

*By Gary J. Rabalais*

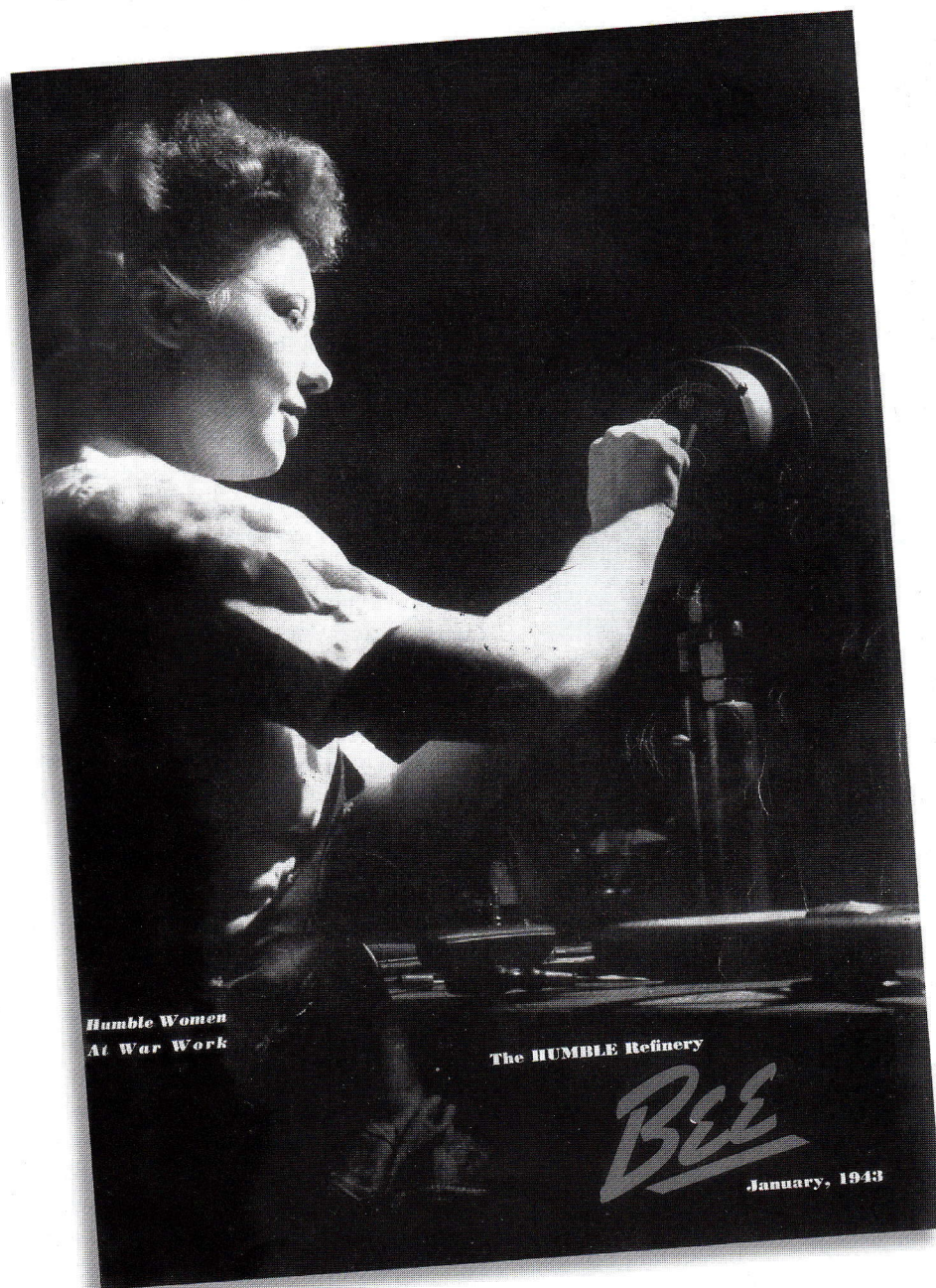
construction of new ones. The giant new shipbuilding facilities on the ship channel were the largest new employers, but the region's oil and petrochemical plants also grew faster than at any time in their histories. The war effort needed 100-octane avi-

ation fuel and many other products from the massive complex of refineries from New Orleans to Corpus Christi, and plant owners all along the Houston Ship Channel from Houston to Texas City had to search far and wide for the workforce needed to operate their plants. As in other industries around the country, the search for workers led to the hiring of women on a scale never before seen.

