

My Drift

Title: Hawaii Lighthouses

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There are forty-three (43) lighthouses in Hawaii. Fifteen (15) of these are controlled by the U.S. Coast Guard. The other twenty-eight (28) are considered minor lights and are controlled by the state or county. I think a lighthouse is a lighthouse, so we are going to take a look at all of them with additional information about some of the more interesting ones. If you read the entire article, you might even learn a few things about the Hawaiian Islands.



Number of Lighthouses by Island

<p>NI'HAU (0) (No Lighthouses)</p> <p>KAUA'I (8) Kokole Lighthouse Nohili Point Lighthouse Kilauea Point Lighthouse Hanapepe Lighthouse Kuki'i Point Lighthouse Kahala Point Lighthouse Makahu'ena Point Lighthouse Nawiliwili Lighthouse</p> <p>O'AHU (6) Barbers Point Lighthouse Makapu'u Lighthouse Pyramid Rock Lighthouse Aloha Tower Lighthouse Diamond Head Lighthouse Ka'ena Point Lighthouse</p> <p>MOLOKA'I (1) Moloka'i (Kalaupapa) Lighthouse</p> <p>LANA'I (4) Palaoa Point Lighthouse Kaumalapau Lighthouse Pohakuloa Point Lighthouse Manele Bay Lighthouse</p>	<p>KAHO'OLawe (1) Southwest Point Lighthouse</p> <p>MAUI (9) Hawea Point Lighthouse McGregor Point Lighthouse Pa'uwela Point Lighthouse Kahului Harbor Range Lighthouse Molokini Lighthouse Lahaina Lighthouse Hanamanioa Lighthouse Ka'uiki Head Lighthouse Nakalele Lighthouse</p> <p>HAWAII ISLAND (13) Kauhola Point Lighthouse Kailua Lighthouse Kukuihaele Lighthouse Napo'opo'o Lighthouse Cape Kumukahi Lighthouse Coconut Point Lighthouse Kawaihae Lighthouse Laupahoehoe Point Lighthouse Pauka'a Point Lighthouse Ka Lae Lighthouse Keahole Point Lighthouse Mahukona Lighthouse Pepe'ekeo Point Lighthouse</p>
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Kokole Lighthouse

Located on the west side of Kauai, the Kokole Lighthouse consists of a diamond-shaped day board on a skeleton tower with a beacon at a focal plane of fifty-eight feet.

The Nohili Point Lighthouse is in Kekaha which is located on the southwest side of the island of Kauai. It is bordered to the east by Waimea and to the south by the Pacific Ocean. Hawaii Route 50 passes through the community, leading northwest 7 miles to its end at the Pacific Missile Range Facility. This light consists of a diamond-shaped day board on a spindle with a beacon at a focal plane of 120 feet.



Nohili Point Lighthouse

The Daniel K. Inouye Kilauea Point Lighthouse is located on Kauai's northernmost tip. It is a 45-minute drive north of Lihue where lighthouse visitors will enjoy the beautiful views.

Perched on a beautiful knoll, the 52-foot Kilauea Point Lighthouse was built in 1913 as a beacon for traveling ships. Although its light was turned off in the 1970s and has been replaced by an automatic beacon, it still serves as one of the island's most frequented attractions.



Kilauea Point Lighthouse

The view off the rugged northern coastline and the deep-blue Pacific makes this the perfect vantage point for photos. The lighthouse is located within the Kilauea Point National Wildlife Refuge, a sanctuary for seabirds. Signage throughout the refuge identifies the various native bird species that nest or visit the area, including great frigatebirds, wedge-tailed and Newell's shearwaters, brown and red-footed boobies, and Laysan albatross. Watch them soar the skies or see them up close in their burrows. This scenic peninsula, 200-feet above sea level, is a must-see on your visit to the North Shore of Kauai.

Kilauea Point Lighthouse is the header picture at top of page 1.

Hanapepe Bay Lighthouse

The first light to mark Hanapepe Bay was a beacon fire kept by early Hawaiians on a hill above the bay to guide their canoes at night. After sugar plantations were established on Kaua'i, a private company used a reflector-equipped steamer lamp raised to the top of a thirty-six-foot frame tower to provide a red light to mark the bay.

The Hawaiian government established an official beacon at Hanapepe in 1902 in the form of an automated beacon mounted on a pyramidal tower that rested on a small enclosure. The present beacon is a flashing light mounted on a tower along with two diamond-shaped daymarks.



Hanapepe Lighthouse

The Hanapepe Lighthouse is located on the south shore west of Koloa in Hanapepe Town. This town once flourished as one of Kauai's largest communities. From World War I to the early 1950s, West Side Hanapepe was also one of Kauai's busiest towns, alive with G.I.s and sailors who were stationed there for training. Today, "Kauai's biggest little town" hasn't changed much over the last century at first look. Its historic buildings are so authentic that the town was used as a location for several films such as "The Thornbirds" and "Flight of the Intruder".

From the Kaumualii Highway (Route 50) near the town of Lihue, follow Nawiliwili Road east to Nawiliwili Park. From here, you can get a view of the Kuki'i Lighthouse across the bay. This navigational aid consists of a twenty-two-foot pyramidal, concrete tower that displays a white flash every 2.5 seconds at a focal plane of forty-seven feet.



Kuki'i Point Lighthouse



Kahala Point Lighthouse

The Hawaiian government established the Kahala Point Lighthouse on Kahala Point (located on the northeast shore of Kauai) in 1898 with John Hoopii serving as its keeper. In 1908, the Lighthouse Board replaced the ordinary kerosene lantern in use at Kahala Point with a lens lantern. J. F Rapozo served as keeper of this new light until it was automated in 1913.

The Lighthouse Board established an official navigational aid at Koloa Point, the southernmost point on Kaua'i in 1908, but this was replaced in 1922 by the Makahu'ena Light, which was built about fifteen feet north-northeast of the Koloa Light. The first Makahu'ena Lighthouse was a concrete tower with a focal plane of sixty feet. This beacon served until 1983, when it was replaced by a light atop a metal pole. The lens and lantern from the old Makahu'ena Light are on display at the Hawai'i Maritime Center in Honolulu.

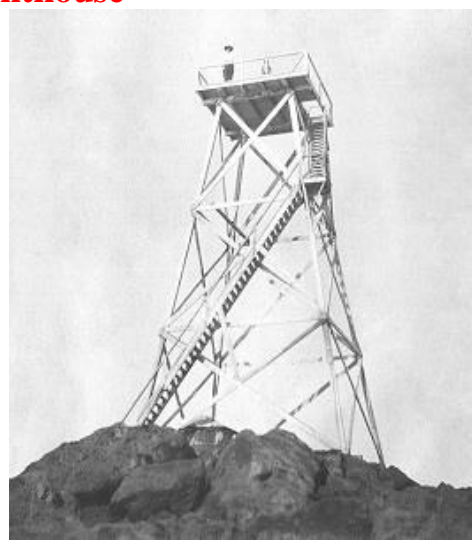


Makahu'ena Point Lighthouse

Nawiliwili Lighthouse



Current Nawiliwili Lighthouse



Original Nawiliwili Lighthouse

Hawai'i's only navigable river, the Wailua River, is found on Kaua'i, however, no natural deepwater harbors existed along the island's entire coastline. To remedy this situation, a portion of Nawiliwili Bay, near Lihue, was dredged and protected by a breakwater to form Nawiliwili Harbor.

