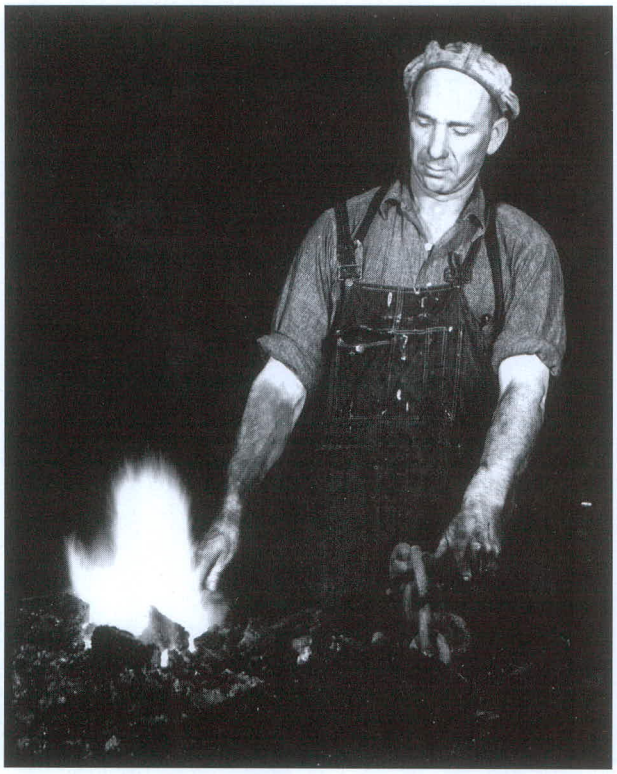
The Depot

by George Worthylake





Above — A blacksmith working on buoy chain at the Yerba Buena Island Depot, San Francisco Bay, circa 1932.

Left — The newly completed Long Beach, CA depot building, circa 1932. U.S. Lighthouse Society photos.

Since the establishment of the first lighthouse at Boston Harbor's Little Brewster Island in 1716, lighthouses have needed supplies. Our first lighthouse keeper, George Worthylake, ferried his supplies to the Boston Lighthouse via row boat. But as the service grew and the number of light stations increased, more than row boats were needed.

The materials the government furnished light stations and the means of furnishing them varied over the years. Until 1852, lighthouses were a collateral duty of the local Collector of Customs. It was his duty to authorize contracts for constructing light stations, repairing existing stations, and providing supplies. It was also his duty to ensure the stations were up to snuff through routine inspections. However, federal investigations of our lighthouse service in the 1830's, 40's and early 50's revealed that many stations were in poor condition, not properly maintained or operated and lacked necessary supplies.

In 1810 Winslow Lewis, an unemployed sea captain, convinced the government to purchase his patent for a parabolic reflector-lamp apparatus. A design which, in fact, had been invented some years before by Ami Argand, a Swiss scientist. Lewis also secured the government contract to furnish the lamps and supplies for all the federal lighthouses for $27,000 per year. An award of $60,000 was made to Lewis for the patent, to install the reflector system in all 49 government lighthouses and to maintain them for seven years. He was later awarded contracts to furnish supplies to lighthouses and even construct new stations. Many of his rubble stone towers failed within a few years, mostly due to poor mortar.

During the first half of the 19th century each Collector of Customs established (in the areas for which he was responsible) crude buoy depots, sometimes merely a designated portion of a public pier, at which to store spare buoys, chain and sinkers. General supplies were furnished by civilian contractors using their own vessels. Winslow Lewis "won" the contract for about 20 years, then a C. Grinnel, Jr. obtained the contract for the next years, followed by C.W. Morgan & Co.

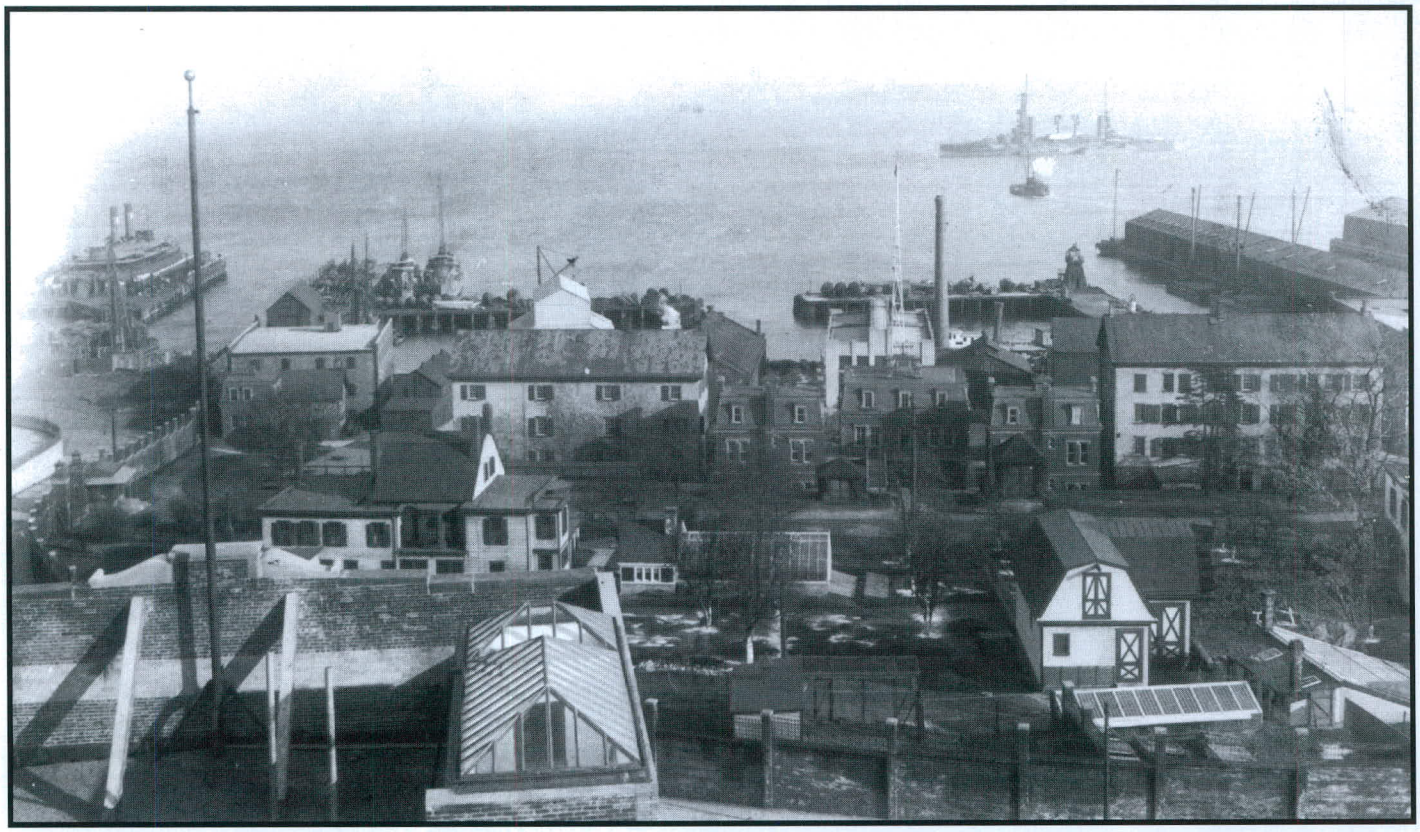
From 1839, until the Lighthouse Board was established in 1852, brothers Jonathan & Joseph Howland, both captains, were employed by the government to furnish supplies to all American lighthouses (Atlantic & Gulf coasts, Great Lakes, Chesapeake Bay and Lake Ponchartrain). Captain Jonathan Howland chartered his schooner Eliza to the government for $700 a month, and his brother Joseph chartered his schooner Augusta for $610 a month. These rates included the vessel, all lighthouse supplies, their salaries and those of the crew. Still, $8,400 a year, in Jonathan's case, was a tidy sum in those years.

