Steve Swenson, Bill Colglazier, Roger Davisson, John Beamer, John Eastment, Tom Carlson, Dave Hyde, Bob Landis, Jim Beall. NOT PICTURED: Yance Hirschi, Rod McCalley, Harold Moeller, Luther Perry, Earl Reiland, Tom Resney, John Vitz.

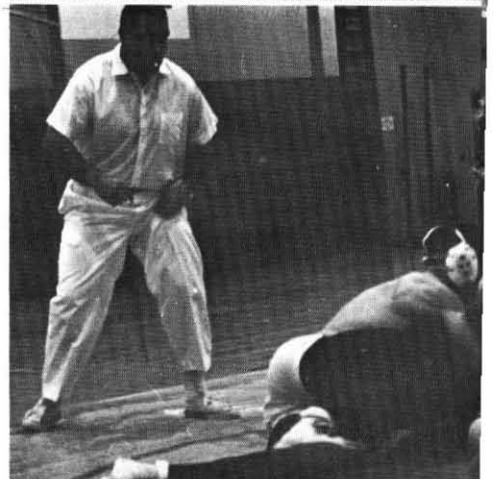
BELOW, WRESTLING, FRONT: Andy Kampe, Howard Powell, Walt Paciorek, Arlin Peters, Jim Groth. BACK: Tom Latham, Dave Faulconer, Dick McGehee, Frank Fujimura, George McKenna, Chris Shelton, Coach Merringer. NOT PICTURED: Tom McKenzie.



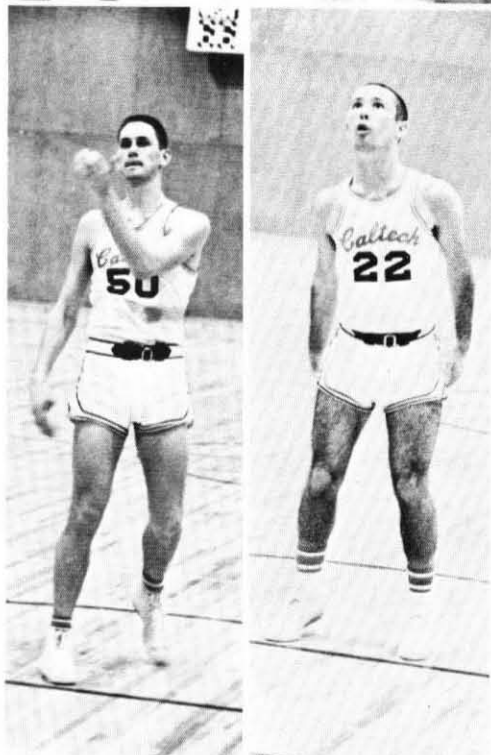
WRESTLING

The wrestling team had a very good season, winning the Conference Championship from Claremont and finishing with a 5-5-2 record overall. The team was hampered by the lack of a 123 pounder and the loss of Tom Latham, who was undefeated until forced out by an injury early in the season. Nevertheless, the team enjoyed a constantly-improving season with Dick McGehee posting the best won-lost record.

Next year should see an experienced team forming around Andy Kampe and freshman Frank Fujimura, and we can look forward to another successful season.



BASKETBALL



The 1963-64 varsity basketball team finished with a disappointing 3-19 record. The final game, a 78-83 loss to UCR, was typical of much of the season. In the first half, Tech led by as many as 14 points. In the second half, the offense lost its touch, the defense sprung leaks, and UCR took the lead in the closing minutes. In all, 9 games were lost in the last five minutes. Lack of reserves hurt the team in many of these games as "Elgin" Vinsonhaler, John Tucker, & Joe Weis were out with injuries or sickness. This problem was alleviated when Doug Holford came out midway through the season and added much needed reserve strength.

Tech again had a high scoring front line. Dick Burgess led the team statistics in most departments. Burgess averaged 16 a game and Captain Joe Weis added 14 more. Leon Thomsen improved steadily throughout the season, and was fine rebounding and great on defense. Gary Dahlman and Volker Vogt started as guards. Gary was the floor general and averaged in double figures. Volker was a steady playmaker and added the much needed spark in many games.

Dennis McCreary, who started part of the season, Vinsonhaler, Tucker, and Holford also saw a lot of action; Jerry Yudelson & Frank Potter not so much. Vinsonhaler kept the team laughing through its trials and tribulations and also claims he led the team in (shots) x (feet from basket) per unit time.

Six team members will graduate, so next year's team will depend greatly on this year's Freshman squad. Tucker, with his fine outside jumps, and McCreary, Holford, Yudelson, and Potter will form the nucleus for next year's squad.

Martin Smith's sparkling dinner announcements in Ruddock provided the most inspired moments of the otherwise disasterous 3-n Freshman Basketball Season.



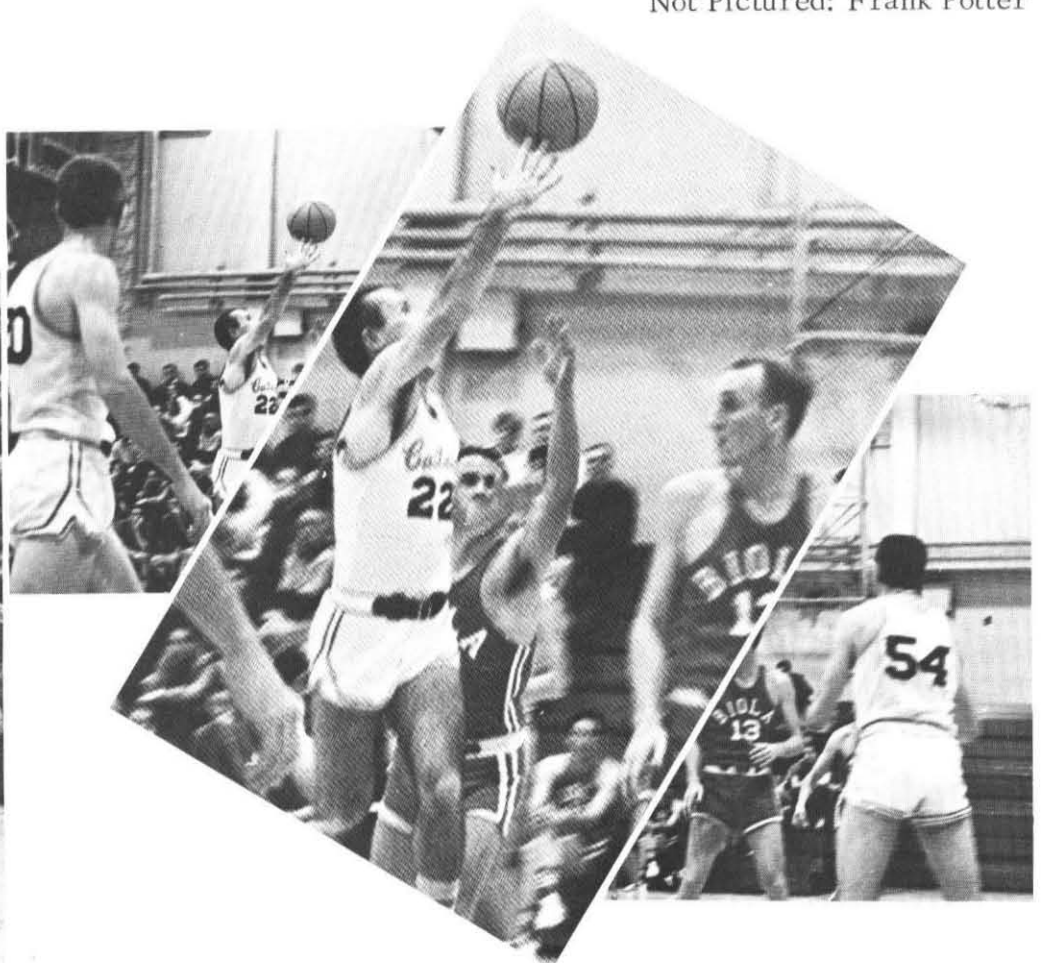
Coach Ed Preisler Dennis McCreary Dick Burgess Leon Thomsen John Tucker Jerry Yudelson



Chuck Vinsonhaler Doug Holford Joe Weis Volker Vogt Gary Dahlman

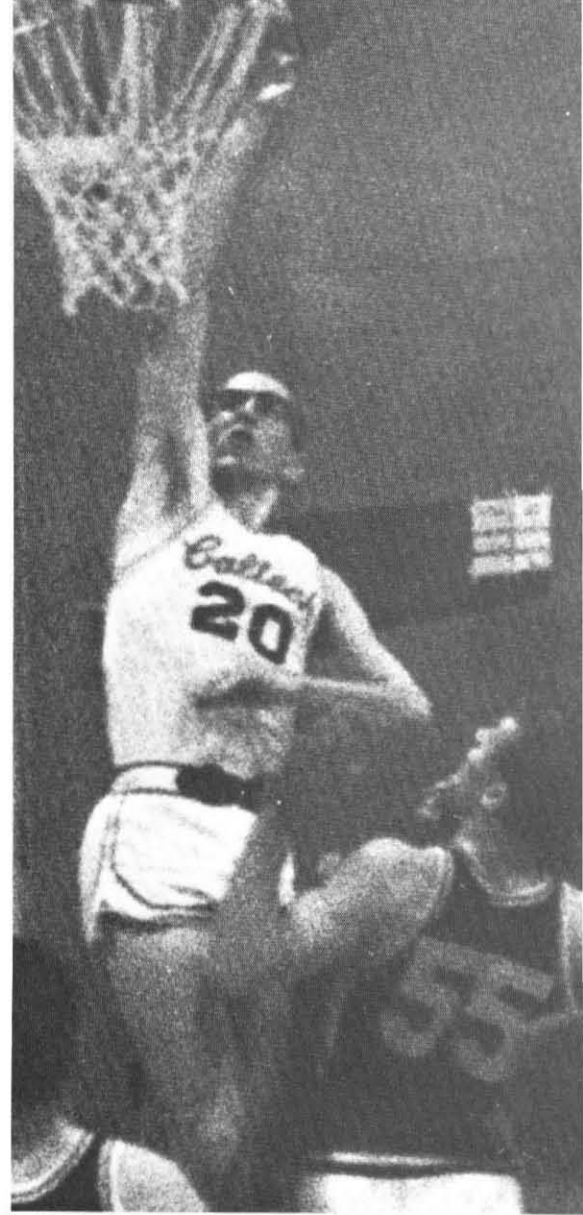
Not Pictured: Frank Potter

Varsity



Our quick-snapping photographer caught Dahlman driving, left, and shooting a second later.

Frosh



BELOW, FRESHMEN, FRONT-Don Blair, Larry Dillehay, Ed Hsi, Dennis White, Coach Keith Jensen. BACK-Dave Van Essen, Brian Stallard, Herb Jubin, Dick Williams, Gray Jennings, Moore Reagan. NOT PICTURED-Martin Cooper, Martin Smith and Eric Young, managers.

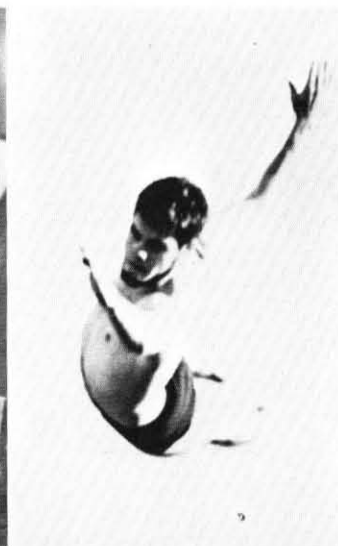
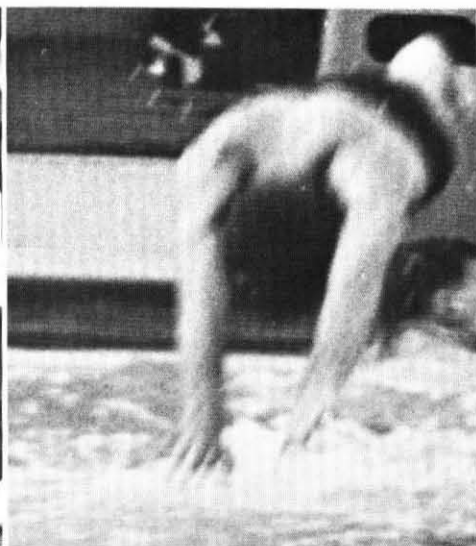


SWIMMING



V
A
R
S
I
T
Y

VARSITY: Front-Ted Jenkins, Larry Anderson, Mike McCammon, Steve Deichelmann, John Walter, Captain George McBean, Bill Owens. Back-Elliot Harry, Rich Nielsen, Duygu Demirilioglu, Art Turner, Pete Ryan, Dave Lambert, I Lok Chang, Coach Webb Emery. Not Pictured: Pat Miller, Jerry Nelson, Tom Crocker, Johann Lau, Chuck Smythe.