Ninini Point, which marks the northern entrance to Nawiliwili Bay, was leased by the Hawaiian government from the Lihue Plantation in 1897 as a site for a lighthouse, and the first was a forty-foot, wooden, frame tower surmounted by a lamp room that housed a light and reflector at an elevation of seventy feet above the sea. The light's first keeper, Manuel Souza, was born on the U.S. mainland to Portuguese parents, but as a youngster he followed the sea and eventually ended up in Hawai'i. His future wife, also of Portuguese descent, came to Hawai'i from the island of Madeira as a contract laborer for a sugar plantation. Souza bought out her contract, and together they lived at the lighthouse for six years.

Each evening before sunset, Souza would climb the tower, light the oil lamp, and place it along with its reflector behind the glass window that formed a corner of the small lamp room. The light would have to be tended during the night, and then around sunrise, Souza would extinguish the lamp, polish the reflector, and prepare the lamp for the next evening.

The present seventy-two-foot concrete tower was constructed in 1932 along with a new three-bedroom keeper's dwelling set on concrete block footings. The airways beacon was transferred from the temporary tower to the concrete tower on November 15, 1932. To ensure continuous operation of the light, an additional thirty-six-inch beacon was mounted on a welded superstructure above the beacon placed on the concrete deck of the tower. If one beacon failed, an alarm would sound so that the keeper could immediately place the other in operation. Two generator units were housed in the first story of the tower to provide electricity for the light and for the keeper's dwelling.

Light Keeper Oliver Kua, who had been assigned to Nawiliwili Lighthouse in 1918, was retained as keeper of the new lighthouse, and he served for a total of twenty-one years at the station before finally retiring in 1939 when the Coast Guard took control of the light.

During World War II, Nawiliwili Lighthouse, along with all others in the Hawaiian Islands, was darkened. On December 31, 1941, a Japanese submarine surfaced near the entrance of the bay and shelled the harbor. Fortunately, several of the shells, including one that made a direct hit on a large gasoline storage tank, failed to explode, and damage was limited to about \$500. Fears of

The Nawiliwili Lighthouse was automated in 1953, however an attendant remained at the station and was responsible for routine maintenance of Nawiliwili and Kilauea Lighthouses and the six other minor lights on the island.



In 1888, \$3,000 was provided to construct the lighthouse tower on land donated by James Campbell. A forty-two-foot tower was constructed of coral stone laid

in a cement mortar, and a frame dwelling was built. Upon completion, the tower was painted white and topped with the red lantern room. The light was exhibited for the first time on March 29, 1888, and William Hatton Aalona was hired as its keeper at an annual salary of \$240.

Early in the morning of August 31, 1906, the army transport ship Sheridan ran aground on Barbers Point. Keeper Hatton Aalona was relieved when the transport officers admitted his light was burning. “That light never go out one time since I became keeper here nearly twenty years ago,” Aalona said. “I feel very sorry about the transport, but the light was there all night.” When Keeper Aalona saw the transport run aground, he awakened the “wireless telegraph boy,” who was able to pass the news along to Honolulu.

To make its light more readily distinguishable from the steady plantation lights in the vicinity, the lighthouse was remodeled in 1912 to accommodate a fourth-order, double-flash lens illuminated by an incandescent oil vapor lamp. The new lens revolved once every five seconds to produce two 0.1-second flashes separated by 1.1 seconds and followed by a 3.7-second eclipse.

By 1930, the tower was showing signs of deterioration and plans were made to replace the structure. An appropriation of \$20,000 was secured in 1933 for erecting a seventy-two-foot, reinforced-concrete, cylindrical tower next to the original one. At the same time, generators were installed at the station to supply electricity to both the lighthouse and the keeper’s dwellings. The lens was transferred from the old tower to the new one.

The lantern room was removed from the Barbers Point Lighthouse when it was automated in 1985. The airway beacon was replaced by a double-barreled Rotating Optic Directional Code Beacon, which increased the range of the light to twenty-four nautical miles.

Makapu’u Trail and Lighthouse



Since improvements were completed in 2015, the Makapu'u Lighthouse Trail has become one of the most popular hiking destinations on Oahu. This trail and lighthouse are also historically significant as you will find out below.

Improvements to the area include much-needed additional parking and the paving of the original path. Located at the very tip of southeast Oahu, the two-mile Makapu'u Lighthouse Trail is ideal for novice hikers and not much more than a brisk walk for experienced hikers. It has a moderate slope that climbs to the east before turning north for the uphill stretch that takes hikers to the lighthouse.



Makapu'u Lighthouse

On clear days, Molokai, Maui, and Lanai are visible many miles to the east. The view north from the lighthouse is alone worth the trip, a vista of windward Oahu stretching to the horizon. To the southwest is the dramatic Ka Iwi Coastline (Sandy Beach Area) and the towering Koko Head Crater. The trail is also ideal for whale-watching when the gentle giants make their annual pilgrimage to these islands each winter.



The view North from the Makapu'u Lighthouse

And while the Makapu'u Lighthouse Trail is widely popular among both residents and visitors for its ease and stunning views, the origins of the lighthouse itself makes it an important historical site as well. It is operated by the United States Coast Guard.

Efforts to build the lighthouse began in the mid-1880s as Hawaii's shipping industry was growing at a feverish pace. After annexation, the U.S. congress appropriated funding in 1906. The lighthouse began operations in 1909. At its completion, the lighthouse was outfitted with a 12-foot tall eight bright eyes, 12-ton lens featuring more than a thousand prisms. It was then the largest lighthouse lens in operation in the United States. It still is, and it remains a vital navigational tool for mariners.

Soon after it began operating, the Makapu'u Lighthouse was equipped with Hawaii's first radio beacon. In the early days of its operation, the lamp was lit using highly flammable oil vapor. In 1925, an explosion caused by an accidental spill that killed an assistant. The lighthouse now features a 500-watt light bulb. It was fully automated in 1974 and the radio beacon was taken out of service.

According to Hawaiian legend, Makapu'u was a supernatural being who, after arriving from Tahiti, took up residence on the point now bearing her name. This being's defining feature was her set of eight bright eyes, which is reflected in her name Makapu'u, Hawaiian for bulging eye. The fact that it is now home to a beacon of light may be just a coincidence, but it's a fun one.

Have you ever hiked up to the Makapu'u Lighthouse?

Pyramid Rock Lighthouse



Kane'ohe Bay on the windward or eastern side of O'ahu is the largest sheltered body of water in the Hawaiian Islands. The 4.6-mile-wide mouth of the bay extends from Pyramid Rock on the Mokapu Peninsula at the southeastern side to Kualoa Point on the northwest side. Before exposure to the Western world in 1778, the Kane'ohe area was the most populated area on O'ahu.

Part of the Mokapu Peninsula was first set aside for military purposes in 1918, when President Woodrow Wilson reserved 322 acres for the U.S. Army. The U.S. Navy purchased the western side of the peninsula in 1939, and construction soon began on Naval Air Station Kaneohe. Dredging of the bay started in 1939, and in 1941 Pyramid Rock Lighthouse was established atop the natural feature on the northwestern point of the Mokapu Peninsula.

