

Bombing Wichita:

How the bombing campaigns of World War II spurred production and change in Wichita, Kansas

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Far above Germany, seven men fly. Their jobs are all different and imperative to the success of their mission. Hundreds of other planes fly beside them. All are focused on the task and trust in the rest of the crew and in their plane. Once the target is sighted, tons of bombs are released. They see the explosions and are elated in another mission completed. What they did not see was the family home the bombs destroyed, or the family members that lost their lives to the horrors of air warfare. The military gave justifications for this new method of war. Perhaps in their hearts, the pilots and crew felt bad for those who perished. However, they are at war and did whatever needed to be done to win. Thousands of miles away, different civilians faced disparate stresses. These civilians lived in Wichita, Kansas and they were imperative to the production of airplanes for World War II. The Boeing-Wichita plant is an important case study of war production. It was the largest plant located in Kansas and built the most iconic aircraft of World War II. The war production transformed Wichita's people, infrastructure, future and added stress to a considerable number of those in Wichita; however, those stresses did not include wrestling with the morality of bombing civilians of belligerent nations.

World War II introduced a new type of warfare. The airplane was a major part of the strategic plans and successes of the various armies. When the German military blitzed through France to defeat it, airpower was imperative. The Luftwaffe, the German Air Force, had overtaken French air power in 1936. Once the attack on France commenced, the Stuka bombers pounded French lines. They caused damage to the defense as well as to morale. This made it easier for the German troops to advance and continually push the French back. At Dunkirk, Hermann Goering was so confident in his Luftwaffe that he told Adolf Hitler the planes on their own could finish off the enemy troops trapped on the beach. After the fall of France, the largest air battle of the war was fought over Britain. This complex aerial battle for the control of British skies was almost the last battle of the war. The British stood alone against German expansion. However, they would not sue for peace. Hitler was finally forced to issue orders for Operation Sealion, an invasion of Britain. The orders stated that, "The English air force must be eliminated to such an extent that it will be incapable

of putting up any substantial opposition to the invading troops.”¹ In the battle that lasted from July 10 - October 31, 1940, the Royal Air Force (RAF) defeated the Luftwaffe and saved Britain from invasion. Over those four months, the major cities of England were repeatedly bombed, with London receiving some of the worst raids. The people of England remembered the pilots, homes, churches, and family members lost in those raids. Soon, Germany would face the same fury from the air.²

Once the Germans were pushed back from invading England, it was the RAF’s turn to launch bombing raids on Germany. The idea of using airplanes and bombs to win the war came from the interwar years. Different countries were planning the best way to utilize the newest technology. General Hans von Seeckt, the former chief of German Army Command, was quoted in a United States school manual, *The Air Force*, as saying, “It is important to attack civilian populations in the back areas of the hostile country.”³ The manual went on to describe how to bomb those areas with the greatest disruption to power, water, and food supply. These ideas became a part of the Army Air Corps doctrine. The main premise of the doctrine was that to win the next war, the civilian morale had to be broken. There were two main methods to accomplish that. Some followed the Italian General Giulio Douhet’s theory of total destruction of urban centers in order to break the enemy civilian’s will to fight. On the opposing side, Billy Mitchell of the US air service thought that the same objective could be reached with the use of a few gas bombs. Regardless, the main air strategists for the war were convinced that bombing cities and destroying civilian morale was necessary to win the war.⁴

When it came to actual bombing raids, different strategies were used. Both sides sent fighters, used anti-aircraft guns, and set up warning systems to combat the air raids. The RAF decided to use night time area bombing. Too many of their planes were being lost on day raids, so they could no longer risk them. Planes that could be seen were easier to bring down. With a night time raid, the planes were safer, but the crews in the planes could not see specific targets. So instead, they sent in large waves of planes that dropped tons of bombs onto an area of the city. This meant that the British were inevitably targeting civilians. Once the United States entered the war, the Army Air Force (AAF) joined in the bombing of Germany. However, the AAF decided to use day time bombing raids. This allowed them to focus on bombing specific strategic targets. Not all the bombs fell on their actual targets, but it was usually less devastating to the civilian population than area bombing. With day time and night time raids, the allies could use twenty- four-hour bombing of Germany.⁵

¹ Richard Townsend Bickers, *The Battle of Britain: The Greatest Battle in the History of Air Warfare* (New York: Prentice Hall Press, 1990), 162.

² Julian Jackson, *The Fall of France: The Nazi Invasion of 1940* (New York: Oxford University Press, 2003), 18, 44, 97; Bickers, *The Battle of Britain*, 162-169.

³ Ronald Schaffer, *Wings of Judgement: American Bombing in World War II* (New York, NY: Oxford University Press, 1985), 27.

