

BOMBER PLANT OR BOOSTER PLANT: FORT WORTH'S DEFENSE UNIT, 1941-1953

by

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ABSTRACT

Once the largest self-contained aircraft manufacturing plant of the world, Fort Worth's division of Consolidated Vultee Aircraft Corporation was constructed in 1942. The Consolidated Vultee Fort Worth plant had a tremendous impact on the western city of Fort Worth by offering employment and boosting its economy. The plant brought high-tech aircraft development, enlarged the skilled workforce, and lifted the city's economy along with its overall population. Until 1940, the city of Fort Worth was undergoing the process of industrialization as a conventional city, with a population of 177,662. In 1950, Fort Worth had increased its population by more than 50 percent, with 277,047 citizens. The Fort Worth plant is the only government-owned aircraft factory, built for World War II, that has remained in operation to this day, managed by Lockheed Martin. This paper encompasses the political process that Fort Worth civic leaders underwent to obtain the plant, the plant's bomber production, and its economic impact on the western city of Fort Worth.

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Introduction

Once the largest self-contained aircraft manufacturing plant in the world, Fort Worth's division of Consolidated Vultee Aircraft Corporation is the only government-owned aircraft factory built for World War II that is still in operation to this day. The Consolidated Fort Worth plant, which opened in 1942, had a tremendous impact on the western city of Fort Worth by offering employment, paying high wages, and boosting its economy. The Fort Worth plant transformed the city's economy from one centered on agriculture to one mostly based on manufacturing, surpassing the stockyards as the city's largest employer. As a war machine factory, the Fort Worth plant's production of bombers, such as B-24 and B-36 airplanes, was a key factor for World War II's victory and the prevention of war in the post-war period.

Consolidated Aircraft Corporation originally produced several types of aircraft for the Army and Navy, and had its headquarters in San Diego, California. Following the U.S. entry in World War II, President Franklin D. Roosevelt created a defense program, sponsoring the construction of new aircraft factories around the country. As part of the nation's industrial mobilization for World War II, Consolidated Aircraft Corporation constructed its new division in the city of Fort Worth. The decision to construct the plant was made after Consolidated's representatives and Fort Worth civic leaders combined effort to convince federal government officials that the city was an ideal site. Both Consolidated Aircraft Corporation and Fort Worth would benefit from the new defense plant. Consolidated Aircraft Corporation eventually merged with Vultee Aircraft Corporation, creating Convair, which managed Fort Worth's plant until 1953.

Before the construction of the plant, Fort Worth was in a stagnant economic period that began after World War I and lasted through the Great Depression era. Fort Worth's new military-

industrial sector shaped the city's economic development. The plant's vast bomber production triggered this change by enlarging the city's skilled workforce and paying high wages. Fort Worth's defense plant represents what came to be known as the military-industrial complex that took place around the United States during and after World War II. Although Eisenhower would warn against the dangers of the military-complex in 1961, the Consolidated plant was responsible for what could be seen as beneficial transformation of Fort Worth. This paper will examine that beneficial period from the plant's construction in 1942 through the incorporation of Consolidated with General Dynamics in 1953. During that period, the plant not only benefitted Fort Worth, but also to the defeat of Germany and Japan in WWII and the maintenance of peace in the early years of the Cold War.

The few historians who have written accounts of Fort Worth's vital aircraft plant incorporate different point of views. E. C. Barksdale, a twentieth century historian, was the first to mention the plant in a book on aviation industry. Fort Worth's plant is mentioned as one of the North Texas manufacturing plants constructed for the aid of World War II. Barksdale emphasizes the process and changes Fort Worth underwent in order to construct the manufacturing unit.¹ Another historian, Brian Cervantez, currently an associate professor at Tarrant Community College, sees the aircraft factory as one of Amon G. Carter's most striking accomplishments.² Focusing attention on the role of World War II in transforming Fort Worth into a military city, J'Nell L. Pate, a historian retired from Tarrant Community College,

¹ E.C. Barksdale, *The Genesis of the Aviation Industry in North Texas* (Austin: Bureau of Business Research, 1958).

² Brian Cervantez, "Amon Carter: The Founder of Modern Fort Worth, 1930-1955," (M.A. thesis, University of North Texas, 2005); Brian Cervantez, "Lone Star Booster: The Life of Amon G. Carter," (PhD dissertation, University of North Texas, 2011).

emphasizes the plant's development as one of the largest producers of heavy bombers and aircraft for World War II.³

Speaking from an economic standpoint, Kathryn Pinkney, a current history professor at the University of Texas at Arlington, argues that the plant brought by Consolidated Aircraft Corporation caused the city of Fort Worth to undergo a major shift, turning from a society economically driven by agriculture to one driven by manufacturing.⁴ Pinkney's account encompasses Fort Worth's economic transformation during World War II and focuses its argument on the city. In consideration of all the existing accounts, this paper focuses on the plant itself. This project will contribute an account that talks about the political process of obtaining the Fort Worth's plant as a group effort of civic leaders. It emphasizes the plant's bomber production and how the city's population and economy was impacted, focusing the argument on the plant itself.

“Where the West Begins”

In June 1849, Brevet Major Arnold, a United States Army officer who fought in the Seminole War and the Mexican War, established Fort Worth as an outpost for the U.S. army.⁵ Fort Worth's establishment was based on its strategic military location sitting on a high bluff with a clear view over the Trinity River.⁶ Specifically, it was located in a central position between two forks that joined to form the Trinity that would allow the protection of settled

³ J'Neil L. Pate, *Arsenal of Defense: Fort Worth's Military Legacy* (Denton: Texas State Historical Association, 2011).

⁴ Kathryn Pinkney, "From Stockyards to Defense Plants, the Transformation of a City: Fort Worth, Texas, and World War II," (PhD dissertation, University of North Texas, 2004).

⁵ Oliver Knight, *Fort Worth: Outpost on the Trinity* (Norman: University of Oklahoma Press, 1953), 11.

⁶ Richard F. Selcer, *Fort Worth: A Texas Original!* (Austin: Texas State Historical Association, 2004), 4.

territory to the east, north, and south.⁷ The purpose of the newly created outpost was for Indian defense, in other words, keeping peace in the Texas frontier.⁸

Throughout the late 1800s, Fort Worth became a major stop on the cattle trail due to the Chisolm Trail, which was a route that led ranchers and cowhands to northern markets.⁹ As the word was spread, Fort Worth became to be known as “Cowtown,” which not only served cattlemen with their necessary supplies before a long road north, but also served them with entertainment like gambling and carousing.¹⁰ The cattle industry was Fort Worth’s first economic security, which gave financial stability to the city by originating relationships between businessmen and cattlemen.¹¹ In 1876, the first train came to Fort Worth, opening the town as a shipping point.¹² The railroad stimulated Fort Worth to develop as a city bringing more jobs and people into it, hence marking the beginning of mass transportation for the city.¹³

Fort Worth entered 1900 with a population of 26,688. In 1902, the packinghouses industry came to Fort Worth as the city’s first major industry, supplying it with thousands of jobs.¹⁴ The packinghouses combined with the stockyards led to a high demand for labor that provoked an influx of immigrants, mainly Mexicans and Eastern Europeans.¹⁵ Due to the packinghouses industry, the city’s population grew to 73,312 in 1910.¹⁶

⁷ Knight, *Fort Worth*, 12-15.

⁸ Selcer, *Fort Worth*, 4.

⁹ Knight, *Fort Worth*, 59; Rita Cook, *A Brief History of Fort Worth: Cowtown Throughout the Years* (Charleston: The History Press, 2011), 15.

¹⁰ Cook, *A Brief History of Fort Worth*, 15.

¹¹ Leonard Sanders, *How Fort Worth Became The Texasmost City* (Fort Worth: Amon Carter Museum of Western Art, 1973), 35.

¹² Cook, *A Brief History of Fort Worth*, 25.

¹³ Selcer, *Fort Worth*, 23.

¹⁴ Cook, *A Brief History of Fort Worth*, 46.

¹⁵ Selcer, *Fort Worth*, 56.

¹⁶ Knight, *Fort Worth*, 175.

In 1911, the construction of a large surface water reservoir started as the city needed better water supply. The city of Fort Worth acquired 5,000 acres for the construction of the lake, completing the project in 1914 at a cost of \$1.6 million.¹⁷ Lake Worth has a storage capacity of 47 million cubic meters and a surface area of 13.2 square kilometers.¹⁸ Lake Worth not only provided an abundant source of safe drinking water, which would make it possible for the city's population to grow, it also had the unintended consequence of creating a body of water suitable for landing seaplanes. Reservoir supporters had no way of knowing it, but their project would play a pivotal role in remaking both Fort Worth's population and its economy.

In 1917, oil was discovered in west Texas, energizing the entire region and having a significant impact in Fort Worth, being only ninety miles east of the farm where the oil was found.¹⁹ This event designated Fort Worth as the gateway to the West Texas oil fields, commenced the skyscraper era, and diversified the city's economy.²⁰ On December 15, 1918, the *Fort Worth Star-Telegram* reported, "five of the nation's leading oil companies either are operating or are building refineries in Fort Worth."²¹ Oil was an important addition to the city's industries, including an increase in the use of the railroad, which helped the city's population to grow from 106,482 in 1920 to 163,477 in 1930.²²

Fort Worth's beginning as a frontier army post was only the opening act. As World War I came to fruition, the U.S. Army came to Fort Worth and its leaders offered more than two thousand acres west of the city for what was known as Camp Bowie.²³ This military installation

¹⁷ Lawana Mauldin, *Lake Worth* (Charlotte: Arcadia Publications, 2010), 9.

¹⁸ Christopher L Braun and Glenn R. Harwell, "Lake Worth Bottom Sediments: A Chronicle of Water-Quality Changes in Western Fort Worth, Texas," (Reston: U.S. Department of the Interior, U.S. Geological Survey, 2004).

¹⁹ Cook, *A Brief History of Fort Worth*, 51.

²⁰ Knight, *Fort Worth*, 199.

²¹ Selcer, *Fort Worth*, 60.

²² Knight, *Fort Worth*, 199.

²³ Knight, *Fort Worth*, 192.

was a training camp for National Guard units, training 100,000 men by the end of the war.²⁴ This marked the beginning of the presence of the U.S. Army in Fort Worth. Moreover, Fort Worth's temperate climate, its human capital, and multiple railroad lines spurred the construction of three Army airfields in the city defeating Dallas, Midland, Waco, Austin, and Wichita Falls for the military contracts.²⁵ Although Fort Worth quickly established itself as a center for military aviation, it was not until World War II that the defense industries became the city's main economic motor.²⁶

“Fort Worth Never Faced a Brighter Future”

From World War I through the Great Depression, Fort Worth stood at an economic threshold of modern industry, but had yet to cross over into industrialization. In the 1930s, Fort Worth's economy still depended on an unskilled labor force and revolved around the agricultural industry.²⁷ As World War II began, Fort Worth's economy needed a boost to grow, modernize, and diversify. At the same time, the United States required an accelerated production of war material. Fort Worth leaders took it upon themselves to bring those needs together in a way that would benefit both their city and their nation.