In the giant Humble Oil & Refining Company's (Humble) Baytown refinery, women war workers shared similar experiences of other women war workers in other parts of the United States. The experiences of Baytown's women war workers, however, were also unique because of the refinery's southern region location. Their story is a reminder of the great contributions made by women workers on the home front—and of the tensions that they encountered as they ventured into jobs traditionally closed to women.

The entry of more and more men into the military during the war resulted in a manpower crisis that one group attributed to "poor distribution, rather than an actual shortage of workers," with "many war plants still [refusing] to hire Negroes, women, aged, or physically-handicapped workers, despite the fact that serious labor shortages exist in the same localities." On October 19, 1942, the War Manpower Commission issued its first statement of policy about women workers, urging the "removal of all barriers against women workers, that they be hired and trained 'on a basis of equality with men' and that they be given 'free access to foremen's supervisory, and technical jobs.'"<sup>1</sup> The Commission's

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*The January 1943 issue of The Humble Bee highlighted Humble's female workforce, with woman war worker Mrs. Gene Edwards on the cover. The original caption read: "Humble women at war... a strange—at the moment—but pleasant scene in certain shops at Baytown refinery where women are taking up duties as assistants in limited types of mechanical work."*

Courtesy Baytown Museum



chairman, Paul McNutt, later testified about the need for women workers before the Senate Military Affairs Committee, which was investigating all phases of the manpower situation. He predicted "woman-power will be required to solve the manpower problem . . . because 5,000,000 workers must enter the labor force by the end of 1943."<sup>2</sup>

Before the war, Humble's Baytown refinery, which had begun operations in 1921, employed very few women, with most assigned to clerical positions.<sup>3</sup> This giant refining complex "was one of the largest and most advanced in the country, and in its equipment for manufacturing high-quality products for war ranked above . . . large refineries abroad."<sup>4</sup> The operation of such a huge refinery was traditionally regarded as a "man's job." This perception began to change by early 1942 as more women entered the refinery workforce. While many women employed at the refinery continued to work in conventional clerical positions, women also began to work in mechanical shops and in area plants as laborers.<sup>5</sup>

As the United States mobilized to supply the war needs of its allies prior to the bombing of Pearl Harbor, the Baytown refinery by 1941 produced 100-octane aviation fuel and synthetic toluene, one of the ingredients in the explosive trinitrotoluene (TNT). Toluene was produced at the Baytown Ordinance Works (B.O.W.), which was owned by the United States government, leased to Humble, and operated by Baytown refinery personnel.<sup>6</sup> After the U.S. entered the war, a combination of investments by business and government expanded these facilities at Baytown, as well as at most other refining centers on the Texas-Louisiana Gulf Coast. In addition, the demands of war encouraged the construction of new plants to produce synthetic rubber and other products, and in September 1944 the Butyl rubber plant at Baytown made its first satisfactory production of Butyl rubber.<sup>7</sup>

With plant expansion and growth, increased production, and loss of men to the armed forces, Baytown was confronted with the need for additional labor. The inclusion of women in the plant's labor force outside of clerical positions, however, occurred only gradually as women replaced some of the men called into the armed forces in

Humble's refinery. The number of women employees grew more rapidly as the war progressed and women were recruited to fill many of the jobs in the newly constructed synthetic rubber plants.<sup>8</sup>

During the year 1942, *The Humble Refinery Bee*, a monthly magazine written for employees of Humble's Baytown works, presented a variety of messages concerning the identity and the role of women workers on and off the job. Early in 1942



Baytown Humble Employees Buy Bombers  
*Framed in the propeller blades' V-for-Victory, is Miss Margaret Johnson of the Baytown Refinery laboratory, who is shown atop a motor of a Liberator bomber.* Courtesy Exxon Baytown

the *Humble Bee* depicted a woman's role as caregiver, housewife and a mother, and bridge player.<sup>9</sup> At the same time, it put forward the perception of women workers at Baytown as simply "refinery girls."<sup>10</sup> The announcement of the first class in Home Defense training for Baytown refinery women employees reinforced the image of women as caregivers: "The introductory course, [is] devoted principally to first aid . . . All women employes [sic] at the Baytown refinery who have not taken the first aid training are urged to register."<sup>11</sup>

In January, the *Humble Bee* announced that the storehouse had its first woman employee. On September 28, 1942, "the first girls began to work as testers in the Baytown Laboratory."<sup>12</sup> Also in September,

the paper took note of "the first feminine members to serve" on the board of directors for the Baytown Humble Club and announced that the Club would sponsor monthly USO dances for servicemen.<sup>13</sup> The ones who actually gave the dances were the Baytown refinery women employees and the wives and daughters of refinery personnel.<sup>14</sup>

A significant change in the role of Baytown refinery women workers occurred in November 1942, when Humble announced "[g]irls and women will be employed at once in the instrument department at the Baytown Refinery." The announcement was made "following a conference between officials of the company and members of the executive committee of the Employees' Federation, the bargaining agency for the Baytown plant." The hiring plan, however, was not to the women's full advantage. The plan included giving women the lower regular labor rate in effect at the time instead of the higher regular apprentice instrument rate. The lower regular labor rate was equal to the rate advertised by the refinery for laborers in the *Goose Creek Daily Sun* on July 15, 1943.

