Oak Ridge: From Federal Base to Tennessee's First Tech City

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by

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ABSTRACT

Created during World War II to assist in the creation of atomic bombs, Oak Ridge, Tennessee, experienced numerous cultural and societal shifts—some in common with and some unique from the rest of the United States—that were influential in the development of the city's community. As a part of the country's top-secret Manhattan Project, and the subsequent ushering in of the "atomic age" and eventual worldwide Cold War, Oak Ridge and its actions weighed heavy on the minds of its people, along with the rest of the state and nation. The revelation of the Manhattan Project's goals, the movement to incorporate the city into the state of Tennessee, and its role in the arms race and energy concerns of the Cold War gave Oak Ridge a singular position in the American imagination, and the city's effect on U.S. history was as influential as the nation's effect on the city's history.

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INTRODUCTION

Oak Ridge, a city nestled into the mountainous eastern region of Tennessee, was established in 1942 as a production site for the U.S. government's Manhattan Project, its effort to create an atomic bomb in the latter years of the Second World War. The city, originally known as the Clinton Engineer Works to neighboring communities, was constructed in the image of a normal American town, save for the security gate that enclosed the entire perimeter of the city and the atomic plants that loomed over the horizon. Thousands of people from across the United States, from construction workers to budding atomic scientists, came into the East Tennessee hills to work on a top-secret project that most only knew was important to the American war effort. Headed by the military, the city was shrouded in secrecy and security, and for years its occupants quietly worked in their appointed positions, be it secretary or chemical engineer. Outside of work, they could enjoy movies, dine at restaurants and cafes, or spend time at their federally-furnished homes. However, the tight watch of the military and strict rules on speaking about their work gave Oak Ridge an eerie, artificial undertone.

This status quo of silence was shattered in August of 1945, when the atomic bombs were dropped on Hiroshima and Nagasaki, two cities in Japan devastated by the blasts. Finally, the secret was out that the plants of Oak Ridge had been enriching uranium and completing atomic research in pursuit of creating these new weapons. For the few in Oak Ridge who knew what the Manhattan Project's goal was, this event was simply a spectacular result for the years of effort put in by the project's many workers.

For those thousands of workers, engineers, and scientists who had no idea what they had been working toward, this event was a colossal shock and set Oak Ridge on a course of change and development that its people could hardly have imagined.

What followed the atomic bombings and the end of World War II was a string of changes over the next several decades as Oak Ridge struggled to define its identity and place within the state of Tennessee and the nation at large. As the United States quickly remobilized during the Korean War and experienced escalating and expanding military needs during the decades-long Cold War, Oak Ridge found itself increasingly necessary to the country's security. The atomic, and later nuclear, plants of Oak Ridge, originally designed to enrich uranium for the first two atomic bombs, were upgraded, closed down, refitted, and upgraded again over the twentieth century to accommodate the constantly changing needs of the federal government and the country. From atomic energy to new thermonuclear bombs, Oak Ridge rarely found itself outside of the scientific spotlight after its wartime inception.

That is not to say that the changes experienced by Oak Ridge and its people were wholly scientific and entirely related to national security. Oak Ridge, as a community, faced multiple culture shocks throughout the decades following its establishment; for the purposes of this thesis, I will be focusing on the revelation of the goals of the Manhattan Project, the city's gradual opening to the public and incorporation into the state of Tennessee, and its growing national role and reputation during the Cold War. These events had a deep impact on the culture of Oak Ridge's inhabitants, and in turn, the city's unique development greatly influenced how the city reacted to and participated in these

events. Oak Ridge's conception as an artificial, secret town focused on the production of atomic bombs and its continuously evolving role within the United States in terms of science and national security gave its people a sense of identity and community unlike almost any other place in the country; they struggled with feelings of pride, guilt, curiosity, and anxiety as they processed the implications of the city's purpose. Oak Ridge's part in the end of World War II and the beginning of the Cold War, its background as a secluded population, and its continuing connection to the increasingly feared and awe-inspiring field of atomic energy all gave the city and its people a reputation of wartime duty, scientific discovery, and destructive power. The purpose of this thesis is to examine how the major events that make up Oak Ridge's early history affected its people and to examine how they have responded to these events and continued to embody, embrace, and come to terms with the city's almost mythical reputation.

Sources and Historiography

The bulk of the sources I use for this thesis consist of primary sources, with an emphasis on the oral history interviews of people who lived in Oak Ridge during the Manhattan Project and Cold War years, supplemented with newspaper articles from the time. The oral histories, collected by the Center for Oak Ridge Oral History and located in the digital historic collections of the Oak Ridge Public Library, provide unparalleled insight into the daily lives of Oak Ridgers throughout these periods and provide first-hand, personal information on the thoughts of the people of the city as it progressed

throughout the years. These oral histories, while invaluable to my personal historical approach for this thesis, do come with some setbacks. The interviews were almost all conducted between the 1990s and the 2000s, half a century after the earliest events I am covering. Memory tends to become less reliable after such a long period of time, and likewise the changing culture and opinions of those interviewed could skew their recollection or telling of events. Regardless, I believe these sources were the most influential for my work and are the main evidentiary difference between my work and others who have written on Oak Ridge's history. Although some events may be recalled differently by interviewees than other historical sources, I believe that what they think or feel happened can be just as valuable, if not more valuable, than what objectively happened, in terms of tracing cultural changes and personal experiences.

Newspapers, much like oral histories, provide primary historical sources from which I can gather more general, far-reaching information on historical events. One of the main papers I refer to is the *Oak Ridge Journal*, published weekly in Oak Ridge between 1943 and 1948. This was the only news source approved by the federal government for printing in Oak Ridge, and as such, one can assume some level of federal oversight of the paper's contents. This is reinforced by the fact that two of the paper's editors, M. S. Levine and D. M. Wendland, were members of the U.S. military, a sergeant and private, respectively. Despite the assumed censorship of the paper, it exists as the only paper that could report on Oak Ridge news before the end of World War II in 1945 and provides valuable local information on the operation and culture of the city at this time. After the paper's discontinuation in 1948, I begin to use a variety of papers from across the state

and country, though I focus mainly on papers from the surrounding cities and towns, such as Knoxville and Chattanooga, Tennessee. These places had a different perspective on Oak Ridge, due to their proximity and occasional intermingling after the war. They provide similarly valuable primary evidence for historical events affecting Oak Ridge and likewise present opinions and thoughts on the city from the perspective of its neighbors.

Historical works with information regarding Oak Ridge often discuss the city and its people as part of the larger trends of military mobilization and spending during World War II and its impact on the postwar economy of the South. Historian Margaret Wolfe exemplifies the typical representation of Oak Ridge in Tennessee histories, noting the city's participation in the creation of the atomic bomb "Little Boy".[1] Historian Robert Corlew added to the historic discussion of Oak Ridge by describing the city's economic part in Tennessee History, becoming one of many industrial centers that defined East Tennessee's economy in the latter half of the twentieth century.[2] Historian Patricia Howard, expanding on the economic perspective of Oak Ridge's impact on the country, describes the part the city's wartime creation played in the larger transformation of Tennessee's agrarian economy into an industrial one, helping to reverse the Great Depression during the Second World War.[3] Mentioned earlier in the 1980s by Corlew, a larger discussion began to grow concerning Oak Ridge's place within the immense

[1] Carroll Van West, *Tennessee History: The Land, the People, and the Culture* (Nashville, TN: Tennessee Historical Society, 2001), 48.

[2] Robert E. Corlew, *Tennessee: A Short History* (Knoxville: University of Tennessee Press, 1981), 10.

[3] West, *Tennessee History*, 413.

federal spending in the American South before, during, and after World War II, with historians Paul Bergeron, Stephen Ashe, and Jeannette Keith adding how federal spending in Oak Ridge boosted the growing industrial economy of the entire region, attracting workers from surrounding cities during the Cold War. These four mentioned historians also often include the Tennessee Valley Authority in their discussions of Oak Ridge's federal origins, and the two projects are rarely mentioned without the other in such discussions.[4] While these discussions of Oak Ridge's part in growing federal spending in the South, and the economic effect that resulted, do a better job of including the normal citizens of the city in their discussions, but still refrain from delving too deep into the everyday lives and social struggles of Oak Ridgers, something I aim to cover in this work.

I find that historical works focusing on Oak Ridge's role in creating the atomic bombs, seemingly the most common historical association for the city, do not sufficiently emphasize the normal citizens and workers who aided in their creation. As noted by historian Wilson Miscamble, writing on the dropping of the atomic bombs on Japan has been contentious and hopelessly argumentative since the years immediately following the end of World War II. A fierce reignition of discussion occurred with the fifteenth anniversary of the atomic attacks and the contested exhibit at the Smithsonian, and little compromise has been reached in the years since. Discussion of the necessity of the bombs in ending the war, the morality of the attacks themselves, and the reasons behind

[4] Corlew, *Tennessee*, 474; Paul H. Bergeron, Stephen V. Ashe, and Jeannette Keith, *Tennesseans and Their History* (Knoxville: University of Tennessee Press, 1999), 258, 281.

U.S. President Harry S. Truman's final decision to use the bombs are mired in political motivation and moral debate, producing significant writing but relatively few novel thoughts over the years.[5] Historian Campbell Craig notes that save for a large disclosure of U.S. government documents during the 1970s, there has been little in the way of new information to dig into concerning the American side of the atomic bomb's history.[6] These two books represent well what seems to be the overall state of history on the atomic bomb--digging through government and military sources to fuel the debate over whether the use of the bombs was necessary or not and over what role the bombs had in the creation or shaping of the Cold War. Miscamble goes on to argue his point on both topics, while Craig keeps his focus on the Cold War, with an emphasis on the atomic bomb's role in it. I aim to provide a more personal and local point of view that explores how the average American, and more specifically the average citizen of Oak Ridge, experienced the tumultuous events of World War II and the Cold War.

In the many decades since the end of World War II, historians and common people alike have debated the necessity of the atomic bombs' use to force Japan's surrender, and the technology of atomic bombs has played a massive role in global tensions between then and the present. I will be using these sources both to glean the most commonly held thoughts about the bombs and Oak Ridge's part in their creation. The sources used often plainly state what the reactions or emotions felt were--sometimes with phrases as simple

[5] Wilson D. Miscamble, *The Most Controversial Decision: Truman, the Atomic Bombs, and the Defeat of Japan* (Cambridge: Cambridge University Press, 2011), 2-3.

[6] Campbell Craig and Sergey Radchenko, *The Atomic Bomb and the Origins of the Cold War* (New Haven, CT: Yale University Press, 2008), ix-xi.

as, “I was overjoyed” or “I was frightened”--but occasionally it is difficult to determine exactly how someone might have felt in the moment just from an interview.

In addition to different sources, this thesis also has a different focus than most other scholarly writing about Oak Ridge. Much of this scholarly writing is focused exclusively on World War II, with little attention on the postwar period and the subsequent incorporation of Oak Ridge, which is often limited to a small section of a chapter, a paragraph or two at most. Lindsey A. Freeman, a sociologist and prolific writer on the history of Oak Ridge, has a very informative section in her book *Longing for the Bomb: Oak Ridge and Atomic Nostalgia*, in which she discusses the legal roadblocks faced by the city in seeking incorporation. Freeman discusses incorporation as a small part in the larger series of events constituting Oak Ridge’s “normalization” following the war, and her writing places incorporation squarely within these events as a rightfully pivotal moment.[7] As the larger theme of her book is the focus on the city’s atomic past as it progresses into the modern day, this event was not central to the things Freeman wishes to discuss, making the brief discussion of incorporation understandable. Similarly, journalist Denise Kiernan, in *The Girls of Atomic City: The Untold Story of the Women Who Helped Win World War II*, is obviously focused on the war and expounds only a bit more on the topic of incorporation, including a few disparate paragraphs concerning the Atomic Energy Commission’s (AEC) efforts to turn Oak Ridge into a “normal” city after the war and some of the struggles the movement for incorporation faced.[8] Kiernan’s

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[7] Lindsey A. Freeman, *Longing for the Bomb: Oak Ridge and Atomic Nostalgia* (Chapel Hill: University of North Carolina Press, 2015), 109.

[8] Denise Kiernan, *The Girls of Atomic City: The Untold Story of the Women Who Helped Win World War II* (New York: Simon & Schuster, 2014), 295-97.

focus is not on incorporation but on the women who helped keep the city and Manhattan Project afloat during the war. So, like Freeman, Kiernan's excerpts on incorporation provide quality information but do not really delve into how incorporation itself affected the city and its culture.

These two examples, the most prominent writing I could find on Oak Ridge's incorporation, do not do justice to the city's history by treating the incorporation story—a major and expansive event—so briefly. Chapter two of this thesis, by taking a deep dive into one of the most important individual events in the city's history, will give this event both breadth—examining how the process of incorporation and people's opinions about it changed over time—and depth by looking at a variety of people and primary sources. I will be focusing less on the objective history of incorporation itself, though that will be included, and more on how the events that unfolded leading up to and during incorporation affected the people of Oak Ridge and their community. Sources such as oral interviews, contemporary newspaper articles, and letters will provide a more personal and subjective view on the city's incorporation. I believe my work will help to expand and ground the historiography, clarify the importance of this event in the city's history, and demonstrate how incorporation was part of the slow and steady creation of Oak Ridge's unique postwar culture, stemming from its strange conception and further development over the years that followed.

In the third chapter, I draw on the same sources--oral accounts given by people who lived and worked in Oak Ridge during World War II and the Cold War alongside newspaper articles from the time and surrounding areas—to tell a bit of Oak Ridge's

history following incorporation. I believe there exists no better way to study history than through its makers' eyes. I have also supplemented those primary sources with some scholarly sources, for a stronger background on the Cold War, its effects on the American people, and Oak Ridge's place in it. Historian Kari Frederickson explains, for example, how postwar military funding and federally-funded industry connected with national security both reshaped and economically transformed the American South following World War II.[9] Similarly, historian Raymond Ojserkis describes the U.S. entry into the Korean War within the larger context of the Cold War and the Soviet atomic weapon tests, which sparked a decades-long arms race that dominated the Cold War.[10] These sources, while invaluable in providing contextual information on the history of the Cold War, provide little to no information on Oak Ridge's specific role in the conflict or on the home front. What I aim to do in chapter three is to provide local and personal perspectives on Oak Ridge's role during the Cold War and to explain how it affected the city and its people, along with their culture and national reputation. As in chapters one and two, I will be doing this mainly through oral histories and newspaper articles, along with the official history of the Oak Ridge National Laboratories by historians Leland Johnson and Daniel Shaffer.[11]

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[9] Kari A. Frederickson, *Cold War Dixie: Militarization and Modernization in the American South: Politics and Culture in the Twentieth-Century South* (Athens: University of Georgia Press, 2013), 5.

[10] Raymond P. Ojserkis, *Beginnings of the Cold War Arms Race: The Truman Administration and the U.S. Arms Build-Up* (Westport, CT: Praeger, 2003), 1-4, 148-49.

[11] Leland Johnson and Daniel Schaffer, *Oak Ridge National Laboratory: The First Fifty Years* (Knoxville: University of Tennessee Press, 1994), 24, 138, 149.

I will use these sources not to analyze or pass judgment on the actions and opinions of those involved, but rather to paint a picture of Oak Ridge's place in the grand scheme of the Cold War, and how it ended up in that position. Oral histories and newspaper articles capture the unique blend of pride and anxiety that not only Oak Ridge, but the entire United States, felt during the Cold War, and despite the methodological drawbacks of oral histories, they are essential to discerning how people felt about different events. Writing on feelings and emotion itself can be just as tricky as writing on memory; that is why I take care in not making my own statements on these feelings and thoughts and avoid putting words into the mouths of my subjects, especially ones of so recent, or in some cases living, memory.

CHAPTER ONE:
ATOMIC REVELATIONS

Most Americans know Oak Ridge, Tennessee, as "The Secret City," a government-created pseudo-city founded in 1942 to house the workers and scientists of the Manhattan Project, the U.S. atomic weapons research program during World War II. Citizens from around the country, from the nation's leading physicists to the humblest factory workers, came to the newly founded "city" to work on what they were told was a top-secret project, critical to ending the war. While some of the very highest-ranking scientists and authorities could discuss the true nature of the Manhattan Project, most were told never to discuss their individual work with their colleagues, and the vast majority of workers had no clue to what end their work was leading. This all changed in August of 1945, when the U.S. attacked the Japanese cities of Hiroshima and Nagasaki with atomic bombs, one of which was created with Uranium enriched by the facilities at Oak Ridge. For most of the workers there, this was the very first time that they had heard of the atomic bomb. Soon everyone at Oak Ridge, the whole country, and the whole world learned about the city and its secret scientific work.

Reactions to this sudden revelation varied greatly across the many levels of Oak Ridge's community; scientists, factory-workers, and the children of the city all had differing, and often complex, emotions regarding the news. I believe that these reactions can help us understand the feelings of the average person concerning this new super weapon, as the people of Oak Ridge were, largely, common citizens who had about as

much knowledge about the bombs before they dropped as any other American. In such a turbulent and confusing moment, these reactions can provide some very personal perspectives on the century-defining creation of the atomic bomb. I will be searching for Oak Ridge citizens' reactions and analyzing them to tease out the general thoughts of the city's populace and how they shaped its identity.