NAS, Kaneohe Bay was attacked by two waves of Japanese Imperial Navy aircraft on December 7, 1941, just minutes before the assault began at Pearl Harbor. Eighteen U.S. sailors were killed during the bombardment, and extensive damage was done to the air station and its aircraft. Following World War II, the Army soon left the peninsula, and the Navy followed suit in 1949. The marines established Marine Corps Air Station, Kaneohe Bay on the combined Navy and Army sites in 1952. In 1994, the Marine Corps consolidates all of its operations in Hawaii on the Mokapu Peninsula and renamed the facility Marine Corps Base Hawaii.

The Pyramid Rock Light currently consists of a light mounted on the roof of a square concrete workhouse, painted with distinctive black and white diagonal stripes. The light guides vessels into Kane'ohe Bay and overlooks a recreational beach for the marines.

Aloha Tower

Did you know that Aloha Tower used to be an active lighthouse? Yes, Aloha Tower is a retired lighthouse that is considered one of the primary landmarks of the state of Hawaii. Opened on September 11, 1926, at a then astronomical cost of \$160,000, Aloha Tower is located in the Aloha Tower Marketplace at Pier 9 of Honolulu Harbor in downtown Honolulu. It has been, and continues to be, a guiding beacon welcoming vessels to the City and County of Honolulu. Just as the Statue of Liberty greeted hundreds of thousands of immigrants each year to New York City, Aloha Tower has greeted hundreds of thousands of immigrants to Honolulu. At 10 stories (184 feet or 56 meters) of height topped with 40 feet (12 meters) of flag mast, for four decades the Aloha Tower was the tallest structure in Hawaii. It was built in the Hawaiian Gothic architectural style.



Aloha Tower (Daytime and at night)

Aloha Tower Marketplace was completed in 1994 as part of a Honolulu Harbor commercial revitalization project. It was acquired by Aloha Tower LP in 1998. In 2002, the Marketplace filed for bankruptcy. It had been operating at a loss because of its distance from other tourist areas, lack of parking, and mismanagement.

Hawaii Pacific University partnered with a developer to own the Marketplace in 2011, and a few years later in 2013, they bought out the developer and took complete control of the facility. They renovated the shopping center into a mixed-use facility with retail, restaurants, and HPU student dormitories. The redevelopment, which began in 2012 was completed in 2015.

Sadly, Hooters Sports Bar at Aloha Tower Marketplace closed on Feb 10, 2020.

Diamond Head Lighthouse (Day and Night)



Located at the eastern end of Waikiki Beach, Diamond Head Crater is a familiar landmark to the throngs of tourists who today pack the high-rise hotels in Waikiki and the surrounding area. For mariners of yesteryear, Diamond Head also served as a landmark, guiding their approach to the harbor at Honolulu from the west coast of the United States.

In the 1820s, sailors discovered what they believed were diamonds in the rocks on the volcano's slopes. Although the sailors' diamonds turned out to be clear calcite crystals, the name Diamond Head has been associated with the crater ever since.

With the increase of commerce calling at the port of Honolulu, a lookout was established in 1878 on the seaward slopes of Diamond Head for spotting and reporting incoming vessels. John Charles Petersen, a mariner born in Sweden, was the first watchman at the station and was paid fifty dollars per month. After his arrival in Hawai'i, Petersen married a native girl who died just four months after the birth of their daughter Melika. Diamond Head Charlie raised his daughter at the isolated station, where he served for thirty years until his death in 1907.

The Diamond Head Lighthouse, originally built in 1899, spreads light nearly 18 miles out into the Pacific Ocean. The house's Fresnel lens burns at 60,000 candle power. Perched on the side of the extinct volcano Diamond Head, the lighthouse lays down a red sector to warn vessels to stay away from the reefs at Waikiki.

The lighthouse is not open to the public but can be seen from Diamond Head Road. The current concrete-reinforced structure stands 55-feet tall and is no longer manned. In 1980 it was placed on the National Register of Historic Places.

Ka'ena Point is the westernmost tip of O'ahu and is a celebrated legendary site for the Hawaiian people. The ancient Hawaiians believed that when a person died their spirit would follow the setting sun to their eternal night. At Ka'ena Point, the souls would leap from the earth and enter the underworld.

In 1919, the Bureau of Lighthouses decided to place an unmanned acetylene light on Ka'ena Point. A site was selected, building materials were hauled in, and a concrete pyramidal tower was



Ka'ena Point Lighthouse

erected at a cost of \$2,479.84. Due to its remoteness, the light frequently fell victim to vandalism. Between 1980 and 1985, the light was extinguished eleven times, as senseless people shot at the lens or stole the beacon's batteries. In 1990, the concrete tower literally fell victim to erosion and was replaced by a light atop a metal pole.

In the 1980s, the Navy requested that the range of the Ka'ena Point Light be increased to assist submarines. Rather than install a more powerful light on the beach, the old Ka'ena Point Light was renamed the Ka'ena Point Passing Light, and a navigational light was activated atop a building at the Ka'ena Point Tracking Station on the bluffs behind the point. This new location for the Ka'ena Point Light was selected due to the commercial power and security available at the tracking station. The new light has a focal plane of 931 feet and a range of twenty-five miles.

The Ka'ena Point Natural Reserve Area was created in 1983 to help protect the fragile dunes and native species on the point. Making the area immediately around the point off-limits to dogs and vehicles has helped restore the natural landscape and elevate the number of nesting Laysan albatross and wedge-tailed shearwaters.



Moloka`i (Kalaupapa) Lighthouse

Most of the long northern shore of Moloka`i is lined by dramatic sea cliffs that drop over 3,000 feet to the ocean, but near the middle of the island, the Kalaupapa Peninsula extends oceanward from the base of the cliffs for a couple of miles. Kalaupapa means 'flat leaf' and is an accurate description of the leaf-shaped peninsula that was formed by a low volcano, which broke the surface of the water long after the rest of Moloka`i was formed. The peninsula is an isolated place, surrounded by the ocean on three sides and the sheer cliffs on the south.



Kalaupapa Peninsula



Kalaupapa Leper Colony

Leprosy was first diagnosed in the Hawaiian Islands in 1835, and, like many diseases, was introduced by foreigners. To prevent the spread of leprosy, King Kamehameha V signed into law an act in 1865 that banished all people who had contracted the disease to the Kalaupapa Peninsula. The first shipment of patients, consisting of nine men and three women, was made in January 1866. Some captains transporting patients to the settlement were so afraid of the disease that they simply dumped the afflicted into the bay, forcing them to swim to the peninsula.

Father Damien (Joseph de Veuster) arrived at the settlement in 1873 and dedicated the remainder of his life to the exiled people. He built a church and housing for the settlement, improved the water supply, bandaged oozing sores, and buried the dead. In 1885, Father Damien was officially diagnosed with leprosy, and he died at the settlement on April 15, 1889, at the age of forty-nine. Over the years, roughly 8,000 people were relocated to the peninsula to live out their final days in isolation.

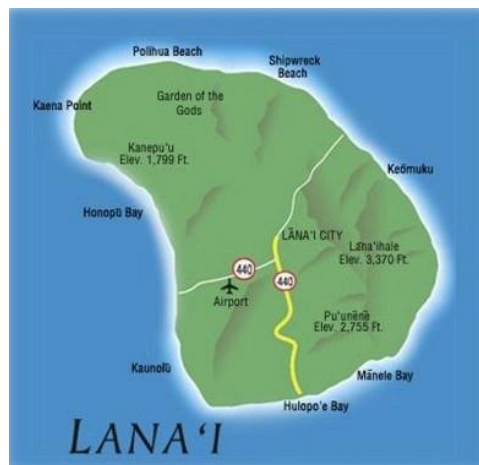
A lighthouse was recommended for the northern tip of the Kalaupapa Peninsula, but lawmakers were reluctant to place the light near the leprosy settlement. Finally, after repeated denials for the funding of a major light on the peninsula, the Lighthouse Board opted to construct the lighthouse. The 132-foot octagonal tower, Hawai'i's tallest, was constructed of concrete. The stairs leading up to and including the fourth landing were also of concrete, while the remainder of the staircase up to the lantern room was of cast iron.



