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## **Atomic Childhood: An Analysis of the Impact of the Manhattan Project on the Children of Oak Ridge, Tennessee**

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To the Graduate Council:

I am submitting herewith a thesis written by John David Prince entitled "Atomic Childhood: An Analysis of the Impact of the Manhattan Project on the Children of Oak Ridge, Tennessee." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in History.

George White, Major Professor

We have read this thesis and recommend its acceptance:

G. Kurt Piehler, Bruce Wheeler

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Vice Chancellor and  
Dean of Graduate Studies

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ATOMIC CHILDHOOD:  
AN ANALYSIS OF THE IMPACT OF THE MANHATTAN PROJECT ON THE  
CHILDREN OF OAK RIDGE, TENNESSEE

A Thesis Presented  
for the Master of Arts  
Degree  
The University of Tennessee, Knoxville

John David Prince  
December 2005

**Dedicated**

to

Tylie, Nina and Maren,

who brighten my life

every day.

### **Abstract**

The city of Oak Ridge was one of three major project sites built by the US Army during the Manhattan Project – the top-secret mission started in June 1942 in order to develop an atomic bomb within a three year period. The Oak Ridge site, chosen in September 1942, was responsible for the production of the uranium that armed the world's first atomic bomb. Prior to the dropping of the atomic bomb, however, the real mission of Oak Ridge was known to only a few select individuals. Indeed, most of the residents and workers at the production plants in Oak Ridge knew only that their efforts were, in some way, contributing to the war effort.

The purpose of this study was to examine the impact of the Manhattan Project on the children of Oak Ridge, Tennessee. Children who were born in Oak Ridge during or shortly after the Manhattan Project, or who moved to Oak Ridge during or shortly after the Manhattan Project answered survey questions and were interviewed by the author. These findings supplemented the written record about Oak Ridge.

While the children of Oak Ridge grew up in a unique cultural environment because their city was dominated by the mission of the Manhattan Project, this study reveals that they were surrounded by an enriching community and educational atmosphere which caused many to develop a profound appreciation for the original mission of Oak Ridge and the environment in which they lived.

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## Introduction

If one were to ask the general populace in America who the most important figures were during World War Two and what moments defined the wartime experience, certain “larger-than-life” figures and “watershed” moments would undoubtedly be central to the answers of many respondents. Hitler’s invasion of Poland, the surprise attack by the Japanese on Pearl Harbor, D-Day, island hopping in the Pacific, the Battle of the Bulge, the bombings of Hiroshima and Nagasaki, Winston Churchill, Adolf Hitler, Joseph Stalin, Franklin Roosevelt, Harry Truman, and Dwight Eisenhower, among others, would almost certainly be mentioned. Though all of these moments and figures are important and have their own unique place in the historical record, it is the legacy and memory of the last events, the bombings of Hiroshima and Nagasaki on August 6 and August 9, 1945, that forever changed the character of the twentieth century – and, in large measure, continue to dominate in the twenty-first.

Yet, before President Truman announced to the world in August of 1945 that the enemy had “reaped the whirlwind” of American power, scientists from around the world, many of them young and just starting their careers, government figures, military planners, GIs, and ordinary citizens, united to bring about the reality of the atomic bomb.<sup>1</sup> Through the Manhattan Project (also known as the Manhattan Engineer District, or, MED), the top-secret mission started in June 1942 by the U.S. Army Corps of Engineers, dedicated individuals united to accomplish a phenomenal industrial endeavor within a three year period. Under the leadership of Major General Leslie R. Groves, the Army transformed

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<sup>1</sup>Hales, Peter Bacon, *Atomic Spaces: Living on the Manhattan Project* (Urbana: University of Illinois Press, 1997), 1.



Richland, Washington; Los Alamos, New Mexico; and the hills of eastern Tennessee (later known as Oak Ridge), into production facilities for atomic weapons.

Although Germany had surrendered to the Allies on May 2, 1945, the leaders of the MED urged against complacency with respect to the development of America's nuclear arsenal. Evidence for this can be seen in the May 4, 1945, memo to the Manhattan Project employees from J.R. Oppenheimer, director of the Los Alamos laboratory. He wrote:

I want to congratulate you on the vital war contribution you have made in developing this project. I thank you on behalf of the Army for the great work you have done here and the sacrifices many of you have made in coming to work here.

The work you are doing is of tremendous importance and must go forward with all possible speed. At the same time, it must be kept secret from the enemy....

The importance of this project will not pass away with the collapse of Germany. We still have the war against Japan to win. The work you are doing must continue without interruption [*sic*] or delay, and it must continue to be a military secret....

We have begun to repay the Japanese for their brutalities and their mass murders of helpless civilians and prisoners of war. We will not quit until they are completely crushed. You have an important part to play in their defeat. There must not be a let up!<sup>2</sup>

Indeed, the Manhattan Project employees continued their determined effort to develop and explode an atomic bomb. On July 16, 1945, at the Trinity Test Site in Alamogordo, New Mexico, the first successful detonation of an atomic bomb ignited the desert sky. The United States Atomic Energy Commission, the Truman Administration and the United States military leaders knew that they now had the ultimate weapon – one

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<sup>2</sup>Fern Lyon and Jacob Evans, eds., *Los Alamos: The First Forty Years* (Los Alamos: Los Alamos Historical Society, 1984), 34.

that would hopefully end the prolonged war in the Pacific and prevent the deaths of hundreds of thousands of American soldiers.<sup>3</sup>

While the story of the building of the atomic bomb is extremely important and, rightly so, dominates in much of the literature related to World War Two, the stories of the children who experienced crucial developmental years on government-controlled military reservations during and shortly after the years in which the Manhattan Project ended deserve more attention from the historical community. As William Tuttle writes in *Daddy's Gone to War: The Second World War in the Lives of America's Children*, "The child's perspective seldom appears in history. Yet, for many Americans now in their fifties, their wartime experiences were of crucial importance not only then, but have remained so throughout their lives..."<sup>4</sup> Though Tuttle's focus is on the psychological implications of family separations and perceptions of the child during World War Two, his idea that World War Two caused immense "economic, social, and cultural change"<sup>5</sup> for many families and children in the United States is important.

Moreover, the children who lived on these military-controlled reservations often came from diverse backgrounds and, most likely, would never have had the opportunity to live in such close proximity to each other. Katrina Mason notes in her study of children who grew up in Los Alamos during the Manhattan Project that, "These children were a microcosm of the United States – children of scientists, many of whom had grown

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<sup>3</sup>This justification for the dropping of the atomic bomb continues to be debated among historians. One historian who adheres to the position presented here is Barton Bernstein.

<sup>4</sup>Tuttle, William M., Jr., *Daddy's Gone to War: The Second World War in the Lives of America's Children* (New York: Oxford University Press, 1993), x.

<sup>5</sup>Ibid, 27.

up in Europe; of machinists and technicians from around the country; of construction workers from Texas and Oklahoma; and of Spanish Americans.” Mason also notes that while the children who grew up on military controlled reservations during the war years did not think of their experiences as unique at the time, later on as adults many realized that “this was not the way in which most people grow up.”<sup>6</sup> Indeed, Manhattan Project sites were not on any public maps, had constant security patrols, were surrounded by barbed wire and were not intended to last after the end of the war.

Much has been written about Oak Ridge’s role in the Manhattan Project and the role that the U.S. Army and the workers in that city filled in order to successfully construct America’s first nuclear weapons arsenal. Some of these works include *These Are Our Voices: The Story of Oak Ridge 1942 – 1970* edited by James Overholt, and *Oak Ridge and Me: From Youth to Maturity* by Joanne Stern Gailar. While both books provide a general history of Oak Ridge, their strength lies in the fact that both provide a glimpse of what life was like in Oak Ridge during and shortly after the war years from the perspective of several of the primary historical actors. Included are several anecdotal accounts of the displacement of the area’s first residents, the efforts at building a “secret city,” and general information about community life in Oak Ridge and the surrounding community.

*City Behind a Fence: Oak Ridge Tennessee 1942 – 1946* by Drs. Johnson and Jackson, remains the seminal account of the community history of Oak Ridge and its operation during the war years. It is a broad account of the operation and nature of the

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<sup>6</sup>Mason, Katrina R., *Children of Los Alamos: An Oral History of the Town Where the Atomic Age Began* (New York: Twayne Publishers, 1995), xi.

city, and it also includes prospects for the future role Oak Ridge will play in the world. Though first published in 1981, it continues to inform the public and guide historians researching various topics about Oak Ridge.

A recently published work by Russell B. Olwell entitled *At Work in the Atomic City: A Labor and Social History of Oak Ridge, Tennessee*, chronicles the attempts by the Oak Ridge residents and workers during the Manhattan Project to build a community that lived up to the ideals of the American spirit. Olwell skillfully details the struggles that ensued between the workers in the various atomic production plants and the federal government over unionization, control over community affairs and political control of the city of Oak Ridge. Moreover, he analyzes the environmental and health issues that have impacted the Oak Ridge area and its workers as a result of the whirlwind effort to establish nuclear hegemony in the world.

As Russell B. Olwell has outlined, the official histories of Oak Ridge published by the U.S. Army, the Army Corps of Engineers and the Atomic Energy Commission present the basic facts of the creation of Oak Ridge and the Manhattan Project; yet, they do not include any “questionable” aspects that have surrounded the Oak Ridge story. Environmental issues that continue to plague the area and the long-term health impacts that also continue to haunt many former plant workers are absent. Furthermore, the operation of the plants during the years of the Manhattan Project is presented as a model of safety and efficiency, despite the enormous production pressures to produce a weapons arsenal before the enemy was able to produce one.

With the exception of Mason's work on the children of Los Alamos, there are few histories of Manhattan Project sites whose main focus is to answer the question of what life was like for the children living and growing up in cities that were designed for atomic material production. Thus, the following is an examination of the Manhattan Project's effect on the children of Oak Ridge, Tennessee. More specifically, this study will examine the general character of Oak Ridge life during and shortly after the Manhattan Project – including matters dealing with planning, constructing, and operating a military reservation, community life within that reservation and the education of its children. While the children of Oak Ridge grew up in a unique cultural environment because their city was dominated by the mission of the Manhattan Project, this study reveals that they were surrounded by an enriching community and educational atmosphere which caused many to develop a profound appreciation for the original mission of Oak Ridge and the environment in which they lived.

## Chapter One

### Oak Ridge Planning, Construction, and Operation

The site for the atomic bomb production facilities in Oak Ridge, as it became known in the spring of 1943, was chosen on September 19, 1942, by Major General Leslie R. Groves. Groves, who assumed control of the Manhattan Project on September 17, 1942, had just come off duty as the Deputy Chief of Construction of the Army Corps of Engineers, a position which he occupied from 1940 to 1942. As such, he had extensive experience in the planning and construction of projects for the United States Army. In fact, Groves successfully led the \$64,000,000 construction of the Pentagon Building – a feat that, surprisingly, did not earn him much recognition outside of the War Department. Upon being told by General Brehon B. Somervell, commander of the Army Service Forces, that “You’ve been picked for the biggest job of the war – the job that can win it!” Groves turned down a coveted overseas leadership post to command the top-secret mission.<sup>7</sup>

To many, Groves was precisely the type of leader the Army needed in order to quickly manufacture a nuclear arsenal. As described by one of his friends, “Groves not only behaves as if he can walk on water, but as if he actually invented the substance.”<sup>8</sup> Though some perceived Groves’ personality as harsh or exceedingly arrogant, his discipline and stubbornness proved to be personality traits that aided in the effective management of the Manhattan Project.

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<sup>7</sup>De Vore, Robert, “The Man Who Made Manhattan,” *Colliers*, 13 October 1945, 12.

<sup>8</sup>Johnson, Charles W., and Charles O. Jackson, *City Behind A Fence: Oak Ridge Tennessee 1942 – 1946* (Knoxville: The University of Tennessee Press, 1981), 4.

After being given several options for locations in which to build the atomic weapons production facilities, Groves chose the area known as Black Oak Ridge because of its proximity to rail lines, its safe distance from the coast, and its high ridges (which would aid in the muffling of possible accidental explosions and help to hide the plants from possible saboteurs).<sup>9</sup> Moreover, the plentiful supply of power that was required to operate the three large production facilities the Army planned to build could be provided by hydroelectric plants at Norris Dam and Watts Bar, just to the north and south of Oak Ridge.<sup>10</sup> Codenamed “Clinton Engineer Works,” the Oak Ridge portion of the Manhattan Project was soon responsible for the separation of isotopes from uranium that would be used to construct the first atomic bomb. The Hanford, Washington, production facility provided the plutonium for the second atomic bomb, and the Los Alamos facility became known as the “scientific center” of the project – the location where scientists and mathematicians developed bomb designs and assembled their final components.<sup>11</sup>

As the largest of the three main Manhattan Project sites, Oak Ridge soon developed into the fifth-largest city in Tennessee. At the height of its production capacity, the population of Oak Ridge was over 75,000, with nearly “10,000 family dwelling units, 13,000 dormitory spaces, 5,000 trailers and more than 16,000 hutment and barracks accommodations.”<sup>12</sup> In addition, the city was one-and-a-half miles wide

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<sup>9</sup>Olwell, Russell B., *At Work in the Atomic City: A Labor and Social History of Oak Ridge, Tennessee* (Knoxville: University of Tennessee Press, 2004), 1.

