

SAN DIEGO

SUMMARY: Established when a marine station on the Pacific Ocean in La Jolla was made part of the University of California in 1912. It eventually grew to become Scripps Institution of Oceanography. The Institute of Technology and Engineering was established in 1958. The area was designated as a general campus in 1959. Statistics as of 1965—Enrollment: 868 undergraduates, 568 graduate students. Divisions: two colleges, one school, 16 departments of instruction (13 in Revelle College and three in Scripps Institution of Oceanography), six institutes. Faculty: 80 full professors, 31 associate professors, 44 assistant professors, three other faculty. One hundred living alumni (all graduate degrees). Chief Campus Officer: John S. Galbraith.

The San Diego campus of the University of California had its origins in the closing years of the nineteenth century, when zoologists at Berkeley, setting out to establish a marine station on the Pacific, selected a site at La Jolla.

Land and a building were given the Scripps Institution of Marine Biology by Mr. E. W. Scripps and Miss E. B. Scripps in 1909. In 1912, about a quarter section of land and improvements were deeded to the Regents of the University. By 1925, the scope of the activity had broadened and the name was changed to the SCRIPPS INSTITUTION of Oceanography.

From this beginning of a gift of land and a single building, a faculty eminent for its achievements emerged. The institution has become a mecca for marine scientists from all over the world and is known today as the foremost center of oceanographic research and instruction in the world.

In 1955, the California State Legislature requested the Board of Regents to investigate the desirability of establishing a branch of the University at San Diego. At their July 18, 1958 meeting, the Regents authorized the establishment at La Jolla of an Institute of Technology and Engineering. The action followed resolutions presented in August, 1956, for a graduate teaching and research activity in science and technology and in August, 1957, for a general campus of the University in the San Diego area.

These actions were designed to help fill the need for expansion of the University to meet current and predicted population growth. The emphasis on graduate work in science, technology, and engineering resulted from the special needs expressed by San Diego civic, industry, and service groups and the greatly increased demands for scientific education and research because of their importance to national security.

Evidence of strong local support for the University's expan-

sion plans in San Diego was reflected by the action of the city council (and overwhelmingly approved by the voters in the 1956 and 1958 elections) in offering the University, free of cost, more than 500 acres of choice city-owned land which had a value of several millions of dollars. The University administration was authorized to seek assurances from the federal government that additional adjacent land would be given to the campus.

At their meeting on August 15, 1958, the Regents selected Roger Revelle, director of the Scripps Institution of Oceanography since 1951, to head the new facility.

On April 17, 1959, the Regents voted to change the name of the Institute of Technology and Engineering to the School of Science and Engineering. The new school was to provide instruction and research in mathematics, physics, chemistry, the earth and biological sciences, and engineering. It was established, according to the Regents' resolution, with the understanding that it "later may be converted into one or more departments of instruction and research. The faculty of the school should be appointed with the expectation that they eventually will carry a full teaching load and will engage in undergraduate instruction as well as in graduate instruction as the need arises."

A month later, at its May 15 meeting, the Board of Regents approved the development of the La Jolla site as a general University campus to be known as the University of California, La Jolla.

The first faculty appointment for the School of Science and Engineering was made in July, 1957, and was supported by a large grant of funds from the General Dynamics Corporation. By June 30, 1959, seven faculty appointments had been made and a total of 36 appointments had been approved for the 1959-60 fiscal year. The school enrolled its first graduate students in 1960 in the physical sciences.

From this beginning, the program was rapidly developed in the humanities and social sciences. Today, research ranges from the problems of cosmochemistry to studies of seventeenth-century philosophy. The teaching program reflects a broad spectrum of learning, with offerings in aerospace and mechanical engineering sciences, applied electrophysics, biology, chemistry, earth sciences, economics, history, languages, linguistics, literature, philosophy, physics, and psychology.

The Regents on November 18, 1960, selected the University of California, San Diego, as the name for the general campus in the La Jolla-San Diego area. At the same time they voted that the Scripps Institution of Oceanography should continue to be

known as the University of California's Scripps Institution of Oceanography, La Jolla.

The building space situation was critically deficient until two new buildings on the Scripps campus were completed during 1960. On February 17, 1961, Herbert F. York, a physicist who had been appointed director of defense research and engineering by President Eisenhower, was appointed the first chancellor of the San Diego campus. York assumed the new office on July 1, 1961.

The School of Science and Engineering was able to move from the Scripps Institution buildings and undergo expansion during the summer of 1963, when the first construction on the former city-owned land, a seven-story science and administration building, was completed.

When, according to its master plan, San Diego reaches its maximum growth of 27,500 students by 1995, the campus will consist of 12 interrelated colleges, each of which will enroll about 2,300 students. To reflect the changing nature of the rapidly growing institution, the Board of Regents, at its October 18, 1963 meeting, approved the changing of the name School of Science and Engineering to the First College.

The campus had already branched into fields other than science and engineering with the establishment of Departments of Philosophy and Literature during 1963. In the fall of 1964, the campus opened for undergraduates offering a basic lower division curriculum preparing students for upper division majors in the humanities, the social sciences, the biological sciences, the physical sciences, and mathematics. A total of 181 freshmen enrolled in the pioneering undergraduate class.

In November, 1963, for reasons of health, York asked to be relieved of his duties as chancellor. A year later, in December,

1964, John S. Galbraith, vice-chancellor and professor of history at San Diego, was named to succeed York. Galbraith, formerly professor of history and chairman of the department at Los Angeles, was formally inaugurated as chancellor of the San Diego campus on November 5, 1965.

On January 22, 1965, the Board of Regents voted to honor the educator and scientist who had done much of the early planning and ground work for the emerging campus. By order of the Regents, the First College was renamed Revelle College. Revelle had served as director of Scripps Institution of Oceanography for 13 years and had been named University dean of research in 1962. He resigned both posts in September, 1964, to become director of the Center for Population Studies at Harvard University. Today Revelle College is a complex of six major classrooms and laboratory buildings surrounding a central plaza.

The Second College began to organize in 1964 and is scheduled to accept its first students in the fall of 1967. It was renamed John Muir College in April, 1966. It is presently centered at the former Camp Matthews Marine Corps Rifle Range, which was deeded to the San Diego campus by the federal government in 1963.

The School of Medicine on the San Diego campus, the third medical school in the University system, began organization with the appointment of Dr. Joseph Stokes, III, as dean in 1964. The school will accept its first group of 32 students in the fall of 1968.