In 1851 an ad hoc Lighthouse Board was established to investigate the condition and operation of America's light stations. They inspected several stations, sent two officers to Europe to learn what was happening on that continent. They also questioned, in grueling detail, the Fifth Auditor of the Treasury

(Stephen Pleasonton) who was the Superintendent of Lighthouses, the Collector of Customs for the Boston District (Greely) and the Howlands. The Board asked who tested oils and equipment, inquired about the condition of the supplies, the conduct of the keepers, condition of the stations and asked for recommendations to improve the system. Pleasonton gave vague answers. The district superintendent thought everything was handled very well and materials and equipment tested scientifically under his supervision. Captain Howland stated his operation was shipshape, but owned up to the fact that the conditions of the stations, and manner in which they were kept, could use improvement. He defended his operation and when informed that several keepers complained of poor quality of the supplies, blamed the keepers for being untrained "...very deficient in information, as to the proper manner in keeping their lights..." especially among new keepers. He further blamed the "spoils" system for the poor grade of keeper.

The ad hoc Lighthouse Board recommended sweeping changes in the manner in which the lighthouses of this country were managed. Their comprehensive report of 744 pages was almost entirely adopted by the government and the ad hoc committee became the ruling board and Pleasonton was removed. The new Board was comprised of two Naval officers, two Army officers (Coast Survey and Corps of Engineers), two civilians of high scientific attainment and a Navy lieutenant as recording secretary. The Board divided the country into several lighthouse districts each with a Navy officer as District Inspector and Army Corps of Engineer officer as the District Engineer. Each district was provided from one to five depots for supplies and eventually ships (tenders) to work the floating aids to navigation and deliver supplies to the stations. The first tender constructed especially for the service, and named after the first president of the Lighthouse Board, was the *Shubrick*. Completed in 1857, she was assigned to the new west coast district where she served for 25 years.

After the Civil War, circa 1866, the Lighthouse Board realized that there was a need for a super depot, a facility to receive and test or inspect all oil, lenses and supplies before transferring the material to the various district depots. The site chosen was federal property on Staten Island, NY at Tompkinsville. In the 1867 Report to Congress the Board reported, "Prior to the establishment of this depot the reserve material for the lighthouse service was stored in several districts, involving the necessity for a multiplication of storage buildings, mechanics, workmen, supplies of all kinds, apparatus, etc., and it frequently happened that articles were purchased for use in one district when there was an excess of the same in other districts. To reduce to the minimum the supply of the service and the consequence expense, it was evident that there must be one storehouse, one workshop, one oil vault, etc., gathered together at one spot and called a depot, from which all needed supplies and apparatus could be issued as they might be wanted, upon requisitions



The General Lighthouse Service Depot looking from the rear toward Brooklyn. The rear of the property is defined by the brick fence, lower portion of photo. Middle of photo from left — Depot Superintendent's house, his greenhouse and barn. The large north warehouse in front of Superintendent's house is the oldest depot building and was constructed in 1864. To the right of the warehouse is the administration building (1869). Note the bridge from the bluff to a rear entrance to provide access for the Superintendent. To the right is the south warehouse (1867-68). Top left is a Staten Island ferry. The next pier to the right are two tenders and on the following pier are numerous buoys and an experimental wooden light tower. Note the large military vessel top right, possibly a cruiser. National Archives photo, between 1901 and 1906.

from the inspectors or engineers of the several districts, approved at the office of the Lighthouse Board. For convenience of purchase and shipment, it was just as evident that this depot must be at or in the immediate vicinity of New York City."

The Board requested, and was awarded $50,000, to procure suitable land and construct various buildings. They found unused property on Staten Island already under control of the government called the "revenue grounds". The Board further reported, "The depot thus established very soon proved its usefulness, even far beyond what had been anticipated ... Although it was expected that the business of the depot would be large, it has far exceeded the expectations, and it was demonstrated that there neither sufficient room nor facilities to ensure the best practical results or to answer all the demands made upon the depot."

To expand their operations an appropriation was made to purchase a strip of land on the north side of the lot from the state. The service also acquired the remainder of the Revenue grounds abutting the depot.