⁴ *Ibid.*, 20-23.

⁵ *Ibid.*, 29-43.

The destruction done by the bombings could be seen best by looking at a few of the cities targeted. For the Allies, London and Coventry were the most bombed cities. The King himself would leave London during the air raids, but he would come back the next day to check on the city and his people. Tens of thousands of civilians died under German bombs in both of those cities. The worst bombed cities in Germany were Hamburg, Dresden, and Berlin. On July 25, 1943, the RAF was sent by Sir Arthur Harris to eliminate Hamburg. This was a tactic that Adolf Hitler had used against England. It became the agreed condition that if the Axis powers did something it was acceptable for the Allies as well. In this case, that meant bombing a city into oblivion. Hamburg was hit in seven day and night attacks by the RAF and AAF from July 25 until August 3. The raids varied in size and destruction, but the raid on the night of July 28 was one of the most devastating raids on a German city. That night seven hundred twenty-two bombers flew over Hamburg and dropped their bombs in a three-mile circumference. The incendiary bombs created ground temperatures that pulled air in and drove the hot air up in drafts that took the smoke four or five miles into the air. People on the streets caught on fire and had to tear their clothes away. Women, children, and men died of the fire, the excessive heat, or from asphyxiation when the fire stole the oxygen from their shelters.⁶

The stories out of Hamburg, Dresden, and Berlin were all similar. Massive bombings that produce large fires, destruction, and death. While the Pacific is not the area of focus of this paper, it is important to note that the US fire bombings of Tokyo were the worst bombings in Japan. Each of the main belligerent nations faced raids like these; even the United States experienced the destruction of an air raid at Pearl Harbor, although, they were the least physically affected by war destruction on their land. Several of the U.S. officers who carried out air raids had moral qualms about bombing and killing civilians as a strategy. Two of the stronger opponents to bombing civilians were Generals Laurence Kuter and Carl ‘Tooey’ Spaatz. These men wanted to focus solely on military targets like oil refineries, but they were not as loud as those in favor of wider bombing. Spaatz even put together a Special Planning Committee in early 1944 to look at which targets should be destroyed. This committee determined that bombing German civilians would not have the appropriate demoralizing effect because living under the Nazi regime had done that already. However, once the men in charge gave the orders, the officers and pilots had to follow them.⁷

It was true that the civilians were part of the war manufacturing machine. In a cold and logical manner, they could be perceived as pieces of the machinery and therefore valid targets. This was how men like David Griggs saw them. He was a scientific advisor who was focused on ways to win the war. The other part of the strategy for bombing cities was to get the civilians to rise up and force their government to stop the war. Kuter even stated, “we do not want to kill them—we

⁶ Schaffer, *Wings of Judgement*, 30-31; Earl R. Beck, *Under the Bombs: The German Home Front 1942-1945* (Lexington, Kentucky: University Press of Kentucky, 1986), 65-71.

⁷ Schaffer, *Wings of Judgement*, 71, 104-105.

want to make them think and drive them to action.”⁸ The bombings actually had the opposite effect. They created a need for aid and drove the German citizens into the arms of their government. The entire country took on a stoic determination to make it through the war. Regardless of the moral questions the officers and pilots faced, they knew they had orders and they would do what was necessary to win the war.⁹

In order to carry out the bombing raids, each nation had to embark on large manufacturing booms. Building the airplanes that delivered the bombs was an expansive part of United States war. The development of these aircraft transformed several communities that were chosen to build them. Wichita, Kansas was one of the communities affected by aircraft. Several aircraft companies, like Beech, Cessna, and Stearman were based in Wichita. All of these companies built aircraft for the United States Army Air Force. In 1941, the U.S. Army appropriation bill was \$1,822,522,959.00 and allowed the construction of 2,566 new airplanes. Each of the Wichita plants landed large contracts to build planes for the war. Cessna received nine million dollars from the Canadian Air Force. Beech was expanding and had 1,260 people working. Stearman had 1,200 people working three shifts, twenty-four hours a day. The city in the middle of Kansas that had limped through the depression, was bustling again now that the war brought jobs and money flooding into the Wichita economy.¹⁰

Wichita was chosen as a hub of aircraft manufacturing for several reasons. First, there were already aircraft companies in place. Many of the companies expanded and worked together to fulfill orders, but the basic infrastructure was either already present or quickly put in place. Second, the geographic location of Wichita was strategic. It was not near enough to any coasts to be threatened by German or Japanese bombings. This was a large fear among the manufacturers on the west coast. Japan could have bombed several of those manufacturers had they not been stopped further out in the Pacific. The final reason was the labor force that Wichita and the surrounding area could provide. The 1940 census put the Wichita population at 114,966 people. It was a large enough city to have workers available. Also, the alien population of Wichita was very low. Of those counted on the census, only 910 were aliens from Germany, Mexico, Canada, Russia, and Syria. This low number gave Wichita one of the lowest percentages of immigrant people in the whole country. In a war environment, the fewer immigrants in a location, the less likelihood of sabotage or spying. The War Department went so far as to send notice to industries handling war production stating that, “Federal statutes require the exclusion of aliens from certain forms of restricted defense work.”¹¹ With so few aliens to worry about, Wichita seemed like a perfect fit for restricted defense work. The next step was to

⁸ *Ibid.*, 81.