The San Diego campus is situated on a site of nearly 1,000 acres that spreads from the sea front, where the Scripps institution is located, across a large portion of adjacent Torrey Pines Mesa high above the Pacific. Much of the land is wooded with graceful eucalyptus; to the east and north lie mountains, to the west the sea. Land holdings operated by San Diego, including the former San Diego County Hospital, total 1,722 acres.—
PAUL WEST

ADMINISTRATIVE OFFICERS

Chief Campus Officers: The chancellor has been the chief administrative officer on the San Diego campus since February of 1961, six months after the establishment of the unit which has now become its first college.

HERBERT FRANK YORK, first chancellor of the San Diego campus, was born in Rochester, New York, on November 24, 1921. He received his A.B. degree in physics from the University of Rochester in 1942; his M.A. degree in 1943. In 1949 he was awarded the Ph.D. in physics from the University (Berkeley) and in 1950 participated in a major diagnostics experiment in Eniwetok in the Marshall Islands. York returned to Berkeley in 1951 and, a year later, initiated and directed the laboratory program at Livermore which conducted research under Atomic Energy Commission sponsorship. In 1958, he became chief scientist of the Advanced Research Projects Agency in Washington, D.C. President Eisenhower appointed him director of Defense Research and Engineering; he was reappointed to this position by

President Kennedy. York was named chancellor on February 17, 1961, a position he



Herbert York
1961-1965

held for nearly four years. In 1965, he was appointed vice-chairman of the President's Science Advisory Committee by President Johnson.

JOHN SEMPLE GALBRAITH, chancellor since January 1965, is the key figure in directing



John Galbraith
1965-

the growth and development of the San Diego campus. Born in Glasgow, Scotland, on November 10, 1916, he received his A.B. degree from Miami University (Ohio) in

1948. From 1948 to 1964 he served as assistant professor, associate professor, and professor of history. He was chairman of the Department of History from 1954 to 1958. Galbraith joined the staff at San Diego as vice-chancellor in July, 1964. Six months later he was appointed chancellor.—EF

Vice-Chancellor

JOHN S. GALBRAITH July-Dec. 1964

*Vice-Chancellor
for Academic Affairs*

CARL H. ECKART 1965-

Vice-Chancellor—Business and Finance

ROBERT H. BIRON 1964-

Dean of Graduate Studies

KEITH A. BRUECKNER Feb.—June 1965
MARTIN D. KAMEN June—Sept. 1965

Registrar and Admissions Officer

JOHN W. BROWN 1963-

Dean of Student Affairs

THEODORE W. FORBES 1962-

Dean of the First College

KEITH A. BRUECKNER 1963-1965
The college was renamed Revelle College in January, 1965, and its executive officer was designated as provost.

Provost of Revelle College

EDWARD D. GOLDBERG 1965-

Provost of the Second College

JOHN L. STEWART 1965-1966
The college was renamed Muir College in April, 1966.

Provost of Muir College

JOHN L. STEWART 1966-

Dean, School of Science and Engineering

ROGER R. REVELLE 1959-1961
JAMES R. ARNOLD (acting) 1961-1962
DAVID M. BONNER (acting) 1962-1963
KEITH A. BRUECKNER Jan.—June 1963
The school was discontinued when K. A. Brueckner became dean of the First College in campus reorganization in 1963.