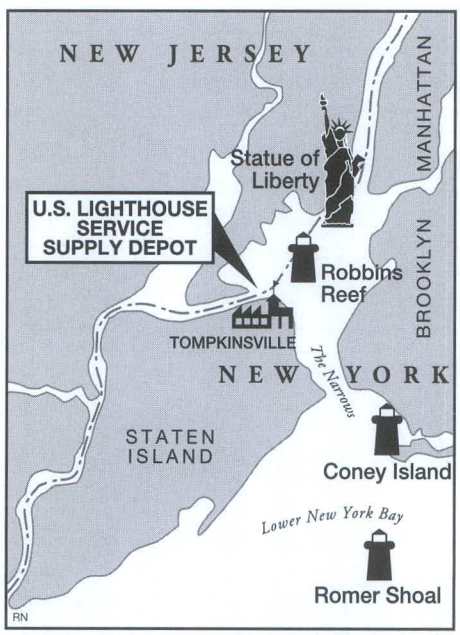
The annual report went on to state, "Among the buildings acquired in the recent transfer are two storehouses, which are very old and far too weak for lighthouse storage purposes. It is proposed to take them down and use the material in building a new storehouse, uniform with the one first constructed, for which purpose no new appropriation is required.

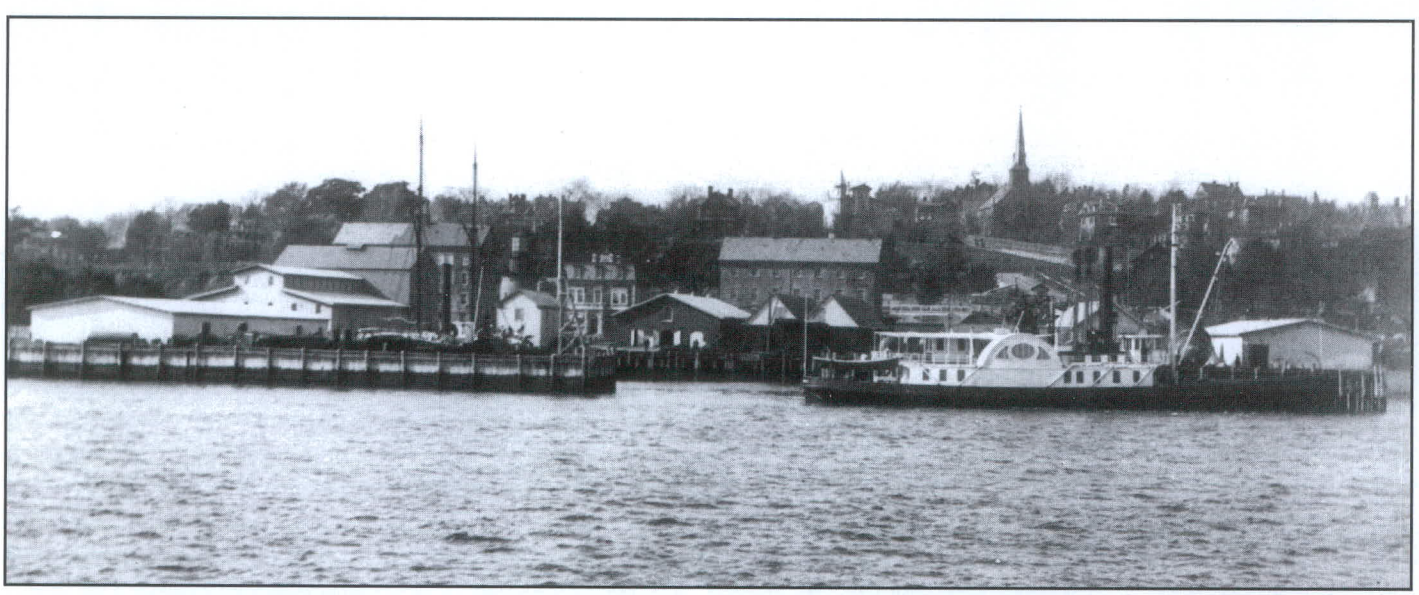
"To avoid all danger from fire, which should not be permitted in the store houses, it is proposed to put up a small building for offices for the district inspector, engineer, etc...

"Arrangements have been made at this depot for testing oils offered by contractors and for experimenting with lamps, apparatus, etc., used in the service. These arrangements are yet limited, but will be extended in accordance with the results obtained."

And extended they were. The Tompkinsville Depot grew into a monster facility. The service received all the oil at Staten Island, tested it, repackaged and shipped it to the districts. Lenses arriving from Europe, wicks, oil and other materials were tested and inspected. Illumination tests were conducted on new lamps and some apparatus was invented at the depot. Most of the brass implements (service box, dust pan, etc.) were actually manufactured at the depot. The site also housed the offices of the Third District superintendent (the title District Inspector was changed to Superintendent in 1918). The service tenders and spare lightships for that district were moored along the wharf. In the 1920's 200 people were employed at the General Depot on Staten Island.

