

THE WATER LEVEL ROUTE TAKES TO THE WATER: NYC MARINE OPERATIONS IN NEW YORK HARBOR

THOMAS FLAGG

Part 5 – The Marine Repair Shop

Maintaining a fleet of marine craft requires a shop facility, and the New York Central's was at the north end of its Weehawken Terminal. This shop mainly did routine maintenance work rather than original construction, though it did build a few barges during WW II. Work on hulls that required a dry dock was done at other facilities.

The Weehawken Marine Repair Shop was built as part of the major expansion of the Weehawken

Terminal that was undertaken by the West Shore Railroad at the start of the 20th Century. Blueprints dated 1902 show the shop building being built. The land where it was built was actually in West New York, not in Weehawken, and had previously been used for a large stockyard. That facility had been moved elsewhere by then, as had some float bridges and a ferry terminal that had been in this vicinity, so the water frontage was available.

By 1904 the marine repair yard had been completed, and Pier 13 had been added at its southern edge



The Marine Repair Shop at West New York, New Jersey appears in this detail from an aerial photograph taken on September 18, 1922. Several craft are tied up between Piers 12 and 13, the largest being one of New York Central's eight ferryboats. NYCSHS Collection.

for the loading of company lumber and ties. In 1905 a large electric power plant was installed to operate the grain elevators, as well as the marine repair and other shops. It utilized Corliss reciprocating engines. It went out of service about 1925, when the Central converted to purchasing power from Public Service.

The shop continued in operation for many years. We will now learn what it was like to work there from Michael Igoe, possibly the last man still living who worked there.

Memories of the Marine Repair Shop

MICHAEL W. IGOE

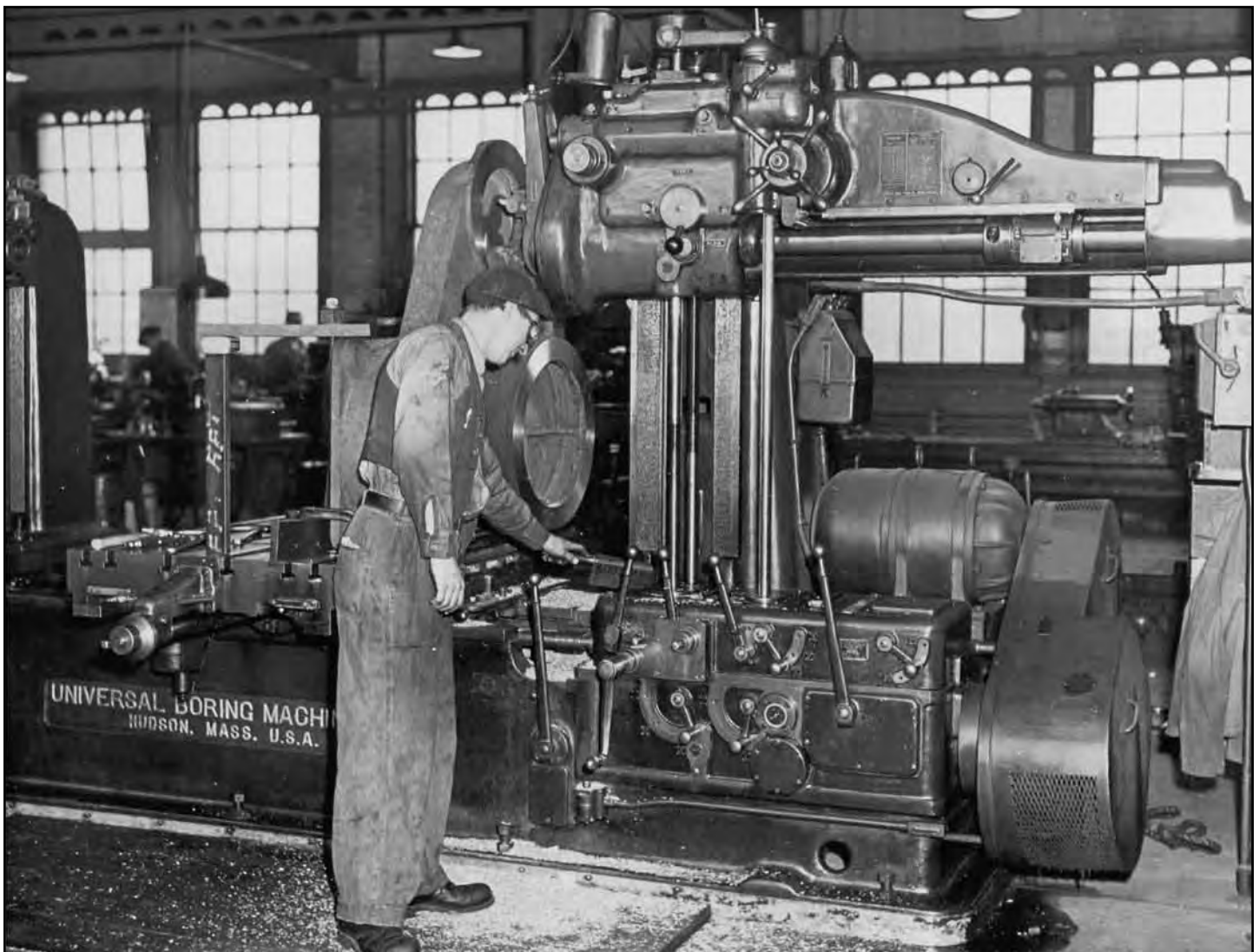
My particular link to the Marine Department was limited to the Marine Repair Shop, located along the Hudson River at the foot of 60th Street, in West New York, New Jersey, at the north end of the West Shore Railroad's Weehawken Terminal. My father was a lifelong employee there, start-

