

Growing Up Under the Shadow of the Bomb: Recollections of a Nuclear Technologist

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Considerable excellent and interesting documentation relating to nuclear weapons-related scientific work and its cultural milieu is available for the time of the Manhattan Project and the period several years thereafter. Richard Rhodes' books, *The Making of the Atomic Bomb* and *Dark Sun*, are two such examples. Most of the information in such documentation was gained from scientists and engineers working on atomic projects in the 1940s and 1950s. Less documentation of the attitudes and reactions of nonscientists and young people to the momentous events of that period is available in the literature. In this paper, a senior ORNL researcher, now in his early 50s, describes his recollections of the 1950s Cold War period. His remembrances of "the Bomb" and the promise of peaceful uses of atomic energy are discussed.

The late 1950s brought air-raid drills in schools and the proliferation of backyard bomb shelters. Public concern was further enhanced by the launch of the Russian Sputnik satellite in 1957, with the attendant fear that Russian weapon delivery systems were superior to those of the United States. One beneficial effect of Sputnik and the Cold War mentality was a significant enhancement of science and mathematics education. Seventh and eighth grade "New Math" courses with their emphasis on "number lines" and other pure mathematical concepts are remembered along with "the Chemical Bond" approach to secondary school chemistry in the early 1960s. As a young child in the mid-1950s, the increasing "size" or yield of bomb tests on the part of both the United States and the Soviet Union is remembered, along with such fearsome concepts as the "cobalt bomb." Science fiction films were the popular entertainment of the day for adolescent and preadolescent boys, especially ones interested in science. Many of them dealt with mutated (usually a factor of 10–100 increase in linear dimensions) creatures resulting from atomic bomb testing or from accidents at "Atomic Laboratories." Other films, such as *Dr. Strangelove*, dealt (sometimes humorously) with the social and political ramifications of nuclear weapons and the arms race. Not all media publicity concerning nuclear projects, however, was negative. Television documentaries, circa 1955, and the Geneva Conference of Peaceful Uses of Atomic Energy presented the possibility of new peacetime benefits of atomic energy, including such technologies as nuclear planes and spacecraft. More detailed examples of some of the above, based on personal recollections as a child in his elementary and middle school years, are discussed, together with the author's premise that many of the politically active public's attitudes toward nuclear weapons and nuclear power today were forged during that period.