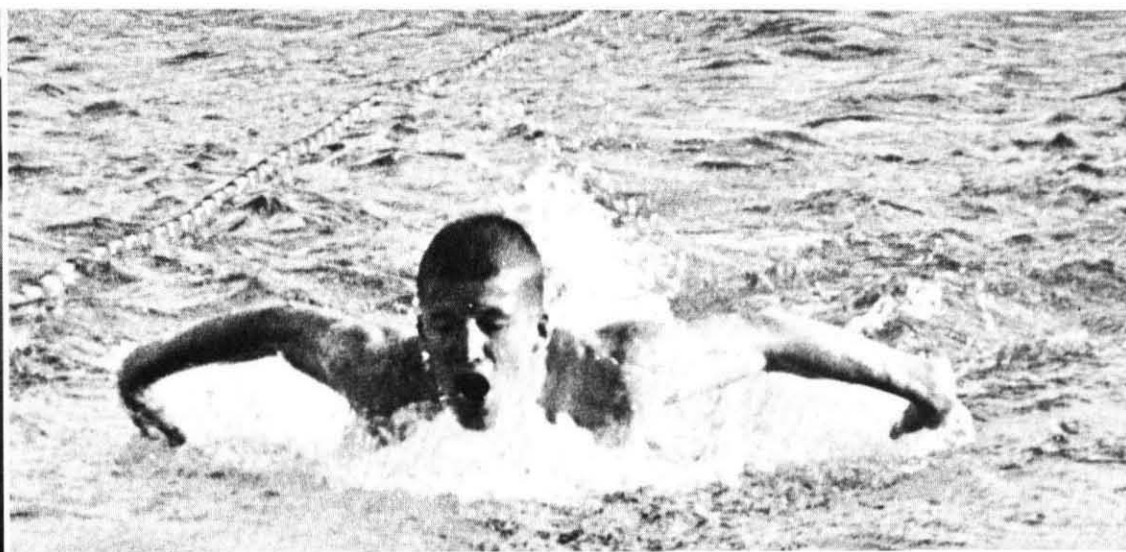
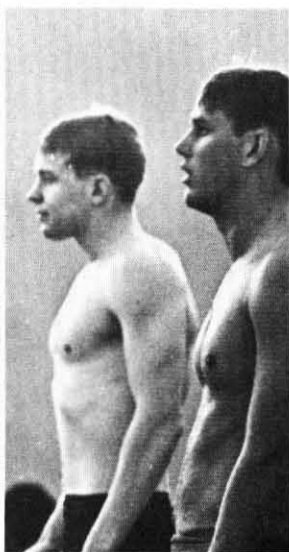
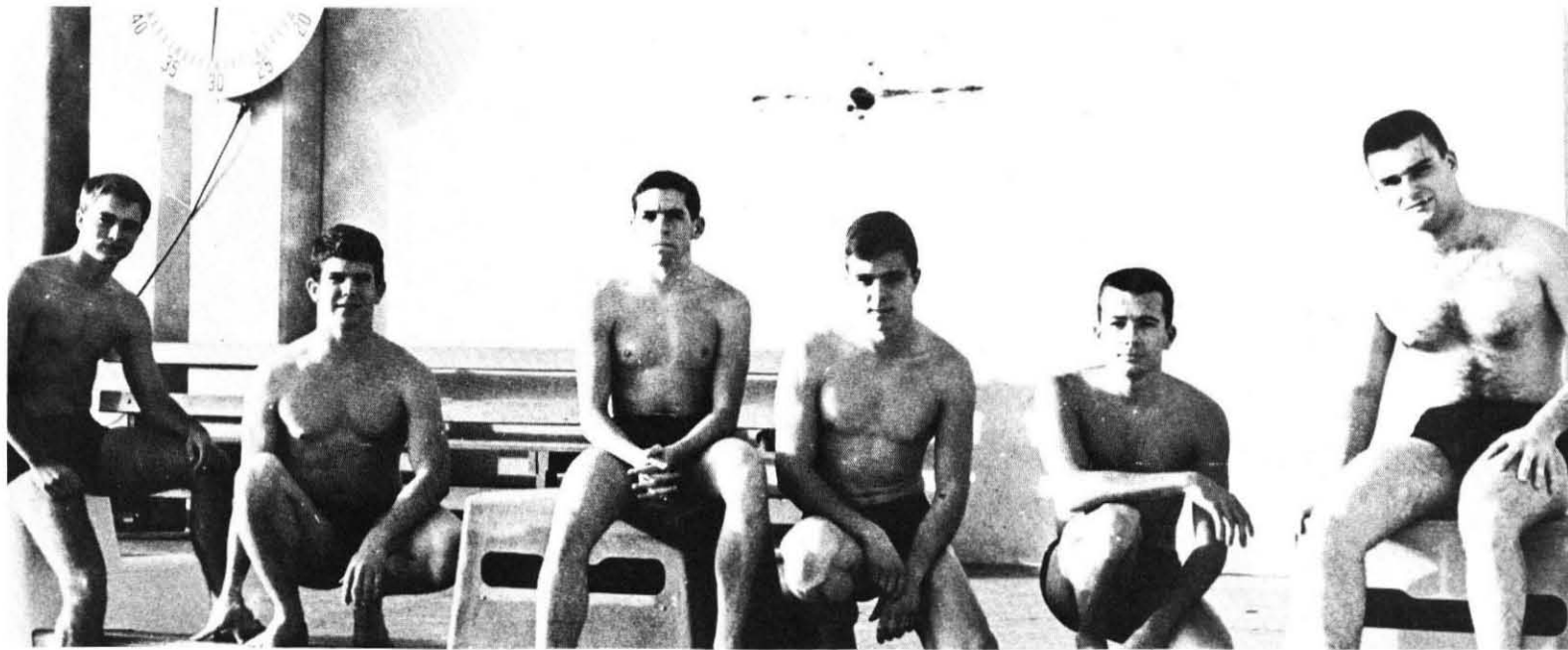




The swimming team this year has been a successful one, but has not been able to recapture the league title from Oxy (the title is decided this year on a dual meet basis only, and Tech swimmers traditionally do poorer in duals than in championship meets). At this writing, however, the chances for a second place finish to Oxy seem are excellent. The team has some outstanding talent this year; Bill Owens, undefeated in conference competition, will probably break school and conference records in the 200 yard backstroke before the season closes. Battling for pre-eminence in the sprint freestyle events are two excellent performers: George McBean and Larry Anderson. Here, too, records could fall. Ted Jenkins continues to show rapid improvement in the distance freestyle events, as does Duygu Demirlioglu in the butterfly. Rounding out the team are Tom Crocker, Dave Lambert, Pat Miller, Jerry Nelson (all in the breaststroke), Rich Nielsen (butterfly), Mike McCammon and Pete Ryan (freestyle), Art Turner (medley), and Chuck Smythe (diving).

The frosh, to over work a hackneyed cliché, have suffered from inexperience, but show lots of potential for next year's varsity. Next year, however, the team will lose McBean, D. D., and McCammon; it seems probable that Tech is at least two years away from regaining the league crown.

F
R
E
S
H
M
E
N



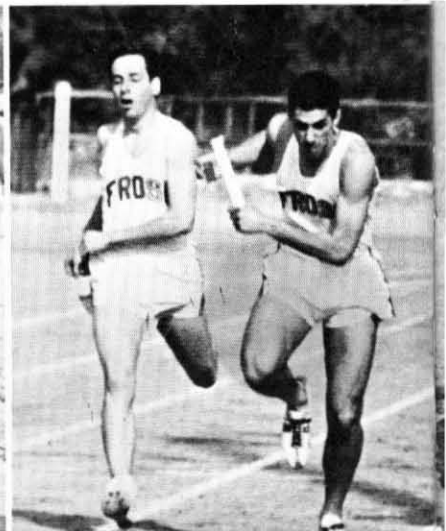
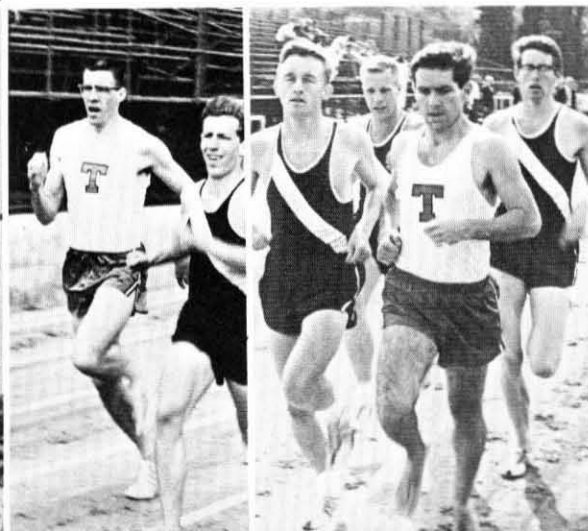


TRACK

Tech's varsity track team has seen a bleak season in 1964. With about half the meets over, the spikers have managed only one victory (against Biola), and prospects for the rest of the season are dim. Inadequate practice due to spring vacation, wet weather and minor injuries has kept the team from thus far realizing its potentialities, but the rest of the season could see much improvement. Steady performers have included Charley Sawicki in the javelin, Tom Williams in the high jump, Steve Blumsack in the 880 and relay, Ken Brown in the dashes and relay, Pete Wyatt in the intermediate hurdles, George Radke in the weight events, Steve Garrison in the pole vault, and Doug Gage in the high jump, long jump, triple jump, and high hurdles.

The frosh have had a drab season, but fine performances have been turned in by Walt Innes (pole vault and the jumping events), Gary Ihas (high hurdles), Bob Miller (distances), Ron Peterson (high jump), Pete Cross (javelin and distances), and Gregg Guffrey and Fred Lamb (sprints and relay).

Next year's team should improve on this year's record as individuals develop, but any spectacular change is unlikely.

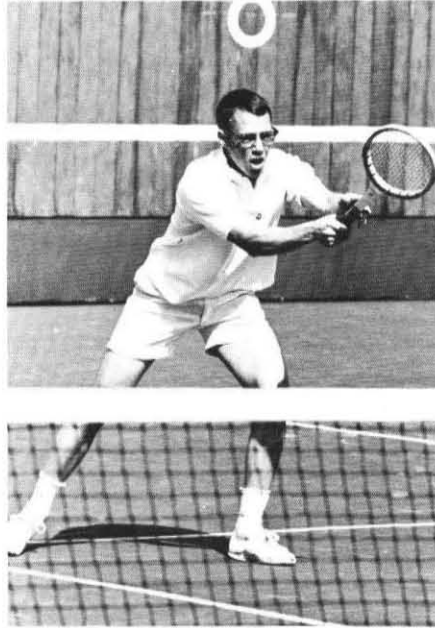
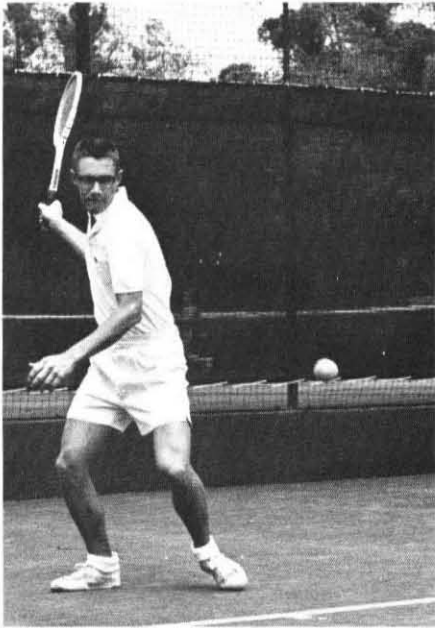




ABOVE, VARSITY: FRONT-Charley Sawicki, Steve Garrison, Pete Wyatt, Steve Blumsack, Doug Gage. SECOND ROW: Bob Levin, Ken Ludwig, Louis Corl, Bill Spring, Thor Hansen, Ken Brown. BACK: Dick Karp, Manager, George Radke, Ed Lee, Don Radcliffe, Tom Williams, Jared Austin, Jerry Kabell, Shelby Chapman, Manager. NOT PICTURED: Dick Essenberg, John Nowery, Leon Thomsen, Marston Westbrook.