<sup>10</sup>Johnson and Jackson, 6.

<sup>11</sup>Olwell, 1 – 2.

<sup>12</sup> Wende, Ernest A, “Building A City From Scratch,” *Engineering News Record* 135 (December 13, 1945): 815.

and six-and-a-half miles long, with all of the necessary amenities that a city of that size would require.<sup>13</sup> A.K. Bissell, a former mayor of Oak Ridge, described the enormity of the industrial undertaking at Oak Ridge in a meeting of the East Tennessee Historical Society in 1967. He said:

Tonight I want to reminisce about the building of a City. Too often in the glamor and romance of atomic energy, sight has been lost of this monument to human ingenuity. Perhaps an analogy might serve to set the stage. Suppose tonight we were to call in the owners of the Holiday Inns and direct them to buy 60,000 acres of rolling farmland in the foothills of East Tennessee; we would tell them that within six months we wanted the land prepared and utilities ready to begin the building of homes. Within eight months we wanted to have 20,000 people living there with restaurants, schools, water, electricity, transportation, medical and dental care, and a local newspaper. Further, the population would increase for a year and a half until 75,000 people must be fed, housed, educated, and transported back and forth to work, and what is more, nobody must know about it....

It wasn't easy, but as time passes we lose touch with the unpleasant. Perhaps the truth is close to a remark of one of our oldest citizens, "It was terrible but we loved every minute of it."<sup>14</sup>

While the plans for Oak Ridge initially called for the town to have a population of around 13,000, that number was quickly surpassed when the Army and top scientists working on the project realized the enormous amount of skilled and unskilled laborers that would be required to build and operate the atomic production facilities. The number of residents in Oak Ridge grew to 45,000, then, by the end of 1944, the number of residents was around 75,000.<sup>15</sup> Workers were recruited from all across the nation to work on the plant construction in Oak Ridge. Due to the extremely sensitive nature of the

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<sup>13</sup>Ibid.

<sup>14</sup>Bissell, A.K., "A Reminiscence of Oak Ridge," East Tennessee Historical Society *Publications* 39 (Fall 1967): 71.

<sup>15</sup>Ibid.



project – and the legitimate threat that the secret mission would be revealed – workers were not told the specific nature of their work. Many were simply informed that it was a “vital war-related project.”<sup>16</sup>

At the beginning of the recruitment process for MED workers, however, the federal government did find it somewhat difficult to recruit workers for the three main project sites. While Oak Ridge was less isolated geographically than the sites at Los Alamos or Hanford, the southern region of the country was notorious for having a rather non-transitory population. Recruiters in the South often failed to reach their goals because of the “...strong sense of place” that prevented workers from leaving area that their families had occupied, in many instances, for many generations.<sup>17</sup> Nonetheless, lured by the promises of good pay, steady work, and the realization that they were – in some way – helping to win the war, thousands constructed and worked on three atomic production plants in Oak Ridge. Moreover, the War Manpower Commission, the agency responsible for the recruitment of workers for the MED sites, often reminded possible labor prospects for Oak Ridge that if they did not come and “volunteer” for unspecified service at the “vital war-related project,” the military draft would await.<sup>18</sup>

Thus, thousands came to Oak Ridge to build and work at the atomic production plants with the designations of K-25, Y-12, and X-10. K-25, constructed in the fall of 1943 by the Kellogg Corporation and managed by Union Carbide Corporation, was located

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<sup>16</sup>Hales, 166.

<sup>17</sup>Ibid., 167.

<sup>18</sup>Olwell, 9.

about ten miles away from the western perimeter of the city. Designed for gaseous diffusion, the plant's main purpose was to separate the rare isotope U-235 from the more common uranium-238. Y-12, whose construction began in February of 1943, was also designed to separate U-235 from U-238. Located in a parallel valley from K-25, the main distinguishing factor that made Y-12 different from K-25 was that the separation of the uranium isotopes at this plant was accomplished through an electromagnetic process. Y-12, also managed by a private contractor, was operated by Tennessee Eastman Corporation.

Located to the southeast of K-25 in another parallel valley, X-10, also known as the atomic pile, was the pilot plant that formed the foundations for the large-scale plutonium production in Hanford, Washington. Also begun in February of 1943, X-10 consisted of a graphite reactor that transformed U-238 into plutonium through nuclear fission. While under construction, X-10 was managed by a division of the University of Chicago until its completion on July 1, 1945. After this date, Monsanto Chemical Company managed the operation of the plant.<sup>19</sup>

Much like the planning and construction of the atomic production facilities, the design and operation of the city was also accomplished through the work of private contractors. Skidmore, Owings, & Merrill (SOM), an architectural firm based in Boston, was commissioned by the MED in 1942 to develop the site and building plans for a secret city. Initially, the architects employed by SOM were only given a few aerial photographs

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<sup>19</sup>Jackson, Charles O., and Johnson, Charles W, "The Urbane Frontier: The Army and the Community of Oak Ridge. Tennessee 1942 – 1947," *Military Affairs* 41 (February 1977): 9; and Jackson and Johnson, *City Behind A Fence*, 9 – 10.

and limited topographical maps in order to design a city that, at its outset, was supposed to be limited to 3,000 families. Eventually, the MED did allow architects from the company to visit the area. Even so, the visits by the representatives of SOM to the area that would become Oak Ridge were conducted with the utmost secrecy, and the ultimate mission of the city was kept a secret even from the city's main architectural firm.<sup>20</sup>

SOM officials, charged with the responsibility of developing the wooded areas of Roane and Anderson counties into suitable areas for the residents that would work on the Manhattan Project, also worked in close collaboration with US Army engineers in order to construct houses and roads.<sup>21</sup> Upon instructions from the Army that most of the residents of Oak Ridge would be “technically trained professionals used to living well,” Skidmore, Owings, and Merrill architects designed a city that was as “pleasant as the emergency would permit.” Thus, a staff of 550 was brought to the area to design community centers, banks, post offices, bus terminals, clothing stores, ten-cent stores, movie theaters, supermarkets, bowling alleys, and a football field. Moreover, living quarters and roads were situated within the natural contours of the land in order to avoid large-scale redevelopment.<sup>22</sup>

While the SOM architectural firm was responsible for the planning and construction of Oak Ridge's facilities, the operation and maintenance of these facilities was given to the civilian-owned Roane-Anderson Company, a subsidiary of the Turner

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<sup>20</sup>Sanderson, George C., “America's No. 1 Defensive Community: Oak Ridge, Tennessee,” *Progressive Architecture* 32 (June 1951): 63.

<sup>21</sup>“Atom City,” *Architectural Forum* 83 (October 1945): 103.

<sup>22</sup>“Atom Town,” *Architectural Forum* 83 (September 1945): 9.

Construction Company. The name Roane-Anderson was derived from the two counties in which the Clinton Engineer Works production facilities operated.<sup>23</sup> Though the Roane-Anderson Company did not work at K-25, Y-12, or X-10, the responsibilities entrusted to this company were tremendous. As Drs. Jackson and Johnson write:

The company was everyone's landlord. It delivered the coal, picked up the garbage, repaired broken windows, and tried to keep the busses running on time. The company sought out and brought necessary retail services to the reservation and was in turn held responsible by residents, as well as the Army, for the efficiency of those services.<sup>24</sup>

Because of the rapidly-expanding Oak Ridge population and the high expectations for a comfortable existence demanded by some of its residents, complaints to Roane-Anderson were numerous. An anonymous MED official is reported to have said that Roane-Anderson was "the best whipping boy the Army ever had." Even so, Roane-Anderson was remarkably efficient and capable in its management of Oak Ridge during the Manhattan Project. It frequently replied to its customers that "an effort will be made" to handle the numerous grievances that living in a city like Oak Ridge entailed. Moreover, it eventually proved to be an economical approach to managing the town, much to pleasure of town's military manager, Captain P.E. O'Meara.<sup>25</sup>

The planning, construction, and operation of the city of Oak Ridge under the authority of the Manhattan Engineer District during the 1940's is information that is essential in order to lay the foundation for the experiences of the children of Oak Ridge.

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<sup>23</sup>Wende, 817.

<sup>24</sup>Jackson and Johnson, *City Behind A Fence*, 69.

<sup>25</sup>Ibid.

The geographic location, the variety of types of work performed and the physical facilities that existed in Oak Ridge all had a tremendous impact on the experiences of the children who grew up in the shadow of the world's most secretive industrial undertaking. While most of the city's workers and children initially had to adjust to life "behind the fence," the children of Oak Ridge soon became aware why Oak Ridge was truly a uniquely positive and enriching community in which to live.

## **Chapter Two**

### **Community Life**

In September of 1945, upon learning that she and her family would soon be moving to Oak Ridge from Madisonville, Tennessee, Mary Elizabeth Alexander recalls that she could hardly contain her excitement. Not only would she, her sister, and her mom be able to live in the town where their father had been working since the previous year, but she also would soon be able to experience all of the “exciting” things that Oak Ridge had to offer. Although she was only ten years old at the time of her family’s move, Mary Elizabeth recalls that Oak Ridge was a very diverse place, with children and families from all across the United States. As she describes it, “Living in Oak Ridge was quite an eye-opening environment for a girl with a rural past.” Moreover, she describes there being “oodles and oodles of children everywhere!” This era was, she explains jokingly, “pre-birth control!”<sup>26</sup>

Indeed, during the Manhattan Project, the city of Oak Ridge was virtually like no other city in America. Though the individuals who lived in Los Alamos and Hanford could probably identify with many of the same aspects of life in Oak Ridge, such as the diverse population with individuals from a variety of socio-economic levels, the Oak Ridge population was much larger than the other two sites. As stated above, at its peak production capacity in 1944, there were over 75,000 residents in Oak Ridge. Los Alamos contained approximately 6,000 during its production peak, and Hanford contained just

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<sup>26</sup>Mary Elizabeth Alexander of Oak Ridge, Tennessee, interview by author, 03 October 2005.

over 40,000.<sup>27</sup> It was, as one person described it, “like a wild West frontier town of the 1870s.”<sup>28</sup> While that may have been a bit of an exaggeration, several aspects of life in Oak Ridge contributed to its distinctive atmosphere.

One of the most striking aspects of life in Oak Ridge was the youthfulness of its citizens. As Francis Sill Wickware described it in 1946:

Today, against this tumultuous background, Oak Ridge has grown up as a settled, genteel community. Probably the most conspicuous thing about it is the youthfulness of its inhabitants. The crowds on the streets are composed almost entirely of people who look well under 30, and even in the conclaves of scientists it is rare to find a man of 40. This reflects the fact that young scientists were more willing and able than older men to pull up stakes and embark on an unknown project. As a result, Oak Ridge is an uncommonly healthy, vigorous city where the number of births is nearly 10 times the deaths.<sup>29</sup>

While the city of Oak Ridge had every necessary amenity in order to be considered “modern” by the standards of the mid-1940’s, the fact that its city leaders advertised in the 1946 publication *For Your Information: A Guide to Oak Ridge*, “compiled as a service to Oak Ridge residents, both old and new,” the fact that it had no funeral home, added to its peculiarity.<sup>30</sup> MED authorities believed there were plenty of funeral homes in the surrounding towns to manage the low number of deaths that occurred in Oak Ridge. Moreover, if a funeral home was allowed to operate in town, project managers believed that there would then be calls for a cemetery – a “symbol” that

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<sup>27</sup> Hunner, Jon, *Inventing Los Alamos: The Growth of an Atomic Community* (Norman: University of Oklahoma Press, 2004), 47; and Hales, 107.

<sup>28</sup> Wickware, Francis Sill, “Oak Ridge,” *Life*, 9 September 1946, 3.

<sup>29</sup> *Ibid.*

<sup>30</sup> “For Your Information: A Guide to Oak Ridge,” *Community Relations Section, United States Engineering Department*, 1946, 36.

Oak Ridge would be a permanent community. The idea that Oak Ridge was to be a temporary wartime community remained central to the authorities in charge of city planning.<sup>31</sup> Even so, there seemed to be an element of pride in the city regarding the fact that the majority of the Oak Ridge population was youthful.

