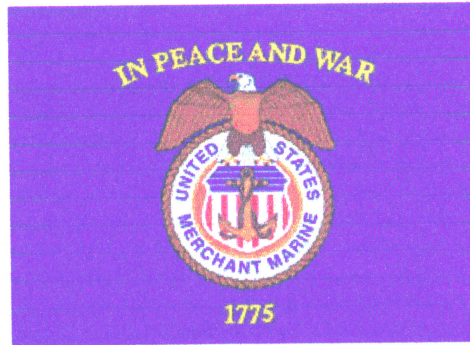
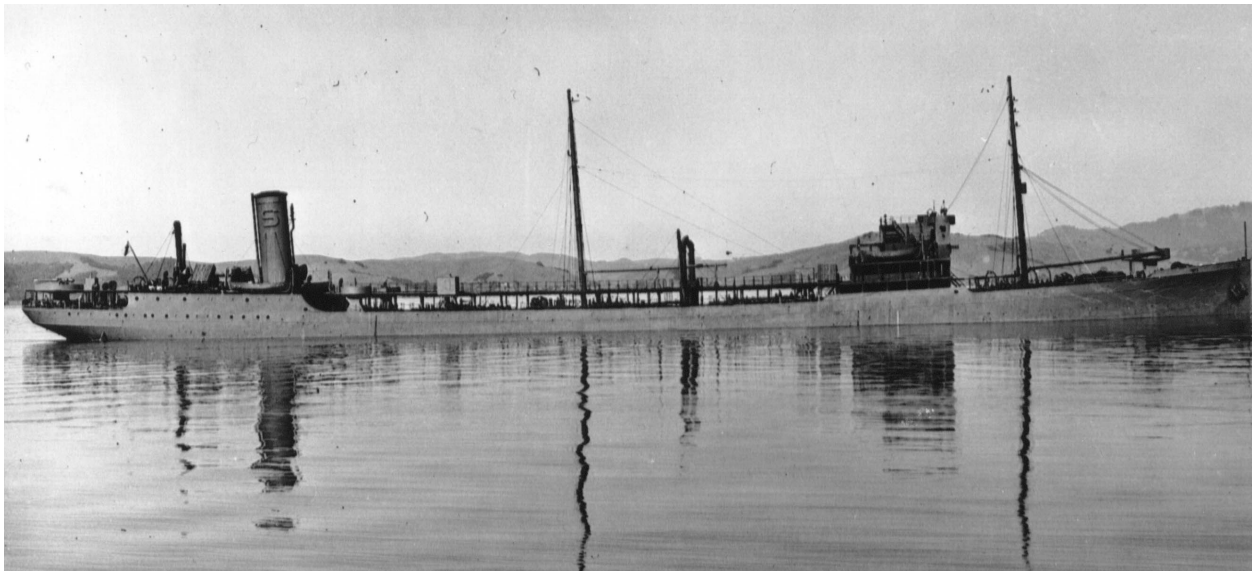


MERCHANT MARINE



Official U.S. Merchant Marine Flag designed by the U.S. Army Institute of Heraldry



U.S.S. W. S. Rheem

I served a short time in the U. S. Merchant Marine in the latter part of WW-II. This duty was on the Standard Oil tanker "W. S. Rheem" and consisted mostly of transporting fuel oil from southern California to various ports in the Pacific Northwest. The Rheem was a large tanker for its time, over six hundred feet long, with twin 3-cylinder reciprocating steam engines and according to scuttlebutt the largest set of Scotch boilers ever built. Each engine was about thirty feet high, the largest piston about three feet in diameter with a four foot stroke. She was built in 1922 by Bethlehem Steel with gross deadweight of 10,765 tons. I later talked with an acquaintance who had served on her in the Persian Gulf in the 1930's. Along with several other Standard Oil tankers she was appropriated by the War Shipping Administration in WWII and spent time in the south Pacific as a Navy "Oiler" where she was torpedoed on August 31, 1943 by a Japanese submarine, the I-20. The torpedo blew a huge hole in the forward cargo hold but missed the oil tanks, avoiding a fire, and by shifting cargo she was able to limp into Espiritu Santo in the New Hebrides (now Vanuatu) where she was patched up sufficiently to make the 5,500 mile trip home to Richmond, California. A more complete account of this from

a February 1944 Standard Oil publication with pictures is at the end of this chapter. The article was written in wartime and for security reasons they could not name the places where the action occurred. I did some research on Japanese submarines and have included information on the I-20, which was itself sunk by the U.S. destroyer USS Eaton (DD-510) in early October 1943, a couple of months after the attack on the Rheem. I-20 was one of the subs that had launched midget subs in the attack on Pearl Harbor.

