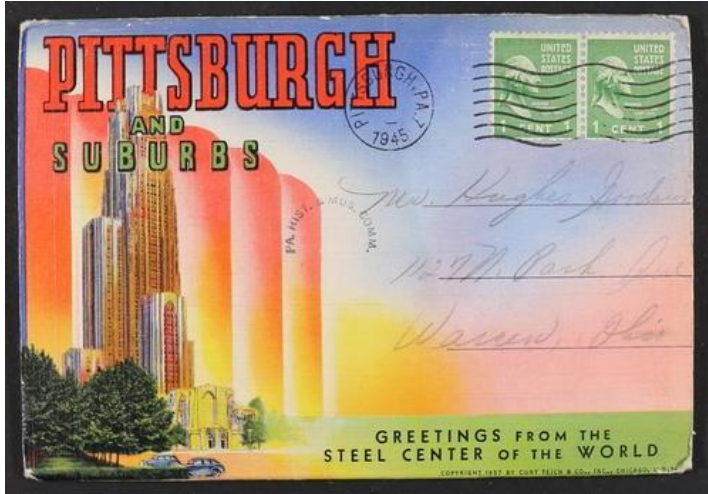


Pennsylvania and the World War II Home Front

Introduction

Pennsylvania's vast industrial infrastructure, primarily shipbuilding and steel manufacturing, was vital to the success of the war. The Keystone State had forty military encampments, depots, and other installations to serve every facet of the war effort. Between 1940 and 1943, Pennsylvania received \$8.8 billion in defense contracts, and nearly 1.25 million Pennsylvanians joined the armed forces during World War II. This massive mobilization did not come without problems, as racial discrimination and violence were commonplace on the state's home front.¹



"Pittsburgh and Suburbs. Greetings from the Steel Center of the World" – copyright 1937, postmarked 1945. Credit: Pennsylvania State Digital Archives

Mobilization: Military and Industry

Philadelphia and its suburbs transformed dramatically during the war. The City of Brotherly Love was known for its shipbuilding industry. Before the U.S. joined the war, the Philadelphia Naval Yard undertook top-secret repair projects for Allied ships that were damaged by attacks in the Atlantic.² The war years were the Yard's most productive period in its 194-year existence. The Yard built 48 new warships, modernized 41, repaired 574, and dry-docked (provided maintenance on a ship's underwater components on a dry platform) 650. Additionally, the Naval Aircraft Factory built 500 planes. The Philadelphia Naval Yard also played an important role in

the construction of the atomic bomb. Philip Abelson conducted experiments related to the liquid thermal diffusion method of isotope separation, which was later used to enrich uranium at the Oak Ridge Plant in Tennessee. This work proved fatal when a Yard building storing uranium exploded, killing two men. The cause of the explosion was not revealed until years later.³

The war also benefited Philadelphia's other naval yards, including Cramps Shipyard and Sun Shipbuilding and Dry Dock Company. Cramps constructed and repaired vessels and employed nearly 8,000 men and women, a remarkable feat considering the shipyard had been dormant since the mid-1920s. Sun Shipbuilding and Dry Dock Company was one of the largest privately owned shipyards in the country during the war. West Chester in the Philadelphia area was also where G. Raymond Rettew pioneered the mass production of penicillin. His Wyeth Laboratory produced and shipped more penicillin to the Allied forces than any other lab in the world.⁴

Pittsburgh, 300 miles to the west of Philadelphia, was home to the nation's steel industry. By the end of the war, Pittsburgh's mills had contributed 95 million tons of steel to manufacturing plants that built

¹ Brian Lockman, *World War II Reflections: An Oral History of Pennsylvania's Veterans* (Mechanicsburg, PA: Stackpole Books, 2009), 1-2.

² Herbert Ershkowitz, "[World War II](#)," The Encyclopedia of Greater Pennsylvania.

³ "[Philadelphia, PA](#)," Atomic Heritage Foundation. "[Atomic Accidents](#)," Atomic Heritage Foundation, June 4, 2014.

⁴ Lockman, *World War II Reflections*, 4.

planes, tanks, jeeps, and countless other items.⁵ The Dravo Corporation, which had massive shipyards in both Pittsburgh and Wilmington (Delaware), converted two of its manufacturing facilities to work on a new invasion vessel. Dravo established high speed assembly lines and replaced slower methods of riveting with electric welding. Working with this improved technology, Dravo could build a Landing Ship Tank (LST) from start to finish in three days. This new class of attack landing craft carried 160 soldiers, 20 tanks and trucks, and could land directly on a beach, which made countless Allied invasions possible. By the end of the war, Dravo's Pittsburgh workers made almost 150 LSTs as well as munitions, hardware, and vehicles using Pittsburgh-produced steel.⁶

