scientific societies. From 1946 to 1969, he was chairman of the National Research Council Subcommittee on Shipment of Radioactive Materials, which established regulations that have since been internationally adopted. In 1966–67, he was president of the Radiation Research Society, and in 1972–73 he presided over the Health Physics Society.

Constantine J. Maletskos, who was a student and colleague of Robley Evans's, describes his former mentor as "a world class physicist with an . . . uncanny ability to see through a problem, to simplify it and get at the important roots and to set up an appropriate model for a seemingly simple solution to a complex analysis." His famous admonition in *The Atomic Nucleus*, "A little contemplation saves a lot of calculation," expresses it all.

GORDON L. BROWNELL Massachusetts General Hospital Boston, Massachusetts

## Russell Lee Robinson

Russell Lee Robinson, a senior staff member at Oak Ridge National Laboratory, died on 25 March. In addition to having a long career in experimental nuclear physics, he served for 10 years as scientific director of the Holifield Heavy Ion Research Facility.

Born on 30 July 1931 in Louisville, Kentucky, Russell Robinson received his bachelor's degree from the University of Louisville in 1953, and his master's and doctoral degrees in physics from Indiana University in 1955 and 1958, respectively. He joined the staff of ORNL's physics division in 1958.

For the first 24 years of his career at Oak Ridge, he did basic research in nuclear physics. He was particularly active in the field of Coulomb excitation and in-beam studies of medium mass nuclei, often working in collaboration with Paul Stelson and Francis McGowan. He was a member of the team that did pioneering work on measuring the quadrupole and large hexadecapole deformations of the uranium and other actinide nuclei.

In 1974, he became the group leader responsible for the experimental facilities at ORNL's Holifield Heavy Ion Research Facility, then under construction. He also remained very productive in his research. In collaboration with a group from Vanderbilt University, Robinson explored nuclei with atomic masses of around 70. This work included the discovery of a new region of nuclear shape coexistence that included the "superdeformed" ground states of <sup>74</sup>Kr and <sup>76</sup>Kr.

Beginning in 1983, Robinson be-



RUSSELL LEE ROBINSON

came scientific director of the Holifield facility and spent the last decade of his career working as a scientific administrator. He served on a three-person board of directors that developed the concept for and managed the Joint Institute for Heavy Ion Research, which brought together funding from the Department of Energy, the state of Tennessee (through the University of Tennessee) and Vanderbilt University. The institute provided on-site user housing, office and meeting space and an active visitor's program. It was through his considerable efforts that Holifield developed an international reputation as a productive, userfriendly nuclear physics facility.

Robinson's untiring efforts and dedication were evident to the many scientists and students working at Holifield. ORNL is presently converting Holifield into a dedicated radioactive beam facility, to begin operation this fall. In preparing for the facility's future role, Robinson coordinated the specifications and procurement of a newly designed major experimental device, a third-generation recoil mass spectrometer. He also guided the design and construction of a new building addition to house this spectrometer, a hall that now bears his name.

Russell Robinson had an intense passion for nuclear physics. His gentlemanly, yet firm and fair, approach to dealing with people earned him the respect and affection of his peers and colleagues. His legacy at Oak Ridge will be long and fondly remembered by his friends.

JAMES BALL

Oak Ridge National Laboratory
Oak Ridge, Tennessee
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## LeRoy Elsworth Doggett

LeRoy Elsworth Doggett, chief of the Nautical Almanac Office at the US Naval Observatory in Washington, DC, and an expert on calendars, astronomical phenomena, archaeoastronomy and astronomical history, died of cancer on 16 April 1996 in Washington, DC.

Doggett was born on 22 October 1941 in Waterloo, Iowa. He received a BS degree from the University of Michigan in 1964, an MS degree from Georgetown University in 1970, and a PhD in engineering mechanics from North Carolina State University in 1981. Starting in 1965, he worked as an astronomer in the Nautical Almanac Office; he headed that office from 1991 until his death.

For the last 20 years, he compiled and edited the US contribution to the Astronomical Almanac (Government Printing Office), the world standard authority for the precise determination of astronomical events and positions of celestial objects. As chief of the NAO, he was also responsible for the Nautical Almanac and Air Almanac, published by the US Naval Observatory, both of which are still widely relied upon for navigation purposes.

Doggett's doctoral dissertation was on the use of Chebyshev series for the generation of a high-precision theory of motion, or ephemeris, for Mars. His dissertation was the basis for introducing Chebyshev polynomials for representation of ephemerides in the *Almanac for Computers*, published under his name by USNO in 1976. The Floppy Almanac (NAO, 1986) was also based on developments that followed from his dissertation.

His research centered on celestial mechanics, and, more recently, on calendars. He investigated calendars from all over the world, both ancient and modern. He wrote the "Calendar"  ${\bf chapter\ of\ the\ } Explanatory\ Supplement$ to the Astronomical Almanac, which is probably the most practical description of the various calendars. He wrote scholarly articles on calendars, and at his death was working on an encyclopedia of calendrical topics, including associated chronological eras and cycles. Doggett was the leading US expert on the subject and was frequently consulted by other scientists, the media and the general public on astronomical phenomena, calendars and the history of astronomy.

In response to numerous and persistent questions concerning the first sighting of the lunar crescent for Islamic calendar purposes, he organized nationwide Moon watches, which pro-