Dean of the School of Medicine

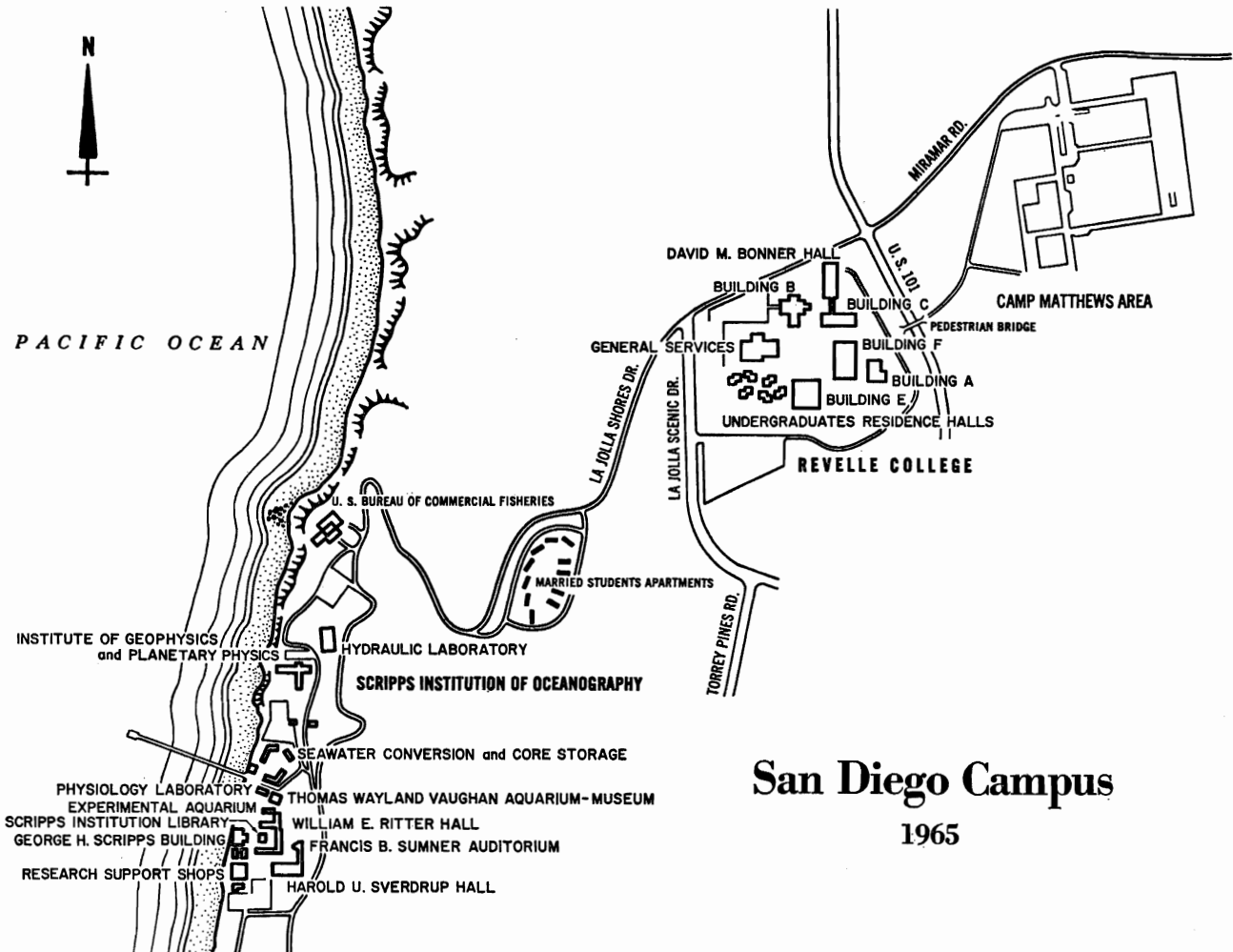
JOSEPH STOKES, III 1963-

SAN DIEGO BUILDINGS AND LANDMARKS

STRUCTURE	DATE COMPLETED	SIZE IN OUTSIDE GROSS SQ. FT., MATERIALS	BUILDING COST	FINANCING	ARCHITECT	HISTORY
AQUARIUM MUSEUM	1950	14,410 concrete	\$207,107	State appropriation	Frank L. Hope	
BONNER HALL	1964	111,704 concrete	\$3,200,185	State appropriation; federal grant	Risley & Gould & Van Heuklyn	Provides space for School of Medicine, the chemistry dept., the biology dept., vivarium, academic offices and research labs, classrooms and undergraduate labs (temporary).
BT (BATHYTHERMOGRAPH) STORAGE STRUCTURE	1954	164 concrete	\$900			To be demolished.
BUILDING B (Administration Building)	1963	148,181 concrete	\$3,481,937	State appropriation	Risley & Gould	For administrative offices (temporary), academic offices, research labs, classrooms, computer center, machine shop, graduate science library (to 1972).
CENTRAL UTILITIES BUILDING	1963	12,240 concrete	\$786,775	State appropriation	Risley & Gould	Houses telephone office and utilities plant.
CORPORATION YARD COMPLEX BUILDINGS AND GROUNDS	1950	3,498 concrete block	\$12,173			To be demolished.
EQUIPMENT COMPOUND AND WAREHOUSE	1965	6,300 concrete block	\$44,200	State appropriation; Scripps Clinic and Research Foundation	Simpson-Gerber	
EXPERIMENTAL AQUARIUM	1958	2,300 concrete block	\$71,113	State appropriation	Frank L. Hope	
Addition	1965	3,753 wood	\$44,800	State appropriation	Architects & Engineers	
GEODESIC DOMES	1959	930 wood	\$6,000			For magnetic studies; to be demolished.
GEOPHYSICS & PLANETARY PHYSICS, INSTITUTE OF	1963	37,423 wood	\$657,079	Gifts; National Science Foundation grant; state appropriation	Lloyd Ruocco	
HUMANITIES-LIBRARY BUILDING	1965	107,000 concrete	\$3,411,000	State appropriation	Deems-Martin	Humanities and social sciences depts., academic offices, library, classrooms.
HYDRAULIC LABORATORY	1964	16,100 wood	\$237,600	National Science Foundation grant	Frank L. Hope	
LIBRARY	1916	11,906 concrete	\$19,400		Wheeler & Halley	
Alterations	1961		\$24,839	State appropriation	Weston, Liebhardt & Weston	
NORTH GARAGE	1950	1,435 concrete block	\$5,000			To be demolished.
PHYSICS-CHEMISTRY BUILDING	1963	106,633 concrete	\$3,081,440	State appropriation; federal grant	Risley & Gould	For physics and chemistry depts., academic offices and research labs.

SAN DIEGO BUILDINGS AND LANDMARKS

STRUCTURE	DATE COMPLETED	SIZE IN OUTSIDE GROSS SQ. FT., MATERIALS	BUILDING COST	FINANCING	ARCHITECT	HISTORY
PHYSIOLOGICAL RESEARCH LABORATORY	1965	18,190 concrete	\$381,000	National Science Foundation grant	Aetron	
PIER BUILDINGS	1916	460 wood	\$3,000			
PURCHASING-STOREHOUSE	1953	5,506 concrete block	\$40,000			To be demolished.
RADIO BUILDING	1952	1,942 wood	\$20,000			To be demolished.
RESEARCH SUPPORT SHOP	1960	7,497 metal	\$60,000			Lower campus machine shops; to be demolished.
RESIDENTIAL APARTMENTS—STEP 1	1962	71,990 wood and stucco	\$892,095	Loan	Mosher & Drew	Student apartments.
RESIDENTIAL HALL—STEP 1	1965	78,000 concrete	\$1,550,000	Loan	R. E. Alexander	Accommodations for 400 students (coeducational).
RITTER HALL	1931	85,487 concrete	\$120,000	State appropriation	Louis J. Gill; W. P. Stevenson	For chemistry, marine biology, micro-biology depts.
Addition	1956	20,821 concrete	\$458,870	State appropriation	Frank L. Hope	



San Diego Campus
1965

SAN DIEGO BUILDINGS AND LANDMARKS

STRUCTURE	DATE COMPLETED	SIZE IN OUTSIDE GROSS SQ. FT., MATERIALS	BUILDING COST	FINANCING	ARCHITECT	HISTORY
RITTER HALL (cont'd.)						
Addition	1960	49,628 concrete	\$1,290,763	State appropriation	Frank L. Hope	
RITTER RESEARCH YARD	1931	1,200 wood	\$10,000			To be demolished.
SCRIPPS BUILDING (old)	1910	6,980 concrete	\$9,700		Irving J. Gill	First building on the Scripps campus; two stories with 12 laboratories and one large room; to be demolished.
SCRIPPS BUILDING (new)	1959	9,533 wood	\$220,500		Risley & Gould	Provides space for Scripps director, marine biology, lower campus food service.
SEA WATER CONVERSION AND CORE STORAGE FACILITY	1962	6,630 concrete	\$108,337	State appropriation	Risley & Gould	
STORAGE BUILDING	1954	2,700 concrete	\$25,000			Research laboratory; to be demolished.
SUMNER HALL	1960	5,595 concrete	\$1,687,300	State appropriation	Risley & Gould	248-seat auditorium.
SVERDRUP HALL	1960	62,285 concrete	(in above cost)	State appropriation	Risley & Gould	Marine Physical Laboratory; accommodates medical staff.
TEMPORARY BUILDINGS	1915-1960	wood				Eighteen structures housing administrative offices, laboratories, lower campus student center; all to be demolished.
UNDERGRADUATE SCIENCES BUILDING		105,547 concrete	\$4,338,100	State appropriation; federal grant	Neptune & Thomas	Undergraduate laboratories and classrooms. Funded or under construction.
WEST GARAGE	1950	4,044 concrete block	\$14,073			To be demolished.

COLLEGES AND SCHOOLS

Muir College: See SAN DIEGO CAMPUS.

Revelle College: See SAN DIEGO CAMPUS.

School of Medicine: For many years, interest has been expressed in establishing a school of medicine in the San Diego area. Recognizing an obligation to educate additional physicians to serve the state's expanding population, the Regents of the University formally voted in February of 1962 to establish a third school of medicine and the search for a dean began.

In January, 1964, Dr. Joseph Stokes, III began his duties as dean of the School of Medicine at the San Diego campus. During the intervening months, academic and architectural planning has accelerated and key faculty members are now (November, 1965) being recruited.

