

# Calco—Bridgewater's Forgotten Award Winning War Production Plant

On the walkway from the parking lot to The Somerset Patriots Baseball Stadium there is a 5 foot \* 3 Foot structure that has two old looking plaques mounted on it. The plaques are not very eye catching, hard to read, as they have bronze letters on a bronze background. On game nights almost everyone walks by them in their excitement to see the baseball game. On the way out, baseball fans again ignore the plaques as they seem to be in a hurry to get home.

But one might wonder what these plaques are for? If we take a look we see that one plaque is dedicated to the workers from a place called *The Calco Chemical Division*.

It states

DEDICATED IN HONOR OF THE MEN AND WOMEN OF  
CALCO CHEMICAL DIVISION  
THE AMERICAN CYANAMID COMPANY  
WHO SERVED OUR COUNTRY IN WORLD WAR II  
AND IN MEMORY OF THE FOLLOWING WHO MADE  
THE SUPREME SACRIFICE

It then lists the 67 Calco workers who died fighting the war.

The second plaque says something about a Army-Navy "E" award. A local resident, if he stops to read the plaque at all, may wonder what was this company called Calco? Where was it? And is this Army-Navy "E" Award a big deal?

Calco was a manufacturing complex made up of dozens of buildings which were located just across the railroad tracks from today's baseball stadium. That land that is now almost empty. Their large parking lot for its 4000 employees was where today's baseball stadium parking lot is. Calco was a division of the American Cyanamid Company.

During World War II, 1941-1945, Calco made tremendous contributions to the war effort. They produced sulfa-drugs which prevented infections caused by wounds suffered in battle. In addition they made the dyes that were used in the camouflage uniforms. They also produced chemicals that were used in making war supplies. For their part, the U.S. government awarded Calco The Army-Navy "E" Award . This was a prestigious award that was given by the U.S. government to just 4% of the manufacturers. It was for excellence in both quality and quantity.

While Calco was located in Bridgewater (on the Bound Brook border) they would be mostly associated with Bound Brook as they had a Bound Brook mailing address which they used in all their ads and correspondences. In Calco's first decades, Bridgewater was not a very developed town. It was mostly farmland, so Bound Brook handled its mail.

Calco's origin began during the first World War. In 1915, the outbreak of war in Europe cut off American manufacturers with many imported products as the British had blockaded German shipping. One of these products that was no longer available was the various dyes that had come from Germany. To fill the gap a textile manufacturer in Somerville, The Cott-A-Lap Company, decided to try and make their own dyes. They created a company they called Calco. The name was based off the first letters of

Cott-A-Lap. They read German textbooks, did some of their own research, and succeeded in making their own dyes. When they began planning to manufacture the dyes, the Somerville residents voiced their concerns about pollution. So the owners decided to relocate to a more isolated area. They purchased 18 acres of land in the southern part of Bridgewater on the Bound Brook border. This location was chosen as it was next to the railroad line and the Raritan River. They went through a good deal of trial error in their first few years. Their big break came at the end of World War I in 1918, when through the spoils of war, the German manufacturing secrets were made available to U.S. companies. The Calco management and scientists were talented and ambitious, so they quickly put this once secret information to good use. They grew the tiny start-up company into a large scale manufacturer of dyes and other products. While they grew, they still struggled financially as many research and development companies do. In 1929, they were acquired by The American Cyanamid Company. The new parent company then brought a great deal of their dye manufacturing under the Calco control in Bridgewater.

Then in 1935, a drug, sulfonamide (sulfa), was found to react biologically with infections. The introduction of this drug had initially been described in a public thesis in 1908 - therefore it was not patented. Seeing the green light, several companies then undertook it to research and develop a practical version of this new wonder drug that could ward off infections. Calco was the first in the U.S. to do this. Within a few years they were able to create a practical drug. Mass production of these Sulfa drugs soon followed. By 1941, when the U.S. entered World War II, Calco was able to meet the large demand that the U.S. military had for Sulfa Drugs. These drugs were extremely important as they were needed to treat wounds suffered in battle and treat the tropical illnesses the soldiers caught in the swamp infested jungles of the Pacific islands.

