The New Point Loma Lighthouse

By Karen Wagner Scanlon



Point Loma, from the west, showing the fog signal building to the left of the tower and the modern electronic fog signal baffle, at right. Compare how close the bluff is to the tower with photos that appear later in this article. Photo by Kim Fahlen.



ike a finger pointing south and out to sea, an eight mile stretch of peninsula protrudes from the mainland of San Diego. It is known as Point Loma. Sheltered to the east of this headland is the channel that links the Pacific Ocean to San Diego Bay. The scrub-covered summit of

Point Loma rises 422 feet above the surf. And below, on a ten-acre slope at the fickle shore of America's extreme southwestern edge, stands the "new" Point Loma Lighthouse. This working Coast Guard Light Station has been a crucial feature of San Diego's landscape for over a century, yet it receives little of the attention paid to the famous original.

The United States Coast Survey had been forewarned that Point

Loma's summit was too high for a lighthouse due to the likelihood of low clouds and fog obscuring the light for ships entering the harbor. Still, San Diego's first lighthouse was lighted here on November 15, 1855. Thirty-five years and four months later, Service personnel were packing the old lamp and lens for shipment to New York. The station had been reestablished with a new, and lower, light tower and two detached keepers' dwellings.

The new Point Loma Lighthouse went into service on March 23, 1891. Lighthouse engineers had been plagued with troubles in the acquisition of its illuminating apparatus – troubles that delayed the operation of the lighthouse for months after the tower was erected. How and why the existing Fresnel lens finally got there is still shrouded in mystery, but several pieces of the puzzle have been found.

Over Rails and Ruts and Out to the Point

The 37 1/2 tons of the Point Loma Lighthouse tower rolled into San Diego from Trenton, New Jersey on flatcars of the Southern California Railroad on July 5, 1890. The train arrived at the rail yards at the foot of D Street, San Diego, but contractor J.M. Scott, "had it run back to Old Town for unloading." The iron skeletal tower - constructed by the Phoenix Iron Works of Trenton, New Jersey - was "hauled on strong wagons" out to the Point. A newspaper reporter quoted Scott as saying he thought it would take twenty men fifteen days to get the ironwork to the grounds and in position. Not bad – considering the only roads were rutted pathways down to the tip of Point Loma.

According to the Annual Report of the Lighthouse Board, 1891, "... the tower was received at the site on July 16, and was erected during August." A concrete block 25 feet square and 14 feet deep, upon which the tower would rest, was ready to receive the only skeletal structure of its type on the west coast of the United States.

By October 18, 1890, the Superintendent of Lighthouse Repairs, Frank A. Burke, and his assistant, Mr. Keefe, had arrived from San Francisco to place the lens in the tower. The poor roads to the light station often made

approach by water attractive, the disadvantages of this were soon discovered. From town, the two rowed a small boat over to the speck of sand beach below Point Loma's tower and proceeded to take measurements for the fitting of the illuminating apparatus. The noon surf was high. Anticipating a wet departure, Mr. Burke rolled up his trousers, removed his socks and shoes, and stowed his coat and vest in a small box under the seat in the boat. He pushed the craft away from the beach, and headed to sea. A breaker caught him amidships and he managed to jump into the waist-deep brine before the boat flipped. The lighthouse watchman - who was tending the station before the keepers moved in - raced to assist the wet and angered superintendent, and the boat was dragged back to the shore. They had, at least, determined that the pedestal acquired for the lens would be the appropriate size.

However, a report made to the Light-House Board, Treasury Department, October 20, 1890, and also included in the *Annual Report of the Lighthouse Board*, 1891, states that "the lens furnished for the new tower was found to be too large for the space provided for it, therefore it was necessary to procure another ..." More reports were filed which recommended alterations for the illuminating apparatus because of a disparity of the lens and lantern.

Noted lighthouse historian, Thomas Tag,

suggested that if a new correct lens from France had to be ordered, delivery would have taken up to three years. "The Twelfth District lighthouse engineers were in a bit of a mess when the lens they had ordered and paid for wouldn't fit — someone didn't know how to read blueprints. Most likely, a trade would have been made for a lens available in a depot somewhere."