⁹ *Ibid.*, 81,105, 149-151.

¹⁰ Craig Miner, *Wichita: The Magic City* (Wichita, Ks: Wichita-Sedgwick County Historical Museum Association, 1988), 185.

¹¹ “Uncle Sam Insists...”, *Contact*, Oct 1941, Boeing Sources, Kansas Aviation Museum, 2.

build up the facilities of the companies there.¹²

In Wichita, the Stearman Aircraft Company became part of Boeing Airplane and Transport Corporation in 1929. In 1934, that parent company was broken up and Stearman became part of the Boeing Company, along with a plant in Seattle. Stearman was mostly known for its Kaydet trainers. On March 15, 1941, the one thousandth Stearman trainer, “taxied from the hangar and took to the blue sky.”¹³ This event was marked by thirty-eight employees dressed in their traditional Native American costume to represent the Cherokee, Sioux, Osage, Pottawatomie, Oneida, Seminole, Ohio, and Comanche tribes. The Stearman employees were proud of their heritage as plains people and now as pioneers in the aircraft industry. In 1941, the Stearman division was renamed Boeing-Wichita. This renaming came shortly after the announcement of a new plant to be built beside the Stearman plant. The new Plant II would quadruple the space for building aircraft. In *Contact*, the magazine published by employees for employees, a story on the new contract was run in June 1941. It said, “The factory will be equal in size to the great Boeing No. 2 plant in Seattle, where the Boeing Flying Fortresses are now built.”¹⁴ Since the Stearman plant was building the wings for B-17s as well as the Kaydet trainers, all assumed that the new plant would be used to build the new model B-17E planes for the war.¹⁵

What most of the population did not know was that the AAF began a search for a new aircraft design in 1940 that could reach a range of 5,335 miles, which was needed to reach the major cities of Germany and Japan. Boeing entered a new design for a plane with a new thinner wing that increased the range and speed of the aircraft. When the designers, Ed Wells and Wellwood Beall, submitted the design on May 11, 1940, Major H.Z. Bogert, acting chief of the experimental engineering section for the AAF, gave them a contract to engineer, test, and build a mockup of the plane. He even said the AAF could order 200 of them.¹⁶

Boeing had already proven with the B-17 that it built dependable sturdy bombers that could stand up to the rigors of war. By September 1940, Boeing had the contracts to build the XB-29. This was the plane that would be known as the B-29 Superfortress. There was to be no mention of the new plane in newspapers until 1943, after a B-29 made a successful bombing run. In the November 6, 1943 edition of the Boeing newspaper called *Boeing Plane Talk*, small details about the plane were revealed. The article told of the plane’s name, secret engineering, and production. “This battleship of the air is armored heavily with multiple-gun power turrets. It can fly at very high altitudes.” It continued, “the B-29 will have a range substantially greater

¹² Miner, *Wichita*, 183-184; Anthony Paul Brusca, “A National Effort for Victory: The B-29 Development Program and the Battle of Kansas” (masters thesis, Wichita State University, 1999), 18-19.

¹³ *Contact*, Jan 1942, Boeing Sources, Kansas Aviation Museum, 4.

¹⁴ “New Contract,” *Contact*, June 1941, Boeing Sources, Kansas Aviation Museum, 2.

¹⁵ E.E. Bauer, *Boeing in Peace and War* (Enumclaw, WA: TABA Publishing, 1991), 56;

“Bomber Room,” *Contact*, Oct 1941, Boeing Sources, Kansas Aviation Museum, 4.