ing as a machinist helper about 1924 and retiring in 1969 as the Marine Repair Shop storekeeper. My paid activity at the Marine Shop was always as a vacation replacement, starting in the summer of 1962, and then off and on during my vacations from college. Those were the ending days, when any unfilled positions were likely to be abolished.

My assignments were varied – storeroom helper, laborer, boilermaker helper, motor truck operator, and night watchman – whatever was available. The ferries were gone by then, so my antics were limited to the tugboats. For several months before going into the Army, I had a job as a section storekeeper at Grand Central Terminal, and lastly as a railroad policeman walking about the West Shore's piers in Weehawken. My last service with the NYC was during December of 1966.

Without any special skill sets, most of my assign-

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Marine Shop machinist John Igoe, the author's father, removing metal filings from the boring machine after completing a design. There was only one such machine at the Marine Shop, and it took skill to make the settings before a job could begin. No automation or lasers then! Some of the windows in the background are among those that Mike Igoe knocked out while trying to clean them. Emmett Francois Collection.

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ments were mundane, although there were a few moments that still stand out. Most of my recollections are anecdotal, as I have absolutely no mind or memory for vessel facts and figures. I can remember the names of many of the managers and supervisors, as well as co-workers, and I can still fairly well remember the layout of the Marine Shop grounds.

I can also recall the general malaise that settled over the yard the closer it came to being phased out. Steamboats were no longer in vogue, and the NYC had only two diesel-powered boats – one purpose built (Tug 34), the other re-engined with a diesel locomotive power plant (Tug 25). Toward the end, there was likely more personal work being done at the Shop than railroad work. With some exceptions, the crew at the Marine Shop was pretty close.

Family Railroaders

My mother's father was the assistant to the terminal manager at Grand Central Terminal. In its day, this was a reasonably prestigious position. During the

depression, my mother eventually found herself working as a secretary somewhere within the Mott Haven Yard. When that job ended, she accepted a similar position at the Marine Shop. There she met my father. My mother was the first female that the Marine Shop had ever employed, and perhaps the last. While a novelty, there was a serious issue to be addressed. The shop had no restroom facilities for females. Thus came into existence a private restroom within the shop's administrative offices on the second floor of the main building. It was designed and built by shop workers sometime during the early 1940s.

