Excerpts from SEDs at Los Alamos: A Personal Memoir

A PERSONAL MEMOIR

*by Benjamin Bederson who worked on the Manhattan Project*

I entered the army through the draft in 1942, possessed of 2 1/2 years of college (City College of New York) as a physics major. At some time in 1943 I had found myself happily back in college, at Ohio State University, taking an electrical engineering course courtesy of the Army Specialized Training Program (ASTP). This program was intended to teach technical skills to soldiers for an army that was experiencing ever-increasing demands on such skills in fighting a modern war. Just as I was completing this course in January 1944, the Army announced that it was going to abandon the ASTP because of the increasing demand for combat troops in Europe and the Pacific. Coincidentally, at that moment my commanding officer asked me if I would be interested in being interviewed for a new project, called the Manhattan Project, where my physics and engineering training, such as they were at the time, might come in handy. And, he remarked, this might get me back to my beloved Manhattan, of whose affection I had made no secret in Columbus, Ohio. Needless to say, I jumped at the opportunity, and shortly thereafter was interviewed by a visiting board of three civilians. They asked rather peculiar questions, I thought at the time, consisting mainly of elementary physics questions, for example about Newton’s laws, and about my career interests.

A few days later I received orders, marked Secret, along with a train ticket, to proceed to a town called Knoxville, Tennessee, to be met there by a car that would take me to another town called Oak Ridge. On the train I met several other GIs who also had received the same orders. We arrived in Oak Ridge to discover a city in the throes of heavy construction. It turned out that the plants were not for whiskey but for the gaseous diffusion separation of U235 from U238. Of course I didn’t discover this until later. I was assigned to the Special Engineering Detachment—the SED-- and remained in it until my discharge in January 1946. Something unusual was going on at Oak Ridge.

After about a week I received new shipping orders, this time to report to an address in Santa Fe, New Mexico. I traveled by civilian train to a town called Lamy. At Lamy I was met by an army sedan and taken to an address in Santa Fe – the now famous 109 E. Palace Avenue. It was a storefront on the main Plaza, where just about everyone going to Los Alamos reported (to Dorothy McKibbin) before heading up the ‘‘hill.’’ Before long I found myself in another army sedan, which drove me north, then west, up a tortuous road along the side of a mesa, without guard rails at the time. I was assigned to a barracks, andthen to a project. As for army life, we did indeed partake of this during the time when we weren’t actually working. We had to undergo hated calisthenics in the early morning, and traditional Saturday morning inspection, for example – but no KP! Comparing notes we discovered that most of us had something in common –our educational or training backgrounds in science, particularly in physics and chemistry. Also scattered among us were machinists, including my neighbor in the next bunk, David Greenglass.

In a month or two I was called to a small meeting of SEDs who like myself were working on various aspects of explosives. At the meeting we were greeted by the head of the Explosives Division, George B. Kistiakowsky. ‘‘Kisty’’ was a professor of chemistry at Harvard, one of the most distinguished chemists in the world, as I was to find out later. He had a strong Russian accent, and was very approachable and good-natured. The purpose of the meeting was to let the GIs know what was going on at Los Alamos. He layed it all out, from beginning to end. The story that circulated later about how security was so tight on the Manhattan Project that people only knew exactly what they needed to know to do their job was simply untrue. He explained nuclear fission, critical mass, and the implosion concept among other things. None of this was needed for my job, which, it turned out, was to help create something called Jumbo. Jumbo was a huge cylindrical container into which was to be placed the first ‘‘Fat Man’’ to be tested. Fat Man was the name of the implosion bomb……