It was toward the end of the war when I enlisted in the Merchant Marine. I went to the Marine Department at Standard Oil with a letter of recommendation from my former employer, got Standard's written offer to sign me on a ship, and with that obtained Coast Guard documents certifying me for sea duty as an ordinary seaman or engine room wiper. If I had known all the ropes at that time my machine shop experience would have qualified me for ship's machinist papers and allowed me a little easier berth. As it was I shipped out as wiper a few days later. On the Rheem, "the pipe-fitter's dream", a wiper's duties consisted mainly of following the First Assistant Engineer or Ship's Machinist around and doing what ever dirty job he dreamed up. We started out by loading aboard a huge replacement armature for one of the ship's generators. Another job that turned up right away permitted me to employ my years of experience with internal combustion engines. It seems that during the ship's stay in port they had tried to use the motor lifeboat and the motor wouldn't start. I investigated and found the crankcase of the four-cylinder inboard gasoline engine to be nearly full of water. After convincing the First Assistant Engineer that the engine could probably be salvaged if immediately removed, disassembled and cleaned, I was allowed to proceed with the operation assisted by another wiper. It was a success.

A never-ending job on the Rheem was replacing the shaft packing on the dozens of reciprocating pumps. The pumps were all about worn out and the packing didn't last long. Each pump had two steam cylinders and two water cylinders. The steam cylinders required asbestos packing soaked in graphite and the water cylinders used flax packing covered with tallow. To perform the repair, one had to activate and switch over to a standby pump, repack four packing glands, then reactivate and switch back. We didn't carry much in the line of spare parts. There was a complete machine shop on board and a large stock of raw material, so we wound up making what we needed. This occasionally gave me a chance to work as a machinist.

Here's one last anecdote from my days as a wiper. As I mentioned, this ship had what were known as Scotch boilers. These were horizontal cylinders about ten feet in diameter with flat end plates, or heads. The end plates were supported against the internal steam pressure by a multitude of steel rods riveted over on the outside of the heads. These rods were actually tubes as they had a small hole all the way through the center. The purpose of this hole was to indicate if the rod broke inside the boiler, as steam would leak out the end of a broken rod. This happened occasionally on the Rheem. The usual fix was to drive a taper pin into the hole to stop the steam leak. This was easily accomplished on one end of the boiler as it was accessible in the fire room. However, the other head was inside the fire box, and

escaping steam in there did not help combustion any. When we were at sea under way they needed all the steam they could get and were reluctant to shut down a boiler for repair, so the fires were temporarily shut down on the affected boiler, but with steam pressure still up and steam leaking into the firebox, we "volunteers" would put on three or four layers of clothing and crawl into the firebox through the burner holes and attempt to drive taper pins into the leaking rods. It was so hot in there we could only stay a couple of minutes. On one of these repairs the hole in the rod was deformed by riveting and the taper pin would not stop the leak. I came out and got a hardened tapered punch to use in rounding out the hole. When I drove in the punch it stopped the leak so I just left it there rather than substituting the taper pin.

I completed that trip as wiper and due to a shortage of qualified people found myself promoted to acting oiler. I can't imagine that this would be a very demanding job on a modern steam turbine or diesel ship, but the old Rheem was not equipped with any automatic features, not even a pressure oiling system. Everything was oiled by hand. There were two oilers on duty on each four hour watch. Each oiler was assigned one of the main engines plus certain of the auxiliaries, which consisted of generators, compressors, blowers and assorted fresh and saltwater pumps, all operated by steam engines of various descriptions. During maneuvering, the port side oiler (me), had to handle the throttles and shift links on the port engine, verify on the engine room telegraph all orders from the bridge for the port engine, and log all commands for both engines. Under way, we had to keep track of the temperature of the main and crankshaft bearings by sense of touch. In the case of the crank bearings this was accomplished by inserting one's hand edgewise in the two-inch space between the connecting rod and huge crankshaft as it passed by at about a hundred R.P.M.. Another cute job was oiling the piston rods. This was done with an oil-soaked brush applied in synchronization with the piston strokes. You climbed inside the safety railing and hung on with one hand as you applied the brush with the other to the rod on it's down stroke and got the brush out of the way on the upstroke. You also had to oil several auxiliary engines. These various chores were repeated every fifteen minutes and were all located at different levels of the engine room reached by steel ladders. You made the rounds and then had a couple of minutes to rest before starting all over again. We used oil cans made of soft aluminum that would crush without totally mangling one's hand. I found about a dozen crushed oil cans once when I was checking an area of the bilge.