**Moloka'i (Kalaupapa)
Lighthouse**

The lighthouse clamshell lens, which weighs over three tons, floated in a vat of mercury. A large weight suspended in the tower powered a clockwork mechanism that rotated the lens to produce a white flash every twenty seconds at a height of 120 feet above the base of the tower and 213 feet above the surrounding water. James Keanu, the keeper of the lighthouse, ascended the 189 stairs on the evening of September 1, 1909, and lit the incandescent-oil-vapor lamp for the first time. Keeper Keanu served three stints as head keeper of Moloka'i Lighthouse, and when he retired in 1939, he had spent roughly twenty-three years on the peninsula.

Just in case you were wondering, The Kalaupapa leper colony is no longer a prison for those afflicted by Hansen's disease but is now a refuge for the now-cured remaining residents who were forced to live their entire lives in isolation. In 1980, Kalaupapa became a National Historical Park. Today, about 10 patients remain at Kalaupapa. When the last patient dies, the federal government wants to open up the isolated peninsula to tourism.



James Dole purchased most of Lana'i from Harry and Frank Baldwin in 1922 for \$1,100,000 and eventually devoted 15,000 acres of the island to pineapples, creating the largest pineapple plantation in the world. To transport the harvest from the island, the bight at the mouth of Kaumalapau Gulch was converted into a small harbor by constructing a breakwater on the north side of this small indentation along Lana'i's southwest shore. The island's first navigational light was established at the end of the breakwater in 1924, and the following year, the Bureau of Lighthouses assumed control for this beacon and established a second light on the south side of the entrance to Kaumalapau Harbor. This second light was originally a beacon mounted atop a small wooden building but has since been replaced with a metal pole, daymark placard, and a solar powered light.

The glory days for Lanai's pineapple crop came to an end in the 1980s, when foreign competition made the venture unprofitable. In 1985, David Murdock took over the nearly bankrupt Castle and Cooke, which assumed control of the Dole Food Company in 1961. Pineapple production has since ceased on the island, and Mr. Murdock has constructed two luxurious resorts, each with its own 18-hole golf course. Though the island's primary industry has switched to tourism, Kaunapali Harbor still functions as the island's main working harbor.

In June 2012, Larry Ellison bought Lanai for an estimated US\$300 million from David Murdock, who had reportedly been asking for US\$1 billion for the island.



Palaoa Point Lighthouse

The Palaoa Point Lighthouse (located on the southern part of Lana'i island) also known as the Cape Ka'ea Light, was first displayed on June 6, 1934. Consisting of an automated beacon positioned atop a wooden skeletal tower, the light was one of eleven acetylene-powered lights built in the islands during the late 1920s and early 1930s. The flashing white light with a period of six seconds has a focal plane of ninety-one feet above the water and has a red sector to mark rocks to the southeast off Manele Bay.



Kahekili's Leap

Hulopo'e Beach is long considered one of the world's most perfect stretches of sand, lies at the base of the Four Seasons Lana'i at Manele Bay near the lighthouse.

Just up the road from the light is the site of the ancient Hawaiian village of Kaunaloa where Kamehameha the Great came with his warriors to try their luck in the fertile fishing waters just offshore. Petroglyphs and the remains of houses can be found in the area. A point on the cliffs just west of the light is known as Kahekili's Leap, where Kahekili challenged others to demonstrate their loyalty to Kamehameha by following him in a death-defying, 75-foot plunge into the ocean.

In 1930, newly appointed Superintendent Frederick A. Edgecomb announced plans to build a lighthouse at Pohakuloa Point, a few miles west of Laewahie, where there was an opening through the reefs. This light was never realized until 1968, when the northern coast of Lana'i finally received a light in the form of a metal pole at Pohakuloa Point, the northernmost point on Lana'i.

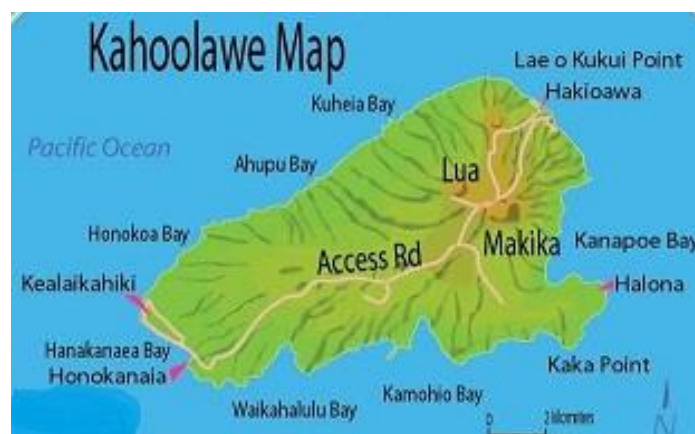


Pohakuloa Point Lighthouse

Manele Bay Lighthouse



In 1965 a breakwater was constructed in Manele Bay to form a small harbor. At the outer end of the breakwater, a beacon mounted atop a pole anchored in a ten-foot-high white house served as an entrance light. Today, a cement base supports a pole light that serves pleasure craft and the ferry that runs between Lana'i and Maui.



Kaho'olawe, the smallest of the eight volcanic Hawaiian Islands, has had a most interesting past. Ka'ahumanu, the favorite wife of King Kamehameha I and ruler following his death, issued an edict in 1829 stipulating that all followers of the Catholic religion were to be banished to Kaho'olawe. Men guilty of "rebellion, theft, divorce, breaking marriage vows, murder and prostitution" were also sent to Kaho'olawe, while women guilty of the same crimes were banished to Lana'i. Kaho'olawe continued to serve as a penal colony until legislation banning the practice was passed in 1853.

Starting in 1858, Kaho'olawe was leased by the Hawaiian government to ranchers, who introduced sheep on the island. Over the next few decades overgrazing denuded parts of the island, allowing the wind to blow away the precious topsoil. After Hawaii was annexed by the United States, the island was set aside as a forest reserve in 1910 in hopes of revegetating the barren land. The continued presence of wild goats thwarted this effort, and in 1918 the island was leased to cattle ranchers Eben Low and Agnus MacPhee who formed Kaho'olawe Ranch with Harry Baldwin, a Maui businessman.

Under executive order 308 issued on December 13, 1927, twenty-three acres on the southwest point of the island were set aside for lighthouse purposes. The following year, a forty-foot tower was erected providing a focal plane of 140 feet for a flashing white light.

In 1941, Kaho'olawe Ranch subleased a portion of the island to the U.S. Navy, but seven months later, when the Japanese attacked Pearl Harbor, the military assumed control of the entire island under martial law. The island was used for practicing ship-to-shore bombardment in preparation for landings throughout the Pacific. As the bombing became more intense, the lighthouse was officially discontinued in 1944. After the war, the military did not relinquish control of the island. Rather, executive order 10436, signed by President Eisenhower in 1953, reserved the entire island for naval purposes save the acreage already set aside for the lighthouse, which had been reestablished in 1952 after the navy declared the tower to be outside its target area.