¹⁶ Bauer, *Boeing in Peace and War*, 134-135; Brusca, “A National Effort for Victory, 18.

than the maximum effective range of today's longest range heavy bombers and it will carry quite sizeable bomb loads for that distance." Though the rest of the specifications were not released, this gave readers a taste of what the new plane could do.¹⁷

The new plane was a secret that was well kept at Boeing. As construction began on the new large plant, the assumption in the community and among most employees was that it was still for building more B-17s. There was too much going on at the plant to be sure of what was going to be built next. "As fast as the contractors trussed, roofed over, and paved a few square feet, jigs and tools for the B-29 were moved in."¹⁸ Then in June 1942, J. E. Schaefer, the general manager of Boeing-Wichita, received a call from Brigadier General K. B. Wolfe. The General told Schaefer, "Well hang onto your chair. I've got some news for you. You're in the glider business!"¹⁹ The Army needed gliders that would later be used in the invasion of Normandy, and they gave that order to Boeing-Wichita. Seven hundred and fifty CG-4 gliders were built inside Plant II while it was still under construction. The final gliders were pushed out of the almost completed plant by the expanding B-29 production.

The beginning of B-29 production was fraught with difficulties. Production on the plane began while it was still undergoing development and testing. As always happens during the development stage, elements of the plane had to be changed when they were found to be faulty or inefficient. This created some headaches for the workers already building the planes. Just as the wing production moved along, the static tests on the wings, "resulted in a decision to 'beef' up the wing a little."²⁰ New tools had to be incorporated into the wing production and the whole process relearned by the workers. On another occasion, 1,200 mechanics were called out into the bitter winter weather to fix the wings on semi-completed B-29's outside of the plant.²¹

Perhaps the largest headache was with the plugs on the wiring. The plugs connected more than 10 miles of electrical wiring in each B-29, and they had done well in the testing phase. However, they were deemed unfit in actual use. This meant that the Boeing-Wichita employees got soldering tools from anywhere they could and, "disassembled, rebuilt and re-soldered more than 586,000 connections in planes already completed, those in process on the floor, and in the thousands of wiring bundles already assembled."²² Clearly, designing an aircraft and producing it at the

¹⁷ Bauer, *Boeing in Peace and War*, 134-135; "Army Reveals New Facts on B-29 Bomber," *Boeing Plane Talk*, November 6, 1943, Boeing Sources, Kansas Aviation Museum, 1 and 4.

¹⁸ *Kansans Build the Boeing B-29 and the Boeing Kaydet* (Wichita, Ks: Public Relations Division Boeing Wichita, 1945), 5. This pamphlet was located in Wichita State University library as a printed book. It was also available at the Kansas Aviation Museum.

¹⁹ *Ibid.*, 6.

²⁰ *Ibid.*, 8.

²¹ *Ibid.*

²² *Ibid.*, 8-9.

same time created problems, but the engineers were determined to put together an amazing plane. They bonded and formed a support system through the trials of designing the plane with a huge pressure deadline. In October 1941, all the engineers in Plant I stopped shaving. They vowed they would not shave, “until new wings go into the blue.”²³ The employee magazine took pictures of the whole group with two weeks of growth. The next month’s issue had some art work of bearded engineers with the caption, “Any resemblance to persons living is absolutely intentional.”²⁴ In March 1942, one engineer, Murray Jones, was receiving odd looks because he still had his beard even though he had moved to Plant II. Apparently, not many engineers in Plant II had whiskers. The employees found ways to handle the stresses of trying to complete the B-29s, because the war demanded that plane be completed as quickly as possible. Even with the changes, the B-29 production was moving forward.²⁵

During all the uncertainties of war and odd production problems, the employees of Boeing-Wichita performed admirably. The war production need had drawn people from across the state and beyond. They poured into Wichita to work in the plants. The city had an over fifty percent increase in three years. The December 1942 *Contact* did a two-page spread titled “Where Are They All Coming From?” which showed twelve new employees with a brief description of what jobs they did prior to the war and what they were doing in the plant during the war. Seven of the twelve were women who came from being homemakers, schoolteachers, or working in stores to do anything the plant needed. Six of the seven women were shown working with tools, while only one woman was pictured in an office setting. The men were shown exclusively working with tools. These men came to aircraft work from orchestras, farms, and drug stores, and several of these workers moved to Wichita from Oklahoma.²⁶

The massive flood of people into Wichita was wonderful for building airplanes, but hard on the city itself. Certain utilities and services quickly became strained. There were not enough houses in Wichita to hold the growing population. The city estimated it would need new housing for 30,000 incoming workers and their families. Housing was such a problem that President Roosevelt declared Wichita was a defense area, and therefore homes could be financed through the Federal Housing Administration. Wichita received an A1A rating which, “released construction activity immediately . . . and all available materials needed might be purchased.”²⁷ This measure increased the number of houses built by private builders. In early 1941, the federal government announced they were going to build 400 homes for defense workers in a neighborhood called Hilltop Manor. Eventually, there were 1,114 houses built in Hilltop Manor and 4,382 houses in Planeview. The *Wichita Eagle* ran a special

²³ *Contact*, December 1941, Boeing Sources, Kansas Aviation Museum, 16.

