GUIDE FOR LIGHTHOUSE VOLUNTEERS

This guide is intended to provide the volunteer who will meet visitors to the Lighthouse [illegible] some suggestions which are intended to be helpful in accomplishing some of the desired outcomes for a visit to the Cape Mendocino Lighthouse.

Every visitor should be greeted with courteous warmth and enthusiasm. The Society welcomes visitors to the Lighthouse and hopes they will leave with more information than what they had when they arrived, and that they leave with a positive feeling toward the project. It is even hoped that this introduction might motivate some of them to become involved in the Society's activities.

An example of how an initial contact might be made follows:

> "Good morning/afternoon! On behalf of the Lighthouse Society, I would like to welcome you to the Cape Mendocino Lighthouse. My name is _____ and I will be happy to answer any questions you may have about the Lighthouse. There is just one request I have to make of you, that is, before you leave, please be sure to sign our guest book. Now then, what would you like to know about the Lighthouse?

Keep in mind that there is no such thing as a "dumb" question, and there is nothing wrong with answering a question with "I don't know." However, the important follow-up to an "I don't know" answer should be, "but I can find out and if you give me your name and address, I'll let you know." A volunteer cannot be expected to know everything, and an acknowledgement of a lack of information is better than an effort to "fake it."

After a preliminary introduction inside, weather permitting, walk the visitors outside to note various architectural and structural features. Particular notice should be taken of the balconies, the lantern room, the shape of the roof, the ball, the missing hand grips on the lantern room windows, the original method of numbering the pieces for assembly, etc. While outside, it might be appropriate to mention how the archaeological requirements for the development of the site were met and the importance of the contributions of the BLM.

After the look outside, return to the inside for further explanation and your concluding remarks, which should include an additional reminder about the guest book.

When on duty at the Lighthouse be sure to dress comfortably. It gets quite cool inside, even on the warmest days. In cool weather, it can get down right cold. There is no uniform or dress code for volunteers, however, you are urged to keep in mind you are the Society's representative to the public and an appropriate appearance is appreciated.

Also keep in mind that your time as a volunteer is a valuable resource and try to use it as efficiently as possible. Try to keep aware of where visitors are in terms of arrival, perhaps one party may be delayed for a moment or two in order to combine it with a second one. A

What Makes the Cape Mendocino Lighthouse Unique?

There are two characteristics of the Cape Mendocino Lighthouse which make it unique among the approximately 40 lighthouses established along the coastline of California. These characteristics are only shared with its almost "twin," the Point Reyes Lighthouse. Both were constructed by the same contractor at approximately the same time. The Cape Mendocino tower was installed and in operation two years before Point Reyes. Both of these lighthouses were essentially all-metal and both were prefabricated.

In the mid-nineteenth century wood, stone, brick and concrete were the most commonly used materials in construction. Metal, specifically iron, was just gaining a foothold as a material superior to these others. Iron, both cast iron and forged iron, make-up most of the parts and pieces in this lighthouse. Steel was not used for such large scale construction purposes until late in the century when the cost of production was substantially reduced. Of the 40-some lighthouses along the coast, metal is prominent in only five others and none of these was all-metal.

Although the technique of prefabrication was well known and widely used in a variety of other construction applications, it was not used in any of the lighthouses along the California coast. With the exception of Point Reyes and Cape Mendocino, all of the other structures were custom built, including, in most cases the lantern rooms.

Apparently the contractor responsible for the construction of this lighthouse, Joseph Bein, was able to persuade the Lighthouse Board to accept this innovative approach to the construction. The tower was not so much built as it was assembled. The use of iron permitted the tower to resist the rigours of the prevailing winds around Cape Mendocino as well as the gusts accompanying storms and gales.

PRE-EUROPEAN/AMERICAN OCCUPANTS

Before the coming of European-Americans to Shelter Cove in the 19th century, the area was inhabited by Native Americans (or Indians) of the Wailaki group, identified as the Shelter Cove Sinkyone. Archeaologists estimate these people arrived in the area about 1000 years ago. They were hunters and gatherers who probably lived in permanent villages within upper Mattole and South Fork watersheds. The habitation sites along the coast were seasonal, occupied in spring and summer. Coastal sites were general adjacent to water sources, streams or springs. When in residence they gathered both shellfish and edible seaweeds. The primary food sources were mussels, chitons, barnacles, limpets and snails. These were collected and cooked, either by boiling or broiling. Curiously, there is no evidence that the Shelter Cove Sinkyone collected the abalone which is so abundant.