On one memorable trip we came into Richmond on San Francisco Bay, the home port for Standard Oil ships and the area where most of the officers live. It is customary that a ship coming into Richmond will get a relief crew while in Port. On this trip there were other ships in and no relief crew available. All the officers except the Third Assistant Engineer disappeared as soon as we docked. All the engine room gang except myself and one fireman signed off (resigned). The fireman got hold of a case of beer and drank himself into a stupor. Water control to the boilers was manual, controlled by valves in the engine room, normally tended by the other (starboard) oiler. Since I was the only oiler left, I was also

water tender. The only thing we did not have to worry about was the main engines. Everything else was still operating. Water tending was trickier without the main engines as it was necessary to keep steam up in all boilers but not in the usual quantity. This was accomplished by cutting back on the number of burners operating and also alternating burners between the three boilers. It was even necessary to cut off all the burners on a particular boiler periodically to avoid making too much steam. Every change of a burner required an adjustment of the water flow. Water level in the boilers was maintained by watching a sight glass in the engine room and adjusting the feed water valves accordingly. There was a safety device called a fusible plug in each boiler that melts if the boiler runs out of water and then the steam escapes up the stack. If the water gets out of sight below the sight glass there is about one half inch of water left before the plug melts.

Here's the scenario: The fireman is asleep in the fire room. There is one fire in each of two boilers and no fire in the third. I had adjusted the water flow accordingly, completely shut off to the boiler with no fire. I went to the upper levels to oil the auxiliary machinery, which took about ten minutes. When I returned to the lower level I glanced at the water gages and nearly panicked when I could see no water in the glass for the supposedly shut-down boiler. I turned the valve wide open and ran to the fire room (at the other end of the boiler). There I found that the fireman had awakened and switched fires without telling me. That was a close call.

One other experience comes to mind from my days on the Rheem. We were heading down the Columbia River to the ocean from Portland, Oregon in a winter storm. When we put off our river pilot at Astoria near the river mouth we were told that the storm was too severe to put aboard a bar pilot to take us out to the open sea over the Columbia river bar, sometimes known as the "Graveyard of the Pacific". We accordingly anchored and the captain went ashore, probably to a tavern. I was off watch and sitting in the crew's mess with the second mate who was in charge of the ship when I noticed that the lights of a fish cannery on shore seemed a lot closer than they had a few minutes earlier and I mentioned this to the mate. He took one look and lit out of there yelling that we had dragged the hook. By the time we got up enough steam to move to safety I could have jumped from the fantail to the cannery dock. The next morning they put on a bar pilot and we made it over the bar, but in the next ten hours we only moved about a mile. Both screws were out of the water about half the time and the whole ship would shake violently as the engines revved up. Quite a memorable experience.

My previous machine shop experience would have qualified me as ship's machinist, which is an officer's berth equivalent to Fourth Assistant Engineer. I did get my machinist's documents from the Coast Guard but signed off the ship instead. Thus I bade adieu to my seafaring days. A 1998 act of Congress recognized U. S. merchant seamen who served during the war as veterans and I recently received an honorable discharge document from the U. S. Coast Guard and correspondence from the Veteran's Administration indicating that I qualified for certain veteran's benefits.

Honorable Discharge




from the Armed Forces of the United States of America

This is to certify that
Walter Charles Bernard Marston

was Honorably Discharged from the
United States Coast Guard

*on the 26th day of December 1945. This certificate is awarded
as a testimonial of Honest and Faithful Service*

Issued pursuant to P.L. 95-202 and/or P.L.
105-368 for service in the American
Merchant Marine between December 7, 1941
and December 31, 1946

TAMARA WILCOX 
Lieutenant (Junior Grade)
Acting WWII Project Officer
By direction of the Commanding Officer

DD FORM 256 CC (REV. 5-60)

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