²⁴ *Contact*, January 1942, Boeing Sources, Kansas Aviation Museum, 16.

²⁵ *Contact*, March 1942, Boeing Sources, Kansas Aviation Museum, 13.

²⁶ “Where Are They All Coming From,” *Contact*, Dec. 1942, Boeing Sources, Kansas Aviation Museum, 8-9.

²⁷ “Houses—Hallelujah!,” *Contact*, July 1942, Boeing Sources, Kansas Aviation Museum, 14.

section in their Sunday paper on April 25, 1943. One of these articles covered the dedication of the developments which was attended by national and state dignitaries. After the ceremony, which had a band and several speakers, the guests were invited to tour the developments to see, “the miracle that has been accomplished in such a short time.” As grand as the developments were, they could not hold all of the new workers. Those who could not find housing in Wichita or lived close enough drove in from neighboring communities like Newton.²⁸

One of the new workers who commuted from Newton was named Connie Palacios. When she got the job at Boeing in May 1943, she would ride the bus every day and be dropped off at the Orpheum Theatre. From there she walked to a building next to the Broadview Hotel where a class for riveters, buckers, drillers, and other jobs was held. Classes like this were held in many areas of Wichita. Even some high schools, like East High, housed Aircraft Training Schools. After two weeks of training, Connie was sent to work at the plant. She still rode the bus for thirty-five to forty minutes from Newton everyday with about thirty-six other employees. After her twelve-hour shift, she would ride the bus home again.²⁹

Many of the other employees at Boeing rode busses or carpooled to work. As the war went on, gas and tire rations forced workers onto the busses. Three new super-highways were also built, “to relieve the traffic problem at Boeing plants.”³⁰ MacArthur Road was extended west from Plant II to Seneca Street. This meant building a bridge across the Arkansas River as well. On the east side of town, Oliver street was widened and resurfaced from Kellogg south to the plant. These projects were pushed through as quickly as possible to give drivers fast access to work. Wichita also added many routes and busses to the roads servicing Boeing. Boeing even had to build a new bus terminal at the plant to ensure the increased flow could load and unload quickly. The January 1943 edition of *Contact* ran a one page story about the new bus terminals which would allow sixty busses to load and unload simultaneously. The structure was described with, “Platforms, stairways, overpasses, even the giant suspension arches, are built of wood and are of the most modern construction.” Connie recalled getting off the bus at this terminal and walking across other lanes of busses on the overpass bridges, then going down into a tunnel that led to the plant.³¹

Once workers emerged from the tunnel, they grabbed their tools and got to work. While she was at work, Connie was a riveter. She was also of Mexican descent, which made her one of the few minorities in the plant. That was the way the administrators and Department of Defense preferred it. However, Connie’s status as

²⁸ Miner, *Wichita*, 189-191; *Kansas Build the B-29 and the Boeing Kaydet*, 7.

²⁹ Connie Palacios, interview by author, Wichita, April 19, 2017; “Class Rooms Selected for Central Location,” *Boeing Plane Talk*, September 4, 1943, Boeing Sources, Kansas Aviation Museum, 6.

³⁰ “It Won’t be Long Now,” *Contact*, July 1942, Boeing Sources, Kansas Aviation Museum, 14.

³¹ *Ibid.*, 14; “Jam Session,” *Contact*, January 1943, Boeing Sources, Kansas Aviation Museum, 5.

a minority did help her in one way. On her first day at the plant, Connie was not able to rivet because she needed a buckler due to the scale of the job. The riveter works on the outside of the plane and runs the rivet gun. The buckler is on the interior and her job was to hold a bucking bar, which was a solid cut piece of metal, up to the back of the rivet. Rivets came in different sizes depending on the hole drilled in the sheeting of the plane. Once the buckler was in place with the bucking bar firmly against the rivet, the riveter would run the gun. This forced the end of the rivet hitting the bucking bar to deform and flatten out. In this way, the sheets of the plane would be fastened together. It was much more efficient than welding when it came to assembling the plane.