Mal Coombs Park is located on one of the largest of these seasonal habitation sites. The blackening of the soil is caused by the ashes from the campfires which burned here for the hundreds of years when the Sinkyone came to stay along the coast. The soil is also littered with shell remnants left over from their processing of the shellfish collected. There are a number of other habitation sites located in the area which seems to suggest that when the food supply at one location had been depleted, the group would move to another place.

In the years following the acquisition of California by the United States and the subsequent discovery of gold in various parts of the state, the Shelter Cove Sinkyone were virtually exterminated. Any survivors of the years of hostilities were confined to a reservation in Mendocino County, unless, under the provisions of the Act for the Government and Protection of Indians, adopted by the California legislature in 1850, they had been made involuntary indentured servants. By the spring of 1864 a scouting party from the Second California Volunteer Infantry was able to report that between Fort Bragg and the mouth of the Mattole River there were no "Indians signs whatever."

THE COMPASS ROSE

The concrete work in the landscaping surrounding the lighthouse is laid out in the form of a partial compass rose. The four main points indicate the primary directions, and the secondary points locate the intermediate directions (north-east, south-east, south-west, and north-west). Thus the lighthouse design is only one-quarter of a complete compass rose, which has 32 points.

The compass rose first appeared on nautical charts and terrestrial maps in the 1300's. The term "rose" came to be applied to the figure depicted because it was thought the points resembled the petals of the flower. Originally the rose was to indicate the directions of the winds, and initially it was called a wind rose. In the Mediterranean, where the device first appeared, there were eight major winds, coming from the eight points of the compass, the same eight around the lighthouse.

THE FRESNEL LENS

Name after its inventor, Augustin Fresnel, French physicist (hence the French pronunciation, with the "e" pronounced "a" and the silent "s", Fraynel) became the lens of choice for lighthouses along the seacoasts of Europe and North America in the nineteenth century. Fresnel released his design in 1822 and it was quickly adopted by most developed nations except the United States. Here, the new design was dismissed as a fad by Stephen Pleasonton, head of the Lighthouse Board. Consequently, application of Fresnel's invention to U.S. lighthouses was delayed until the 1850's.

A Fresnel lens consisted of concentric rings of glass prisms aligned above and below the light source. As light entered the prisms it was bent and directed toward a center point, each reflection concentrating it. The center of the lens was shaped like a magnifying glass which cast the concentrated beam outward. Increasing the number of rings of prisms increased the concentration of the beam of light. Increased rings also increased the size of the lens. Seven standardized sizes (called "orders") eventually were developed. The three largest, and most powerful, first, second, and third orders, were intended for coastal lighthouses.

HEIGHTH OF CALIFORNIA LIGHTHOUSES

Over 40 lighthouses were constructed in California. Only four had towers over 100 feet in height, Point Arena (115), Pigeon Point (115), Piedras Blancas (115), and St. George Reef (146). These are the only ones which feature the "classic" lighthouse form. These were also located at critical coastal locations on relatively low-lying sites and had to be built tall to improve visibility.

The rest were of two types, those to aid in navigation in and around harbors, and those to protect mariners along coastlines where natural terraine provided the elevation needed for visibility. As a result, the typical California lighthouse was not as tall as its counterparts on other coastlines. Most were less than 40-feet tall.

Where was the Cape Mendocino Lighthouse originally located?

>Original site was approximately 35 miles north of Shelter Cove

>Cape Mendocino is the westernmost point of land on the coast of California

>Rising more than 1400 feet above the sea, the Cape is a prominent landmark

>Cape designated a potential lighthouse site by the Coast Survey done in 1850-51

>Reservation upon which the lighthouse station was finally established was approximately 140 acres in area

>Lighthouse located over 400 feet above the sea, at the top of one of the most precipitous cliffs on the cape

>Station consisted the lighthouse, an oil house, a barn, a carpenter shop, and residences for the keepers and their families

>The Cape Mendocino Lighthouse became the highest lighthouse in the United States when the Point Loma Lighthouse was deactivated in 1891-

Why was it located at Cape Mendocino?