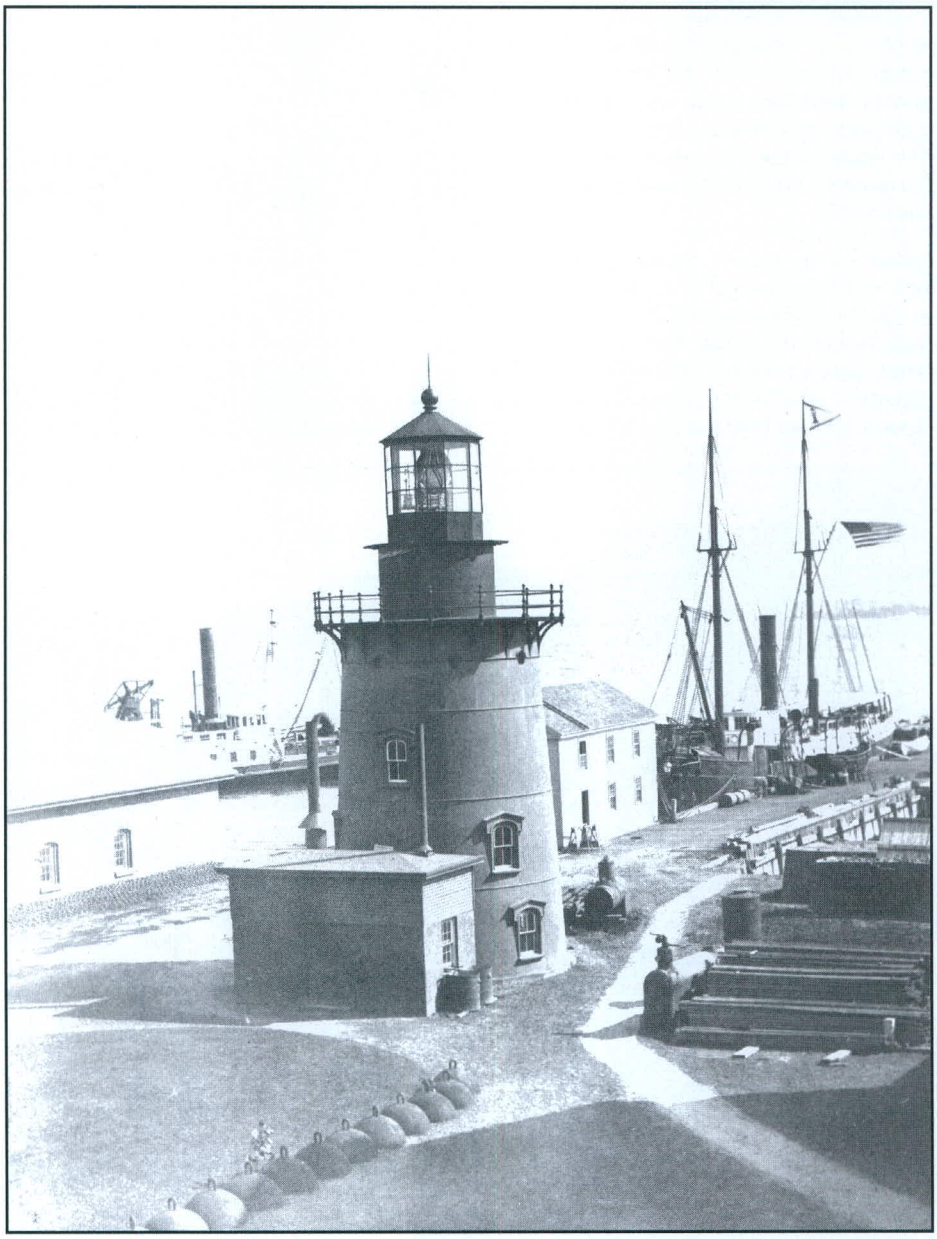
Staten Island remained the General (supply) Depot and quality control center until the service was absorbed by the Coast Guard in 1939. But other depots were constructed and expanded over the years. Each district had one primary and some secondary depots. The principle features of the depot are a dock and storehouse. As required, some depots had isolated fuel houses, lamp, lumber, carpenter, and blacksmith shops, cement houses, buoy, lumber and coal sheds, officers' and depot keepers' dwellings, and derricks and other apparatus. Mooring chain and sinkers for buoys were made up and stored at the district depots along with paint, oil, coal and other supplies. In 1913 there were 44 depots throughout the country.





The General Depot at Thompkinsville. At right is a side-wheel buoy tender, possibly the John Rogers. Above the vessel's stern is the north warehouse and moving left; the administration building, a cast iron experimental lighthouse and the south warehouse. A better view of the cast iron tower can be seen on the opposite page. National Archives photo, date unknown, but due to the existence of the lighthouse, sometime after 1890.





Above — The General Depot administration building in recent years. Although the building appears shabby, a recent engineering study stated the structures are sound. Due to transients living in them for a number of years, windows missing and general vandalism, approximately $700,000 will be required to stabilize the six structures which remain. Another $600,000 will be necessary to bring them up to code and install utilities.

Left — This cast-iron lighthouse tower was used for experiments (insulation, coatings) and training. The lens in the lantern appears to be a 3rd order. There is speculation that the structure was eventually moved and became an operational lighthouse.

At left is a side-wheel tender (possibly the John Rogers) and another tender can be seen at right flying the Lighthouse Service pennant. The dome shaped articles in the foreground are iron buoy sinkers. U.S. Lighthouse Society photo.

The smaller district depots were secondary storage facilities. These were usually located at remote areas of a district and were used to store buoys, sinkers, chain and other material for use by a tender when working in that area of the district.

Every district which had lightship stations was provided a spare or relief lightship and those vessels were moored at the depot along with the district tenders.

The depots had a Depot Keeper in charge, who requisitioned stores and issued supplies, materials and equipment for the maintenance and operation of all floating and fixed aids to navigation and for the lighthouse tenders. The Depot Keeper had a depot office staff which maintained a card record of the receipts and issue of supplies, materials, equipment and other records. Also a crew consisting of men skilled in various trades; carpenter, blacksmith, laborer, painter, storeman, machinist, sheet metal worker, watchmen and the like. In recent years some publications have been advertising a U.S. Lighthouse Service badge. These badges were worn by the watchmen at depots, never by lighthouse keepers.