The use of the lower rate by the refinery was consistent with the new categories of "women's work" supported by trade unions in the United States to ensure that women workers did not receive equal pay to men.<sup>15</sup> The lower labor rate would continue at the company's option for a three to six month period during which the women had to demonstrate "sufficient capability in the work" in order to be placed on the higher regular apprentice instrument rate.

Even as women were lured into a better paying jobs, some men doubted their ability to handle the work. According to Clifford M. Bond, the public relations director for the Employees' Federation, "When a woman is hired for this type of work, the company has no assurance that she will prove capable or adapt herself readily to the duties."<sup>16</sup> Women who entered the refinery workforce clearly faced a significant challenge in convincing both their employers and their co-workers that they should be accorded equal treatment.

For Baytown refinery women workers, 1943 was a watershed year for improved job opportunities and better pay. The engineering department had its first draftsman.<sup>17</sup> Two women started work in the carpenter shop.<sup>18</sup> Eight women were brought into the machinist department.<sup>19</sup>



In the language of *The Humble Bee*, one woman “invaded” the foamite department.<sup>20</sup> Nine women were among the new testers at the Butyl laboratory.<sup>21</sup>

Even with these new opportunities, however, mixed messages about the woman worker’s identity and role continued. *The Humble Bee* continued to depict women as needing to be cared for and protected: “To you guys in the service, your wives are getting the best care the Humble Company can offer, so keep fighting, you sons of freedom.”<sup>22</sup> Women were praised for doing good work while being reminded of their submissive roles, “A word of praise . . . for those women whose husbands are in the service . . . [and who] are carrying on their part here on the production front . . . [and] doing a swell job.”<sup>23</sup>

The refinery magazine continued to treat women workers as novelties and not capable of performing the same work as men. The January 1943 issue showed on its front cover the picture of a woman repairing a gauge in the refinery’s instrument shop. The first page described the front cover: “Humble women at war . . . a strange—at

the moment—but pleasant scene in certain shops at Baytown refinery where women are taking up duties as assistants in limited types of mechanical work.” The lead article, “Humble Women At War Work,” reinforced the concept that operating a giant refinery was a man’s job, with women as temporary helpers for the duration of the

*Winifred Brown worked in the Humble machine shop during WWII.*  
Courtesy Exxon Baytown



*At the Galveston airport, Humble Baytown refinery employees fuel one of the two Liberator-type bombers purchased by the funds raised from the refinery’s successful “Back the Attack” war loan drive in 1943.*

Courtesy Exxon Baytown



*Alez Arnold Steed rode her bicycle to work each day at the Baytown Humble Refinery.*

Courtesy Mrs. Steed

war. The article included pictures of women at various jobs, including tool room attendant, surface grinder operator, packing cutter, radial drill operator, saw sharpener, engineering, photostat machine operator, clock repairing, regulating and testing, instrument and gauge repair, blueprint machine operator, and draftswoman. The article focused not on the work the women in the pictures performed, but on what “milady” should wear and how she should not waste company time putting on makeup. It pointed out the need for practical clothing that would allow a woman to do a man’s job, but cautioned that the clothing needed to be stylish as well as practical, because if you “give a woman an unattractive costume . . . down goes her morale.” The women workers were also informed that “the girl who has to leave the machine or whatever job she may have, every half hour or so to put on a new face is not accomplishing much . . . [and] it is high time to apply moderation.”<sup>24</sup>

In April 1944, Humble for the first time launched a campaign to recruit new workers. The refinery plant manager, Gordon L. Farned, issued a special letter to every employee at the Baytown refinery. Acknowledging a manpower shortage at the Baytown refinery, Farned announced the need to “obtain the services of a thousand men or women by July 1 [1944].... Almost any man under 45 years of age or any woman under 35 years of age who can meet our physical requirements will be accepted.”<sup>25</sup> The company also placed ads for workers in daily newspapers in Houston and in the *Goose Creek Daily Sun*. As part of the special campaign, Humble established the policy that “employees hired after September 15, 1940, were designated as temporary.”<sup>26</sup>