>As the westernmost point on the coast of California, rising abruptly from the ocean to 1400 feet, the Cape had been used as a landmark for mariners since Spanish explorers first mapped it in the 1500's

>For mariners sailing south, it marks the beginning of one of the most inhospitable coastlines in California

>Currents and winds off Cape Mendocino are irregular and can change suddenly

>Less than a quarter of a mile off the Cape lies Sugar Loaf Rock, rising 326 feet out of the sea

>Submerged rocks and reefs extend west of the Cape, ready to harm the unwary, or unlucky, mariner

>Farther out to sea lies Blunts Reef, a major navigational hazard to the uninformed mariner

>A light ~~on Cape Mendocino~~ would fulfill both major purposes of a lighthouse, to warn and inform

>To warn navigators that they were in the vicinity of hazardous waters

>To inform them as to their precise location on the coastline

Why was the Cape Mendocino Lighthouse moved to Shelter Cove?

>Coast Guard took lights from the structure in 1971, out of service

>Replaced with reflecting airway beacon mounted on a pole 515 feet above sea

>Reservation unstaffed and the Lighthouse was essentially abandoned

>Lighthouse structure and foundation, repeatedly damaged by earthquakes and earth slippage, began tilting toward the edge of the cliff by 5-10 degrees

>Coast Guard increasingly concerned that quake or slippage could cause the Lighthouse to fall down the cliff

>In 1994, the Coast Guard announced it was prepared to have the Lighthouse declared surplus property

>Coast Guard wanted an appropriate agency or organization to assume responsibility for protecting and restoring the structure

>Cities of Eureka and Ferndale actively interested in obtaining possession

>Shelter Cove group organized to compete with the north county cities

>Leadership for the Shelter Cove effort provided by Vernice Strange, Charlie Woods, Jack Sanford, and Bea Anderson

>Enlisted the assistance of Humboldt County and submitted an application in 1995

>Humboldt County, acting as the agent for the Shelter Cove group, was awarded the Lighthouse on March 25, 1997

>Cape Mendocino Lighthouse Preservation Society-Shelter Cove delegated full responsibility for the relocation, restoration, operation and maintenance of the Lighthouse on July 29, 1997

How was the Cape Mendocino Lighthouse moved to Shelter Cove?

>Disassembly was started in the fall of 1998, by a work party consisting of Chris Kregoski, Phil Robinson, and Rodney Morris

>Lantern room removed by crane, provided by NCI Construction from Eureka, and flown by National Guard helicopter to new site in Shelter Cove (Mal Coombs Park)

>Lower two levels taken apart, over 100 pieces, after being numbered to facilitate reassembly

>Pieces moved by truck to work site at Whitethorn Construction

>Each piece had to have 100 years of paint and rust removed by chipping and sand blasting to prepare for application of primer before reassembly, most of this accomplished through the efforts of Roy Heider and Hank Brimhall

>Priming and repair completed and the pieces trucked to Shelter Cove in August 1999

>Reassembly effort led by Heider and Brimhall with assistance from Bob Porteous, Randy Adams, and Tony Puch

>Reassembly completed in the late fall, 1999, with placement of the latern room on top of the structure

When was the Cape Mendocino Lighthouse built?

>Prefabricated of forged iron in San Francisco in 1867

>Work done by Joseph Bein, a machinist

>Assembled in San Francisco and parts numbered before disassembled

>Lower levels shipped to Cape Mendocino in 1868

>Pieces were brought ashore through surf and hauled over 400 feet up the cliff at the Cape and reassembled by the numbers

>Lantern room and Fresnel lens shipped to Eureka and brought to the site by wagon

>On December 1, 1868, the lamp was ignited and the light was turned on

>Although the Cape had been designated for a lighthouse in the early 1850's, higher priorities were given to harbor lighthouses and the Civil War added to the delay

>The Cape Mendocino Lighthouse was the first of only two lighthouses built on the California coast in the 1860's

How long was the Cape Mendocino Lighthouse in service?

>From 1868 to 1939 operated by the United States Lighthouse Service

>From 1939 to 1971 operated by the United States Coast Guard

>Operated by keepers fro 97 years, from December 1, 1868 to March 3, 1951, when the lamp and lens were replaced by a pair of electrically powered automated rotating airway beacons

>Finally abandoned in 1971 when a beacon was installed on a pole located about 100 feet farther up the cliff at the Cape

>Total service life, 103 years

What are the dimensions of the Cape Mendocino Lighthouse?