In 1940, Congress passed a bill, known as the Defense Plant Corporation (DPC), to build new or enlarge existing defense factories.²⁸ This national defense program, announced by President Franklin D. Roosevelt, became the root of Fort Worth's tremendous transformation. Fort Worth's civic leaders, such as Amon G. Carter, *Fort Worth Star-Telegram* publisher, and William Holden, executive director of the Fort Worth Chamber of Commerce, deduced that the

²⁴ Janet L. Schmelzer, *Where The West Begins* (U.S.A: Windsor Publications, 1985), 66.

²⁵ Knight, *Fort Worth*, 52.

²⁶ Heather Marie Stur, “Martial Metropolises: The Impact of World War II on U.S. Cities,” *Journal of Urban History* 40 (2014): 622.

²⁷ Pinkney, “From Stockyards to Defense Plants, the Transformation of a City,” no page.

²⁸ Pate, *Arsenal of Defense*, 67.

mobilization of the American economy in a war-time period might benefit Fort Worth. Indeed, Fort Worth emerged from World War II as an anchor of the United States' defense strategy and as one of the nation's prime aircraft production centers.²⁹

Since the early 1900s, the Fort Worth Chamber of Commerce had been great supporters of aviation and wanted to attract an aircraft factory to the city.³⁰ Fortunately, Amon G. Carter also had a profound interest in aviation. Carter convinced American Airlines to move its southwestern headquarters from Dallas to Fort Worth in 1934, and became one of the primary stockholders of the company.³¹ Carter's acquaintance with Major Reuben Fleet, president of Consolidated Aircraft Corporation, resulted from this shared interest. In May of 1940, Carter received a call from Major Fleet and a letter saying that Consolidated Aircraft Corporation was looking for a site to build another of its plants in the Southwest, and Fort Worth was of interest.³² The Consolidated plant was part of the government-owned contractor-operated (GOCO) arrangement of the nation's "all-out" military-industrial mobilization.³³ On August 24, 1940, the *Fort Worth Star-Telegram* published for the first time the federal government's intentions of looking for "the best locations for defense factories" in the Midwestern states.³⁴ Centrally located and away from any coast, Fort Worth met government's requirements for an inland airplane plant.³⁵ The city's leaders took advantage from this point on and began a campaign to attract the government's attention and bring Consolidated to Fort Worth.

²⁹ Pinkney, "From Stockyards to Defense Plants, the Transformation of a City," no page.

³⁰ Pate, *Arsenal of Defense*, 68.

³¹ Brian Cervantez, "Amon Carter: The Founder of Modern Fort Worth, 1930-1955," 12.

³² Correspondence from Major Fleet to Amon Carter, 27 May 1940, Amon G. Carter Papers, group 14, series I, box 61, Consolidated Aircraft Corporation 1940 (1 of 2), Texas Christian University, Fort Worth, TX.

³³ Mark R. Wilson, *Destructive Creation: American Business and the Winning of World War II* (Philadelphia: University of Pennsylvania Press, 1970), 77.

³⁴ "Knudsen Satisfied with Air Program," *Fort Worth Star-Telegram*, August 24, 1940.

³⁵ Pate, *Arsenal of Defense*, 67.

In July and August of 1940, William Holden made numerous trips to Washington, D.C. and other cities to convince the Army and Navy to choose Fort Worth as a site for either an aircraft factory or a seaplane base.³⁶ Holden was in continuous communication with Major Fleet and Mr. James Kindelberger, president of North American Aviation Company.³⁷ Congressman Fritz Lanham and Texas Senator Morris Sheppard also cooperated with Holden. To Fort Worth's advantage, in the summer of 1940, the Civil Aeronautics Authority built an inland seaplane base on Lake Worth, which served as a mid-continent stop for Navy airplanes flying cross-country.³⁸ Nonetheless, this achievement did not satisfy Fort Worth's leaders, who kept on pushing for a defense plant.

The fall of 1940 marked a decisive period for the city of Fort Worth, its economic development, and the prosperity of its citizens. That fall, the Fort Worth Chamber of Commerce issued a booklet specifically calling for the establishment of an aircraft manufacturing plant, titled *A Brief of the Facilities of Fort Worth and Tarrant County, Texas*. The booklet described all of Fort Worth's facilities as an industrial city, including its location (shown in maps), its markets, labor conditions, transportation facilities, raw materials, climate conditions, cost of living, municipal government, civic advantages, and comparison with other cities such as Dallas, Houston, and Tulsa.³⁹ William Holden distributed copies of this booklet to William Knudsen, member of the National Defense Advisory Commission, in charge of the U.S. military production of planes, and to various members of the War Department.⁴⁰ Harold Foster, director of the Industrial Department of the Fort Worth Chamber of Commerce, made sure that Knudsen

³⁶ Pate, 66.

³⁷ William Holden, letter to Amon Carter, 15 August 1940, Consolidated Aircraft Corporation 1940 (1 of 2).

³⁸ Pate, *Arsenal of Defense*, 66.

³⁹ Fort Worth Chamber of Commerce, "*A Brief of the Facilities of Fort Worth and Tarrant County, Texas*," Consolidated Aircraft Corporation 1940 (1 of 2).

⁴⁰ Pinkney, "From Stockyards to Defense Plants, the Transformation of a City," 84.

and General George Brett, chief of the U. S. Army Air Corps, received a very specific outline of Fort Worth's advantages, stating, "Fort Worth is unexcelled by any city in the Southwest and, perhaps, is outstanding."⁴¹ Foster specified Fort Worth's interest in serving as a site for an inland plant for Consolidated Aircraft Corporation.

Consolidated and the War Department had to choose among Fort Worth, Tulsa, and Oklahoma City to build a defense plant since they desired to expand in the South due to favorable weather conditions.⁴² In December of the same year, it became clear that Fort Worth was Consolidated Aircraft Corporation's preferred location for its new division.⁴³ Major Fleet mentioned Fort Worth as the "ideal" site in a letter to General Brett.⁴⁴ However, federal government officials did not agree with this choice; they wanted either Tulsa or Oklahoma City to serve as the location of the new plant. The War Department had the final choice, since the Advisory Commission to the Council of National Defense and the Army would sponsor and contract the Consolidated plant.⁴⁵ On December 18, General Brett told Major Fleet to submit his plans and estimates for the construction of the government's third plant at Tulsa as Consolidated's new division. Nonetheless, Fort Worth and Consolidated's leaders were not planning on backing off; they kept on pushing, rooting for Fort Worth.⁴⁶

⁴¹ Correspondence from Harold Foster to George Brett, December 1940, Consolidated Aircraft Corporation 1940 (1 of 2).

⁴² Correspondence from William Holden to Amon Carter, 15 August 1940, Consolidated Aircraft Corporation 1940 (1 of 2).

⁴³ Correspondence from Major Fleet to George Brett, 13 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁴⁴ Correspondence from Major Fleet to George Brett, 17 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁴⁵ Correspondence from Frank Knox to Senator, December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁴⁶ Correspondence between Major Fleet and General Brett, 18 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

Compared to Tulsa and Oklahoma City, Fort Worth was the best option for Consolidated's new division, as reported by Van Dusen, vice president of Consolidated Corporation in charge of operations. Fort Worth had better proximity from the center of the city to the site. Fort Worth also offered the best site location with 1,200 acres and natural drainage. By contrast, Tulsa had only 460 acres and Oklahoma City had a site with poor drainage. Fort Worth had the largest labor population and transportation facilities. Also, Fort Worth was a midway transcontinental stop for American Airlines, which offered practicality and no delay for executives and engineers flying in or stopping over. Neither Tulsa nor Oklahoma City could offer these benefits. Fort Worth also offered the best climate conditions, whereas Tulsa and Oklahoma City's bad weather could interfere with production, having 10 percent more chance of rain and temperatures as low as 17 degrees below zero.⁴⁷ Consolidated President, Major Fleet clearly said, "Fort Worth is... the only place we know of in the area selected suitable to our needs."⁴⁸

Fort Worth's biggest advantage was Lake Worth and its seaplane base, since even though the new plant would construct Army bombers, the company could switch or add the construction of bombers for the Navy if the need presented itself.⁴⁹ The adjoining Lake Worth would allow both the Army and the Navy to produce their aircrafts, instead of only the Army, as in Tulsa's or Oklahoma City's case.⁵⁰ Opportunely, the National Defense was planning to increase bomber productivity by the construction of three or four aircraft plants, one of which Consolidated

⁴⁷ Correspondence from Major Fleet to General Brett, 20 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁴⁸ Correspondence from Major Fleet to Admiral Towers, 20 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁴⁹ Correspondence from Amon G. Carter to Edgar Gott, 14 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵⁰ Correspondence from Amon G. Carter to Edgar Gott, December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

Aircraft Corporation would manage and operate.⁵¹ Luckily for Fort Worth, Consolidated Corporation was the only large contractor assigned to the Navy Department; hence, the new division, if located in Fort Worth, would also construct flying boats, Consolidated's major reason for choosing Fort Worth as its plant's new site.⁵² Offering more incentives, the Fort Worth Chamber of Commerce granted Major Fleet and the government seven concessions that county officials and representatives of the city confirmed and pledged would develop if the plant came to Fort Worth.

Fort Worth's civic leaders were not alone in trying to attract a defense plant to their city. The Dallas Chamber of Commerce completed a negotiation with North American Aviation Company in the summer of 1940. The fact that Fort Worth's plant would be built as close as twenty-five or thirty miles from the plant in Dallas could prove "detrimental."⁵³ However, Fort Worth's leaders argued that instead of a disadvantage, the proximity would be an advantage for both plants. In the first place, the two counties, Tarrant and Dallas, had a population of approximately 625,000, supplying an additional employment of 15,000 men for the factory.⁵⁴ Secondly, having skilled labor in both factories would be beneficial since they could conveniently work together by sending groups of employees from one factory to another.⁵⁵ Lastly, having two plants near each other could facilitate the transportation of supplies, materials,

⁵¹ Correspondence from General Brett to Senator Sheppard, 14 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵² Correspondence from Major Fleet to Admiral Towers, 20 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2)

⁵³ Correspondence from Amon G. Carter to Franklin D. Roosevelt, Amon G. Carter Papers, group 14, series I, box 163, Franklin D. Roosevelt, 1934-1936.