Since Connie did not have a buckler, the first day she was put to work getting assorted sizes of rivets for the other teams. On her second day, Connie found there was a buckler available but she was working in maintenance. Connie asked why she was in maintenance when she would be better used as a buckler. She was told no one wanted to work with that woman because she was black. Connie immediately said, "I don't care I'm a Mexican descendent."³² So the African American woman named Jeri came to be Connie's buckler. These two women worked together wonderfully. Connie would rivet the outside of the nose of the plane while Jeri held a steel bar on the opposite side to flatten the rivet. Connie said Jeri was the best buckler because she could get into any hard or tight space to hold that bucking bar. Connie and Jeri became one of the best teams and built hundreds of Superfortress nose sections. They worked together until they were laid off in August of 1945 just after the war ended.³³

The B-29 project was a vital task for the war. J. E. Schaefer wrote a letter to his employees to impress upon them the importance of the tremendous task. He noted that this was a job for which no one would have true experience. This was a whole new plane and was the largest at the time. Schaefer believed in his employees and their ability to complete the program. He did warn that, "no one can afford to be 'cocky' in the discharge of his duties."³⁴ This reads as an officer's warning to his men to keep their heads down and stay focused on the job. Any time the leaders in the plant could relate the workers with soldiers they did so. "We must be humble and we must work to make good for none of us has anything to 'crow about' until all of us, working together—you in the plant, me at my desk, the soldier at the front and the sailor at sea—get this job done."³⁵ The war was on, and the war production had to move forward quickly so that the men fighting overseas had the proper tools with which to fight.

Nothing was said about who those men were fighting against and killing. Instead of considering those ramifications of the war, employees at Boeing celebrated their contributions to the war. They crowed about their work by searching for ways

³² Connie, interview.

³³ Ibid.

³⁴ "Our Responsibility," *Contact*, January 1943, Boeing Sources, Kansas Aviation Museum, 1.

³⁵ Ibid.

to make their production better. After President Roosevelt announced the declaration of war, some of the foremen at Boeing immediately began planning for the increased production that would come. One foreman, Clarence Watters, who served in World War I and knew all too well the realities of war, received a visit from his workers who said, "If it will help production we will be glad to work a 10-hour day for 71/2 hours wages."³⁶ Not all workers would have agreed to this arrangement, nor would the Boeing leaders, however, it shows how willing many were to make sacrifices and work harder to win the war.

The plants also started a program designed to cut back on waste. In a *Contact* article titled "Scraps Buy Ships," the conservation of supplies was lauded. Jim Duncan, who was the administrative assistant to the works manager, noted that in America, "a land of plenty, we have not been taught to conserve as we now must do—at least for the duration."³⁷ The plant began having employees sweep the floor of the plant. All the scraps from the Flying Fortress and Trainers that were being built at the time would be swept up and sorted through. Everything that could be useful in any way was saved. Aluminum items such as shavings, bolts, nuts, washers, and rivets were saved to be melted down and reused. Other scraps like cloth and wood were also saved and went into war production. The article reminded workers that the more they saved, the more planes could be built. This message was reinforced by another article almost a year later. The scraps that were being saved from the plant floor amounted to a savings of over eighty thousand dollars per month. It was done all as a contribution to the war effort. The "Industrial Scrooges" of the airplane industry had a process so complete and organized that they were truly saving money. The article went into the details of how the salvage was done. They wanted their workers to be proud of the program and understand why it was necessary. It was a reprogramming of American abundance thinking.³⁸

J. E. Schaefer not only wrote to his employees about the important job they were undertaking, he was also corresponding with General Dwight Eisenhower. Schaefer and Ike had attended West Point together. In a letter to Eisenhower on May 11, 1943, Schaefer complimented the progress the army was making, then went on to talk about the new planes. He wrote, "We are still making progress, but it is at times all too slow. Progress it is, nevertheless, and one of these days, you, Tooley, and Jimmy are really going to have something with which to go to town. You can bet your bottom dollar we are doing our best to get it to you as quickly as possible."³⁹ Tooley and Jimmy were references to Carl 'Tooley' Spaatz, who was in charge of the strategic bombing of Germany, and Lieutenant General Jimmy Doolittle, who commanded the 8th air force. Eisenhower was glad to hear such positive news from a former school

³⁶ "Fair Winds," *Contact*, December 1941, Boeing Sources, Kansas Aviation Museum.

³⁷ "Scraps Buy Ships," *Contact*, February 1942, Boeing Sources, Kansas Aviation Museum, 7.

³⁸ *Ibid.*, 7; "Saving Materials of War," *Contact*, January 1943, Boeing Sources, Kansas Aviation Museum, 6-7.

³⁹ J. Earl Schaefer to General Dwight Eisenhower, May 11, 1943, Dwight D. Eisenhower Library, Abilene, KS.

companion. He responded on May 28, "I have heard something of your new product and as you can well imagine, we are all awaiting its delivery for operations with the greatest of anticipation."⁴⁰ The workers were proud of building the planes, and the military was anxious to use them against the Germans and Japanese.