>Base is 20 feet wide at the widest point

>From the foot of the base to the top of the ball on the roof of the lantern room it is 43 feet tall

>The roof is topped by a four foot lightening rod

>The first and second levels are each formed by 16 plates of forged iron

>The 16 plates of the first level range in thickness from 3/8 of an inch to 1/2 inch

>The first level room is 9 feet 3 inches high

>The 16 plates of the second level room are 1/4 inch thick

>The second level room is 7 feet 4 inches high

>Without the third level, the lantern room, the structure weighs 38 tons

>The lantern room is 12 feet 4 inches wide and 10 feet 6 inches high and weighs 7 1/2 tons

>The entire structure is bolted together as well as being bolted to its foundation

How was the Lighthouse operated?

>Originally rated for a staff of four, a head keeper and three assistants

>Primary staff mission was to ensure regular operation of the light

>Satisfactory illumination required absolutely clean lens, lamp, and lantern room windows, inside and out

>Flash effect caused by precise rotation of the lens required surgically clean clean clockwork mechanism and track

>Shift started 1/2 hour before sunset

>Clockwork mechanism wound at start of each shift and rewound as needed

>Lamp wicks trimmed and fuel tank filled

>Keepers duties also included maintenance and upkeep of all buildings at the station- oil house, carpenter shop, barn, residences, and entry road

>Annual inspections considered successful if the informal report was that the Lighthouse was clean enough to eat off the floor

>For 65 of the 71 years the Lighthouse operated before the Coast Guard took over, the staff was only two or three, most often a head keeper and assistant

>Over the years there were seven head keepers, three of whom served in the first six years

>Longest serving head keepers were:

A. P. Marble, 1874-1889 — 15 YRS
W. C. Price, 1889-1908 — 9 YR
Peter Jensen, 1908-1924 — 16 YRS
M. M. Palmer, 1924-1939 — 15 YRS

How was the lamp in the lantern illuminated?

>Original lamp was located in the center of the Fresnel lens

>Lamp fueld by lard oil (processed from animal fat) until 1875

>In 1875 a kerosene burning lamp was installed

>Kerosene was used until electricity was brought to the station in the 20th century

>Electricity ultimately made it possible to replace the clockwork operated lamp and lens with an automated pair of rotating airway beacons

Fresnel lens was removed from the lantern room in 1951 and sent to Ferndale where it is on display at the entrance to the County Fairgrounds

>The lamp and mechanical devices used to rotate the light have been lost

How far could the light be seen?

>Original lamp had light focussed by the largest Fresnel lens, a first-order lens

>Fresnel lenses were manufactured in Europe, named after the man who perfected the technique for arranging the prisms to achieve the magnification of the light from the lamp

>First-order Fresnel lenses were used only for coastal lighthouses in California

>They ranged in height from slightly less than eight feet to over 12 feet, and were over six feet in diameter

>The lens for the Cape Mendocino Lighthouse was 12 feet tall

>The beam cast by the lens was visible for 20 miles, although some reports indicate up to 30 miles in good weather

>The light at the Cape Mendocino Lighthouse was white and flashed at a 30-second interval

>Flashing effect produced by rotating the lens and lamp on a track in the lantern room

>Rotation achieved by a clockwork mechanism activated by weights

CAPE MENDOCINO

Cape Mendocino is California's greatest headland, its westernmost point, and its most prominent coastal feature. It is a mountainous headland, the ancient landmark of the early Spanish navigators and the galleons from the Indies.

At a time when there still lived those who had spoken with Chirstopher Columbus, Cape Mendocino had already become important to mariners. The Spanish sailors regarded the cape as a mysterious and dangerous place, with swirling currents, heavy fog, and hidden reefs. Such a place must be the breeding ground for scurvy, so reasoned the superstitious Spanish seamen.

Those who sailed the galleons were ~~going~~ wrong about scurvy, but they were right about the rest. Cape Mendocino is a place of strong and unpredictable currents, fierce winds, and rapidly changing weather. It is a place of great climatic change. To its north the wind blows more violently and the rain is heavier; to the south-below Punta Gorda-there is less wind and rain, but more fog. To this day the Pacific Coast Pilot urges the ships use "considerable caution" when approaching Cape Mendocino and warns of "numerous rocks and sunken ledges" offshore. The ocean has a heavy westerly swell that breaks not only close to shore but in deep water as well. Even the bottom of the sea contributes to the danger, for the bottom is irregular and there are frequent depth changes so that soundings may confuse the sailor as to his position. Yet nearly all coastwise vessels must pass Cape Mendocino, it is the major turning point in the northern California shipping lanes.