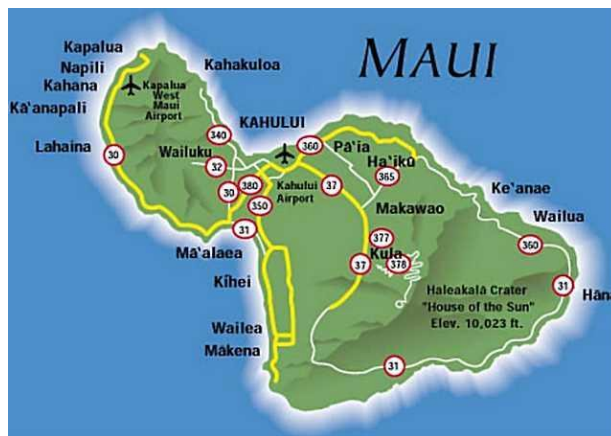
Kaho'olawe was used for bombing practice during both the Korean and Vietnam Wars, and only after a lawsuit was filed by Protect Kaho'olawe Ohana in 1976, was pressure put on the government to cease the practice. In 1990, President George H. W. Bush issued an order that halted the bombing and led to the island being turned over to the State of Hawaii in 1994. The U.S. Congress allocated \$400 million for removing unexploded ordinance from the island and rejuvenating its environment.

The Kaho'olawe Island Reserve Commission was established to oversee the restorative effort and pledges that the island will henceforth be used "for the purposes of the traditional and cultural practices of the native Hawaiian people." Archaeological evidence reveals that the island was inhabited for more than 1,000 years, but it is now uninhabited.

The present twenty-foot light tower was placed on the island in 1987.



Kaho'olawe Southwest Point Lighthouse



Hawea Point Lighthouse



Hawea Point Kapalua Maui

Haweia Point is the northern most point on Maui (that little bump on the map). The Haweia Point Lighthouse originally consisted of an acetylene lens lantern mounted atop a sixteen-foot pyramidal skeleton tower. First established in 1912, the light is now a metal pole flanked by diamond-shaped day markers and topped by a flashing solar-power light.

Look at the other picture on the right. You are in luck! That meta-luxury home you see is on sale for \$37.5 million. The home is up high on a lava rock point, which provides privacy and security far above the ocean. This landmark 10-acre property bordered by 12 acres of land, which is protected by the Hawaiian Island Land Trust and can never be built on. The location is irreplaceable - yet this elegant home showcases a whole peninsula of your own in the midst of the already very exclusive resort of Kapalua. **You even have a lighthouse!**

In the 1870s, Daniel McGregor captained vessels involved in the Ko'olau trade. Ko'olau means windward side of an island, and the Ko'olau trade involved the delivery of supplies between windward landings by interisland vessels. On one stormy night, Captain McGregor was bound for the landing at Ma'alaea Bay but knew the turbulent seas would prevent his anchoring there.



McGregor Point Lighthouse

Determined to find an alternate landing for the night, Captain McGregor sent three men forward with lead lines to sound the water while he probed the rugged shoreline in the pouring rain for an adequate anchorage. Between two and three o'clock in the morning, when the winds suddenly diminished and the water became significantly shallower, the captain ordered the anchor dropped for the night. The next morning McGregor awoke to find that he had discovered an excellent cove, which, along with the protecting point, still bear his name.

The lighthouse itself is located just west of Ma'alaea Town in south central Maui which is the site of a small boat harbor. The 1906 light at McGregor Point was replaced by a twenty-foot reinforced concrete pyramidal tower in 1915. The focal plane of this tower, which today shows a flashing green light, is seventy-two feet above sea level.



Original Pa'uwela Point Lighthouse



Current Pa'uwela Point Lighthouse

In 1915, a temporary acetylene light was activated on Pa'uwela Point (northeast coast of Maui) on top of the keeper's dwelling with a wooden light tower mounted on its roof. Philip Kepilino was the first keeper of Pa'uwela Lighthouse and served until the light was automated in 1921. At this time, an acetylene light was installed atop a new metal, pyramidal tower, and the keeper's dwelling was sold at auction.

In 1911, a breakwater was completed to protect the harbor from swells that built up during periods of strong north winds, and an automatic acetylene light was established on the east end of the breakwater to mark the man-made obstruction.

The government eventually assumed control of the range lights at Kahului.



Kahului Harbor Range Lighthouse

In 1925, the front light and rear light were being displayed from rectangular, wooden structures mounted atop wooden, trestle towers. Today, Kahului Range Lights are exhibited from metal towers equipped with red-and-white-striped daymarks.

Molokini Crater and Lighthouse

Early each morning, a flotilla of boats departs Maui bound for Molokini Crater, Hawaii's premiere snorkeling destination. Once secured to a mooring inside the crescent-shaped crater, the vessels disgorge their sun-starved tourists, equipped with flippers, masks and snorkels, to enjoy a colorful array of coral and marine life. Molokini is often billed as one of the top dive spots in the world where the visibility is typically 150 feet or better inside the crater.



**Molokini Crater with Maui in the background
(If you look closely, you can see the lighthouse)**



Molokini Lighthouse

During daylight hours, Molokini's height of 160 feet above the ocean makes it easily visible, but at night, it poses a navigational hazard for interisland navigation. The Lighthouse Board first proposed a light for Molokini in 1905, but funds were not allocated for the project until six years later when a sixteen-foot-tall, skeletal tower was erected on the southwest rim of the crater where it had a focal plane of 173 feet above the water. The tower's automated light, which went into service in 1911, was powered by acetylene and emitted a white flash every three seconds.

The Molokini Light burned for nineteen years and eight months without being extinguished. As the light flashed every three seconds, this amounted to approximately 207,000,000 flashes during this period. The lantern and flasher were exchanged for overhauling and cleaning about every four years. This impressive record of continuous service ended in November 1930, when either an air pocket or acetone in the gas line caused the light to go out.

This second light marked Molokini for twenty-two years until it too succumbed to the elements and was replaced in 1947 by a twenty-five-foot skeletal tower, which displayed an electric light powered by batteries stored in a shack built inside the base of the tower. In April 1989, a powerful storm packing winds of over sixty miles an hour toppled the tower and sent it tumbling down into the crater. Members of the Coast Guard were helicoptered to the island to erect a temporary beacon and later the metal pole and solar powered light that graces Molokini today.

Lahaina Lighthouse



Between 1820 and 1860, Hawai`i was popular with whalers as a stopover point for refitting and reprovisioning, and the high cost of supplies and port charges at Honolulu made Lahaina the port of choice for whale ships. To aid the ships in reaching the port, the first lighthouse in Hawai`i was constructed at Lahaina in 1840. The light was built on a section of waterfront known as Keawaiki that means literally “the small passage,” referring to a narrow break through the coral reef that led to protected anchorage.

Lahaina served as the capital of the Kingdom of Hawai`i from 1820 until 1845, when the capital was moved to Honolulu. A group of armed businessmen overthrew the Hawaiian monarchy in 1893 and established a provincial government. The U.S. government officially annexed Hawai`i on July 7, 1898, but it would not be until 1904 that the government took control of the aids to navigation in the islands.