⁵⁴ Correspondence from William Holden to Senator Sheppard, 24 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵⁵ Fort Worth Chamber of Commerce, "Unusual Advantages Available at Fort Worth, Texas, For Establishment of a Manufacturing Plant by Consolidated Aircraft Corporation," 14 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

and equipment.⁵⁶ Fort Worth's promoters argued that the city should not be penalized for other factories located in Texas; it had not yet received benefits from the new defense program, and had an economy based on agriculture and unemployment was high.⁵⁷ Therefore, Consolidated's plant could be the solution for Fort Worth's revitalization into a modern economy.

Fort Worth and Consolidated's leaders worked hard to convince the National Defense Commission that Fort Worth was the most logical site for Consolidated's new plant. Holden sent copies of a report titled, "Unusual Advantages Available at Fort Worth, Texas, For Establishment of a Manufacturing Plant by Consolidated Aircraft Corporation" to a number of key officials, including Senator Morris Sheppard, General Brett, Mr. Knudsen, Admiral Towers, and Captain Krause, the assistant director of Aircraft Division of National Defense Advisory Commission.⁵⁸ Amon G. Carter also wrote a letter to Franklin D. Roosevelt, with whom he had a friendly relationship, on December 30. Carter argued that Fort Worth had presented the "best and most practical site" for Consolidated's new division, stating some of its advantages. Carter also suggested that another plant be built in Tulsa, just not Consolidated's division, since Tulsa did not meet the company's needs.⁵⁹ Also, Carter reached out to Elliott Roosevelt, FDR's son, to explain to General E. M. Watson, the President's secretary, why Fort Worth was the most logical

⁵⁶ Correspondence from Dutch Kindelberger to William Knudsen, 31 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵⁷ Correspondence from Amon G. Carter to William Knudsen quoting letter from Fort Worth Chamber of Commerce to Patterson, 22 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵⁸ Correspondence from Amon G. Carter to William Knudsen, 22 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁵⁹ Correspondence from Amon G. Carter to Franklin D. Roosevelt, 30 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

site.⁶⁰ After all, Consolidated Aircraft Corporation preferred the Fort Worth site in order to do a better job in World War II for the government and the nation.⁶¹

On December 31, 1940, the *Fort Worth Star-Telegram* published the headline “Aircraft Plant Here Possible,” announcing that the government might choose between Tulsa and Fort Worth, as Oklahoma City was removed, for the construction of a defense plant: “It appeared last week that Tulsa would get the Consolidated plant, when Fort Worth... interceded and asked that the Texas point be considered for that particular project.”⁶² Likewise, the *Dallas Morning News* published on Jan 1, 1941, “Plane Assembly Plant Slated for Fort Worth,” reporting that both Douglas Aircraft Corporation and Consolidated Aircraft Corporation needed a city to build a plant, and stated, “The latter city [Tulsa] recently was reported to have been chosen by the War Department, when Fort Worth interceded and caused the withholding of final approval.”⁶³

January 3, 1941, was the date that changed Fort Worth forever. After analyzing all the stated facts throughout a conference, Major Fleet, Mr. Knudsen, Mr. Patterson, and General Brett made their final decision. The War Department officially announced the construction of defense plants in both Tulsa and Fort Worth.⁶⁴ Douglas Aircraft Corporation would operate and manage the plant in Tulsa, and Consolidated Aircraft Corporation would operate and manage the one in Fort Worth. The locales of the four defense Air Force plants, chosen by the War Department, were Omaha, Kansas City, Tulsa, and Fort Worth.⁶⁵ Fort Worth’s plant was known as Air Force

⁶⁰ Correspondence from Amon G. Carter to Van Dusen, 22 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁶¹ Correspondence from Amon G. Carter to William Knudsen, 22 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁶² “Aircraft Plant Here Possible,” *Fort Worth Star-Telegram*, December 31, 1940.

⁶³ “Plane Assembly Plant Slated for Fort Worth,” *Dallas Morning News*, January 1, 1941.

⁶⁴ Telegram from Senator Sheppard to Amon G. Carter, 3 January 1941, Consolidated Aircraft Corporation 1941 (1 of 3).

⁶⁵ “Controversy Ended By Double Award; Bombers to Be Made,” *Dallas Morning News*, January 4, 1941.

Plant 4.⁶⁶ The exact location of the plant was more than 400 acres of land owned by the George and Sarah Grant family since 1881. The government bought it through federal condemnation for \$187 an acre. This same family had sold part of their land to the city of Fort Worth for the construction of Lake Worth in 1914 for \$38 an acre.⁶⁷

The year 1941 represented the dawn of a new era for Fort Worth. As the plant was appointed by officials of the War Department, the Navy Department, the National Defense Commission, and Consolidated Aircraft Corporation, the Fort Worth Chamber of Commerce publicly announced the bomber plant and confirmed that the plant would be a *permanent* one and would be extensively used after World War II.⁶⁸ Negotiations began between the city and the War Department with regards to the plant, as well as to the construction of the plant.⁶⁹ The Fort Worth Chamber of Commerce guaranteed seven concessions to Consolidated Corporation and the War Department. Fortunately, city and county citizens endorsed large numbers of bond issues in order to fulfill these concessions.⁷⁰ The first concession offered to furnish all the location on the south side of Lake Worth, which consisted of 1,200 acres for the plant and airport, plus 400 acres extending to the west. The second concession offered the construction of adequate runways for testing the planes, with a main north and south runway 7,000 feet long and a second runway of 5,300 feet. The third concession involved providing a water supply and sewage disposal to the site. The fourth concession offered to provide utilities to the site, such as

⁶⁶ The use of the term "Air Force" was simply used as a general term in that time since the United States Army had the Air Corps as a military aviation arm as part of the larger United States Army. However, in June of 1941, the Air Corps became the United States Army Air Force as a unique entity with greater autonomy.

⁶⁷ Barksdale, *The Genesis of the Aviation Industry in North Texas*, 9-10.

⁶⁸ "'Go Ahead' Signal Given On Bomber Plant and Airport," booklet issued by FWCC, Consolidated Aircraft Corporation 1941 (1 of 3).

⁶⁹ Correspondence from Amon G. Carter to Lyndon Johnson, 30 August 1941, Consolidated Aircraft Corporation 1941 (2 of 3)

⁷⁰ "Membership and Budget Campaign" by William Holden, Consolidated Aircraft Corporation 1941 (1 of 3).

telephone, power and gas lines, and a railroad spur without any cost to the company or to the government. The fifth concession promised main highways to the site. The sixth concession offered housing for the employees of the new plant. Finally, the seventh and most convenient concession for Consolidated offered the accessibility and use of the water runways on Lake Worth if the plant ever needed it for any other National Defense program.⁷¹ Fort Worth pledged to spend up to one million dollars to complete this development.⁷²

President A. A. Lund of the Fort Worth Chamber of Commerce stated that “a vote for the bonds is a blow to Hitler.”⁷³ The bomber plant, with the adjoining industrial airport, had become a life-changing project for the city of Fort Worth, estimated to increase its population by 50,000 people and bring more growth and progress than any other project before. As William Holden, the executive director of the Fort Worth Chamber of Commerce, said, “Fort Worth never faced a brighter future.”⁷⁴

One hundred and five busy days after the War Department chose Fort Worth as a defense plant site, the plant’s construction began.⁷⁵ The War Department awarded the official architectural, engineering, and construction contract of the plant to the Austin Company of Cleveland, Ohio.⁷⁶ The ground-breaking ceremony took place on April 18, 1941, marking the beginning of aviation manufacturing in Tarrant County.⁷⁷ Dignitaries that represented several

⁷¹ Correspondence from Fort Worth Chamber of Commerce to Major Fleet, December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁷² Correspondence from Amon G. Carter to William Knudsen quoting letter from Fort Worth Chamber of Commerce to Patterson, 22 December 1940, Consolidated Aircraft Corporation 1940 (2 of 2).

⁷³ “Citizens Committee Named to Push Plant Bond Issues,” *Fort Worth Star-Telegram*, February 18, 1941.

⁷⁴ “Membership and Budget Campaign” by William Holden, Consolidated Aircraft Corporation 1941 (1 of 3).

⁷⁵ “Bomber Plane Plant Construction Begun 105 Busy Days After War Department Decided on Fort Worth as Site,” *Fort Worth Star-Telegram*, April 19, 1941.

⁷⁶ Bascom Timmons, “Cleveland Firm Selected to Design and Build Unit, Work on Project at Tulsa,” *Fort Worth Star-Telegram*, March 9, 1941.

⁷⁷ Barksdale, *The Genesis of the Aviation Industry in North Texas*, 10.

areas of influence on the defense plant, such as Tarrant County, the city of Fort Worth, and the War Department, gave short speeches.⁷⁸ As one speaker phrased it, the announcement of the \$30 million heavy bomber assembly plant made a “great day not only for Fort Worth, but for the entire country.”⁷⁹

April 18, 1942 marked the realization of Fort Worth’s Consolidated Aircraft Corporation bomber plant, declared by War Department officials as an “outstanding job.”⁸⁰ Completed two months ahead of schedule, the bomber plant had a record-breaking start-up due to the acceleration of the war production program.⁸¹ Figure 1 shows a national base map, where the plant is clearly seen. When built, the plant was the longest aircraft factory in the United States being a mile-long.

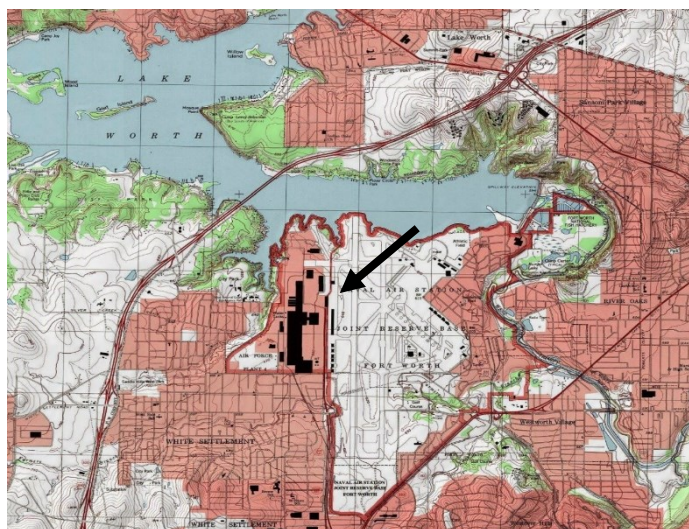


Figure 1. Image is the USGS National Base Map for ArcGIS. The arrow is pointing at the large black rectangle which is the mile-long Fort Worth plant. (“USGSTopo,” nationalmap.gov. <https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer> (accessed October 4, 2017))

The attack on Pearl Harbor, not only led the nation into World War II, but transformed its production into one for victory.⁸² The Fort Worth plant became the biggest single factor in the development of the city, the largest factory in Texas, and one of the nation’s greatest war machine plants.⁸³

⁷⁸ “Program Ground Breaking Ceremony,” 18 April 1941, Consolidated Aircraft Corporation 1941 (1 of 3); Barksdale, *The Genesis of the Aviation Industry in North Texas*, 10.