Even with the manpower shortage, the presence of women workers in Baytown was not always appealing or acceptable to everyone. Of concern to the boilermakers in the refinery was the possibility that they might have a “Rosie the Riveter” at Baytown because of the manpower shortage.<sup>27</sup> Some women workers responded with self-deprecating humor that described “how hard it is on men to put up with a bunch of gals.” Others joked about male workers being forced to face the problem of “trying to please [so] many women.” *The Humble Bee* reflected the prevailing tone when it referred to women working in the same group as a “sewing circle.”<sup>28</sup> The lack of women in



positions of authority reinforced the sense that they were not completely accepted or seen as equal to men. During the war, "no matter how qualified the women were, they could not become supervisors; only the men were allowed the privilege."<sup>29</sup>

The conditions for women in the newly opened synthetic rubber facilities were somewhat different than those in the oil refinery proper.<sup>30</sup> These new plants had to be staffed in 1942 and 1943, as wartime demands for labor intensified. One response for Humble was to aggressively recruit a generation of women laboratory workers from colleges in the region. Unlike many of the women in the refinery, these women came with the expectation that they might become permanent employees. Attracted by the relatively high pay offered by Humble, they took up temporary residence in family homes in Baytown and set to work pursuing their careers while also contributing to the war effort.

After a brief, two-week training course in the company's main lab, they moved over to the Butyl lab for a one-month training period before beginning their work. There they joined a work force of as many as 125 young women between the ages of eighteen and twenty-one years old. The work was demanding, but these young women brought a wave of enthusiasm and professionalism to their new jobs. They met the attitudes of many of the male employees about women in the workplace with a combination of good humor and commitment to doing their jobs well. When, for example, men in the plant began to call them the "Butyl beauties," they accepted this as a compliment of sorts and went forward with their demanding jobs.

Good humor could not provide a protective shield against the real and ever-present dangers of work in a rapidly expanding facility that used heat, pressure, and complex chemical processes to turn crude oil and natural gas into products needed for the war. Humble's Baytown works experienced nine fatalities from three explosions during the war years. One contributing factor may have been the inexperience and lack of training for the thousands of new employees pressed into service to staff these rapidly growing plants.<sup>31</sup>

On May 4, 1945, a flash fire in the Butyl lab severely burned two first class laboratory testers and one first class laboratory assistant. It was believed that the fire occurred when vapors from a leaking pressure container used in collecting isobutylene samples escaped in one of the laboratory rooms and were ignited.<sup>32</sup> The laboratory assistant, Norris Holloway, died on the day of the fire.<sup>33</sup> One of the laboratory testers, Margaret Jean Martin, died on May 8; the other, Lena Belle Fore, died on May 13.<sup>34</sup> The two testers were the first women

**"I put my application for employment in late 1942. My husband was in the army and was to leave promptly for overseas. The story was going around that if a girl could, in a dark room, tell the difference between a sewing machine and a typewriter, she was hired. I worked in the machine shop office, attached to the machine shop with all its noisy machines running constantly. Other girls my age went to work on the machines and many worked in other nearby offices and in laboratories. I worked until the fall of 1946 when my husband returned from overseas and I was anxious to start a family."**

**—Francis Janelle Beaugh Milner**

killed in a plant accident at Humble in Baytown. Both were twenty-two year old college graduates who had moved to Baytown in 1943 from outside the region to take promising jobs in the new Butyl facilities. Along with other workers who died in the fast-growing defense-related plants in Houston and around the nation, they were casualties of war.

As the war drew to a close in 1945, men discharged from the military became available for work. Humble's policy was to reemploy those former workers who had one or more years of continuous service prior to entering the military and who were physically qualified for their old jobs.<sup>35</sup> Men who returned to work in the refinery often displaced women workers, in particular those

who were hired after September 15, 1940. Women workers who were wives of veterans returning to jobs in the refinery were generally characterized in the *Humble Bee* as resigning their jobs "to resume domestic duties"<sup>36</sup> or to "do a better job of keeping the home fires burning."<sup>37</sup> In addition, veterans who were not former employees also took jobs at the refinery, displacing women.<sup>38</sup> "[I]t was understood that women would gladly relinquish their high-paying wartime jobs; those who must work would return to clerical positions to make room for the veterans."<sup>39</sup>

