



Peter T Lyttle/GD/USGS/DOI

Sent by: Janice H Shay

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To GS-G All, elt

cc

bcc

Subject The Passing of Richard Doell

Dear Geology Employees,

Richard Doell, a distinguished USGS scientist (retired), died in his sleep on March 6, 2008, at his home in Point Richmond, California, following a series of grave illnesses.

Born in Oakland in 1923, Richard grew up in Carpinteria, California. After serving for 2 years as a combat infantryman during World War II, he resumed his studies at UC Berkeley, where he earned his doctorate in geophysics in 1955. Following graduation, Richard held teaching positions at the University of Toronto and MIT.

Richard joined the USGS Geophysics Branch in Menlo Park, California, in 1959 where he specialized in research on the earth's magnetic field and remnant magnetism in rocks. He was an integral member of a team that presented convincing evidence of periodic polarity reversals of earth's main magnetic field by analyzing magnetization of rock samples collected from widely separated, geologically young, volcanic sequences. Furthermore, isotopic dating of the rock samples provided the first time scale of polarity epochs for the last 3.2 million years (Cox, Doell, and Dalrymple, 1963). The timed sequence of reversals, with subsequent refinements by this USGS team and others, proved to be a major component of the plate tectonics revolution in the mid-to late 1960s. It not only provided the basis for confirming the hypothesis of sea floor spreading, but it also was a technique for quantifying rates and amounts of crustal plate movements on a global scale.

For his numerous unique pioneering scientific contributions and leadership, Richard Doell was elected to the National Academy of Sciences in 1969 and he shared the prestigious Vetlesen Prize with Allan V. Cox of the USGS and S. Keith Runcorn in 1971. Richard served as President of the American Geophysical Union's section on Geomagnetism and Paleomagnetism from 1968 to 1970 and as Chief of the Geological Survey's Branch of Theoretical Geophysics from 1967 to 1971.

In 1978, Richard retired from the USGS to pursue his passions for the new field of environmental studies, sailing, exploration, and photography. Having built a 38-foot sailboat, he began a series of long sailing cruises to Alaska, French Polynesia, and northern Europe. In 1984 he married Janet Hoare who joined him on those voyages. Since 1993 he devoted much of his time to photography, specializing in the photography of lichens as an active member of the California Lichen Society.

He was a gentle, soft-spoken person who was equally at home in the laboratory inventing and building equipment for paleomagnetic analysis or working in remote field localities to collect the critical rock samples to be analyzed. He thoroughly enjoyed opportunities to join with friends and colleagues for story-telling, food, and drink; on these occasions his innate

modesty invariably precluded mention of his own numerous and diverse accomplishments.

Richard is survived by his wife Janet Doell and daughters Kerstin Doell of Seattle and Shirley Doell of Point Richmond, California, and by a large family of devoted step- children, grandchildren, and great grandchildren. He will be greatly missed.

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