Sam Clinton, whose father and mother had worked in defense factories in Detroit before he moved to Oak Ridge in August of 1945, also recalls there being swarms of children all over the neighborhoods. He remembers playing “kick the can” and other games with all of the children who lived on Robertsville Road and Regent Circle.<sup>32</sup> When asked to describe why there might have been such a large population of children in Oak Ridge during the years of the Manhattan Project, one resident recalled that, “Pretty near all there was to do in those days” was to have children.<sup>33</sup>

Another resident, when asked why he and his wife decided to have a child in Oak Ridge, recalled that he and his wife believed a child would help lighten the mood in their home. He remembers working all day and then not being able to tell his wife anything about his experiences because of the classified nature of the project. “A man could bust,” he said. “Then we started quarreling. Over nothing, really. So we decided to have a baby.”<sup>34</sup> Though it may have seemed to many in town that all there was to do in Oak Ridge was to have children, it is not surprising that Oak Ridge had the highest birth rate

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<sup>31</sup>Jackson and Johnson, *City Behind A Fence*, 130.

<sup>32</sup>Sam Clinton of Knoxville, Tennessee, interview by author, 09 October 2005.

<sup>33</sup>Falstein, Louis, “Oak Ridge: Secret City,” *New Republic*, 12 November 1945, 5.

<sup>34</sup>*Ibid.*, 2.



in the nation, considering the fact that the average age of the worker in the plant was 31 and that thousands of workers were brought into a small geographic area.<sup>35</sup>

Sam Clinton also recalls that there were no class distinctions or distinguishing socio-economic characteristics among the children. In that manner, he viewed Oak Ridge as “progressive” in relation to the surrounding communities.<sup>36</sup> Joette Rule, a long-time resident of Oak Ridge whose family moved to town in the spring of 1945 from Kingsport, Tennessee, also recalls that social or class distinctions were not relevant to the children of Oak Ridge. “We didn’t know about money, and we didn’t care,” she recalls.<sup>37</sup> Steve Evans, a life-long resident of Oak Ridge, remembers that the children of Oak Ridge were mildly aware of social class because of the types of clothes a child wore, but it was, as he puts it, “Not a big deal. Intellectual class was the most important thing.”<sup>38</sup>

While some children in Oak Ridge labeled their city “progressive” because of the lack of social distinctions between its children, others labeled this “socialistic.” The Army and its contractor, Roane-Anderson, kept tight control of all matters relating to housing or business. And, because there was a concern that some businesses would not pay enough rent to the Army or, furthermore, engage in price gouging because of the lack of competition in Oak Ridge, the Army imposed tight restrictions.<sup>39</sup> In her January,

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<sup>35</sup>Lania, Leo, “The Real Secret at Oak Ridge,” *UN World* (January 1950): 19.

<sup>36</sup>Sam Clinton interview.

<sup>37</sup> Joette Rule of Oak Ridge, Tennessee, interview by author, 09 October 2005.

<sup>38</sup>Steve Evans of Oak Ridge, Tennessee, interview by author, 07 October 2005.

<sup>39</sup>Jackson and Johnson, *City Behind A Fence*, 92.

1950, article entitled “The Real Secret of Oak Ridge,” Leo Lania outlines why she thinks Oak Ridge was, in fact, a socialist community. She writes:

While the experiments which are conducted day and night behind those barbed wires are America’s most effectively guarded secrets, there is one experiment which every visitor can witness freely and which is perhaps no less remarkable: Oak Ridge is a socialist community....

You cannot own any land or house in Oak Ridge. Homes are only for rent, which ranges from \$30 to \$85 a month. If you want to open an office, a drug store, a restaurant or a shop, you apply for a license and if you get permission to start your business, your rent is fixed on a sliding scale depending on your revenue. You are not allowed to make more than 10 percent profit. The proprietor of the local drug store, for example, has most of his earnings siphoned off into a rent of \$100,000 a year.<sup>40</sup>

Despite the reality that much of the profit of the vendors in Oak Ridge was paid to the federal government, Lania goes on to note that, because of the large population of Oak Ridge, and the fact that competition among local vendors of goods was minimal, life for the businessman was “nice...Not colorful, not adventurous – just nice.” Furthermore, because the average age of the Oak Ridge resident was 31 years, and these residents came “from every state in the nation,” Oak Ridge residents held a uniquely liberal and progressive view of world affairs.<sup>41</sup> Certainly, living in Oak Ridge as a child, in the midst of this “socialistic” environment, afforded the children of Oak Ridge a childhood that was, almost assuredly, different than that of other American children.

Moreover, because Oak Ridge was a military reservation, access to town by tourists or any other non-MED resident was prohibited. Thus, parents had little reason to fear for the safety of their children. Joette Rule remembers that parents in the different

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<sup>40</sup>Lania, 17 – 18.

<sup>41</sup>Ibid, 19.

neighborhoods looked after everyone's children, and that she does not recall "one instance of ever being afraid." She adds, "We felt safe and had plenty of freedom."<sup>42</sup>

Mary Elizabeth Alexander remembers that, "Oak Ridgers stood up for themselves and looked after each other." After all, she adds, "We didn't have family here. We only had each other."<sup>43</sup>

Concern for the safety of Oak Ridge children was not an issue, and, even if there were individuals who lived on the MED reservation that may have been inclined toward criminal activity, concern over this matter was minimal. In fact, conviction of a crime in Oak Ridge would most likely mean the loss of one's job, and, subsequently eviction from the city. Peter Hales describes this well when he writes:

To be fired meant more than forced unemployment without a statement of availability. On the District, it meant immediate eviction from onsite housing, not just of yourself, but of your entire family. Within twenty-four hours of being fired, workers and their families found themselves and their belongings deposited (sometimes forcibly) outside the gates.<sup>44</sup>

Another one of the reasons that the parents in Oak Ridge felt safe to let their children roam the neighborhoods was that all of the persons ten years of age or older entering the city were required to show a badge in order to pass through the security checkpoints that led into the city. Moreover, cars and suspicious vehicles were often searched at the discretion of the military personnel on duty.<sup>45</sup> Nearby residents from

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<sup>42</sup>Joette Rule interview.

<sup>43</sup>Mary Elizabeth Alexander interview.

<sup>44</sup>Hales, 177.

<sup>45</sup>Ogden, Waren, "Oak Ridge Primps as Opening Time Nears," *Knoxville News-Sentinel*, 6 March 1949, 1.

Knoxville often expressed extreme frustration because they did not know what in the world was occurring inside the “secret city.” What is more, the only time non-residents could enter the city was when a resident of Oak Ridge obtained a visitor’s pass for them, and – even then – security officials often monitored the duration of a visitor’s visit very closely. Additionally, in an effort to guard against security threats to the project from MED residents, items that could somehow jeopardize the security of the Manhattan Project, such as cameras or firearms, had to be registered with the local authorities.<sup>46</sup>

Thus, when the gates of the city were scheduled to open on March 19, 1949, many parents in Oak Ridge expressed apprehension about the effect this would have on their children. Bill Woolsey, a journalist with *The Nashville Tennessean Magazine*, captures the sentiments of a large number of the parents of town in his article from March 13, 1949. Concerning the parents of the town, he writes, “They worry that Sunday drivers from other cities will speed through their streets, threatening their children’s lives. They fret that peddlers will knock on their front doors and that thieves will break their windows.”<sup>47</sup> Though the city gates were opened to the public on March 19, 1949, the Atomic Energy Commission, the civilian agency responsible for control and development of nuclear power, would continue to govern the city much like the MED authorities.<sup>48</sup>

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<sup>46</sup>“Mystery Town Cradled Bomb,” *Time and Life*, for Union Carbide and Carbon Corporation, 1945, 2.

<sup>47</sup>Woolsey, Bill, “Oak Ridge Breaks its Shell,” *The Nashville Tennessean Magazine*, 13 March 1949, 6.

<sup>48</sup>Jackson and Johnson, *City Behind A Fence*, 168.

The Atomic Energy Commission continued to govern the city until June 6, 1960 – the official date of incorporation for the city of Oak Ridge.<sup>49</sup>

While it may have seemed to many children living in Oak Ridge that there were no social distinctions or class differences in Oak Ridge and that all Oak Ridgers maintained a concerted posture toward the welfare of their fellow neighbors, preferential treatment was given to some citizens. For example, while the size and type of house made available to families in town was supposed to be governed by family size, charges that larger and more elaborate homes were given to certain individuals with high social rank or some other notable distinction were common.

Upper level civilian and military personnel were often situated in areas of town that were separate from the more transitory, less educated workers who were mainly responsible for plant construction. The Army often housed these residents in trailers, white hutment areas, barracks, or farmhouses which were seized from the original inhabitants of Anderson and Roane Counties. Thus, the terms “Snob Hill,” and “Brass Hat Circle,” were coined for the area of town north of Jackson Square where upper level civilian and military personnel were given more comfortable cemesto homes (named because of the combination of prefabricated cement and asbestos).<sup>50</sup>

Moreover, the contractors who operated the plants often tried to “bend” housing rules in order to recruit a larger, more talented workforce. Restrictions established by the Army stated that only “bona fide heads of families” could apply for family quarters

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<sup>49</sup>Bissell, 86.

<sup>50</sup>Jackson and Johnson, *The Urbane Frontier*, 11; and Jackson and Johnson, *City Behind A Fence*, 105.

(which, most of the time meant a married man, living in a house). Yet, Tennessee Eastman Corporation and Roane-Anderson often requested the Army house its women and single men in houses. While there were some exceptions to this rule made by the Army and, despite the fact that upper-level scientists and managers were sometimes given more comfortable housing arrangements, the reality was that housing rules were fairly straight-forward and administered objectively.<sup>51</sup> Dormitories, trailers, and small, flat-top houses were distributed to Oak Ridge residents according to gender, marital status, and, to some extent, rank within the community. While the shortage of houses that plagued Oak Ridge since the start of its operation lessened after the height of the atomic production in 1944, there was the persistent problem that “supply never reached the level of demand.”<sup>52</sup>

Though many adults who lived in Oak Ridge as children recall that there were always plenty of children to play with, that parents were not too concerned about safety because of the restricted nature of the city, and that housing distribution was relatively consistent, it was clear that race was extremely important. Much like a large majority of the United States in the 1940's and 1950's, Oak Ridge was segregated along racial lines – whites in one section, blacks in another. In fact, when the city of Oak Ridge was designed, separate “White” and “Colored” areas were clearly defined. Russell Olwell describes some aspects of this segregation well when he writes:

The Army segregated housing, shopping, and transportation in the city. Through leases and contracts, the army controlled the businesses and the bus system at Oak

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<sup>51</sup>Jackson and Johnson, *City Behind A Fence*, 79 – 81.

<sup>52</sup>*Ibid.*, 77.

Ridge and used this power to enforce racial segregation. One white resident remembers that as a small child, a bus driver chased him to the front of the bus because he was sitting in the “wrong section.”<sup>53</sup>

Additionally, Olwell describes that, at the beginning of the war, married black couples were even forced to live apart. Black women were confined to dormitories separate from the white women, and, similar to the poorer white Oak Ridge workers, black men were forced to live in the “colored hutments,” one room shacks that contained no plumbing, rarely had windows and were, by all accounts, very primitive.<sup>54</sup> Peter Bacon Hales provides an excellent description of the hutments in Oak Ridge that served as the residences of lower-class whites and the black community:

At Oak Ridge, both whites and blacks lived in “hutments.” These were not the same structures the workers at Hanford had – *those* were plywood Quonset huts, insulated, heated, even cooled with “desert chillers” in the summer, with separate rooms occupied by two workers, each room with a window. The Oak Ridge hutments were plywood cubes without interior walls; the upper half of each wall was “window” – but without glass and usually without a screen, and “secured” with large, hinged, drop-down shutters that could only be pulled up out of the way, or locked down... Within, there was no privacy; the inside was a small open area with bunks and footlockers crowding the space. In summer it was always sweltering. In winter, it was “heated” by an oil stove in the middle of the room.<sup>55</sup>

Though documents show that the Army did want to have a “Negro Village” at the time of the construction of the city that would be comparable to the housing that was given to whites, this planned community was halted because of the additional housing that was needed for whites. Anticipating some resistance to the idea of transferring “Negro Village” to the white workers, project managers attempted to rationalize their

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<sup>53</sup>Olwell, 21.

<sup>54</sup>Ibid.

<sup>55</sup>Hales, 195.

decisions. Lieutenant Colonel Crenshaw, the officer in charge of the building program for Oak Ridge, explained that, “Negroes...didn’t want the fancy houses that [Skidmore, Owings, & Merrill] had designed for them – they liked the shacks and cabins to which they were accustomed.”