I feel that while unavoidably situated within the subject of the atomic bomb, this chapter does not concern itself with the necessity of the atomic bombs' use, and so far as it considers its impact on the American side of the Cold War, it specifically focuses on the common people of the country. As will be discussed in the following pages, the people of Oak Ridge responded to news of bombs' use in a visceral and emotional manner. While uniquely close to the bombs, they represent a largely relatable reaction to the introduction of atomic weaponry into the world. This, I believe, is best explained by Oak Ridge's uniqueness within the Manhattan Project. Francis Gosling—writing for the U.S. Department of Energy—provides the best description of each Manhattan Project site and compares the three sites at Oak Ridge, Tennessee; Hanford, Washington; and Los Alamos, New Mexico. While he does not concern himself with the reaction of the workers of each site to the atomic bombs, he does explain what made Oak Ridge different. While all of the project sites had citizens mostly separated from nuclear work and while most workers at each site did not know what they were truly working on, Oak Ridge had a much larger population of average citizens and was specifically built to

resemble a normal town.[1] This allowed the citizens of Oak Ridge to have a special reaction to the bombs, one that represented both the reaction of normal American citizens and also the reaction of those who had specifically contributed to this new super weapon as part of a confidential government program. The research presented in this chapter—drawing from oral histories and newspapers--provides an intimate glimpse into the thoughts and feelings that pervaded the emerging Cold War, as the world plunged into unending atomic (and then nuclear) tension due in part to the work done in Oak Ridge.

Oak Ridge Security

Some precursory discussion on the security and secrecy of Oak Ridge is necessary to understand the magnitude of the "big reveal" in the minds of the workers. The city was not simply gated; barbed wire fences surrounded the city limits, soldiers patrolled every entrance and exit, and all talk was monitored by the federal government. Leaving one's home to engage in recreation, even something as simple as a trip to see a movie would be tainted by the knowledge that they were always under watch. Under the federal government's orders, Oak Ridgers could not keep journals or diaries and were to discourage gossip of any kind. Security personnel frequently stopped Oak Ridgers, asking for the identification (typically in the form of a resident or worker badge) regulations said they had to carry on their person at all times; searches sometimes followed. One woman, Clara Zulliger, noted being subjected to polygraph tests for her

[1] Francis G. Gosling, *The Manhattan Project: Making the Atomic Bomb* (Washington, DC: Office of History and Heritage Resources, Executive Secretariat, Office of Management, Department of Energy, 2010), 20-21, 31-32.

job in a government office, much to her displeasure.[2] Another worker, Ted Kwasnowski, recalled a man who he and his friends had worked alongside at Oak Ridge for years, a man they considered a friend. Years later, after the bombs and Oak Ridge security measures had been dropped, Ted found out that the man had been an informant for the FBI (Federal Bureau of Investigation), reporting in to the agency every month about any suspicious activity or "loose lips."[3]

These security measures shaped the lives of the citizens of Oak Ridge, and the air of secrecy pervaded every single facet of their lives.[4] Even simple tidbits of household information were often lost to the new culture of secrecy in the lives of Oak Ridge workers.[5] Tension between husbands and wives flared often on the topic of secrecy, as the women grew more curious with every passing day about the nature of their husbands' work. June Adamson, the wife of one of the city's scientists, recalled her husband chastising her for asking about his work so often; he was seriously worried that her curiosity would get him in trouble with the authorities.[6]

There were some in Oak Ridge, however, who did have at least some inkling of what was really going on in the top-secret facilities. Sam Beall, one of the higher-level scientists in one of Oak Ridge's facilities, was well aware of the atomic bombs by the time he got to the city. Coming from the University of Chicago, Beall notes that the entirety of the technical staff at the university knew about the bombs. However, he did

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[2] Clara Zulliger, interview by Keith McDaniel, October 9, 2012, Center for Oak Ridge Oral History, Oak Ridge, Tennessee [hereafter COROH].

[3] Ted Kwasnowski, interview by Keith McDaniel, September 19, 2003, COROH.

[4] Freeman, *Longing for the Bomb*, 80-84.

[5] "Secrecy Became a Habit," *Oak Ridge Journal*, August 16, 1945, 2.

[6] June Adamson, interview by Keith McDaniel, April 15, 2003, COROH.

not know that he was aiding in the enrichment of weapons-grade uranium at the facility until the bombs dropped; he only knew that somewhere the bombs were being worked on.[7] Another scientist in one of the city's plants, Hubert Barnett, remembered so casually discussing the possibility of their work being for bombs that the workers bet on the date that the bombs would be dropped. Barnett did not know for certain that their work concerned the creation of atomic bombs; none of his colleagues did either. But they had all received books on atomic fission, examples of physicist Albert Einstein's works on nuclear physics, and a copy of Einstein's letter to then-president Franklin Roosevelt, warning him of Germany's atomic-weapons research and urging the president to pursue a similar program. To Barnett and his fellow scientists, it was abundantly clear, barring any official statements, that they were working on creating atomic weaponry.[8]

Most of the workers at Oak Ridge, however, saw no indication of what the city was truly working on. James Young, one of the security guards tasked with maintaining peace and silence on the project, remembered knowing absolutely nothing about any sort of atomic weaponry created at the plants. Young recalled,

> Oh, they had all those signs up all around Oak Ridge, "What you hear here, leave here," and "Don't listen to gossip," and they was pretty strict on that. I guess, if people got to talking too much, they'd come inside the plant and get them, and some you'd never hear no more about, and some would be back to work the next day.[9]

The prevalence of secrecy propaganda and the swiftness and attentiveness of government officials in dealing with those who spoke too much is plain to see in Young's

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[7] Sam Beall, interview by Stephen H. Stow, March 13, 2003, COROH.
[8] Hubert Barnett, interview by Don Hunnicutt, November 1, 2012, COROH.
[9] James Young, interview by Keith McDaniel, March 28, 2016, COROH.

recollection. These memories stuck with him, portraying the effectiveness of wartime propaganda on the people of Oak Ridge as well as the consequences for breaching these imperatives. The punishment for revealing secrets was severe, and everyone in Oak Ridge was aware of this fact.

This bothered some, like scientist Edward Fairstein, who felt that this secrecy in the workplace was counterproductive to the usual scientific methods of sharing your work with others. He recalled, "In the scientific community, there's cooperation and you share your technical information with whoever else is working on a thing. Now, in this environment, you couldn't do that. And we didn't believe it was going to be effective." Fairstein's annoyance with the tight-lipped security of the Manhattan Project shows that frustration was present among some of Oak Ridge's workers with the secrecy of the project. Though he made guesses at what the ultimate goal of the project was, Fairstein could never get very far in figuring it out due to the knowledge on his own individual work being restricted.[10] Frustration seems to have been widespread in the years preceding the end of the war, from housewives frustrated about being kept out of the loop to scientists frustrated about a lack of professional discussion to bolster their work. These frustrations, I believe, help explain the most common reaction of the people of Oak Ridge to the news of the bombs dropping—relief.

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[10] Edward Fairstein, interview by Jim Kolb, November 13, 2002, COROH.

Oak Ridgers' Relief and Pride

June Adamson, like most other Oak Ridge housewives, had been listening to the radio when news of the atomic attack on Hiroshima came over the radio in the middle of the day. Since most workers were on the job, the stay-at-home housewives were some of the first people to hear the news and called their husbands. June told her husband that she finally knew what he had been doing, prompting him to assume it was another trick to find out from him about his work. However, when she told him that the radio had broadcasted news of the bomb, he knew the story was out.[11] A similar story came from James Kolb, a worker in one of the city's factories, who told a story about a friend of his, an engineer in one of the plants, whose wife also called to tell him about the news; he angrily scolded her for speaking about it out loud, only to find out a short time later that the whole world now knew about the atomic bombs.[12]

All of these positive reactions to the bombs dropping culminated in many celebrations after the news came out. William Tewes remembered being tipped that he and his fellow soldiers would be confined to the barracks later in the day, so they scattered across town, not knowing until later that the reason was the news breaking about the bombs.[13] Tewes recalled wild celebrations across the city, from impromptu dances and parties to heavy drinking, of which he admitted to having suffered a hangover from.[14] Rose Feldman remembered the streets being filled with celebrating Oak Ridgers,

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[11] June Adamson, interview by Keith McDaniel, April 15, 2003, COROH.
[12] James Kolb, interview by Keith McDaniel, December 9, 2010, COROH.
[13] William Tewes, interview by Connie Callan, March 8, 2005, COROH.
[14] William Tewes, interview by Keith McDaniel, part 1, July 28, 2012, COROH.

the city practically erupting into one large party.[15] Mary Elizabeth Alexander, who was a child at the time, told about how she and the other children ran up and down their residential streets in excitement.[16] Almost every man, woman, and child in Oak Ridge was ecstatic to hear the news, at least on the very first day. They gave little thought to the short remainder of the war or the people who fell victim to the blasts. That all came later, as the flaring emotions began to cool over the following weeks. What was important to the vast majority of the people in Oak Ridge, in that very moment, was that the war was coming to an end.

After years of closed-off husbands, private coworkers, and being watched by prying eyes at almost every waking moment, Oak Ridgers were now free to speak, and the relief was overwhelming and immediate. Now that one of the country's biggest secrets—and the secret that had hung over the lives of the people of Oak Ridge for years—was laid bare for the world to see, there was nothing stopping them from talking about it any longer. Anxious to finally put into words years of pent-up thoughts, countless people began to write. Even before the flood of reporters and journalists who soon crowded into the city, the people of Oak Ridge were prolifically writing in their journals and diaries, to the *Oak Ridge Journal*, and to countless other publications trying to get their words out.[17] Mary Kraus, in a joint oral history interview with her husband, noted the large amount of writing done by citizens of Oak Ridge after the news broke and remembered a sense of "unwinding" in the city, as the iron grip kept on people's voices

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[15] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

[16] Mary Elizabeth Alexander, interview by Don Hunnicutt, December 19, 2012, COROH.

[17] "Reporters, Cameramen Flood Town," *Oak Ridge Journal*, August 16, 1945, 1.

was suddenly flung off with next to no warning.[18] This moment in the city's history was no doubt a continuous series of shocks to the workers; in rapid-fire succession, they learned that their work had been to create atomic bombs, then the culture of secrecy implemented by the government was quickly replaced with news of the bombs, and the city gates—once shut tight to all but new workers and military personnel—were flung open as curious journalists descended upon the city, looking to cash in on the biggest news event of the century. This moment seems to have been one large, collective sigh of relief for the people of Oak Ridge. After years of treading on the thin ice of government surveillance--knowing that any slip in maintaining the confidentiality of the project would result in dire punishment, they were now being asked to discuss and write about those very same secrets, or as much as any one person knew.

Not everyone was desperate to talk about their work, however, as Louise Alspaugh noted of her husband, who never spoke to anyone about his work in the atomic plant, even years after the news broke. Responding to the interviewer stating that her husband was—at the time of the story she was telling—free to speak about his work, she said, "But he never did. He never did."[19] More of the writing done by these individuals was about the security state of Oak Ridge than any "insider knowledge" about the bombs, which the vast majority of people could not access. Those individuals who had more intimate connections to the creation of the bombs, such as engineers and scientists, were less apt to immediately speak out on their experiences to the public.

[18] Kurt and Mary Kraus, interview by Charles Johnson and Charles Jackson, May 22, 1976, COROH.

[19] Louise Alspaugh, interview by Jim Kolb, September 17, 2002, COROH.

While relief from the secrecy and surveillance of the Manhattan Project was visible in the outpouring of writing and interviews, this was not the only stress lifted from the citizens of Oak Ridge. The people of Oak Ridge joined the rest of the nation in welcoming the speedy end of the war, something that had weighed greatly on the shoulders of every American at this time. It was less than a week after the second atomic attack that Japan agreed to surrender to the United States, leading to the end of World War II. Many were simply relieved that the war was over. Robert Allen, who was ten years old when the bombs were dropped, only remembered being glad that the war was over.[20]

Many people who were not yet old enough to serve in the military rejoiced at the end of the war, because it meant they would not have to be involved in its fighting. Howard Baker, a high school student at the time of the bombings, remembered he and his classmates were relieved that they would not be shipped out to the Pacific to fight the Japanese. He recalled in his interview, "I believe without exception my classmates in that training school cheered wildly, because – not because of the technological advance, but because that meant we were not going to have to go to the Pacific."[21] Though some animosity and desire for revenge against Japan seemed to exist after the attack on Pearl Harbor, it seems that this had little effect on the boys of Oak Ridge.

War-time had been frightening, and its end brought great joy to those dreading their involvement in it. Rose Feldman sought to make an important distinction in her interview; she noted that the relief and massive celebrations that followed V-J Day were

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[20] Robert Allen, interview by Chris Albrecht, November 3, 2005, COROH.
[21] Howard Baker, interview by Jim Campbell, August 19, 2009, COROH.

not in response to Japan being bombed. She said, “There were parties to celebrate the fact that the war was finished. I think there is a difference. The attention was not on how the war was ended, but just that the war was ended.” It may seem dismissive of the devastation suffered by the Japanese people due to the bombs, but Oak Ridgers—like most ordinary Americans--simply welcomed the end of the war, disregarding completely how it came about. The people of Oak Ridge were not ecstatic that the Japanese had been decimated or even that the Allied forces had beaten the Japanese. People were happy because the war was over.[22]

While much of the relief over the war’s end was an immediate reaction to the end of hostilities, many—like Howard Baker—were also thankful for the countless American lives seemingly saved. Paul Fussell, a prominent cultural historian and American soldier during World War II, expresses a common sentiment regarding the bombs; he believed that, as a soldier, the bombs were used to end the war as early as possible, averting an invasion of Japan that would have been costly and, in a sense, pointless when the atomic bombs were an option.[23] Although modern-day historians debate U.S. casualty projections and whether an invasion of mainland Japan would have been necessary to force its surrender, everyday Americans at the time no doubt rejoiced not only the end of the war but also that the bombs had ended it without requiring a U.S. invasion. The week following the bombings, the *Oak Ridge Journal* published a letter written by a veteran from Oak Ridge expressing relief over avoiding a land invasion of Japan.[24] Rose

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[22] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

[23] Paul Fussell, *Thank God for the Atomic Bomb and Other Essays*, 14.

[24] “Men Overseas Write Reactions to Atomic Bomb,” *Oak Ridge Journal*, August 23, 1945, 1.

Feldman believed that shortening the war by even one day had saved countless lives, stating that 5,000 to 7,000 U.S. troops were dying every day. Whatever the accuracy or contextual nature of this statement is, it clearly informed her belief in the positive effect the bombs had in saving American lives.[25] William Tewes, a soldier stationed in Oak Ridge, noted that he and his fellow soldiers were painfully aware of the death toll in the Pacific, specifically citing the bloody battle of Iwo Jima and lamenting the massive loss of lives on both the American and Japanese sides of the war. The bombs, in his mind, were key to ceasing the wild loss of life, not taking into account the victims of the bombs themselves.[26] The presumed avoidance of massive U.S. casualties also bolstered the pride the people of Oak Ridge felt at the end of the conflict, an emotion already riding high after the bombs ended the war.

After the relief of the war being over was fully realized by the people of Oak Ridge, many turned to feelings of pride—not only pride in Oak Ridge's place in ending the most terrible war the world had yet seen but also pride in their individual contributions to that success. The *Oak Ridge Journal*'s news coverage noted pride being the most common reaction to the bombs, next to surprise.[27] Rose Feldman, in a retrospective reflection many years later, believed that her part in ending the war had given her a sense of accomplishment in life that she had not fully appreciated at the time.[28] Louis Falstein, a reporter who came to Oak Ridge in the excitement following the

[25] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

[26] William Tewes, interview by Connie Callan, March 8, 2005, COROH.

[27] "Workers Thrill as Atomic Bomb Secret Breaks: Press and Radio Stories Describe 'Fantastically Powerful' Weapon: Expected to Save Many Lives," *Oak Ridge Journal*, August 9, 1945, 1.

[28] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

bombs, noted that many residents did not quite grasp just how important Oak Ridge's work was not only to the war, but to the world as a whole.[29] Mary Elizabeth Alexander admitted to this in her oral history interview, saying that she had not fully understood the weight of Oak Ridge's achievement until much later, which she came to appreciate deeply later in her life.[30]

One should not assume, however, that Oak Ridgers jealously guarded the praise they garnered for their part in the war or felt that they alone had contributed to its end. William Tewes noted that there was not a sense of Oak Ridgers having miraculously won the war by their own virtue alone; he remembered that people only ever said that they helped win the war. He recalled, "And everybody was saying, 'We did it…' 'We helped end the war…' I never heard anyone in Oak Ridge, at that time, say, 'We won the war.'"[31] Tewes' memory shows the deep impact of the bombs' success on the people of Oak Ridge. The humbleness within their pride can be attributed to the relatively indirect impact that the average Oak Ridge worker had on the actual creation of the bombs, instilling in them a genuine sense of "group effort" concerning the accomplishment. It seems reasonable to believe that this sense of pride and accomplishment stemmed not only from the technical feat of creating the bombs—with the resultant saving of American lives, but also from a patriotic sense of communal duty to the country as a whole, especially for those who did not have a direct hand in the creation of the bombs.

