



### **Walter S. McAfee, PhD**

Walter S. McAfee, whose scientific career was spent at Fort Monmouth, New Jersey, died in Belmar, NJ on February 18, 1995. The structure housing the Information and Intelligence Electronic Warfare Directorate at Ft. Monmouth was dedicated as the McAfee Center in 1997, the first time a civilian has been so honored there.

Walter McAfee was born September 2, 1914 in Ore City, Texas (one of nine children of a carpenter, eight of whom completed college) and attended public schools and college in Marshall, Texas, receiving a BS in mathematics from Wiley College in 1934. He went on to graduate school at Ohio State University, meeting his future wife, Viola, in Columbus, Ohio in 1935, and earning an MS in physics in 1937.

In 1942, McAfee joined the Army Signal Laboratory at Camp Evans (Ft. Monmouth). His calculations played a major role in the experiment on January 10, 1946, that bounced the first radar signals off the moon. Granted a leave of absence, he returned to graduate school at Cornell University, holding a Rosenwald Fellowship, and receiving a PhD in 1949 for work in nuclear physics with Hans Bethe. Monmouth University awarded him an honorary DSc in 1958; and he was the 1985 recipient of the Stevens Institute of Technology Stevens Award and a number of other awards and honors. McAfee was, in 1971, the first African American employee of the US Army promoted to GS-16, a Civil Service "super-grade" status.

In 1956, President Eisenhower presented McAfee with one of the first Secretary of the Army Research and Study Fellowships, which he used for post-doctoral studies in radio astronomy and ionospherics at Harvard University. With colleagues Felix Lavicka and Ockle Johnson, he analyzed data collected during high altitude nuclear explosions over the Pacific in 1959-60, and they showed for the first time that such explosions could cause communication black-outs. McAfee held a number of research and supervisory positions in the areas of wave propagation, passive sensing, target acquisition, and battlefield surveillance up to his 1985 retirement. He also taught courses in atomic and nuclear physics and in solid state electronics at Monmouth University from 1958 to 1975. He maintained membership in AAS throughout these changing responsibilities and interests.

Walter McAfee is survived by his wife, Viola, and daughters Diane Mercedes McAfee and Marsha Ann Bera-Morris.