In "Baytown's 'Rosie the Riveter,'" Donna Lura Bonin included comments from interviews with three women—Marjorie Walker Eastwood, Mary Carlson Easley, and Mary Barron Bonds—who worked in the Butyl laboratory beginning during World War II. These women felt that the national image of "Rosie the Riveter" did not apply to the women workers at the Baytown refinery. After the release in February 1943 of the song "Rosie the Riveter," the title became the catchphrase to represent all women war workers. On May 29, 1943, a painting by Norman Rockwell on the cover of the *Saturday Evening Post* showed a woman worker with a rivet gun resting across her lap and the name Rosie painted on her lunchbox. In 1944, the movie *Rosie the Riveter* glorified the efforts of women war workers.<sup>40</sup> The media tended to portray Rosie as a young, white, middle-class woman with a boyfriend or husband fighting overseas. She did not have a job until she entered the labor force, which was motivated by her patriotism. When the vets returned home, Rosie willingly left the labor force to start a family and be a full-time homemaker.<sup>41</sup>

From the accounts of the three women interviewed by Bonin, women workers at Baytown did not meet all the qualifications of the mythical Rosie. The youth of the women workers in the Butyl laboratory was consistent with Rosie's youthful persona, as was the fact that the lab workers were white women from predominantly middle class families. Contrary to the myth, few of the women lab workers were married. Some had

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## Humble Women at War

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been employed outside the home before working at the refinery. While all of the women interviewed took pride in contributing to the war effort, they stressed that they took their jobs at Baytown primarily because the pay and the working conditions were better than other jobs available to them at the time. Many of the lab workers came to Baytown not as temporary workers, but with the intention of staying on the job and making a career after the war. Many of them subsequently spent long, productive careers working for Humble.<sup>42</sup>

One of the problems experienced by women workers was their lack of adequate training. Given the fact that there was a need for them to be as productive as quickly as possible, the lack of training, especially in the area of safety, certainly placed them at a greater risk for failure. Women working at the Baytown refinery in May 1945 at the time of the fatal fire in the Butyl lab recalled that they "were not taught too much safety until after the fatal accident."<sup>43</sup>

The small number of black women workers at Humble's Baytown refinery faced conditions starkly different from those of the white women who worked in the labs. The first picture of a black woman in the *Humble Bee* during the war was in the January 8, 1942 issue, which contains a photo of an unnamed black woman identified only as a maid for the Humble Club's 1941 New Year's Eve program. The magazine included a "Colored Column" from January through March in 1942, but it contained no items about black women. Likewise, the feature article "Humble Women at War Work" in the January 1943 publication of the *Bee* made no mention of black women. The July 1944 issue had a photo of black men and women with a caption about amateur night: "The Baytown Humble Club presented all colored entertainers among employees and their families. This program featured folk music, spirituals, choral numbers and ballads by a talented group of entertainers." The third and last

wartime photo of a black woman was in the July 1945 issue; it depicts the woman standing next to a stove and holding a pie. There is no article about her, but the caption of the picture described her as a recent annuitant who had worked as a maid from August 1927 to November 1933, when she became a cook at the refinery hospital until her retirement.

This limited number of photos of black women in the *Humble Bee* reminds the reader of the realities of life in the Jim Crow South, even in the midst of a major war.



*Humble Refinery workers were a close-knit family. They often gathered together for picnics and other activities, a simple but important act that helped keep a sense of normalcy during the war. They still get together today.*

*Courtesy Mary Carlson Easley and Gary Rabalais*

Black women workers at Baytown certainly did not hold jobs comparable to that of the much-heralded mythical Rosie the Riveter. Neither the participation of black women in

higher paying, nontraditional jobs nor the opportunity for them to participate existed at the refinery.<sup>44</sup> In this era, black men in the refineries still worked almost exclusively in all-black labor gangs and black women worked primarily as cooks and cleaners. Even the imperative of a world war fought on two fronts did not bring a significant change in the status of black workers in Houston-area refineries.

This conclusion serves as a part of a broader observation about the women who worked at Humble's Baytown refinery during World War II. A look inside this giant facility suggests that the image and mythology of Rosie the Riveter has stood in the way of a more complex understanding of women in the workplace during the war. Some of the women who worked at Humble were temporary workers who chose to substitute for their husbands or for other male workers knowing that they would leave their jobs when the war ended. Others, such

as those in the Butyl lab, seized opportunities created by the war boom to create careers for themselves where none had previously existed. The opportunities of others remained starkly limited by their skin color, as the historical realities of Jim Crow triumphed over the temporary realities

of a world at war.

All of the women workers at Baytown confronted traditional biases against women in industrial jobs. All surmounted those biases and made important contributions to the war effort. And all had their lives changed by their experiences during the war, as did almost every one in the Houston region and the nation as a whole. ★