The cape itself is a high, wind-blown mountain. Its rolling hills are grassy, furrowed by deep ravines in which the forest manages a foothold. The seaward face of the headland is steep, dropping almost vertially to a rocky sea. Two hundred and fifty yards offshore is beautiful Sugar Loaf, a 326-foot-high rock, dwarfed by the cape.

By the late 1860's it had become urgent that Cape Mendocino be marked by a lighthouse. On September 14, 1867, the lighthouse tender Shubrick was steaming up the coast with the men and materials necessay to build a light station. The Shubrick was in dangerous waters, and thirteen miles south of Punta Gorda she struck a rock. Water poured through a hole in the side-wheeler's hull. Fortunately, the Shubrick was

Throughout a century Cape Mendocino was unsurpassed in its importance to Pacific

at three hundred yards off Big Flat; and the tender's captain made a ring turn, running the Shubrick safely aground on the sandy beach. The vessel was later repaired and refloated.

While the ship was saved, the construction materials were lost. When new materials finally arrived at Cape Mendocino, everything had to be landed through the surf. Once on the beach, reaching the lighthouse site caused further difficulties, The beacon was to be built 422 feet above the sea, only part way up the bluff but high atop its most precipitous cliff. Building the beacon so high up the slopes was no ordinary task; Cape Mendocino would become the highest lighthouse site in the United States.*

Reaching the site required a long, steep climb. Mules and even a derrick were required to haul materials up the bluff. Terraces had to be dug to provide level areas for the light, dwelling, and other buildings during summer the ground was rock-hard; but when the winter rains began, the earth became soft, mucky, and unstable. Mud slides and slip-outs occurred. Despite plans which called for a lighthouse of less than average height, the ground was too unstable to support the beacon and a large, deep hole had to be dug down to solid rock. The hole was then filled with concrete to provide a stable foundation.

The cape is one continuous slope, so steep at the site that a concrete platform had to be built around the tower's base just to provide space to walk around it. The cut in the hillside behind the tower had to be covered with stone and mortar to prevent the ridge from slumping down onto the tower.

After much effort the work was completed. The new lighthouse was a 16 -sided, iron-plated, pyramidal structure with double balconies. The sentinel was 43 feet tall, painted white with a large, black lantern room inside, two short, semi-circular stairways led up to a beautiful first order lens. The lens would rotate very slowly, despite its many panels hence it would show a flash but once every 30 seconds.

In recognition of the cape's high winds, the entire structure was bolted to its massive concrete foundation. The finished product was epitome of a California lighthouse-a short tower with a first order lens mounted in a large lantern room, standing atop an unusually high windy bluff When Point Reyes light was built a short time later, it was strikingly similar to Cape Mendocino, just as those two great headlands resemble one another both in size and weather. However, the umbrella shaped roof at Cape Mendocino would offset it from Point Reyes and link it architecturally to such earlier beacons as Point Bonita and Farallons.

[illegible] Lighthouse San Diego Bay was higher. Built in 1854 [illegible] however, is that the station was relocated and [illegible] feet above the sea. After 1861 therefore Cape [illegible] the highest lighthouse in the nation.

On December 1, 1868 Cape Mendocino was lighted. A headland used by mariners for three centuries was finally marked by great beams of light that swept nearly thirty miles out to sea.

Despite frequent thick weather, there was never to be a fog signal at Cape Mendocino. Blunts Reef is three miles to the west and the shipping lanes passed two miles beyond that.* A fog signal could not normally be heard so far offshore. Instead, a whistling buoy was moored off the reef as a sound signal.

Stations lacking fog signals were usually staffed with but one keeper. However, Cape Mendocino was to prove such a difficult station that it would always have two or-more commonly-three attendants. The wickies would be the westernmost residents of California, and they were to see hard days on the edge of the continent.

Cape Mendocino was a large station in area (the reservation comprised 171 acres, almost all of it steep, sandy and gravelly fields), but there were few buildings in the early days. Besides the lighthouse, there was a dwelling, barn, carpenter shop, and some lesser structures. More buildings would be added in coming years.