Moreover, he continued, the nature of the Negro – especially the women – was not accustomed to high standards.<sup>56</sup> Thus, the area that was originally designed to have about “fifty cemesto units, four dorms, a cafeteria, a church, school, and limited stores” for the black community was expanded into what became known as the “East Village,” a community for white workers and their families. Black workers in Oak Ridge were never able to obtain the type of housing that was available to white workers. Hutments and “family hutments” (made by connecting two standard-size hutments), was the extent of the available housing for blacks.<sup>57</sup> And even though there were a limited amount of “flattop” houses available to blacks after the war, the hutment areas remained the location where most of the black families continued to live.<sup>58</sup>

This hutment area became known as “Gamble Valley,” complete with its own cafeteria, shops, and entertainment facilities called Scarboro Village. The white settlements in Oak Ridge were confined to three other major areas: Pine Valley (to the west of the town center), Elm Grove (on the east side of town), and Outer Drive (to the north of the town center along the top of the ridge than ran parallel to the main road in

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<sup>56</sup>Ibid., 194.

<sup>57</sup>Jackson and Johnson, *City Behind A Fence*, 22 – 23.

<sup>58</sup>Ibid., 212.



town).<sup>59</sup> Each one of these neighborhoods also had its own shops, playgrounds, and eating facilities. Consequently, there was very little interaction between white and black children.

Not only were the black families in Oak Ridge given the poorest quality of housing that was available, but Gamble Valley also was known to be notorious for being lower and wetter than the surrounding topography – thus, the prevalence of mud and mosquitoes was common. Also, going against the advice of many scientists and planners who had influence in determining the type and location of housing in Oak Ridge, black neighborhoods were located in much closer proximity to the Y-12 electromagnetic facility. As a result, the risk that these neighborhoods would be exposed to poisonous emissions or explosions was much greater.<sup>60</sup>

An unfortunate consequence of the poor location in which the black hutments were located is detailed in a 1949 article published in the *Science News Letter*. While there have been contemporary studies which indicate that the “cemesto” houses in Oak Ridge were, and continue to be, hazardous to the health of the residents of Oak Ridge, the 1949 study indicated that the housing that was given to blacks in Oak Ridge was more hazardous than the housing given to whites.

Dr. Bernard M. Blum of Philadelphia and William F. Elkin, a statistician with the health physics division at the Oak Ridge National Laboratory (formerly known as X-10), concluded that the Negro community in Oak Ridge was more susceptible to meningitis

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<sup>59</sup>Hales, 22.

<sup>60</sup>Ibid., 197.

because of the slums in which their neighborhoods were located.<sup>61</sup> Even though information like this was most likely available to MED officials, it is evident that this type of information did not prompt MED officials to improve the housing situation for the black community on a large scale. Efforts were put in place by the Atomic Energy Commission to provide longer-term, more durable housing units in March of 1949, but this new housing was limited to 286 units.<sup>62</sup>

Not only were the children of Oak Ridge divided along racial lines because of the physical separation of their neighborhoods, but community-sanctioned recreation activities also prohibited interaction. The Recreation and Welfare Association (RWA), established in July of 1943 in order to provide Oak Ridgers with the types of social and community activities that were common in other non-military towns, intentionally denied extensive recreational activities and meeting locations to the black community. In general, card playing in the “Colored Recreation Hall” and a few unofficially-sanctioned USO recreation activities were the extent of the recreational opportunities offered to the black community.<sup>63</sup>

In stark contrast, recreational opportunities for the white children of Oak Ridge were plentiful. In fact, the availability and variety of activities most likely exceeded the recreational opportunities offered in normal civilian cities of comparable size. By 1945, for example, the civilian-run, non-profit RWA “...provided project residents with 2

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<sup>61</sup>“Housing in Oak Ridge Greater Threat than Bomb,” *Science News Letter*, 5 November 1949, ?.

<sup>62</sup>“New Housing Projects at Oak Ridge,” *Knoxville News-Sentinel*, 6 March 1949, 1.

<sup>63</sup>Jackson and Johnson, *City Behind A Fence*, 116, 121 – 122.

nursery schools, 4 theaters, 6 recreation halls, 36 bowling alley units, 23 tennis courts, a swimming pool, 18 ball parks, a number of taverns, and a 9,400 volume library.”<sup>64</sup> The library, which maintained a staff of seven full-time workers and five part-time workers, was open 70 hours a week and even had a traveling “bookmobile” (a converted US Army surplus ambulance) that traveled the entire residential sections of the city to promote reading.<sup>65</sup> Moreover, seasonal activities such as “little theater, athletic leagues, a music society, concerts, physical fitness classes, community sings, concerts, and talent shows” were provided to Oak Ridge residents as a result of the work of the RWA.<sup>66</sup>

Larry Dickens, a long-time resident of Oak Ridge who lived on the east end of town as a child, recalls that, “Oak Ridge was a rockin’ place!” While the evidence suggests that there were more than two theaters in town, he details how he and his childhood playmates could see movies at two of these – the “Grove” or the “Ridge.” He adds that there were always a variety of sports activities in which to participate and that the Oak Ridge Municipal Swimming Pool was always filled with children in the summers.<sup>67</sup> The pool, which measured 60,000 square feet and held over 2,100,000 gallons of water, was one of the largest in the country and served as the “centerpiece”

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<sup>64</sup>Ibid., 121.

<sup>65</sup>Johnson, Betty, “The Oak Ridge Public Library: Its first in Six Years,” *Tennessee Librarian* 3, no.1 (October 1950): 14 – 15.

<sup>66</sup> Jackson and Johnson, *City Behind A Fence*, 121.

<sup>67</sup> Larry Dickens of Oak Ridge, Tennessee, interview by author, 02 October 2005.

summer experience for many of Oak Ridge's children.<sup>68</sup> In addition, despite the quality of the programs and the large number of children who participated in the activities sponsored by the RWA, the fact that all of the programs were free was the thing that impressed Mary Elizabeth Alexander the most.<sup>69</sup>

While Mary Elizabeth recalls that all of the programs sponsored by the RWA were free, the reality is that small fees were collected if children desired to participate in activities sponsored by the riding academy, the roller skating rink, the amusement park, the dance classes, the pool room, the art school, or the junior band. These fees then went to offset the operating costs of the other programs.<sup>70</sup> Even so, the fact that the children of Oak Ridge had an extensive, well-managed recreation program that provided an "outlet" for the stress of living in an unusual environment, shows that the MED authorities were concerned about the quality of life for the majority of its residents. Their efforts helped to contribute to a sense of stability and "normalcy" for many children in Oak Ridge.

In addition to the RWA provided recreational programs, religious life in Oak Ridge was encouraged in a variety of ways by the MED authorities. Many structures within Oak Ridge – such as schools, cafeterias, and theaters – served as meeting places for different congregations that existed, and the Army even built a non-denominational

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<sup>68</sup> Robbins, J.D. and Jarrell, Temple R., "Recreation in America's Secret City," *Recreation*, February 1946, 577.

<sup>69</sup> Mary Elizabeth Alexander interview.

<sup>70</sup> Robbins and Temple, 576.

chapel named the “Chapel-on-the-Hill.”<sup>71</sup> Moreover, because the military believed that “the presence of ministers on the area would [help] abate criticism which might come to the community regarding morals,” ministers who served the various congregations were given special housing if the congregations they served were of sufficient size.<sup>72</sup>

Lieutenant Colonel Robert C. Blair, the Deputy District Engineer of Oak Ridge in 1943, encouraged local denominational leaders in East Tennessee who had expressed interest in the possibility of establishing churches in the area by saying, “It will be the policy of the Clinton Engineer Works to encourage and foster in every way possible the organization of religious groups and the development of church programs among these individuals who will be residing upon the reservation.” This support for the establishment of churches and religious organizations, however, also came with the stipulation that participation among the residents of Oak Ridge was strictly voluntary.<sup>73</sup> Furthermore, in order for the military to avoid the appearance of favoritism between congregations or religious faiths, supplies for church services and other religious customs had to be purchased entirely with private money.<sup>74</sup>

Mary Elizabeth Alexander recalls that because there were such a large number of residents in the community and a wide variety of different faiths represented, the Chapel-on-the-Hill often had rotating church services. For example, she recalls, “The Methodists

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<sup>71</sup>Jackson and Johnson, *City Behind A Fence*, 127 – 129.

<sup>72</sup>*Ibid.*, 129.

<sup>73</sup>Sparrow, Martha Cardwell, “The Oak Ridgers” (MA thesis, Mississippi State University, 1980), 108.

<sup>74</sup>Jackson and Johnson, *City Behind A Fence*, 129.

might meet in the morning, then the Baptists would meet in the evening.”<sup>75</sup> Joette Rule’s family primarily worshipped with the local Baptist congregation, but, because the Methodist congregation also met in the same facility in the evening, she also remembers worshipping with the Methodists. That “openness,” she explains, was a tremendous learning experience.<sup>76</sup> Certainly, because many of the children of Oak Ridge were exposed to a variety of different faiths, and an “ecumenical and cooperative spirit”<sup>77</sup> existed among the Jewish, Catholic, and Protestant groups, they received valuable lessons in cooperation and understanding that guided many throughout their adult lives.

The children of Oak Ridge also developed a sense of personal responsibility for their actions because the mission of the city was classified. All residents – including the children – were encouraged to remain supportive of the war effort and to not “ask too many questions about what went on inside the labs.”<sup>78</sup> Some of the people interviewed for this project recall there being signs all over town dealing with security matters. For example, upon leaving the city, residents were admonished by one sign that read, “What You See Here, What You Do Here, What You Hear Here, When You Leave Here, Let It Stay Here.”<sup>79</sup> As a child, Jnell Pleasant recalls that she felt secure in Oak Ridge, but, much like her other playmates, took the warnings on the signs to be quiet about the

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<sup>75</sup>Mary Elizabeth Alexander interview.

<sup>76</sup>Joette Rule interview.

<sup>77</sup>Sparrow, 113.

<sup>78</sup>Mary Elizabeth Alexander interview.

<sup>79</sup>“Mystery Town Cradled Bomb,” 1.

surroundings in Oak Ridge very seriously.<sup>80</sup> Joette Rule remembers, even at home, “We didn’t talk about the work at the labs.” She adds, “We took the motto that there should be ‘no loose tongues’ very seriously.”<sup>81</sup>

While the intimidating signs in Oak Ridge were probably enough to encourage the children to remain quiet about their surroundings, the threat of being prosecuted by the government for revealing secret information almost guaranteed silence on the part of all the residents. Francis Sill Wickware describes some of the fear that dominated life in Oak Ridge concerning the security situation when she writes:

...Oak Ridgers almost never mention the “stuff”... There are a number of reasons for this. To begin with, talk can be extremely dangerous. Heavy fines and stiff prison sentences await anyone divulging confidential information, and it is not always easy to know just what “confidential” means. An air of secrecy – if not fear – ...blankets the project. This is undoubtedly a hangover from early days when private parties of more than seven persons were viewed with suspicion by security agents, and Oak Ridgers were wary about inviting the same guests very frequently. For it was common knowledge then that on every level special FBI and Army Intelligence men worked, lived and mingled with the ordinary citizens.<sup>82</sup>

While it is true that there were residents in Oak Ridge who were employed by the military and the contractors who operated the main labs to act, in a sense, as “secret spies” and to report any suspicious activity or subversive behavior to the proper authorities, information gathered for this study suggests that the children knew very little, if anything, about these agents. Even so, MED authorities maintained tight security throughout the Manhattan Project to maintain the integrity of the mission. Intercepted

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<sup>80</sup>Jnell Pleasant of Oak Ridge, Tennessee, interview by author, 07 December 2005.

<sup>81</sup>Joette Rule interview.

<sup>82</sup>Wickware, 6.

messages by the Federal Bureau of Investigation in early February 1945, which indicated that the Germans and the Soviets were highly interested in learning about the status of “atomic explosive experimentation” in the United States, only served to heighten the security awareness among MED officials.<sup>83</sup>

Though the admonitions to maintain the secrecy of the mission in Oak Ridge were commonplace, and, at times somewhat intrusive, Oak Ridge residents were acutely aware of the patriotic duty of Americans on the home front to do their part to help win the war. The term “patriotic consensus,” coined by Russell Olwell, is descriptive of common practices among Oak Ridge workers of placing national defense goals above civil liberties. Thus, complaints to MED authorities by workers regarding extensive background investigations, restrictions on living quarters, health threats posed by the exposure to hazardous materials at the labs – and other inconveniences – were often non-existent, or, delayed until the end of the war. Additionally, the opportunity to live in a city that paid high wages, provided steady work, and was – by almost all accounts – better than the communities back “home,” propelled workers in the labs to be vigilant with their duties and submit to the wishes of their supervisors.<sup>84</sup> The primacy of the mission of Oak Ridge – even if workers did not know the precise nature of the work occurring – overshadowed all other concerns in Oak Ridge.