BELOW, FRESHMEN: Ron Peterson, Doug Eaton, Gregg Guffrey, Bob Piccioni, Dave Hammond, Larry Dillehay, Gary Ihas, Walt Innes, Peter Cross, Kent McCaulley, Frank Benford, Thynm Hynczrym, Bob Miller, Fred Lamb.

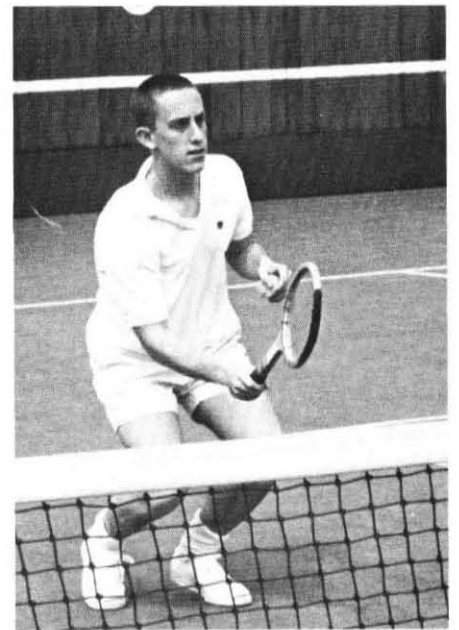




FAR LEFT: freshman John Hoshor. NEAR LEFT: Butch Niell. OPPOSITE-freshmen: manager Peter Balint, Jim Fishbein, John Hoshor, Dick Juster, Jim Buckholtz, Terry Beard, Mark Satterthwaite, coach John Lamb. NOT PICTURED: John Eyley, manager Dave Woodward. BELOW: frosh Jim Buckholtz.

TENNIS

Due to the graduation of three strong players, Tech's varsity tennis team this year has not been so successful as last year's. At this midseason writing, the team has scored only one victory against four defeats. The team has faced some really strong competition (such as Redlands, certainly one of the strongest teams in the state); nevertheless, many of the individual matches have been very well fought. Occupying the tough number one position for the first half of the season has been Butch Niell, who has played particularly well.



Varsity





Freshmen



Winning important matches and always putting up a good effort against formidable opponents. Unfortunately, Butch will be out for most of the rest of the season due to a skiing injury. This will mean that Al Limpo, who played first doubles with Butch, will now play in the number one slot. Al and Ray Green have been high on the ladder throughout the season, and their consistent play has contributed to a number of victories. Another fine contributor has been Freeman Rose, who has an unusual but reliable style of play. Rounding out the team are three sophomores: Val Ellis, Jay Pearlman, and Jeff Pressing. More experience and coaching should see these three improve the consistency of their games as the season progresses. Ellis especially seems to be a very fine prospect for the future. Coach Lamb's fine coaching should produce continued improvement in the team throughout the rest of the season.

The frosh have had a dismal season, but John Hoshor should prove a valuable addition to next year's varsity.

ABOVE: Freeman Rose. OPPOSITE-
varsity team: manager Ron Elkin, Al
Limpo, Freeman Rose, Jay Pearlman,
Butch Niell, Jeff Pressing, Don Green,
coach John Lamb. NOT PICTURED:
Val Ellis. RIGHT: Jeff Pressing and Al
Limpo.



BASEBALL

Coach Ed Preisler's diamond contingent is struggling to escape the confines of the SCIAC cellar, its habitat for many eons. With the Occidental and Whittier vying as usual for the league championship closely followed by hard-hitting Redlands, it remains to CHM, Pomona, and Caltech to fight it out in the amateur division.

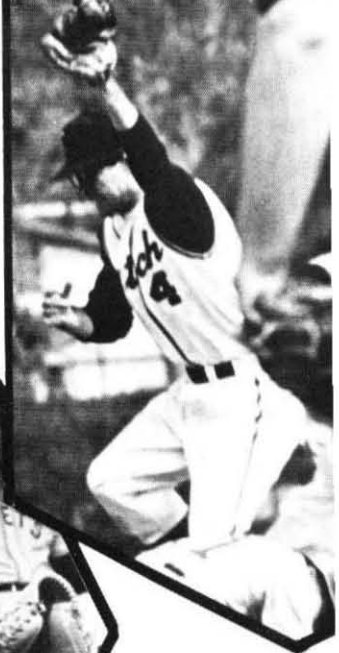
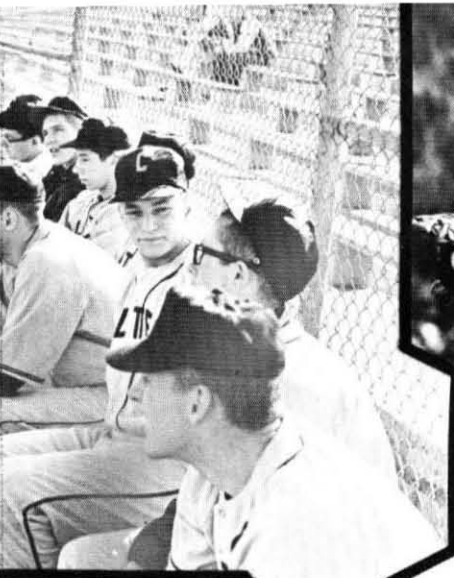
After a successful exhibition season of four wins and one loss, the Beavers got off to a terrible league season by dropping three consecutive games to Whittier and a doubleheader to Redlands. Unsteady fielding, mediocre pitching, and a lack of hitting characterized these early losses. If the team can combine a better defense with more potent batting behind more improving hurling, victory may yet be achieved at the expense of CHM or Pomona.

The team is dominated by seniors playing together for the fourth year. Ricks and Diebel handle the mound chores with Christie wearing the "tools of ignorance." The infield consists of Weber at third, Gowen at short, Dahlman at second, and either MacDowell or Ricks at first. Sophomore Tom Resney roams centerfield while flanked at different times by Liebermann, Gilman, Hall, MacDowell, Eastment, and Weatherwax. The hitting power, while lacking at times, is provided by Captain Dahlman, Christie, Ricks, Weber, Resney, Gowen, Diebel, and Caltech's answer to pinch hitting Smokey Burgess, Dave Hewitt.

With eight seniors graduating in June, Coach Preisler must look for support for Juniors Hall, Diebel, and Gowen and Soph Resney. Coach Jensen's Frosh team promises some measure of this needed support. Frosh Chuck McQuillan, Gray Jennings, and Gary Little should help the varsity in years to come.



ABOVE, VARSITY: FRONT-Bob Gilman, Dave Hewitt, Bill Weber, Gary Dahlman, Bob Liebermann, Walt Davis, Bob Weatherwax, Tom Resney. BACK: Coach Ed Preisler, Joe Milstein, John Eastment, Larry Gowen, Bill Ricks, Bob Christie, Jon Diebel, Tom MacDowell, Leonard Gurdy, Manager. RIGHT, FRESHMEN: Coach Keith Jensen Et. Al.



ATHLETIC STAFF



Harold Z. Musselman



Miss McGee and Mrs. Wayne

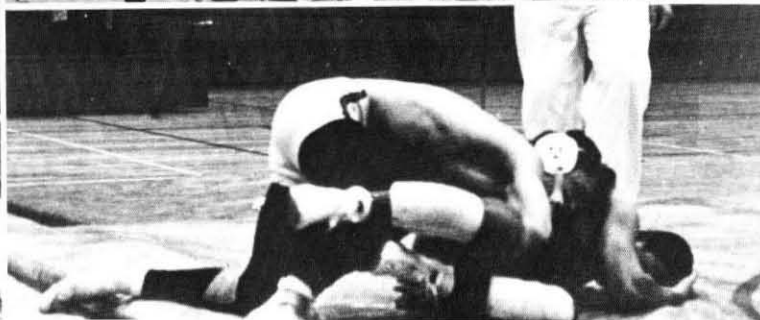
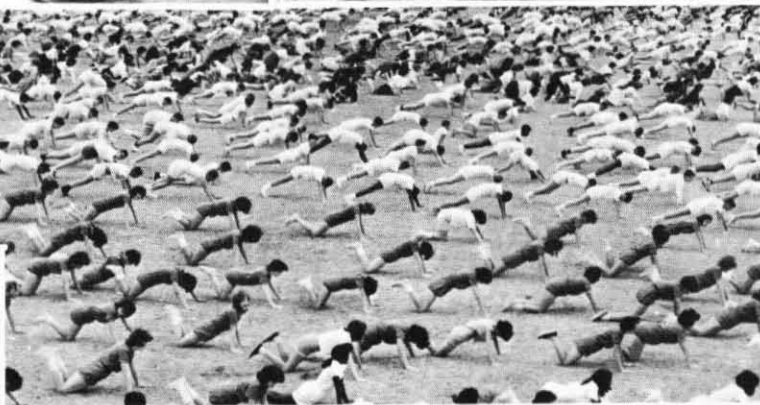


Coach Bert LaBrucherie



Coach Ed Preisler

HERE, SPORT!