⁷⁹ “Fort Worth Bomber Plant,” *Texas Press Clipping Bureau Dallas*, April 19, 1941.

⁸⁰ B. N. Timmons, “‘Outstanding Job’ Hailed by Officials,” *Fort Worth Star-Telegram*, April 19, 1941.

⁸¹ “April—A month of Historic Anniversaries,” *Fort Worth Star-Telegram*, April 19, 1941.

⁸² B. N. Timmons, “‘Outstanding Job’ Hailed by Officials,” *Fort Worth Star-Telegram*, April 19, 1941.

⁸³ Amon G. Carter, monologue, 24 March 1942, box 62, Consolidated Aircraft Corporation 1942 (3 of 4).

World War II: “We’re Digging Hitler’s Grave”

As a starting point, the Army Air Force assigned the Fort Worth plant to manufacture the bomber model B-24, called the *Liberator*.⁸⁴ The first B-24, shown in figure 2, was produced and flown more than 100 days ahead of schedule. With this achievement, it was soon obvious that the plant could surpass its expectations. Fort Worth’s plant enabled mass production, beginning with raw materials on one side of the factory and ending with a complete aircraft on the other side. The experience gained from other divisions in Consolidated made Fort Worth’s division particularly successful.⁸⁵



Figure 2. Picture of a Consolidated B-24 Liberator, representing the bomber version of the plane. (“Consolidated B-24 Liberator,” wikipedia.org. https://en.wikipedia.org/wiki/Consolidated_B-24_Liberator (accessed November 12, 2016))

The B-24 was a four-motor engine, turbo-supercharged land-based, high-speed bomber.⁸⁶

Production began in 1942 and, these so-called Liberators of the war performed on Allied fronts, carrying out bombing missions over Germany, Italy, Japan, and the Mediterranean.⁸⁷ A Liberator’s firepower and bomb capacity made it the most daunting aircraft for Allies in World War II.⁸⁸ Up to 1943, the B-24 established the record for the Atlantic crossing of six hours and

⁸⁴ Correspondence from Van Dusen to Tom Girdler, 1 January 1942, Consolidated Aircraft Corporation 1942 (3 of 4).

⁸⁵ George J. Newman, “Liberators’ by Consolidated Vultee,” *Aviation Magazine*, July 1943, Consolidated Vultee Aircraft Corporation 1943-1944.

⁸⁶ “Score of Army and Navy Officials Are Present for Rites,” *Texas Press Clipping Bureau Dallas*, April 18, 1941.

⁸⁷ Booklet by Hill and Knowlton, July 1943, Consolidated Vultee Aircraft Corporation 1943-1944, 5.

⁸⁸ Booklet, “Consolidated Vultee Planes,” University of Texas at Arlington Special Collections, Arlington, Texas.

twelve minutes, carrying a crew of eight to ten men. The high-performance bomber had a top speed of 300 mph and could deliver 10 tons of bombs to a target.⁸⁹

As a transportation modification of the B-24, engineers on the Fort Worth plant developed the *Liberator Express* cargo planes, C-87, shown in figure 3, that same year.⁹⁰ Being

able to carry 20 passengers plus cargo, the C-87

assisted the United States Army Air Forces by

transporting supplies to all the Allied fronts.⁹¹

Its characteristics made it an ideal plane for

transport service.⁹² The Liberator Express held

the Pacific crossing record of less than 36 hours

from Australia to San Francisco, with a top

speed better than 300 miles per hour.⁹³ The B-

24 and the C-87 were tangible demonstrations

of Fort Worth's technological advancement and contribution to World War II.



Figure 3. Picture of a Consolidated C-87 Liberator Express, representing the cargo version of the B-24. (Larry Westin, "Consolac," stinsonflyer.com. <http://www.stinsonflyer.com/consolac/c87-3c.jpg> (accessed November 12, 2016))

The Fort Worth division was vital to World War II. From the first B-24 constructed in the plant to V-J Day, 29,990 warplanes, most of them B-24 bombers, were produced.⁹⁴ The United States helped win the war primarily by selecting specific aircrafts and massively out-producing both Germany and Japan. The key was improving these selected aircraft and maximizing their production.⁹⁵ Harry F. Woodhead was Consolidated's, and eventually Convair's, wartime

⁸⁹ Booklet by Hill and Knowlton, July 1943, 5.

⁹⁰ Booklet by Hill and Knowlton, July 1943, 23; Newman, "Liberators' by Consolidated Vultee," *Aviation Magazine*, July 1943.

⁹¹ Booklet by Hill and Knowlton, July 1943, 6.

⁹² Booklet, "Consolidated Vultee Planes," University of Texas at Arlington Special Collections.

⁹³ Booklet by Hill and Knowlton, July 1943, 6.

⁹⁴ Barksdale, *The Genesis of the Aviation Industry in North Texas*, 11.

⁹⁵ Mark A. Lorell, *The U.S. Combat Aircraft Industry, 1909-2000: Structure, Competition, Innovation* (Santa Monica: RAND, 2003), 60.

president, serving from 1942 to 1948.⁹⁶ In July 1942, Woodhead added a third shift to the Fort Worth's plant schedule, thus adopting a twenty-four-hour, seven-day work week that rapidly began producing bombers, like the Liberators and Coronados, which soon led attacks in the world's fronts.⁹⁷

The year 1943 was a turning point for the city; it was the year Fort Worth's defense plant became part of one of the world's largest aircraft manufacturing companies: Convair. In 1941, Reuben Fleet, president of Consolidated Aircraft Corporation, sold his company to Victor Emanuel, head of the Aviation Corporation. Victor Emanuel purchased 440,000 shares from Consolidated Aircraft, obtaining 34 percent of Consolidated common stock.⁹⁸ One of the Aviation Corporation's subsidiaries was a California airplane builder, Vultee Aircraft Corporation.⁹⁹ Victor Emanuel then appointed Tom Girdler as chairman of both Consolidated and Vultee aircraft corporations.¹⁰⁰ Both companies saw advantages in coordinating activities to guarantee the high production of aircraft needed for World War II; therefore, they decided to merge.¹⁰¹ On Wednesday, March 17, 1943, Tom M. Girdler announced the merger between Consolidated Aircraft Corporation and Vultee Aircraft Corporation.¹⁰²

The newly created company was Consolidated Vultee Aircraft Corporation, better known as Convair. This merger brought three new heads to the company: Tom Girdler as chairman of the board, Harry Woodhead as president, and M. Laddon as executive vice president. Girdler

⁹⁶ "Major Fleet was First President of Convair," *Fort Worth Star-Telegram*, May 31, 1953.

⁹⁷ Booklet, "Performance in Combat," University of Texas at Arlington Special Collections; Pate, *Arsenal of Defense*, 76.

⁹⁸ Pate, *Arsenal of Defense*, 75.

⁹⁹ Diana J. Kleiner, "Consolidated Vultee Aircraft Corporation," *Handbook of Texas Online*, Texas State Historical Association, 2010, accessed November 16, 2016, <http://www.tshaonline.org/handbook/online/articles/dlc05>.

¹⁰⁰ Pate, *Arsenal of Defense*, 75.

¹⁰¹ Booklet, "History of the Corporation," University of Texas at Arlington Special Collections.

¹⁰² "Consolidated and Vultee in Merger," *Fort Worth Star-Telegram*, March 18, 1943.

believed that the merger would not only help energize war production, but would also be useful for post-war rehabilitation.¹⁰³ Fort Worth's defense plant was now part of thirteen divisions located throughout the nation from coast to coast in ten states, and represented one of the largest divisions.¹⁰⁴

That same year, Fort Worth's division of Convair turned into *the* plant completely based on efficiency, ranking the second in efficiency of production between all United States producers of heavy bombers.¹⁰⁵ Fort Worth's plant was "the largest windowless factory" and "the largest self-contained aircraft manufacturing plant in the world."¹⁰⁶ General Gerald Brant, commander of the Gulf Coast Air Forces Training Center, declared, "Nowhere have I ever seen more efficiency in production and more time-saving details than in this magnificent creation that wasn't even here two years ago [Fort Worth's division]." He added, "We're digging Hitler's grave."¹⁰⁷ In mid-1943, Liberators attacked the Ploesti oil fields in southern Europe, cutting off one-third of Hitler's oil supply. After this event, Liberators often attacked Hitler's defense installations and war plants in Europe.¹⁰⁸ It was clear that Liberators played a vital role in World War II. The War Production Board, in 1943, recognized Consolidated Vultee as the "world's largest producer."¹⁰⁹

¹⁰³ "Consolidated and Vultee in Merger," *Fort Worth Star-Telegram*, March 18, 1943.

¹⁰⁴ Pate, *Arsenal of Defense*, 76.

¹⁰⁵ Pate, *Arsenal of Defense*, 77.

¹⁰⁶ Newman, "'Liberators' by Consolidated Vultee," *Aviation Magazine*, July 1943.

¹⁰⁷ "Brant Visits Consair Plant," *Fort Worth Star-Telegram*, February 14, 1943.

¹⁰⁸ Booklet, "Performance in Combat," University of Texas at Arlington Special Collections.

¹⁰⁹ Booklet, "Production," University of Texas at Arlington Special Collections.

With the appearance of Convair, Fort Worth's unit started building all types of aircraft, from the heaviest bombers to the 'flying jeep.'¹¹⁰ The L-5, *Flying Jeep Stinson*, was a light, highly maneuverable airplane that spotted targets, directed gun fire, and transported men in emergencies. This key airplane carried radio equipment for communication with ground units and other planes.¹¹¹ Other productions were the PBY and the PB2Y-3, both flying boats, and the A-31, an Army bomber. The PBY, known as



Figure 4. Picture of a Consolidated PB2Y-3 Coronado (pinterest.com. <https://www.pinterest.com/pin/411586853414966022/> (accessed November 12, 2016))

Catalina, was a high-wing, two-engine aircraft used as an ocean patrol bomber, in service of the United States and British navies. The *Catalina* had a high speed of 193 miles per hour, and a range of 3,100 miles at 10,000 feet when fully loaded.¹¹² The PB2Y-3, known as *Coronado*, shown in figure 4, was used as a patrol bomber that attacked Japanese bases and transported war cargo, capable of carrying 30,000 pounds of cargo and 10 crewmen.¹¹³ It was the largest Consolidated Vultee plane in mass production, as of 1943, and the Navy's most powerful bomber.¹¹⁴ The Coronados once bombed Wake Island and were proclaimed the Navy's "secret weapon."¹¹⁵ The A-31, known as *Vengeance Dive Bomber*, was a monoplane with a bomb load capacity of 2,000 lbs. and a long range that enabled it to penetrate into the enemy's territory. It was a hydraulically-controlled aircraft that allowed the pilot complete control and a high degree

¹¹⁰ "Consolidated and Vultee in Merger," *Fort Worth Star-Telegram*, March 18, 1943.