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[29] "Oak Ridge Still Big News to Entire Nation," *Oak Ridge Journal*, October 18, 1945, 1.

[30] Mary Elizabeth Alexander, interview by Don Hunnicutt, December 19, 2012, COROH.

[31] William Tewes, interview by Keith McDaniel, part 1, July 28, 2012, COROH.

Considering the Dark Side of the Bombs

That positive reaction to the bombs was not unanimous, however. There were some people who admitted to immediately reacting negatively to the truth about Oak Ridge's work, most being concerned about the devastation wrought by the bombs. Mary Ann Halstead remembered some people reacting with complete panic. She said, "I don't know. I think they thought if—they didn't know what we were doing here until then. They had no idea we were building an atomic bomb, you know. I think they panicked and said, 'Oh, my God, let's get away from here.'"[32] This is an interesting story that I found no other allusion to in my research; however, I believe that this kind of reaction was reasonable in light of their circumstances. Some workers, especially those with the least sense of the nature of Oak Ridge's work, might have had reasonable cause to panic after learning that they had been essentially caged inside of a massive explosives-manufacturing facility for the past few years.

More common negative reactions to the news were somberness and doubt over the good done by the bombs' use. Carl Hagaman remembered being asked right after the news broke how he felt about the situation and saying, "'I don't know what to think.' We don't know if we had done the right thing by making that thing or not, you know." It was no doubt a confusing moment; Hagaman, a construction worker, found understandable difficulty in wrapping his head around the destruction borne from the city where he had done inconspicuous work for many years.[33] Some others, such as Horace Stanley, felt

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[32] Mary Ann Halstead, interview by Don Hunnicutt, October 25, 2012, COROH.

[33] Carl and Ida Hagaman, interview by Charles Johnson and Charles Jackson, May 15, 1976, COROH.

conflicted by their initial positive reactions. He remembered being pleased by the end of the war and Oak Ridge's part in it, but quickly he began to question his happiness in the face of all of the victims of the bombs.[34] Jane Teasley, too, was not sure if her emotions were righteous following the news. She said,

> I hate to say that I was terribly glad. I was sad that it had to be, but I had lost one of my best friends to those Japs and I couldn't wait for 'em to get 'em back. He had been a best friend since we were children and we had -- we had spent many long hours together and it broke my heart to see that boy killed because he was right in the prime of life. So, yes, I guess I rejoiced even in the sadness of knowing that other people had to suffer.

Teasley recalled desiring revenge against the Japanese for the loss of her friend and having that desire turn to despair over the major loss of life caused by the bombs--surely a difficult string of emotions to process.[35]

A prevalent thought at this time regarding regrets over the bomb's use was how the situation would have ended had the two countries' positions been flipped. June Adams, while noting that the atomic attacks were a terrible thing, said that they were also necessary to end the war and therefore justified. She went on to state that had Japan developed atomic bombs, it likely would have done the exact same thing to the United States, alleviating any guilt in her mind.[36] Rose Feldman thought similarly, remembering the still-fresh wounds of the Japanese bombing of Pearl Harbor and saying that the Japanese had not cared about who was underneath the bombs during their attack. She believed that Japan, having instigated the war with the United States, was in no position

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[34] Horace Stanley, interview by Bart Callan, April 12, 2005, COROH.
[35] Jane Teasley, interview by Bart Callan, April 13, 2005, COROH.
[36] June Adamson, interview by Keith McDaniel, April 15, 2003, COROH.

to complain about how the United States ended it, putting to rest any doubts she had about the necessity of the bombs.[37]

It would be difficult to imagine such a devastating event not drawing any dissent, especially from those who unwittingly played a part in bringing it about. The *Oak Ridge Journal*, in the weeks following the bombings, did not publish any people's negative reactions. As the sole newspaper running in the city and one overseen by the federal government, it seems reasonable to assume that the paper wished to avoid any sort of division in the population following this event. While negative reactions to the bomb seem to be heavily outnumbered by positive ones in the immediate aftermath, they became more common as the weeks and years went by and the passions of the war died away, leaving only time to wonder if the workers of Oak Ridge had done the right thing.

Reporters Come to Oak Ridge

Among the very first reporters to gain access to the previously hidden city of Oak Ridge were those from the neighboring city of Knoxville, Tennessee. Therefore, many of the very first news reports about the Secret City came out of Knoxville. As the largest city in East Tennessee, many of the surrounding smaller communities, including Oak Ridge itself, got much of their news from the journalistic organizations of Knoxville, so the influence of the Knoxville newspapers reached much of the eastern portion of the state as well as the surrounding border states. After Oak Ridge's gates opened to reporters less than a week after the bombs fell, news of the newly discovered city

[37] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

headlined and filled the two major newspapers--*The Knoxville Journal* and *The Knoxville News-Sentinel*. Oak Ridge news dominated these papers for the first few weeks following the atomic attacks, and these reports provide a unique insight into the city.

Many of the news reports at the time seemed fascinated and bewildered by the fact that the workers of Oak Ridge, save for a small number at the top of the chain of authority, knew nothing about what they were working on. *The Knoxville News-Sentinel* on August 6, 1945, wrote, “What is probably most remarkable about Oak Ridge is the fact that the inhabitants themselves, with the exception of a few key men, knew nothing about the city’s purpose, what it was built for or what its giant plants were producing.” The writer seemed amazed at the fact that everyone from the common workers in the factories to some of the higher-up scientists were left in the dark about what their work entailed and were required under penalty of punishment not to disclose anything about their work to others, be they coworkers or even their own families. The author even notes that some workers were concerned that they were producing nothing, as seemingly limitless amounts of material were pushed through the factories and seemed to simply vanish.[38] Much emphasis is put on the workers and their experience in the article and relatively little is put on the bombs themselves. Naturally, one could attribute this to the massive influx of stories on the bombs themselves, but many of the papers from places close to Oak Ridge seem to focus more on the population of the town, perhaps denoting a more personal connection with the site.

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[38] “Official Story Is Told of How Secret Was Kept,” *Knoxville News-Sentinel*, August 6, 1945, 18.

The Knoxville Journal, similarly, seemed to take steps to try to humanize the city of Oak Ridge, making it seem to readers less like a federal research facility and more like a living city full of people. In its August 7, 1945 issue, the paper lauded the merits of the town, with only short sections focused on the work of the Manhattan Project. The author listed out the facilities available to the residents of Oak Ridge, from grocery stores to restaurants, and put special care into expressing how the people of the city, while not on the job, lived relatively normal lives, save for the constant federal oversight. The author even goes so far as to cite statistics calling Oak Ridge one of the healthiest and least crime-ridden cities in the country, along with one of the youngest populations in the country.[39] Realistically, much of this can be attributed to the strict federal oversight of the daily lives of Oak Ridge citizens. However, it seems the author went to great lengths to paint the city in a more human and positive light, expressing the virtues of the city.

This is not the only example of news reports vouching for the virtues of the city. *The Knoxville Journal* in its August 14, 1945, issue printed the words of a clergyman from Oak Ridge, denying claims that the city was full of money-hungry and opportunistic people who came only to the region only for the money. The paper reported the words of Father Joseph Steiner, pastor of the Oak Ridge Catholic Church: "The people, gathered here from every section of the country and every walk of life, have created a 'community with a minimum of delinquency and maximum measure of the virtues that are vital to wholesome and worth-while character and citizenship."[40] The reporters who covered this

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[39] "Oak Ridge Is Locale of Best Kept Secret of War: Only 18 Miles of Knox," *Knoxville Journal*, August 7, 1945, 10.

[40] Jean M. Stevens, "Clergy Denies Oak Ridge Has 'Boom-Town' Morals," *Knoxville Journal*, August 14, 1945, 14.

story clearly understood the unique nature of Oak Ridge's creation and its contemporary position somewhere between a real, normal city that had cropped up in the midst of the war and a meticulously created federal work site. This news story also put the people of Oak Ridge in a sympathetic light, countering the view of some that the people of Oak Ridge were outsiders who had only come to the South to make money from federal work. Some of this animosity might have come from the removal of the previous land owners where the federal government constructed Oak Ridge, but the paper does not identify the true source of the rumors.

Some news sources attributed the work done in Oak Ridge to the coming of a new scientific age, dominated by atomic energy, with all of its perils and opportunities. The August 7, 1945, issue of *The Knoxville Journal* took this approach. Curiously, the article seems to only give a sidewise glance at Oak Ridge as one of the major sites of this research, placing more emphasis on the future of atomic energy and how the countries of the world may use it.[41] Despite being mentioned only tangentially, the article is clearly inserting the Tennessee city into the larger, growing field of atomic research. Knoxville reporters seemed to go out of their way to make certain that the efforts of Oak Ridge workers were not forgotten in discussions of the new "atomic era."

Reports on Oak Ridge and the atomic bomb from the wider state of Tennessee echoed many of the sentiments seen in Knoxville publications. Most Tennesseans felt the same sense of geographic connection to Oak Ridge that any person in Knoxville would; after all, whether you were from Knoxville or Memphis, you yourself were not a worker

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[41] "Science Ushers in New Era," *Knoxville Journal*, August 7, 1945.

in Oak Ridge. Surely most would know that a great number of the city's residents were from places across the country; the more technical and scientific positions drew prospective employees from universities and government agencies across the entire United States. However, plenty of the individuals who worked factory jobs and some of the even more mundane and non-research-related positions were indeed from the surrounding areas in Tennessee. The apparent sense of pride seen in some reports from Knoxville and other state news outlets speaks to the collective culture and community attributed to the state as a whole, and any accomplishment, especially one so spectacular as the creation of the atomic bombs, reflected well on the spirit and ingenuity of the state as a whole.

Some Tennessee papers did break with the norm and present more negative experiences tied to Oak Ridge. *The Chattanooga Times*, in its August 7, 1945, issue, tells the story of the author's experiences of touring Oak Ridge before and after the revelation of the Manhattan Project's goals and the city's opening. Unlike the Knoxville news publications, the author describes Knoxvillians' unhappiness with the influxes of people connected to Oak Ridge's construction. Out-of-towners filling Knoxville hotels and restaurants also caused discontent, even though they certainly contributed to the local economy for a time. Oak Ridge was blamed for the lack of food in grocery stores at times, and frustrations over packed eateries and slower-than-usual traffic seem to have been common.[42] This is an interesting insight into how some Knoxville citizens viewed Oak Ridge at a time when most newspapers were interested in the great scientific

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[42] "Story of Atomic Bomb, U.S. Secret Weapon, Told in Stories and Pictures," *Chattanooga Daily Times*, August 7, 1945, 7.

achievements wrought by the city. It is unique to see such a negative view of Oak Ridge, and even more interesting that the only place I was able to find these complaints was in an entirely different city's newspaper.

Another unique perspective on the city of Oak Ridge and its precarious place in the state can be seen in *The Johnson City Express* issue from August 12, 1945. Rather than focus on the city, its citizens, or the work associated with it, this article focuses on the effects of Oak Ridge on state and federal government agencies. The immense resources put into not only creating the city, but also hiding it from both the public and even most government officials, seemed to have put off many when the city was revealed. On top of this, papers seemed to express concern over the city's political place in the state, as it was then under the jurisdiction of the federal government. The paper noted that many believed that the city would eventually be shuffled into the state and wondered how Tennessee would be able to afford its schools, at the time done so by the federal government.[43] This is certainly an interesting perspective on Oak Ridge's impact and helps illuminate how some of the political and governmental challenges that the Secret City posed to the Volunteer State.

Yet another example of negative press given to Oak Ridge can be seen in *The Nashville Banner* on August 9, 1945. The article itself focuses on a usually underrepresented moment in this period of history--the time between the first and second atomic bombings, when the Soviet Union declared war on Japan. The paper discusses the reactions of Oak Ridge citizens to this news and notes that many considered the first

[43] Clif Paisley, "Hardly a State Department Left Unaffected by Impact of Oak Ridge Development," *Johnson City Press*, August 12, 1945, 10.

atomic bombing to be a major factor in Russia deciding to declare war. However, the title of the article, "Oak Ridgers Think 'Their' Bomb Brought Russia into War," seems to place emphasis on the Oak Ridgers' sense of possessiveness toward the atomic bomb. The quotation marks around "their"' in the title seem to suggest that the writer felt this possessiveness was undeserved, since none of the quotations in the article itself from Oak Ridgers seem to reflect this proprietary sense.[44] The material of the article does not indicate any animosity or ill-will towards Oak Ridge and its citizens, focusing solely on their reaction to the declaration of war. The title is how most readers would first see the article, and the first impression might seem to discredit Oak Ridgers' efforts or simply connect Tennessee and Oak Ridge to the international scale of the war.

Some papers of the time printed stories expressing early fears of Oak Ridge as a danger to neighboring communities and cities. *The Bristol News Bulletin*, in its August 7, 1945, paper, at first seems to be another article concerning the amazement at the workers of Oak Ridge being in the dark about the Manhattan Project. The author lauds the efforts of both the government in building the city of 75,000 out of seemingly nowhere and of the work of the factory workers and engineers who made the bomb possible. However, near the end of the article, some Knoxville locals react to the news. Among them is a Knoxville woman who said, "I'm too close to Oak Ridge. I want to move away right now."[45] While seemingly a one-off quote from a random woman, its inclusion in the paper adds to a substantial, but still relatively small, amount of negative attention given to

[44] Benwah Kail Sparkes, "Oak Ridgers Think 'Their' Bomb Brought Russia into War," *Nashville Banner*, August 9, 1945, 6.

[45] "Oak Ridge Excited about Atom Bomb," *Bristol News Bulletin*, August 7, 1945, 5.

Oak Ridge and its work. While most of the country was celebrating the dropping of the bombs and the impending end of the war, the deliberate inclusion of testimonies of people frightened by the prospects of the atomic bombs being made so close to their homes stands out among the sea of positive and uplifting stories. This also continues what appears to be a trend of people from Knoxville, the closest neighboring major city, having issues and concerns over Oak Ridge that are seemingly absent from Knoxville newspapers. One could theorize that the Knoxville papers hoped to avoid expanding any concerns over Oak Ridge, as positive news running up to the end of the war would likely sell better and be received more favorably.

Oak Ridge Ponders the Future

With the very immediate reaction to Hiroshima and Nagasaki having passed, the people of Oak Ridge began to have complex thoughts about the bombs and especially concerning the future. Some people believed that the discoveries connected to the bombs could bring about a better future for humanity. A man from Oak Ridge sailing for the U.S. Navy, H. L. Wigner, wrote a letter to his brother back home, which was published in the *Oak Ridge Journal* a few days later. His thoughts were that the science and technology that had allowed for the creation of the atomic bombs could be repurposed to further humanity and that the bombs themselves could help bring about peace in the world. He called it the "duty of the present generation" to properly utilize and shape this technology.[46]

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[46] "Men Overseas Write Reactions to Atomic Bomb," *Oak Ridge Journal*, August 23, 1945, 1.

In a similar vein, Rose Feldman said that she hoped that the terrible work of the bomb might ultimately bring international peace through its strength.[47] Lynn Fortenberry, signaling what would become the baby boom of the post-war era, remembered being delighted by the prospect of raising her children in a world free of war, and she was genuinely hopeful that the atomic bombs were capable of producing such a world.[48] While many echoed the sentiments of desiring peace in the aftermath of the atomic bombs, few made any note of how that might be achieved. Sergeant Jacob Deutsch was blunt about his opinions on the matter, hoping to see the United States use the atomic bombs as a powerful threatening tool to ensure peace throughout the world.[49] Many residents of Oak Ridge saw the atomic bombs as an "ultimate weapon," capable of commanding the respect of any nation and providing the United States with the means to strong-arm any opposition. This was a reasonable assumption in the aftermath of World War II when the United States held a monopoly on this weapon. However, while this power was a comforting thought for some, others were concerned over concentrating this much power in one place and worried about the proliferation of such weapons elsewhere should the technology not be controlled in some way.

The control of nuclear weapons was of fairly quick concern for many Oak Ridgers. While most immediate reactions to the bombs dropping were relief and pride, which itself led to joyous celebration among most of the city's residents, these same people soon began to wonder in earnest about what the future of atomic weaponry would

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[47] Rose Feldman, interview by Erica Rivinoja, 1997, COROH.

[48] Lynn Fortenberry, interview by Connie Battle, January 21, 2003, COROH.

[49] "What Form of Control Do You Favor for the Atomic Bomb?" *Oak Ridge Journal*, October 18, 1945, 3.

look like. And as soon as their celebration turned to wonder, that wonder turned to worry. Alfred Brooks, a nuclear engineer at one of the city's plants, lamented the lack of foresight about controlling atomic weapons after their debut in the world. Brooks remembered the feeling of having been on the forefront of revolutionizing warfare, developing a weapon capable of wiping out humanity, and knowing that there were no systems yet in place to rein in that destructive power.[50] This was a frightening prospect for many; the United States had seemingly unleashed a terrifying power upon the world, with only its hand on the chains keeping it at bay.