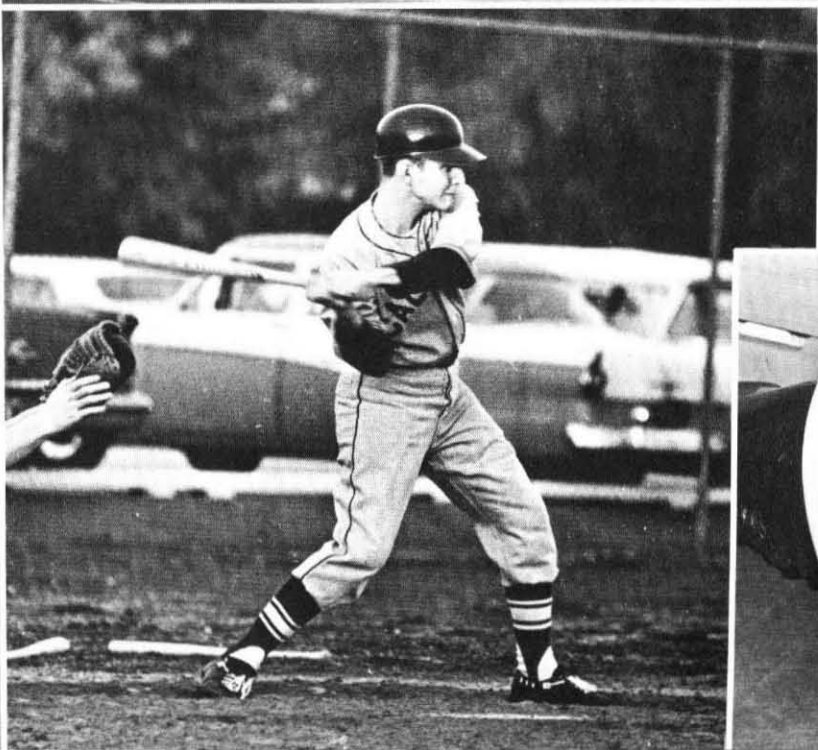
Coach Jim Nerrie

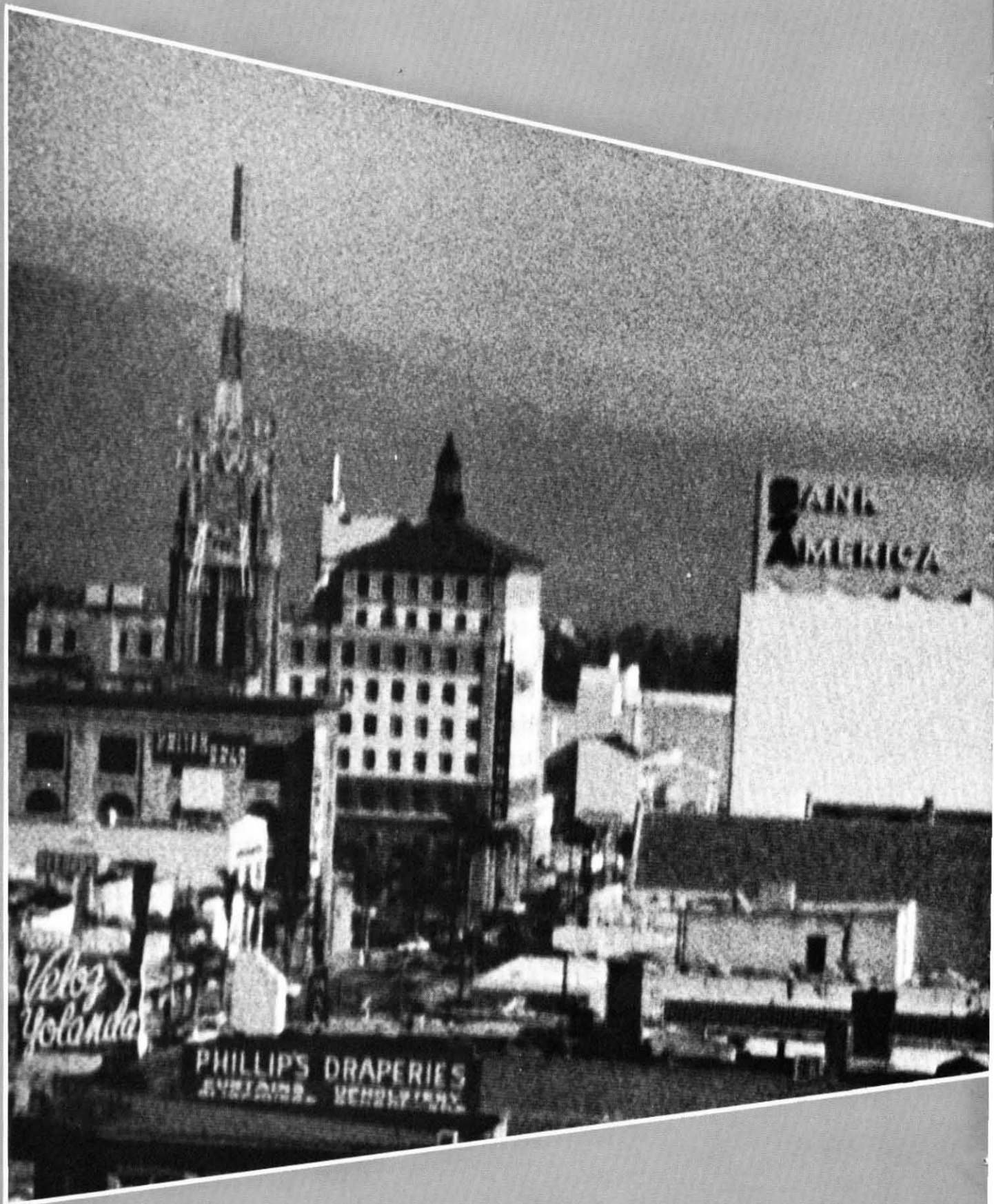


Paul "Jake the Barber" Barthel

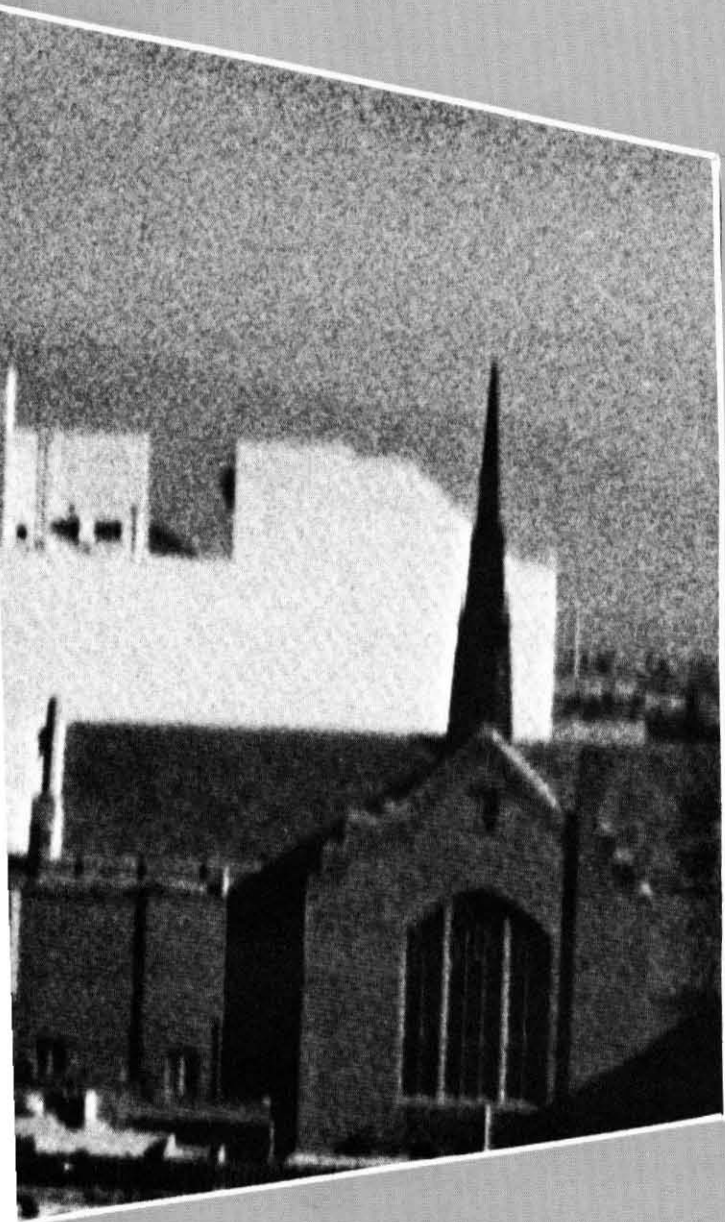


Fergy





I
ADS



SUPPORT OUR ADVERTISERS

On the next few pages you will find advertisements from the people who are supporting this annual. Much of the money necessary to publish the 1964 Big T was supplied by these advertisers. You will notice that many of them offer various services to Techmen while others handle the products which everybody needs. It is our advice that you patronize these people when seeking such services and products. You will notice a number of ads from companies who are interested in hiring Caltech students. These advertisements provide a good method of becoming better acquainted with the job opportunities and fields of activity of these companies. We suggest that you use the Big T as a guide when seeking interviews.

The Big T staff and the entire Caltech student body wish to thank these advertisers for supporting this annual, and hope that they reap the benefits of their ads and will be with us for many years.



The Royal

unexcelled

LAUNDERING
CLEANING
LINEN
SERVICES

Prompt pickup and delivery — or stop at Royal's Drive-In Offices at Hastings Ranch Shopping Center. Main Office 443 S. Raymond, Pasadena.

FINISH WORK • SHIRTS • BLANKETS

Telephone SYcamore 6-4311

PASADENA'S LARGEST AND FINEST LAUNDRY AND CLEANING PLANT

Rexall DRUGS

CALIFORNIA *Rexall* PHARMACY

555 S. Lake Ave. Pasadena, Calif.
SYcamore 2-6222 — SYcamore 2-3156

DRUGS — COSMETICS
Free Parking in the Rear

Barnett, Smith, and Salit, Inc.

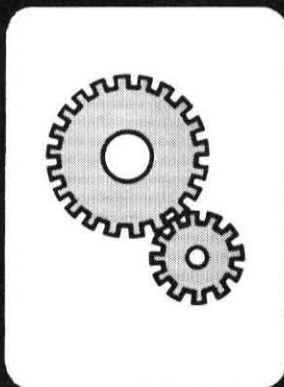
CIVIL ENGINEERS AND LAND SURVEYORS

35 South Raymond Avenue
Pasadena, California
SY 5-0458 — MU 1-0606

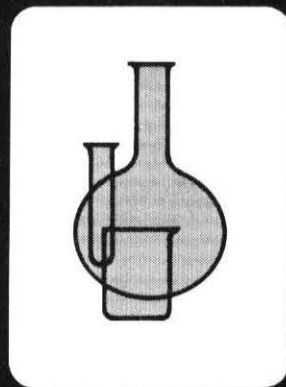
Harold A. Barnett '23

A BETTER
CAREER OPPORTUNITY
FOR YOU AT

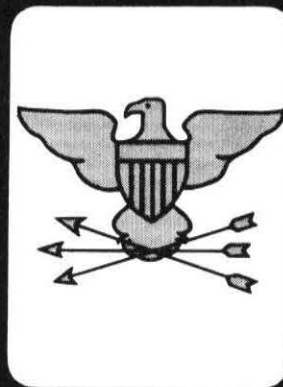
F M C



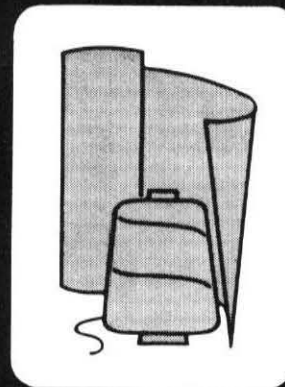
MACHINERY



CHEMICALS



DEFENSE



FIBERS & FILMS

RESEARCH and DEVELOPMENT: FMC offers challenging opportunities for technical personnel to engage in work in areas of electronics, automated controls, hydraulics, plastics, radiation, fabrication techniques and industrial design, as well as immediate and long-range projects in organic chemicals, including polymers and plastics, fibers and films, and inorganic chemicals.

MACHINERY: Automated machinery and allied equipment for food preparation and processing, farming and gardening, materials handling, packaging and paper box making, paper and film converting, industrial, agricultural and household pumping requirements, waste disposal, oil field operations, fire fighting, and automotive servicing.

DEFENSE: Armored and unarmored military tracked and wheeled vehicles, hydrofoil vehicles, amphibious landing craft, nuclear handling equipment, remote control systems, electric drives, gunfire simulators, propellant handling systems, missile ground support systems and equipment, and missile and rocket propellants.

CHEMICAL: Insecticides, fungicides, and herbicides for agriculture; concentrates for grain fumigants and household pesticides; basic inorganic chemicals for industry; and organic chemicals, intermediates, plasticizers and plastics for industrial and specialty applications.

FIBERS AND FILMS: Rayon filament and staple fiber, and acetate yarns for textile manufacturers and specialty products; tire yarns; cord strapping, cellophane, cellulose bands and casings for packaging; plastic molding powders; and microcrystalline cellulose for food, drug and cosmetic industries.

Putting Ideas to Work in Machinery, Chemicals, Defense, Fibers and Films

FMC CORPORATION

An Equal Opportunity Employer



Corporate Personnel Administration
FMC Corporation
1105 Coleman Avenue
P.O. Box 760
San Jose, California

Chemical Divisions
Industrial Relations Department
FMC Corporation
633 Third Avenue
New York 17, New York

Ordnance Division
Industrial Relations Department
FMC Corporation
1125 Coleman Avenue
P.O. Box 367
San Jose, California

American Viscose Division
Industrial Relations Department
FMC Corporation
1617 Pennsylvania Blvd.
Philadelphia 3, Pennsylvania

CAREER OPPORTUNITIES AT DOUGLAS



Can
you
make
water
out
of
H₂O?

