



IN MEMORIAM

George J. Maslach

Professor of Mechanical Engineering, Emeritus
Vice Chancellor for Research and Academic Affairs, Emeritus
Berkeley
1920 — 2004

George Maslach was born in San Francisco on 4 May 1920 to Michael Maslach and Anna Pszczolkowska, Polish immigrants who came to San Francisco soon after the 1906 earthquake to participate in the rebuilding of the city. Those who are curious to know how a local son of immigrant parents rose so high and accomplished so much should visit The Bancroft Library and read the oral history that George recorded in 1998 and 1999*. They will be informed and entertained with a vivid account of the life of an adventurous youngster in San Francisco in the days of the Great Depression, of a fresh college almost-graduate in the exciting years of World War II, and of George in the never dull life that followed.

George held a special place in the family, which allowed him unusual freedom to explore and learn from his surroundings, while his parents kept a closer eye on their heir, his older brother Michael. They were determined that their children be well educated and lead professional lives. Michael was to become a lawyer (he did), and George a doctor. Although science always intrigued George, he never took an interest in medicine. But he surely became a professional! Father Michael was not just good with his hands but was an accomplished linguist and a leader in social and political affairs. Thus the Maslach home was a stimulating place and probably helped to sow the seeds of the remarkable social adaptability that George demonstrated in later life.

Young George acquired practical manual skills at an early age and was also a voracious reader who became such a fixture in the San Francisco Public Library that the librarians, seeing him come in, would bring forth books they had been saving because they knew he would enjoy them. Biography and history were his favorite topics. Anyone who knew him at the University of California, Berkeley knows that he never outgrew his fondness for reading; he became a fixture in the Morrison Reading Room at the Doe Library.

George began college life at San Francisco Community College in 1939, by this time focused on science, mathematics, and basic engineering courses. He found himself very well prepared for the study of engineering when he transferred to Berkeley as a junior, which may partially explain his later enthusiastic support for the unique California system of cooperation between the state university, the state colleges, and the community colleges.

Having always been an excellent scholar, George prospered at Berkeley. He was soon recruited to tutor less successful students, and by his senior year had a job as a research assistant on a project concerned with the design and model testing of amphibious landing craft. By that time the United States was formally in World War II.

In April 1942, just two months before he would have graduated, George was swept up in the current of wartime events as a recruit for the Radiation Laboratory at the Massachusetts Institute of Technology (MIT), where radar was being developed. While the bulk of their staff would be physicists and electrical engineers, they had a pressing need for mechanical engineers to design means for support and steering of the radar antennas. George's professors encouraged him to go, assuring him that he had done enough at Berkeley to earn his degree, and that his diploma would be forwarded to him in due course.

The war years at MIT were years of explosive professional and social growth for George. After the surrender of Japan, the Radiation Lab at MIT was disbanded almost immediately, and George got a free train ride home; but the Bay Area now seemed dull compared with the exciting years at MIT. Two of his former colleagues there had decided to found General Precision Laboratories as a subdivision of General Precision Products, a dominant manufacturer of equipment for the motion picture industry, and George decided to join in this venture. The new lab and apartments for its staff were located on a magnificent old estate near New York City, and for four years George and his by now growing family lived in idyllic surroundings while George worked on a variety of interesting projects.

The itch to return home to California was, however, gradually growing. After a brief flirtation with a private company, George took a job at UC Berkeley as research engineer on the Low Pressures Project, which was exploring flight in the upper atmosphere by developing laboratory equipment in which to simulate aspects of such flight. Specifically, George was put in charge of a research contract with NACA, the predecessor of NASA. When Eneas Kane, one of the founders of the project, finished his doctoral project and left the University, George took charge of the Office of Naval Research project that had been managed by Dr. Kane.

In the early days, many fundamental design problems, involving vacuum engineering and instrumentation for measuring low pressures and tiny forces, had to be solved, and lots of one of a kind, first ever, things had to be fabricated. George's extensive experience with this kind of work was invaluable, as was his knack for getting along with the craftsmen who did this work in the University shops. He also played an important role in the supervision of graduate students in the lab, fostering cooperation among them and their understanding of each other's needs for the use of resources.

All of this must have seemed like child's play to George after his experiences at MIT, and would leave him wondering what sort of professional future he could expect in the College of Engineering. Would he ever have a chance on the faculty, without an advanced degree? In any other field, the answer would probably have been "No," but among the engineering faculty there was still a strong feeling that practical experience was to be treasured and that it was a better preparation than an advanced degree for the teaching of engineering students. For one so young, George had practical experience in spades, and Clyne Garland urged him to try classroom teaching, at least to see how he would like it. He started with a graduate seminar in vacuum system design, and then with the basic mechanical engineering curriculum from the bottom up — drafting, statics and dynamics, thermodynamics, engineering design, and so on. He found that he enjoyed it, took it very seriously, and became a very popular instructor. During this same period in 1951-52, he served as associate director of the Institute of Engineering Research. In 1954 George was formally appointed to the faculty, with the tenured rank of associate professor. He pitched into academic life with gusto, eagerly participating in the work of the Academic Senate, and discovering the joys of social networking at The Faculty Club. He was more active than ever in the work of the Low Pressures Research Project, and he continued administrative work in the Institute of Engineering Research, taking over the directorship when Commodore Schade retired.