The hopes for a bright future courtesy of atomic power were quickly dashed by oncoming fears about a hostile atomic world. The *Oak Ridge Journal* published an article asking citizens of the city how they felt the atomic bomb should be controlled; their responses shed light on these fears and how residents hoped to see them alleviated. Dr. Vladislav Ignatov, a local dentist, believed that the secrets of the atomic bomb should be closely guarded by the United States and that the country should stay ahead of others in terms of research. He believed that the United States was the only country capable of properly maintaining peace through these weapons and almost prophetically noted that an atomic arms race could spell disaster for the world. Sergeant Jacob Deutsch, stationed in Oak Ridge, felt similarly, stating that the United States ought to keep its nuclear secrets and not provide any other country access to them.

Some citizens felt differently about atomic science and believed that sharing this knowledge could benefit the world and keep it safer. C. C. Sullivan, a grocer, thought that

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[50] Alfred Brooks, interview by Bart Callan, April 14, 2005, COROH.

the United States should keep the bombs and continue its experiments in atomic science, but he also felt that something truly remarkable could be achieved if all the nations of the world came together into a union concerning such research. This seems to be one of the earliest mentions of what would become a fairly widespread thought about the atomic bombs. Katherine Powers, a local shopkeeper, expanded on the idea, noting that if some kind of world council was not formed to control the spread of atomic research and weapons, they would begin to crop up all over the world and cause major issues. Ruth Weiner, the publicity director for the city's Recreation and Welfare Association, similarly believed in a global body designed to control the bombs. She believed it would be foolish to keep the research away from other countries, as some--like the Soviet Union--were probably already feverishly working on their own atomic weapons.[51] Students at Oak Ridge High School even formed a committee dedicated to sharing ideas about how to control atomic weapons. The committee was born from student discussions sparked by scientists from the plants visiting the students. Seriously concerned over the future of the world, these students--in conjunction with scientists from Oak Ridge--formed the committee to garner support for what they believed to be the only solution to the issue--a world government capable of ensuring that atomic weapons would not spread or be misused.[52]

[51] "What Form of Control Do You Favor for the Atomic Bomb?" *Oak Ridge Journal*, October 18, 1945, 4.

[52] "Student Form 'Council on Atomic Crisis,'" [sic] *Oak Ridge Journal*, December 28, 1945, 1.

The rise in a desire to see a world government formed to control atomic research and weapons is interesting and seemingly swept over the city fairly quickly. While it is entirely understandable that the people of Oak Ridge harbored a lot of anxiety at this time about the future of nuclear weapons, it is difficult to say where this specific idea had its origins. One might assume that the successful efforts of President Franklin Roosevelt to create a U.S.-led world leadership group in the form of the United Nations (U.N.) might have influenced these beliefs. With its official founding at the San Francisco Conference in the spring of 1945, it might have seemed to be the world's best hope at controlling what many rightfully thought would quickly become a global issue. Of course, some felt that the U.N. would not be powerful enough to provide the sort of control they believed was necessary to protect the world from these weapons. A council dedicated to the oversight of nuclear weaponry was needed, in their minds; this notion was doubtlessly a comforting thought in the minds of scientists, laymen, and students alike at a time when the fate of the world seemed uncertain.

Conclusion

The tightly secured secrecy of the Manhattan Project in Oak Ridge no doubt contributed to the intensity of the reactions and emotions that followed the revelation of the program and its products at the end of World War II. After years of pent-up frustration and rabid curiosity, such a sudden and shocking revelation no doubt had a huge impact on everyone, and we see this clearly in the story of Oak Ridge. The sheer weight of the situation, too, must have played a part in understanding how the city's

residents felt following Hiroshima and Nagasaki. World War II was doubtlessly an unimaginably frightening time. The Japanese attack on Pearl Harbor had not only spurred an immensely patriotic and militaristic determination in the hearts and minds of the American people but also a hostility and desire for vengeance against the Japanese empire that is difficult to relate to in the modern day. This is apparent in some of the reactions to the atomic bombs' development and use at the end of World War II, and Oak Ridge was by no means an exception to this. While these feelings of hostility have largely cooled in the aging citizens of Oak Ridge, their initial reactions can be gleaned from their recollections of their initial reactions that sparked widespread celebration at the war's end. However, as many of the interviewees noted in their stories, both those proud and excited in light of the atomic revelation and those fearful and stressed by it, the mostly positive initial reaction to the bombs was aimed at the war's end, and not the misfortune brought upon the enemy. Thoughts of the victims of the bombs were delayed; the initial focus was on the end of the most disastrous war the world had seen to date.

It is easy to look back in retrospect and question the necessity of the atomic bombs in ending the war and the morality of their development in the first place. However, the fact is that they did in fact end the Second World War. And those bombs existed thanks to the extraordinarily stressful, difficult, and revolutionary work done by scientists of the Manhattan Project—who in turn were supported by all those who lived and worked in Oak Ridge, from the lead engineers to the housewives and security guards. This was a fact not lost on the people of Oak Ridge. Every individual in the city had some part to play in the creation of the weapons that ended the war, saving countless

lives and returning a short, perhaps shallow, peace to the world at large. And while the city of Oak Ridge is still known as the “Secret City” and one of the major sites of the Manhattan Project, much of the colloquial credit goes to the scientists in Los Alamos. Nonetheless, the people of Oak Ridge endured a great deal of hardship to ensure the Manhattan Project’s success, and their relief, pride, anxiety and fear following the global revelation of the work they had unknowingly participated in deserves to be remembered. It was a monumental turning point in their lives and for the entire world.

CHAPTER TWO:

THE IMPACT OF INCORPORATION ON THE IDENTITY OF OAK RIGE AND VICE VERSA

Oak Ridge, Tennessee, has a past that is largely unique among the greater history of the United States. What began as a secret research site for the Manhattan Project evolved into a full-fledged city in the state of Tennessee. It retained the character and ideals instilled in it by the war, as it both struggled and succeeded in becoming not only a city independent of the federal government but also one independent from its storied past. The nature of the city as a top-secret government city built quickly to resemble and operate as a normal town on the surface level, while being shrouded in secrecy and the iron grip of the government at all times, created a culture unlike almost anything else seen in the United States. The citizens of Oak Ridge knew that they were subject to constant surveillance and searches, and they knew that they were a part of a highly classified government project. Yet beyond that, they were determined to live their lives as normally as possible and to do their work in service of the nation's war effort.

This all changed, however, after the atomic bombs were deployed against Japan in 1945. What had previously been a secret project to the citizens of Oak Ridge, one that no single person knew the whole truth of, was now a tangible reality, not only for the city, but for the entire world. Most celebrated the end of the war and their part in accomplishing it; some others lamented the huge loss of life and feared for the future under the shadow of atomic weaponry. What every single citizen of Oak Ridge

experienced in the coming months and years, however, was a massive shift in their daily lives.

This was a time of great change and importance for the citizens of Oak Ridge, and much interest and concern surrounded the city and its future after the end of World War II. Though incorporation would not officially occur until the middle of 1960, Oak Ridgers had discussed and built towards it for more than a decade prior.[1] Opinions on incorporation varied over time and among different portions of the citizenry, and such a monumental event's impact on the culture of the city can be seen in the words of its people and in the stories told by newspapers of the time. Incorporation, to some, represented a necessary change for Oak Ridge, the logical next step in the city's history that would allow it to grow and prosper. To others, incorporation represented a loss of security and community, a coming tidal wave of new, unfamiliar neighbors and a loss of the legal and economic protections provided by federal control. While incorporation eventually passed with flying colors, it took time for the citizens of Oak Ridge to accept the necessity of removing federal oversight from the city and to find their place as normal citizens within the state of Tennessee, a difficult endeavor, as the rest of the state continues to look at the city with both wary and admiring perspectives.

Oak Ridge after the War Ended

As the Second World War came to a close in 1945 with the bombings of Hiroshima and Nagasaki, the veil that had covered Oak Ridge and its citizens was

[1] Denise Kiernan, *The Girls of Atomic City: The Untold Story of the Women Who Helped Win World War II* (New York: Simon & Schuster, 2013), 296-97.

quickly snatched away. It did not suddenly become a normal, no-secrets city. However, after years of living in a miniature security state, the citizens of Oak Ridge experienced a cultural whiplash as the secret of what they had been working on was revealed to them and the rest of the world. The initial flood of reporters just a few days later, the later opening of the gates to the general public in 1949, and the ability to breathe a sigh of relief as years of tension fell away certainly took Oak Ridgers for an emotional ride.[2] However, the general administration of the city did not immediately change. The federal government and the military continued to operate the city, albeit with a looser grip and by less invasive means. The federal government and the Atomic Energy Commission (AEC, in charge of the war-time general operations of Oak Ridge, began a series of postwar changes that seemed to be preparing the city for a more independent and hands-off approach as soon as a few weeks after the bombs dropped.

One of the first changes came with how workers paid for their dormitory housing, which laid the foundation for shifting from Oak Ridge being something of a "company town" and toward private ownership. During the war, every citizen of Oak Ridge--from the highest-ranking nuclear scientists to the most common laundry attendant--was an employee of the federal government. Therefore, they paid for their dormitory housing through a payroll deduction from their salary.[3] However, just a week after the Nagasaki bombing, *The Oak Ridge Journal* reported on August 16, 1945, that workers living in the dorms would now pay for that housing on a monthly, cash-based rental system. In this

[2] Donna Smith, "Oak Ridge Celebrates 75 Years After the Secret City's Gates were Opened to the World," *Oak Ridger*, March 20, 2024.

[3] "Dorms Go on Cash Rental Basis Aug. 27," *Oak Ridge Journal*, August 16, 1945, 1.

way, the government began setting the city up for private ownership of housing facilities separate from government-run companies.

The federal government also signaled that peacetime would bring changes to Oak Ridge when it did not renew the contracts for running the city's cafeterias with the war-time contractor. Later that same August, *The Oak Ridge Journal* reported that a Chicago-based company, Canteen Food Service, had won the contract to provide food services at three Oak Ridge cafeterias, while Tucker and Capiello began providing services at another cafeteria and a bar.[4] This is the first instance of the federal government transitioning from war-time to peace-time business contracts made for the running of Oak Ridge's services, which was another step toward full privatization of businesses in the city.

Oak Ridge's government also began shifting in August of 1945, providing a growing sense of normalization and independence from the federal government despite the fact that it was still exercising control. The city government set out to expand its Town Council with public elections. The expanded council provided representation for four new districts in the local government to serve the expanding population.[5] Likewise, later in September, Oak Ridge began to reorganize and expand its police force. Under the wartime government of the city, the military was in charge, and policing functions were divided between many different groups, such as traffic and detective divisions. Under the proposed reorganization, the police would be centralized into a single force and

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[4] "New Firms Take over Four Cafeterias," *Oak Ridge Journal*, August 23, 1945, 1.

[5] "Town Council Elections Set for Sept. 25," *Oak Ridge Journal*, August 30, 1945, 1.

integrated into the city's local governance, operating more akin to a normal city's police department and free of military control.[6] This was perhaps the longest step towards independence from the federal government that the growing city government took in these early post-war, pre-incorporation years.

While many of these events were of course initiated by the federal government that still exercised control of the city, it seems to actually have been a move by the government towards distancing itself from growing local leadership of the city. This may seem an odd choice, in a time where the federal government seemed to be shoring up all of the authority and territory it could find to strengthen its position against the burgeoning Soviet Union. Or perhaps it was just a symptom of the immediate postwar demobilization the U.S. initiated after World War II.[7] However, as Lindsey Freeman notes, in the immediate aftermath of the war but before the Cold War, the federal government became less and less interested in running the Manhattan Project cities, and Oak Ridge was by all accounts the most capable of converting to a normal, incorporated city.[8] With so much on the government's plate, the running of cities associated with a completed project was no longer a priority. By easing the city into more self-governance and privatization early on, the federal government created an environment in Oak Ridge that could, and eventually did, foster a successful incorporation into the state of Tennessee. However, the

[6] "Oak Ridge Police Department Now Undergoing Reorganization," *Oak Ridge Journal*, September 13, 1945, 1.

[7] James T. Sparrow, "Behind the Atomic Curtain: School Desegregation and Territoriality in the Early Cold War," *Tocqueville Review* 33, no. 2 (July 2012): 115–39.

[8] Lindsey A. Freeman, *Longing for the Bomb: Oak Ridge and Atomic Nostalgia* (Chapel Hill: University of North Carolina Press, 2015), 109.

government did not completely abandon its ambitions in Oak Ridge, as the Clinton Engineer Works (CEW)--a common name for the city and its enrichment plants--was confirmed just weeks after the bombs dropped to remain on the agenda of the federal government for years to come by Colonel Kenneth D. Nichols, District Engineer of Oak Ridge. No one quite knew for sure what that involvement would look like, but the government assured the people of Oak Ridge that they and the city would be needed for the coming years.[9]

The First, Failed Incorporation Vote

The movement for incorporation did not occur until after an initial, failed vote. The first vote for incorporation took place on March 31, 1953, as part of a town meeting. The people of Oak Ridge voted soundly in favor of not incorporating; the measure failed by a four-to-one margin.[10] This vote took place less than ten years after the end of World War II, when the city's residents still very much used to its federal oversight. One could also assume that the Korean War, which was nearing its end but still ongoing during the vote, influenced this decision. Oak Ridge's people might have felt that another war so quickly after World War II showed that their place under the federal government was likely to continue. Newspapers in neighboring Knoxville noted that there was no organized support for incorporating in Oak Ridge at this time. The paper also reported that one of the main concerns of citizens was the lack of outside industry in Oak Ridge, due to its unique development, which meant that a withdrawal of federal funds would

[9] "New CEW Work Plan Told," *Oak Ridge Journal*, September 6, 1945, 1.
[10] Kiernan, *Girls of Atomic City*, 296.

leave the city in financial trouble.[11] The gates had hardly been open to the public for five years as well; the idea of incorporating into the state and operating like any other town was obviously not yet popular. The people of Oak Ridge still preferred their unique position as a federal city within the state.

This first incorporation vote demonstrated that many people in Oak Ridge had significant concerns about what an end to the city's federal status might mean to them. Martha Adler-Jasny, a citizen of Oak Ridge at the time of incorporation, recalled some very telling worries that people had regarding losing federal oversight. As she notes in her interview, "But the incorporation, not everybody wanted to incorporate. Once you start being taken care of by someone, it can be difficult to relinquish that care. The finances for the future were uncertain. We were going to have to pay taxes, for heaven sake, and it was an interesting time."[12] This statement shows that a decent portion of the population of Oak Ridge had become quite accustomed to the perks of federal control and were concerned that incorporation would cause financial hardship. Some Oak Ridgers thought the benefits of their dependence on the federal government outweighed any desire for autonomy and citizenship in Tennessee. Cleva Marrow, another woman residing in Oak Ridge at this time, noted even having fears concerning their safety should it incorporate. As she put it, "And the fact that you never, as long as the city was gated you never, ever. . . We never locked a door."[13] The safety and close-knit community that the people Oak Ridge felt they had developed during the war--while seemingly strict and

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[11] "Ridgers Disagree over Self-Rule, Vote on Tuesday," *Knoxville News-Sentinel*, March 29, 1953, 8.

[12] Martha Adler-Jasny, interview by Keith McDaniel, March 26, 2012, COROH.

[13] Cleva Marrow, interview by Keith McDaniel, August 10, 2013, COROH.

unfree by today's standards--proved a comforting force for many. The security badges and manned fences, while an annoyance for some, also created safety, comfort, and a sense of belonging for many Oak Ridgers.[14]

For these individuals, and many more Oak Ridge citizens, incorporation meant uncertainty. Incorporation meant giving up the guarantee of free electricity, reduced taxes, and home security. The oral histories of these Oak Ridgers seem to indicate that the federal government provided electricity and water at no cost, that there were few if any additional taxes (from the city, state, or county) paid by workers, and that the security of the city kept crime extremely low. The *Knoxville News-Sentinel* reported that the federal government, through the Atomic Energy Commission, spent $3.5 million supporting the city with fire protection, police, schools, and other normal city functions.[15]

Arguments for Incorporation

However, many knew that this level of federal support could not last forever, as the government's steady withdrawal from different aspects of running the city were becoming obvious. Luther Reed, a local Oak Ridge lawyer and supporter of the Citizens for Incorporation advocacy organization, stated that their goal after the initial, failed incorporation vote was to convince doubters that the city's time under federal care was coming to end--whether they voted to incorporate or not--and that incorporating would

[14] Kiernan, *Girls of Atomic City*, 296.
[15] "Ridgers Disagree over Self-Rule, Vote on Tuesday," *Knoxville News-Sentinel*, March 29, 1953, 8.

allow the city to transition more smoothly.[16] While incorporation eventually passed with an overwhelming majority, there can be no doubt that the vote was not unanimous and that a certain sense of the city's self was lost upon full normalization.