Two parts of hydrogen and one of oxygen leave a thirsty man high and dry. But give him a match to ignite the gases and a jar to catch and condense the steam, and he can drink the result.

Likewise, capability in the individual sciences and skills involved in developing great aircraft and defense and space systems isn't enough. The right combining agency is essential.

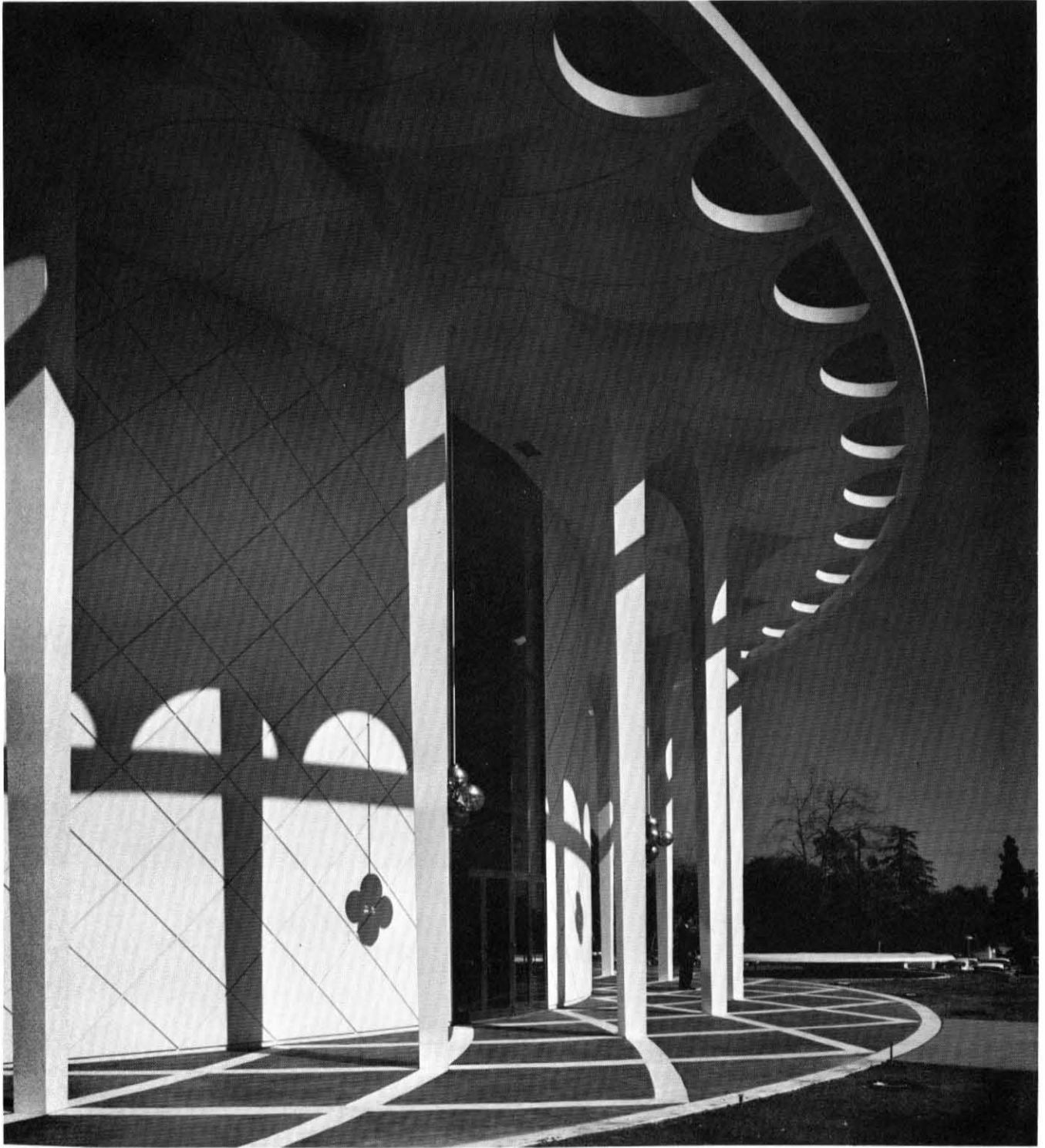
That's where Douglas comes in. It has the ability to make big programs jell. And its comprehensive approach

to technological achievements make it an ideal place for young engineers and scientists to grow in professional stature. At Douglas, you not only will have wide opportunities in your own discipline, but have every chance to integrate it with others as you contribute to the development of advanced space, defense and electronic systems.

If you would care to join us, please send resume to Mr. S. A. Amestoy at

DOUGLAS

An equal opportunity employer / 3000 Ocean Park Blvd., Santa Monica, California



ARNOLD O. BECKMAN AUDITORIUM

M. J. Brock & Sons, Inc.

GENERAL CONTRACTORS

2894 Rowena Ave.

Los Angeles 39



You've been here... why not stay awhile?

Here is Caltech's Jet Propulsion Laboratory in Pasadena, California. Here is a facility responsible for R & D on America's Lunar, planetary and inter-planetary exploration.

Here are the finest technical aids in the world — the library with 125 thousand technical documents, the most sophisticated computers, space simulators, acres of laboratory space and about 1300 scientists

and engineers who work with 2700 support people.

If you come here, you'll be working with the finest scientific minds in the country. If you like that, and if you think you want to think hard for a living, you should think hard about coming to JPL.



JET PROPULSION LABORATORY

4800 Oak Grove Drive, Pasadena, California
Attention: Personnel Department 519

"An equal opportunity employer." Jet Propulsion Laboratory is operated by the California Institute of Technology for the National Aeronautics & Space Administration.

OUR GOAL...

A Satisfied Clientele

CALTECH FOOD SERVICE

George Hershberger
Richard Huffman
Dennis Furness

POY7

THE BEAUTIFUL SENIOR PORTRAITS
WERE DONE AT

MARYLAND STUDIO

80 North Hill Avenue
Pasadena 4, California

MANUFACTURERS OF

●
THE BIG T
YEARBOOK COVERS

●
INDUSTRIAL CATALOG COVERS
BINDERS • PRESTIGE PACKAGING

●
THE S. K. SMITH COMPANY

5300 W. 104th Street • Los Angeles, Calif.
SPring 6-2424

TOUJOURS GAI!

—GILBERT A. ROLAND



SUNNY ITALY

Home of Fine Italian Food

470 S. Rosemead Ave., Pasadena
SY 2-7437

OUR GOAL...

Keeping the Troops Happy

M. ROSALINO
Mrs. K
Ruby Sapphire Diamond
Elmo E. Taylor

American Yearbook Company



MIRRO-GRAPHIC DIVISION

4103 SAN FERNANDO ROAD . GLENDALE, CALIFORNIA

RICHARD ROCKET
(executive)

*The Home of the BIG BOY
in the considered opinion
of Mr. Rocket, is the finest
engineered facility in America
for producing wonderful food
and service. (Mr. Rocket
was in The Home
of the BIG BOY last night
with his lovely wife
and children.)*



home of the
Big Boy
original double-deck
HAMBURGER





"The Greatest Name in Dairy Products"

Carnation Company

AD ASTRA PER ASPERA

Independent
Star - News

PASADENA • CALIFORNIA

EMETT & CHANDLER

INSURANCE BROKERS and AVERAGE ADJUSTERS

Complete Service for All Lines of Insurance

2999 West Sixth Street, Los Angeles 5

Telephone DU 1-1201



◆◆ FAMOUS FOR PRIME RIB, STEAKS, SUPERB ROAST BEEF AND AUTOGRAPHED LOBSTER. CAESAR OR TOSSED SALAD INCLUDED WITHOUT CHARGE WITH MORE THAN 30 ENTREES, SERVED IMPECCABLY IN AN ATMOSPHERE OF QUIET CHARM AND ELEGANCE.

LUNCHEON • PRE-THEATER DINNER • DINNER

SUPPER • SUNDAY BRUNCH

(Diner's Club - American Express)

NEW YORK-160 CENTRAL PARK SOUTH: DAVOS -4 EINBAHNSTRASSE
PASADENA-137 OLIVE WALK EAST

BLACKER



Y.C.F. and G. Society

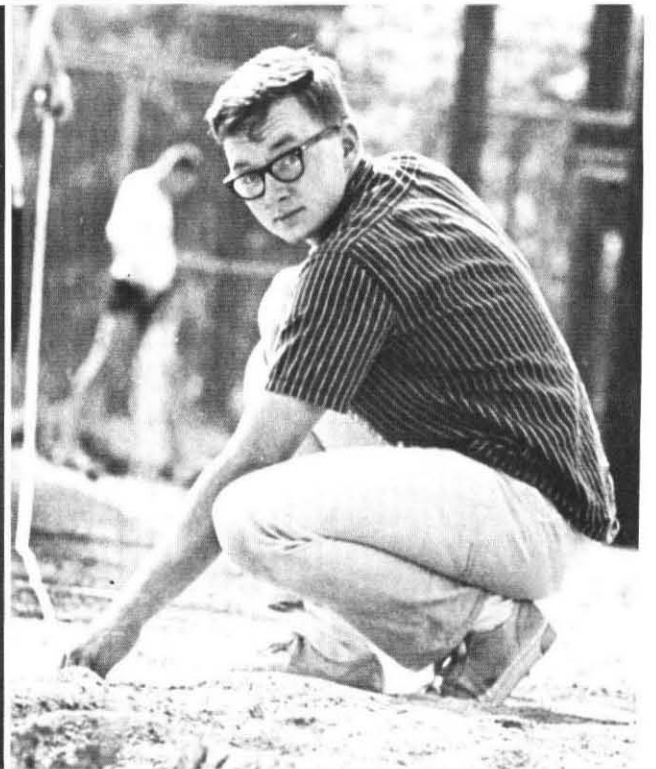
The Caltech Phi Phi Pho Chapter of the national Y. C. F. and G. Society was founded early in October 1963 to, in the words of the national organization's charter, "provide a nucleus around which imaginative men may justify their yielding to hedonistic impulses in the face of modern America's compulsive Stoicism, *A la Metrecal*."

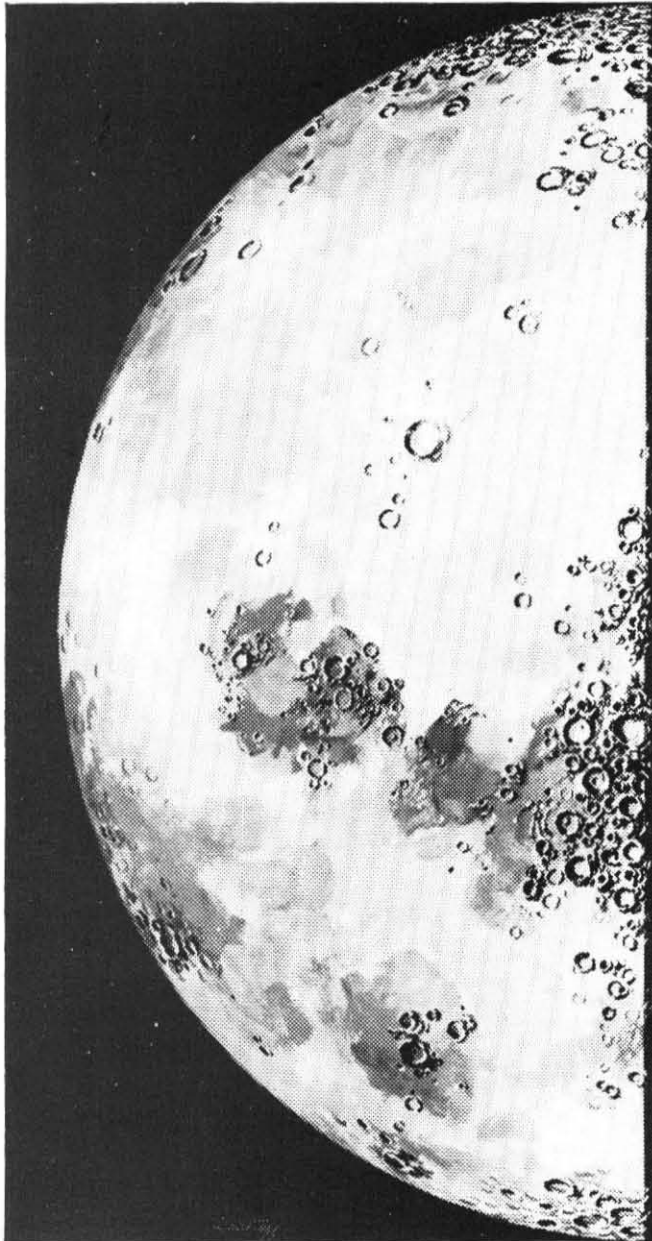
The local chapter's charter members, Dick Burgess, Rog Hendrix, Mike Lambert, and Al Limpo, who were soon joined by charter non-charter member Spicer Van Allen Conant managed to entrench the Society firmly in the Real World. It's many and varied activities attracted the attention of Caltech students, ensuring the perpetuation of the new Chapter in coming years.