The new keepers probably had little idea of what they would face at Cape Mendocino. It would come to be considered (along with St. George Reef, Farallon Islands, Mile Rocks, Point Sur, Point Reyes, and Punta Gorda) one of the coast's roughest stations. When Cape Mendocino's keepers, in accordance with Lighthouse Service regulations, went out in the morning to raise the American flag, they found that the prevailing wind was so fierce that it was usually impossible to fly the flag. After a few mornings' attempts, the keepers probably began to have an inkling as to what lay ahead.

Trouble began during the first two winters. The lighthouse's massive concrete foundation settled unevenly and slightly cracked the tower, no small feat with a building made of thick iron plates. The new frame dwelling was more flexible as it settled, but it was less than equal to the wind. It became badly battered and began to shake apart.

In 1870 an earthquake struck and, again, the dwelling did not hold up as well as the lighthouse. The residence had to be razed and rebuilt. Three years later another earthquake hit. The ground actually split open, the crack missing the lighthouse by just fifteen feet. The crack was filled with concrete to restore stability to the site.

1875 the keepers were complaining of chimneys being blown down and windows shattered by the wind. The rebuilt dwelling was still no match for the gales. Eventually, it would literally be shaken apart by

[illegible] actually naming Cape Mendocino [illegible] the [illegible] Coast. This was such a dangerous practice that men [illegible] companions refused to row [illegible]

the repeated windstorms. The house would become so loosened that 12-by-12-inch timber bracing would be necessary to hold it together..

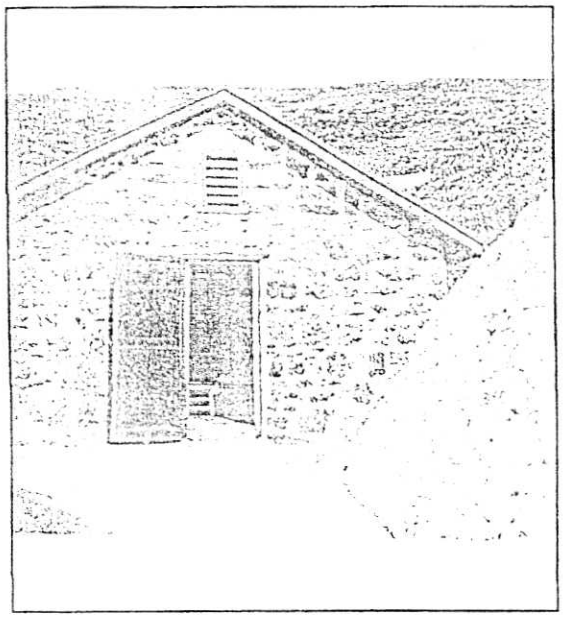
In November, 1877, still another earthquake battered the reservation. However, it was the wind that frightened the keepers the most, an understandable reaction for a person who works and lives atop a 400-foot-high cliff. One night the wind was so violent that the assistant keeper fled his residence in terror, huddling in the sturdy lighthouse for safety. On many nights it was dangerous just to walk from the dwelling to the lighthouse to stand watch. A frame watch house had to be built next to the lighthouse, because trying to change watch during a windstorm could result in a wickie being blown off the cliff. The watch house was equipped with a bed to be used when the blow was a long one. Even doing indoor chores during windstorms could be hazardous in 1880 the barn and the carpenter shop both had their windows broken by powerful gusts.

In between earthquakes and windstorms, the winter rains would soften the soil, and the buildings continued to settle. They settled so unevenly that ceilings cracked open, floors warped, and even brick walls split. Landslides and slumps continually annoyed the attendants during the wet season. In 1891 there was a particularly large landslide that left the station completely isolated. Not only did such earth movements create heavy shovel work, but they posed health hazards as well. The landslides opened the buildings to icy winds and drenching rains as well as destroying the sewage system.

Even when everything was intact, working conditions could be intolerable. The watch house lacked even a stove for heat, and the keepers often stood watch for hours in cold, wet clothes in the chill little room.