My mother and father met at the Marine Shop, probably during 1942. At the time, my mother was the secretary to the superintendent. My father was either a machinist helper or a machinist. My mother was then living in New York City, and would commute to the Marine Shop via ferry and Public Service bus. The bus would leave her off at either Park Avenue or Boulevard East and 60th Street, in West New York. My dad had a car in those days, and would just happen to be at that intersection when my mother would alight from the bus. He'd offer her a ride to the Marine Shop,



In this 1948 view looking out Pier 13 toward the river, we see two caulkers sitting on a wooden scow, while a carpenter labors on the cabin framework. At left, two more carpenters are doing roof repairs on the refrigerator barge *Vernon*. A carfloat is tied up on the north side of the pier, and two ferryboats, *Albany* and probably *Stony Point*, languish on the right side. An impromptu conference appears to be taking place halfway out the pier. Photo by Ed Nowak.

sparing her walking in her high heel shoes. When word got out that mom and dad were dating, his workmates warned him that he'd "never get to first base."

What Did the Shop Do?

Assignments went from the mundane (replacing light bulbs on the tugs) to the medium difficulty of cutting out and welding new pieces of steel onto a boat as long as it was above the waterline. The shop was also responsible for preparing the boats for mandated Coast Guard inspections. The Marine Shop never had a dry dock insofar as I know. Heavy repairs and maintenance were outsourced to local dry docks, such as Lord's, Todd's, Union, or Roderman's. During WW II, the Marine Shop had perhaps nearly 200 craftsmen, helpers, laborers, and administrative people working. The craftsmen at the Marine Shop were exempt from military service – if they so chose – being employed in a critical war industry.

The crafts at the Marine Shop would typically represent a small town's core of infrastructure maintenance. Carpenters, including joiners, took care of all things wood. They would replace storage boxes on the boats, replace or repair wooden cabins, replace or maintain pilot house woodwork, and so on. Painters painted, of course, but also maintained the number boards on the pilot houses. Glazing, replacing broken or cracked glass on the tugs, was handled by the painters.

Electricians attended to all things electrical, from replacing light bulbs to rewiring the electrical panels on the tugs. Tinsmiths handled anything that sheet metal would require. That would include working on the smokestacks. Also, the tinsmiths would repair or replace sheet metal that protected workers from heat and sun glare.

Boilermakers, including welders, cutters, and pipe fitters, took care of things relevant to steam propulsion. They maintained boilers and made medium repairs to tug hulls and superstructures, while machinists retooled, repaired, or replaced valves and injectors. They also worked on Flexi-Van pneumatic pumps. The primary function of a pipefitter was to install pumps, check the operating status of the various pumps, and prime each pump to ensure proper operation. Sailmakers did fender and rope work, including splicing of lines, construction of fenders, and anything requiring canvas. It was later determined that fenders could be replaced by used tires.

Other positions employed at the Marine Repair Shop included a motor truck operator who was limited to using a motorized vehicle to carry heavy loads to the yard piers, watchmen, a radio technician who maintained tug communication with Pier 2, a diesel mechanic responsible for the engines on tugs 25 and 34, and laborers, who did anything that did not fall under the purview of a craft.

Supervisors handled some of these positions. For example, the machinist foreman had been trained in

diesel maintenance and repair.

On the administrative side, there was a yard superintendent, a general foreman, a storekeeper, and various clerks. The positions of assistant superintendent, marine surveyor, and secretary to the superintendent, as well as some clerical positions, were abolished by the time I started hanging around the yard.

The yard workforce had been greatly diminished after the ferries were removed from service in 1959. When I had a paying job at the yard, there was just a skeleton crew working on the remaining boats. Numerous craft positions had been abolished. In the 1960s, the NYC sought to dispose of all of its wood-hulled vessels, especially scows, barges, and covered barges which were no longer of any use, generally selling them to civic organizations for pennies, just to get them off the roster. The Sea Scouts received some of these vessels.

Winter Furloughs

For years, the Marine Shop used to cease operations during the New York winters. The thought was that it was simply too cold to work on the boats – you couldn't haul them into a heated garage. The workers were furloughed until warmer weather. There may have been a skeleton crew left in place. Some of the furloughed workers were able to find other positions within the NYCS. According to my father, one of the jobs he filled during a furlough was working at the GCT information booth. He may have been in the lower level's suburban train information booth. According to the 1930 Federal Census, my father listed his job as "Float Tender," likely another furlough job. If I remember the story correctly, with the advent of WWII, the company experimented with year-round operations. That's the way it stayed.