Off campus conclaves were called in several exoticly conducive locations, from Mexico to the historic John Muir Trail, because we feel that man lives not by bread alone, but also by the fruits of his evils. The new Caltech Chapter communicated frequently with Society supply centers from Washington, D. C. to Washington State. In cooperation with students at other schools, efforts were made to establish other Society chapters at nearby girl's schools.

The Society, true to Caltech intellectualistic orientations, contributed several new concepts to modern culinary thinking, notably the successful "Pease Porridge 12 days Old," the reactionary smoky green beef, and titilating Hearty Pea Soup. Such viands were the results of our unflinching belief in the "Gourmand Precept" enunciated by the Y. C. F. and G. National. We were particularly active in edible research throughout the year.

Regular contests between members were held for greatest quantity procured, and prizes were awarded on a basis. Officers elected at the most recent of these were: Solicitor General, Dick Burgess; Procurement, Rog Hendrix; Consumption Comptroller, Mike Lambert; Pop Officer, Al Limpo; and Vineyard Foreman, Spicer Van Allen Conant, who also wrote this garbage.





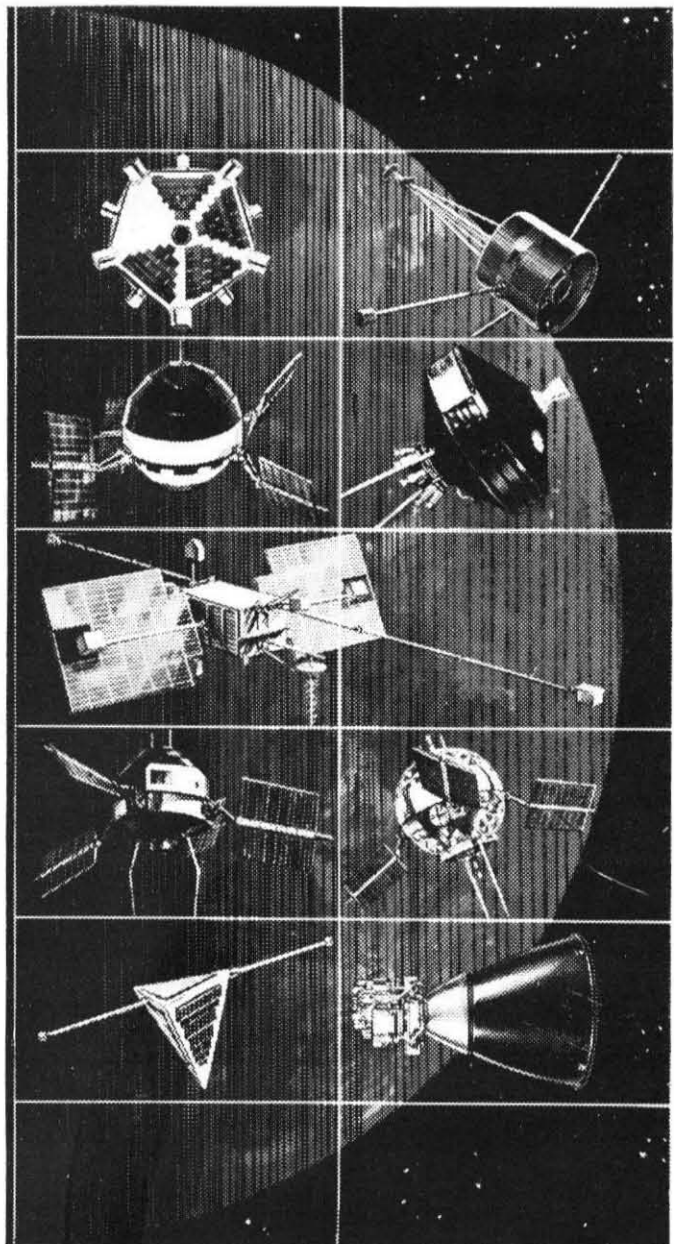
TRW SPACE TECHNOLOGY LABORATORIES *IN PERSPECTIVE*

As the nation's first industrial firm devoted exclusively to missile and space technology, TRW Space Technology Laboratories grew with the national space effort. Since 1957, STL has participated in nearly every manned and unmanned space probe.

Today, 2500 engineers and scientists and 4500 support personnel combine their talents on many STL projects ranging from research and development to design and manufacture of NASA'S OGO spacecraft, Air Force nuclear test detection spacecraft, Tetrahedral Research Satellites, and NASA'S Pioneer spacecraft.

Also underway is the development of the variable-thrust rocket descent engine for LEM, the Lunar Excursion Module of Project Apollo. At the same time STL continues Systems Management for the Air Force's vital Atlas, Titan and Minuteman Programs.

These many space activities create immediate openings for engineers and scientists with experience in Theoretical Physics, Systems Engineering, Radar Systems, Experimental Physics, Applied Mathematics, Space Communications, Space Physics, Antennas and Microwaves, Inertial Guidance, Analog Computers, Solid State Physics, Computer Design, Telecommunications, Digital Computers, Guidance and Navigation, Electromechanical Devices, Engineering Mechanics, Applied Aerodynamics and Propulsion Systems.



For information about positions in Southern California or Cape Kennedy, write STL Professional Placement, Department CT-1, One Space Park, Redondo Beach, California. TRW is an equal opportunity employer.

TRW SPACE TECHNOLOGY LABORATORIES
THOMPSON RAMO WOOLDRIDGE INC.



HYDRAULIC OIL WELL PUMPING SYSTEMS

The engineered solution
to an industry-old problem

KOBE, INC. 3040 East Slauson Avenue
Huntington Park, California



BEHRENDT-LEVY INSURANCE AGENCY

COMPLETE INSURANCE PROTECTION and SUPERVISION

George S. Behrendt, President

325 West 8th Street • Los Angeles 14 • MAdison 2-1261

Seb Gertmenian's

Pasadena **Wholesale Produce Co.**

275 E. ORANGE GROVE
SY 5-9711
PASADENA, CALIFORNIA

We Sell Caltech Their Fresh Fruits and Vegetables



CERTIFIED
CONCRETE
READY MIXED

Light Weight
Concrete

BUILDING MATERIALS

E. LOCKETT & SON

552 South Raymond Ave.
Pasadena, Calif.
Phone: 796-0191

THE CLIQUE

rays

T.S.

