

colleague and as a close friend to his associates and former students.

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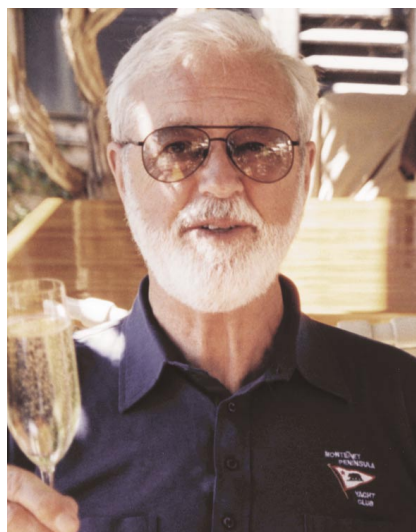
John Robert Neighbours

John Robert Neighbours, emeritus professor of physics at the Naval Postgraduate School (NPS) in Monterey, California, died of an inoperable brain tumor on 16 September 2000 in his Monterey home.

Born on 22 November 1924 in Cleveland, Ohio, John served as a US Army photographer in the Pacific theater at the end of World War II. He was among the first US soldiers to enter Nagasaki after it had been devastated by "Fat Man," the second atomic bomb used in war. After serving almost three years in the Army, he entered the Case Institute of Technology, where he earned three degrees in physics: a BS in 1949, MS in 1951, and PhD in 1953.

Immediately after graduation, John served for two years as an assistant professor of physics at Rensselaer Polytechnic Institute. He joined the scientific laboratory of Ford Motor Co in 1956 as a senior research scientist. In 1959, he became an associate professor of physics at the NPS, which had recently relocated from Annapolis, Maryland, to Monterey. John spent the remainder of his career with the school.

John's physics interests were eclectic: His earlier work (until the 1970s) was in solid-state physics and the properties of materials, but he also was active in the fields of phase transitions, cryogenics, elastic-wave propagation, and energy flow in anisotropic media. Of specific interest to him was that ultrasonic waves propagating in various directions in a single crystal yielded the various elastic constants of the material. In the 1950s and 1960s, John, Charles S. Smith, George A. Alers, and Frank H. Featherston conducted their earliest measurements of the elastic constants of nickel and copper. Later, their measurements included silver, gold, and zinc. The measurements were generalized to high pressures and lower temperatures. John supervised the work of Featherston, who received the first physics PhD granted by the NPS in 1963.



JOHN ROBERT NEIGHBOURS

Maintaining the NPS as his primary affiliation, John also was the chairman of the physics department at Colorado State University from 1969 to 1970 and a visiting scientist at the Naval Research Laboratory in Washington, DC, periodically during the 1970s. In the early 1970s, John edited two classified editions of *Handbook of Laser Effects* for the US Navy. His later work involved research in the generation of coherent radiation with relativistic electron beams. John worked as a liaison scientist with the London branch of the Office of Naval Research from 1980 to 1981. During his career, he also consulted for TRW Inc; Sandia Corp (now Sandia National Laboratories); Boeing Research Laboratory; and several Navy laboratories. With us (Buskirk and Maruyama), John predicted and measured microwave Čerenkov radiation as a diffraction phenomenon at the NPS electron linear accelerator in the 1980s.

After his retirement from the NPS in 1994, John completed perhaps the greatest task in his career: building almost single-handedly his 28-foot racing sloop *Calphurnia*. John possibly holds the record for maintaining his position on the waiting list for a slip at Monterey Harbor for the longest period while he constructed the yacht. His other myriad interests included politics, sports, photography, movies, mountaineering, and good Irish whiskey shared with friends.

Until the last few days of his illness, John was in good spirits and maintained his sense of humor and his love for family, friends, and stray cats.

XAVIER K. MARUYAMA

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