In 1917, the wooden trestle tower was replaced by the current thirty-nine (39) foot, pyramidal, concrete tower at a cost of \$1,549, which included improvements to the seawall. A metal ladder leads up one side of the tower to the platform from which a fixed red light is shown. The durability and ease of maintaining such concrete towers led to their wide deployment throughout the islands. A metal plaque placed at the tower in 1984 by the Lahaina Restoration Foundation, the caretakers for the lighthouse, gives a brief history of the various towers built at the site, which was originally home to the “oldest Pacific lighthouse”:

On this site in 1840, King Kamehameha III ordered a nine-foot wooden tower built as an aid to navigation for the whaling ships anchored off Lāhainā. It was equipped with whale-oil lamps kept burning at night by a Hawaiian caretaker who was paid \$20 per year.

The tower was increased to 26 feet in 1866, rebuilt in 1905, and the present concrete structure was dedicated by the Coast Guard in 1916. Thus, this light was the first in the Hawaiian Islands and pre-dates any lighthouse on the US Pacific Coast.

Hanamanioa Lighthouse



Original lighthouse built in 1886



Current lighthouse built in 2008

Over the years, several lights have marked Maui's southernmost point, which surrounds La Perouse Bay and is known as Cape Hanamanioa. The current tower has a pyramidal base of reinforced concrete and had a focal plane of seventy-three feet above the water. The light, run on acetylene, was automated from the beginning.

Ka'uiki Head Lighthouse



Hana (Pueokahi) Bay has a diameter of about $\frac{3}{8}$ mile and is defined by Nanualele Point on the north and Ka'uiki Head on the south. In 1919, the U.S. Coast and Geodetic Survey reported that the anchorage at Hana Bay "used by

the small local steamers is inside Kauiki Head in the southwesterly part of the bay and is marked by a mooring buoy to which vessels make their stern lines fast. This anchorage is about 200 yards wide, with depths of 14 to 36 feet; it is exposed to northeast winds and sea, and during strong southwesterly blows the wind comes offshore in such heavy squalls that vessels are apt to drag.”

The Lighthouse Board knew the anchorage at Hana Bay was precarious, but since it was being used by vessels engaged in interisland trade, they felt the bay should be marked by a light. Ka’uiki Head, an extinct crater with a height of 390 feet, was considered as a site for a light, but the tiny islet of Pu’uki’i located just off the head was selected instead. For some reason, however, the light has always been called the Ka’uiki Head Light. Pu’uki’i means Image Hill and at one time the image of a native god was displayed on the islet by King Umi to ward off invaders.

A fourteen-foot pyramidal reinforced concrete tower was built on Pu’uki’i in 1914, and the light source was changed from kerosene to acetylene, allowing the station to be automated.

Nakalele Lighthouse



In 1908, the Lighthouse Board selected “the most northerly point of the westerly part” of Maui, known as Nakalele Point, for the erection of a forty-foot wooden mast atop which a temporary light could be displayed. By 1910, a keeper’s dwelling had been constructed on the point and a boxlike platform was built on its roof for displaying a fixed-white light. John M. Hanuna was keeper of the Nakalele Point Light from 1910 to 1915, when John K. Mahoe took over responsibility for the light. Luther K. Kalama was appointed keeper in 1917, and he served until the light was automated in 1922. The characteristic of the light was changed to flashing white upon automation.



HAWAII ISLAND



Kauhola Point Lighthouse

Near the northern tip of the Big Island, Kauhola Point juts out into the Pacific Ocean. Steep cliffs surround the point on either side, and reefs extend from the point for roughly two miles. After several ships wrecked off the point, the Hawaiian Government constructed a wood-frame, forty-foot tower, topped by an enclosed lamp room. A lens and reflector, fabricated by Barbier and Benard of Paris, amplified the light source and sent forth a beam from the lamp room's bay window that could be seen for ten miles. The light was activated in 1897, one year before Hawai'i became a U.S. territory.

In 1933, an eighty-six-foot, major lighthouse was built of reinforced concrete. A 105-step spiral staircase led to the top of the tower, where a trap door had to be slid back to access the beacon. The welded, metal superstructure atop the tower housed two thirty-six-inch airway beacons, one of which was active while the other served as backup. The revolving beacon produced alternating red and green flashes every six seconds. Although this Christmas-like signature was in use elsewhere in the Pacific, it was a first for Hawai'i and was very favorably received and commented on by mariners.

When originally built, the 1933 lighthouse stood eighty-five feet from the nearest cliff edge, but by 2007, this distance was reduced to just twenty feet. Between 2003 and 2007, the cliff face retreated fifteen feet with six feet being sheared off by an October 2006 earthquake. An engineering report completed in 2007 estimated that the tower would likely collapse within two to five years due to shoreline erosion. The Coast Guard decided to demolish the tower and replace it with a monopole light located farther back from the cliff edge. The replacement light was in place by November 2009, and demolition of the 1933 tower took three days.



**Kauhola Point Lighthouse
after 2006 earthquake**



Kailua Lighthouse

The present Kailua Light, a pyramidal concrete tower, was built under the Bureau of Lighthouses in 1915 and replaced a fixed lens-lantern light that was established in 1909.

The light sits on Kuka'ilimoku Point and marks the northwestern side of Kailua Bay, which is home to a sport fishing fleet.

Most of the windward or eastern shore of the island of Hawai'i is lined by steep bluffs, rising to heights of up to four hundred feet. As ranches and sugar plantations developed atop these bluffs, a method for efficiently transporting cattle, sugar, and molasses off the island had to be developed. Fortunately, the water just offshore is deep, but the difficulties faced included how to securely anchor a vessel in open water so its cargo could be loaded and unloaded, and how to transfer the cargo from the bluff top down the vessels.



Kukuihaele Lighthouse

The solution to the problem was found in the 1890s in the form of "wire landings." Four mooring buoys were anchored offshore at roughly the points

of a rectangle, and a vessel would tie up to the buoys using two lines fore and aft to securely hold the ship into the wind. Atop the bluff at the landing, a hoist house held equipment used for lowering and raising a trolley along a wire that ran from the hoist to an anchor on the seaward side of the vessel. For cargo that weighed more than two tons, a derrick landing was used, but this was advisable in only calm seas as it was difficult to quickly cast off when the wind shifted.

The Kukuihaele Landing, located on the northeastern side of the island just south of the Waipio Valley, was one of nine wire landings established along the windward shore. To mark the landing, the present thirty-four-foot concrete tower lighthouse was built in 1937. Due to the height of the bluff on which it stands, the light has a focal plane of 154 feet. The Kukuihaele Light is the only remaining concrete light structure in Hawai'i which has an interior ladder used for accessing the lamp. This feature of the hourglass-shaped tower allowed the keeper from being blown off the tower by the high winds that frequently buffet the area.



Captain Cook killed at Kealahou Bay



Napo'opo'o Lighthouse

Captain Cook embarked on his third voyage of discovery in 1776 aboard the *Resolution*, and, after a stop in Tahiti to return a native picked up during his previous voyage, Cook happened upon the Hawaiian Islands in January 1778. After two weeks of trading and friendly interaction with the islanders, the *Resolution* sailed north in search of the fabled Northwest Passage. The next several months were spent mapping much of the west coast of North America, with the expedition reaching as far north as the Bering Strait. As fall was setting in, Cook headed south to warmer climes.