An article from the *New York Times* that appeared in the *Oak Ridge Journal*, the weekly publication started in September 1943 by the Recreation and Welfare

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<sup>83</sup>J. Edgar Hoover to Harry L. Hopkins, 9 February 1945, contained in Fern Lyon and Jacob Evans, eds., 33.

<sup>84</sup>Olwell, 41.



Department, summarized many of the reasons Americans were fighting. The intent was to encourage persons on the home front to support the war effort. Furthermore, it touched on the “niceties” of life that would return if the United States was victorious in the war. It stated:

We all know what we’re fighting for. We’re battling for a better world – for life, liberty, and the pursuit of happiness – for the Four Freedoms. We’re struggling – actually – for survival.

But we’re also fighting for a lot of little things...None of them proven to be a real sacrifice – but – collectively, they total up to a mighty big reason for us all to pitch in and win this war...and win it quickly.

Silly as it may sound – we’re fighting for a “steak for every frying pan”...For good, heavy whipping cream to top off luscious desserts...For the return of the nickel hot dog...For hunks and hunks of butter – to bring out the real personality of a baked potato...We’re getting along just fine without those things, and we’ll gladly give up more to help win the war – but they happen to be good examples of the little things we’re fighting for!<sup>85</sup>

Joette Rule echoes this patriotic sentiment when she explains that, “We [as children] were proud of our town. We knew our boys were dying overseas, and we just wanted to help bring them home!”<sup>86</sup> Much like the children of Oak Ridge who expressed a strong desire to get the project done – whatever it was – so the fighting boys could return, many residents in Los Alamos also echoed this sentiment. One woman there remembers, “There was the feeling that you’ve got to make that bomb; you’ve got to get it done; others are working on it; hurry! hurry! hurry! This is going to save our boys!...get that damn bomb done!”<sup>87</sup>

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<sup>85</sup>“What We’re Fighting For,” *Oak Ridge Journal* 1 (25 September 1943): 11.

<sup>86</sup>Joette Rule interview.

<sup>87</sup>Mason, ix.

Despite the fact that this woman from Los Alamos expressed a pre-August 6, 1945 knowledge about the mission of the Manhattan Project, most residents on MED project sites did not know the mission's ultimate goal. Moreover, even some of the upper-level military personnel and scientists knew only of the processes involved at the work in the labs – not the ultimate product.<sup>88</sup> Information was “compartmentalized” in the various plants. That is, information in order to do one's job – and nothing more – was divulged to project employees. As part of this compartmentalization process, project employees could only enter certain areas of the production plants based on a certain security clearance.

Thus, because the mission of the Manhattan Project was such a closely guarded secret, the children of Oak Ridge, much like others around the world, expressed a variety of emotions upon learning that their city had produced the devastating power that destroyed the city of Hiroshima. Though some children were shocked and disillusioned that a weapon so powerful and destructive could be produced by a “peaceful” nation like the United States, most were excited that the war would soon be coming to an end and that the fighting boys would soon return home. Moreover, many children expressed a “qualified” pride in the work their parents had been performing. One child remembers that his pride was not one that said, “...aren't we great? It's more of a pride that says there was this thing to be done and they did it.”<sup>89</sup>

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<sup>88</sup>Sparrow, 134.

<sup>89</sup>Mason, xiv.

While Sam Clinton was not in Oak Ridge on August 6, 1945, because his family was traveling, he remembers that, “100 percent of the people in Oak Ridge were proud of the fact that we had dropped the bomb.” He adds that, because of his strong hatred for the Germans and the Japanese at the time, he was “happy” about the dropping of the bomb.<sup>90</sup> Mary Elizabeth Alexander recalls that, because she and her family had been surrounded by the workings of the Manhattan Project long before the Hiroshima bombing, this probably influenced her feelings about the event. Even so, she expresses her belief that, “Because the work of the Manhattan Project ended the war,” she was proud to be associated with the town and its mission.<sup>91</sup>

Even though there were a variety of aspects about Oak Ridge life that made it a unique place in which to live as a child, some citizens recall that it took several years for Oak Ridge to be labeled “home.” Family connections in other parts of the country or world, combined with the fact that many Oak Ridge residents believed their stay in Oak Ridge would be temporary, caused many to be “cautious” when it came to establishing family roots in the secret city. For Joette Rule, it took many years for her to think of Oak Ridge as “home.” It wasn’t until she was married and had children of her own did this “home” equation become real to her. She also explains that, because it was a big hassle for family members to visit the residents of Oak Ridge, frequent trips back to wherever residents were from also prevented citizens from “settling in.”<sup>92</sup> For others, however,

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<sup>90</sup>Sam Clinton interview.

<sup>91</sup> Mary Elizabeth Alexander interview.

<sup>92</sup>Joette Rule interview.

Oak Ridge became “home” rather quickly. This happened when “Roads were laid out, busses started to operate, taxi-cabs were brought in...[and] neon lights went up on business establishments.”<sup>93</sup> But for some, Oak Ridge and the word “home” never went together.

Islara Souto, a resident of Oak Ridge as a child whose father worked as a top-level scientist for the Atomic Energy Commission, recalls that her childhood experience was not pleasant at all. Due to the fact that she and her family moved to Oak Ridge from Spain, and because her family’s political philosophy tilted toward the left, she was always labeled as a “foreigner” and “leftist.” In her description to the author regarding her childhood experiences in Oak Ridge, she writes:

[My Oak Ridge] childhood turned me into a “rebel without a cause.” I hated life in Oak Ridge, and when I left in 1972 or ’73, I never looked (or ever went) back!

My father discovered three substances in the blood of large irradiated mammals in 1971 (including from the Bikini Atoll experiments). He refused to turn them or his lab protocols over to the AEC, for which he eventually lost his job after much coercion from the U.S. Government; our mail was censored, our telephones tapped, our comings and goings watched – and he was assured that his children would never be admitted to a public university. Although my father had a “Red” past, he was considered sufficiently brilliant and useful to the U.S.; he had received a special clearance from Foster Dulles (Secretary of State), in the early 1960’s to immigrate to the U.S., which we did in 1962...<sup>94</sup>

The experiences that Islara Souto endured while her family was in Oak Ridge, though different than the majority of the children, illustrate the fact that some Oak Ridge

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<sup>93</sup>Falstein, 5.

<sup>94</sup>Islara B. Souto of Miami, Florida, telephone interview by author, 07 October 2005. Foster Dulles died in 1959. Secretary Dulles may have given permission for her family to immigrate in the late 1950’s – a time frame very close to the early 1960’s. No effort by the interviewee to “misconstrue” information was perceived by the author. An effort was made to re-contact the interviewee for factual clarification.

residents did not necessarily fit the “homogeneous mold” of the majority. The complicated nature of the Manhattan Project, and the ensuing Cold War that erupted following the Allied victory, caused the AEC to bring to Oak Ridge scientists with certain areas of expertise. In the case of Islara Souto, the extensive experiences of her father, Dr. Jose C. Souto, with physiology and cancer research were the qualifying factors that allowed his family to move to Oak Ridge.

Unfortunately, the painful experiences that Islara Souto and her family endured in Oak Ridge were common occurrences for a number of high-ranking officials who worked for the AEC. As Richard Gehman notes in his article in *New Republic* entitled “Oak Ridge Witch Hunt,” in 1948 the Atomic Energy Commission conducted approximately 12,000 “loyalty” inquiries out of the total Oak Ridge workforce of approximately 36,000. These “loyalty” tests often consisted of show trials in which potentially damaging information about an official was sent from the AEC Headquarters in Washington. Most often, officials claimed that a suspect had some association – intentional or unintentional – with Communist groups.<sup>95</sup> Though the “witch hunt” inquests, as Gehman labels them, occurred in the immediate aftermath of the Manhattan Project, a period in which security concerns were paramount as a result of the raging Cold War, the critical intrusions into the lives of many individuals – which, in many cases ruined the careers of countless individuals – are difficult to justify. Important for the purposes of this study, however, is the fact that these critical investigations caused some Oak Ridge children to become resentful and bitter toward much of the vital work that occurred in Oak Ridge.

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<sup>95</sup>Gehman, Richard B., “Oak Ridge Witch Hunt,” *New Republic*, 5 July 1948, 12 – 13.

In attempting to summarize the experiences that the children of Oak Ridge encountered with respect to their community during and shortly after the years in which the Manhattan Project occurred, one can be assured that the experiences of one child will most certainly differ from another. Nonetheless, because of the youthful atmosphere in the city which contributed to the abundance of children, Oak Ridge was almost certainly not a “boring” environment. There were children in the neighborhoods from all over the United States, and, in some cases – the world – which exposed children to a variety of cultural attitudes and ways of thinking. Children from different social classes played together – at least the children of the same race – and recreation and community events were well organized and plentiful.

Religious life was important to the community, though participation was strictly voluntary. Of great significance was the fact that patriotism in the community ran high, and after the real reason for the existence of Oak Ridge became known to the world, appreciation for the work of Oak Ridge in helping to end World War Two further increased these patriotic feelings. Finally, though most children and their families in Oak Ridge were not subjected to the character investigations carried out by the AEC, the fact that some of the lives and reputations of high-ranking AEC personnel were left in shambles as a result of these investigations reveals that memories of an Oak Ridge childhood for many are, indeed, bittersweet.

## Chapter Three

### Education

While there are many aspects about Oak Ridge life that characterized it as a positive and enriching place for the children of the city, few aspects of life contributed more to this atmosphere than the Oak Ridge Schools. Indeed, the highly-educated residents of Oak Ridge would have it no other way. Moreover, because the MED authorities wanted to attract – and keep – talented individuals in town to work at the three plants, an excellent school system was of paramount importance.<sup>96</sup> Most significant, however, is the fact that the Oak Ridge Schools prepared the children of Oak Ridge well for the challenges that would confront them throughout their lives.

The first matter of business for the MED authorities in organizing the new school system was to hire a school superintendent. While the job of most school superintendents under “normal” circumstances is challenging enough, the superintendent who would be in charge of the Oak Ridge schools was required to develop a quality school program in a matter of months. Moreover, the classified nature of the work in Oak Ridge would not allow the new superintendent to openly advertise to prospective teachers the mission, or, much less, the location of the city.<sup>97</sup>

Dr. Alden H. Blankenship from New York City was recruited by the Army to be Oak Ridge’s first superintendent. Blankenship, who had recently earned his doctorate in

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<sup>96</sup>Jackson and Johnson, *City Behind a Fence*, 126.

<sup>97</sup>Overholt, James, ed. *These Are Our Voices: The Story of Oak Ridge 1942 – 1970., The Schools of Oak Ridge*, by Marion Alexander (Oak Ridge: Children’s Museum of Oak Ridge, Tennessee, 1987), 135 – 136.

education from Columbia University, was described by many as a “very capable and dynamic individual” with a strong personality.<sup>98</sup> In addition, his charisma and inspirational leadership skills allowed him to recruit top-quality teachers from forty states. Nonetheless, most of the teachers who taught in Oak Ridge during the Manhattan Project came from Tennessee and the surrounding states. Most recruiting was conducted at Peabody Teachers College in Nashville, the University of Kentucky and the University of Tennessee.<sup>99</sup>

Apart from the opportunity to take part in a vital war-related project in a city that would have on-site housing and pay better than the school districts in the surrounding counties, Dr. Blankenship could not offer much more information to prospective teachers. He did, however, promise that they would be able to have freedom in the classroom to experiment with progressive teaching methods.<sup>100</sup> Despite the limited amount of information that was available to prospective teachers, adequate numbers were recruited to successfully open the schools on October 4, 1943. By 1945, the school system had grown from zero buildings to ten, and from an enrollment of 637 to 8,223 students.<sup>101</sup> And, between the graduating classes of 1944 and 1953, the number of graduating seniors increased by 214 students, from 27 to 241.<sup>102</sup>

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<sup>98</sup>Sparrow, 97.

<sup>99</sup>Alexander, 136.

<sup>100</sup>Sparrow, 99.

<sup>101</sup> Jackson and Johnson, *City Behind a Fence*, 126 – 127; and Alexander, 135.

<sup>102</sup>“1783 ORHS-ers Get Diplomas in Ten Years,” *Staff Bulletin – Oak Ridge Schools* 9, no.6 (March 3, 1953) 1.