Calco became the principal producer in the U.S. of sulfa-drugs. Before sulfa was used, infection on the battlefield was a common cause of death during wartime. Sulfa was the first and only effective antibiotic available in the years before penicillin was widely available, sulfa drugs continued to thrive through the early years of World War II. Sulfa was known as the wonder drug as it credited with saving the lives of tens of thousands of patients. American soldiers were issued a first-aid kit containing sulfa pills and sulfa-powder which they were told to sprinkle on any open wound.

Another product produced by Calco was the dyes that were used to help camouflage the uniforms of all our soldiers, sailors, and marines. The production of dyes encompassed a great deal of the complex. Many of the positions at the plant were related to producing dyes.

While Calco was not a munitions plant that created weapons, they did produce chemicals that were used in making gun powder for shells, bullets, torpedoes, bombs, and other explosives. Calco was one of the most important producers of these chemicals in the U.S..

Calco also produced chemicals that were important in making synthetic rubber. Due to Japan taking over the countries that had 90% of the natural supply of rubber, the production of synthetic rubber was vital. Calco produced a chemical enabled synthetic rubber to dry four times faster.

To aid in locating pilots who were stranded in the ocean after being shot down, Calco produced a florescent chemical that was used in life jackets. To further aid these downed pilots, they made shark repellent.

Additives which increased the octane rating of aviation gasoline were produced at Calco. So were chemicals which lengthened the life of the lubricating oil that was used in tanks, planes, and other vehicles.

## **Woman in the workplace**

As the U.S. went to war, over a thousand of Calco's employees went into the service. At the same time the number of jobs that needed to be staffed increased. To fill this void, many women were hired. In 1942 women had not previously worked in large number in the workforce. But now woman worked in large numbers in the workplace. Previously when they did work, it was usually in clerical jobs. But now they staffed jobs that previously had been considered men's jobs. At first when the women came into various sections of the plant they caused quite a stir. Whistles and flirtatious comments were common, but with time most of this nonsense disappeared.

The initial opinion among many old time plant managers was that women would not take their work seriously. However, this stereotype proved unfounded and Calco's personnel manager was quoted " In spite of the fact that women war workers have been accused by some sources of being frivolous in their working attitude, we here at Calco have not found this to be so. They have taken seriously the work assigned to them. They realize the importance of war production in our plant. We are looking forward to hiring many more women workers."

Some adjustments needed to be made to accommodate the women. Safety in 1940s workplace was not what it is today. Caps were supplied to women to prevent their hair from getting caught in the all too dangerous moving machinery.

Women were employed in all types of work. Some were welders. Others caught on quickly in the repair shops where they fixed the tools and delicate instruments which produced the chemicals that Calco made. The "dye shops" were a common location for woman workers.

Overall the women workers liked their jobs. Working and earning a paycheck gave many women a new sense of independence. After the war, many women returned to the home. However, this surge of women into the workplace planted a seed that would harvest years later as women starting around the 1960s would begin entering the work force in large numbers – this time permanently- beginning a climb toward equality with men.

## **Calco Wins Army-Navy "E" Production Award**

In December of 1942 the U.S. government announced that it was awarding Calco the prestigious Army-Navy "E" Award for excellence in production of war materials. This award was given to just 4 percent of manufacturers during World War II. The quality and volume of Calco's production had been exceptional. A letter from the U.S. Undersecretary of War said:

"This is to inform you that the Army and Navy are conferring upon you the Army-Navy production award for high achievement in the production of war material.

Your patriotism, as shown by your remarkable production record, is helping our country along the road to victory. May I extend to you men and woman of Calco Chemical Division my congratulations for accomplishing more than seemed possible a year ago.

In conferring this award, the Army and Navy will give you a flag to fly above your plant and will present to every individual within it a lapel pin symbolic of leadership on the production front."