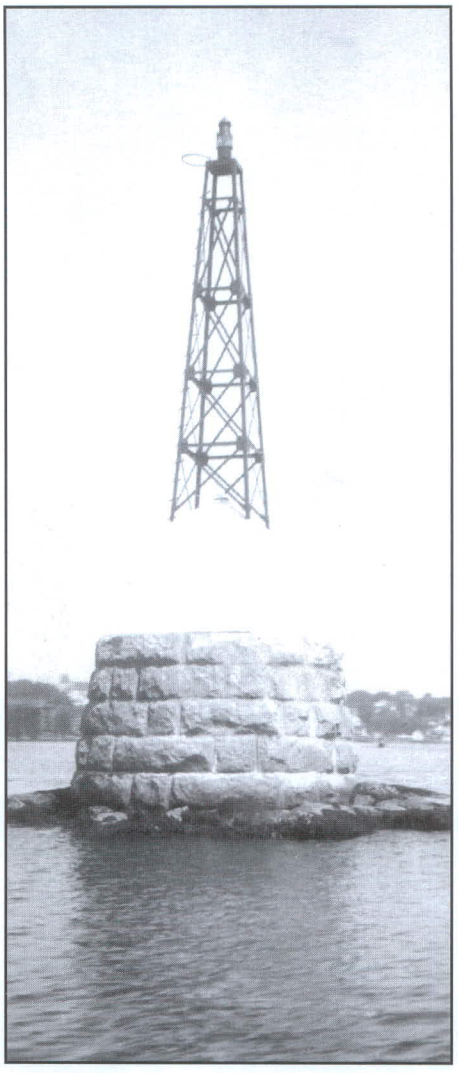
Often stationed at, and operating out of, the depots were Field Construction Forces, although they were officially attached to the District office. The force was composed of carpenters, painters, masons, mechanics and laborers. These field crews did the repair and upkeep work on permanent aids (including light stations) and other aids which could not be conveniently moved to the depot shops. Often the district used the Force to construct new aids and make major repairs to light stations. Although the keepers of the light stations were required to make minor repairs and do general painting and cleaning, sometimes a project such as rebuilding a barn or a garage was beyond the capability of the station personnel.

Also assigned to the Depot was the district Lampist. This mechanic was well versed in the workings of clockworks of lenses and automatic fog bell strikers and was often sent to a station to fine tune or repair apparatus.

In 1926 the Depot Keeper's salary ranged from $1,260 to $2,300 per year. The highest paid lighthouse keeper made $1,585 in that year, with most keepers averaging $1,100.

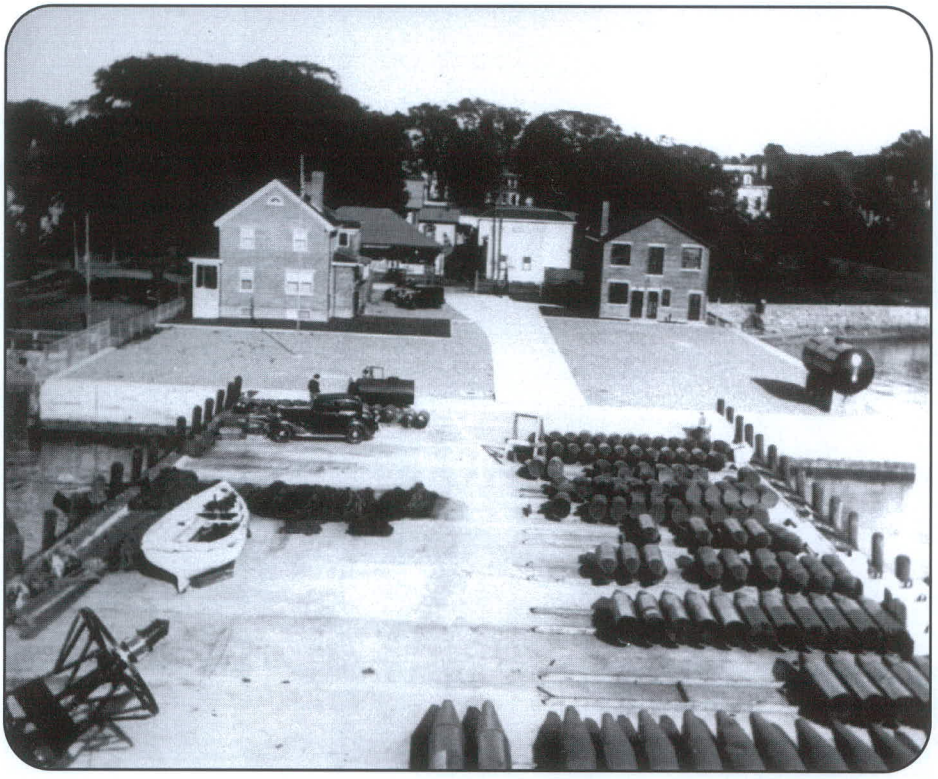
Today the Coast Guard continues to maintain depots, now called bases, around the nation as a storage and dispersing facility of supplies. Buoys and chain are manufactured under contact at civilian factories and delivered to the bases along with paint and various aids to navigation equipment. Most Coast Guard district bases still make up certain commodities like dayboards for minor aids to navigation and repair and repaint buoys which are brought in after being on station for six years.