The first class of medical students will enroll in the fall of 1968 and plans call for a progressive increase to an entering class size of 96 students.

The School of Medicine will offer a unique, experimental curriculum that will emphasize close affiliation with the general campus and maximum flexibility. The first year will be

taught primarily by faculty members from the graduate department at San Diego with graduate students and medical students taking the same course in cell biology. Formal demonstration laboratories for first-year medical students will be replaced by rotation through various research laboratories similar to that given to first-year graduate students in biology. Opportunities in research will be enhanced by the uniquely integrated relationship with the faculty in the behavioral and social sciences and the graduate Departments of Biology, Chemistry, Physics, and Mathematics. At least 20 per cent of the student's time will be free to pursue research or other elective activities.

The second-year curriculum will introduce the student to organ structure and function in health and disease and will also include an integrated course in the neurosciences and courses in pathogenic microbiology and pharmacology. During this year, students will be assigned to 16-man multidiscipline laboratories where they will be supervised by instructors from various departments of the School of Medicine.

During the third year, students will be introduced to the tools of clinical medicine and will pursue a core clinical curriculum at the three hospital facilities which will be oper-

ated by, or affiliated with, the School of Medicine. This will allow a fourth year which will be largely elective and which should allow a student to pursue his individual interests by taking medical or surgical clerkships, clinical or basic science electives, or continued research.—JOSEPH STOKES, III, M.D.

DEPARTMENTS OF INSTRUCTION

Aerospace and Mechanical Engineering Sciences officially started operation on April 1, 1964, with the arrival of the first four faculty members: Stanford S. Penner (chairman), Hugh Bradner, Forman A. Williams, and Sinai Rand. Richard W. Patch had started some months earlier, with the help of a technician, to transfer Penner's fully equipped shock-tube and spectroscopy laboratory from the California Institute of Technology.

By September 1, 1964, a distinguished faculty covering combustion and propulsion sciences, gas dynamics, fluid mechanics and related fields had been assembled which included Paul A. Libby and Daniel B. Olfe; this group was joined in January, 1965, by John W. Miles. By September, 1964, there were 15 graduate students enrolled. Graduate enrollment reached 19 in January, 1965.

During 1965, the first important steps were taken in complementing the existing faculty by the addition of an outstanding group of people in solid mechanics and structures, which included the great pioneer in applied mechanics, structures and applied mathematics, William Prager from Brown University. William Nachbar, N. C. Hunag, and Chester Van Atta completed the faculty roster in June, 1965.

By June, 1965, the department had become firmly established as one of the important graduate study centers in the country (See NOTE); it was gearing up for the expected arrival of 40 additional graduate students, had enrolled five post-doctoral fellows, formulated an undergraduate curriculum leading to the degree of applied science that complemented the unique program of lower division education which was being developed in Revelle College on the San Diego campus, and had numerous research programs in fluid mechanics, (radiation) gas dynamics, reentry physics, plasma physics and magnetohydrodynamics, combustion and propulsion theory well under way. Sizable government research grants had been received to support both theoretical and experimental studies. The Ph.D. and M.S. degree curricula in engineering science had been designed with the hope of immunizing participants permanently against the type of technical obsolescence which was known to plague earlier graduates of engineering schools. — S. S. PENNER

NOTE: In the aerospace community, it was affectionately referred to as "the La Jolla sink"; over a period of a few months, more than 50 professional candidates from all parts of the world had to be turned down because of the absence of suitable openings at the San Diego campus.

Biology: The biology department was initiated with the appointment of the late David Mahlon Bonner as the first professor and chairman. Bonner was an internationally famous biochemical geneticist, who left his position as professor of microbiology at Yale University to take up the challenge of creating a new University department in La Jolla. He arrived in December, 1960 and was joined by three other members of the original faculty: John A. DeMoss, Stanley E. Mills, and S. Jonathan Singer. This group initiated a research and graduate teaching program in cell and molecular biology in temporary quarters in Sverdrup Hall of the Scripps Institution of Oceanography, closely allied with a group of faculty members in the Department of Chemistry, including Martin D. Kamen, Stanley L. Miller, and Bruno H. Zimm. After a little more than three years in La Jolla, during which brief time he made very great contributions to the future of the University, Bonner died at the age of 48. He was succeeded in June, 1964 by Singer. Early in 1965, the Department of Biology and part of the Department of Chemistry moved into what was first

known as Building D. This permanent building was dedicated in May, 1965 as David M. Bonner Hall. In July, 1965, the chairmanship of the department was taken over by Clifford Grobstein, formerly of Stanford University. The department is now intensively preparing its first undergraduate course offerings to supplement its graduate program.—S. JONATHAN SINGER

Chemistry was one of the early departments outside of the Scripps Institution authorized in the development of the University at San Diego. It was officially established in the spring of 1961, under the chairmanship of Professor James Arnold, and operated in George Scripps Hall and Sverdrup Hall on the Scripps campus. Joseph E. Mayer succeeded Professor Arnold as chairman in 1963.

In March, 1964, the department began its move to the upper campus, which is now complete. Before the official inception of the department, several of its present faculty had accepted appointments at La Jolla.

At the time of the initial organization only the Ph.D. degree was offered; the first was awarded in 1963. In 1965, authority to grant the M.S. degree was requested and granted. In the fall of 1961, 11 students entered. The enrollment in autumn 1962 was 14; in 1963 it was 26; and in 1964, it was 38. Three students completed their doctoral requirements in 1965, and one student received the master's degree.

Partially due to the small size of the department, the emphasis on lectures as a means of instruction has been small. Relatively few graduate courses are given, and a close student-faculty relationship has been attained.

The undergraduate curriculum of Revelle College includes physical science in the first and second year, but the instruction in chemistry takes place only in the sophomore year, so that no undergraduate courses have yet (1965) been given. However, considerable effort has already gone into the planning of the future undergraduate curriculum.—JOSEPH E. MAYER

Earth Sciences: This department, the first academic department on the San Diego campus, was established July 27, 1959 as the initial stage in the expansion of the specialized La Jolla campus to a general campus. The original graduate degree given by the department was the Ph.D. in geochemistry, which had previously been administered through the Scripps Institution of Oceanography. With the development of the more general curriculum, this was changed and the department now gives undergraduate and graduate degrees in earth sciences. The department also served as a nucleus for the development of the Department of Chemistry until faculty strength in chemistry was sufficient to organize an independent department. These two departments still maintain very close ties with each other in teaching and research.

The present faculty numbers 15 full-time professors with interests in almost all aspects

of the earth, marine, and atmospheric sciences. Seven of these men are associated with the Scripps Institution of Oceanography in its Division of Earth Sciences and four men are members of the Institute of Geophysics and Planetary Physics. The present curriculum includes 20 graduate and nine undergraduate one-quarter courses. The student body numbers 35 graduate students and some 12 undergraduates who will reach their junior year in the new Revelle College next year and become formal majors.