A trade would explain the next piece of the lens puzzle. Records of whether a lens and pedestal, or just a pedestal, were traded are not available. These early accounts were destroyed by a fire at the Department of Commerce Building in Washington, D.C. in the 1920s. It is presumed that both were traded since a new lens had been requested by Lighthouse Engineer Heuer, and the pedestal bears the name of another lighthouse – Anclote Keys, Florida.

The recent discovery of the association between Anclote Keys and Point Loma was made fortuitously using an unsophisticated, yet clever, means. Assisted by station resident, 11-year old Jesse Strangfeld, the author used a wax crayon and sheet of paper to rub the four- by two-and-a half inch brass plate attached to the lens pedestal. The engraved inscription on the plate is illegible, all but a few letters. From the crayon rubbing, however, it becomes clear: ANCLOTE KEYS Florida HENRY-LE PAUTE Engineer PARIS 1887. Interestingly, Anclote Keys Lighthouse had been in operation since October 1887 using a 3rd order Fresnel lens manufactured in 1884. It is unclear why Point Loma's lens had not made its original Florida destination.

The acquisition of the Anclote Keys lens was not the first time a lens associated with Point Loma had gone astray. The ruby-colored and clear glass prisms originally ordered and designed for the "new" Point Loma Lighthouse would not arrive in San Diego for another 77 years. Consequently, it was never used here. Quite a work of art, the lens was displayed at the Paris Exhibition in 1889 by request of its prominent Parisian manufacturer, Henry-LePaute. The lens won gold and bronze medals, despite the fact that it was exhibited in the shadow of another demonstration of French technology, the new Eiffel Tower.



Contemporary photo of the Point Loma Light Station showing the original dwellings and fog signal building. Photo by Les Liddle.

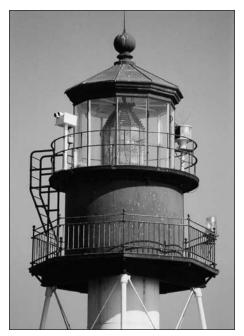
enry-LePaute then requested to exhibit the lens at Chicago's Colombian Exposition (World's Fair) in 1893. He won awards here, too, this time competing with the thrill of the new Ferris Wheel. Because of the delay caused by exhibiting the lens, the U.S. Lighthouse Service sought another lens for Point Loma. The award-winning lens stayed in Chicago, where it served the Chicago Harbor Lighthouse until the early 1960s. By 1968, sections of this lens and one door of the marble-inscribed pedestal found its way to San Diego and were exhibited at the Cabrillo National Monument Visitor Center. These lens sections were later crated and housed in the monument's museum storage facility.

The barrel-shaped optic that remains in Point Loma's tower today – a 3rd order Fresnel lens – arrived from San Francisco aboard the steamer *Corona* on February 3, 1891, and was hauled to the light station by an eight-horse wagon. *The Union* newspaper somewhat flippantly described the lens as "a \$4,000 affair from France." The French were the undisputed leaders in manufacturing precision lenses, ground slowly and with great skill – technology that the United States Lighthouse Service respected.

Each of the twelve, glass prism lens panels contains a center "bull's-eye" which is designed to reflect and refract errant beams from the light source. Originally, the lamp at Point Loma was a kerosene burner with three concentric, tubular wicks. The multiple wicks were used to create a more powerful light source. A flashing red and white light glowed from the lantern room, the result of panes of red glass suspended in front of every other one of the twelve lens panels. The first burner used three gallons of oil a night to produce a 60,000 candlepower beam. In 1912, the new incandescent oil-vapor light used only one gallon of oil a night to produce 120,000 candlepower of light. By that time, the red panes had been removed because the red flash was a weaker signal than the white, and the station's characteristic changed from one flash every 20 seconds to one white flash every 15 seconds.