The war brought pressure to the lives of the workers; however, they found ways to negate that pressure and blow off some steam. The majority of the time, workers were facing high temperatures in the summer and working weeks that averaged fifty-five hours to get the planes built. Yet, the pages of *Contact* were full of events, parties, and other opportunities for fun when time allowed. In January 1943, there was a special party planned at nine-o'clock in the morning at Crawford Theater. The Employees' Association set up food and a movie for third shift workers who could not normally see movies. In February 1944, the plant also started showing short news reels and reports in the tunnels of the plant during lunch times. Outside recreation was encouraged. The Employees' Association set up a park between the two Boeing plants. Here Boeing workers and their families could, "relax and rest—or play tennis, badminton, volleyball, shuffleboard or miniature golf." There was also trap shooting, archery, and baseball. Boeing employees frequented many of the Wichita parks in their time off work. However, it must be noted that not all employees were able to enjoy this. Connie was a part of the population of plant workers who were never invited to events such as these. Even if she had been, it would have been hard for her to attend because she was always either on the bus going to and from Newton or in the plant working. For those who lived in Wichita the recreation experiences were easier to have.⁴¹

With all the new defense housing that was built, a substantial portion of air defense workers did live within Wichita. The main developments were Hilltop Manor, Planeview, and Beechwood. The latter was built close to the Beech Aircraft plant for those workers. The former two housed mainly Boeing employees. The largest of the neighborhoods was Planeview. It had 4,283 houses that could hold a substantial portion of the new people in family units. It also had a park, church, high school and many businesses. Even this large new complex of houses did not solve the housing problem. In February 1944, *Boeing Plane Talk* ran an article calling for help to find dwelling units. At this time, Planeview had 4,200 of their units built. Construction on the rest was moving rapidly, and as soon as a unit became available, it was filled. Boeing's new extended work schedules made the housing situation worse. The longer hours in the plant encouraged many to make the move to Wichita from surrounding cities to cut down on the commute. The Boeing housing section in the employee's service department had a waiting list of three hundred and fifty families who needed

⁴⁰ General Dwight Eisenhower to J. Earl Schaefer, May 28, 1943, Dwight D. Eisenhower Library, Abilene, KS.

⁴¹ "Candidly Yours," *Contact*, January 1943, Boeing Sources, Kansas Aviation Museum, 15; "Sound Movies Now Shown in Plant Tunnels," *Boeing Plane Talk*, Feb 4, 1944, Boeing Sources, Kansas Aviation Museum, 6; *Contact*, August 1943, Boeing Sources, Kansas Aviation Museum, 8-9, 16.

two or three bedroom houses or apartments. The battle for housing was a constant issue in Wichita during the war, and it shaped the way the layout of the city developed.⁴²

The longer hours at Boeing added to the housing issue, but they also changed the way businesses had to run. Amenities within the housing developments and the rest of the city began to change their operations to cater to aircraft workers. Wichita now had three full shifts of workers who needed to do business at all times of the day. Local banks extended hours to go from 4:30 am to 7:00 pm on Thursdays and Fridays. This way, the defense workers had time to cash their paychecks before or after work. The banks also allowed a badge from the plant as identification and there was no service charge. There were other businesses located within Planeview that also extended their hours. The accounting office, post office, grocery, dry cleaning, shoe repair, barber shop, bakery, drug store, and bowling alley all held hours later into the evening to accommodate the various shifts of workers. Several opened earlier in the morning as well. The cafeteria in Planeview had hours from eleven in the morning until seven at night in February 1944. By July of that year, the hours were extended to 4:00 am until 8:00 pm and all three meals were available. It was strictly done, “for the convenience of Boeing employees who have to ‘hit the deck’ early.”⁴³ The war changed physical aspects of Wichita as well as general practices of operation.

The prevailing tone of Wichita was of pride over their accomplishments in the plant. Every time a milestone was reached, there was a celebration. The 1000th, 7000th, and 10,000th Kaydets built all received ceremonies marking their completion. The 1000th B-29 to be completed received special attention. When the 7000th Kaydet was complete, the *Wichita Eagle* noted on April 25, 1943 that those 7000 planes and the spare parts for the Kaydets, “represents more planes than the total of military aircraft owned by the United States army and navy at the start of the war in Europe.” Connie remembered that day. Each of the employees put one dollar inside of the plane until it was full of dollars, which were given to charity. Then they all watched as the plane took off, the collective effort of all the employees was celebrated. Boeing employees were also proud of their attendance records. As demand for the B-29 increased and work days grew longer, employers watched the absenteeism rates. They did not need to worry; Wichita employees continued to show up to work. Their record was hailed as, “an example of willingness, cooperation and bulldog determination that will become a part of the permanent record of what Americans at home are doing to help win the war.”⁴⁴ Connie recalled the long hours at the plant. She said she often

⁴² “Asks Employee Help in Listing Dwelling Units,” *Boeing Plane Talk*, Feb 4, 1944, Boeing Sources, Kansas Aviation Museum, 1, 8.