One of the main reasons that the quality of education was high in the Oak Ridge School System, apart from the fact that teachers were required to have at least a bachelor's degree and most of the teachers at the high school had master's degrees, was the fact that Dr. Blankenship also required the teachers to participate in professional development programs.<sup>103</sup> Marion Alexander offers a good description of the in-service days in the early Oak Ridge School system. She writes:

From Dr. Blankenship's belief that teachers should improve themselves while they taught, teachers' inservice training was established. Until a Wednesday afternoon inservice time was approved in 1970, teachers and administrators worked one Saturday morning each month. Additional training was added to the faculty meetings in all schools every Wednesday afternoon after the children had been dismissed. Much of the inservice was cooperative: teachers shared their ideas and projects; they initiated enrichment activities for grade levels and departments; and they worked on solving the building problems. Curriculum guides were changed, added to, and improved. The professional staff was encouraged to attend summer school and to take courses for advanced degrees. Salary increases were incentives for acquiring additional graduate hours and the master's degree.<sup>104</sup>

In addition to the required teacher in-service hours that were established by Dr. Blankenship, the Oak Ridge Schools maintained their high standards through the variety of ways in which they were funded. Through a combination of funding from Anderson County, (the county in which the schools operated), the MED, and other federal funds operated under the Lanham Act, the Oak Ridge Schools were well-prepared to meet the challenges of its rapidly-expanding student population. Some of this money went to

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<sup>103</sup>Jackson and Johnson, *City Behind a Fence*, 126.

<sup>104</sup>Alexander, 137.

operate five nursery schools.<sup>105</sup> As one can imagine, this provided great flexibility for mothers who worked in the plants, and, simply functioned as a way for the young children of Oak Ridge to develop their social skills.

When asked to recall her experiences in the Oak Ridge Schools, Mary Elizabeth Alexander remembers that there were always a variety of students from different backgrounds – something that was quite nice for a “country girl.” In fact, as one talks to Mary Elizabeth about her experiences, there is a palpable excitement in the air. She remembers there being a rotating class schedule because of the large number of students and the limited availability of classrooms. Nevertheless, she didn’t mind this. Moreover, Mary Elizabeth remembers there being a variety of advanced classes offered in Latin, Spanish, and French, as well as the existence of a unique teaching method called CORE curriculum.<sup>106</sup>

CORE curriculum, was, in fact, quite a unique and progressive method of teaching in the mid 1940’s and early 1950’s. CORE classes, which combined the study of two different subjects such as social living and English on the ninth-grade level, world history and world literature on the tenth-grade level, and American history and American literature on the eleventh-grade level, were modeled after teaching methods used at Berea College.<sup>107</sup> The two-hour, comprehensive classes were most often taught by more than one teacher. Since the CORE curriculum was proven to improve academic scores among

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<sup>105</sup>Sparrow, 103.

<sup>106</sup>Mary Elizabeth Alexander interview..

<sup>107</sup>Capehart, Bertis E., Allen Hodges, and Norman Berdan, “An Objective Evaluation of a Core Program,” 84, from *The School Review*, no date, University of Tennessee Special Collections, Hodges Library, Estes Kefauver Collection, Series I, MS 837, Box 43.

students, the reputation of the Oak Ridge Schools in the surrounding communities for fostering excellence and innovation increased.<sup>108</sup>

While there was objective evidence that showed that the CORE classes offered at the high school were influential in improving study skills, sociability, self-confidence and expression,<sup>109</sup> certain members in the Oak Ridge community were against any type of teaching method that was labeled “progressive.” Reflecting the cultural climate of the time, some even believed that “progressive” teaching would cause the Oak Ridge Schools to be influenced by Communists. In an article that appeared in the May 19, 1953, issue of the *Knoxville News-Sentinel*, Mary Lou Bonham, a student at Oak Ridge High School, responded to the charges that the “progressive” teaching at the high school, as offered in the CORE classes, served as a system that was “ideal for undermining by Communists.” She writes:

In our core class, not only have we studied English grammar, from nouns to parenthetical phrases, and literature from Thoreau to Whitman, but we have also learned to weigh and evaluate before making decisions and to know ALL the facts before forming and expressing our opinions. We have been taught to stand on our feet, to speak our minds. We have learned that each person should be accepted on his individual worth and not prejudged by prejudice. We have studied extensively and intensively the history of the United States and the ideals on which our country was founded....

If this system of teaching is bad, and, if it is, in truth, “ideal for the undermining by the Communists,” then the death knell of America tolled long ago, and for the past 170 years we have been looking toward ideals which are, in reality, made of pink smoke.<sup>110</sup>

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<sup>108</sup>Alexander, 139 – 140.

<sup>109</sup>Capehart, Hodges, and Berdan, 89.

<sup>110</sup>Bonham, Mary Lou, “High School Student Comes to defense of Oak Ridge Schools” *Knoxville News Sentinel*, 19 May 1953.

Clearly, the CORE classes at the high school prepared this young lady to adequately defend the educational system against ignorant and baseless charges by some.

Other members of the Oak Ridge community, including a prominent medical doctor in town, were dismayed that some Oak Ridge residents, whose “own emotional problems dictate this kind of action [of attacking modern teaching methods],” were making headway in the community. Thus, on May 26, 1953, Dr. J.S. Felton wrote Tennessee Senator Estes Kefauver to seek his assistance. In part of his letter, Dr. Felton writes:

In brief, the Oak Ridge Schools, which have been following not a progressive method of education, but a modern type of teaching, have become the target of a few individuals, utilizing both radio time and newspaper space to tear down the present system and revert to educational methodologies of 20 to 50 years ago. It has been our personal experience that the schools here are outstanding, creating not only happy children, but children who can fit into a school system and college set-up with ease and equipped with the necessary information and skills to carry on future learning.<sup>111</sup>

Undoubtedly, the educational experience of the children of Oak Ridge was greatly enriched by both the quality of curriculum and by the active support of the Oak Ridge community as a whole.

Studies were performed at both the high school level and the elementary level to measure student progress in relation to the types of teaching methods used. One study performed by the school administration in 1950 was designed to measure the achievement of students in the fifth through seventh grades who had spent their entire school career in the Oak Ridge Schools versus those who spent only part of their careers

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<sup>111</sup>J.S. Felton, M.D., to Senator Estes Kefauver, 26 May 1953, University of Tennessee Special Collections, Hodges Library, Estes Kefauver Collection, MS 837, Box 43.

in the Oak Ridge Schools. The study revealed, across the board, students who had spent their entire school career in the Oak Ridge School system performed better in virtually all subject areas.<sup>112</sup>

Other studies performed at the elementary level were interested in measuring parent satisfaction or dissatisfaction with the Oak Ridge Schools. For example, a study performed in 1951 by Mrs. Joyce Hamric, a teacher at Woodland Elementary School, found that 85% of Oak Ridgers were satisfied with the school; .02 dissatisfied; 11% satisfied and dissatisfied; and .03% undecided or not answering.<sup>113</sup> Studies performed in other years and at other schools show a similar level of satisfaction with the school system among Oak Ridge parents – a good indicator of the high quality of education the students were receiving.

Moreover, the surveys and professional studies indicate the level of community involvement that was expected from Dr. Blankenship. As he reported to the faculty and staff of the Oak Ridge schools in the October 9, 1945, issue of *The Oak Ridge School News Bulletin*:

The value of a mutual understanding between school and home cannot be overemphasized. All of us are vitally interested in giving the best program possible to the children of Oak Ridge. While this is being done, we need to take stock at times and ask whether or not we are taking advantage of every opportunity to see that the patrons and the community understands the goals for which we are striving.<sup>114</sup>

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<sup>112</sup>“A Survey of Achievement of Fifth, Sixth and Seventh Grade Pupils in the Oak Ridge Schools,” University of Tennessee Special Collections, Hodges Library, Estes Kefauver Collection, Series I, MS 837, Box 43.

<sup>113</sup>“Hamric Survey Finds Big Percentage of Parents Satisfied” *Staff Bulletin – Oak Ridge Schools* 7, no.7 (May 15, 1951): ?.

<sup>114</sup>“Community Relationships,” *The Oak Ridge School News Bulletin* 2, no.2 (9 October 1945): 1.

It is clear that the level of community involvement that Dr. Blankenship expected from his faculty and staff was a direct reflection of the philosophy of education that was approved to operate within his school system. Adopted from the United States Department of Education, the Oak Ridge School System's philosophy of education maintained that, "The American public school was developed as an institution to preserve a democratic government and society."<sup>115</sup> In order to accomplish this goal, the Oak Ridge School System sought to promote a literate citizenship by serving as a stabilizing influence in the lives of its students. Moreover, it attempted to promote quality personal growth and development, maintain wholesome personal relationships, and encourage civic and economic responsibilities.<sup>116</sup>

While the school administrators and staff who worked in the Oak Ridge Schools had many professional development programs and a variety of teaching methods served to increase student achievement, students in the Oak Ridge Schools, especially at the high school, also had the opportunity to participate in a variety of extra-curricular clubs and organizations. For instance, students could write for the school newspaper; join the Art, Home Economics, or Dramatic Clubs; play in the band; participate in the Girl Reserves; play all kinds of sports; cheer; or join the student council.<sup>117</sup>

Even so, as an indication of the social consciousness of some within the student body, Philip Kennedy, an English teacher from West Virginia, organized the Youth

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<sup>115</sup>"A Statement of Philosophy of the Oak Ridge Schools," Library Holdings, The Oak Ridge Room, Oak Ridge Public Library.

<sup>116</sup>Ibid.

<sup>117</sup>Alexander, 139.

Council on the Atomic Crisis during the 1945 – 46 school year.<sup>118</sup> The purpose of the club was to “urge responsible men to prevent destructive use of atomic energy.” It was formed in response to growing fear among many that the nuclear weapons that had resulted from the work in Oak Ridge and other MED sites would be misused or exploited by individuals and/or governments throughout the world. Some scientists warned that “...any modestly industrialized country with access to Uranium can deplete the American atom-smashing machinery in a few years’ time.”<sup>119</sup> Dire warnings by scientists who worked with atomic energy were instrumental in helping to convince students and faculty members that such a group was needed.

Charles Coryell, an atomic chemist, visited Oak Ridge High School in April of 1946 and offered this sober assessment of atomic power: “Unless the atom bomb is controlled for peace, one out of three persons in this auditorium will probably die of the effects of atomic energy.”<sup>120</sup> Students at the high school were also moved to social involvement by editorials which appeared in local media outlets. One issue that appeared in the *Oak Leaf*, the student newspaper of the high school, stated, “We do not want to die a useless death. We cannot be indifferent. We are alarmed that this terrible menace has not been generally recognized...Our fathers [mostly scientists or workers in the atomic bomb development] have told us that the atom bomb can wreck the world, and we believe

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<sup>118</sup>Ibid., 140.

<sup>119</sup>“Oak Ridge: Life Where the Bomb Begins,” *Newsweek*, 5 August 1945, 34.

<sup>120</sup>“Yak-Ac,” *Time*, 8 April 1946, 52.

them.”<sup>121</sup>

Some students in the group traveled to various parts of the country in an effort to attract attention to the council’s cause. In October 1946, Joyce Griggs, a student at Oak Ridge High School, told congregants gathered at Christ Church in Philadelphia that “Hope is a big word...We have to look forward to the goodness of man, the greatness of world peace. World government, world peace, world fellowship we must have. We must remove the shell of indifference which surrounds us and let the good show thru [*sic*].”<sup>122</sup> Furthermore, to illustrate the extent to which the students in the council spread the news around the United States about their mission, by September 1946, 11,000 high school principals and superintendents across the nation had received correspondence from the council explaining their mission.<sup>123</sup>

Despite the fact that much about the Oak Ridge Schools system was progressive and modern, the schools were still segregated along racial lines. There was only one elementary school in the Gamble Valley neighborhood for all black children.<sup>124</sup> All black high school students were required to attend school in Knoxville. They were not allowed in Oak Ridge High School. However, when the Supreme Court ruled in the landmark *Brown v. Board of Education* decision that schools within the United States should integrate, Oak Ridge was the first community in the state of Tennessee to comply with

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<sup>121</sup>Ibid.

<sup>122</sup>Kennedy, Philip E., “Youth, Hope, and the Atomic Paradox,” *NEA Journal* (October 1946): 392.

<sup>123</sup>“Atom’s Children,” *The American Magazine* (September 1946): 141.

<sup>124</sup>Sam Clinton interview.



the order. At the start of the 1955-56 academic school year, 100 black students were chosen to integrate the Oak Ridge Schools. Fifty black students attended the high school, and the other fifty attended Robertsville Junior High School.<sup>125</sup>

Mary Elizabeth Alexander remembers the integration of the school system well. Though she was studying at the University of Tennessee during the 1955-56 school year, she came to back to Oak Ridge in 1957 to teach math. Therefore, she was familiar with many of the events that occurred in Oak Ridge surrounding integration. She recalls that integration went smoothly, though there were some groups in town that tried to prevent it.<sup>126</sup> One group called “Oak Ridgers for Segregation” even tried to recruit volunteers in the community to forcibly prevent black students from entering the Oak Ridge Schools. In a letter that was distributed to Oak Ridgers, the group stated:

Oak Ridge Resident:

The Negroes have registered at Robertsville Jr. High School and at Oak Ridge High School, and Negro teachers have been hired to teach white children.