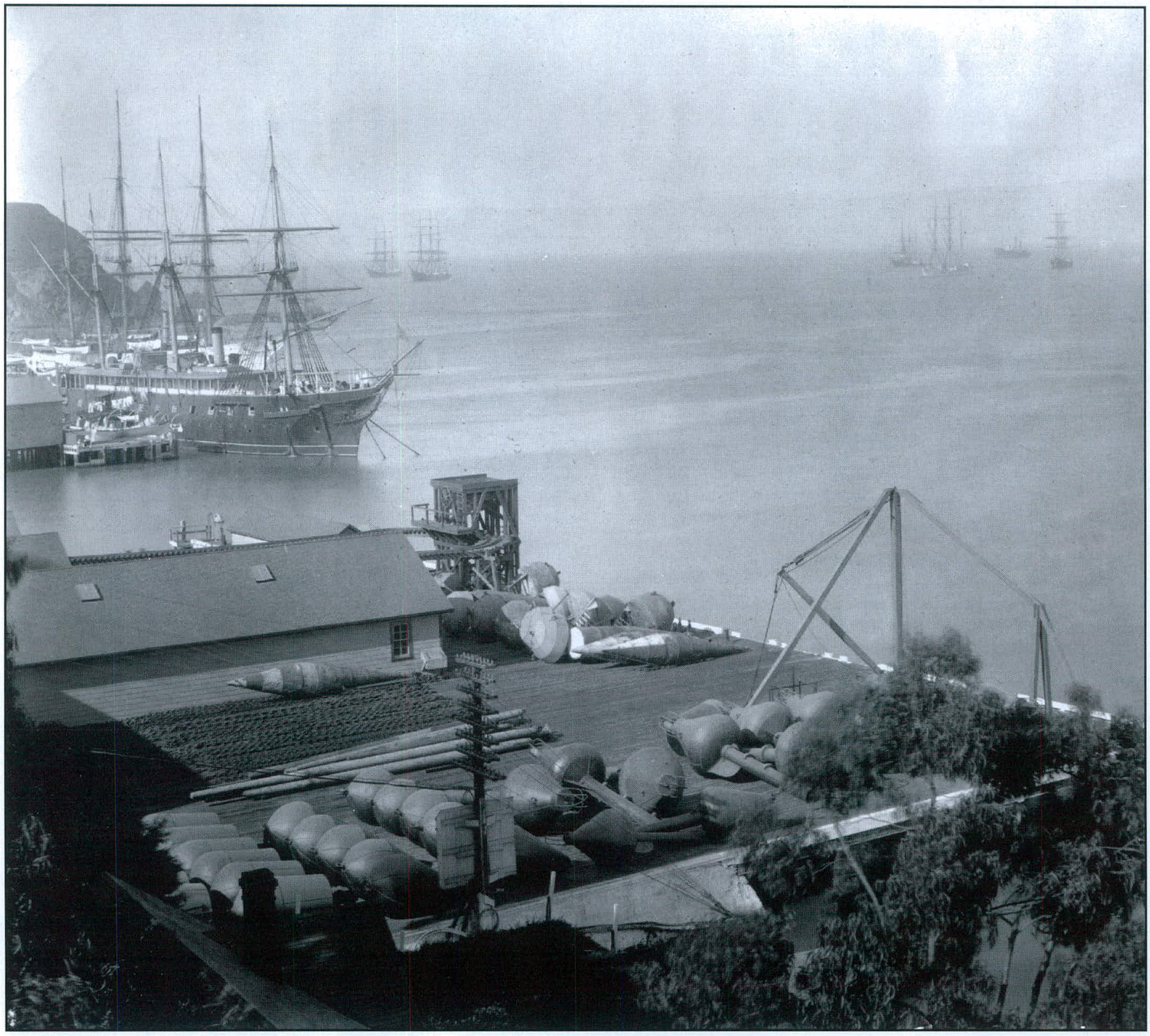
The super depot on Staten Island was abandoned by the Coast Guard several years ago. Experiments of new aids to navigation equipment is now conducted by civilian companies that specialize in those products. The old Staten Island depot is presently owned by New York City.



Right — A standard Lighthouse Service minor aid structure constructed at the depots. Acetylene tanks which powered the optic were stored in the small metal house. The towers varied in height, depending on the required range of the light. USLHS photo circa 1920s.

Below — The Bristol, Rhode Island Depot. This is a typical small depot which was ued to store buoys, sinkers, chain and other materials for the tender working in the area. Small depots usually didn't have facilities to construct aids to navigation or make major repairs. USLHS photo circa 1930s.

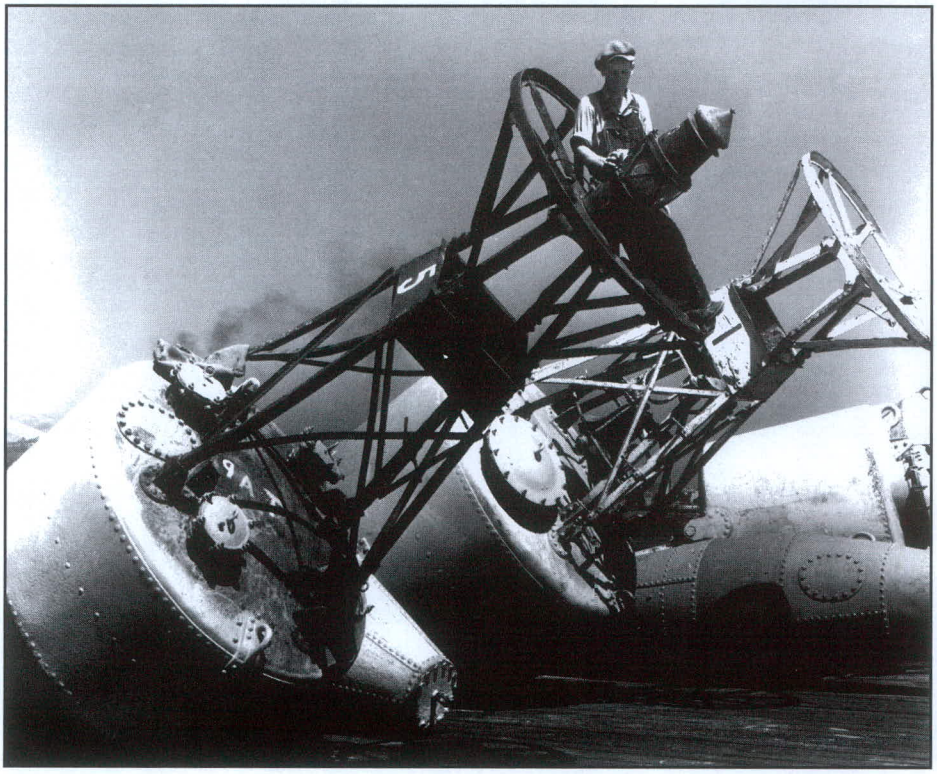




The Goat Island (now Yerba Buena Island) depot around the turn of the century. The naval vessel *Boston* can be seen at left along with numerous tall ships anchored out. The area left of the *Boston* was originally an Army Base and later, as in this photo, a naval station.

The building at left is a coal storage shed; a small tram way can be seen at the right end of the building. Lighthouse Service tenders and lightships tied up under this transway and coal cars dumped coal into the hold of the ships. In the foreground at left are unlighted can and nun buoys. 1870 style long tube whistle buoys can be seen at right by the stiff leffed crane. U.S. Lighthouse Society photo circa 1900.

Above — The Coast Guard buoy Tender *Magnolia* tied up at the Yerba Buena Island Depot in San Francisco Bay. The three main Art Modern depot buildings replaced earlier structures in 1930. At left is a buoy painting shed. At the top of the photo are two Spanish style houses, constructed simultaneously with the new depot buildings, which housed the Depot Superintendent and his assistant. The Yerba Buena Island light station keeper's quarters can barely be seen at top left. Yerba Buena was called Goat Island until sometime in the 1930s. Coast Guard photo circa 1970.