¹¹¹ Booklet by Hill and Knowlton, July 1943, 19.

¹¹² Booklet by Hill and Knowlton, July 1943, 9.

¹¹³ Booklet, "Consolidated Vultee Planes," University of Texas at Arlington Special Collections; Booklet by Hill and Knowlton, July 1943, 11.

¹¹⁴ Booklet by Hill and Knowlton, July 1943, 11.

¹¹⁵ Booklet, "Performance in Combat," University of Texas at Arlington Special Collections.

of accuracy in aiming the bombs. Both the Army Air Force and the Royal Air Force utilized them.¹¹⁶

In 1944, Convair delivered a total of 131,000,000 pounds of airplanes and spare parts throughout the year, which is approximately 4,760 planes, breaking the 1943 record by 5,000,000 pounds, or approximately 180 airplanes.¹¹⁷ During this record-breaking year, the company built 14 different types of planes. Between Pearl Harbor and the end of 1944, the Consolidated Vultee Aircraft Corporation delivered 30,164 airplanes.¹¹⁸ Throughout World War II, Convair produced more heavy bombers than any other company.¹¹⁹ By the end of the war, Fort Worth emerged as one of the nation's foremost aviation centers and a keystone for America's defensive strategy.¹²⁰

Convair: Booming Fort Worth's Economy

Fort Worth's division of Convair was not only one of the most efficient war-time producers, but also was the catalyst for rapid industrialization for the city. In response to the availability of employment through Convair and allied industries, Fort Worth's population grew through the migration of rural Texans seeking new opportunities.¹²¹ The aircraft manufacturing industry laid the foundation for future industrial development.¹²²

In 1943, Fort Worth's plant reached a peak of 30,600 employees for war operations.¹²³ After the war was over, the Fort Worth division of Convair adjusted its employment to an

¹¹⁶ Booklet by Hill and Knowlton, July 1943, 15.

¹¹⁷ "Consolidated's Year," *Fort Worth Star-Telegram*, February 21, 1945.

¹¹⁸ "Consolidated's Year," *Fort Worth Star-Telegram*, February 21, 1945.

¹¹⁹ Annual Report, "Convair 1949," by Convair, Consolidated Vultee Aircraft Corporation 1950, 17.

¹²⁰ Pinkney, "From Stockyards to Defense Plants, the Transformation of a City," 106.

¹²¹ Pinkney, 8.

¹²² Pinkney, 7.

¹²³ "Manufacturer's Whim Located Convair Plant at Lake Worth," *Fort Worth Star-Telegram*, May 31, 1953.

average of 23,000 persons with an annual payroll of more than \$60,000,000.¹²⁴ The U.S. Chamber of Commerce estimated that “every employed industrial worker furnished direct support for three persons and indirect support for seven persons other than himself.”¹²⁵ In 1944, the Fort Worth Chamber of Commerce’s Annual Report stated employment to have increased 260 percent since 1940, and payrolls 500 percent as well.¹²⁶ Convair’s payroll, therefore, had a dramatic and visible effect on Fort Worth’s economy. For instance, Fort Worth’s buying power in 1939 totaled around \$562,463,000, growing to more than double, \$1,202,017,000, in 1943.¹²⁷

Furthermore, from 1937 to 1940 the aggregate number of new manufacturing jobs in Fort Worth was 5,798 with annual payrolls of \$8,189,500. Exceptionally, in 1941 alone, there were 11,949 new manufacturing jobs with annual payrolls of almost \$16,000,000. In 1943, the aggregated number went up to 22,653 new manufacturing jobs with annual payrolls of nearly \$36,000,000.¹²⁸ Throughout World War II, Convair annually drove millions of dollars into Fort Worth’s economy: \$10 million in 1942, \$55 million in 1943, and \$60 million in 1944.¹²⁹

Besides the increase in purchasing power, Convair and its employees benefited Fort Worth with charitable monetary contributions. August C. Esenwein, division manager of Convair’s Fort Worth plant, said, “the most valuable asset we have is our employees. As civic boosters they not only become better employees, but better citizens.”¹³⁰ In 1944, alone, Fort Worth Convair’s employees contributed \$82,000 and Convair itself contributed \$30,000 to the Tarrant County Red Cross drive. They both also contributed \$52,000 and \$47,000 to the Fort

¹²⁴ Correspondence from R. G. Mayer to Amon G. Carter, 19 March 1945, Consolidated Vultee Aircraft Corporation 1945-1947.

¹²⁵ Pinkney, “From Stockyards to Defense Plants, the Transformation of a City,” 101.

¹²⁶ Pinkney, 114.

¹²⁷ Pinkney, 101.

¹²⁸ Pinkney, 115-116.

¹²⁹ Pinkney, 114.

¹³⁰ “Employees Join In Community Work,” *Fort Worth Star-Telegram*, May 31, 1953.

Worth Community War Chest, which helped fuel the war. Employees purchased more than \$12,000,000 in war bonds, and Convair contributed \$10,300,000 to Tarrant County quotas in the 4th, 5th, and 6th War Loan drives.¹³¹ Roland G. Mayer, division manager of the Consolidated Vultee plant, stated, “These employee and company contributions to the progress of Fort Worth and its humanitarian needs and to our nation’s war efforts give me considerable personal pride.” Mayer added that the plant and its employees worked “not only to help win the war and the peace, but help to make Fort Worth one of the finest communities in these United States.”¹³²

As the war ended and the nation’s entire aircraft industry quieted down, Fort Worth’s plant hit a post-war low of 6,400 employees in December of 1945.¹³³ However, by the end of the war, Fort Worth’s metropolitan population had increased by 85,000 people, starting with 117,662 in 1940.¹³⁴ Even though the war was over, the relationships between the city and the United States Air Force Army were not, which resulted in Fort Worth’s growth post-war. Convair had twin objectives by the end of the war: production efficiency and design excellence. By 1945, the corporation started to analyze and prepare to incorporate into the business world through the sale of commercial and private planes as well as military aircraft.¹³⁵

¹³¹ Correspondence from R. G. Mayer to Amon Carter, 19 March 1945, Consolidated Vultee Aircraft Corporation 1945-1947.

¹³² Correspondence from R. G. Mayer to Amon Carter, 19 March 1945.

¹³³ “Manufacturer’s Whim Located Convair Plant at Lake Worth,” *Fort Worth Star-Telegram*, May 31, 1953.

¹³⁴ Ty Cashion, *The New Frontier: A Contemporary History of Fort Worth & Tarrant County* (San Antonio: Historical Publishing Network, 2006), 90; Barksdale, *The Genesis of the Aviation Industry in North Texas*, 12.

¹³⁵ “Consolidated’s Year,” *Fort Worth Star-Telegram*, February 21, 1945.

Post-World War II: “Fort Worth: Where B-36 and West Begin”

The new realities of the post-WWII world demanded that Fort Worth’s bomber plant not only maintain certain production marks, but also assume a leadership role in research and development to remain relevant in the Cold War aircraft industry. One of Convair’s major research advances involved complex internal components, such as software. The company advanced on both military and commercial technology, especially electronics such as applied to missiles. Convair had also designed both piloted and pilotless aircraft using all types of jet and rocket propulsion.¹³⁶ In addition to the design and development of aircraft, Convair contributed to the safety of aviation with its thermal anti-icer.¹³⁷ Convair was the only company in the world developing twin-engine commercial transports, while also creating a new B-102 and B-58 and working on an nuclear-powered aircraft.¹³⁸ The research and development done by Convair benefitted Fort Worth and opened its doors for future investment.

The Fort Worth division’s greatest contribution to the aircraft industry was the B-36, known as the *Peacemaker*. Many versions of it were designed and version B-36D is shown in figure 5. The B-36 aircraft’s design began in 1941 for the purpose of war.¹³⁹ Nazi Germany’s



Figure 5. Picture of the Convair B-36D Peacemaker. (“Convair B-36 – The Ultimate Peacemaker,” [wordpress.com](https://acesflyinghigh.wordpress.com/2014/08/06/convair-b-36-the-ultimate-peacemaker/), <https://acesflyinghigh.wordpress.com/2014/08/06/convair-b-36-the-ultimate-peacemaker/>)

¹³⁶ Annual Report, “Convair 1949,” by Convair, Consolidated Vultee Aircraft Corporation 1950, 17.

¹³⁷ Booklet, “Research,” University of Texas at Arlington Special Collections.

¹³⁸ Ira Cain, “Convair Dug in to Stay,” *Fort Worth Star-Telegram*, June 15, 1953. Note: only some research and developments can be mentioned because of the limitations of national security, which is confidential information.

¹³⁹ “B-36-A1 Becomes ‘City of Fort Worth’ As Thousands See FWAAF Ceremony,” *Fort Worth Star-Telegram*, August 4, 1947.

aggression and the Japanese attack on Pearl Harbor triggered the development of the *Peacemaker*.¹⁴⁰ However, even with the Air Force's urgency for a long-range bomber, the program progressed slowly, and Convair completed development of this bomber only after World War II. Convair counted on its potential power to be sufficient to act as a deterrent to the Soviet Union in a Cold War environment.

Convair flight-tested the B-36, a long range nuclear bomber, on August 8, 1946.¹⁴¹ The B-36 was capable of flying 10,000 miles without refueling, had great speed and load-carrying capacity, and had a target altitude of at least 40,000 feet. This bomber completed a 6,000-mile flight at an average speed of 300 miles per hour with 311,000 pounds of load, at an altitude of 30,000 feet.¹⁴² The B-36 was "one of the nation's chief weapons for world peace."¹⁴³ It was the largest, most powerful, and most destructive of all air weapons able to carry an atomic bomb.¹⁴⁴ The B-36 was America's first true intercontinental bomber, and Convair maintained it as the greatest bomber of its kind through intensive development, undergoing several modifications. The B-36 had a remarkable ability to absorb new developments.¹⁴⁵

In 1947, the Air Force dedicated the bomber B-36-A1 as "City of Fort Worth."¹⁴⁶ The Fort Worth Convair plant built the B-36-A1, announced in dedication to the city on a ceremony held at Fort Worth Army Air Field. Amon G. Carter said, "In naming this great fighting ship the 'City of Fort Worth,' we dedicate it not to war but to the protection of our nation and the

¹⁴⁰ Marcelle Size Knaack, *Encyclopedia of U.S. Air Force Aircraft and Missile Systems*, Vol. 2 (Washington, D.C.: Office of Air Force History, 1988), 3.

¹⁴¹ Welman A. Shrader, *Fifty Years of Flight: A Chronicle of the Aviation Industry in America, 1903-1953*, (Cleveland: Eaton Manufacturing Company, 1953), 92.

¹⁴² Robert Wear, "B-36 Superbomber," *Fort Worth Star-Telegram*, October 9, 1948.