The department offers two general graduate curricula, one in geology-geochemistry and one in geophysics, which are directed toward applications of the analytical, experimental, and theoretical aspects of physics and chemistry to the earth and space sciences. Field courses in geological and oceanographic work are given. Extensive participation in research is emphasized.

A major curriculum innovation has been the development of an annual summer field course built around a departmental sea-going expedition. On these expeditions, organized around staff research projects, students participate in field work at sea, on islands, and on adjacent continental areas, carrying on studies in marine and terrestrial geology, geochemistry, and geophysics. Formal lectures and seminars are given on the ship by staff members and visiting professors. Much of the work is published by the students themselves. These unique "expedition courses" using the Scripps institution research ships have operated in the following areas: San Benitos expedition (1961—San Benitos Islands); Zephyrus expedition (1962—San Diego-Martinique, Mid-Atlantic, Mediterranean, Red Sea); Bonacca expedition (1963—Guatemala, Panama, Caribbean Sea); Carrousel expedition (1964—San Diego-Easter Island, Juan Fernandez Islands, Chile, Clipperton, and San Benedicto Islands); Papagayo expedition (1965—San Diego-Costa Rica, Guatemala Basin, Mexico). A special volume on the results of Bonacca expedition will be published by the University of California Press.—HARMON CRAIG

Economics: The first chairman of the department, Seymour E. Harris, arrived at San Diego in January, 1964. For 1965-66, the faculty is expected to consist of five members; by 1966-67, it will have seven members. Undergraduates who will be required to take the elementary course in economics in 1965-66 will number 150 and in 1966-67 an estimated 600. Six graduate students are expected in the academic year 1965-66 and 14 are expected by 1966-67.

The department has tried one innovation, namely to keep down the number of courses. The intention is to have six fundamental courses for both undergraduate and graduate students: Economics 1, which will be for undergraduates only, Economic History, Public Policy, Quantitative Economics, Micro-Economics, and Macro-Economics. In the development of these courses the staff will deal with monetary problems, labor problems, and similar fields, but they will

Another innovation will be the introduction of freshman seminars, which have been especially successful at Harvard. Freshmen will have increased opportunity to write papers, do independent work, and will not depend excessively upon lectures by senior professors.

In building up the department, an attempt is being made to obtain faculty members of differing ideologies and interests, such as mathematical economists, Keynesian economists, and those whose bent is classical economics.—SEYMOUR E. HARRIS

Linguistics: The Department of Linguistics on the San Diego campus was formed in April, 1964. In 1964–65, the department administered the basic language training program for the pilot freshman class and began its program of graduate instruction and research in linguistics. Beginning with a single member at its formation, the department plans to grow to 13 professors, plus a large staff of native speakers of foreign languages who will conduct the tutorial program in the basic language program.

In its graduate program in linguistics, the primary emphasis of the department during its early years will be on linguistic theory and the psycholinguistics of language acquisition, but it will soon initiate a program of research and instruction in anthropological linguistics as well.

The basic language training program for undergraduates offers the department a unique experimental laboratory for the study of language acquisition. The department also offers a well-stocked phonetics laboratory and a large Language Learning Center for the scientific and practical study of foreign languages. The central library holdings in linguistics have increased explosively since the establishment of the department and are already quite strong in the fields of modern linguistics which the department will stress.—LEONARD NEWMARK

Literature: The Department of Literature was established in 1963 with Roy Harvey Pearce as its first chairman. Graduate instruction began in fall, 1964; at the same time the department, jointly with the Departments of Philosophy and (fall, 1965) of History, set up and offered instruction in the basic humanities course required of all freshmen and sophomores. In the fall of 1965, the department began a full program of instruction, its Ph.D. program in English and American literature having been approved in the preceding spring and its Ph.D. program for Spanish being readied for approval. Still in the process of development were its programs in comparative, French, German, Italian and classical literatures.—ROY HARVEY PEARCE

Marine Biology: Although the Scripps Institution of Oceanography originated in 1892

Marine Biology is relatively new. Until recently, the graduate students pursued advanced degrees in marine biology at the Scripps institution under the auspices of the appropriate departments or fields of study at Berkeley or Los Angeles. In addition to thesis research, upper division and graduate courses have been offered in such areas as oceanography, biology of the sea, marine biochemistry, marine microbiology, phytoplankton, marine invertebrates, biology of fishes, and comparative biology.

A million dollar grant was awarded by the Rockefeller Foundation in 1954 to enlarge the faculty and expand the teaching and research programs in marine biology. A group consisting of Professors Adriano A. Buzzati-Traverso, Denis L. Fox, Francis T. Haxo, Carl L. Hubbs, John D. Isaacs, Martin W. Johnson, and Claude E. ZoBell petitioned for authorization to offer a study program leading to advanced degrees in marine biology at La Jolla. The marine biology curriculum was approved in October, 1956. In the meantime, the Division of Marine Biology was organized under the chairmanship of ZoBell, who served from July, 1956 until May, 1960. During this period, Professors Edward W. Fager, Ralph A. Lewin, Per F. Scholander, and Benjamin E. Volcani joined the faculty. Hubbs was acting chairman of the division from May 15 until September 10, 1960, when Haxo assumed the chairmanship. Fox served as acting chairman during periods of Haxo's absence.

In October, 1960, the marine biology faculty requested the establishment of a department. This status was approved by the Regents in October, 1962. Professor Andrew A. Benson joined the faculty in August, 1962. After serving ten months as lecturer in marine biology, Richard H. Rosenblatt became an assistant professor in May, 1965. Currently, Theodore Enns is a lecturer in physiology and E. Yale Dawson, David Jensen, A. Baird Hastings, Charles R. Schroeder, and Thomas W. Whitaker are research associates in the department.—CLAUDE E. ZOBELL

Mathematics: The Department of Mathematics was formally established in September, 1963, with the appointment of a chairman. Prior to this time some research projects and seminars in mathematics were conducted by visiting professors (in 1962–63) under the auspices of a campus Committee on Mathematics (Carl Eckart, chairman) within the physics department.

The first year was largely devoted to the recruitment of faculty and preparation of graduate and undergraduate curricula, but some graduate instruction was offered. In September, 1964, the department started full-fledged operation with six professors and two assistant professors, approximately 30 graduate students, and 180 undergraduates (freshmen). On February 1, 1965, the de-

partment's programs for instruction leading to the M.A. and Ph.D. degrees in mathematics were approved.