⁴³ “They’re Stopping the Clock for Us,” *Contact*, May 1942, Boeing Sources, Kansas Aviation Museum, 10; “Hours Fixed at Planeview for Tenant Service,” *Boeing Plane Talk*, Feb 4, 1944, Boeing Sources, Kansas Aviation Museum, 2; *Boeing Plane Talk*, July 7, 1944, Boeing Sources, Kansas Aviation Museum, 2.

⁴⁴ “Employees Set Attendance Record As Demands for B-29’s Increase,” *Boeing Plane Talk*, July 29, 1944, Boeing Sources, Kansas Aviation Museum, 1.

worked ten to twelve hours. Many times, they even had to work Sundays. There was no day of rest when the country was at war.⁴⁵

Wichitans and soldiers would not rest until the war was won. However, there was one area of war that the Wichita population did not have to deal with on a real level. They did not have to see those hurt and dying. Most of the evidence of employee's lives, interests, and worries during the war showed they were not concerned with the morality of bombing civilians in Germany or Japan. While Germans lost their homes, Wichitans had new ones built. While Germans starved, Wichitans had to cut back and saved scraps to be more productive. While Germans fled their towns to survive, Wichitans went to the movies. The war was not fought in Wichita, so the same sacrifices would not be expected. The employees knew about the bombings of cities overseas, and they certainly knew when B-29s made successful bomb runs. *Boeing Plane Talk* kept a running tally across the top of each issue. It was called the scoreboard, as if it was a game, and started in August 1944. Each bombing was represented with a small picture of a bomb with the name of the city bombed written inside. The first scoreboard had six bombs on it. In March 1945, there were seventy-seven bombs running across the top of the first and second page and bleeding onto the third. The workers knew exactly how often the B-29's were raiding and that they were raiding cities. Connie spoke of this. With a pained expression she said, "everybody would say, so many innocent people died, but it had to be done."⁴⁶ The war had to be won, and regardless of emotions, the bombers were the way to win.

World War II was a titanic battle between nations. The home front was just as important as the war front. Those in command of the armies realized this and they capitalized on it. Civilians became targets for the bombs and the face of Europe was changed. While Wichita never had to face bombs, they were integral to the success of the Army Air Force. The war changed the city. The population grew by enormously fast rates. Construction of the new plants and the utilities such as roads to service them went fast. Whole neighborhoods were built and occupied in a few months. The war made airplanes a large part of Wichita's identity. The city was dubbed the "Air Capital" of the world before World War II, but after the city pushed to build the planes that helped win the war, that name took on a stronger meaning. The larger population also had increased stress because they were aircraft workers. These workers held heavy burdens of responsibility and expectation. If they failed, perhaps the war would be lost and the whole country hurt. Those were the stakes laid before workers by the military and administrators at Boeing. However, they found ways to offset the stresses of war just as soldiers did. Soldiers rotated back to have some rest and relaxation. The aircraft employees also had opportunities for that, though some were able to use those chances more than others. The war changed many things, but

⁴⁵ *Contact*, Jan 1942, Boeing Sources, Kansas Aviation Museum, 4; "Seven Thousand Airplanes," *Contact*, April 1943, Boeing Sources, Kansas Aviation Museum, 1-2; Connie, interview.

⁴⁶ Connie, Interview.

it was never seen as immoral. The question of the morality of civilian bombings was answered the same way the military answered it. While it was sad, it was necessary.

The moral questions that the officers and pilots faced during the war did not extend across the Atlantic to the manufacturers in Wichita. The workers in the plants were proud to be helping win the war. Some may have had unspoken reservations about their work, but in an environment where everyone was staunchly patriotic, those kinds of reservations would never have been spoken. Airplanes became Wichita's way of fighting and Wichita still has a strong connection with the planes that were built here. It is a huge part of the city's heritage and even after knowing what the planes were used for, people here still remember them with fondness. Perhaps that was because the community was so focused and productive at the time. The work was hard, but the payoffs were better. Men and women had paychecks again. They had recreation. They had new housing and ready-made communities set up for them. Hundreds of people came together to build planes and they were seen by the nation as integral to helping win the war. It was a high point for the city after the lows of the Depression.

The planes built in Wichita during the war remain a high point in the city's history. In commemoration a B-29 was rescued in 2000 and brought to Wichita to be rebuilt. This B-29 was named "Doc" a plane Connie Palacios had built during the war. She warmly talked about the plane and revealed that all but seven of her original rivets were still intact. While it took sixteen years to refurbish the plane, it is now fully functional. A large crowd looked on with pride and admiration as "Doc" took its first flight. The people of Wichita remember the strength, power, and grace of those aircraft.