## **Physical History**

## 1849-1854: Early Lighthouse Backing

In January 1848, gold was discovered along the American River at Coloma, California near Sacramento. The resulting Gold Rush of 1849 made San Francisco a West Coast boomtown. Maritime traffic soon inundated the San Francisco Bay, bringing ships from around the world. That same year, President Zachary Taylor authorized the U.S. Coast Survey to inspect and recommend sites for lighthouses along the California coast. The following year, the U.S. Coast Survey recommended that a light station be constructed at several critical locations. Altogether, sixteen light station sites were recommended for California, four of them in the Bay Area: Alcatraz, Fort Point, Farallon Islands and Point Bonita.

Prior to 1852, the Fifth Auditor of the Department of the Treasury operated the lighthouses through local collectors of customs. On October 9, 1852, the Lighthouse Board was created within the Treasury Department; California was part of the twelfth district. The nine-member board was composed of several civilian, naval, army engineers to inspect each light station, and other aids to navigation, every three months and report on the condition. (http://www.uscg.mil/hq/g-cp/history/faqs/when.html, first accessed February 11, 2005)

In a letter to the Secretary of the Treasury, the Superintendent of the 1853 Coast Survey, stressed the urgency for funding the Point Bonita Light Station and explained why the other three funded light stations could not serve as a suitable entrance marker to San Francisco Bay. He concluded that Fort Point could not be adequately viewed from a southern approach. This was an especially important consideration in the Gold Rush years when the majority of coastal traffic was arriving via Cape Horn or Panama. It was deemed that Alcatraz was located too far inside the Bay to serve as an entrance marker through the Golden Gate. Finally, the Farallon Island Lighthouse was more useful "showing its own position and the surrounding dangers, than as a guide to the heads" and served as general navigation aid for the West Coast. Additionally, Point Bonita provided a natural landmark at the northern entrance to San Francisco Bay that was as "well known or remarkable . . . as could be readily and promptly distinguished during a clear night." (National Register Nomination, 1989)

Few captains dared sail their vessels through the Golden Gate after sundown; even those approaching in the daytime encountered fogs, swift currents and other navigational hazards. Before the station was constructed, a number of shipwrecks occurred while ships tried to find a safe passage into the Bay. The largest wreck in the vicinity of Point Bonita was that of the side-wheeler steamship Tennessee which occurred on March 6, 1853. Fortunately all 1,000 passengers and crew made it safely to shore at Indian Cove (later renamed Tennessee Cove in memory of the shipwreck).

Congress finally authorized and appropriated \$25,000 for the Point Bonita Light Station on March 3, 1853, just three days before the wreck of the Tennessee. However, construction continued to be delayed. In August 1853, Richard P. Hammond, Superintendent of Lights and Collector of Customs at San Francisco requested permission to contract local companies to expedite construction and complete the new light station before the rainy season. In response to a letter from the Secretary of the Lighthouse Board on December 5, 1853, Hammond continued to advocate for local contractors, stating that within forty days of authorization the tower could be constructed of brick by a local contractor for \$16,500 or of stone for \$17,000. In the letter he also explained the "it is believed that the claimant under the [Sausalito Rancho] grant will donate 100 acres or such quantity as may be necessary for the Light House purposes," and stressed the importance of the light at Point Bonita.

On May 27, 1854, the lighthouse inspector of the Twelfth Lighthouse District, Campbell Graham, was instructed to concentrate on the construction of the lighthouse at Point Bonita. Because Inspector Graham was supervising the construction of eight other funded lighthouses along the West Coast, it would be two more months before he could send specifications and plans for the light. He had found the ridge of Point Bonita was too narrow and would have to be cut down twenty feet and also advised that local contractors should be used.

On September 29, 1854, another petition was submitted to the Secretary of the Treasury, this time from the Branch Pilots Association and Merchant Ship Masters urging the construction of the light station.

Finally, on November 15, 1854, more than a year and a half after Congress appropriated funding, Inspector Graham receive plans for, and authorization to solicit local contractors to construct the Point Bonita Light Station.

## 1855-1899: Point Bonita Light Station Construction

After finally receiving notice to move forward, Inspector Graham immediately arranged a contract for the construction of the Point Bonita Lighthouse. A letter was sent to the Lighthouse Board that a contract with Ephraim McLean was established to provide for materials and construction of the lighthouse tower and Keeper's dwelling. The contract stated building was to be completed by March 1, 1855, and the beacon was to be installed on May 1, 1855. A second letter was sent from Inspector Graham to the Lighthouse Board informing them that McLean had sold the contract to Hofras and Cowing, and that they also had a good reputation.