Life at the Light Station

The families of principal keeper Robert D. Israel and assistant Thomas W. Anderson moved down the hill from the old lighthouse a few days before

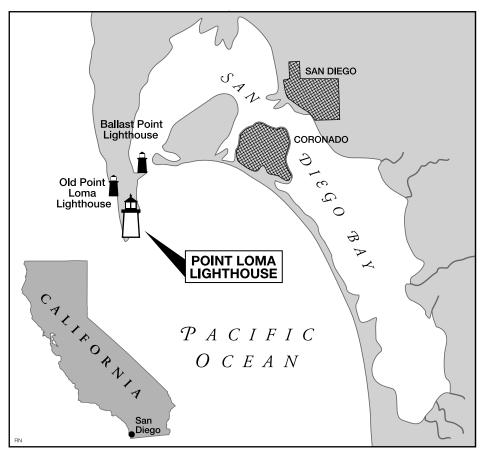


The 12-sided, 3rd order Fresnel lens can be clearly seen in the lantern room. The object at left is a fog detector. On the upper level at right is a Vega optic (made in New Zealand) which now serves as the primary optic at Point Loma. The lens on the lower level, at right, is a 300 mm standby, battery-powered optic. Photo courtesy of Kim Fahlen.

the switch to the new lighthouse was made. Two, white, clapboard Mission Revival-style structures with lead-colored trim housed what was, at the time, a lonely community of just two families.

It was seven miles to town by mule team or horse-drawn buggy over rutted dirt roads, or a row across the water at low tide in a small boat. The new Point Loma Light Station was not issued a boat, but neighboring Ballast Point Light Station did have one. Occasionally supplies were shuttled between the two and delivered to the beach below Point Loma's tower. There was no wharf or landing at the station. People and/or supplies that were landed on the beach then negotiated a 35-high climb up a steep cliff – on foot or by using a hoist.

The first keeper at the new light, Robert D. Israel, spent twenty-one years at the old light. During the Mexican War, in 1846, he served as a Sergeant in the Regiment of Mounted Rifles. The Lighthouse Service hired him in 1871 as assistant keeper, promoting him to keeper in 1873. Although Keeper Israel lighted the wicks in the new tower on his 68th birthday, his service at the new light station lasted only nine months.



Much of what is known about this light keeper occurred during his tenure at the old lighthouse.

Life on the Point at the old lighthouse in those days was, at times, monotonous - frequent whitewashings of the dwelling, tower, and outbuildings, inside and out; sweeping down the stairs; measuring oil and carrying it to the lantern; caring for the chickens and horse; and cleaning the privy - "a nasty job." His duties at the new lighthouse would change only slightly, with no tower to whitewash, but with additional steps to climb. Perhaps more difficult than the mundane jobs performed to keep the light burning, was that of keepers having to get along with each other. More than one assistant keeper reported to the lighthouse inspector that keeper Israel had a disagreeable nature.

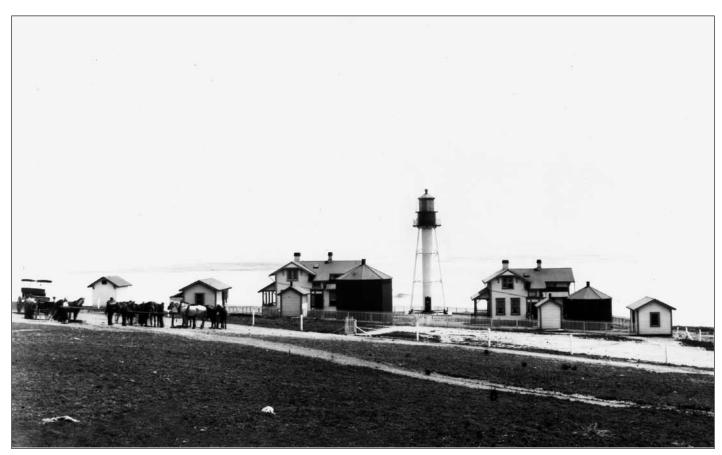
During Robert D. Israel's nine-month tenure at the new station he remained angry over an incident that occurred three years earlier. One of his sons, and the son of the assistant keeper, had lost the old station's boat. The lighthouse district inspector

deducted \$50 pay from each keeper for the cost of the boat. Twice the Lighthouse Board denied Israel's request for reimbursement. It seems that Israel's recourse then was to make a fuss about the water supply not being enough, and a slacking off of his duties as manager of the light station. "His criticism of the new rainwater catchments and cistern was forthright if not diplomatic. . "In November, 1891, the Lighthouse Board wrote Israel that a recent inspection of the new light station was unsatisfactory, that the lens was not clean, and the grounds were in disorder. Israel's career as light keeper ended in January of 1892.