Coast Guard Boiler Inspections

The USCG was required to inspect the boilers on steamboats in the harbor, including NYC's remaining steam vessels. During my time as a vacation replacement boilermaker, the Coast Guard showed up at the Marine Shop to conduct a boiler inspection on the tug I was working on. Warned in advance of the inspection, the boilermaker foreman told me what I was to do once the inspectors got on the boat. I was to get into the boiler with a high-pressure water hose and start to wash off the mineral scaling on the heating tubes.

So into the boiler I squirmed, water hose and all. I started washing off the mineral deposits on the heating tubes. Once the inspectors were below decks, the foreman called me out of the boiler to show the inspectors just how well the boiler was being maintained. The inspectors took a cursory look at my progress, telling the foreman to have the job finished. They were satisfied. Once the inspectors were gone, I was told to put the access port back on the boiler, and consider it a good day's work. The tug passed inspection.

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Fuel Delivery on a Collapsing Bulkhead

During 1966, I was filling in for the motor truck operator position. There was a gasoline delivery scheduled for the Marine Shop. Gasoline was used to power the few machines requiring it. Gasoline was also used to clean grease off pumps. The gasoline tanker pulled into the yard, and began backing toward the downpipe to off-load. As the tanker backed up, we could see that the bulkhead beneath it was beginning to collapse into the Hudson River. This says something about deferred maintenance. My foreman, Walter Newman, grabbed the public address system and told the tanker driver to stop – NOW! – halting the tanker just before it went into the river backwards. The delivery was eventually made with the help of several extension hoses.

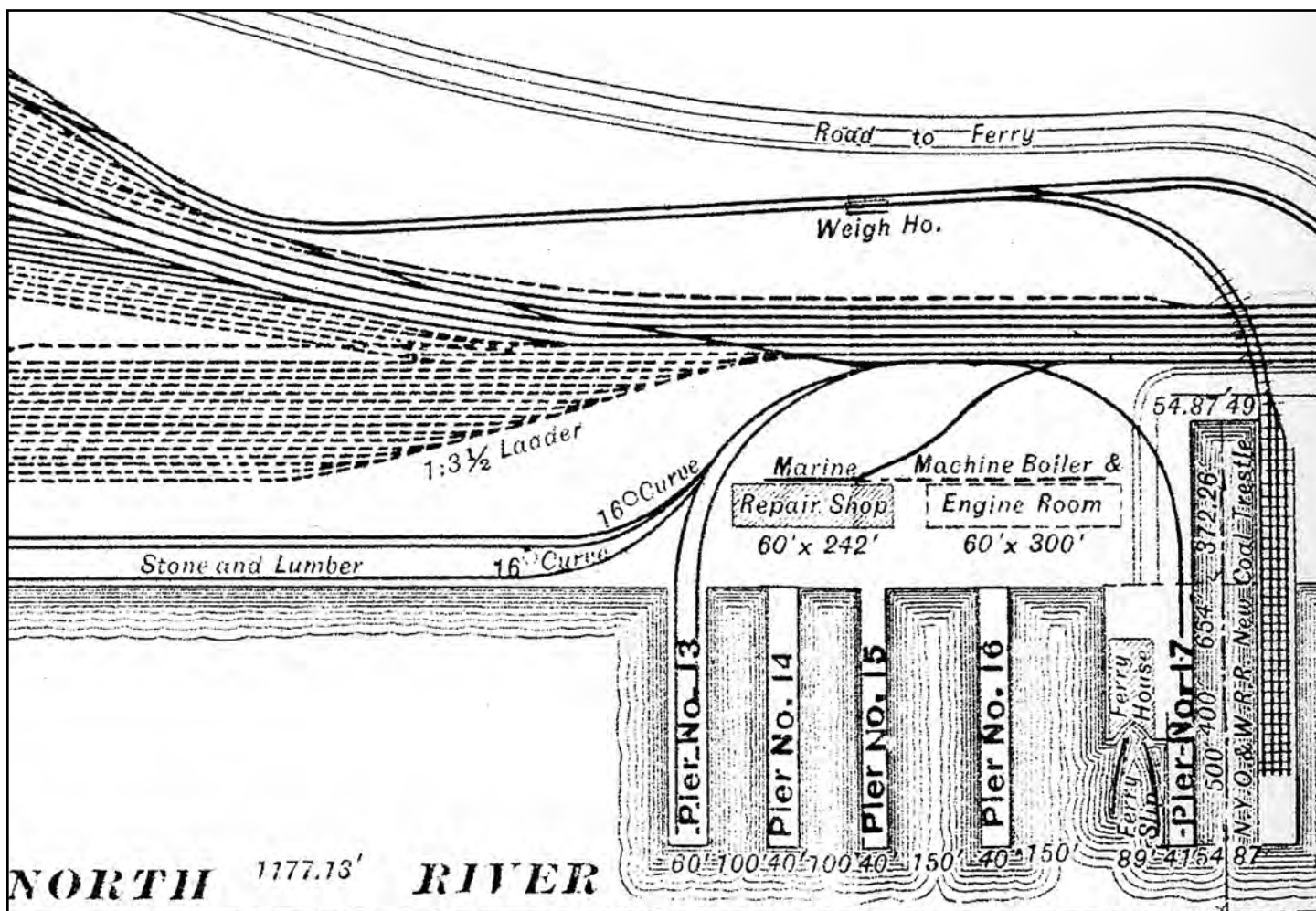
The Joan B.