Regardless of some Oak Ridgers' fears surrounding incorporation, many more came around to the idea and began to support it. As the town grew after the Korean War and moving into the 1960s, support for incorporation only grew. Among the reasons for this growing support was the matter of representation for the city's citizens. Murray Rosenthal, an Oak Ridger concerned with labor unions at the time, recalled that one of the major pushes for incorporation came from districts of Oak Ridge that were unrepresented in the Town Council, many of which included members of labor unions unable to advance their agenda without proper representation. If supporting incorporation into Tennessee meant that their districts would gain proper representation in their local government, these people were more than willing to throw their hat in with the cause. As noted by Rosenthal, if the city could succeed in an incorporation vote, its citizens would be able to vote for their own City Council and School Board, allowing them to properly draw the city's districts and ensure that everyone was represented.[17]

Incorporation, to some Oak Ridgers, seemed to be a way towards greater representation and organization among those citizens seeking other changes. Another citizen, Barbara Lyon, brings up another interesting aspect of the fight for incorporation in the city. She recalls that they could not have national organizations in the city, only

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[16] "Oak Ridge Residents Expected to Add Fifth Biggest City to State This Year," *Knoxville News-Sentinel*, February 8, 1959, 47.

[17] Murray Rosenthal, interview by Keith McDaniel, June 27, 2013, COROH.

local chapters.[18] Without national access to groups such as the League of Women Voters and various labor unions, the citizens of Oak Ridge struggled to push for certain improvements compared to a normal city. As a strange, really-never-before-seen mix of a federal district and a "normal" city, Oak Ridge was subject to many strange restrictions such as this. However, groups such as the League of Women Voters went on to play a large role in getting incorporation passed on a local level.

The League of Women Voters was very active in Tennessee during this time, and participated in many movements throughout the state in the middle of the twentieth century. The Tennessee League of Women Voters supported organizations such as the Red Cross, PTA, and more local groups such as clubs and churches.[19] The Oak Ridge League of Women Voters itself had supported various movements in the city before incorporation, such as its members forming part of the school advisory board, and the local chapter president, Mrs. J. L. Ledgerwood, pushed for legislation to ease the process of purchasing homes for Oak Ridge citizens.[20] This legislation would come to fruition as the Atomic Energy Communities Disposal Bill, approved by Congress and signed by President Dwight. D. Eisenhower in 1955, allowing for the AEC to sell previously federally-owned homes in Oak Ridge to citizens.[21] As noted by both Rosenthal and Lyon, the League of Women Voters' Oak Ridge chapter formed education groups and set out to

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[18] Barbara Lyon, interview by Jim Kolb, July 22, 2004, COROH.

[19] Karen Beard-Case, "The Tennessee League of Women Voters, 1945-1960" (master's thesis, Middle Tennessee State University, 2003), 89-90.

[20] Jim Elliot, "Oak Ridge Plans to Desegregate Schools under AEC Order," *Nashville Banner*, February 3, 1955, 17; "10 Year Limit Set on AEC Payments," *Knoxville News-Sentinel*, July 31, 1955, 1.

[21] William J. Willcox, "The Long Road to Becoming a City," *Oak Ridger*, June 2, 2010.

persuade the people of the city of the value and benefit of incorporating into Tennessee. The League worked closely with the Oak Ridge Town Council to provide information pamphlets on incorporation timelines and its benefits.[22] Aiding in the creation of the "Citizens for Incorporation" group, the League of Women Voters played a significant role in spreading information about the process, dispelling misconceptions and explaining how it would affect the city and its people.[23]

Some citizens even sought to escape the oversight of the government to grow out of the very comforts so many others admitted to enjoying and wanting to preserve. Martha Adler-Jensyn, as a part of the Oak Ridge League of Women Voters mentioned before, further discussed the fears of losing the financial security provided by federal ownership. She said that the League took a stance against federal ownership and sought to get the citizens of Oak Ridge to "grow up" and out of the federal government's protection and resources.[24] This was an interesting stance, as rather than simply seeking to promote the benefits of incorporation, it seems to almost chastise those still seeking to remain under federal ownership.

These pushes for support of Oak Ridge's incorporation from local groups are largely on the basis of representation, in some way or another. Whether they refer specifically to national support groups or expanded local districts, many of the concerns over incorporation seemed to stem from the desire for the city to be able to make

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[22] "Ridge Tells Steps in Incorporation," *Knoxville News-Sentinel*, November 16, 1958, 12.

[23] Murray Rosenthal, interview by Keith McDaniel, June 27, 2013, COROH; "Oak Ridge Residents Expected to Add Fifth Biggest City to State This Year," *Knoxville News-Sentinel*, February 8, 1959, 47.

[24] Martha Adler-Jasny, interview by Keith McDaniel, March 26, 2012, COROH.

decisions for itself, free of the federal government's final say on all matters. One might not think of a city being an "independent" entity, but in relation to its previous history as a federal project site, Oak Ridge's people truly did seem to be seeking independence and self-rule in their own way.

Moving toward Incorporation

However, incorporation's initial lack of popularity was not the only obstacle the movement faced. According to Tennessee state law at the time, the formal request of at least one hundred land-owning citizens had to be sent to the state legislature for incorporation to be considered. This presented an issue for Oak Ridge, as there were no land-owning citizens. As a government program site, all of the land in Oak Ridge was federal property, putting it into a unique position that would seem to bar the city's incorporation on a technicality.[25] Newspapers covered this issue surrounding the initial incorporation vote in 1953; that vote was meant to serve as an expression of Oak Ridgers' thoughts on the matter and to spur the state legislature to change the law, if the city's citizens voted in favor of incorporation.[26]

This legal issue was not formally resolved until the passing of the "Oak Ridge Law." The law, introduced to the state House by Tennessee Representative John M. Purdy of Oak Ridge and to the state Senate by Tennessee Senator Hobart Atkins of Knoxville, was designed as a general update to the procedures of incorporation, though it

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[25] Freeman, *Longing for the Bomb*, 109.

[26] "Ridgers Disagree over Self-Rule, Vote on Tuesday," *Knoxville News-Sentinel*, March 29, 1953, 8.

was designed and presented specifically with Oak Ridge in mind.[27] Signed into law by then-governor Frank Clement on March 20, 1957, the law allowed for the incorporation of Oak Ridge, despite its lack of private land, pending an official incorporation vote.[28]

The contention and debate surrounding the Oak Ridge Hospital in the middle of the 1950s seems to be one of the single most influential events in pushing the incorporation issue to the forefront in Oak Ridge. The issue arose when it came time for the federal government to relinquish control of the hospital to a private organization of some sort, as a part of the larger waves of defederalization that different parts of Oak Ridge experienced. The hospital was created by the Atomic Energy Commission, costing it $2.9 million dollars, to replace an older, military hospital. The new hospital was to be emblematic of Oak Ridge's transition from a wartime federal project to a real city, according to newspaper reports at the time.[29] A referendum took place in 1958 for the people of Oak Ridge to decide who would gain control of the hospital. The fact that this decision was put to a public referendum may be telling of Oak Ridge's growing political independence and of the federal government's increasing delegation of authority to citizens.

Although there was a popular movement to have the city itself assume control of the hospital, the Holston Conference of the United Methodist Church emerged as the top contender ahead of the referendum. It already handled several hospitals in the region and had substantial financial backing. However, the Holston Conference made many

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[27] "Oak Ridge Incorporation," *Chattanooga Daily Times*, February 6, 1957, 9.
[28] Kiernan, *Girls of Atomic City*, 296-97.
[29] "Hospital Dedication Is Saturday," *Knoxville News-Sentinel*, February 12, 1960, 12.

promises ahead of the referendum that were apparently quickly discarded or broken afterward, according to a concerned citizen who led the push against Methodist control in a letter to U.S. Senator Albert Gore. The broken promised included a hospital-based nursing school, consistent and low rates for hospital care, and maintaining a board of trustees that represented different religious groups. Even without a slew of mishandled campaign pitches, the hospital seemed to have been run poorly in the two years following the referendum; those critical of the Methodists' running of the hospital claimed that it provided inadequate care at unfair rates.[30] It would be wise to note, however, that these claims are sourced from a single author in writing to the senator and may well not represent the situation with perfect accuracy, especially in context of the author's position in this debate.

Concerned about these developments, a local organization called Oak Ridge Citizens for a Community Hospital (ORCCH) formed to oppose Methodist control of the hospital. They sought to have control of the hospital transferred to the people of Oak Ridge, through the growing city leadership. If they could not achieve that goal, then they wished to have some four million dollars meant to be given to the Methodist church by the federal government for construction and operation of the hospital to the community instead for their own hospital. The ORCCH petitioned the Atomic Energy Commission, still formally in charge of such matters concerning city funding and organization, to enact these changes. It believed that the hospital, which they posited was given to the

[30] Letter from Wayne R. McClellan to Senator Albert Gore, November 19, 1960, Albert Gore Sr. Senate Papers, box 312, V-92, Albert Gore Sr. Research Center, Murfreesboro, Tennessee [hereafter AGRC].

Methodist church by the referendum under “devious” circumstances and run poorly in the following months, should not be subsidized further by the government. The nature of these “devious” circumstances are not laid out clearly by the author and may refer to the organization’s belief that the referendum vote was tampered with or subverted in some way. However, at least one newspaper reported that Robert Stover, commissioned by the Atomic Energy Commission, supported transferring control of the hospital to the city. Interestingly, Stover also reported that he believed that Oak Ridge, to operate both the city itself and the hospital, should incorporate as soon as possible.[31] Activists sought non-political, non-sectarian control of the hospital, not only for the sake of keeping the hospital functioning and affordable but also to properly provide for all citizens of Oak Ridge--promises originally made and supposedly broken by the Holston Conference of the Methodist Church.[32] Worthy of note in the discussion of the ORCCH’s complaints is that the Holston Conference even in the face of dissenters arguing for a more overt mention of the group’s spiritual aims in the hospital’s charter, declined to push their beliefs on the people of Oak Ridge or patients of the hospital, hoping to retain the delicate relationship it had with the city.[33] Unfortunately for the ORCCH group and its supporters among the people of Oak Ridge, their efforts were unsuccessful, as the

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[31] “Survey End Finds City in Debate,” *Knoxville News-Sentinel*, May 23, 1958, 20.

[32] Letter from Wayne R. McClellan to Senator Albert Gore, November 19, 1960, Albert Gore Sr. Senate Papers, Box 312, V-92, AGRC.

[33] Sherlock Hope, “Dissenting Delegates Delay Methodist Hospital Approval,” *Knoxville Journal*, June 5, 1959, 1.

referendum ended in favor of the Holston Conference, and the hospital was dedicated under the Methodist group's control on February 13th, 1960.[34]

However, this event seems to have aided in the push for incorporation among the city's citizens, as the struggles over the hospital's management and transfer occurred at the same time as, and in the year prior to, the incorporation vote in 1959. It seems clear that many of the citizens of Oak Ridge felt that the federal government was not making decisions in the best interest of the local community, and this affected the upcoming incorporation vote. Although prior to this event there were concerns over the financial future of Oak Ridge, the seeming mismanagement of the Oak Ridge Hospital seemed to have shown the city that the government's choices were not necessarily the best ones for the city. However, up to this point, the city's major decisions were still being made by the Atomic Energy Commission, and decisions such as putting the hospital's control up to a referendum ultimately seemed to prove harmful to the community, at least in the eyes of some Oak Ridgers.

The Manhattan Project years had had a profound effect on the city's culture, instilling by force a closeness and feeling of security that the citizens became not only accustomed to, but fond of. In 1953, Oak Ridge had not yet come to terms with the idea of total separation from the government, as evidenced by the first incorporation vote. Though some of the previously mentioned privatization efforts by the government had already been put into place, the people of Oak Ridge themselves felt no need or desire to incorporate. They had everything they needed; the security of the gates and guards, the

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[34] "New Oak Ridge Hospital," *Knoxville News-Sentinel*, February 7, 1960, 28.

financial stability of the federal payroll, and a fairly close-knit community of individuals, many of who knew each other and shared a common history under the Manhattan Project. Incorporating the city into the state and losing its secure and small status seemed to no benefit for them at the time.

Incorporation

However, growing concerns over representation, along with the mismanagement and supposed fraud of the hospital transfer and operation, began to reveal cracks in this notion of idyllic federal oversight. As the city matured as a community and faced new issues that had previously either not been a concern or had been taken care of for them, the idea of incorporation began to pick up momentum and seem a not-so-distant prospect. The federal government, perhaps in the wake of the end of the Korean War, also seemed to be in favor of reducing its presence in the city; Oak Ridgers were in a position to decide what that could mean for their city. The Atomic Energy Commission could continue to administrate the city, but if the people ever wanted to truly govern themselves, the time to decide was closing in quickly. Through the efforts of groups including the League of Women Voters and local unions—in addition to the hospital situation, the popularity of the incorporation movement began to grow substantially.

The final vote for the incorporation of Oak Ridge was on May 5, 1959, bringing to a head the previous debates over the city's federal status. Almost 6,000 Oak Ridge residents casted their vote on the issue. The city's incorporation was finally successful, with 5,552 people voting in favor of it, and only 395 voting against it. The voter turnout,

in comparison to the 30,000 residents of Oak Ridge at the time seems low, and this may be due to a sense that incorporation was inevitable after the numerous changes made in the city over the past decade. If there existed strong opposition to incorporation that could have swayed the vote, they likely would have actually cast votes in this election. However, all that can be said for certain is that among the population that chose to vote, their decisions reversed the original vote almost completely. The massive shift in popularity for incorporation can be attributed to all of the support shown by the various interest groups mentioned prior and to events such as the hospital management debate and passage of the federal and state laws allowing for the city's legal incorporation. The time was finally right for Oak Ridge to remove itself from federal jurisdiction and join the state of Tennessee as a normal city. The Atomic Energy Commission and the U.S. military gradually pulled out of operations in the city, and Oak Ridge was fully, formally incorporated by the summer of 1960.[35]

The outcome of the vote was a surprise, even among its supporters, due to the sheer volume of supporting votes. L. B. Shallcross, an administrative consultant to the Oak Ridge town council, had predicted a much more modest margin of success for incorporation and said, "the interest and enthusiasm shown certainly places Oak Ridge among the most municipally minded cities in the state."[36] The success of the vote is sign not only of Oak Ridge's desire to incorporate into the state but also a willingness and ability to do so in a speedy and effective manner. Newspapers across the state celebrated

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[35] Freeman, *Longing for the Bomb*, 109.

[36] "Ridgers Vote Incorporation by 15-1 Margin," *Knoxville News-Sentinel*, May 6, 1959, 18.

Oak Ridge's incorporation as well. The *Chattanooga Daily Times*, in an issue just two days after the successful incorporation vote, applauded the vote's success and called Oak Ridge a "sister city" committed to furthering of "municipal dignity, democracy, and normalcy" in the newly joined city.[37] I wondered, when reading this article, if this celebration was just in honest support of their fellow Tennesseans, or a sign of relief that its neighboring cities would no longer have to suffer from Oak Ridge's special economic and political status. Nothing I have found supports this conclusion directly, so I will not state it as any sort of fact; it does raise questions regarding neighboring cities' opinions on Oak Ridge, which will be touched on in the next chapter.

With the incorporation vote, and by extension the larger incorporation movement that had been pushing for it over the past decade, finally being successful, the city had reason to celebrate. Following many years of pushing for the right to enjoy the basic benefits of normal citizenship--such as self-governance, control of local facilities in the hands of civilian leadership, and freedom to join national unions and social organizations--Oak Ridge had managed to pull itself together into a normal, functioning city. However, this did not happen overnight once the votes were cast. The Atomic Energy Commission and the military's slow but steady withdrawal from operations in the city began in tandem with Oak Ridge electing its own real, authority-wielding town council and learning its place as a city within both Anderson county and the state of Tennessee. Murray Rosenthal recalled the city facing difficulties as it began to elect and send representatives to the county court. He noted that tension came less from the fact that a new city was being

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[37] "Milestone in Oak Ridge." *Chattanooga Daily Times*, May 7, 1959, 14.

added to the court and more from the existing factions within the court who were already clashing before Oak Ridge's introduction. Rosenthal also noted some awkwardness the city experienced as it transitioned from receiving federal funding to county funding, specifically in regards to its school board and system.[38]

Regardless of these issues, the city managed to find its footing in the county and state systems and began to thrive. Paul Elza—an elected member of the original, pre-incorporation town council—recalled the council's efforts in setting the city up for success and navigating the early days of incorporation. He was delighted by the progress made by the council and the city's ability to keep itself together under the pressures of incorporation and the influx of new responsibilities and changes. Working with the county government on budgets and other political issues was not always without tension.[39] Elizabeth Peele, another citizen of Oak Ridge who pushed for incorporation, remembered defying the concerns of those Oak Ridgers who had opposed incorporation before the vote, proving that the city would in fact thrive independently from the federal government.[40]

Conclusion

Oak Ridge's incorporation, and the years of social movements supporting it, definitely impacted the city's growth and development. From the city's beginnings as a federal military project site, Oak Ridge was a city thrown together quickly and with few

[38] Murray Rosenthal, interview by Keith McDaniel, June 27, 2013, COROH.
[39] Paul Elza, interview by Sibyl Nestor, November, 1973, COROH.
[40] Elizabeth Peele, interview by Keith McDaniel, February 23, 2010, COROH.

plans for its post-war status, with people from all corners of the United States coming to work on a project about which they knew little to nothing. Some were scientists, others were security personnel, and still others were simply mail carriers or diner servers. The one thing that almost every individual had in common, however, was that they were not from the area originally. Paul Elza, himself, one of the very few born and raised in the area, put it plainly: “In those days almost everyone, certainly the great majority of those who were in positions of responsibility and authority had been brought here from someplace else.”[41]

In this sense, and even to those few who were in fact from the area, Oak Ridge was entirely new and foreign; its occupants likewise alien to each other and the regional culture. The city, following the displacement and removal of the land’s previous pre-war inhabitants, was placed down seemingly out of nowhere, in record time. Individuals both highly and only modestly educated, from wealthy and poor backgrounds, were all thrown together to help create the atomic bombs and keep the city running. Out of this, a strange but strong bond was created among the people of Oak Ridge, born not just from wartime urgency and scientific progress but also from the oppressive and secretive nature of the city’s wartime operation. As the people banded together to make the Manhattan Project a reality and while simultaneously straining to keep every detail a secret even from each other, a closeness akin to a small, rural town developed in the span of just a few years. Doors remained unlocked, many Oak Ridgers knew each other by name, and they all shared the experiences of World War II and the Manhattan Project.