Not surprisingly, the health of the keepers and the families suffered. Throughout much of the nineteenth century, inspection reports listed the health of those serving at Cape Mendocino as "poor" or "fair." The health of the residents of most other stations during this period was described as "good" or "excellent." Several of Cape Mendocino's keepers had contracted "lung disease" and rheumatism. Conditions had bebecome so bad that the assistant keeper and his family were forced to live in the oil house, a structure designed to accommodate kerosene, not people. By 1900 the oil house's foundation was "unsafe," the building "unsanitary" and "almost~uninhabitable." The structure was listed in public documents as beyond repair. Yet it continued to be all that was provided assistant keepers. Even when a member of the assistant keeper's family died, new dwellings were still not authorized.

Throughout the nineteenth century, conditions at Cape Mendocino had been the most disgraceful on the California coast. Nature played a major role, but it seems incredible that other building projects were



Cape Mendocino's old house was necessarily of solid rock construction. The assistant keeper and his family were forced to live here for years under the harshest conditions. The old house stood until an earthquake destroyed it in 1906. (U.S. Coast Guard)

approved while Cape Mendocino's keepers lived without adequate shelter.

Finally, the 1906 earthquake struck San Francisco, 185 miles to the southeast. The San Andreas earthquake fault runs as far north as Cape Mendocino, and the station's chimneys were knocked down and a footbridge displaced. The 12th Lighthouse District was badly hit at many stations, and a massive rebuilding program resulted. Perhaps as a consequence, two fine new dwellings were built at Cape Mendocino in 1908.

Keeper Peter Jensen was given a two-story, three-bedroom, frame house which was quite similar to those at Punta Corda and Point Cabrillo. Located three hundred feet southeast of the lighthouse, it was some thirty-five feet higher in elevation. The two assistants were assigned the second dwelling, a similar structure except that it was subdivided into duplex quarters with appropriate facilites for two families. It was built on another terrace, dug about one hundred feet northeast of the first keeper's dwelling and about fifty feet higher. The two

residences had the distinction of being the highest light keepers' dwellings in the United States. The keeper's house had a workshop and fuel building only a few feet away, while the assistant's residence was provided with a small building which served as a workshop and tool house.

The winds prevented much ornamental landscaping, but the rich pastures were good places for animals. The wickies grazed cows for decades. Assistant P. Hunter went even further. He was a local boy, and he knew how to utilize Cape Mendocino's grasslands. The stage line ran from Ferndale to Capetown (several miles to the northeast of the lighthouse, on Bear River), and on down to Petrolia, passing along the southern edge of the lighthouse reservation. It was a difficult pull from ar sea level at Bear River up over the cape and back down to sea level. Hunter raised ponies for the stage, which changed teams at the Hunter family hotel at Capetown. Coming from a Petrolia family, Hunter had access to several hundred acres of prize grassland and the knowledge to provide a nice supplement to his income as a light keeper. He continued to provide horses as long as the stage ran. When it was replaced by a gasoline vehicle, Hunter saw no future in Cape Mendocino. He then transferred to Punta Gorda to be closer to his home town and the cattle ranches to the south.

New dwelling under construction 1908 (U.S. Coast Guard)

While in later years supplies arrived at Cape Mendocino overland from Humboldt Bay, in the early years landings had been made by lighthouse tender from the sea. Working a ship in past Blunts Reef and other dangers had proven perilous. Passing through the surf was even more hazardous . In 1881 a tender (either the old Shubrick or the recently arrived Manzanita) anchored just outside the breakers, probably off the beach that is just to the south of the cape. Lighthouse inspector McDougal was to make the quarterly inspection, and he was put over the side in a small boar. Commander McDougal began rowing ashore, the light keepers undoubtedly waiting on the beach to help pull the boat ashore. As the inspector attempted to pass through the surf, the breakers became unmanageable. The boat capsized and Commander McDougal was drowned. According to tradition, he was dragged down by the heavy bag of gold coins fastened to his waist, since he was bringing the keeper their pay. (A year later, McDougal's widow, Kate, was appointed keeper of Mare Island lighthouse at Vallejo, a position she would hold for thirty-five years.)

The Cape Mendocino area would be the scene of at least nine major shipwrecks, a number kept relatively small by the combined efforts of Cape Mendocino light and the Blunts Reef Lightship, placed off the reef in 1905. When the passenger steamer Bear ran ashore at Bear River in 1916, survivors at first attempted to come ashore through the heavy surf. The lifeboats were capsized, and five persons drowned. After witnessing what Cape Mendocino's breakers had done to their pulling boats, those still aboard the Bear manned the remaining lifeboats and rowed out to sea-to the Blunts Reef Lightship and safety. Much worse was the wreck of the liner Alaska, which struck Blunts Reef in 1921. Forty-two lives were lost; and when the crew of the Humboldt Bay Lifeboat Station arrived, they found only the Alaska's mast sticking above the water.