Dh

Web

Geo

Carp

Green

dt

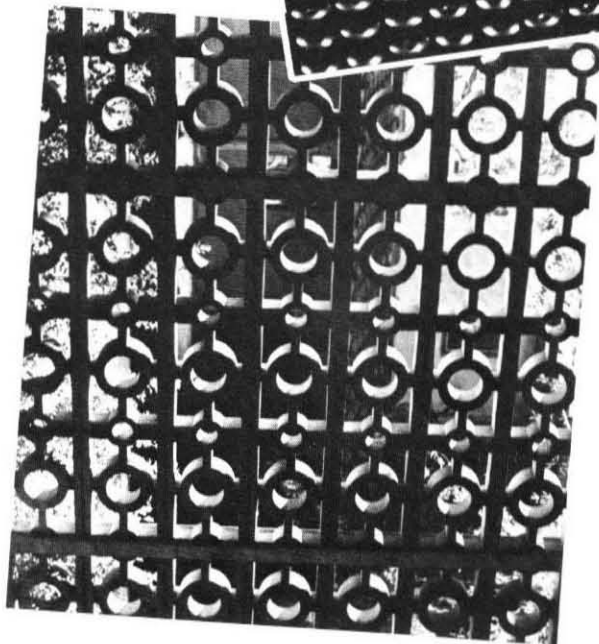
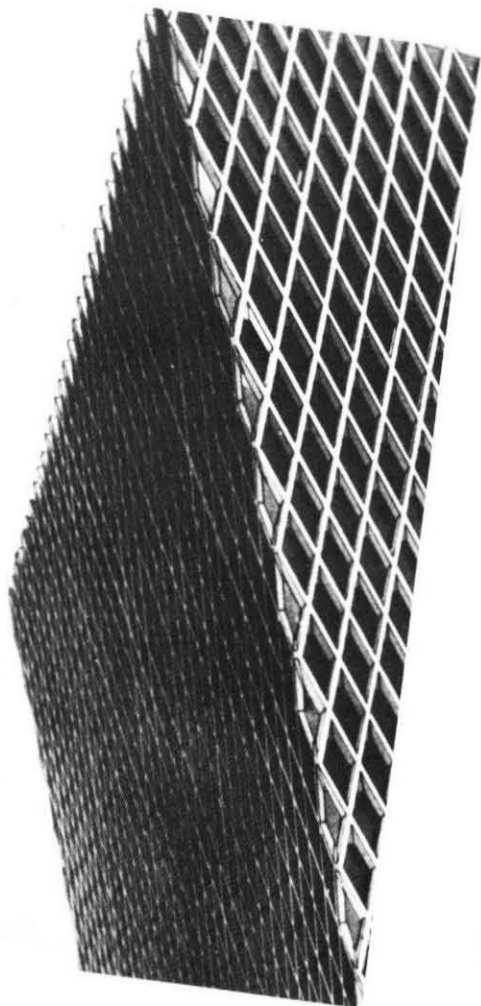
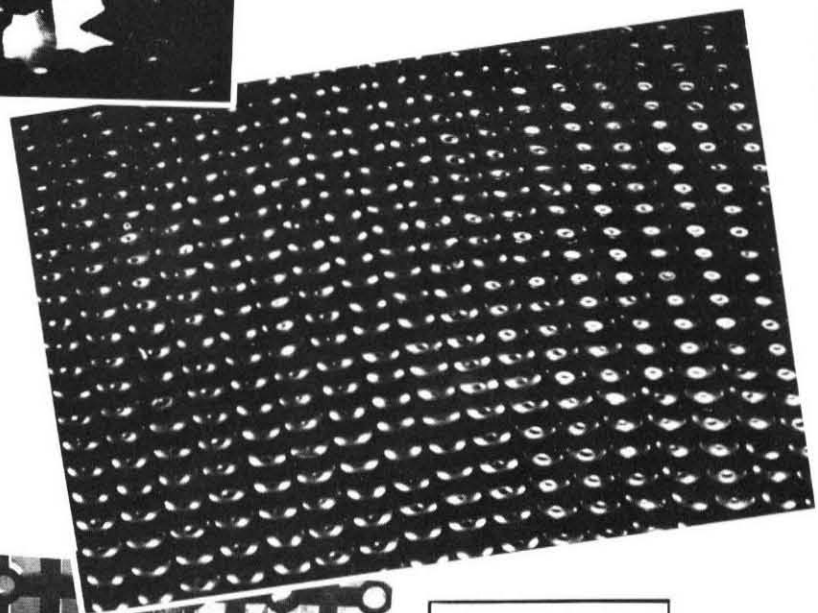
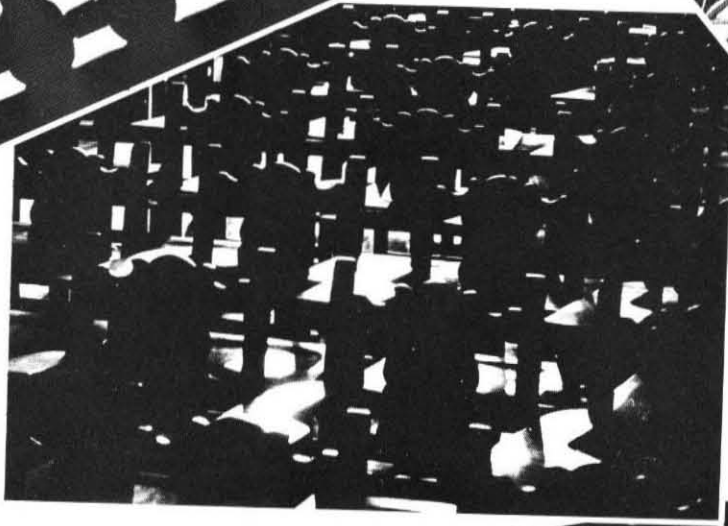
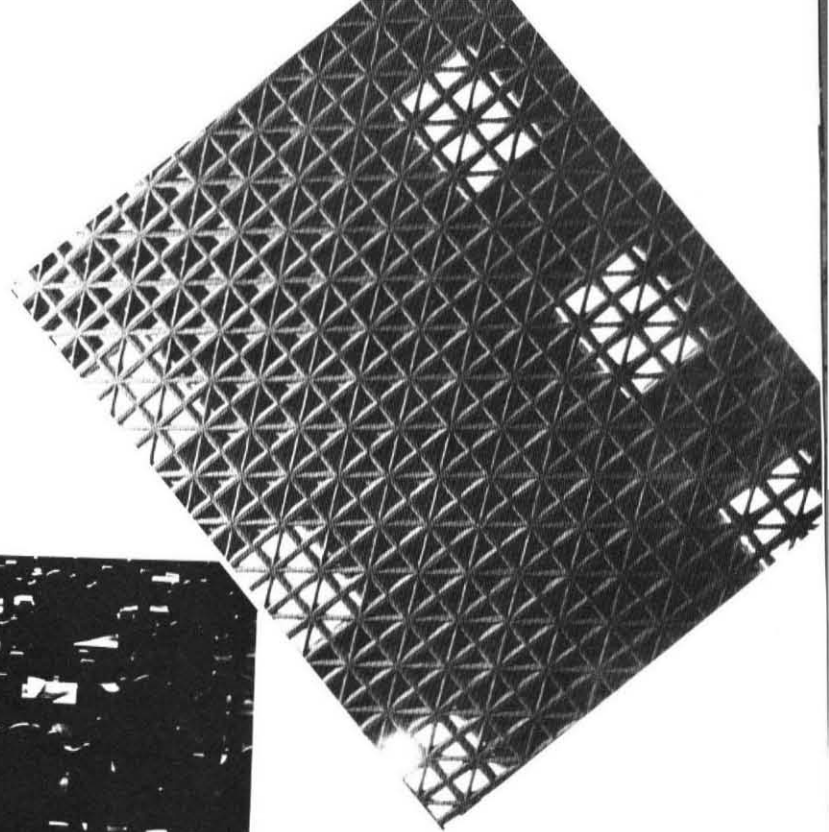
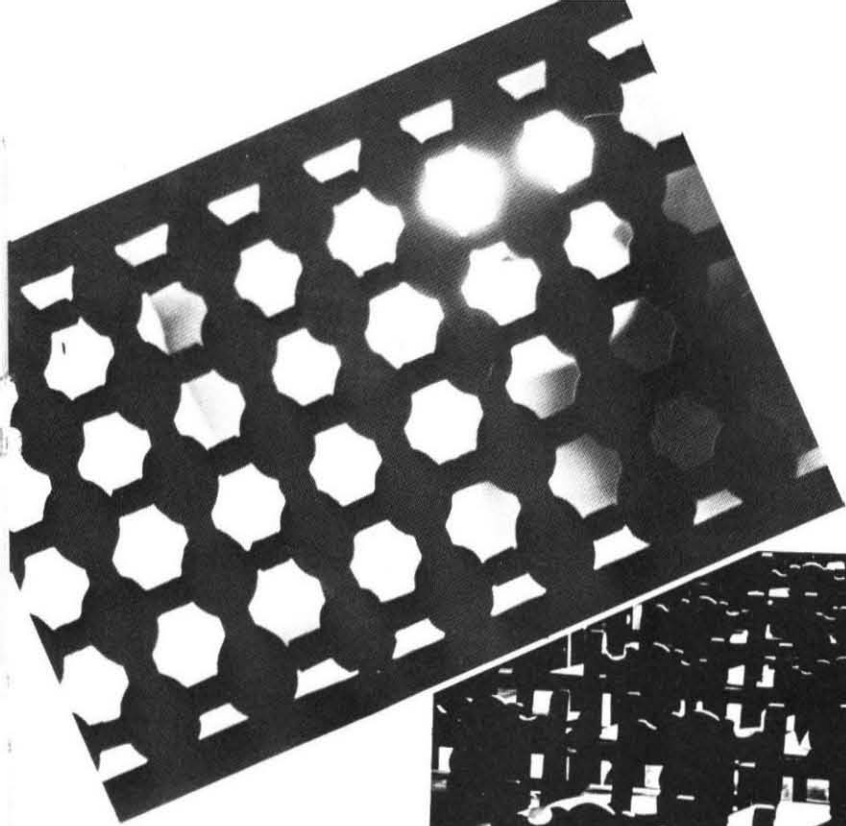
Mac

Dick

Grove

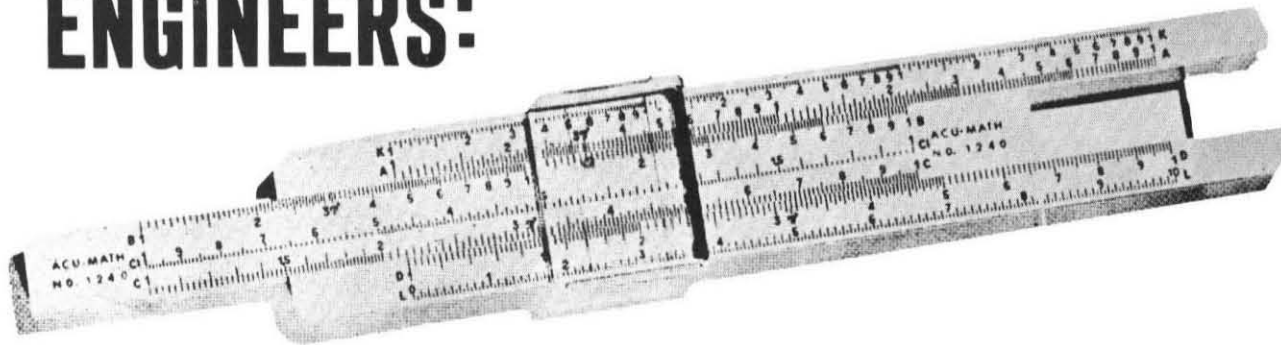
Beaver

Geepsbeer



Well, what
the hell
do you
expect for
5 A.M. ?

ENGINEERS:



CIVIL...MECHANICAL...ELECTRICAL—

Edison offers you both challenge and opportunity in the all-electric future.

If you want a career with challenge, we at Edison would like to talk to you.

We'd like to explain our role in the expanding economy of Southern California. Today, Edison serves more than six million people. In fifteen years it is estimated that approximately nine million will be served.

And we'd like to explain how you can fit into this all-electric future. Unlimited opportunities exist for creative engineers as the demands for electricity continue to grow. To meet these growing demands new

and more efficient engineering construction and operating methods must be developed.

You'll find opportunity at Edison. Because at Edison, you link *your* future with the all-electric future

For full details, write or call:

Mr. F. E. Avery
Southern California Edison Company
P.O. Box 351 • MADison 4-7111
Los Angeles 53, California

Southern California Edison **SCE**

Phone SYcamore 3-8183



Compliments of

H. B. Hubbard Electric Co., Inc.
ELECTRICAL CONTRACTORS

30 East Del Mar, Pasadena, Calif.

"I think I've been poisoned," Tom said sagaciously.



- SALES
- RENTALS

MEN'S FORMAL WEAR

250 South Lake PASADENA SY 6-4651

HOLLYWOOD SHERMAN OAKS SANTA ANA

Big T business managers need more money.

THE WILLIAM WILSON CO.

REAL ESTATE • INSURANCE • LOANS

918 EAST GREEN STREET, PASADENA
SYCAMORE 3-8111 • MURRAY 1-6961

ESTABLISHED 1887

IF YOU DECIDE TO MAKE YOUR HOME IN
SOUTHERN CALIFORNIA, LET US HELP YOU

SELECT IT
FINANCE IT
INSURE IT

SPECIALIZING IN CHOICE RESIDENTIAL PROPERTIES
Sole Pasadena Agents — HARTFORD INSURANCE CO.

HISULS has struck.



AWNINGS
Metal or Canvas
NOW WE MANUFACTURE
PROTECTO COVERS

We Cover Everything

- | | |
|------------------------|--------------------|
| Manufacturers of . . . | Dealers in . . . |
| • Awnings | • Linoleum |
| • Window Screens | • Garden Furniture |
| • Window Shades | • Venetian Blinds |

Protective Coverings for Machinery

G. W. COX & SON

"Just a Shade Better"

63 No. Fair Oaks, Pasadena 1, Calif. SY. 3-2186

Compliments

The
Pantry
Markets

Feynman is not God!