But Israel had a point about the water shortage. According to Joe Brennan, son of Israel's replacement, George Patrick Brennan, the water supply was a problem.

"We had what they called the watershed out in back of the buildings and it was all right in wet years but the years weren't always wet. The watershed was a big patch of cement about the size of a couple of tennis courts, on the side of the hill, with a cistern at its lower corner. It was supposed to catch enough rain-water to supply the two keepers' families, but it was seldom enough. During the dry years ... we used to load water from a well in Roseville, half a dozen barrels of it at a time, and bring it out in a wagon ... as often as twice a week, if it was a long, dry spell."

The catch-water basin was not completed until the end of October, 1891, seven months after the move to the new lighthouse. Accusations of shoddy work, false reports, a poor grade of cement, lying, and malicious destruction of portions of the cement were made among the key players – the cement mason, the light keeper, and the lighthouse engineer in San Francisco. It is believed that Israel "was either lying or that the catchwater blocks . . . had been broken by force or with malicious intent (by Israel himself)". The letter between Israel and Engineer H. H. Heuer further states "that investigation revealed the (6,400 square foot) catch-water structure to be perfect and satisfactory both in workmanship and material," and that the



Point Loma Light Station, circa 1905, prior to the construction of the fog signal building. Workshop at right, small buildings are privies, and large cisterns at right of each dwelling. Note horses and wagon at left. Photo courtesy of the San Diego Historical Society.

basin was "the finest piece of work in the (lighthouse) district." Thus began the career of the second keeper at the new light.

Keeper Brennan had eight children – five boys and three girls. On school days, the oldest son, Dick, hitched up a sway-backed horse named Ping to the spring-wagon and they drove in over the hill to Roseville and to the only school. Once a week or so the family would go in for groceries. Cooking was done on coal stoves (until the early 1940s when coal was replaced by butane).

Every few months the lighthouse tender *Madrono* came down from San Francisco to bring kerosene and coal, and other lighthouse supplies and food provisions. Through the breakers and up to the beach came the pulling-boat with casks and sacks that the Brennan children would help carry up the cliff. Toward sunset, father, and sometimes a son, would climb the winding stairs to begin the nightly ritual. Always in the morning, the light was extinguished and tidying of the lantern was carried out, and the shades were drawn to protect the lens from sunlight.

A mail carrier came on foot from San Diego to deliver mail to Roseville, La Playa, and to the lighthouse, sometimes hurrying to beat high tide while running over Dutch Flats. Electric bells with a hand-crank source of electricity were used in the keepers' dwellings and tower to alert each other of watch changes. Bells were also utilized between Ballast Point – the harbor light established

in 1890 at the entrance to San Diego Bay on the eastern shore of Point Loma, and razed in 1961 – to Pelican Point, the local name given to the area where Point Loma's landfall beacon stands. One light station alerted the other when a vessel was outside the harbor. A local mariner suggested that "the telephone would be a welcome addition on the Point, and that if interested persons would get up a petition, they might induce the government to make this improvement." Telephones were installed in the keepers' quarters and to the signal in the lighthouse sometime before 1911, connecting the lighthouse to the city and beyond.

Despite the shortage of water, keepers sought to make their windswept surroundings bloom. Palm trees so prominent on the grounds of the light station today rise to the height of the 70-foot tower as reminders of their efforts. Ken Franke, keeper's son from Ballast Point, notes that, "A light station was home to a light keeper and there was no committee to beautify it. Keepers were permitted to make it beautiful in any way they could. Some of them had green thumbs. They had a good carpenter shop on the Point, too."