Standard Oil's Pittsburgh Grease Plant provided another essential product to the war effort. The company manufactured more than five million pounds of waterproof grease that was vital to the success of amphibious missions in France and the Pacific. Known as "Eisenhower grease," the product was also used in military vehicles, ships, and planes. East of Pittsburgh, the Lehigh Valley's Bethlehem Steel was the largest producer of ordnance, shells, armor plate, components for aircraft engines, and air systems for submarines in the nation.⁷

Headquartered outside of Harrisburg, Hershey Chocolate played an underrecognized role during the war. The famous Pennsylvania company created a survival ration bar called the Ration 'D' bar that was distributed to American soldiers across Europe. For warmer locations, the company created a chocolate bar that would not melt in order to withstand tropical climates of the Pacific theater. In recognition of Hershey's efforts, the company was awarded five Army-Navy 'E' Production Awards by the time the war ended.⁸

Pennsylvania also had many significant military installations. Camp Michaux, located at a Civilian Conservation Corps camp in Michaux State Forest, was a top-secret prisoner of war interrogation site during the war. Chosen for its proximity to Washington D.C. and railroad transportation, the Army Corps of Engineers upgraded the camp to house high-security prisoners of war. Military officials interrogated more than 7,500 German and 161 Japanese prisoners at the camp to determine whether or not a prisoner had valuable information. Camp Michaux is currently the subject of archeological digs and studies to further our understanding of how prisoners were treated at these unique POW sites.⁹

Mobilization: Changes for Workers

Pennsylvania's urban centers saw an explosion in defense work opportunities. Of Philadelphia's 1.9 million inhabitants, 350,000 worked in defense. The city also saw an influx of Black workers, migrating to the city in search of lucrative war work. Between 1940 and 1945, 25,000 Black Americans moved to Philadelphia. At the beginning of 1941, the Philadelphia Naval Shipyard had 24,000 employees. At the peak of its war production, the yard employed 60,000 men and women.¹⁰

⁵ "[Pittsburgh, Pennsylvania](#)," National Park Service. Ashley Tierney, "Women Workers Needed: Pennsylvania Women During World War II," (Ph.D. diss., 2013), 19.

⁶ "[Dravo Corporation Historical Marker](#)," ExplorePAhistory.com. Lockman, *World War II Reflections*, 3.

⁷ Lockman, *World War II Reflections*, 2-3; Tierney, "Women Workers Needed," 82.

⁸ "[Serving Our Country: Hershey Chocolate's Contributions to World War II](#)," Hershey Community Archives, April 9, 2010.

⁹ David L. Smith, *Camp Michaux Self-Guided Walking Tour: Revised* (Cumberland County Historical Society, 2019), 33.

¹⁰ Ershkowitz, "[World War II](#)." Carl Ellis Johnson, "Black Philadelphia in Transition: The African-American Struggle on the Homefront during World War II and the Cold War Period, 1941-1963" (Ph.D. diss., Temple

Women also found new opportunities in the state's defense industries despite initial pushback from male managers and workers. To meet the increased demand for ships, the Sun Shipbuilding board voted to relax their work regulations and offered welding classes to women. Women selected for this training performed electric welding and were paid the same amount as their male counterparts. By 1944, 23,000 of Bethlehem Steel's 300,000 workers (spread across 15 shipyards in various states) were women.¹¹ In 1943, J. Howard Miller produced the iconic "We Can Do It!" Rosie the Riveter poster for Westinghouse Electric and Manufacturing Company headquartered in Pittsburgh. Created to boost women workers' morale, the famous poster was used in a national campaign to encourage women to join the home front workforce.¹²

Pennsylvania's mighty industrial output also benefited from Prisoner of War labor. Between May 1944 and October 1945, the Letterkenny Army Depot in Chambersburg held approximately 1,200 Italian POWs. The prisoners were allowed to opt in to work assignments and earned \$0.80 per hour for their efforts. The Letterkenny POWs mainly loaded and unloaded freight trains that brought supplies to the war front. In their spare time, the prisoners also constructed a chapel, which still stands today and is on the Commonwealth's Register of Historic Places.¹³

Discrimination and Fights for Equality

Black men and women across the country continued fighting for racial equality during the 1940s and the war offered a new perspective on this fight. The *Pittsburgh Courier*, the largest Black newspaper in the country, championed the Double V for Victory campaign, which encouraged Black people to fight for victory over fascism abroad and racism at home. White resistance to the reenergized civil rights movement brought racial tensions in Philadelphia to a boiling point. Untold numbers of employers and white workers discriminated against the hiring of Black men and women. A case in point was the Philadelphia transit strike, which had large-scale ramifications on the war effort.