The NYC had a supply boat named the *Joan B.* I've no idea where the name came from, although

you would suspect that some NYC functionary had someone in mind. The *Joan B.* would load up daily at the Marine Shop, carrying rope, lubricants, and other items needed by the tugs. The boat had a skipper and one or two deckhands, but no other crew members. It reminded me of a WWII P.T. boat, although smaller. I remember it as being diesel powered, steel hulled, and dispatched out of Pier 2. I believe that the job was abolished during the 1960s.

A Dangerous Place to Work

The Marine Shop could be a dangerous place to work. While I didn't witness any workers being injured, I can remember some of the craftsmen with missing fingers and scars of various descriptions. One fellow lost an eye after a wire rope strand unraveled and whipped while he was trying to make a splice. He later went into the employ of Todd's Shipyard in Hoboken as a rigger. Much of his job involved splicing wire cables. I met him there when I had a summer job with the same outfit, probably during 1963. Other craftsmen lost fingers and toes, broke bones, twisted



This plan shows the Marine Repair Shop area at West New York as it existed in 1905, shortly after the construction of the facility. One of the two New York, Ontario & Western coal trestles is at right. The NYO&W had trackage rights over the West Shore Railroad to Cornwall, New York. T. Flagg Collection.

and pulled muscles, grew faint working within the boilers, slipped down ladders, and suffered various cuts and bruises.

I remember a fireman on a tug telling me about the time he dove overboard to rescue a mariner who'd fallen off another (non-NYC) tug. The time of year was March, with the Hudson River still very cold. The fireman saved the life of the near-drowning hand, towing him back to the NYC tug. The deckhands on the tug first pulled in the fellow who'd fallen into the river. By the time they got to the fireman, he was unable to use his hands to grab the line that was thrown to him. He was able to get his arms into a life ring, and then was hauled back onto the tug. When he came out of the water, his skin was blue. The rescued hand was transferred back to his boat, and the rescuing fireman was warmed up within the engine room. The event was never reported or logged.

How did accidents happen? All you needed was to be distracted while working on a lathe, using a power saw, lose your footing, drop something on your foot (not many safety shoes in those days), or pick up too heavy a load without assistance. You could bang your head on a beam within a tug's engine room (no safety helmets in general use then), slip on a wet deck, bang your hand with a hammer, pinch your finger while tightening a nut on a bolt or seating a valve – you name it. If it could happen, it happened.