The official ceremony to award Calco the Army-Navy "E" award was held at the plant on January 20th, 1943. It received quite a bit of local fanfare. Radio Station WJZ in New York broadcasted the lunchtime

ceremony. The local papers covered the event as the lead story on the front page of their next issues. The maintenance building of the Calco plant was chosen to hold the ceremony as it was large enough and wide open to provide a auditorium like setting where 3,000 of the 4,000 Calco workers could attend the festivities. The Calco plant manager and the Union President stood side by side at the event. There had been a short strike at the plant in 1941, but now all American's were united. Music by the Camp Kilmer Military Band from New Brunswick opened the program. Then, famed singer, Paul Robeson, who grew up in Somerville, sung *America*. The first speaker was U.S. congressmen Charles A. Eaton. He said:

“The significance of this gathering can't be missed. The whole world is standing in the valley of decision, all shoulder to shoulder, ready to turn either to the left for a thousand years of slavery or to the right for a thousand years of freedom and justice.

Your sons and brothers are at the front. But you at home, too are making every sacrifice to fight the jungle beasts, beat them back into the jungle. God bless you men and women of Calco. “

Then General Waitt of the Army spoke

“Every American is asking himself if he is doing enough to help win this war. ... I say a soldier can't get along without you. If you stop working, he must stop fighting. We are part of the team. It is no secret that it takes seven workers to provide for one soldier. “

He went on further to say how Calco's drugs have saved the lives of the fighting men at the front. And that the dyes that camouflaged the uniforms have helped the soldiers in battle.

The ceremony concluded with Paul Robeson singing The National Anthem. The Calco workers sung along with him. This provided a nice ending to their lunchtime ceremony. Then the Calco workers returned to their jobs.

## **The Calco complex was an extremely busy place**

The plant eventually grew to around 80 buildings with 3000 employees in peace time and 4000 during the war. What had started as 18 acres expanded to 600 acres. Originally Calco produced just a few products. Then they grew to hundreds of products being made by highly skilled personnel. Calco alone would produce tons of sulfa drugs for the war effort.

At its most productive stage the Bridgewater plant used over a million gallons of river water daily, burned hundreds of tons of coal per day, manufactured over a hundred tons of ice (for its own use) per day, and used 35 tons of salt per day. Its tools ranged in size and ease of dexterity from small delicate lab instruments to a large crane with a 100 foot boom.

The plant had three water towers which held 300,000 galloons of water suspended high in the air, used miles of piping, and had 20,000 fire sprinkler heads.

## **Pollution**

While the plant played a vital role in both war time and peacetime, the Calco plant was typical of a chemical manufacturer of its era. Around the plant an absolutely awful sulfur odor and tallow pale hung

in the air over Bridgewater and Bound Brook. On a rainy day the smell could be detected as far away as Raritan. These negative effects on the environment would never be tolerated today.

During its first decades Calco dumped its liquid waste of chemicals into the Raritan River. Up until around 1940 much as this dumping went un-challenged by authorities. Many of the dumped chemicals were poorly degradable, thus the condition of the water around the plant was terrible. Some of the boys who swam in the river too close to the plant often came out of the water colored purple. Starting 1940 state and local agencies began demanding that something be done. In response, Calco throughout the years came up with innovative inventions in the field of waste management. However, much damage had already been done. An article from a 1943 newspaper would be amusing if it was not so disturbing. A Calco plant manager made a public statement how they have improved their waste disposal. He boasts that fish can now be seen living in the Raritan River around the plant.

### **Calco's End**

Following the war, Calco prospered for a couple decades, but then began a long steady decline. A combination of poor management, a changing economy that moved factory work overseas, and rising concerns about pollution all contributed to the decline. The plant would close gradually over a period of years in the mid 1980s. Even the name Calco disappeared as American Cyanamid sold its Calco Bridgewater Division to Lederle Laboratories.

Today on the former Calco site, there is but one building remaining from the original Calco complex. It is an old brick building that is used as a training facility for STS Tire.

While there are those two plaques on the walkway to the stadium, a better tribute to the workers at Calco is surely needed. In this authors many trips to the ballpark, I have not observed a single person taking notice of these plaques.

It seems somewhat fitting that on (and adjacent to) the former site of an award winning war production plant now stands a baseball stadium. This land once produced materials to fight a war that ensured our freedoms. Now that the battle is won, the land serves to allow us to enjoy those freedoms—by watching baseball – our “National Pastime”. Ironically, during World War II, the Japanese (our enemy) banned the playing of baseball because it was America’s favorite sport.