¹⁴³ Amon G. Carter's draft speech for FWAAF Ceremony, Consolidated Vultee Aircraft Corporation 1945-1947.

¹⁴⁴ Knaack, *Encyclopedia of U.S. Air Force Aircraft and Missile Systems*, 3.

¹⁴⁵ Annual Report, "Convair 1949," by Convair, Consolidated Vultee Aircraft Corporation 1950, 21.

¹⁴⁶ "'City of Fort Worth' is Dedicated," *Fort Worth Star-Telegram*, August 4, 1947.

furtherance of peace.... God forbid that there should ever be another war.”¹⁴⁷ The citizens of Fort Worth were beyond proud and grateful that the Army Air Forces named the B-36-A1 in honor of the city.¹⁴⁸ The fact that such a magnificent bomber was named after the city, would bring Fort Worth to the eyes of thousands.¹⁴⁹ Years later, Lionel Bevan, president of the Retail Merchants Association, said, “With the building of the B-36 it has focused the eyes of the entire country on Fort Worth as one of the progressive cities of Texas.”¹⁵⁰

At the FWAAF ceremony, General Ramey declared the B-36 to be “a milestone in aviation development most necessary to national defense.” He added, “World peace, and our safety from the horrors of an atomic war... depend upon the degree of superiority we maintain over a possible aggressor enemy in aircraft design and performance. The B-36, the world’s largest and longest-range airplane today, is foremost in that degree of superiority.”¹⁵¹ Even more noteworthy, The Fort Worth plant was the only producer of the B-36.¹⁵²

With the rise of the Cold War, Stuart Symington, first Secretary of the Air Force, declared the production of the B-36 should continue and not be interrupted. Symington took this step because the United States would need the B-36 if it went to war against a land-locked country that armies and sea vessels could not reach quickly. The B-36 was one of the most important developments in the Air Force.¹⁵³ In June 1948, the Air Force received the first combat

¹⁴⁷ “B-36-A1 Becomes ‘City of Fort Worth’ As Thousands See FWAAF Ceremony,” *Fort Worth Star-Telegram*, August 4, 1947.

¹⁴⁸ Amon G. Carter’s draft speech for FWAAF Ceremony, Consolidated Vultee Aircraft Corporation 1945-1947.

¹⁴⁹ Correspondence from William Holden to Amon G. Carter, 31 July 1948, Consolidated Vultee Aircraft Corporation 1948.

¹⁵⁰ “Convair Contribution To Growth Here Hailed,” *Fort Worth Star-Telegram*, May 31, 1953.

¹⁵¹ “B-36-A1 Becomes ‘City of Fort Worth’ As Thousands See FWAAF Ceremony,” *Fort Worth Star-Telegram*, August 4, 1947.

¹⁵² Pate, *Arsenal of Defense*, 91.

¹⁵³ “Symington Says Production of B-36 To Continue Without Interruption,” *Fort Worth Star-Telegram*, May 27, 1948.

B-36.¹⁵⁴ In 1949, Convair designed and tested an experimental version of the B-36; the model had twin jet pods as supplemental power, giving the aircraft more speed: 450 miles per hour.¹⁵⁵

Consolidated Vultee Aircraft Corporation's president and general manager, La Motte T. Cohe, referred to the B-36 and the Fort Worth plant as "an important part of the nation's overall air power and the finest aircraft plant in the world."¹⁵⁶ In 1949, the B-36 already had an assigned role in Air Force strategic planning for defense and attack in atomic warfare. The Air Force proclaimed it a "peacemaker" since it was going to (hopefully) discourage enemy attack with its capability of delivering atomic bomb retaliation.¹⁵⁷

In 1948, Convair had become extremely active in producing missiles with contracts sponsored by both the Navy and the Air Force, and produced Convair-Liners for airlines commercial.¹⁵⁸ The Fort Worth plant was in a position to become a permanent aircraft manufacturing center and "the finest big bomber plant in the world."¹⁵⁹ Floyd B. Odlum, chairman of the board of Consolidated Vultee Aircraft Corporation, said, "Everything tends to the conclusion that this will be a permanent plant to back up the 70-group Air Force program."¹⁶⁰

That same year, production plans for the giant B-49 *Flying Wing* in Convair's Fort Worth plant took place.¹⁶¹ Fort Worth was ready to give its nation the longest-range jet plane in the world. The aircraft could carry 30,000 pounds of bombs, and had a speed of 500-miles per

¹⁵⁴ "Air Force Receives First Combat B-36," *Fort Worth Star-Telegram*, June 27, 1948.

¹⁵⁵ "B-36 Jet Plane Gets Test Flight," *Fort Worth Star-Telegram*, March 27, 1949.

¹⁵⁶ Robert Wear, "Air Force Shows World B-36 Ready for Combat," *Fort Worth Star-Telegram*, October 9, 1948.

¹⁵⁷ "Eager Editors Inspect B-36s Inside and Out," *Fort Worth Star-Telegram*, November 4, 1949.

¹⁵⁸ Annual Report, "Convair 1949," by Convair; Shrader, *Fifty Years of Flight*, 109.

¹⁵⁹ "Convair Head Due Here to Supervise Flying Wing," *Fort Worth Star-Telegram*, July 23, 1948; "Convair to Stay at Top in Aviation," *Fort Worth Star-Telegram*, July 7, 1948.

¹⁶⁰ "Convair to Stay at Top in Aviation," *Fort Worth Star-Telegram*, July 7, 1948.

¹⁶¹ "Convair Head Due Here to Supervise Flying Wing," *Fort Worth Star-Telegram*, July 23, 1948.

hour.¹⁶² It contained eight General Electric jet engines, producing a 32,000 sustained horsepower, more than any other airplane in the world at that time.¹⁶³ The B-49 measured 172 feet from wing tip to tip, being seven feet thick in the center, plus having a capacity of 13 crewmen and 6 off-duty crewmen.¹⁶⁴ Convair's Fort Worth plant became one of the major aircraft centers when they start building the B-49 from Northrop Aircraft.¹⁶⁵ The Flying Wing was developed by John K. Northrop, president of the company, who believed the Fort Worth plant was better adapted to production line of large aircraft than was the Northrop plant at Hawthorne, California.¹⁶⁶ In 1950, Convair was the second-largest contractor for United States Air Force aircraft purchases.¹⁶⁷ By 1951, it was involved in the production of at least 170 giant atomic bombers with more on the way due to the Korean War.¹⁶⁸

In 1951, the B-36 was still the world's biggest bomber, and the Fort Worth Convair plant was the world's largest integrated aircraft manufacturing unit in the world, due to its B-36 production.¹⁶⁹ However, in 1952, the Boeing B-52 made the B-36 bomber obsolete and, at the same time, became the finest airplane yet built.¹⁷⁰ In spite of its loss, the B-36 was once the "mainstay" of the Air Force and one of the principle keys for national defense.¹⁷¹ The *Fort*

¹⁶² "200,000-Pound Flying Wing Is the World's Longest-Range Jet Plane," *Fort Worth Star-Telegram*, July 23, 1948.

¹⁶³ "Convair," *Fort Worth Star-Telegram*, July 23, 1948.

¹⁶⁴ "200,000-Pound Flying Wing Is the World's Longest-Range Jet Plane," *Fort Worth Star-Telegram*, July 23, 1948.

¹⁶⁵ "Shift Made in Plant's Executives," *Fort Worth Star-Telegram*, July 23, 1948.

¹⁶⁶ "Made in Plant's Executives," *Fort Worth Star-Telegram*, July 23, 1948.

¹⁶⁷ Shrader, *Fifty Years of Flight*, 122.

¹⁶⁸ "B-36 Output Quietly Stepping Up In Big Fort Worth Convair Plant," *Fort Worth Star-Telegram*, March 18, 1951.

¹⁶⁹ "B-36 Output Quietly Stepping Up in Big Fort Worth Convair Plant," *Fort Worth Star-Telegram*, March 18, 1951.

¹⁷⁰ Knaack, *Encyclopedia of U.S. Air Force Aircraft and Missile Systems*, 206.

¹⁷¹ Irvin Farman, "New Chairman Sees Convair Plant Here as Fixture in Permanent Defense Setup," *Fort Worth Star-Telegram*, June 16, 1953.

Worth Star-Telegram stated, “In 12 years, the plant which had been thrown up in record time to build B-24s, was now an industrial city containing the major deterrents to another world war.”¹⁷²

Post-World War II: from Cowtown to Bombertown

April 18, 1951 marked the tenth anniversary of breaking ground at the Convair facility in Fort Worth. Ben Ramsey, president of the Texas Senate, stated that Convair’s ground-breaking ceremony marked “a momentous development which surpassed the then bold dreams of the important role Convair was destined to play in security of the United States through its product and the economic life of Fort Worth, Tarrant County, and a sizeable part of the State of Texas.”¹⁷³ The U.S. Census of Manufactures stated that Fort Worth, from 1939 to 1947, “topped all other major cities in the United States for the increase of production workers and industrial payrolls.”¹⁷⁴

By the post-war years, aviation had become big business in Fort Worth and Convair had replaced the stockyards as the city’s largest employer.¹⁷⁵ Cowtown had become Bombertown. Fort Worth increased its population by 59.2 percent between 1940 and 1950, going from 177,662 citizens to 278,778.¹⁷⁶ As a major employer, Convair had a direct impact over the city’s population growth. Furthermore, figure 6 shows a map of Tarrant County’s population in 1950 divided into census-tract levels. It shows that the census tract with the highest population is the area in proximity to the Convair plant. The mile-long plant is located where the black rectangle is placed on the map. In 1941, Fort Worth incorporated White Settlement as a new residence for

¹⁷² “Manufacturer’s Whim Located Convair Plant at Lake Worth,” *Fort Worth Star-Telegram*, May 31, 1953.

¹⁷³ “Senate Resolution No. 164,” signed by Ben Ramsey, 18 April 1951, Consolidated Vultee Aircraft Corporation 1951 (1 of 3).

¹⁷⁴ Ronald Stead, “Fort Worth: Where B-36 and West Begin,” *The Christian Science Monitor*, March 24, 1950.

¹⁷⁵ Pinkney, “From Stockyards to Defense Plants, the Transformation of a City,” 112.

¹⁷⁶ Pinkney, 113.

the plant's employees. White Settlement is the region exactly on the census tract that shows a population of 10,827 in 1950. This census tract is the highest census tract of Tarrant County.

This growth has a direct correlation with the construction of the plant.