[41] Paul Elza, interview by Sibyl Nestor, November, 1973, COROH.

And just as they had shared their experiences during the war, they continued to do so following the war's end. However, unlike during the war, Oak Ridge experienced numerous events that pushed the city to adapt and change. Immediately after the atomic bombings, the city and its people began to experience the disruption of their normal way of life, shattering years of stable, albeit strict, living. As reporters flooded the town, businesses and government practices began to change and as the city gates began to open to more and more outsiders, the people of Oak Ridge were forced to step outside of the shell made for them by the federal government. As they did, their community seemed all the more close-knit and secure, and many of them believed the need to preserve this community by retaining its federal jurisdiction.

The first incorporation vote in 1953 was evidence of this; just a few short years after the end of World War II and still reeling from even the temporary and minor openings to the public, Oak Ridge was not ready for incorporation. That such an overwhelming majority opposed incorporation--well before it was even a true legal possibility--shows the reluctance of the city to give up the comforts of its then-current arrangement. Most financial issues, such as taxes and utility bills, were covered by the federal government's funding. The gates provided security to those living in the city, ensuring that everyone who came in and out of the city was accounted for and watched. For a time, even their rent was swiftly and effortlessly transferred from their pay, ensuring that the residents of Oak Ridge had many of their daily, routine duties taken care of for them.

This control, however, began to grate on the people of Oak Ridge. Cracks began to appear in their view of government authority. As social and economic movements, such as voter awareness and unions, became more popular, Oak Ridgers sought to join in and push for change in their own town. However, the laws of Oak Ridge made it difficult for national organizations to operate in the city, and the pre-incorporation town council—standing as a mostly advisory and federally-mandated institution—could not properly represent every district of the city. Pressure began to mount when the issue of the Oak Ridge Hospital came to a head, frustrating and disenchanting citizens with the idea of government-mandated referenda determining the city's course. And when their efforts to have control of the hospital transferred to the community failed—even after giving what they considered proof of broken promises, mismanagement, and decline in services—the people of Oak Ridge knew it was time for change.

The second incorporation vote in 1959, much like the first, was indicative of the city's maturity and readiness to develop on its own. However, after years of being prepared by the government and numerous events displaying the flaws of federal oversight, Oak Ridge was now ready to incorporate. The feelings of security and financial stability had turned into feelings of restriction and frustration. Some had doubted that incorporation would be a positive change for the city, but these voices seem to have been few and far between compared to those who were ready to take the next step in the city's history. The margin of success for the incorporation vote was even stronger in the winning side's favor and reversed the original vote's results. Such a drastic shift in the people's opinions on incorporation, in such a relatively short time, displays the huge

social change experienced by the city over those six years. The people of Oak Ridge were no longer stuck in their pre-war bubble, happy to keep to themselves and continue their small and close community. They realized the necessity of growing into a true city and shedding the fears and complacencies that had trapped them under federal control.

Oak Ridge's incorporation cannot be understated or glossed over in understanding its significant role in the development of the city. On a purely technical basis, Oak Ridge was now a normal city, able to govern and regulate itself, determine its own representation, and represent itself on the county and state levels. Though Oak Ridgers were now be subject to the taxes and utility charges of any normal citizen, the economic and political freedom that came with this change were not lost on the people.

However, incorporation also represents the second time that the culture and way of life in Oak Ridge was turned on its head. The end of World War II saw the veil of secrecy being lifted off of the city and its citizens, allowing free speech and movement once again. Likewise, incorporation pulled the rug of federal authority, security, and stability out from under the city. Anyone could now move into Oak Ridge, they could now vote for members of a city council with real power, and they were now responsible for many of the basic functions previously taken for granted under federal oversight. However, unlike the end of the war, incorporation was a choice made fully by, and in the interest of, Oak Ridge citizens. The people of the city finally took control of their home and did so of their own volition and right. This shows a maturity and growth that most cities are never forced to experience and places Oak Ridge in a relatively unique historical position in the state and nation.

CHAPTER THREE:

OAK RIDGE IN THE COLD WAR

Oak Ridge's incorporation into the state of Tennessee in 1959 came at a time when the United States was well entrenched in the Cold War era. Just a few short years after the city's incorporation, both the construction of the Berlin Wall and the Cuban Missile Crisis put the entire country, and even the entire world, on edge. The Cold War, by most accounts, began in 1947 with the proclamation of the Truman Doctrine by the United States, pledging the nation's support to any democracy that came under threat by an authoritarian power. This was seen as a counter to the expansion of the Soviet Union after World War II and began a decades-long series of conflicts and tensions that only came to a close with the collapse of the Soviet Union in 1991.

However, I am not alone in believing that the Cold War began with the use of the atomic bombs against Japan in August of 1945. Put most simply by historians Campbell Craig and Sergey Radchenko, "We can regard Hiroshima as the final American strike of the Second World War, and Nagasaki as its first strike in the Cold War."[1] Craig and Radchenko point to the many signs that the Japanese were willing to surrender after the first bombing at Hiroshima; however, fearing Soviet occupation of Japan amid rising concerns over the two superpowers' post-war relationship, President Truman deployed the second bomb to expedite the end of the war and prevent a Soviet landing on the Japanese mainland. While on the surface this was just another, and the final, strike of

[1] Campbell Craig and Sergey Radchenko, *The Atomic Bomb and the Origins of the Cold War* (New Haven, CT: Yale University Press), 89.

World War II, the political implications of the entire situation point to great consideration being given to the Soviet position before its use. In this sense, it can be said that the use of the atomic bombs was indeed the first move of the Cold War and that Oak Ridge played an undeniable part in igniting this worldwide conflict.

Oak Ridge played a pivotal role in both the military and social histories of the Cold War in the United States. Its role as a top-secret atomic facility gave it a unique position within this conflict. Oak Ridgers, and their fellow Americans, recognized the city's unique past and role in the current Cold War, even as it transitioned into a normal Tennessee city. Oak Ridge National Laboratory, after experiencing a slight lull in production during the immediate postwar years began to ramp up uranium enrichment, expand its nuclear plants, and attract many scientists and engineers for research into weaponry and electricity generation. However, as Americans became aware of the potential dangers of nuclear radiation, people both in and around Oak Ridge became concerned about the possibilities of radiation from the city's plants affecting the general population and feared that the city would be a major target should the United States ever come under fire. Neighboring Tennesseans and Americans from across the country looked at Oak Ridgers differently, with a strange mix of admiration, confusion, and wariness over the years following the end of World War II. As a result of Oak Ridge's origins and place within the American imagination, the city developed a culture and community significantly different than others in the country. This culture seems to have been both reinforced by the city's position in American history, and likewise this position seems to have been the deciding factor in its development.

New Missions for Oak Ridge

After the atomic bombings of Hiroshima and Nagasaki and the secret of Oak Ridge's ultimate goal became well known, many believed that there would soon be no need for Oak Ridge's atomic research and production; however, rising tensions and a brewing Cold War ensured the city's continued necessity. With such a spectacular ending to such a costly war, many believed, as they had with the First World War, that the second would finally bring a lasting peace to the earth. This, of course, did not happen. While the average American might have been hopefully optimistic about the future of global affairs, the governments of the world were already preparing for what became the Cold War. And perhaps at the center stage of this coming conflict was the atomic/nuclear arms race, following the revelation that the Soviet Union had developed and tested their own atomic bomb on August 29, 1949. As sociologist Lindsey Freeman notes, it quickly became evident that not only would the Oak Ridge National Laboratory not be closing down, but new federal expenditures and expansions of the plants in Oak Ridge as well as more scientists and engineers would still be needed.[2] Like many other World War II military installations, Oak Ridge would not be a throwaway, temporary federal instillation, but rather a permanent fixture in the new national security system of the growing superpower of the United States.

Being developed alongside the growing stockpiles of atomic and then nuclear weaponry was a new source of energy—nuclear energy, which constituted much of Oak Ridge's new Cold War duties and shaped the city's public image. Oak Ridge was at the

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[2] Lindsey A. Freeman, *Longing for the Bomb: Oak Ridge and Atomic Nostalgia* (Chapel Hill: University of North Carolina Press, 2015), 22.

forefront of pioneering this new science, and the expanding nuclear plants and research teams became a breeding ground for what many believed would be the future of energy in the atomic age.[3] K-25, one of the main war-time plants in Oak Ridge, increasingly enriched uranium for use in reactors that produced electricity. Keith Lowery, a lab worker at K-25 in the postwar era, noted that the lab enriched uranium not only for the United States, but for other allied nations as well, including Japan and Switzerland. He notes that the money spent on this process was substantial, and the international work helped lead to further advances in nuclear science.[4]

Although Oak Ridge was only one part of a chain of plants enriching uranium (albeit one of the larger and more important ones), the city alone became synonymous with atomic and nuclear energy in the American Southeast. According to another worker at K-25, an engineer named Sheldon Jacobs, K-25 was one of the earlier stage enrichment plants, enriching uranium up to a few percentages of radioactivity—the higher of which would provide more potent reactions—and sending it to other facilities that enriched it further. K-25's uranium after enrichment was far from weapons-grade. Its uranium stood at low percentages after enrichment, while the material's final enrichment after multiple stops at different plants would be weapons-grade, around ninety percent.[5] This is an interesting fact to note, as K-25 seems to be one of the most prolific and well-known plants in Oak Ridge, along with the Y-12 plant. With most of its nuclear material being

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[3] Freeman, *Longing for the Bomb*, 110.
[4] Keith Lowery, interview by Bart Callan, May 18, 2005, COROH.
[5] Sheldon Jacobs, interview by Bart Callan, March 9, 2005, COROH.

enriched only to low percentages unfit for nuclear weapons, it seems that much of the material being produced was for the sake of energy production.

However, this does not seem to be the case, as the plants' original purposes was for enriching uranium for the atomic bombs deployed against Japan, and much of their effort focused on weapons production. Henry Stoner, another engineer at K-25, noted that the technology they were using at that time to enrich uranium had been developed specifically to enrich uranium for weapons and was tweaked to produce lower percentage uranium for energy. Stoner believed that the entire mission of the Oak Ridge plants, and the United States at large, was to develop more atomic, and later nuclear, weapons than the Soviet Union could. All the expansions of plants, creation of new ones, and founding of new research teams was in the pursuit of furthering the Cold War arms race and staying one step ahead of the Russians, at least in the minds of those operating the plants and labs.[6] Historian Raymond Ojserkis notes that the American arms race, while surely built up to by the end of World War II and in response to the advances of Soviet atomic weaponry, truly began during the Korean War, as fears of Soviet military capacity outstripping that of the United States grew.[7] Plant expansions were both the catalyst for and setting of major technological improvements at this time as well, with the reactor motors in the K-25 plant being improved by a magnitude of 150, according to another engineer.[8] These accounts seem to indicate that while the plants might have had a prime

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[6] Henry Stoner, interview by Bart Callan, March 10, 2005, COROH.

[7] Raymond P. Ojserkis, *Beginnings of the Cold War Arms Race: The Truman Administration and the U.S. Arms Build-Up* (Westport, CT: Praeger, 2003), 1-4.

[8] Joe Dykstra, interview by Connie Callan, March 7, 2005, COROH.

directive and original purpose of producing weapons, much of their time was devoted to the production of energy and technology research.

The K-25 plant was put into permanent stand-by mode in the mid 1960s, and much of the Cold War production of enriched uranium was transferred to Y-12, signaling a shift in American goals. An older plant crucial to the war effort in the 1940s, Y-12 was refitted and converted into a plant for creating weapon parts, presumably alongside continuing its uranium-enrichment activities.[9] The Oak Ridge National Laboratory also instituted a Civil Defense Research Project in the mid to late 1960s, shifting some resources to the development of fallout shelters in Oak Ridge and to research into how a nuclear attack would affect the civilian population in order to figure out how they could prepare.[10] It seems that as the Cold War crept closer to the 1970s, the U.S. focus shifted away from developing nuclear energy and to throwing all of its resources in with weapon development. From the first reports that the Soviet Union had acquired the technology for atomic bombs, it was clear that unless some sort of governing apparatus was created to control the proliferation of these weapons, an arms race would inevitably begin. As we now know, that is exactly what happened, and Oak Ridge and its nuclear plants were right at the center of this push for nuclear supremacy.

Oak Ridge's role in supporting the United States in the Cold War produced pride in many of the city's workers, echoing sentiments many Oak Ridgers had immediately following the atomic bombings of Japan. Many workers, such as Lowery, looked back

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[9] Alfred Brooks, interview by Bart Callan, April 14, 2005, COROH.

[10] Leland Johnson and Daniel Schaffer, *Oak Ridge National Laboratory: The First Fifty Years* (Knoxville: University of Tennessee Press, 1994), 138.

fondly on their time working in Oak Ridge, felt that their work had a positive impact on America's success in the Cold War, and were proud of their work. Gerald Pierce, a scientist at K-25, was asked if he felt any guilt about working at Oak Ridge on atomic weaponry, and said that he did not. He continued,

> The Cold War was going on at the time, and yes, I feel like that Oak Ridge did have a part in that, that there were a lot of defense-related activities going on during that time. Whether Oak Ridge, how much influence the city or the activities here had in ending the Cold War, I don't know that I'm qualified to guess, but I feel like there was a part of it, and yes, it was a big part of some of my work.[11]

This was not a universal opinion, however, with some workers concerned about the city's place in the Cold War; once again mirroring the split reactions to the initial revelation of Oak Ridge's atomic work in 1945. Dykstra noted that some were uncomfortable with Oak Ridge's place in the arms race and that some saw the massive proliferation of atomic and nuclear weaponry as a portent of doom. But while some (or even many) had reservations about working in such a field, Dykstra opined that the workers coming in during the Cold War realized that the Soviet Union was already producing weapons at a similar pace and that the United States could not fall behind.[12] Some had even less optimistic outlooks and struggled to justify the work done in Oak Ridge. Alfred Brooks, an atomic engineer in Oak Ridge at the time, put it most eloquently, and his statement stands as a testament to another side of American thinking at this time:

> Well, for -- it's pretty clear that we helped contribute to the revolutionizing of warfare. We've helped create a military system that can literally destroy the world or civilization or society as we know it; a destructive system which we frankly do

[11] Gerald Pierce, interview by Keith McDaniel, December 20, 2012, COROH.
[12] Joe Dykstra, interview by Connie Callan, March 7, 2005, COROH.

> not know how to control. We do not have the political apparatus which should properly manage that weapon. Which was really proper management of it is to nullify it [sic]. We've recently moved to a very, very dangerous position. For a couple hundred years we had no preemptive strikes. And four years ago we went to preemptive strike. God, what happens when you go to preemptive strike with nuclear weapons? It's unthinkable. Yes, where does it say that the human race lives forever?[13]

It is plain to see that amidst the pride and celebration of Oak Ridge's efforts in furthering the arms race and the Cold War at large, some of its workers had a more somber and introspective point of view.

Oak Ridge's uranium-enrichment facilities, whether working towards cleaner energy or a larger stockpile of armaments, played a crucial part in the nation's Cold War efforts. The K-25 and Y-12 plants were vital parts of the country's initial uranium production chain, and Y-12 continued to play this important role in the supply chain. Likewise, Oak Ridge continued to serve as a center for atomic and nuclear research. Of course, Oak Ridge's origins as a Manhattan Project city laid the foundation for these postwar scientific developments and was the reason for its continued relevance. With existing infrastructure for enriching uranium, scientists and engineers already settled in the area and looking to continue their work, and the federal government already having avenues of funding set for the city, Oak Ridge was set to be both one of the birthplaces of and continuing home for America's Cold War atomic and nuclear efforts.

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[13] Alfred Brooks, interview by Bart Callan, April 14, 2005, COROH.