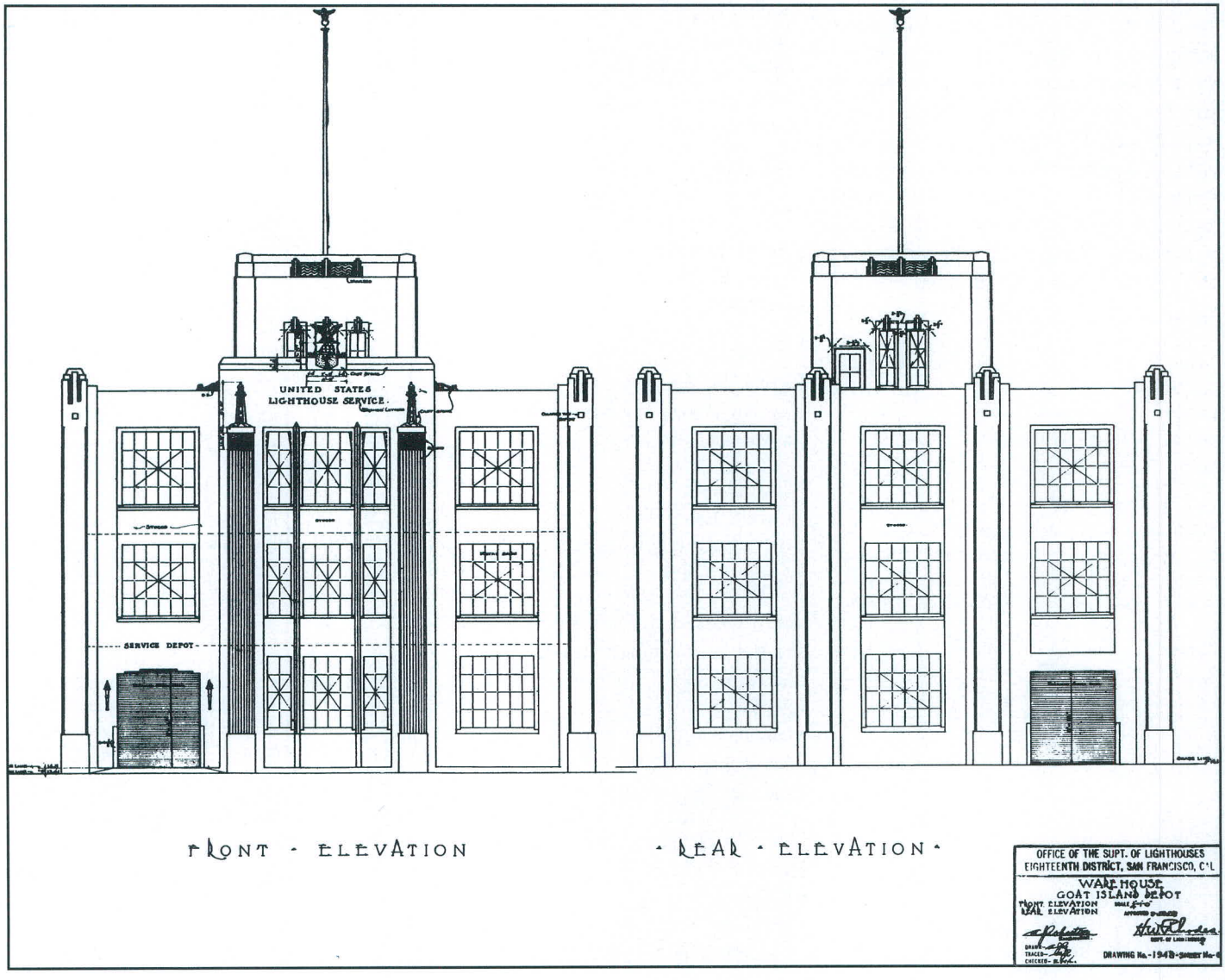


Right — A workman servicing an acetylene lighted buoy on a depot dock. U.S. Lighthouse Society photo circa 1932.



Left — The blacksmith shop of the "new" Yerba Buena Island Depot circa 1932.

Below — Plans for the new (1930) Yerba Buena Island Depot. Note the lighthouses at the top of the two decorative pillars and the Commerce Department symbol top center.



USLHS DEPOTS - 1915

A high water mark for Lighthouse Service operations is 1915. The service probably had the most manned lighthouses in operation at one time in this year. Also the most lightship stations were recorded in 1915 at 53, with 66 vessels to man the stations (13 were relief vessels).

Following is a list of depots throughout the service in 1915. Some of the depots were merely a wharf in some remote area where the service could store buoys, chain and sinkers to be retrieved by the buoy tender as needed. Smaller depots were manned and contained a variety of basic supplies, but usually didn't have personnel like lampists and blacksmiths. The larger depots stored coal for the ships and light stations, fuel oil, buoys and other supplies. Large wooden spar buoys were shaped at large depots and blacksmiths made up lengths of chain, repaired buoys and created various items of iron for light stations. A lampist was on hand to repair clockworks and constant level oil lamps. Lampists could also be sent into the field to repair machinery at light stations. The largest depots also had a Field Construction Force which was dispatched to light stations to make major repairs, construct breakwaters, docks and boat houses. The principal depot for each district is indicated by larger type.