The strike began on August 1, 1944, when 6,000 white workers walked off the job in protest of the Philadelphia Transit Company (PTC) hiring eight Black men as conductors. Previously, Black men were relegated to lower positions. Because the PTC provided transportation for so many war workers, the War Department deemed the transportation company essential to the war effort. White PTC workers were given an ultimatum—report back to work or lose your job and draft deferment status. According to historian Karl E. Johnson, "The War Department reported that the strike had 'seriously affected the production of radar, heavy artillery, heavy ammunition, military tracks, bombs and other supplies vitally needed,' as well as the blood donation supply, making the strike an issue of national security." While Philadelphia narrowly avoided a race riot, 300 were arrested, store windows broken, and 14 people hospitalized because of isolated street fights that took place during the six-day strike.¹⁴

The Armstrong Association, a social service association dedicated to advancing the interests of Black people in Philadelphia, advocated on behalf of potential employees. At Sun Shipbuilding, where Black

University, Philadelphia, 2001), 58. Jim Saksa, "[Philadelphia Naval Yard](#)," The Encyclopedia of Greater Philadelphia.

¹¹ Lockman, *World War II Reflections*, 3; Tierney, "Women Workers Needed,," 57, 82.

¹² "[Who Was Rosie the Riveter?](#)," National Park Service.

¹³ Flavio G. Conti and Alan R. Perry, *World War II Italian Prisoners of War in Chambersburg* (Charleston, S.C.: Arcadia Publishing, 2017), 2, 151.

¹⁴ Johnson, "Black Philadelphia in Transition," 82, 107-10, 113.

workers were usually consigned to low-wage jobs, the association insisted that Sun hire Black workers into higher-paying skilled positions. By the war's end, Sun employed 50 Black men as shipfitters. With Emmett J. Scott, who was Booker T. Washington's former secretary and advisor, the company decided to build a segregated shipyard, known as Navy Yard 4. This yard, staffed entirely by Black men, had 9,000 workers by 1945. However, at the war's end, Sun closed the segregated shipyard and laid off 80 percent of its Black workforce.¹⁵

Life on the Home Front

Pennsylvanians rose to the occasion to provide support to the war effort through war bond sales, Red Cross drives, victory gardens, and other forms of volunteerism. In the Point Breeze neighborhood of Pittsburgh, every Thursday night Mary and Lou Fuchs put out pencils, postcards, and paper for their tea shop customers to write to local servicemen who were abroad.¹⁶ In another example, the Jewish community in Philadelphia came together despite experiencing anti-Semitism and suffering individual attacks and property destruction. They sought to provide special programming to reaffirm Jewish traditions and to provide a safe and welcoming space for Jewish service members at the city's USO. The community prepared special foods, helped observe religious holidays, and organized activities at Pennsylvania's military outposts.¹⁷

After the War

While Pennsylvania's intense wartime manufacturing boom had many short-term benefits, it did not last over the long term. As part of the Rust Belt region, the state experienced severe industrial decline and population loss as well as economic stagnation that peaked in the 1970s and 80s. Returning veterans used the GI Bill to buy suburban homes and take advantage of higher education opportunities. While this created a construction boom in the suburbs, it also contributed to the removal of urban resources and finances. Black veterans and workers continued to face racial discrimination, which helped fuel the Civil Rights Movement of the 1950s and 60s. Pennsylvania also had to reckon with environmental degradation and negative health impacts caused by wartime factories and mills. To combat the thick industrial smog, Pittsburgh began implementing its landmark smoke control ordinance in late 1946.

Places of World War II History

- **Pittsburgh, Pennsylvania:** As the state's designated World War II Heritage City, the Steel City increased steel production by 200 percent by 1942, becoming the world's leading producer. Factories churned around the clock, producing a wide variety of defense materials.
- **Philadelphia Naval Yard:** The Navy's first yard expanded rapidly during the war. Over 40,000 workers constructed around 50 warships, repaired almost 600, and ran experiments that contributed to the construction of the atomic bomb.

By Julie Huddleston, supervised by Dr. Matt Basso. Adapted by Dr. Nicole Martin, a consulting historian with the National Park Service in partnership with the National Council on Public History.

¹⁵ Johnson, "Black Philadelphia in Transition," 48, 50; John M. McLarnon, "Pie in the Sky vs. Meat and Potatoes: The Case of Sun Ship's Yard No. 4," *Journal of American Studies* 34, no. 1 (April 2000): 67-88.

¹⁶ Leslie Przybylek, "Regards to All My Friends," *Western Pennsylvania History* 98, no. 1 (Spring 2015): 55-56.

¹⁷ Maryanne Lovelace, "Facing Change in Wartime Philadelphia: The Story of the Philadelphia USO," *The Pennsylvania Magazine of History and Biography* 123, no. 3 (July 1999): 143-77.