LEE & DANIEL

STRUCTURAL STEEL

1465 E. WALNUT

MURRAY 1-6391

PASADENA

GEDDES PRESS

Printers

WE OFFER A COMPLETE PRINTING SERVICE

LETTER PRESS — OFFSET

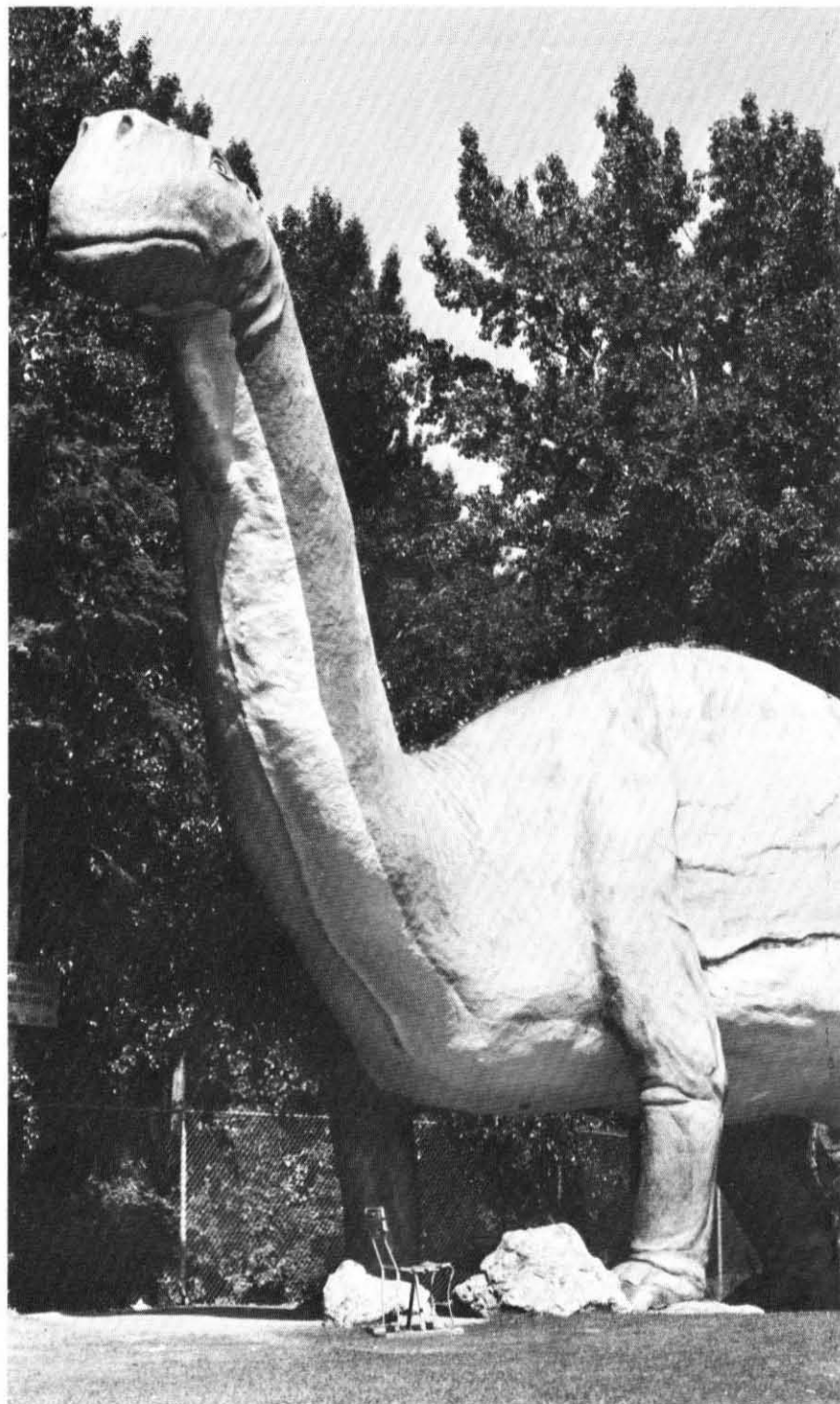
little t printer

795-9955

681-7264

975 East Green Street — Pasadena

Congratulations
To
Bob
Liebermann
And
Art
Johnson



The Liebermann and Johnson Mausoleum, recently erected during the 1963 Interhouse Dance in honor of the two campus leaders, is but one of the new additions to the campus. Proudly does it take place among the other architectural miracles which have appeared in recent years. Its long sweeping arches, being mathematically based upon the intricacies of the famous Parker RF Formulae, vividly represent the thrilling abstractions of the new era of architecture which has descended upon Caltech. This is all we have seen so far, for the interior is yet off limits. We are also awaiting completion of the rear half of our counterpart to Paris's Eiffel Tower so its recipients will take it home.



Your Loyal Protector

Always Vigilant
 Always Brooklyn
 Always Yours



Before



After

This sewage tank was in serious disrepair, threatening to deluge the countryside in 69 feet of garbage at any moment when B & G was called in to repair it. After only 6.9 months and a cost of \$690,000, the job was done. The results, no longer a danger to anyone, can be seen at right. Unfortunately, the countryside was deluged with garbage during repairs.

Can YOU find a place in this thriving organization?
 Can YOU fit into this job of the future?

Don't apply to work at B & G unless

- You feel a need to earn wages without work and have no prior experience or skill.
- You can spend up to six hours eating one sandwich in the student game room.
- You can pass a rigid interhouse physical.
- You have been fired from a minimum of six previous positions for incompetence or laziness.

Can YOU find a place in today's MAN'S B & G? See your local B & G recruiter or come and visit our congenial offices and meet most of our staff.

B & G

Head Office--Right across the street from the Physical Plant Building

Dino's

ITALIAN Inn

*The Place to Feel at Home
Italian Food at its Best*

Home of the Popular Minstrone Soup

"After the theater try Pasadena's
favorite Crown Pizza"

Try Our Newest — PIZZA BURGER

**2055 EAST COLORADO STREET
PASADENA, CALIF., SY 2-0657**

Clark Motel

22 UNITS

14 WITH KITCHENS

AIR CONDITIONED

FREE TV & HI FI IN ALL ROOMS

HEATED POOL

3019 E. Colorado St.
Pasadena, Calif.

Phone
SYcamore 2-2121

SYcamore 9-1711

MUrray 2-1875

Technical Glass Blowing

Custom Apparatus

Glass to Metal

Distilling Apparatus

Manometers

Condensers

Vacuum Processing

Vacuum Manifolds

Vacuum Tubes

Glass Metalizing

Graded Seals

GLASS INSTRUMENTS, INC.

2285 E. Foothill Blvd. SY 2-7348

"I'm glad I'm not a speaker. I'd probably
turn myself on all the way and blow myself!"
--Simple Sam



Fortifiber
CORPORATION

manufacturers of

Building Papers

Paper Shipping Bags

4489 BANDINI BOULEVARD LOS ANGELES 23, CALIFORNIA

MOCK Printing

1122 MISSION STREET

SOUTH PASADENA, CALIFORNIA

SYcamore 9-1711 • MUrray 2-1875

Welcome to the

CAMPUS BARBERSHOP

in Winnett Center

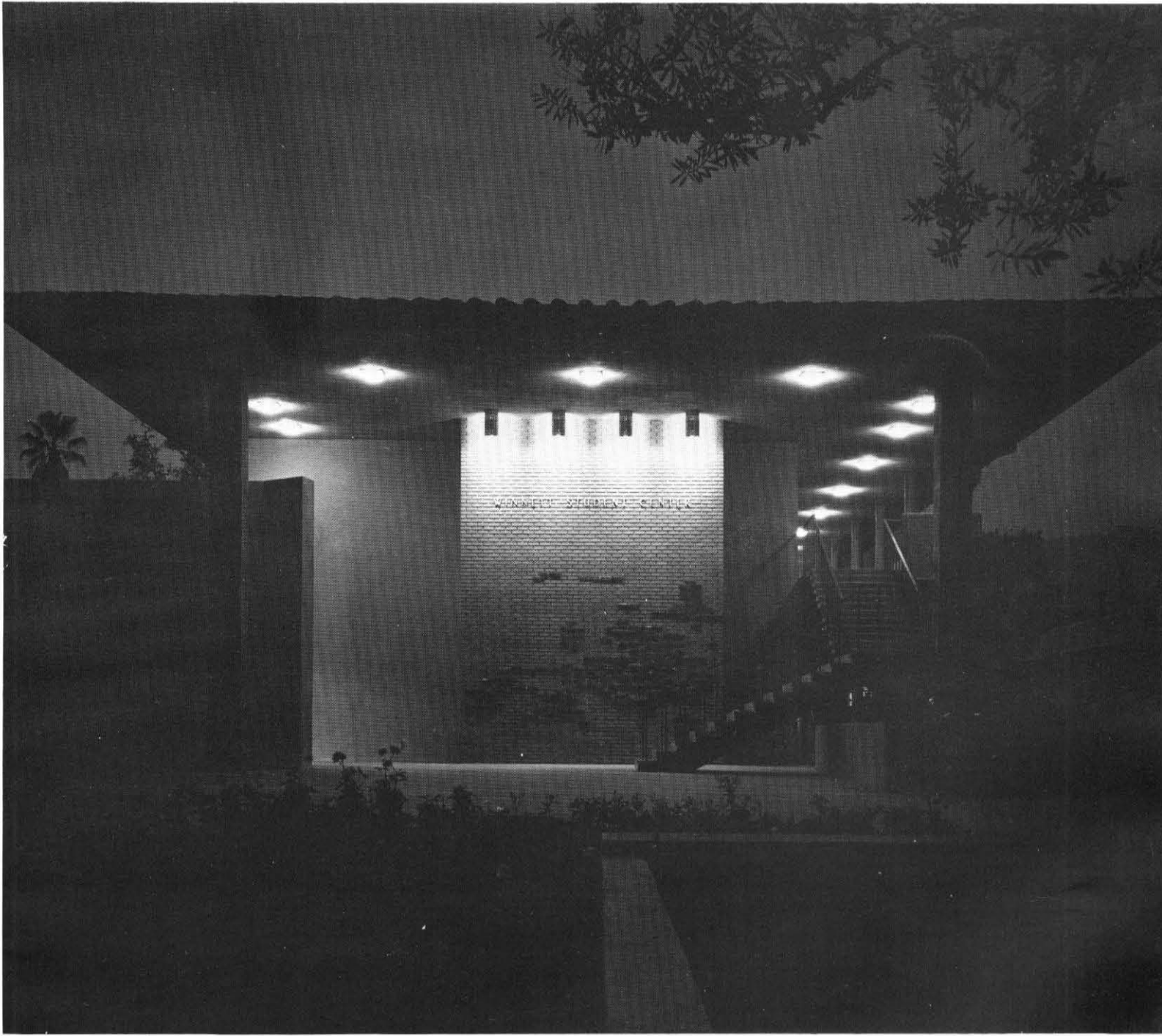
All Haircuts \$1.75

Three Barbers to Serve You

8 to 5:30 Monday - Friday

Paul A. Harmon

Lieberman was never just half-ASCIT;
He was always a complete ASCIT whole.



**Best Wishes to the Class of 1964
From Your Caltech Bookstore**

Advertisers

American Yearbook Company	177
Barnett, Smith, and Salit	172
Behrendt-Kevy Insurance	183
Blacker Waiters	180
Bob's	178
Calif. Rexall Pharmacy	172
Caltech Bookstore	191
Caltech Food Service	177
Campus Barber Shop	190
Carnation Company	179
Clark Motel	190
Clique, The	184
Dedrick's	186
Dino's Italian Inn	190
Douglas Aircraft Company	174
E. Lockett & Son	183
Emmet & Chandler	179
FMC Corporation	173
Fortifiber Corporation	190
Geddes Press	187
Glass Instruments, Inc.	190
G. W. Cox & Son	187
H. B. Hubbard Electric Co.	186
Independent Star News	179
Jet Propulsion Laboratory	176
Kobe, Inc.	183
Lee & Daniel	187
Maryland Studio	177
M. J. Brock & Sons, Inc.	175
Mock Printing	190
Pantry Markets, The	187
Pasadena Wholesale Produce Company	183
Royal Laundry, The	172
S. K. Smith Company	177
Southern California Edison Company	186
Space Technology Lab	182
Stuft Shirt Restaurant	183
Sunny Italy	177
William Wilson Co.	187
Y.C.F. & G. Society	180

Book Index

AICHE	138	HOUSES	
Alpha-Phi-Gamma	117	Blacker	60
Alpine Club	140	Dabney	66
Alumni Pages	144	Fleming	72
ASCIT Assemblies	123	Lloyd	78
ASCIT President	109	Page	84
Auto Eng. Club	142	Ricketts	90
		Ruddock	96
Band	121	Honor Keys	124
Baseball Team	166		
Basketball Team	157	IHC	110
Beavers	130	In Memoriam	4
Beckman Auditorium	104	Interhouse Sing	133
Big T Staff	2		
BOC	111	Jose Frink	98
BOD	108		
Booth Computing Center	102	Karate	140
Bud and Travis	125		
		Little t	116
California Tech	114	Lower Page	142
Campus Personalities	20		
Chem E's Sink	Low	Manager of Student Houses	59
Chem 46 Needs More	Units	Master of Student Houses	59
Chemistry Club	138	Math Club	139
Chess Club	141	Model U.N.	122
Chinese Students	141	Mole	98
Christian Fellowship	137	Mudeo	119
Christian Science	137		
Class Officers		Newman Club	137
Senior	28	New Officers	131
Junior	135	Nobel Winner Pauling	5
Sophomore	134		
Freshman	136	Physics Club	139
Coffee Hours	122		
Coin Club	142	Radio Club	141
Cross Country Team	151	ROTC	113
Debate	139	SENIORS, by options	
Deseret	138	Astronomy	31
		Biology	32
Election Committee	130	Engineering	34
EPC	112	Geology	40
ExComm	112	Chemistry	41
		Mathematics	45
FACULTY		Physics	48
Air Science	14	Lost Sheep	55
Astronomy	18	Service League	143
Biology	10	Shots Around Campus	22
Chemistry	11	Soccer Team	152
Engineering	12	Swimming Team	160
Geology	19		
Humanities	15	Tau-Beta-Pi	117
Mathematics & Physics	17	Tennis Team	164
Physical Education	168	Totem	116
Fencing Club	140	Track	162
Football Team	148		
		Water Polo Team	155
Glee Coub	120		
Golf Team	156	YMCA	126