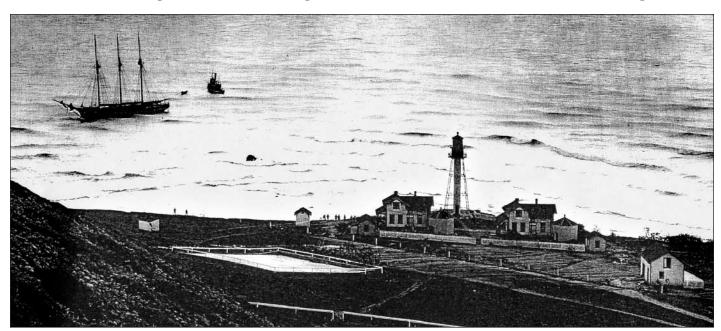
"The entire place was like a big beautiful garden," remembers keeper's daughter and resident during WWII – Lexie Johnson, "My dad had so many flowers. Roses. Poinsettias. Easter lilies. Most everything, as well as all kinds of vegetables and berries and fruit. He

also had a big garden on the side of the hill near the old water catch basin. My father grew all the produce in the garden behind the house."

lectric cables were laid across San ◀ Diego Bay in 1909, but the wheels of ✓electricity for the lighthouse were not set into motion until September, 1924. The Superintendent of Lighthouses requested the Commanding Officer at Ft. Rosecrans to extend the power line to Point Loma Light Station. Although the request was granted and the station was wired for electricity in 1926, the families continued to burn kerosene lamps in their quarters another seven years. Electrical beacons seemed impractical. Unwilling yet to yield to the modern innovation of electricity, a coal oil or acetylene light continued to flash Point Loma's characteristic across the water.

Finally, in 1933 the electrical current was sent up the tower to a 500-watt bulb. The 200,000 candlepower of light and the slow revolution of the lens exhibited a 15-second flash, the beam lasting 1.5 seconds, followed by 13.5 seconds of darkness. A heavy iron weight, falling down the center of the tower, drove the clockwork that rotated the lens. From sunset to sunrise, the keepers divided the night into four- to six-hour watches. The light was never left untended, for the clockwork had to be wound once each watch—175 turns of the hand crank did the trick.

A constant lookout for fog was routine,



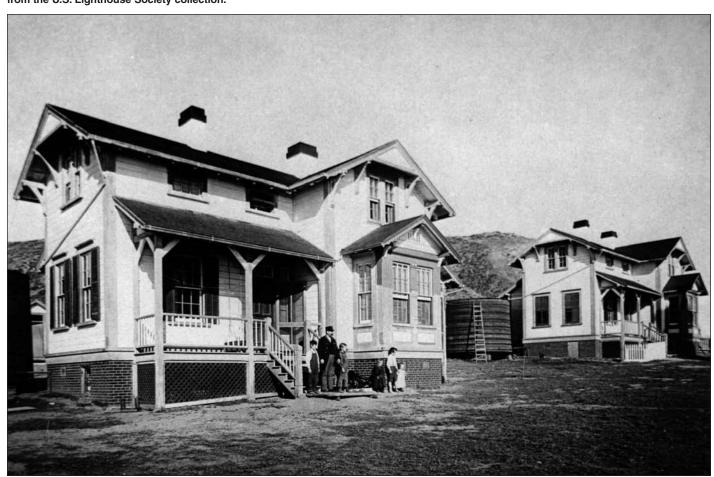
The vessel *Alice McDonald* run aground off Point Loma, December 31, 1909. Large rain catchment basin in left foreground, station barn at right. A tug is attempting to pull the vessel off the reef. San Diego Historical Society photo.

and keepers were often busier maintaining the fog signal than doing any other lighthouse chore. Keeper Israel's fog signal at the old light was his trusty shotgun. If he sighted the masts of sailing vessels standing in too close, above low banks of fog, he would fire several shots in the air as a warning. In time, the gongs from a one-ton fog bell at Ballast Point reached into the dreary shroud that sometimes hid the entrance into the harbor. Neither of the Point Loma Light Stations ever had a fog bell. In 1913, a powerful compressed-air fog siren was installed. Driven by oil engines, it emitted a three-second blast followed by 17 seconds of silence, as long as thick weather continued. The engine house was built near the foot of the light tower to shelter the new equipment, and a third keeper employed. His dwelling had been added to the light station the year before.