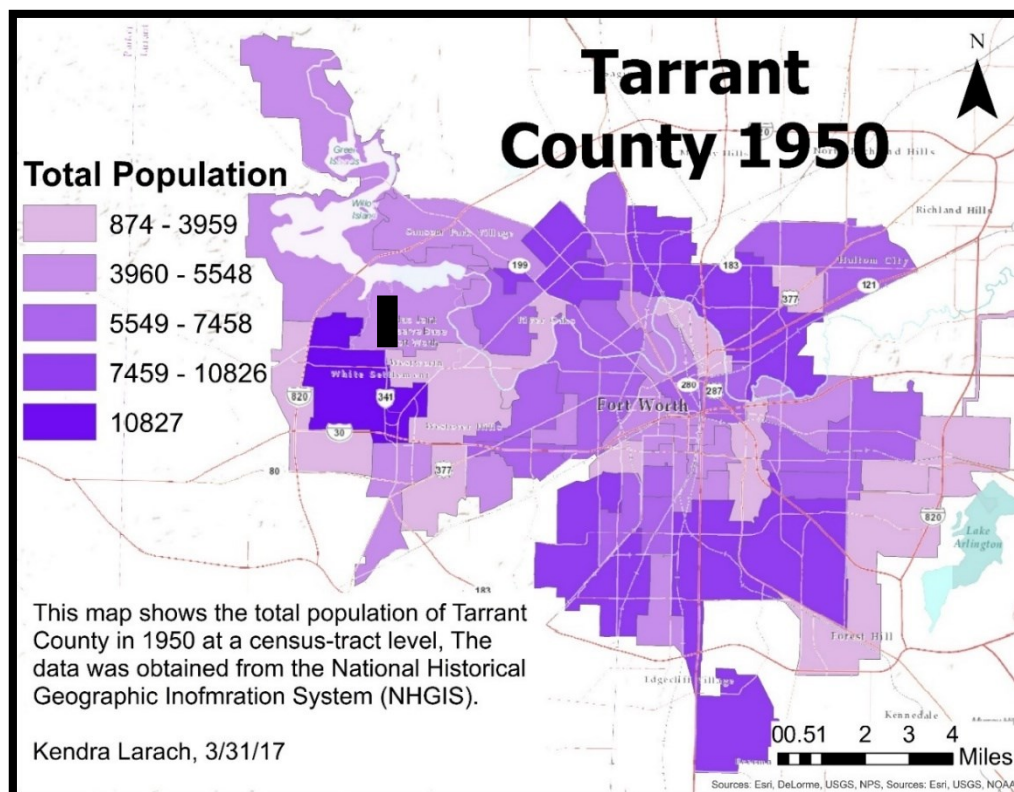


Figure 6. Tarrant County's population in 1950. Map by Kendra Larach. Data from the National Historical Geographic Information System (NHGIS).

Furthermore, during the same 10 years, the number of jobs in manufacturing went up from 7,010 in 1940 to around 30,000 in 1950. Plus, unemployment went down from 12,776 to 3,686.¹⁷⁷ Figure 7 and 8, show four different occupations in Tarrant County, comparing years 1940 and 1950. Operatives is the occupation that represents skilled manufacturing labor. Figure 7 shows how male operatives grew from 9,207 in 1940 to 20,476 in 1950, being the occupation with the biggest increase. Both male and female operatives more than doubled in ten years at

¹⁷⁷ Pinkney, "From Stockyards to Defense Plants, the Transformation of a City," 113.

different scales. Figure 8 shows female operatives increased from 3,085 in 1940 to 6,309 in 1950. By 1950, manufacturing jobs accounted for more than 24 percent of the city’s employees.¹⁷⁸

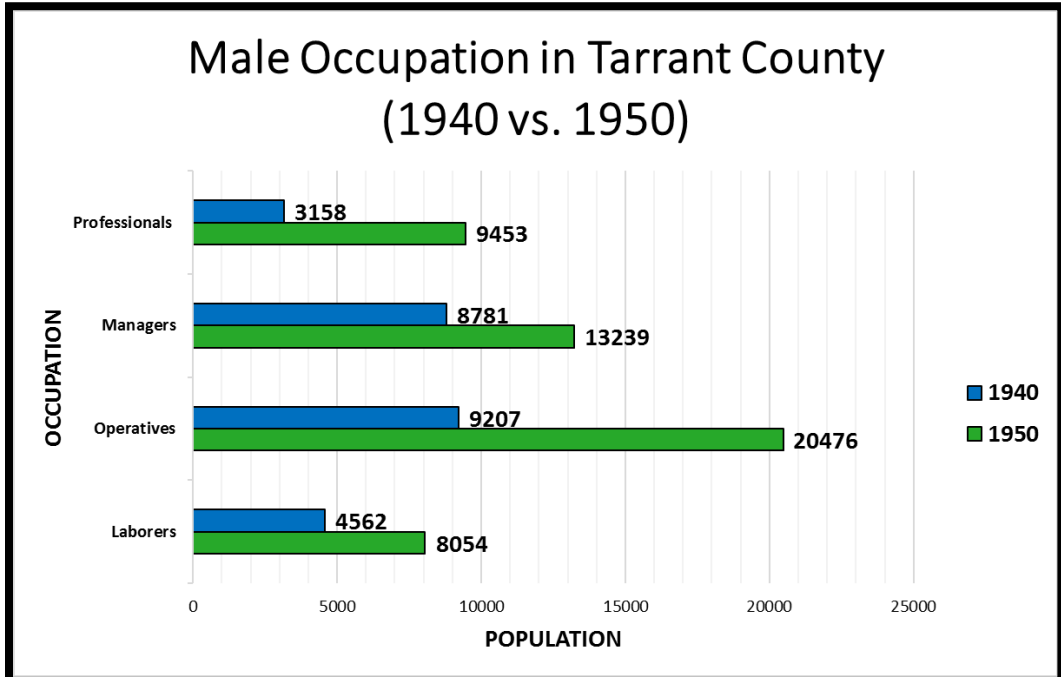


Figure 7. Male Occupation in Tarrant County. Chart by Kendra Larach. Data from the National Historical Geographic National Geographic Information System.

¹⁷⁸ Pinkney, “From Stockyards to Defense Plants, the Transformation of a City,” 112.

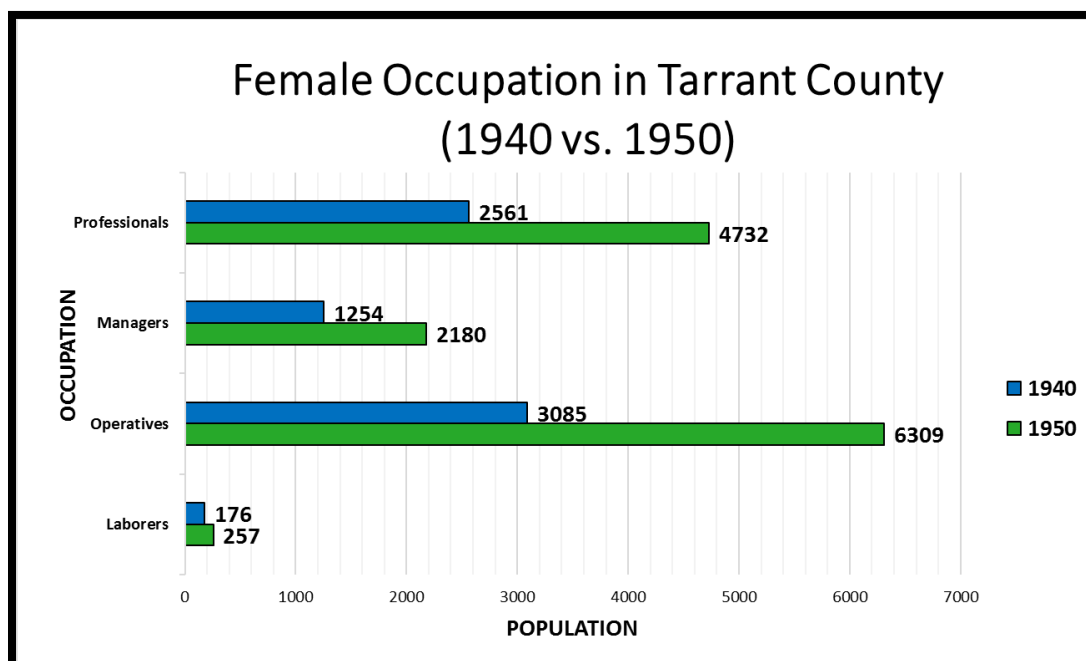


Figure 8. Female Occupation in Tarrant County. Chart by Kendra Larach. Data from the National Historical Geographic National Geographic Information System.

Community leaders in Fort Worth praised the plant, stating that Convair was “one of the most important factors in the city’s great growth of the last decades.”¹⁷⁹ They argued that the plant’s employments and their payrolls pumped tremendous amounts of money into the city’s businesses. J. C. Llewellyn, president of the Fort Worth Real Estate Board, said “Convair marks the transition from a little country town into a metropolitan city as far as real estate is concerned. It has had a terrific impact on property values. Certainly it has been an influential factor in the growth of our city, both residential and business.”¹⁸⁰ By 1950, over \$300 million payroll dollars had streamed into Fort Worth from Convair’s plant.¹⁸¹ Lionel Bevan, president of the Retail Merchants Association also said that the payroll “has been a tremendous factor in growth of the retail business of the city.”¹⁸² J. Lee Johnson Jr., president of the Fort Worth Clearing House

¹⁷⁹ “Convair Contribution To Growth Here Hailed,” *Fort Worth Star-Telegram*, May 31, 1953.

¹⁸⁰ “Convair Contribution To Growth Here Hailed,” *Fort Worth Star-Telegram*, May 31, 1953.

¹⁸¹ Pinkney, “From Stockyards to Defense Plants, the Transformation of a City,” 114.

¹⁸² “Convair Contribution To Growth Here Hailed,” *Fort Worth Star-Telegram*, May 31, 1953.

Association said, “for in addition to their own plant area, there are entire sections of Fort Worth which before Convair’s arrival were only prairie.”¹⁸³

In 1950, Fort Worth had around 650 different industries. Fort Worth improved infrastructure with more than twenty million dollars in bonds for municipal improvements such as highways, buildings, and parks.¹⁸⁴ Additionally, the city had land acquisitions through annexations and more than 4,000 new homes were built. Growth in the business sector was remarkable as other major industries located plants in Fort Worth. During 1948 a total of 871 businesses opened or expanded. Among the new businesses were General Steel Company, International Harvester, and Westing-house. Employment raised to 138,000 in the city.¹⁸⁵

In 1950, Fort Worth’s plant had around 13,000 employees; however, by the end of the year, one-third more men were hired to speed production of the B-36.¹⁸⁶ In the start of 1951 it had around 28,000 employees with an all-time high payroll of \$75,00,000.¹⁸⁷ By October of 1951, Fort Worth’s plant had reached its employment peak of 30,800, breaking the war-time record.¹⁸⁸ This made the plant “the largest single aircraft family in the United States” and paid among the highest wages in the area resulting in a higher amount of money flowing into Fort Worth’s businesses.¹⁸⁹ A direct correlation between the Convair plant and business activity

¹⁸³ “Convair Contribution To Growth Here Hailed,” *Fort Worth Star-Telegram*, May 31, 1953.