George's special expertise in engineering was the design of gears, a far from mundane business. One of the simplest in appearance and function was a differential manometer, which enabled us to measure the difference in elevation of two liquid surfaces to a thousandth of an inch. This in turn enabled us, with due precautions, to measure gas pressures in the low density wind tunnel with sufficient accuracy for many purposes. Another, much larger scale, experience with gears partially explains why George was suddenly jumped in rank from associate professor to professor, step II, in 1958. In 1957 the University's astronomical observatory at Mt. Hamilton was putting a new large telescope into operation. It was immediately evident that something was seriously wrong. Bits of bronze were drifting down from the giant gears that aim and move the telescope, and planets appeared to be wobbling in their orbits, at a frequency corresponding to the rotational frequency of one of the gears. A whole circle of lawsuits was pending, as the University, contractors, and subcontractors all scrambled to assign, or avoid, the blame. Fortunately, George's experience with the design of just such gear systems, used for aiming radar beams, was known. A car was sent to rush him and his specialized measuring instruments to Mt. Hamilton, and within a day he had identified the problem and specified the cure. The

director of the observatory was so impressed and grateful that he wrote a special letter of commendation for George's personnel file. When the Budget Committee saw that, a double jump in rank seemed entirely in order.

George had a reputation as an exciting researcher. In 1958 he took his first sabbatical and was recruited for a lecture tour throughout Europe. In those days, any news of the Berkeley Low Pressures Project was eagerly received. When George checked in with his host in Paris, he learned that every branch of their organization was eager to hear from him, but that to spare him too much trouble, they had pruned his assignment down to a mere 30 lectures — just in Paris!

This level of excitement, and George's thorough enjoyment of the life of a professor, persisted until the watershed year of 1963, when George became dean of the College of Engineering with a three-fold mandate from Chancellor Edward Strong: 1) to reshape the undergraduate program, so that it could reasonably be completed in four years; 2) to make the UC Berkeley College of Engineering No. 1 in the U.S.; 3) to get the engineering faculty involved in the work of the Academic Senate. In order to give the new job the kind of full speed ahead effort that had come to characterize everything he did, George dropped out of the life of teaching and research, which had become so pleasant to him. He also dropped out of competitive sailing, which was a favorite form of recreation.

At George's memorial service his colleague Ernest S. Kuh recalled: "A quality of his administrative style was his efficiency. He always kept a clean desk, with very little in his inboxes. He was also highly effective working with higher administration and obtaining resources. ... I think one of his main contributions was his emphasis on developing an excellent relationship with the junior colleges. He visited many of them, got to know their faculty and curricula, and was successful in recruiting some outstanding students, especially minority students. ... He also recognized the importance of computer sciences for the College."

George did not pretend that he instinctively knew how to be a dean, but he sought out those deans whom he admired and picked their brains. He also visited all those persons with whom he would have to deal, such as the Chancellor and the chairmen of key Academic Senate committees, to study their operations and learn how he could best produce what they needed from him.

Points 1 and 3 of Chancellor Strong's mandate were quickly and successfully discharged. The effort to make UC Berkeley No. 1 in engineering was successful enough. Many schools had legitimate bragging rights, but Cal was always right up there.

George served as dean from 1963 to 1972, when he helped to convince Chancellor Albert Bowker that the professional schools and colleges, such as engineering, law, and business, needed better representation in the higher circles of campus administration. The Chancellor then created the new post of Provost for the Professional Schools and appointed George to it. Thus George entered what he called the fourth phase of his career. Having been a professional engineer, then an engineering professor, next an administrator of engineering education, he now stepped onto an even broader stage, as an administrator of education in many professional disciplines.

Much of his career as provost coincided with a period of stringent budgetary limits for the University and of dramatic changes in disciplines such as biology. To survive and prosper in the face of these challenges, the campus would have to do unaccustomed things, such as present to the California Legislature a comprehensive inventory of the space available for instruction and research, and a rational description of the need for additional buildings. George was assigned this task and completed it on time and with impressive effect. The reorganization of instruction and research in the biological sciences was a far more subtly demanding task, requiring the cooperation of many faculty who may have felt threatened by any proposed changes. The prospects for success were coupled with the search for financial resources with which to renovate or rebuild the facilities needed to carry the campus forward in this field. Again, the outcome was successful, and Chancellor Bowker assigned George a sizeable share of the credit.

During all his years as dean, provost, and later vice chancellor, George's career was eventful to a degree that is sometimes hard to believe. He was swept into a whirlwind of service on various advisory boards of universities, laboratories, and government agencies. Often he would fly to Washington on a weekly basis, leaving Berkeley on a Friday evening and getting home Sunday night. We have tried to convey some sense of how this was all possible, and to what personal attributes it can be ascribed. In brief, George just seems to have faced life with the attitude, "So you have a job that needs to be done. I can do that." And he could!

George died on 11 November 2004 shortly after a stroke. He was able to be active almost to the end. He is survived by his widow, Doris, a well- known community leader; his daughter Christina, who is retracing her father's career path as a professor of psychology and university administrator at Cal; sons Jamie and Steve, both distinguished in fields of scientific and artistic glass blowing; and five grandchildren.

*Now accessible online at
www.archive.org/advancedsearch.php.
Search for "maslach" and "Texts."

Ernest S. Kuh
Frederick S. Sherman