This is going farther and faster than the Supreme Court recommended!!! Should it prove impossible to have the pupils removed from the High School, the teachers and those pupils at Robertsville should go back to Gamble Valley. If you are opposed to this intermingling of races, make known your opposition – keep your child, or children, out of school for at least nine days. It may even prove difficult to force the white children into schools with the Negroes in Tennessee.

If your child is in elementary school this year, and is not at all affected, your support is needed.

Will you assist us in attaining bargaining strength???

Thanks,

Oak Ridgers for Segregation<sup>127</sup>

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<sup>125</sup> Elliot, James, “Oak Ridge Maps Desegregation,” *Southern School News* 1, no. 6 (February 3, 1955): 1.

<sup>126</sup> Mary Elizabeth Alexander interview.

<sup>127</sup> Oak Ridgers for Segregation, to Residents of Oak Ridge, 1950, Special Collections, University of Tennessee Hodges Library, Estes Kefauver Collection, Series I, MS 837, Box 43.

Another group, this one based in Nashville, The Tennessee Federation for Constitutional Government, published a pamphlet “as a public service” in 1956 entitled “Tyranny at Oak Ridge,” in which they urged residents of Tennessee to oppose school integration because it was, in their view, unconstitutional. According to their interpretation of the events that occurred, integration was “forced upon certain public schools [including Oak Ridge] in disregard of the laws, customs, and educational policies of the state of Tennessee.” Moreover, in an attempt to arouse public opinion because the Oak Ridge Schools employed black teachers to teach white students, the pamphlet urged citizens to oppose this practice. One revealing section of the pamphlet states:

...one Negro teacher of industrial arts, Fred Brown, was put in charge of prevalently white classes at Oak Ridge High School. Fred Brown was to be a “guinea pig,” too, in this experiment of putting a Negro in charge of white students in a Southern town. He knew he was a “guinea pig.” It would be generous to understand why a prevalence of A’s might appear when he did his first grading.<sup>128</sup>

Though the hatred expressed by these two groups is shocking, it reveals that there were members of the Oak Ridge community – despite its diversity and highly-educated majority – who desired to see the Oak Ridge Schools maintain the status quo. Nonetheless, the fact that the Oak Ridge Schools (which were under federal authority) proceeded with integration quickly after the Brown decision in 1954, and with no violent episodes, suggests that it was more forward-thinking than the school systems in the surrounding area.

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<sup>128</sup>“Tyranny at Oak Ridge,” Tennessee Federation for Constitutional Government, 1956, Special Collections, University of Tennessee Hodges Library, Eugene L. Joyce Collection, Series III, MS 2522, Box 4.

Just a few miles to the northeast, for example, the town of Clinton, the county seat of Anderson County, experienced a dramatic battle over integration. National Guard troops had to be called to restore order, and a federal injunction issued prohibiting anyone to “interfere with integration” after a series of clashes sparked by some members of the community attempting to prohibit school integration.<sup>129</sup> The situation in Clinton grew even more serious, when, on October 5, 1958, three dynamite explosions destroyed Clinton High School. As an illustration of the willingness of the Oak Ridge Schools to help “mend” the situation in Clinton, Oak Ridge school officials opened an abandoned elementary school during the 1958 – 59 school year to serve as the meeting place for more than 1,000 Clinton High School students while their high school building was being rebuilt.<sup>130</sup>

In sum, the children who attended school in Oak Ridge during or shortly after the Manhattan Project were fortunate to be surrounded by a positive environment that challenged their intellectual and physical lives. The quality of the school’s personnel, from the first ambitious superintendent to the well-educated teaching staff, served as a model for other school systems in the state and entire region to emulate. Moreover, the high funding provided by the local, state, and federal authorities allowed the school system to establish a nursery school program, as well as provide the student population with the opportunity to participate in a variety of extra-curricular and socially-conscious organizations. Finally, the speed and effectiveness with which the Oak Ridge Schools

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<sup>129</sup> Morrell, Ken, “The Equation at Oak Ridge,” *Southern Education Report* 3, no. 7 (March 1968): 18; and Lawrence, David, “Judge-Made Chaos,” *US News and World Report*, 21 December 1956, 128.

<sup>130</sup> Morrell, 18.

integrated demonstrated the willingness of community and school leaders to provide a quality education for all of Oak Ridge's children.

## Conclusion

The topics considered so far demonstrate that children who lived in Oak Ridge during or shortly after the Manhattan Project were surrounded by an enriching community and educational environment. While this reality was not afforded to all children because of racial discrimination, the vibrant atmosphere created by a multitude of children from all over the nation and, in some cases, the world, helped the children to appreciate diversity and openness, regardless of financial status. The variety of community-sponsored activities helped the children to develop socially. The patriotism and steady focus on the mission of the city helped the children to value much of the work of the US Government. And, finally, the high-quality of education that many children in Oak Ridge received helped prepare them for a complicated and challenging world.

Even so, the relationship of all of these themes needs to be put into the context of the family atmosphere that surrounded the children of Oak Ridge during or shortly after the completion of the Manhattan Project. Although most of the children of Oak Ridge did not have to learn how to cope with the separation from a father who was fighting overseas, they did have to learn to live with the family atmosphere in a city dominated by war. Moreover, the instability of the Cold War which gripped the nation following World War Two and the distinct challenges which faced the African-American families in Oak Ridge should also be considered.

As revealed by William Tuttle in *Daddy's Gone to War: The Second World War in the Lives of America's Children*, many families during World War Two desired to achieve some form of domestic stability in the midst of the instability created by World

War Two. Consequently, letters to home from fathers serving overseas, the increased responsibility of the mother, and the increasingly important “gap” filled by grandparents in the absence of the traditional two-parent home helped to facilitate this.<sup>131</sup> In the case of Oak Ridge, however, evidence gathered for this study reveals that family life was affected, but not to the degree of families in other parts of the country. Family life was undoubtedly stressful at times because of the necessity of the city’s ultimate mission; nevertheless, family life in Oak Ridge remained relatively constant.

One of the main factors that contributed to this was the fact that most Oak Ridge families were able to remain in one city for the duration of the war. As Tuttle notes, this was in sharp contrast to the experiences of many other families during the war. He illustrates this well when he writes:

Between 1941 and 1945 the Census Bureau tracked America’s population; a sample enumeration in March 1945 showed that 15,000,000 civilians were living in different counties from the ones in which they had lived on December 7, 1941....

Even these figures are low, however, since numerous Americans moved more than once during the war. Migrating from one Army or Navy base to another, or from one construction site to another, were tens of thousands of men, women, and children. An example was Rachel Love, whose father, an Air Corps instructor, was reassigned every two months, and as “he went from base to base all over the United States – we went with him.”<sup>132</sup>

Moreover, because Oak Ridge was meticulously planned and managed by the federal government, parents in Oak Ridge could be assured that their children would be enrolled in excellent schools and be surrounded by a stimulating community. This was quite different from the experiences of many other “migratory” children during the war.

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<sup>131</sup>Tuttle, 18, 31 – 36.

<sup>132</sup>Ibid., 51.

Often, the cities in which they moved were unprepared for the large number of residents, thus putting a large strain on the educational and community services that were offered.

Furthermore, after the end of the war, the sense of urgency that had dominated Oak Ridge life for several years subsided in many ways. When control of Oak Ridge passed from the military to the civilian-run Atomic Energy Corporation on January 1, 1947, the population of Oak Ridge decreased considerably. The 1950 census, for example, revealed that the population in Oak Ridge had decreased to 30,205.<sup>133</sup> Consequently, many mothers stopped working in the production plants and either assumed more traditional vocational roles for women in the 1940's and 1950's or simply quit working altogether and devoted their energy to "homemaking." While the production plants in Oak Ridge continued to focus on the task of atomic material production because of the Cold War, a new emphasis on scientific research and development emerged.

Though some children may not have been born during the war years in Oak Ridge, many were products of the "baby boom," the period lasting from approximately 1940 to 1960. During this era, the United States experienced its highest number of births per capita in the twentieth-century. Caused by a number of factors, such the high marriage rate during the economic boom in the years immediately leading up to World War Two, the peace and prosperity that resulted at the end of World War Two, and the strong domestic and political ideology during the Cold War, the "baby boom" was a large

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<sup>133</sup>Jackson and Johnson, *City Behind a Fence*, 168.

factor in determining the character of family life in Oak Ridge. The divorce rates in the United States decreased, the traditional roles of father as “breadwinner” and mother as “homemaker” were emphasized, and economic affluence was widespread.<sup>134</sup>

The “baby boom” children grew up amid an environment in which the cultural climate of the Cold War dominated. As Elaine Tyler May describes in her formidable study of American families in the Cold War, the concept of “home” and “family” became to many a “private nest” in an extremely insecure world. American families – including families in Oak Ridge – desired to feel “liberated from the past and secure in the future.” That is, in her attempt to analyze public policy debates and political ideology concerns in light of the postwar American family, May asserts that American postwar values such as “materialism, consumerism, and bureaucratic conformity,” became attempts to counter the threats posed by the USSR.<sup>135</sup> Thus, the “pervasive consensus politics” that engulfed the nation during the Cold War surely influenced the manner in which the children of Oak Ridge perceived their environment. The critical investigations into the lives of suspected “Communist sympathizers” that were widespread must be viewed in this broader cultural context.

Finally, the many challenges which faced the African-American families in Oak Ridge were certainly not unique. Segregation was commonplace throughout much of the United States and was firmly-established in American culture. Yet, strong arguments can be made to support the fact that discrimination in Oak Ridge was harsher physically and

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<sup>134</sup> May, Elaine Tyler, *Homeward Bound: American Families in the Cold War Era* (New York: Basic Books, 1988), 3 – 9.

<sup>135</sup> May, 10.



psychologically than in other parts of the United States. In many other cities across the United States, African-Americans could “cope” in a sense because outlets such as community groups and religious activities could be formed, which were largely free from the influences of the dominant white majority, which provided an “outlet” for escape. In Oak Ridge, however, community groups and churches for the African-American community were minimal – and those that were formed were dominated by the federal authorities which governed Oak Ridge. The federal government had the opportunity to minimize racial segregation when creating Oak Ridge; yet, because it remained – and, in many instances – exceeded discrimination in other areas of the United States, the “soul” of America with regard to racial equality was revealed.

As the children of the “atom-splitters” (as they were commonly known during the 1940’s and 1950’s) moved into adulthood, some chose to remain in Oak Ridge for a variety of reasons, while others, as one can suspect, moved from the city to other areas of the United States and the world. Nonetheless, the dedication to the mission of the Manhattan Project that characterized the attitudes of many of the residents of Oak Ridge during the formidable war years has continued to shape the lives of its children. The children who grew up in the shadow of the production plants of the city that processed the material for the world’s first atomic bomb were offered a childhood that was filled with exciting, enriching, and often unique, opportunities.

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## **Appendices**

## **A. Methodology**



Eighteen individuals who were either born in Oak Ridge or moved to Oak Ridge during or shortly after the Manhattan Project answered a questionnaire that dealt with issues such as family, patriotism and feelings about World War Two. Seven of these eighteen individuals were interviewed. Interview candidates also filled out a pre-interview survey. Interview questions were different for each person based on the responses these individuals noted in their questionnaire and pre-interview survey. Nonetheless, most questions dealt with family history, childhood experiences, Oak Ridge community and educational life, and prospects for the future role of Oak Ridge. Both the completed questionnaires and interviews helped to supplement the written record of Oak Ridge history.

The interviewees who participated in this study agreed to have their interviews taped. The audio tapes of their interviews will be donated to the University of Tennessee, Knoxville, Special Collections at the Hodges Library for the future use by students and scholars.

**B. Biographical Notes on Interviewees**

**1. Mary Elizabeth Alexander:**

Mary Elizabeth Alexander (b. 1935) and her family moved to Oak Ridge from Madisonville, Tennessee in September 1945. After earning her BS and MS degrees, she returned to Oak Ridge in 1957 to begin a career with the Oak Ridge Schools. Initially hired to teach math, she moved on to serve as a civil rights liaison, counselor, principal, and administrator. She remains an active part of Oak Ridge community and religious life.

**2. Sam Clinton:**

Sam Clinton (b. 1935) moved to Oak Ridge from Detroit, Michigan in August 1945 after convincing his parents that Oak Ridge would be a nice community. A retired chemical engineer, Sam just recently moved out of Oak Ridge. Nonetheless, he continues to remain active in Oak Ridge life and events. He has two children.