Top – Front of the east dwelling, with a keeper and kids on the front porch. The windows on the porch at right raise up into the wall and serve as doors. The dwelling design was used at San Luis Obispo and Table Bluff (Humboldt Bay). The picket fence in the foreground is a standard design used at many light stations.

Bottom – The west dwelling with keeper and kids. The cistern for the east dwelling can be seen between the buildings, circa 1893. Both photos from the U.S. Lighthouse Society collection.



Reprinted from The Keeper's Log — Winter 2002 <www.uslhs.org>

'n September, 1933, the siren was changed to the guttural call of a diaphone - a Ltwo-tone monition of dangerous cliffs and shoals. Ken Franke recalls that "the diaphone at Point Loma hiccupped. Every fourth or so bee-ooop came out bee-op. It was meant to be that way. It had a beautiful sound that we could hear at Ballast Point if the wind was right." Also inside the engine house is a wooden partition fitted with panes of glass reminiscent of an old post office. The Service installed a radio beacon in this section of the engine house in 1936. The radio's signal, sent to ships at sea, was synchronized with the diaphone to give bearings and distance during disorienting weather.

Over the years, the Point Loma Lighthouse was outfitted with modern equipment as it became available. The light was fully automated in 1973, and a last keeper – Coast Guardsman Ned J. Sacco – moved on. Since that time, select Coast Guard families have occupied the dwellings overlooking one of the most beautiful natural harbors in the world. The light station, and its modern optic, a VRB-25 Vega Beacon—as unassuming-looking as a basic exterior garage light—are maintained by the United States Coast Guard Operations Center on San Diego's Embarcadero nine miles away.

Vessels have gone aground, in spite of the lighthouse, but uncounted numbers have been saved from hidden shoals and jutting cliffs at this edge of America. The women and children of the keepers of old, and today, resident families, find themselves unofficial custodians of the light. In the days of lighted wicks, their eyes watched involuntarily toward the light in the tower and ears were tuned to the stranded cry in the surf below their homes. "Boaters get into trouble out here, and we hear them yelling. We know that the privilege of living at a lighthouse also requires us to be alert to these things," says Station resident, Kathi Strangfeld.

Time has left its mark on Point Loma's working lighthouse. Today, the glass jewel in the tower—a modern marvel of the 1890's—stands motionless and unused. Former station resident and Coast Guard Commander Frederick Kenney recalls that, in November, 1997, "my friend, David Tam, and I were below the cliffs fishing. It was Veteran's Day. David looked up at the tower and asked me if the lens didn't rotate twenty-four hours. I told him it did. We stared at the light for

some time and noticed the lens was not turning. I phoned operations to come out and have a look at it."

In U.S. Navy Commander David Tam's words, "it was nearing dusk, and it felt funny not to have the sense of the light rotating and casting its light about. We climbed the stairs and noticed that the motor was still running but the lens wasn't moving."

The Coast Guard's Aids to Navigation Team was able to restart the rotation of the lens but determined that the chariot wheels were "taking a beating" and in order to preserve them, the entire works should be stopped. According to USCG PO 3 Gary Tingley, the corrosion and rust taking place in and around the lantern room are causing the floor and the top of the tower to lift and the wheels to grind an uneven path in their guiding yoke. A blue tarp, borrowed from the trunk of a Coast Guard vehicle, was draped over the quiet lens and secured by bungee cords. Later, a more befitting, zippered-canvas cover replaced the tarp.

The future of Point Loma Lighthouse remains uncertain. Modern channel markers could eliminate the need to operate a light in the tower, though a range light would be needed. Inklings of the station's tentative restoration and public opening (perhaps by the National Park Service or San Diego City Parks and Recreation) conflict with the Coast Guard's desire to keep it. The Coast Guard and any potential caretakers are concerned about the financial upkeep and the eroding cliff upon which the tower stands. Though man has changed his role from keeper to controller, and a small lantern replaces the work of the giant prismatic lens, the sea's relentless rush to Point Loma's shore will remain the same.



The backyard of the Point Loma Light Station, showing the barn, a horse and surrey, circa 1893. U.S. Lighthouse Society collection.