Rather than use the standard plan of a tower within a Cape Code-style house imported from the East Coast and used for the other early West Coast lighthouses, the Lighthouse Board had the Point Bonita Light Station and Keeper's dwelling constructed at separate locations. The light beacon was located at the highest point of the land near the edge of a cliff, which had a steep drop down to the ocean 260 feet below. Because the site was not large enough for a house and a tower, the house was constructed 440 feet to the southeast at a lower elevation.

On February 14, 1855, Inspector Graham reported the construction was well underway and in agreement with his directives, the contractor was ready to install the lens in two weeks. However, rains and heavy seas prevented the delivery of the lens until March 6. Finally, on April 24, the work on the first lighthouse tower completed. The lighthouse tower was 295 feet above sea level and the height of the tower created a focal plane for the light beacon of 306 feet above sea level, marking the northern entrance to San Francisco Bay. The Point Bonita Lighthouse beamed its first rays from the fixed natural color second-order Fresnel light out to sea on May 2, 1855.

Shortly after the light began operation, the Lighthouse Board turned its attention to providing a fogsignal for the fog-bound location. A twenty-four pounder army cannon on a field carriage was requisitioned from the Benicia Arsenal and installed at Point Bonita on August 6, 1855, becoming the first operating fog-signal on the West Coast (see photo: History #1). Due to the rough terrain at lower elevations, the cannon was situated 1,800 feet to the north of the lighthouse tower and fired every halfhour, day and night, during foggy weather. On March 18, 1858, the cannon was replaced with a mechanical fog bell that only required winding every six hours. A notice to mariners informed them that the new fog-signal would be struck six times at intervals of sixteen seconds followed by forty-four seconds of the silence. The cannon was finally removed in 1915 for the Panama Pacific Exposition. The fog cannon was eventually moved to the U.S. Coast Guard Island, Alameda, California, where it is still

## located.

While the construction of the light station went smoothly, ownership of the property and establishment of the lighthouse reservation was apparently not immediately determined. William Richardson owned Rancho Sausalito in addition to running a very successful transportation service. However, at the time of the construction of the light station, Richardson was experiencing a series of financial setbacks after he transferred to the riskier shipping trade and mortgaged the ranch. He then turned to Samuel R. Throckmorton, a San Francisco real estate broker. Throckmorton advised Richardson to deed four and one-half leagues of the Rancho; Throckmorton would serve as trustee for William Richardson. Eventually, the property would be returned to Richardson free of debt. However, Richardson died on April 21, 1856, after he had received confirmation of his title for the Rancho Sausalito. Subsequently, Throckmorton replaced the beef cattle with dairy cattle and leased the property to tenant ranchers.

It was also at this time that Throckmorton offered to sell 2,300 acres of Rancho Sausalito to the U.S. government for a military reservation. However, the exorbitant asking price led to an investigation of the land values and the actual size of the property, postponing the sale of the property. Finally, on July 24, 1866, a grant deed transferred nearly 2,000 acres of the Marin Headlands, later the Lime Point (later renamed Fort Baker) Military Reservation, from Throckmorton to the United States government, eleven years after the completion of the lighthouse tower. A September 24, 1902 letter to the Lighthouse Board from Lieutenant Colonel Thomas H. Handbury, Engineer of the Twelfth Lighthouse District, and Commander J.B. Milton, Inspector of the Twelfth Lighthouse District, confirms this, stating that there were no records of any arrangements with Throckmorton for the construction and use of Point Bonita for a light station.

After several years of operation it became apparent that the fog on the Pacific Coast occurred at a higher elevation than the ocean fogs along the East Coast. As a result, the Point Bonita light would often be obscured by fog at the 300-foot level, while lower elevations remained clear. Lighthouse authorities decided that a new tower and fog-signal would need to be constructed on the tip of the Point, at a much lower elevation. Construction proved difficult due to the precarious terrain.

Beginning in 1871, improvements to the site of the Point Bonita Light Station commenced. In the early 1870s, a landing was constructed near the new lighthouse tower site along with a winch and lift to haul material up the side of the cliff. A new fog-signal—a steam siren—was completed in 1872; however, a portion of the fog-signal building fell to the sea in a winter storm two years later. In 1874, the tip of the Point was leveled and the fog-signal building pulled away from the edge of the cliff.