I was once detailed to assist a pipefitter to get his gear onto a tugboat, after which he'd work on the pumps and assorted piping. There was a gangway leading from the pier to the tug. The gangway was just a straight board, with low elliptical railings along either side. I'd preceded the pipefitter to the tug so I could carry his gear and then heft it onto the boat deck. The pipefitter, who was a decent and conscientious person, had atrocious eyesight. He must have been at least legally blind, but he could still do the job. As he was descending the gangway, he lost his balance, and fell down on the gangway. The railings, which were knee high, didn't help him. I was able to catch him before he landed in the river. He begged me not to tell anyone about the incident, and I agreed. I felt very sorry for him. Once on the boat, he taught me the principles of pump priming and how the various tubing connected to this or that pump led to this or that part of the engine. He operated very much by memory, touch, and feel, his eyesight being so poor.

One day, I was detailed to move the rope coils from a boxcar on the railroad's spur to the Marine

Shop. I had to shove the coils down a portable ramp to Walter Newman, my foreman, who would then navigate the coils into the storeroom area. These rope coils were large and heavy, not easily deflected once they started to roll. Mr. Newman and my father were conversing as I was manhandling the rope coils. My father, as storekeeper, was keeping track of the order while Mr. Newman was deciding where to place each coil. I, ever oblivious, shoved the next coil down the ramp, without wondering if the recipients were ready.

As it turned out, they weren't ready. When I realized that, I shouted to Mr. Newman and my father. My father simply stepped out of the way, but Mr. Newman decided to jump on top of the preceding rope coil, to keep from being squeezed between it and the rapidly approaching rope coil. Fortunately, he was very agile, and no injuries incurred.

“How did accidents happen? All you needed was to be distracted while working on a lathe...”

Washing Windows and Making Gaskets

While working as a laborer, I needed to figure out what to do while I wasn't assigned to a specific task. I took it upon myself to begin washing the windows on the east side of the Machine Shop. These windows hadn't been washed since the Marine Shop was erected, nor had they been maintained in any manner. When you walked into the Machine Shop area, regardless of bright sunlight out-of-doors, it was a dismal scene. There was just not enough sunlight getting in there. Considering the seniority of the machinists, they never noticed. So I loaded up a large bucket with window washing liquid (likely just water, soap, and ammonia) and started in with a long pole and attached brush. After about the fifth window fell out, I gave up the task. There was nothing holding in the windows except gravity. The machinists got a laugh out of it.

I was once introduced to the art of making gaskets for fittings that could no longer be called modern. Gaskets for the boats weren't readily available in the local hardware or plumbing supply store. To make a gasket, you'd put the valve or fitting into a vise. Then you would get a piece of gasket material from the storeroom. You'd lay the material over the valve opening, and then hammer on top of the material around the fitting with a ballpeen hammer. When you were done, the indentations would show you where to cut around the edge, as well as where to cut out holes for the bolts. Voila! Instant gasket, made to fit. Someone would take the gasket

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and fitting out to the boat, line it all up, and bolt everything into place.

The Oakite Vat

There was a rectangular steel open-topped vat between the boilermaker and machinist areas. This vat was filled with water, heated via a steam line, and then had several barrels of Oakite tossed into it. The vat mixture was used to clean anything that needed heavy duty cleaning. You'd find boilermaker and machinist tools hanging in it, valves, paint trays, paint brushes, anything that needed heavy-duty grime or grease removed. The vat was discontinued after the Marine Shop no longer had a source of steam to heat the water with.

Me, the Night Watchman

During a part of the summer of 1962, I hired on as a night watchman at the Marine Shop. I was the midnight to 8:30 a.m. relief man. And I loved it. My primary duties were to ensure that the shop and its vessels were safe. This required making a tour of the premises and boats once an hour. My only tool, other than a telephone, was a watchman's key and clock, along with a written log.

On the hour, I was to ring into an alarm monitoring system to let a central station know that I was still awake, and likely still alive. That ring station was just outside of the yard's administration offices on the second floor. From there, I was to traverse the upper and lower levels of the Marine Shop, inserting the local key into the watchman's clock and making a turn. Thus, my visit would be recorded.

Then came the boats. At that time, there may have been three or four tugs tied up, all alongside the south pier at the Marine Shop. It was a bit of a walk from my last ring at the boilermaker's area to the pier with the tugs. On one occasion, I was at the end of the respective pier, when I heard the telephone for the Marine Shop ringing. Remember, there were no cell phones in those days. I trotted back to the nearest phone, but the caller had already ended the call, and there was no message waiting in those days. So I went back to the pier to begin my tug rings when the phone began ringing again. I had no idea who would be calling the Yard at 1:00 a.m., unless it was Pier 2.