First District
Bear Island, ME
LITTLE DIAMOND ISLAND, ME

Second District
LOVELLS ISLAND, Boston Harbor, MA
Woods Hole, MA

Third District
Goat Island, Newport, RI
Juniper Island, VT (Lake Champlain)
New London, CT
THOMPKINSVILLE, Staten Island, NY [the General Depot for the service]
Tucker Beach, NJ

Fourth District
EDGEMOOR, DE
Lewes, DE

Fifth District
Annapolis, MD
Chincoteague, VA
Lazareto Point, Baltimore Harbor, MD
Point Lookout, MD
PORTSMOUTH, VA
Washington Wharf, DC
Washington, NC

Sixth District
CASTLE PINCKNEY, Charleston, SC

Seventh District
Egmont Key, FL
KEY WEST, FL
PORT EADS, LA

Eighth District
Fort San Jacinto, Galveston, TX
Mobile, AL

Ninth District
Culebrita Island, PR
Guantanamo Bay, Cuba
SAN JUAN, PR

Tenth District (Lakes Ontario & Erie and the St. Lawrence River)
BUFFALO, NY
Erie, PA
Maumee Bay, OH
Rock Island, NY
Sandusky Bay, OH

Eleventh District (Lakes St. Clair, Huron and Superior)
DETROIT, MI
Minnesota Point, MN
St. Marys River, MI

Twelfth District (Lake Michigan)
Charlevoix, MI
MILWAUKEE, WI
St. Joseph, MI

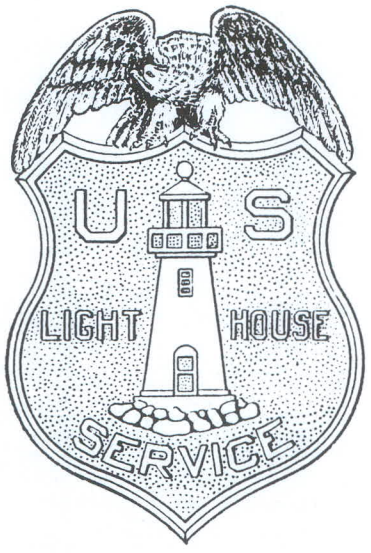
Sixteenth District
KETCHIKAN, AK

Seventeenth District
Ediz Hook, WA
TONGUE POINT, OR

Eighteenth District
GOAT (Yerba Buena) ISLAND, San Francisco Bay, CA

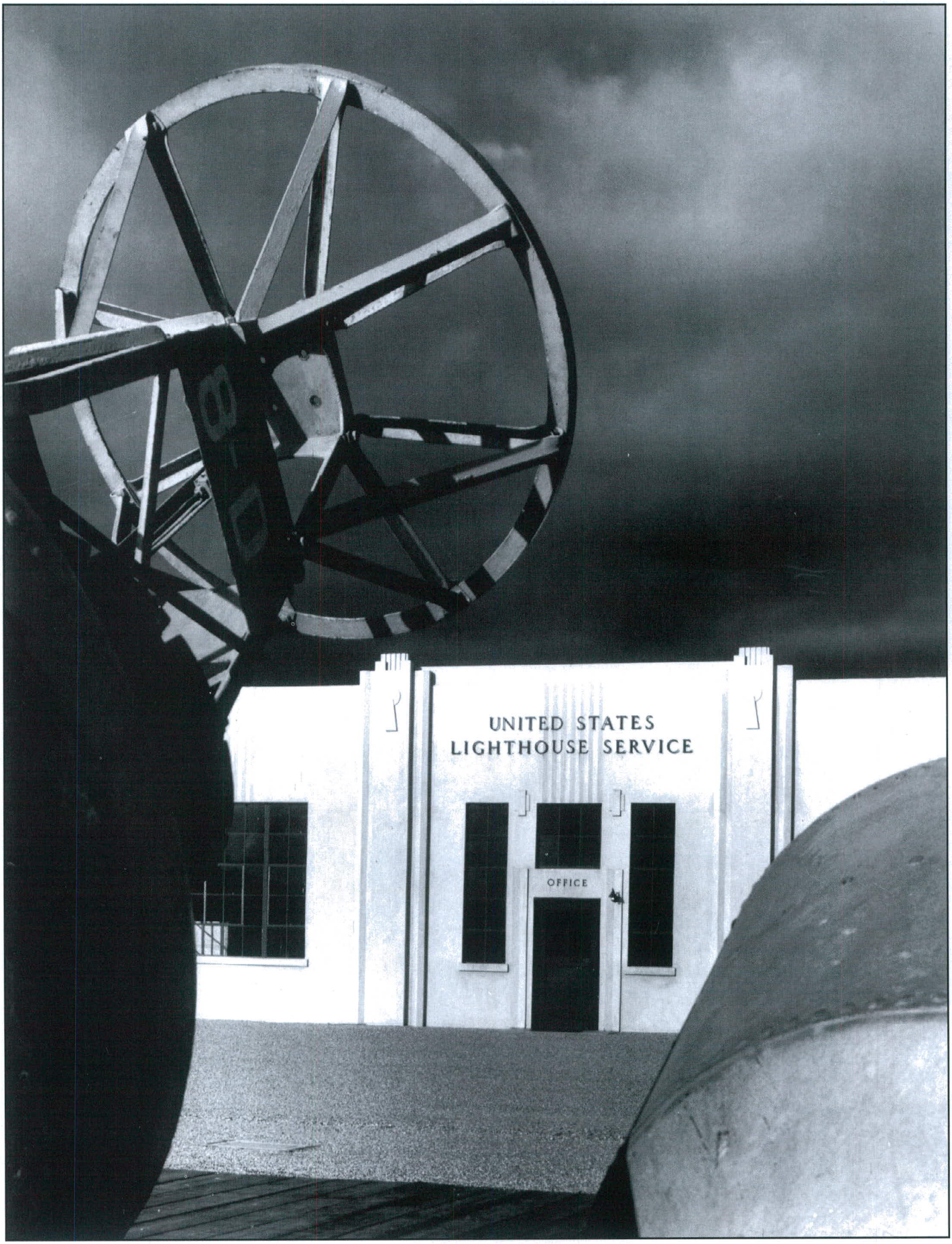
Nineteenth District
HONOLULU, HI

The 13th thru 15th Districts represent the Western Rivers, which didn't have depots. The supplies for the small unmanned shore aids and unlighted buoys were carried aboard the tenders which serviced the Ohio, Tennessee, Missouri and Mississippi Rivers.



The badge worn by depot keepers after the Bureau of Lighthouses replaced the Lighthouse Board in 1910. Lighthouse keepers did not wear this device. Drawing from Uniform Regulations 1920.

Right — The Long Beach Depot circa 1932. USLHS photo.


UNITED STATES
LIGHTHOUSE SERVICE
OFFICE