¹⁸⁴ Schmelzer, *Where The West Begins*, 78.

¹⁸⁵ Schmelzer, 79.

¹⁸⁶ Ronald Stead, “Fort Worth: Where B-36 and West Begin,” *The Christian Science Monitor*, March 24, 1950.

¹⁸⁷ “Senate Resolution No. 164,” signed by Ben Ramsey, April 18, 1951, Consolidated Vultee Aircraft Corporation 1951 (1 of 3).

¹⁸⁸ “B-36 Production to End with Current Contracts,” *Fort Worth Star-Telegram*, August 10, 1952.

¹⁸⁹ Warren Eugene Johnson, “A Study of the Effect of Convair Employment Fluctuations on Fort Worth Business Activity,” (M.B.A. thesis, Texas Christian University, 1960), 24; Pate, *Arsenal of Defense*, 91.

cannot be proven; however, a company that employs one third of all manufacturing employment in a city makes a vital contribution to the city's economy.¹⁹⁰

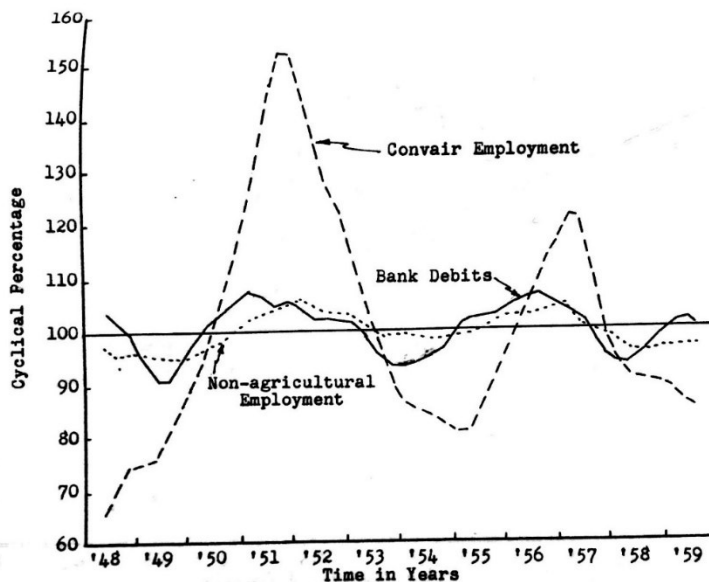


Figure 9. Convair's cyclical employment. (Warren Eugene Johnson, "A Study of the Effect of Convair Employment Fluctuations on Fort Worth Business Activity," (M.B.A. thesis, Texas Christian University, 1960), 13.)

Figure 9 shows Convair's cyclical percentage employment from 1948 to 1959. We can observe Convair's peak by the end of 1951; however, Convair's employment is not correlated with bank debit figures of the city obtained from the Bureau of Business Research.¹⁹¹ Bank debits is a term used to describe withdrawals of funds from bank accounts. Conclusions of Convair's employment directly correlated to business activity cannot be made from figure 9.

Furthermore, figure 10 shows Convair's quarterly employment obtained from the Personnel Department of Convair-Fort Worth. We can observe Convair's peak and immediate decline in employment. Boeing's win over Convair's aircraft ceased the production of the B-36, which caused layoffs at the Fort Worth plant. Convair's Fort Worth plant lost approximately

¹⁹⁰ Johnson, "A Study of the Effect of Convair Employment Fluctuations on Fort Worth Business Activity," 26.

¹⁹¹ Johnson, 7.

6,000 employees from 1951 to 1952.¹⁹² However, Fort Worth already had its boost and its diversified economy was not affected by this. Additionally, we can see how employment stabilized by the end of the 1950s. Both figure 9 and 10 display a small peak of employment after 1955.

CONVAIR QUARTERLY EMPLOYMENT^a
(IN THOUSANDS)

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1948	11.3	11.5	13.2	13.8
1949	13.9	13.8	15.2	15.8
1950	16.9	18.5	19.5	23.6
1951	26.6	29.0	30.3	30.8
1952	28.8	27.0	25.8	24.9
1953	23.4	21.5	20.6	18.8
1954	17.7	17.9	17.8	17.3
1955	17.2	16.3	18.4	20.0
1956	21.4	22.5	24.4	25.4
1957	27.3	27.6	24.9	21.8
1958	21.5	20.6	20.5	20.7
1959	20.0	20.0	20.2	19.2

Figure 10. Convair Quarterly Employment. (Warren Eugene Johnson, "A Study of the Effect of Convair Employment Fluctuations on Fort Worth Business Activity," 10.)

"Goodbye, Convair"

In 1952, the plant's present approved contracts had expired, and resulted in the loss of highly skilled workers. As of July 1952, Fort Worth division employed 26,243 and were expecting a drop to 14,400 by June 1954.¹⁹³ The only contract that could have saved the loss of employees would have been the immediate approval of the contract to produce the B-60. However, Boeing's B-52, shown in figure 11, which was relatively similar to Convair's B-60,

¹⁹² "B-36 Production to End with Current Contracts," *Fort Worth Star-Telegram*, August 10, 1952.

¹⁹³ Report "CONFIDENTIAL," 30 July 1952, box 63, Consolidated Vultee Aircraft Corporation 1952.

both being wing-jet powered, had a speed advantage of approximately 13 percent.¹⁹⁴ The Air Force picked Boeing's B-52, with a top speed of over 600 miles, as its intercontinental all-jet bomber to replace the B-



Figure 11. Boeing B-52 Stratofortress. ("Boeing B-52 Stratofortress Long-Range Multirole Bomber, United States of America," blogspot.com. (<http://suryamalam.blogspot.com/2016/02/boeing-b-52-stratofortress-long-range.html>))

36.¹⁹⁵

On May 15, 1953, John

Jay Hopkins was elected as board chairman of Consolidated Vultee Aircraft Corporation, succeeding Floyd B. Odlum. Hopkins was already the board chairman and president of General Dynamics Corporation of New York.¹⁹⁶ While Hopkins was elected as board chairman of Convair, the majority stock control passed to General Dynamics Corporation, as it acquired 400,000 shares of common stock. Furthermore, Frank Pace, Jr., executive president of General Dynamics, was chosen to be on the Convair board.¹⁹⁷ These were the most important new members of Convair, even though many others connected to General Dynamics were also elected. One of the reasons General Dynamics wanted to buy Convair was that one of its subsidiaries, Electric Boat Company, was building an atomic-powered submarine for the Navy, and Convair was building an atomic-powered engine airplane for the Air Force, giving General Dynamics atomic activities on both sides.¹⁹⁸ On May 31, 1953, Convair had reached an

¹⁹⁴ Report "CONFIDENTIAL," 30 July 1952.

¹⁹⁵ "B-36 Production to End with Current Contracts," *Fort Worth Star-Telegram*, August 10, 1952.

¹⁹⁶ "J. J. Hopkins New Heads Convair Board," *Fort Worth Star-Telegram*, May 16, 1953.

¹⁹⁷ "J. J. Hopkins New Heads Convair Board," *Fort Worth Star-Telegram*, May 16, 1953.

¹⁹⁸ Farman, "New Chairman Sees Convair Plant Here as Fixture in Permanent Defense Setup," *Fort Worth Star-Telegram*, June 16, 1953.

important stage in its development as one of the chief builders of aircraft for war and peace in the United States.¹⁹⁹ On March 1, 1954, Convair became a division of General Dynamics Corporation closing a chapter in not only the company's history but in Fort Worth's as well.²⁰⁰

Conclusion

Until 1940, the city of Fort Worth was undergoing the process of industrialization as a conventional city, with a population of 177,662.²⁰¹ Manufacturing had begun in the city during the early 1900s with the stockyards and basic industries, like packinghouses and oil processing factories. Fort Worth's greatest advantages, such as Lake Worth and the efforts and persistence of its civic leaders, helped attract one of Fort Worth's greatest blessings: a defense plant. The Fort Worth plant was the only one of the government-owned aircraft factories built for World War II that has remained in operation to this day.²⁰²

The plant brought high-tech aircraft development to the city of Fort Worth, enlarged the skilled workforce, and lifted the city's economy along with its overall population. In 1950, Fort Worth had increased its population by more than 50 percent, with 277,047 citizens.²⁰³ As Fort Worth's largest employer, the defense plant was a bigger factor than all the other factors, like airplane part suppliers, put together.²⁰⁴ The production of bombers served as an engine of economic progress for Fort Worth during World War II, aiding the diversification of its economy. The Fort Worth plant marked the transition of the city from a little country "Cowtown" to a metropolitan city, real estate-wise.²⁰⁵ From an agricultural working force, the

¹⁹⁹ "A Salute to Convair," *Fort Worth Star-Telegram*, May 31, 1953.

²⁰⁰ Barksdale, *The Genesis of the Aviation Industry in North Texas*, 11.

²⁰¹ Barksdale, 12.

²⁰² Pate, *Arsenal of Defense*, 92.

²⁰³ Barksdale, *The Genesis of the Aviation Industry in North Texas*, 12.

²⁰⁴ "Convair Contribution to Growth Here Hailed," *Fort Worth Star-Telegram*, May 31, 1953; Pate, *Arsenal of Defense*, 84.

²⁰⁵ "Convair Contribution to Growth Here Hailed," *Fort Worth Star-Telegram*, May 31, 1953.

military-industrial complex transformed workers into experienced technicians skilled in engineering design, development, tooling, and manufacturing aircraft.²⁰⁶

The Fort Worth plant also played a key role in supporting national defense. As a defense plant, Fort Worth's production of bombers, such as B-24 and B-36 airplanes, was essential for both World War II and post-World War II periods, being "probably the most important military installation in the world."²⁰⁷ The city of Fort Worth had transformed itself into a producer of the major deterrents to another world war.²⁰⁸ From the production of the heaviest bombers to the "flying jeep," Fort Worth's plant became one of the nation's most important aircraft factories, crucial to the nation's victory in World War II and to the avoidance of war through the rest of the twentieth century.

²⁰⁶ Report "CONFIDENTIAL," 30 July 1952.

²⁰⁷ "Senate Resolution No. 164," signed by Ben Ramsey, 18 April 1951.

²⁰⁸ "Manufacturer's Whim Located Convair Plant at Lake Worth," *Fort Worth Star-Telegram*, May 31, 1953.

Future Research

This project emphasized the process Fort Worth's civic leaders had to undergo to be able to obtain the defense plant. The information was taken from long archival research and my understanding of many correspondences between officials and civic leaders. The project also talks about Fort Worth's economic advancement, not its social history. For future research, it would be great to incorporate a social history of the city with the downsides of having a defense plant in a developing city. With the advancement of this project, one would have to incorporate sources that do not agree with the military-industrial complex since the majority of the sources used for this project are pro-industry.

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