The graduate program in 1964–65 provided basic full-year courses in real and complex analysis, modern algebra and topology, a year course on Methods of Applied Mathematics, and one on Numerical Analysis. In addition, seminars on algebra, topology, and functional analysis were conducted for advanced students. A weekly colloquium was held and frequent special lectures by visiting lecturers, especially in connection with recruitment of additional faculty, were given.

The department began the year 1965–66 with a considerably expanded staff of 12 regular and five visiting (or acting) members of all professorial ranks. All senior members of the department have federal research grants. The fields represented in the department are real analysis, complex analysis, the classical theory as well as modern developments, functional analysis, differential geometry, partial differential equations, probability, and numerical analysis. The department plans to develop strength in algebra and topology, further areas of analysis, and applied mathematics. The graduate program has been expanded by additional courses in partial differential equations, functional analysis, and probability. A program providing for the undergraduate major in mathematics and service courses to other fields is offered. The campus-wide computer center has a close association with the department.—S. E. WARSCHAWSKI

Oceanography: The Department of Oceanography was formally established in 1960, but the SCRIPPS INSTITUTION of Oceanography first provided a graduate curriculum in oceanography in the 1920's. Students in this curriculum completed advanced course work and research at Scripps for master's and doctoral degrees awarded at Berkeley or Los Angeles. Until 1946, no more than five to ten students were in residence each year on the La Jolla campus. In 1946, a more complete program was initiated under the leadership of the institution's director, Harold U. Sverdrup, and the student enrollment more than doubled. The institution began to expand rapidly in research and instruction and to undertake more of the responsibilities of a graduate department in oceanography under the supervision of the Graduate Division at Los Angeles. Between 1946 and 1960, 53 doctoral degrees were granted to candidates in oceanography.

Since its formal establishment, the department has continued to emphasize studies designed to reveal the interdependence of the biological, chemical, geological, and physical processes operating in the oceans. Entering students are required to have a baccalaureate degree in one of the physical or biological sciences and to continue their

studies in basic science at the graduate level. At the same time they are expected to broaden their experience by the study of all aspects of oceanography. The number of students increased from 57 in 1960 to 72 in 1965 and 18 doctoral degrees were granted during this period. The department has a faculty of 16 and some members of the Scripps research staff serve as lecturers. All of the faculty hold appointments in the Scripps Institution of Oceanography, and some have additional appointments in other units of the San Diego campus, such as the Institute of MARINE RESOURCES and the Institute of GEOPHYSICS AND PLANETARY PHYSICS.—ROBERT S. ARTHUR

Philosophy: The Department of Philosophy was formed on July 1, 1963, with the appointment of Professors Richard H. Popkin (chairman), Jason L. Saunders, and Avrum Stroll. In 1964–66, Professors Paul Henry, Herbert Marcuse, Associate Professor William W. Bartley III, and some temporary members were added to the staff.

Graduate instruction began in the academic year 1963–64 with nine graduate students. In 1964–65, there were 22 graduate students and in 1965–66, there will be more than 40. In January, 1965, the department received authorization for its M.A. and Ph.D. programs. In May, 1965, its first student was advanced to candidacy for the Ph.D. degree and in June, 1965, its first M.A. degree was awarded.

Undergraduate instruction began in 1964–65, when the first freshman class was admitted. The department, in cooperation with the Department of Literature, offered the freshman humanities course to the entire freshman class (176 students). An elective introductory course was also offered to 16 freshmen in the spring of 1965. In 1965–66, the department will participate in both the freshman and sophomore humanities course in Revelle College, as well as offering elective philosophy courses at the sophomore and junior levels.

The curriculum at both the undergraduate and graduate level is designed to emphasize the history of philosophy, political and social thought, and the widest possible variety of philosophical approaches. It is hoped thereby to provide students with a solid foundation and to encourage them to do independent, imaginative, mature, and self-critical work in philosophy.

In its first two years, the department has also sponsored a public symposium on The Relevance of Philosophy Today, a campus-wide symposium on Marxism, a lecture series on Galileo (in conjunction with the Department of Literature), and a departmental colloquium on Contemporary European Philosophy. The editorial office of the *Journal of the History of Philosophy* is in the department. The department has also initiated a cooperative graduate program with the

Irvine campus.—RICHARD H. POPKIN

Physics: The physics department was formed in 1959 as part of an exclusively graduate school of science and engineering and was the first of the new departments at San Diego. The initial faculty complement was four and the first students admitted in September, 1960 numbered 21. Growth was extremely rapid, the faculty having increased a year later to 21 and the student body to 49.

The department presently has a student enrollment of 142 and a faculty of 27; in addition, 33 postdoctoral fellows participate in instruction and research. The program of physics instruction is broad, comparable to that at the two larger campuses, Berkeley and Los Angeles, in all respects, save one: instruction, with the exception of a single course, has been confined solely to graduate work. However, preparations are already under way to enroll undergraduate physics majors and a complete program of undergraduate instruction in physics will be offered for the academic year 1965–66.

The main areas of interest of the faculty can be described as follows: physics of elementary particles; nuclear forces and structure; physics of the solid and liquid state; plasma physics and magneto hydrodynamics; hydrodynamics; and astro and space physics. The department has experimental facilities for research in solid state physics, including low temperature physics, space physics, plasma physics, and high energy nuclear physics. In addition, the major fraction of the work of the campus high speed computer is devoted to physics research.—LEONARD N. LIEBERMANN

GRADUATE STUDIES

The graduate program of the San Diego campus had its beginnings in the 1920's when graduate students from the Berkeley campus traveled to the Scripps Institution of Oceanography to study under several of the prominent oceanographers on the staff.

Several graduate oceanography courses were listed in the 1920's but it was not until the 1930's that the first degrees in oceanography were offered by the University. At that time the students spent most of the time on the Scripps campus but the degrees were awarded by the Los Angeles or Berkeley campuses.

Today, as in the early years, Scripps offers only a graduate curriculum. Some 30 years after the first graduate students began work at Scripps, the Regents, in 1958, authorized the establishment at La Jolla of an Institute of Technology and Engineering. Emphasis was placed on graduate work in science, technology, and engineering due to the special needs expressed by San Diego civic, industry, and service groups and the greatly increased demands for scientific education and research because of their importance to national security.

In 1959, the Regents changed the name of the institute to the School of Science and Engineering. The new school was to provide

graduate instruction and research in mathematics, physics, chemistry, the earth and biological sciences, and engineering. By June 30, 1959, seven faculty appointments had been made and a total of 36 appointments had been approved for the next fiscal year. The school enrolled its first graduate students in 1960 in the physical sciences.

Roger Revelle, director of the Scripps Institution of Oceanography, was selected by the Regents in 1958 to head the new school. Two years later, Norris W. Rakestraw, professor of chemistry at Scripps, was named associate dean of the Graduate Division and a year later, dean of the Graduate Division at San Diego. He held the post for four years, giving it up to travel and study in Europe.