A gallery, or cliff-hanging wooden platform, skirted the sheer cliff providing the only pedestrian access to the lighthouse tower and fog-signal building. Numerous landslides, from 1872 to 1876, had plagued the light station, making the gallery one of the most dangerous stretches of the path to the lighthouse (see photo: History #2). Finally, in 1876, Chinese workmen hand dug a tunnel through solid rock to replace the gallery.

The new lighthouse began operation in 1877. It was composed of a one-story brick base on which was mounted the relocated lantern room and lens from the original lighthouse tower (see photo: History #3). The 1855 lighthouse tower was converted for use as a day mark when a dome was added to the top of the structure.

The present fog-signal building was constructed in 1903, replacing the previous fog-signal buildings built in 1872 and 1874. Following the 1906 earthquake which severely damaged the old residence, the 1874 fog-signal building was adapted for temporary use as the Keeper's residence (see photo: History

#4). Eventually, a new Keeper's residence and Assistant Keeper's duplex were completed in 1908 (see photo: History #5). The 1874 fog-signal building became the quarters for a third Assistant Keeper.

The Keeper's life was full of monotony, given that the Keepers kept long watches and performed routine maintenance, such as cleaning the lens, whitewashing the buildings, repairing structures, water lines and cisterns, and keeping journals of the light station. However, despite the light and the fog-signals that were installed, shipwrecks still occurred during thick fog and stormy conditions, and on rare occasions the monotony at Point Bonita was interrupted as lighthouse staff performed heroic rescues. On October 3, 1874, the steam tug "Rescue" went aground and was broken against the shore. The lighthouse Keepers were able to rescue nine of the ten crew members. Again in April 1876, two men were rescued by the lighthouse staff after their boat capsized. On December 26, 1896, Lighthouse Keeper George Cobb, without assistance, rescued three men from drowning after their sailboat capsized in the San Francisco Bay during a storm of rainsqualls and gale force winds blowing fifty miles an hour.

On March 9, 1897, the State of California ceded "all right and title of the State of California in and to the parcels of land extending from the high-water mark out to three hundred yards beyond the low-water mark ... to the United States ... occupied or reserved for any military or naval purpose" as long as the government of the United States held title to the adjunct land. The ceded property was added to the Lime Point Military Reservation. However, a boundary for the lighthouse reservation had still not been established.



History #1: The first operating fog-signal on the West Coast, circa 1870; the original 1855 lighthouse can be seen in the background on the far left side. (U.S. Coast Guard, 12th District)



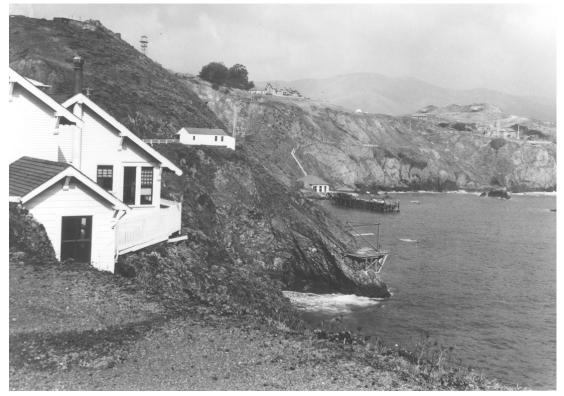
History #2: A photo of the gallery around the cliff at Point Bonita, date unknown. (Lone Mountain College Collection of Stereographs by Eadweard Muybridge, Unit ID: 1652, University of California, Berkeley; The Bancroft Library)



History #3: Circa 1910 view of the 1877 brick lighthouse, with the 1855 metal lantern and lamp rooms. The 1903 fogsignal building roof is in the background. The brick chimney for the fog-signal boilers is on the right. (U.S. Coast Guard, 12th District)



History #4: Circa 1940, the aerial photo shows the lighthouse tower, 1874 fog-signal building, 1903 fog-signal building, oil tanks, inclined tramway, and the trail to the light. (Golden Gate National Recreation Area Park Archives and Record Center)



History #5: Point Bonita Cove, from left to right, with the fog-signal building, turn-around station above the derrick, Keeper's residences, life-saving station and the boathouse on the waterfront. (1908-40, PWR-Oakland, National Register Records)