Calming Atomic Fears

Oak Ridge's atomic fame did not always paint the city in a positive light, however. Beside the previously mentioned concern over the city's moral involvement in the Cold War arms race, concerns began to form in the 1950s regarding the effects that the city's atomic work was having on the environment and the population. The *Paducah Sun*, a Kentucky newspaper, covered a story in 1958 in which eight workers experienced a dangerous dose of radiation while at work in the Y-12 plant. The men were hospitalized, and the situation prompted statements from prominent radiation specialists, attempting to ensure people that the radiation produced by Oak Ridge's research and production activities was, save for freak accidents like this one, completely safe. Dr. Marshal Brucer, a radiation medicine specialist and notably the chairman of the medical division of the Oak Ridge Institute of Nuclear Studies, made a lengthy statement for the press in 1958 in which he argued that the radiation in Oak Ridge was less dangerous to the lives of Oak Ridgers than the cars driven in the city or even plain, everyday living. Dr. Brucer noted the exhaustive safety measures employed by the Oak Ridge plants. He only feared that this accident, which he claimed was beyond any prediction, would cause an unnecessary fear of nuclear energy.[14]

Another newspaper article confronted rumors that the radiation experienced by plant workers in their day-to-day routines was making them sterile. Printed in 1961 by the *Knoxville News-Sentinel*, the article assured readers that no such sterility issue existed in Oak Ridge and that in fact, medicinal chemical compounds were even being tested on

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[14] Dr. Marshall Brucer, "How Safe Are Our Atomic Plants?" *Paducah (KY) Sun*, August 17, 1958, 10.

various animals to allow mammals to resist the negative effects of radiation poisoning.[15] However, one might be confused at the lack of sourcing for author Inez Robb's claims, though this does not seem uncommon for articles at this point in time.

Notable also at this time were early fears of atomic attacks on Oak Ridge, and the affects that the resulting radiation would have on surrounding areas. As early as 1955, *The Knoxville News-Sentinel* published an article attempting to examine and analyze wind patterns and other factors that would blow irradiated clouds into other areas of East Tennessee should Oak Ridge be attacked by a hydrogen bomb.[16] The article is curiously morbid, speaking of the effects of such a blast with little regard to how the population of Oak Ridge would be affected. Perhaps this was due to the obvious destruction these poor citizens would face in such a situation, but regardless, the article does not make light of the idea of such a strike against Oak Ridge and shows how seriously Americans were considering the prospect so early into the Cold War. This does, of course, coincide with the earliest Soviet atomic tests, which confirmed the loss of America's atomic monopoly and began the arms race itself. It is difficult to shake the feeling that there is, to some degree, a lack of concern for the people of Oak Ridge when this topic is brought up outside of the city itself. There was only a small addendum at the end of the article urging readers concerned about their chances in the event of an attack to consider the Oak Ridgers' plight, but most of the discourse about such an event centers around the odds of places neighboring the city, giving little thought to Oak Ridge itself.

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[15] Inez Robb, "No Sterility in Oak Ridge." *Knoxville News Sentinel*, October 6, 1961, 12.

[16] Carson Brewer, "Wind Study Shows Cumberlands 14-1 Safest Area in Event of H-Bomb Blast." *Knoxville News-Sentinel*, February 20, 1955, 37.

Another, less talked about fear surrounding Oak Ridge during the Cold War was its potential as a target for foreign attack, had the Cold War turned hot. This might seem an obvious point of concern, considering Oak Ridge's role in the creation of atomic weapons and its continuing role in the nation's Cold War strategies. As a child, I remember it being a common sentiment in neighboring Knoxville that should Oak Ridge ever be hit with a nuclear weapon, we would likely suffer the same consequences due to our proximity to the city. This, of course, was decades after the end of the Cold War, and these feelings were no doubt amplified and far less humorous when the threat of nuclear attack by the Russians was far more tangible. Barbara Gritzner, a child in Oak Ridge during the Cold War in the 1950s and 1960s, remembered a general unease and real fear of World War III becoming a reality. She recalls even her own father considering building a bomb shelter and having visited at least one actual bomb shelter in Oak Ridge. Naturally, worries about the Cold War becoming an active conflict were common across the nation, but the citizens of Oak Ridge had understandable cause for particular alarm. Gritzner noted that the children were issued dog tags to wear, including their names, parents' names, and addresses, owing to most of the city believing they would be a prime target.[17]

Some began to suspect that the federal government was lying about the true dangers of radiation and that the threat of the plants at Oak Ridge to public health had been swept under the rug. In 1977, two writers, Jack Anderson and Les Whitten, penned an article in *The Daily Republic* newspaper in California, claiming that the government

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[17] Barbara Gritzner, interview by Keith McDaniel, November 25, 2013, COROH.

was forcing researchers to cease their research into the dangers of radiation and preventing them from speaking out on it. The two presented multiple cases and claimed the government had threatened to pull funding from one researcher's team, forced another to give a highly edited version of their original address concerning radiation, and blocked articles concerning radiation's dangers from being published in government-affiliated scientific and medical journals.[18] The end of the article included an addendum stating that the authors were awaiting a response from federal sources but had printed the story before any could be received. One might wonder if this article presents a wild conspiracy theory or perhaps shows cracks in the federal government's veneer of nuclear safety.

The concerns raised in Anderson and Whitten's article seem to not be without cause, as radiation experiments on human subjects covered up by the federal government have at this point been confirmed. Investigative journalist Eileen Welsome tells the story of eighteen individuals who, between 1945 and 1947, were unwittingly injected with plutonium as part of early government efforts to understand the effects of radiation on the human body.[19] One particular case occurred in Oak Ridge itself. Ebb Cade, the first of the eighteen victims of this secret government research plot, was injected with almost five times the amount of radioactive material that was then considered safe for humans to have within them. This event occurred on April 6, 1945, months before the end of World War II. Cade had been in a car accident on his way to work in Oak Ridge and was taken

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[18] Jack Anderson and Les Whitten, "Feds Squelch the Radiation Scandal," *(Fairfield, CA) Daily Republic*, December 5, 1977, 4.

[19] Eileen Welsome, *The Plutonium Files: America's Secret Medical Experiments in the Cold War* (New York City: Dial Press, 1999), 5-10.

to the local military hospital, where the injection was made without his consent or knowledge. He was noted to have been in terrible pain for weeks after the injection, in seemingly worse condition than he had been when he arrived at the hospital after the crash.[20] This incident, along with the seventeen others recorded by Welsome, prove that as early as April 1945 (before the atomic bombs had even been used against Japan), scientists under the authority of the U.S. government were testing the effects of radiation, with complete disregard for the safety and well-being of American citizens. While these experiments did occur very early in the Cold War, they represent a willingness on the part of the government to perform these experiments on human subjects, realize the negative effects, and then tell the public that there was no need to worry about radiation's effect on their health.

The federal government was far from complacent when it came to the public image of atomic science at this time, and rather than own up to the dangers of radiation, it presented the phenomena as part of a positive and utopian future of atomic energy. Freeman argues that the Atomic Energy Commission's founding and control of the American Museum of Atomic Energy in Oak Ridge in 1949 (renamed the American Museum of Science and Energy in 1978) was part of this pursuit to control the public's thoughts and opinions on all things atomic. Showcasing the latest in atomic science and scientific oddities of the time (such as early robotics), the museum presented atomic energy as the catalyst for a bright and successful future and the atomic stockpile of the United States as insurance for the safety of the free world. At one point, visitors could

[20] Welsome, *The Plutonium Files*, 82-87.

even have a dime temporarily irradiated as a souvenir or buy small chunks of uranium ore as keepsakes. While these scientific parlor tricks and giftshop stock did not pose any real risk to the visitors to the museum, the AEC made sure there was no mention of the potential dangers of radiation in the museum.[21] The message on atomic energy presented by the museum was loud and clear: atomic energy is safe and will ensure a better tomorrow. Later works sponsored by the government, such as the history of the Oak Ridge National Laboratory written by historians Leland Johnson and Daniel Schaffer, presented the lab's research into how to safely interact with and contain radiation as a top priority, only admitting that wartime deadlines and time constraints had prompted some accidental exposures of lab technicians.[22]

Radiation Fears

Still, not everyone was convinced, and even decades later it was obvious that fears surrounding atomic energy and the work being done in Oak Ridge were here to stay. As late as 1994, newspapers were writing about the potential threat of the plants' work on the citizens of Oak Ridge and the surrounding communities. In an article from the January 23, 1994 issue of *The News Record* from Kentucky, the paper reported on scientists' concerns about the dangers of iodine clouds put into the sky over Oak Ridge during the 1950s and 1960s as part of research into a radiation-based weapon. Claiming that clouds of radioactive iodine were released a few days each month for years from the Oak Ridge plants to study the release of radioactive material, the tracking of

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[21] Freeman, *Longing for the Bomb*, 122-24.
[22] Johnson and Schaffer, *Oak Ridge National Laboratory*, 24.

radioactivity, and the dispersion of said clouds over distances, the article presents this incident as a deception by the government. The newspaper also quoted a former Oak Ridge lab worker bemoaning the fact that her government would lie about the dangers of her work for so many years.[23] The incident described by this article seems to align with previous experiments made by the U.S. military in the 1950s, in which pilots were instructed to fly into the radioactive clouds left behind by a thermonuclear detonation.[24] Other atmospheric radiation tests were conducted by the U.S. government in the 1950s, the effects of which could have affected the development of thyroid disease in Oak Ridge and other parts of the country, according to reports from the Tennessee Department of Health and Oak Ridge Reservation Public Health Assessment.[25]

Among the concerns about the effects on human health, the iodine-cloud article also raised concerns about the environment, such as the diffusion of radioactive material into the ground, water, and food supply through cattle.[26] Environmental concerns, rather than those focused purely human health, about atomic energy production seem to become more common in latter part of the twentieth century, as environmental safety became a higher priority. This is reflected in articles such as this one and extends to a wider fear of atomic and nuclear energy at large, which has a slightly older history but remains a prevalent feeling today. The trend of environmental concern can also be followed through antinuclear protests, growing common in the 1980s and putting pressure on the few

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[23] "Scientists Looking for Effects of Iodine Clouds," *(North Hills, PA) News Record*, January 23, 1994, 4.

[24] Welsome, *The Plutonium Files*, 272-75.

[25] D. Ray Smith, "Impacts of Oak Ridge's Radioiodine Accident in 1954," *Oak Ridger*, April 18, 2016.

[26] Ibid.

locations of nuclear-energy production in the United States.[27] These protests often took to decrying the improper handling of radioactive waste and materials, and they focused on the plants at Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio.[28] The late twentieth century saw the Tennessee state government and federal government become involved in investigating Oak Ridge's impact on the local environment. Investigations approved by the Department of Energy and the governor of Tennessee in the late 90s, while inconclusive to the damage done to the environment, stained the relationship between East Tennessee citizens and the federal government, as far as environment health was concerned.[29] Oak Ridge's atomic plants responded to early environmental concerns by allowing scientists employed at the Oak Ridge National Laboratory to educate the populace at public events on Earth Day, admitting to the pollution caused by coal- and nuclear-energy production and promoting efforts to reduce these effects.[30] This relatively small gesture shows some effort on the part of the lab to improve its public image and that of atomic science.

Oak Ridgers themselves were aware of these environmental concerns, but some felt they were overblown and damaging to the image of nuclear energy. Alfred Brooks again commented on these fears, believing that they stemmed from the few major accidents involving nuclear reactors, namely the accidents at the Three Mile Island and

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[27] Vermont Royster, "Safety, Merits of Atomic Energy are Misunderstood," *Santa Cruz (CA) Sentinel*, October 17, 1985, 10.

[28] "NRC Asked to Lift Restrictions on Nuclear Waste," *Ukiah (CA) Daily Journal*, December 9, 1980, 2.

[29] William Lyons, John M. Scheb II, and Billy Stair, *Government and Politics in Tennessee* (Knoxville: University of Tennessee Press, 2001), 327.

[30] Johnson and Schaffer, *Oak Ridge National Laboratory*, 149.

Chernobyl nuclear plants. The "Three Mile Island Accident" was a partial nuclear reactor meltdown near Harrisburg, Pennsylvania, on March 28, 1979. The accident, caused by faulty measuring and reading of equipment in the plant, did not cause any immediate health concerns, and long-term studies have shown that there was likely little to no effect on the surrounding population in the decades since.[31] The "Chernobyl Accident," more commonly referred to as the "Chernobyl Disaster," took place on April 26, 1986, and involved the explosion of one of the reactors at the Chernobyl nuclear plant in what is now Ukraine. The indecisiveness of plant leadership, the secrecy and cover-ups of the incident, and the profound health effects on the entire surrounding region have cemented the Chernobyl Disaster as the most notorious nuclear incident in history and has had a deeply negative impact on how the entire world views nuclear energy.[32] Brooks felt that these fears are unfounded, as he believed that the Chernobyl plant was an extremely poorly run reactor and that the Three Mile Island accident did not adversely affect any individuals. He expressed disappointment and sadness at America's refusal to accept and use nuclear energy on a large scale, touting the benefits it had brought to European and Third World countries that had adopted it. Brooks described a very sensible reasoning for much of the fear surrounding nuclear energy in a closing statement on the topic: "When your first news release is that you've killed a hundred forty thousand people [at Hiroshima and Nagasaki], there's no way to go but up. It was a -- it left the, it left the

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[31] Evelyn O. Talbott, Ada O. Youk, Kathleen P. McHugh-Pemu, and Jeanne V. Zborowski, "Long-Term Follow-Up of the Residents of the Three Mile Island Accident Area, 1979-1998," *Environmental Health Perspectives* 111, no. 3 (March 2003): 341-48.

[32] Maxine Peterson, *The Chernobyl Disaster: Nuclear Materials and Disaster Research* (Hauppauge, NY: Nova Science Publishers, 2016), 1-10.

public with a great fear of the unknown, namely radioactivity."[33] As environmental concerns began to rise, the few-and-far-between accidents involving atomic and nuclear plants, however disastrous or fatal, seemed to be seen in the public eye as the rule, rather than the exception.

John McLaughlin, for his part, believed that much of the wariness surrounding nuclear energy in the latter half of the twentieth century stemmed from a lack of understanding of the science. He believed that due to most teachers themselves not understanding the topic well and science textbooks often glossing over it in favor of other topics, students never got anything resembling a decent understanding of atomic and nuclear energy, prompting a "fear of the unknown" situation.[34] Keith Lowery expressed similar feelings in his oral history, believing that Three Mile Island was swiftly stopped before any danger could arise, and that save for the Chernobyl incident, no other major meltdown or other accident had occurred. He expressed annoyance with the numerous environmental roadblocks that nuclear energy production has faced in the modern day and stated his discontent with the power environmental lobbyists had over the industry.[35] The nuclear incident that occurred at the Fukushima plant in Japan might come to mind when reading these accounts, but one must remember that this accident, while severe, occurred almost a decade after these interviews.

Oak Ridge and its neighbors stood out in East Tennessee region. It should hardly be a surprise that when you slap together a city in the middle of the Appalachian

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[33] Alfred Brooks, interview by Bart Callan, April 14, 2005, COROH.
[34] John McLaughlin, interview by Bart Callan, March 11, 2005, COROH.
[35] Keith Lowery, interview by Bart Callan, May 18, 2005, COROH.

wilderness and import thousands of highly educated scientists and workers from across the country, they are going to stick out. Jim Campbell, a young man from Anderson County during the Cold War who spent a great deal of time in Oak Ridge, recalls the struggle that Oak Ridge went through when thrust into cooperation and coexistence with the other "normal" cities of the county and surrounding area. Everything from political headbutting to bitter sports rivals seem to have stemmed from a sense of Oak Ridgers being different.[36] Historian William Bruce Wheeler notes that in the early years following World War II, Knoxville had a very antagonistic relationship with Oak Ridge, with local Knoxville newspapers trying to claim Oak Ridge's atomic notability for their selves and merchants up-charging Oak Ridge residents visiting the city. Wheeler explains that this was due to the subpar postwar economy of Knoxville, juxtaposed with Oak Ridge's burgeoning atomic and chemical industries, resulting in jealousy in the Knoxvillians. He notes that many people from all across East Tennessee, regardless of their particular city or town of origin, seemed to feel some sense of regional identity.[37] Oak Ridge, however, experienced wariness from its regional neighbors due to the nature of their sudden implantation and artificial growth as a city.

The citizens of Oak Ridge were not oblivious to these feelings. John McLaughlin remembered bitterly how Oak Ridge seemed to be unfairly blamed for air pollution in the region. He notes that the amount of harmful material released into the atmosphere by the nuclear plants in Oak Ridge paled in comparison to that released by the nearby coal-

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[36] Jim Campbell, interview by Keith McDaniel, December 19, 2014, COROH.