Keith A. Brueckner, professor of physics and director of the Institute for Radiation Physics and Aerodynamics, served for two years as dean of Letters and Science before serving for six months (from February to June, 1965) as dean of Graduate Studies at San Diego. Since Brueckner's appointment as director of the institute, two professors have served as acting dean of the Graduate Studies. They are James Arnold, professor of chemistry, who served as acting dean until September, 1965, and Martin Kamen, professor of chemistry, currently serving as acting dean.—PAUL WEST

HOUSING

Facilities in use at the San Diego campus in 1965 included a 23-man dormitory and 106 residential apartments designed primarily to accommodate married graduate students. The dormitory is a temporary one located at Camp Matthews; it is operated under the supervision of one resident advisor and incorporates the community kitchen concept. New residence halls are scheduled for completion in the fall of 1965 and spring of 1966. They will comprise six low-rise buildings housing 440 undergraduate men and women and will function as "language houses." In addition, a new 800-seat cafeteria and recreation center will complement the residence halls. By 1967, 100 new residential apartments and 400 additional residence hall units should be ready for occupancy by San Diego students.—HN

LIBRARIES

The San Diego campus library had its beginnings more than 40 years ago in the Scripps Institution of Oceanography. By 1960, development had begun on a library to support advanced graduate programs in science and engineering; two years later the collection was expanded to include areas in the humanities and social sciences. Under the New Campuses Program established in 1962, 75,000 basic undergraduate library books were purchased in triplicate for new campuses at San Diego, Santa Cruz, and Irvine. As the first of the three to be established, the San Diego library carried out the program. In addition, the book collection of the

and the Scripps Institution of Oceanography Libraries, with total resources of 285,000 volumes, as well as 7,000 serial publications regularly received. Growth rate for the book collections is 80,000 volumes per year. As the only major research libraries serving metropolitan San Diego, the libraries' collections have had heavy use by the community's students and scholars, as well as other persons interested in serious study.

Special Collections: The library of the Scripps Institution of Oceanography is one of the world's outstanding special libraries in the fields of oceanography and marine biology. It receives nearly 3,000 serial publications, including those of all of the world's oceanographic research organizations. Its 50,000 volumes include rare books on oceanography and sets of reports of major voyages and expeditions. The Biomedical Library provides complete coverage of current medical research publications of South and Central America. The General Library's Special Collections Department includes outstanding collections devoted to D. H. Lawrence, Ernest Hemingway, William Blake, and San Diego authors, as well as works on Baja California and California.—MELVIN J. VOIGT

Librarian

MELVIN J. VOIGT 1961-

MUSICAL ORGANIZATIONS

A student orchestra, chorus, and jazz group have been formed on the San Diego campus. The chorus of 25 to 30 students is directed by Mrs. Jean Moe and gives two annual concerts, at Easter and at Christmas. The orchestra was organized under Earl Schuster, first oboist with the San Diego Symphony.—EF

ORGANIZED RESEARCH¹

Unit	Year Est.
Computer Center	1961
Geophysics and Planetary Physics, Institute of ²	1946
Marine Life Research Group	1947
Marine Physical Laboratory	1946
Marine Resources, Institute of	1954
Matter, Institute for the Study of	1962
Oceanic Research, Division of	1961
Oceanography Group, Applied	1961
Physiological Research Laboratory	1963
Radiation Physics and Aerodynamics, Institute for	1964
Scripps Institution of Oceanography	1912
Sea Water Test Facility	1962
Space Sciences Laboratory	1960
Vaughan (Thomas Wayland) Aquarium-Museum	1914
Visibility Laboratory	1952

¹ A primary article on each unit appears elsewhere in the CENTENNIAL RECORD.

² University-wide.

STUDENT GOVERNMENT

Student Government on the San Diego

mittee and a communications committee, whose function it was to initiate campus publications.

The first action of the constitution committee was to create an enabling document which served to enfranchise the student body, allowing them to function as an associated student body until a constitution could be formulated. They followed this action with the establishment of an advisory committee to assist students in the formation of clubs and campus organizations; they also prepared a draft for San Diego's first student body constitution. The draft was presented to the students at a Constitution Convention held in November, 1964, where it was modified and revised; the result was accepted by general student vote a week after the convention.

Selection of student body officers, including president, vice president, ASUCSD senate representatives, judges, and Associated Women Students' and Associated Men Students' presidents, took place at the first campus election in December, 1964.

The student body president and his appointed cabinet constitute the executive branch of student government. The ASUCSD senate, composed of representatives elected from each of the classes and, eventually, from each of the proposed 12 colleges, serves as the legislative branch. The judicial council, comprised of four elected and three senate-appointed judges, serves as the judicial branch. The judicial council is responsible for the constitutionality of government operations and upholding the honor spirit or honor system, a code which places students "on their honor" to act in accordance with University regulations. These three branches function as the mainstay of student government.

The student body on the San Diego campus is still small enough to allow a high percentage of students to take an active part in the development of the government. The most important function of the present governmental organizations is to create a foundation sound enough to adapt to a continuously growing campus.—CY GREAVES

STUDENT BODY PRESIDENTS

LARRY BAKER	1964-1965
LARRY BAKER	1965-1966

STUDENT PERSONNEL SERVICES

Student Personnel Services are offered in an integrated program made up of the several offices and services listed below. Each specializes in one aspect of student life.

Food Service: An 800-seat cafeteria was completed during the fall quarter, 1965. Prior to this time students dined in a temporary cafeteria. Before moving to the upper campus, meals were served from a snack bar adjacent to the Scripps Building.

Office of Housing Services, begun in 1962, helps students secure quarters in on-campus residence halls and married students apartments, or in rooms, studios, apartments and houses in the surrounding community.

Student and Alumni Placement Office serves regularly enrolled students who need part-time or summer employment, graduating students of all degree levels who are seeking full-time career opportunities in business, industry or government, and alumni of the University who wish assistance in job betterment or relocation. Wives of regularly enrolled students are eligible for assistance in seeking employment. This service began in a limited basis in 1964 and continued with full service available in 1965.

Student Health Service has been in existence on the San Diego campus since August 1, 1964, and is housed temporarily in Bonner Hall. Medical consultation is available during school hours. Through an insurance plan carried by the University, medical and surgical care beyond that provided by the Student Health Service is available from a doctor of the student's choice, or another physician from the area when referred by Student Health Service personnel.

Night and weekend coverage for dormitory residents or those in nearby student housing is provided through an agreement with two qualified local physicians. Some drugs prescribed by health service physicians for acute problems are dispensed without cost to students. Several other services are provided on the campus including immunizations, first aid, and medical screening of personnel involved in use of radioactive materials.