I literally ran back to the nearest phone, answered it before the line went dead, and discovered that it was my mother wondering if everything was well on the waterfront. Once I regained my composure, I assured her that all was well, and to leave me alone. I later asked my father when to race back to a telephone during my rings. He told me to just ignore it – finish my rings and then retreat to the Marine Shop. "If it's important, they'll call back," he said.

General Foreman Henny Sitterman was responsible for reviewing the ring tapes within the watchman's clock. He, with humor, told me that he didn't know there were so many local keys within the shop.

The log that I kept was not quite what the Marine Shop was used to. Usually you'd merely see an entry when a watchman came on duty, and another when he went off duty. In my case, I'd record all sorts of trivia, such as the state of the tide, the colors on the Empire State Building, the weather prediction atop the Mutual of New York Building across the river at 1740 Broadway, the cloud cover, the view of New York City with the sunrise, the sounds of cars switching in the Weehawken yard, the passing or arrival of a liner, and other trivia.

One night as I was making my rounds, I noticed that a tugboat was listing severely to port. I made my ring on the boat, looking for signs of water or whatever would cause the boat to list like that.

I called Pier 2, and related what I saw, and a tug was dispatched to check out my call. They arrived at about 3:00 a.m., and the crew clambered aboard the listing tug. After their inspection, it was announced that the boat had been heeled over intentionally, better to facilitate work that had to be done on the now exposed area. It took a while for me to live that one down. While my father never laughed all that much, he thought my call was worthy of a laugh, and a "coffee and..."

General Malaise

It was never a secret that the Marine Shop was living out its last days. Some of the workers and managers took it in stride, trusting either to the union agreements, or to the likelihood of finding other work during the economic build-up for the war in Viet Nam. Others simply retired.

My father was too young to retire, so he accepted a similar position with the newly created Penn Central. Rather than walk to work, as he had for many, many years, he now had to commute by car to Kearney, New Jersey. He told me that there was animosity between the NYC and PRR guys, and took an early retirement at age 62.