On the morning of January 17, 1779, Captain Cook and his two vessels entered the protected waters of Kealahou Bay during the height of a religious festival honoring the God Lono. The Hawaiians reportedly greeted Cook as Lono

incarnate and honored the captain during the remainder of the celebrations. After the festival, Cook and his crew left the islands but encountered a fierce storm that snapped the foremast of the Resolution. After returning to Kealahou Bay for repairs, a schism developed between the islanders and the explorers, and one of Cook's small launches was stolen. Planning to take the chief captive until the vessel was returned, Cook rowed ashore with several of his crew. The abduction, however, was thwarted, and Cook and his men retreated to their boats on the beach. While trying to return to the safety of the Resolution, Cook was struck on the head and stabbed to death along with four of his men.

In 1908, a tall wooden mast topped with a lens lantern was placed on the point just west of where Cook fell to mark Kealahou Bay, regarded as the finest anchorage on the western coast of Hawai'i. The light station property on which a keeper's dwelling was also erected was 2.93 acres in size and was relinquished to the federal government by Governor Frear on March 16, 1909. Oliver Kua, a local farmer, served as the light's second keeper.

Today, a concrete pyramidal tower (Napoo'opo'o Lighthouse), built in 1922 just west of the Captain Cook Monument, serves to mark Cook Point and the northern entrance to Kealahou Bay, a marine sanctuary frequented by kayakers and snorkeling expeditions. The ground on which the Cook Monument stands was deeded to the British Government, and a ship is reportedly sent by the British to perform regular maintenance.

Cape Kumukahi Lighthouse

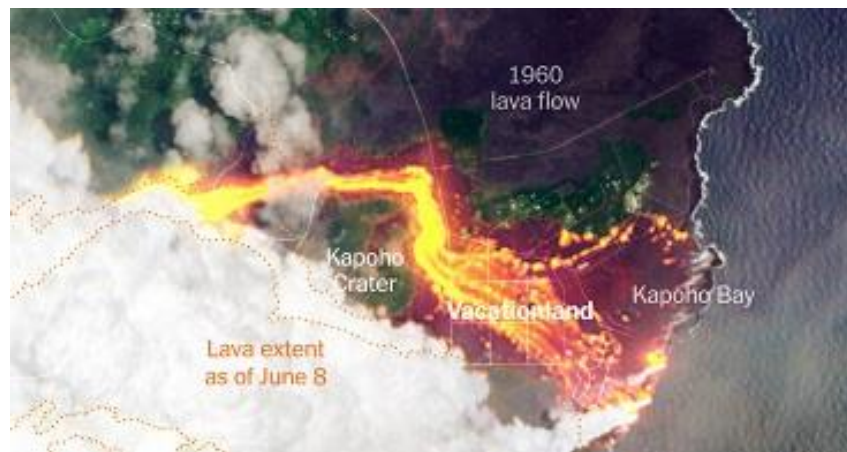


Located on the Big Island, twenty-five miles southeast of Hilo, is Cape Kumukahi, the easternmost point of the Hawaiian Islands. According to Hawaiian mythology, the cape is named after Chief Kumukahi who refused to

allow the fire goddess Pele to participate in the playing of royal games. Offended, Pele sent forth a fountain of fire and lava that chased Kumukahi to the beach and continued eastward creating the cape.

In 1933, a square, pyramidal, skeleton tower was constructed of galvanized steel, and two, thirty-six-inch airway beacons were placed at its top, roughly 125 feet above the ground. To supply power for the light and keeper's dwellings, three engine-generators units were installed in a corrugated powerhouse located at the base of the tower. With a strength of 1,700,000 candlepower, Cape Kumukahi Light was the strongest in the Hawaiian Islands, and only the concrete Molokai Lighthouse was taller. Just one of the two airway beacons was in operation at any time, with the other unit being reserved as a backup. The signature of the new light was a white flash every six seconds.

Cape Kumukahi is included in Kilauea Volcano's active east rift zone. In 1955, a lava flow threatened the station, but Joe Pestrella (the light keeper) remained on duty at the peril of his life to keep the light running. The lava flow stopped before hitting the lighthouse. For his dedicated years of service at the station, he was selected as Civil Servant of the Year for the Hawai'i area in 1956.



On January 13, 1960, a fiery fountain of lava, roughly half a mile long, shot up in a sugar cane field, two miles east of the lighthouse and just north of the town of Kapoho. Bulldozers and fire hoses were used in attempts to divert and harden the flow. On January 21, the lava flow turned south and started to encroach on the lighthouse station grounds. Pestrella's wife and infant son were evacuated, but Pestrella remained at the station saying, "When my backside feels hot, I'll move on. Not till then!!".

When the lava set the station's gate ablaze, Pestrella surely felt the heat, and on January 28, he wisely decided to place the light on emergency power and leave

the station. The lava flow swallowed the keeper's dwellings and incinerated Pestrella's orchard. That same day, the flow engulfed the town of Kapoho. The heat from the flow caused the generator's fuel tanks at the tower to explode, and the light was extinguished. As the river of lava approached within a few feet of the lighthouse tower, it remarkably divided into two streams that flowed past each side of the structure, leaving the tower unscathed. The Kapoho eruption had covered over ten square kilometers and added two square kilometers of land to the island. Madame Pele had spared the lighthouse again!

In 1904, the first beacon at Coconut Point was built on the southwest shore of Hilo Bay and was tied to the city's electric lines.

A concrete tower topped by an acetylene flash was erected on Coconut Point in 1915, and the present thirty-four-foot pyramidal tower was erected in 1975. The signature of Coconut Point Light is flashing green.



Coconut Point Lighthouse

Kawaihae Lighthouse



First Kawaihae Lighthouse



Current Kawaihae Lighthouse

Honolulu and Lahaina were the two main Hawaiian ports in the 1800s when whaling ships were calling at the islands for provisions, but by 1845 Hilo and Kawaihae on the Big Island had become important stops for procuring fresh food and beef. Cattle were also being shipped from Kawaihae, located on the

northwest coast 35 miles north of Kailua-Kona, to supply the whaling needs at Honolulu and Lahaina.

The present Kawaihae Lighthouse, a thirty-six-foot pyramidal concrete tower, was erected in 1915. Between 1957 and 1959, the anchorage at Kawaihae was dredged and a breakwater was constructed to form a deep-draft harbor. The harbor has since been kept busy with shipments of molasses, petroleum, and military cargo. The present Kawaihae Light produces a white flash once every six seconds.

Laupahoehoe Point Lighthouse

Laupahoehoe means "lava leaf" or "smooth lava flat" and is an apt description of this small peninsula that was formed when lava flowed down a valley and formed a delta extending several hundred feet into the ocean. In 1890, the first lighthouse was built on Laupahoehoe Point, the outermost tip of the peninsula, in the form of a thirty-foot wooden trestle tower atop which an ordinary house lamp was kept in a protective box.

Located on the Big Island's Hamakua Coast (east shore), Laupahoehoe Point is a peninsula covered with coconut palms, grass, and black lava rocks on the shoreline, which contrast beautifully with the deep blue ocean. On a sunny day, the ocean is particularly blue here. The landing, located on the inner part of the peninsula, was the only place besides Hilo on the Big Island's windward coast from which passenger boat service was available.



1946 Tsunami Hits Laupahoehoe Point

Laupahoehoe is known for its scenic views, but it also holds a tragic past. It was here where a tsunami killed 19 schoolchildren and 5 adults on April Fool's Day in 1946. The names and ages of the victims were engraved on a rock, which

serves as a memorial in the park. The village was later relocated further inland to avoid another tragedy.