Larger facilities were planned for the fall quarter, 1965. Expansion included additional physician coverage, overnight accommodations for minor illnesses, facilities for standard laboratory procedures, and services of a psychiatrist and counselor.—EF

STUDENT PUBLICATIONS

The San Diego campus has two student publications: an annual and newspaper.

Sandscript, the student newspaper of the San Diego campus, began publication in 1963. Growing from the dittoed *Freshman Newsletter*, the *Sandscript* has developed into a full-fledged newspaper though published sporadically. In 1965, for the first-time, costs are being partially subsidized by Associated Student funds; the remaining expenses are covered by advertising revenues. *Sandscript* has 15 volunteer staff members. Operating procedures are kept informal and participation by students and faculty is encouraged. Although the demand for, and production of, the newspaper is bound to increase each year, the staff will adhere to its present goals—to provide an information outlet for the campus

and to encourage a climate conducive to discussion of ideas and intellectual growth.

Trident: As a result of the enthusiastic efforts of a self-appointed group of 11 of the first freshmen students on the campus, the first edition of the *Trident*, the student annual, was available in November, 1965. A pictorial history of San Diego's first freshman class was contained in the 120-page book.

During the summer of 1964, prior to the arrival of the first undergraduate class on campus, a number of local students banded together to produce a *Freshman Newsletter* designed to bring together, via the mail, the future freshman class. The *Newsletter* contained plans for the coming school year, photographs of the students, their summer activities, and individual interests. It also provided a means for organizing pre-school social gatherings of as many of the students as possible.—CY GREAVES

Publication Editors

Sandscript

MARK HINDERAKER 1964-1965
MARK HINDERAKER 1965-1966

Trident

KATHY BOWER 1965-1966

TRADITIONS

While there are already several traditions at San Diego, their history is short, since under-

graduates were not admitted to the campus until the fall of 1964.

Beach Parties are held on the beach in front of the Scripps Institution of Oceanography campus about a half mile from the Torrey Pines campus. One or two beach parties a year are formally organized by the Student Affairs Office. They usually start in the afternoon and last into the evening, with a fire, food, volleyball, touch football, and often music and dancing.

Faculty Home Visitations are held during three evenings of registration week. Early in the week, the freshmen students sign up to visit various faculty homes and are treated to a small informal gathering with punch or coffee and cookies. This year, 36 faculty members took part in the program, established in 1964.

Frosh Beanies are distributed to members of the freshman class at the Welcome Day picnic as a gift from the UCSD Honorary Alumni. This tradition began with the first freshman class to enter San Diego in the fall of 1964. The hats bear the class numeral and are worn during registration week.

Honor Code: An honor code was established by the student body in 1964 and is now being expanded into the dormitories which opened for the first time in fall, 1965.

Trip to Baja California: The trip to the Escuela Superior de Ciencias Marinas of the Universidad Autonoma de Baja California began during Thanksgiving holiday in 1960, when a group of foreign students under the

direction of Norris Rakestraw, then foreign students' advisor, visited the Mexican Marine Institution. The institution is located in Ensenada and is part of the University of Baja, with headquarters in Mexicali. At the time of the first trip, the Mexican marine school had eight students and was under the direction of Professor Pedro Mercado, an alumnus of Scripps Institution of Oceanography. Students from the Mexican Marine Institution returned the visit a year later. It has now developed into a twice-a-year visit, with San Diego students visiting Mexico during Christmas holidays and Mexican students visiting San Diego in May. For the last two years, the two groups have played soccer, the national game of Mexico. A perpetual trophy is held by the winner. Last year a total of nearly 250 faculty and students took part in the visit to Mexico.

Triton: The Triton was selected by the undergraduates in November, 1964 to be the school mascot. An official caricature of the mascot has not yet been developed.

Watermelon Drop: Following finals in the spring, a watermelon is dropped from the seventh floor of Building B to see how far it will splatter. A watermelon queen is chosen by the students.

Welcome Day is a picnic day hosted for the freshmen and their families by the honorary alumni. It is held outdoors in the Building B Plaza on the Sunday before the start of registration week. Speeches of welcome are made and tours of the campus are arranged.—MAS

San Francisco Art Institute: In the late 1860's, a group of San Francisco artists, writers, and businessmen started meeting after work to discuss the arts. From these informal gatherings grew the San Francisco Art Association, which was founded in 1871 with the objectives of promoting fine arts and establishing a school.

In 1874, the art association opened the doors of the first art school west of the Mississippi, the California School of Design, which occupied rented quarters at 430 Pine Street until 1893, when it moved to the Nob Hill mansion of Mark Hopkins. This property was deeded to the University of California Board of Regents by Edward F. Searles, to be held in trust for the school. Thus an affiliation was established between the school and the University which has persisted through the years.

The Mark Hopkins Institute of Art, as the school became known, developed into the foremost art school in the west, with students drawn from all over the country and with its reputation honored in the art academies of Europe. The Hopkins' mansion was destroyed in the fire of 1906, but the association rebuilt the school in temporary quarters on the site and called it the San Francisco Institute of Art, a name that was changed in 1916 to the California School of Fine Arts.

Among the well known artists affiliated with the school during this early period were Maynard Dixon, William Keith, Xavier Martinez, Ralph Stackpole, Charles Rolla Peters, Arthur Matthews, and G. Piazzoni.

In 1926, the property on Nob Hill was sold to the Mark Hopkins Hotel and the art association and school constructed their own Mediterranean-style building on the northeast slope

of Russian Hill. The deed of the new property is held by the Regents of the University.

After World War II, international attention was focused on the school as the west coast birthplace of abstract expressionism simultaneous with the development of this new style in New York. Faculty members at that time included Clyfford Still and Mark Rothko. Among their many students who have since become noted artists and taught at the school were Richard Diebenkorn, Frank Lobdell, John Hultberg and James Weeks. During the same period, Ansel Adams started a photography program as the first course in photography as a fine art to be offered in an American college. In the 1950's, with Diebenkorn, Weeks, Elmer Bischoff, Nathan Oliveira, and David Park on the faculty, the school became known as the center of the new style of San Francisco figurative painting.

The names of the San Francisco Art Association and the California School of Fine Arts were changed and combined in 1961 as the San Francisco Art Institute, which provides an exhibition program for the artist association and operates the college. Today the institute's college has an enrollment of some 750 students from every region in the United States and from a number of foreign countries. The college offers the bachelor of fine arts degree in fine arts, design, and photography, and the master of fine arts degree in painting and sculpture. Presently a major development program is in progress with the goals of constructing an additional building by 1967 and an adequate endowment fund by 1971. The institute is governed by 24 trustees, eight of whom are professional artists elected by the artist association.—JACQUELINE KILLEEN