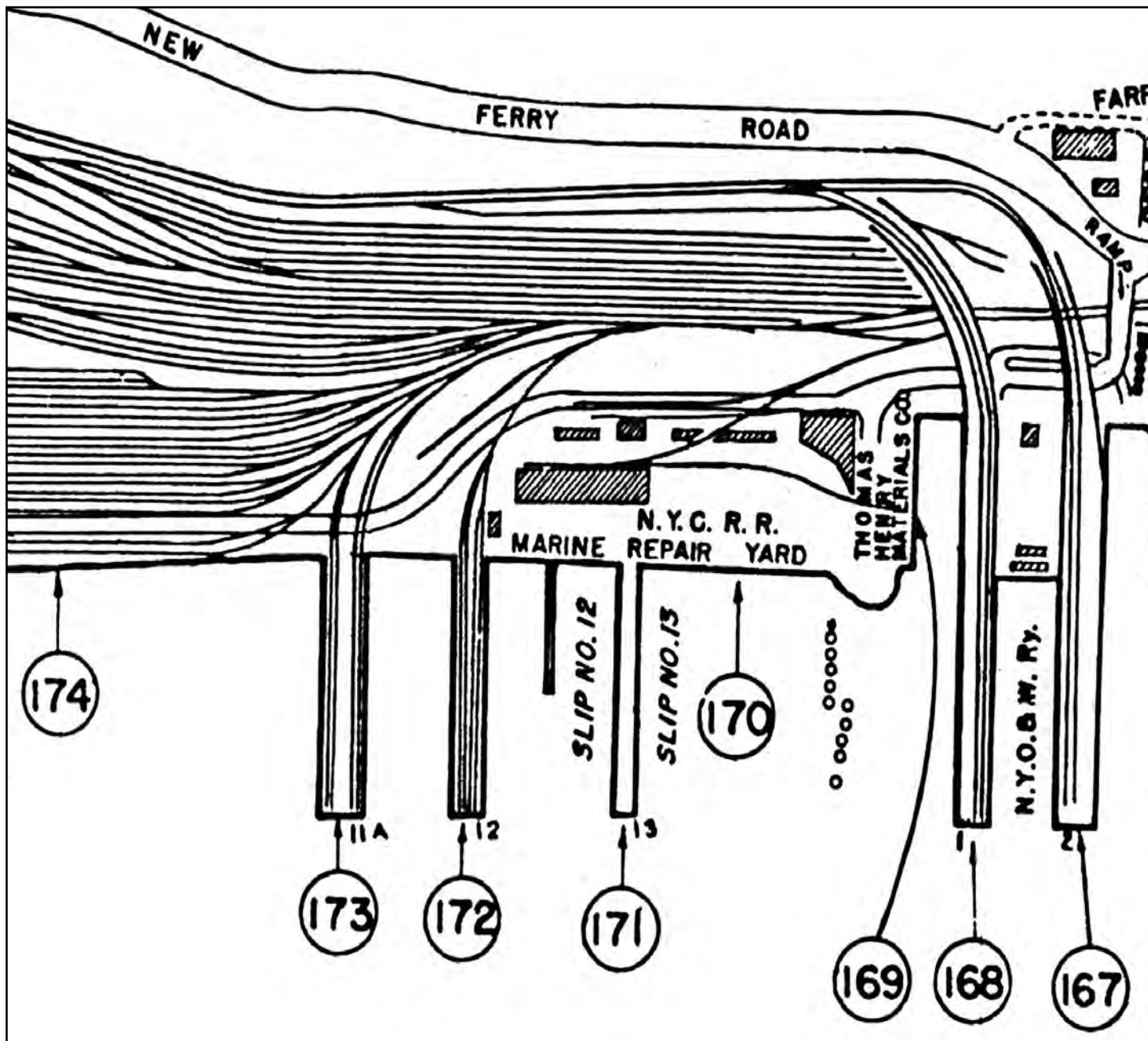
Among the workers at the Marine Shop, it was apparent that no one was enthusiastic about putting in a day's work. The end was nigh, so why exert yourself? The craftsmen would drift out to their assignments at least 30 minutes after the normal start time, eat their lunch at least another 30 minutes before the normal lunch time, and then drift back out another 30 minutes after the normal lunch time. The end of the day was the same routine. Rather than ending their day at 4:30 p.m., they would leave their tasks at no later than 3:30 p.m. The work they were performing was still good enough to keep the tugs safe, but the spirit was gone.

What Remains of the Marine Shop

After three years in the Army, I returned to Michigan State University, getting a Master's Degree, and then found a non-railroad career. With my father retired and me back at home during 1971, we went for a ride to see what was left of the Marine Shop. Nothing was left. The area had been leveled. Only the piers remained. My father was well saddened, as was I. With the exception of a pier or two, the Marine Shop grounds were razed to make room for riverside housing.

Last of the Marine Shop Crew

While thinking about fleshing out this story, I stopped in mid-review and thought that I may be the last person alive who worked at the Marine Shop in West New York, albeit on a very limited basis. No doubt, the fellows I worked with have gone on to their greater rewards. I've no proof of this, but the arithmetic adds up. I'm 67 years of age. There was no one at the Marine Shop less than 40, and that's likely stretching it.



This plan is from the 1953 edition of the "Port Series," a series of books put out by the U.S. Army Corp of Engineers giving the plans and descriptions of every major port in the United States. The map has been cropped to show just the north end of the Weehawken Terminal. The numbers refer to full descriptions given in Vol. 2 of the book. Essentials: 167, 168 are coal trestles owned by the NYO&W for the transfer of anthracite from cars to barges; 169 is the Thomas Henry Materiel Co. wharf, owned by NYC, for receipt of building materials by barge. 170 is the bulkhead fronting the NYC RR Marine Yard, for mooring carfloats, barges, ferryboats, and tugs undergoing repair; 171 is NYC RR Pier 13, same function as 170; 172, 173 are open Piers 12 and 11-A, for receipt and shipment of general cargo by barge. T. Flagg Collection.