The concrete light tower managed to survive the tsunami intact, but its foundation had been undermined by the powerful waves, and it toppled over the following year in a storm. The Coast Guard erected a new tower with a similar, pyramidal shape, but this one was a skeletal tower built of metal. In 1975, a modern, solar-powered light atop a twenty-foot metal pole was placed on the point.



Laupahoehoe Point Lighthouses

Although the 1947 tower was removed from the point, its predecessor, the concrete tower that survived the tsunami, lies broken on the lava rocks in front of the present tower (you can see it in the above picture). For those who know its history, the fallen tower seems to belong on the point as a relic from the day of the tsunami, which battered Hawai'i as it was still recovering from World War II.

Pauka'a Point Lighthouse



Original Lighthouse 1869



Current Lighthouse 1925

Hilo Bay has long been the most important anchorage on the Island of Hawai'i, so it was a natural place for one of the island's early lights. Before a breakwater was constructed, the bay was somewhat sheltered by a submerged coral reef which curved westward from Coconut Island, on the eastern side of the bay. The channel leading into the bay was thus defined by bluffs to the north of Hilo and the western extremity of the coral reef.

Several sites were suggested for the first light to mark Hilo Bay, but the one finally selected was on the shore at Pauka'a, two-and-a-half miles north of Hilo. Mariners could steer directly towards the light, and then sail south to enter the bay. The light was erected for \$325 and was first lit on August 13, 1869. It seems the local sheriff was responsible for overseeing Pauka'a Light.

The present pyramidal concrete tower, exhibiting a green flash every six seconds at a height of 145 feet, was placed at the point in 1925.

Ka Lae Lighthouse

A beacon to light the Big Island's southernmost point, known as Ka Lae (the point) in Hawaiian, was first proposed in 1883, but the Hawaiian Government provided no appropriation for the request. Finally, the funds were approved in 1904 and the lighthouse was built. A lens-lantern supported by a thirty-four-foot wooden mast was ready for display on March 5, 1906, and its light, produced by incandescent oil vapor, was visible for nine miles. A small service house was built at the base of the mast, but no accommodations were provided for the keeper.



Ka Lae Lighthouse

Ka Lae Light is located roughly thirty-five miles southwest from Kilauea Volcano. In May 1924, Keeper Flint sent a letter to the superintendent of lights for Hawaii that read in part "for the last 10 days this station has been enveloped with clouds of smoke and ashes. Every night the lens has to be lowered down to clean off the ashes."

Ka Lae Light was automated in 1949, and the forty-five-foot tower was replaced by the present thirty-two-foot concrete pole in 1972. Today, batteries charged by solar panels power the light.

Keahole Point Lighthouse



A lighthouse was placed at Keahole Point, the westernmost point on the Big Island, in 1908. A fixed red lens-lantern was mounted on a thirty-six foot white wooden mast to produce a light with a focal plane of sixty feet. A service house topped with a red roof was built at the base of the mast, and a light gray one-story keeper's dwelling, embellished with red trim and a red roof, was built 550 feet east of the light.

In 1915, one of the many concrete pyramidal towers used in Hawai'i was built on Keahole Point. This one stood thirty-three feet high and displayed a white flashing light. Although you can drive to the point today, this has not been the case for too long. Coast Guard personnel servicing the light in the 1940s noted that the five-mile trail to the light "could be approached from land, but should not be attempted in a vehicle without four wheel-drive since it went directly over a lava bed."

Sharing the point with the light today is the Keahole-Kona Airport and the Natural Energy Laboratory of Hawaii Authority. The state developed this area to promote research on the ocean thermal energy conversion (OTEC) process and its related technologies. Pipeline systems pump both deep and surface seawater to shore around the clock to support several companies established on the point.

Mahukona Lighthouse

In the late nineteenth century, sugar plantations were prospering on the Big Island. Six plantations in North Kohala, the area that includes the island's north shore, used a couple of crude landings along that rugged coastline for exporting their products. Steers would pull heavy wagons full of sugar or molasses to the landings where, braving high surf and swell, men loaded the

cargo onto flatboats, which would transport the goods offshore to awaiting steamers.

In winter, the use of the landings was often too risky due to large breakers, so the sugarcane byproducts were transported over the hill to Mahukona, a protected small cove on the leeward side of the island. In 1881, Samuel G. Wilder, owner of a steamship company, initiated work on the Big Island's first railroad that would solve the Kohala plantations' transportation problem by connecting them to the port at Mahukona. Wilder started with improving Mahukona port through the addition of numerous wharfs and a storehouse. By March of that year, the first section of ties and tracks had been laid, using 100 Chinese as workers under the supervision of twenty Caucasians. In January 1883, the tracks covered almost twenty miles, reaching the northernmost sugar fields of Niulii, and the Hawaiian Railroad was complete. The steam locomotives traveled twelve miles per hour, crossing seventeen gulches and rounding twenty-five sharp curves. The train was a novelty for locals, and tourists were visiting from Hilo to take a ride. Plantation owners were also pleased with the new railroad as their revenues started to surge.

In 1889, Charles L. Wight, president of the Hawaiian Railroad Company, requested the construction of a light to mark the port at Mahukona. "Foreign vessels call here about every three weeks and they often lose much time not knowing where to come in. In thick weather it is also hard for steamers to find the place. In addition, it will be of material assistance to the vessels bound up the channel."



Mahukona Lighthouse

The light was built south of the anchorage at Mahukona according to Wight's suggestions and took the shape of a truncated cone that tapered from a bottom

diameter of twelve feet to an upper diameter of three feet. The tower was built of rock, covered with a thick layer of mortar, and topped by three feet of solid concrete. A ladder ran up the outside of the tower to a platform on which a five-sided lantern was mounted. Framed in oak and finished in redwood, the lantern had three-quarter-inch glass plates on four of its faces, and a door in the fifth. The roof of the lantern was sheet brass, and inside a one-hundred-candlepower lamp was exhibited atop a nickel-plated brass stand. On August 5, 1889, W. D. Alexander, surveyor general, reported that the tower was complete and that the light, at a focal plane of seventy-five feet, was visible for ten miles.

The harbor at Mahukona is now part of Mahukona Beach Park, which is a popular spot for swimming, snorkeling, and camping. The remains of the original tower can still be seen just north of the current Mahukona Light.



**Pepe'ekeo Point
Lighthouse**

Alia Point lies just under nine miles north of Hilo on the eastern coast of the Island of Hawai'i. In 1897, Makahanaloa Light was established on a point roughly a half mile south of Alia Point. This beacon consisted of an open wooden-frame tower that stood forty feet tall and was surmounted by an enclosed lamp room. The light was kept by a worker at the nearby Pepe'ekeo Sugar Mill Company.

In 2004, the skeletal tower was replaced by a seventy-five-foot metal pole, which displays two diamond-shaped daymarks in addition to a light.

Some Statistics

I know that this article is long, but I hope you enjoyed it. I know that I learned a lot about Hawaiian history with much of it, as we found out, being associated with Hawaii's many lighthouses.

How many lighthouses are there in the world? Around 18,600.

What country has the most lighthouses? The United States with over 700.

So, what U.S. state do you think has the most lighthouses? Did you say Hawaii? Nope.

I thought California and Florida would be in the top five instead of New York and Massachusetts. I was wrong – they each have 30.

Here are the Top Five:

- #1 is Michigan with 129 (the winner by a mile)
- #2 is Maine with 65
- #3 is New York with 51
- #4 is Massachusetts with 47
- #5 is Hawaii with 43

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