[37] William Bruce Wheeler, *Knoxville, Tennessee: A Mountain City in the New South*, 3rd ed. (Knoxville: University of Tennessee Press, 2020), 84.

powered steam plants operated by the Tennessee Valley Authority. McLaughlin felt that newspapers and TV focused disproportionately on the emissions from Oak Ridge, and he was frustrated by not knowing how this could be resolved.[38] This seemingly unfair shift of blame onto Oak Ridge in regard to air pollution likely stemmed from the previous fears and concerns over the safety of the plants in the city, coupled with the general anxiety and unease surrounding nuclear energy in the United States as a whole. As much of the plants' operations remained secret from the general public, these fears likely compounded over time and made Oak Ridge an object of blame.

The general air of secrecy and worry that so many felt regarding Oak Ridge has, at least in some of its citizens, developed a defensive posture when talking about their city and its work. An interesting 1961 article by Inez Robb in the *Knoxville News-Sentinel* related the author's experience of visiting Oak Ridge with some of its citizens and promptly receiving an unsolicited reassurance that no one in the city felt guilt about its history. The article went on to explore how the city grapples with the sizable impact it has had on both the natural world and history in general and how some people's views on the atomic bombs and the previously secretive and tight-knit city produced a defensive nature in its citizens.[39] This defensive nature does not seem to be universal of Oak Ridgers as I search through the city's oral histories and was perhaps a product of the tensions of the Cold War, as Oak Ridge became a household name in the increasingly feared field of nuclear energy.

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[38] John McLaughlin, interview by Bart Callan, March 11, 2005, COROH.

[39] Inez Robb, "Oak Ridgers Feel Guiltless," *Knoxville News-Sentinel*, October 2, 1961, 22.

Goodwill towards Oak Ridge

Oak Ridge's renown across the region and country was not all bad, however; it seems to be far from it in many regards. Even past the initial celebrations of the city's contributions to ending World War II, Oak Ridge remained a household name in the United States for its work on atomic energy and its prevalence in producing atomic weaponry throughout the Cold War. Mick Weist, the son of a Manhattan Project scientist who grew up in Oak Ridge during the Cold War, spoke fondly of his hometown being recognized by most people when he traveled, and he did not seem to ever have any negative interactions regarding his home. He noted the pride that so many people in the city had when in different parts of the country, knowing that people respected the place they came from for its service to the nation during and since World War II.[40]

Some of the goodwill towards Oak Ridge came from the more tangible contributions it made to the region, namely its boost to the economy. Historian Keri Frederickson notes the economic booms experienced all throughout the South due to the massive federal defense and military budgets disbursed to the various plants and installations throughout the region. Without even considering the cultural and social impact of these sites on the surrounding areas, their presence was one of many factors in the uplifting of the South's economy, a region that historically had faltered economically.[41] Jerry Shattuck, a longtime resident of Anderson County in this period, lauded the advancements made and benefits reaped from cooperation between Oak

[40] Mick Weist, interview by Keith McDaniel, October 13, 2004, COROH.

[41] Kari A. Frederickson, *Cold War Dixie: Militarization and Modernization in the American South. Politics and Culture in the Twentieth-Century South* (Athens, GA: University of Georgia Press, 2013), 5.

Ridge's population and the rest of the county, bringing the area much needed support and change that uplifted its citizens and significantly boosted the city's reputation.[42] Despite concerns over radiation and nuclear attacks, Oak Ridge's contributions to the region and the country have not gone completely forgotten.

Conclusion

Oak Ridgers have rarely, if ever, made any grand claims of "normalcy." From their wartime origins with the Manhattan Project and all its secrecy, to the fear and admiration of the Cold War era, the city and its people have at every step set themselves apart from any other town in Tennessee.[43] As Barbara Lyons, a life-long Oak Ridger put it in her oral history, "Over and over people left Oak Ridge after the War and came back because the towns were so uninteresting."[44] It would be unreasonable to expect such a place to seamlessly blend into the surrounding region, and this higher profile was aided in part by what seems to be a lack of desire by Oak Ridgers to fit in completely. They wear their origins on their sleeve and rarely feel anything but pride for their hometown.

Oak Ridge was undeniably different, and this came with numerous side effects. As the Second World War ended and the Cold War almost immediately flared up, Oak Ridge continued to play an important role in the U.S. push for atomic and nuclear supremacy. In fact, even after the city's incorporation in 1959, the plants remained under the control of the AEC and the federal government. Since Oak Ridge's creation under

[42] Jerry Shattuck, interview by Keith McDaniel, February 2, 2012, COROH.
[43] Freeman, *Longing for the Bomb*, 110.
[44] Barbara Lyon, interview by Jim Kolb, July 22, 2004, COROH.

secrecy in the midst of World War II, through its struggle and success in incorporating into Tennessee, and growing even stronger during the Cold War, the city's reputation for and association with atomic energy never faltered or withered in the eyes of the general public. This reputation was not always positively viewed and has reinforced the uniqueness of Oak Ridge compared to the rest of East Tennessee, even decades after its official incorporation. Regardless of this fact, the city remains a symbol of both World War II and the Cold War, and its impact on those conflicts should not be understated; but we can also clearly see the reciprocal impact that these conflicts have had on the city.

CONCLUSION

Oak Ridge, Tennessee, occupies an interesting place in American history, and the American imagination. Since its initial conception as a part of the Manhattan Project, the city has stood out among its neighboring communities, and held a sort of mythical draw to it. Following its incorporation, though it became a normal Tennessee city by all legal rights, Oak Ridge and its people remained culturally distinct from the rest of East Tennessee. Many of its original residents were transplanted from across the country, bringing a diversity of genius and geographical origin to the city, and finding no common ground to assimilate with the likes of Knoxville, Chattanooga, or Johnson City other than its location. Rather than bemoan this cultural separation or endlessly seek to remedy it, the people of Oak Ridge took pride in their circumstances, and welcomed their growing reputation as a strange hub of science in the backwoods of Tennessee.

Oak Ridgers could hardly construct an identity for themselves until they knew what they had been invited to do, and after finding out in the wake of the atomic bombings of Japan in 1945, they knew that their role was that of the scientific bulwark of the United States. As the city slowly welcomed the public behind its gate, at first only reports but later general public visitors and eventually seeing the wholesale removal of the security fences, Oak Ridgers began to wonder what their place not just as a wartime production site was, but rather as a city of people, with a culture and community uniquely held together by shared wartime experiences and life under the watchful eye of the military. During the movement for the city's incorporation, many wondered if the loss of

security and economic coverage provided by the federal government would change the town, as they were accustomed to not locking their doors or worrying about utility bills and taxes. Oak Ridgers decided, however, that it was time to become a normal city and rather than be provided for by the government, help provide for their region and the state. The Cold War, coinciding with and proceeding past the city's incorporation, saw Oak Ridge double down on its atomic work, rather than transition into something new. At first atomic energy, but later almost solely nuclear weaponry, dominated the work of the plant's employees, and this cemented Oak Ridge's reputation as the hub of atomic and nuclear energy, and more broadly science in general, in the Southeast.

Throughout these periods, Oak Ridge's citizens experienced massive changes in the way they lived their lives, and how they were viewed by the nation. The city was at first a heroic secret of the wartime effort, and later concurrently the continuing backbone of the American Cold War effort and the source of the increasingly feared and distrusted nuclear energy industry. All the while, Oak Ridgers grappled with what being from Oak Ridge meant, and how their contributions to not only the country's wars, but to world history overall, affected humanity. At all times, there seemed to be a mix of pride and anxiety; pride in the city's place in helping end World War II and usher the world into the atomic age, and anxiety over how their work on the atomic bombs could have brought the world to nuclear ruin over the course of the Cold War. Never settling for being "normal," the people of Oak Ridge, whether proud of anxious, found comfort in standing out, and the complex nature of their history. These feelings were as much influenced by the city's history as they influenced that history in turn, giving cause for debate over incorporation

and building the city's reputation in the decades following its conception during World War II.

Pitfalls and Future Work

Perhaps the greatest thorn in my side while writing this thesis was my inability to find Town Council records pre-incorporation, and the unavailability of prints of the *Oak Ridger*, the city's local paper following the discontinuation of the *Oak Ridge Journal*, before 1980. I was unable to determine if records of the Town Council before it became official following incorporation even exist, and if they do, I was unable to find any such records with the Anderson County Archives or the Oak Ridge Heritage and Preservation Association.

The *Oak Ridger*, on the other hand, is well known to exist, as it is referenced many times in the oral histories of the townspeople, and I use a few modern articles run by the paper in this thesis. However, the Tennessee State Library and Archive is the only remotely close location that has access to these papers before the 2000s, as no digital versions exist to my knowledge and I simply did not have the time or means to travel further on short notice to search for it. However, the Tennessee State Library and Archives was reprinting their microfilm of multiple state newspapers, including the *Oak Ridger*, up to the 1980s, and would be doing so for too long for me to wait. I would like very much to look through those prints of the paper when they are made available again, and perhaps write a larger work with the source in hand.

Over the course of my research for this thesis, a few things stood out to me that I wish I could have focused on, and perhaps will in the future. The displacement of the original inhabitants of the Oak Ridge area and their lives prior to and following this displacement interested me, but due to time constraints and having no real place for the story in my thesis, I had to skip over it for now. Likewise, there was an interesting story in one of the oral histories I cited for the third chapter that detailed the sports rivalries of schools in Anderson County and Oak Ridge, possibly leading to some interesting conversations about the city's school system post-incorporation and the butting heads of the different social groups in the county. I could not find enough extra information on this subject in time to add anything substantial to my thesis and would like to explore that avenue of research in the future.

BIBLIOGRAPHY

Primary Sources

Albert Gore Sr. Research Center. Murfreesboro, TN.

Center for Oak Ridge Oral History. Oak Ridge, TN.

Alfred Brooks, interview by Bart Callan, April 14, 2005.
Barbara Gritzner, interview by Kieth McDaniel, November 25, 2013.
Barbara Lyon, interview by Jim Kolb, July 22, 2004.
Carl and Ida Hagaman, interview by Charles Johnson and Charles Jackson, May 15, 1976.
Clara Zulliger, interview by Keith McDaniel, October 9, 2012.
Cleva Marrow, interview by Keith McDaniel, August 10, 2013.
Edward Fairstein, interview by Jim Kolb, November 13, 2002.
Elizabeth Peelle, interview by Keith McDaniel, February 23, 2010.
Francis Wulk, interview by Don Hunnicutt, December 5, 2013.
Gerald Pierce, interview by Keith McDaniel, December 20, 2012.
Henry Stoner, interview by Bart Callan, March 10, 2005.
Horace Stanley, interview by Bart Callan, April 12, 2005.
Howard Baker, interview by Jim Campbell, August 19, 2009.
Hubert Barnett, interview by Don Hunnicutt, November 1, 2012.
James Hackworth, interview by Bart Callan, April 13, 2005.
James Kolb, interview by Keith McDaniel, December 9, 2010.
James Young, interview by Keith McDaniel, March 28, 2016.
Jane Teasley, interview by Bart Callan, April 13, 2005.
Jerry Shattuck, interview by Keith McDaniel, February 2, 2012.
Jim Campbell, interview by Kieth McDaniel, December 19, 2014.
Joe Dykstra, interview by Connie Callan, March 7, 2005.
John Auxier, interview by Keith McDaniel, January 27, 2012.
John McLaughlin, interview by Bart Callan, March 11, 2005.
June Adamson, interview by Keith McDaniel, April 15, 2003.
Keith Lowery, interview by Bart Callan, May 18, 2005.
Kurt and Mary Kraus, interview by Charles Johnson and Charles Jackson, May 22, 1976.
Louise Alspaugh, interview by Jim Kolb, September 17, 2002.
Lynn Fortenberry, interview by Connie Battle, January 21, 2003.
Martha Adler-Jasny, interview by Keith McDaniel, March 26, 2012.
Mary Ann Halstead, interview by Don Hunnicutt, October 25, 2012.
Mary Elizabeth Alexander, interview by Don Hunnicutt, December 19, 2012.
Mick Weist, interview by Keith McDaniel, October 13, 2004.
Murray Rosenthal, interview by Keith McDaniel, June 27, 2013.
Paul Elza, interview by Sibyl Nestor, November, 1973.
Ralph Aurin, interview by Don Hunnicutt, December 11, 2012.

Robert Allen, interview by Chris Albrecht, November 3, 2005.
Rose Feldman, interview by Erica Rivinoja, 1997.
Sam Beall, interview by Stephen H. Stow, March 13, 2003.
Sheldon Jacobs, interview by Bart Callan, March 9, 2005.
Ted Kwasnowski, interview by Keith McDaniel, September 19, 2003.
William Tewes, interview by Connie Callan, March 8, 2005.
William Tewes pt. 1, interview by Keith McDaniel, July 28, 2012.

Newspapers

Chattanooga Daily Times, 1957-1959.
Daily Republic, 1977.
Johnson City Press, 1945.
Knoxville Journal, 1959.
Knoxville News-Sentinel, 1953-1961.
Nashville Banner, 1955.
News Record, 1994.
Oak Ridger, 2010-2024.
Oak Ridge Journal, 1945.
Paducah Sun, 1958.
Santa Cruz Sentinel, 1985.
Ukiah Daily Journal, 1980.

Secondary Sources

Beard-Smith, Karen. "The Tennessee League of Women Voters, 1945-1960." Master's Thesis, Middle Tennessee State University, 2003.

Bergeron, Paul H., Stephen V. Ashe, and Jeannette Keith. *Tennesseans and Their History*. Knoxville: University of Tennessee Press, 1999.

Corlew, Robert E. *Tennessee: A Short History*. Knoxville: University of Tennessee Press, 1981.

Craig, Campbell, and Sergey Radchenko. *The Atomic Bomb and the Origins of the Cold War*. New Haven, CT: Yale University Press, 2008.

Downs, Matthew L. *Transforming the South: Federal Development in the Tennessee Valley, 1915-1960*. Baton Rouge: Louisiana State University Press, 2014.

Frederickson, Kari A. *Cold War Dixie: Militarization and Modernization in the American South.* Athens: University of Georgia Press, 2013.

Freeman, Lindsey A. *Longing for the Bomb: Oak Ridge and Atomic Nostalgia*. Chapel Hill: University of North Carolina Press, 2015.

_______. *This Atom Bomb in Me.* Stanford, CA: Redwood Press, 2019.

Fussell, Paul. *Thank God for the Atomic Bomb and Other Essays*. New York: Ballantine Books, 1990.

Gosling, Francis G. *The Manhattan Project: Making the Atomic Bomb*. Washington, DC: Office of History and Heritage Resources, Executive Secretariat, Office of Management, Department of Energy, 2010.

Johnson, Charles W., and Charles O. Jackson. *City behind a Fence: Oak Ridge, Tennessee, 1942-1946*. Knoxville: University of Tennessee Press, 1981.

Johnson, Leland, and Daniel Schaffer. *Oak Ridge National Laboratory: The First Fifty Years*. Knoxville: University of Tennessee Press, 1994.

Kiernan, Denise. *The Girls of Atomic City: The Untold Story of the Women Who Helped Win World War II.* New York: Simon & Schuster, 2013.

Lyons, William, John M. Scheb II, and Billy Stair. *Government and Politics in Tennessee*. Knoxville: University of Tennessee Press, 2001.

Miscamble, Wilson D. *The Most Controversial Decision: Truman, the Atomic Bombs, and the Defeat of Japan*. Cambridge: Cambridge University Press, 2011.

Molella, Arthur. “Exhibiting Atomic Culture: The View from Oak Ridge.” *History & Technology* 19, no. 3 (September 2003): 211–26.

Ojserkis, Raymond P. *Beginnings of the Cold War Arms Race: The Truman Administration and the U.S. Arms Build-Up*. Westport, CT: Praeger, 2003.

Olwell, Russel B. *At Work in the Atomic City: A Labor and Social History of Oak Ridge, Tennessee*. Knoxville: University of Tennessee Press, 2004.

Peterson, Maxine. *The Chernobyl Disaster: Nuclear Materials and Disaster Research*. Hauppauge, NY: Nova Science Publishers, 2016.

Smith, Ray. *Ed Wescott: Photographer*. Morrisville, NC: Lulu Press, 2022.

Sparrow, James T. “Behind the Atomic Curtain: School Desegregation and Territoriality in the Early Cold War.” *Tocqueville Review* 33, no. 2 (July 2012): 115-39. https://www.doi/10.1352/toc.2012.0011.

Talbott, Evelyn O., Ada O. Youk, Kathleen P. McHugh-Pemu, and Jeanne V. Zborowski. “Long-Term Follow-Up of the Residents of the Three Mile Island Accident Area, 1979-1998.” *Environmental Health Perspectives* 111, no. 3 (March 2003): 341–48.

Welsome, Eileen. *The Plutonium Files: America's Secret Medical Experiments in the Cold War*. New York: Dial Press, 1999.

West, Carroll Van. *Tennessee History: The Land, the People, and the Culture*. Nashville: Tennessee Historical Society, 2001.

Wheeler, William Bruce. *Knoxville, Tennessee: A Mountain City in the New South*. 3rd ed. Knoxville: University of Tennessee Press, 2020.

Wilcox, Bill. "The Transformation and Second Birth of Oak Ridge." Speech, Oak Ridge, Tennessee, June 4, 2010. https://www.y12.doe.gov/sites/default/files/assets/document/2013-11-08.pdf.