**3. Larry Dickens:**

Larry Dickens (b. 1951) is a native Oak Ridger. After leaving Oak Ridge to serve as a military pilot for several years, he returned to serve as an engineer and licensing executive. He continues hold numerous leadership posts within Oak Ridge and Anderson County. He has two children.

**4. Steve Evans:**

Steve Evans (b. 1951) is a native Oak Ridger. After serving in the Army Reserves and studying at the University of Tennessee, Steve began a career at Y-12 in 1977. He held various positions there, from posts in the Weapons Material Management Division to Supervisor of various departments. He has three daughters and two stepdaughters. He is currently retired and living in Oak Ridge.

**5. Jnell Pleasant:**

Jnell Pleasant (b. 1935) moved to Oak Ridge in June 1945 from Ragland, AL. A retired Registered Nurse, Jnell continues to work part-time performing hazardous material health monitoring of employees in Oak Ridge. Jnell has five children. She remains active in Oak Ridge community and religious life.

**6. Joette Rule:**

Joette Rule (b. 1935) moved to Oak Ridge in the spring of 1945 from Kingsport, TN. Currently retired, Joette worked in Oak Ridge as a teacher and a human resources officer at Y-12. She still lives in Oak Ridge and participates extensively in the continued learning classes offered through Roane State Community College and the University of Tennessee, Knoxville. She has two children.

**7. Islara Souto:**

Islara Souto (b. 1952) moved to Oak Ridge in 1962 from Madrid, Spain. She left Oak Ridge in 1972 to prepare for a career in Public Health and Epidemiology. Currently living in Miami, Islara stays relatively uninformed about current Oak Ridge affairs. She has two children.

## **C. Questionnaire**

Dear Current or Former "Oak Ridger":

Information about children who were born in Oak Ridge, Tennessee during or shortly after the Manhattan Project or who moved to Oak Ridge, Tennessee during or shortly after the Manhattan Project is being gathered for a university study which may reveal the impact that the Manhattan Project had on familial relationships, future career choices, feelings about World War Two, and the present international role that Oak Ridge plays with regard to scientific research and development. Participation in this survey is voluntary, but all questionnaire recipients are encouraged to participate, because their personal opinions are extremely important.

All responses will be kept strictly confidential, and this form will be destroyed after the data have been collected. The entire questionnaire should take about fifteen to twenty minutes to complete. To participate, please read each question carefully and answer each question truthfully.

On the last page of the questionnaire there is an area to indicate whether or not you would like to be interviewed by the principal investigator. While the principal investigator would like to interview all of those who indicate they would like to be interviewed, time restrictions and other concerns will only allow for the personal interviews of ten to fifteen individuals.

When you have finished with the questionnaire, please return it in the postage-paid envelope provided by \_\_\_\_\_.

As a current or former resident of Oak Ridge who lived in this unique town as a child during or shortly after the Manhattan Project, you hold in your head stories and memories that could expand the understanding of one of the most pivotal industrial endeavors of the twentieth century. I hope you will consider participating in this brief questionnaire. Thank you in advance for your time and your involvement.

Cordially,

John D. Prince  
MA Student in History  
University of Tennessee, Knoxville

## UNIVERSITY OF TENNESSEE, KNOXVILLE

QUESTIONNAIRE FOR CHILDREN WHO LIVED IN OAK RIDGE, TENNESSEE  
DURING OR SHORTLY AFTER THE MANHATTAN PROJECT

**Principal Investigator:** John D. Prince  
MA Student in History

**Project Classification:** Thesis

**Project Title:** "Atomic Childhood: An Analysis of the Impact of the  
Manhattan Project on the Children of Oak Ridge,  
Tennessee"

**Project Completion Date:** October 17, 2005

.....

Part One Instructions: please mark the blank which corresponds to the response which best describes you personally. For questions that require additional comments, please answer these questions on the blanks provided. If additional space for responses is needed, please write on another sheet of paper. Please indicate the number to the question you are answering.

1. Sex: \_\_\_\_\_ Female

\_\_\_\_\_ Male

2. I was born:

\_\_\_\_\_ In Oak Ridge

\_\_\_\_\_ In another city

If you were born in another city, where were you born?

\_\_\_\_\_

3. What year were you born?

\_\_\_\_\_

4. If you moved to Oak Ridge after you were born, from where did you move?

\_\_\_\_\_

5. Which response most closely reflects the type of job that my father had in Oak Ridge?

\_\_\_\_\_ Scientist

\_\_\_\_\_ Machine Operator

\_\_\_\_\_ Security Guard

\_\_\_\_\_ Bus Driver

\_\_\_\_\_ Other, please describe \_\_\_\_\_

6. Which response most closely reflects the type of job that my mother had in Oak Ridge?

\_\_\_\_\_ Homemaker

\_\_\_\_\_ Machine Operator

\_\_\_\_\_ School Teacher

\_\_\_\_\_ Cafeteria Worker

\_\_\_\_\_ Other, please describe \_\_\_\_\_

7. My father worked at:

\_\_\_\_\_ Y-12

\_\_\_\_\_ K-25

\_\_\_\_\_ X-10

\_\_\_\_\_ Other, please indicate where \_\_\_\_\_



8. My mother worked at:

\_\_\_\_ Y-12

\_\_\_\_ K-25

\_\_\_\_ X-10

\_\_\_\_ Other, please indicate where \_\_\_\_\_

9. Where do you currently live?

\_\_\_\_ In Oak Ridge

\_\_\_\_ Outside of Oak Ridge

If outside of Oak Ridge, please indicate where? \_\_\_\_\_

10. While I lived in Oak Ridge as a child, I had:

\_\_\_\_ no siblings

\_\_\_\_ one sibling

If you had one sibling, please indicate the sex and year that your sibling was born \_\_\_\_\_

If you had siblings, please indicate the sex and year that your siblings were born \_\_\_\_\_

11. Please describe your present vocation:

\_\_\_\_ Scientist

\_\_\_\_ Teacher

\_\_\_\_ Other, please describe \_\_\_\_\_

12. Did your mother know the mission of the Manhattan Project prior to the dropping of the atomic bombs on Japan in August of 1945?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

13. Did your father know the mission of the Manhattan Project prior to the dropping of the atomic bombs on Japan in August of 1945?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Part Two Instructions: To complete the following questions, please mark each answer by placing an X in the one space where you would fit into each scale:

1. How closely attached are you, or were you, to your parents?

very close \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ unattached

2. Normally, how do you recall your childhood experiences in Oak Ridge?

very unpleasant \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ very pleasant

3. Typically, how do you recall the familial atmosphere in your home?

very unpleasant \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ very pleasant

4. To what degree are you like your parents?

a carbon copy \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ not at all

5. How well did you understand the work of your father?

thoroughly \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ not at all

6. How well did you understand the work of your mother?

thoroughly \_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_:\_\_\_\_\_ not at all

7. How much do you agree with the work your parents did in Oak Ridge?  
strongly disagree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ strongly agree
8. To what degree do you agree with the mission of the Manhattan Project?  
strongly disagree \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ strongly agree
9. How has your Oak Ridge experience affected your career choice?  
not at all \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ a great deal
10. To what degree do you stay informed about the current research performed in Oak Ridge?  
not at all \_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_:\_\_\_\_ a great deal

Part Three Instructions: To complete this survey, please mark each answer by placing an X in the one box that best describes where you would fit into each scale. Mark your answers according to the following scale:

S/A = Strongly Agree

A = Agree

U = Undecided

D = Disagree

S/D = Strongly Disagree

S/A : A : U : D : S/D

1. Generally speaking, my educational experience in the Oak Ridge schools was above average.      \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_
2. I handle changes that take place within my life with relative ease.      \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_
3. I think that an industrial undertaking like the one that took place in Oak Ridge during the Manhattan Project could be repeated today.      \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_
4. While I lived in Oak Ridge as a child, civic participation was above the national average.      \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_
5. While I lived in Oak Ridge as a child, I felt "displaced" because of the often difficult living conditions and temporary housing arrangements.      \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_ : \_\_\_

6. During and shortly after the Manhattan Project, I felt Oak Ridgers were patriotic.      \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_ : \_\_\_\_

Part Four Instructions: please place an X next to the appropriate response.

1. I am willing to be interviewed by the principal investigator regarding my childhood experiences in Oak Ridge.

\_\_\_\_ Yes

\_\_\_\_ No

2. I am unable or unwilling to be interviewed, but I know of another person who lived in Oak Ridge as a child during or shortly after the Manhattan Project and might be willing to be interviewed.

\_\_\_\_ Yes

Please list name and phone number of this person.

Name \_\_\_\_\_

Phone # (\_\_\_\_) \_\_\_\_\_

\_\_\_\_ No

3. If you would like to be interviewed by the principal investigator, please list your name and phone number.

Name \_\_\_\_\_

Phone # (\_\_\_\_) \_\_\_\_\_

**D. Pre-Interview Survey**

## PRE-INTERVIEW SURVEY

### THE UNIVERSITY OF TENNESSEE, KNOXVILLE

For: Individuals who will be interviewed for the Master's thesis entitled:

**“Atomic Childhood: An Analysis of the Impact of the Manhattan Project on the Children of Oak Ridge, Tennessee”**

Principal Investigator: John D. Prince,  
M.A. Student in History

Dear Current or Former Oak Ridger:

Thank you for your willingness to participate in this effort to document the childhood experiences of children who grew up in Oak Ridge during or shortly after the Manhattan Project. Your voice is an important one for it will enable future generations of scholars and students gain a better understanding of the impact of the Manhattan Project upon the lives of its youngest participants. To help me ask informed questions during your oral history interview, I ask that you please complete the following pre-interview survey.

*Please answer only the questions you feel comfortable completing.* If you have questions or concerns about this survey or the upcoming interview, please do not hesitate to contact me.

Cordially,

John D. Prince

**YOUR PARENT AND SIBLINGS:****Please answer the following information about your mother:**

Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Place of Birth: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Political Affiliation: \_\_\_\_\_

Religious Affiliation: \_\_\_\_\_

Occupational History: \_\_\_\_\_

\_\_\_\_\_

Education: (check highest level)

\_\_\_\_\_ some elementary      \_\_\_\_\_ elementary      \_\_\_\_\_ some high school

\_\_\_\_\_ high school      \_\_\_\_\_ some college      \_\_\_\_\_ college

\_\_\_\_\_ graduate school      \_\_\_\_\_ technical/vocational school

**Please answer the following information about your father:**

Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Place of Birth: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Political Affiliation: \_\_\_\_\_

Religious Affiliation: \_\_\_\_\_



Occupational History: \_\_\_\_\_

\_\_\_\_\_

Education: (check highest level)

\_\_\_\_\_ some elementary      \_\_\_\_\_ elementary      \_\_\_\_\_ some high school

\_\_\_\_\_ high school      \_\_\_\_\_ some college      \_\_\_\_\_ college

\_\_\_\_\_ graduate school      \_\_\_\_\_ technical/vocational school

**Please use the following lines to list the names of your brother(s)/sister(s), their dates of birth, their highest level of education attained, their current vocation, and their current city of residence.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**YOUR PERSONAL INFORMATION:**

**Please answer the following information about yourself:**

Date of Birth: \_\_\_\_\_

Place of Birth: \_\_\_\_\_

Marital Status: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Political Affiliation: \_\_\_\_\_

Religious Affiliation: \_\_\_\_\_

Occupational History: \_\_\_\_\_

\_\_\_\_\_

Education: (check highest level)

\_\_\_\_ some elementary      \_\_\_\_ elementary      \_\_\_\_ some high school  
\_\_\_\_ high school      \_\_\_\_ some college      \_\_\_\_ college  
\_\_\_\_ graduate school      \_\_\_\_ technical/vocational school

**Please use the following lines to list the name(s) of your child(ren), their dates of birth, their highest level of education attained, their current vocation, and their current city of residence.**

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**OTHER INFORMATION:**

**In the space below (or on the back of this page), please feel free to add any additional information that you think will help the interviewer prepare to understand your childhood experience in Oak Ridge, your career choice, your feelings about World War Two, and/or your current involvement with Oak Ridge:**

I give the principal investigator, John D. Prince, permission to use this information in his Master's Thesis. At the conclusion of this study, I recognize that the principal investigator will donate this form to the Special Collections Archives at the University of Tennessee, Knoxville for use by scholars, students, and the general public.

Your Name: \_\_\_\_\_

Your Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

**Vita**

John David Prince is a native of California and Tennessee. He received his BA from Oklahoma Baptist University in 2000. He currently resides in Oak Ridge, Tennessee, and is pursuing his MA in History.