In 1924, M. M. Palmer became a keeper at Cape Mendocino. Palmer was well aware of the area's recent shipwrecks, and he kept a sharp eye on the sea. One day in October, 1926, Palmer saw that a passing steam schooner, the Everett, was afire. A telephone line had been built, its wires placed underground in some locations for protection from the high winds, and Palmer quickly sent out a call for assistance. The situation was very serious. After the fire had started, the Everett's crew had been gassed by fumes. Palmer's alertness allowed a ship to arrive in time to rescue the helpless crew, and he was credited with saving their lives.

Through the 1930's Palmer worked with first assistant P. Rickard, and together they ran a well-managed light station. The dwellings were still lighted by kerosene and heated by burning presto logs in the brick fireplaces. With adequate shelter, Cape Mendocino could be a wonderful and beautiful place, especially during spring when the wildflowers

bloomed in the grasslands. Sea lions barked from the beach below, and the gentle sound of the wind could be heard as it flowed around Sugar Loaf. The light-blue sea could be seen stretching far beyond the little red lightship off the reef.

At the outbreak of World War II, a coastal lookout was established near the lighthouse. Cape Mendocino's amazing view was to prove it's worth in short order. On December 20, 1941, the tanker Emidio was torpedoed twenty miles off Blunts Reef by a Japanese submarine. Cape Mendocino's lookout, Coastguardsman Walter G. Muenther, was immeditely informed of the incident and his were the eyes which watched over the other American vessels as they rounded the headland that frightning afternoon.

After the war, the station continued to be manned. Then, in 1950, the Coast Guard began the long road to automation on the Redwood Coast. Punta Gorda was the first to lose its keepers; and a few days later - on March 3, 1951-Cape Mendocino Light Station was unmanned and converted to automatic operation.

The first order lens was removed, to be displayed at the Humboldt County Fairgrounds in Ferndale. The old lens was placed in a wooden information center and ticket booth which somewhat resembles the actual lighthouse. It remains there today, and can be seen even when the fair is not in session.

A pair of modern, rotating airways beacons (which had their own small prisms) were installed in the Cape Mendocino lighthouse lantern room, and the antique sentinel continued its time-honored duty. Eventually, however, even the rotating beacons were removed; and today the lighthouse is dark.

A light still shines from the cape, but it emanates from a double-drum, reflecting airways beacon atop a steel pole, 515 feet above the surf. It is maintained by electricians from the Humboldt Bay Coast Guard Station who arrive once or twice a month to service the light, radio beacon antenna, and a small structure filled with electrical generating and radio beacon equipment.

All of the interesting wooden structures are gone now. In 1960 the Coast Guard burned the frame buildings in response to "squatters." No consideration was given to historical significance, and the dwellings were destroyed completely.

Fortunately, the lighthouse was spared and it stands today. The old sentinel still serves as a day mark for commercial fishermen and small craft, a valuable feature since mariners have historically confused Cape Mendocino with False Cape, four and a half miles to the north. The

[illegible] Cape Mendocino light station [illegible] the pilots [illegible] from Number [illegible] formant while the great [illegible] [illegible] (US Coast Guard)

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consequences of such an error have led to several major shipwrecks.

Presently, the lighthouse is closed to the public. There is a genuine need to reopen the lighthouse so that citizens can return to visit such an historic site. Cape Mendocino is a maritime landmark dating from the days of the Spanish galleons, the former home of light keepers who were the westernmost residents of California. Cape Mendocino is the great tuning point of the Pacific Coast shipping lanes, and its light was for over a century perhaps the most important in California. From early spring until late fall, the cape is usually blessed with good weather and almost magical scenery. The old sentinel and the terraces of the former dwellings lend themselves to a fine small park. Visitors would see one of the earliest and best examples of a Pacific Coast lighthouse, a sentinel unquestionably worthy of being included in the National Register of Historic Places.

At this time, visitors must view the beacon from a distance. The trip from Ferndale to Petrolia is pastoral and unspoiled. When the road finally reaches the sea, the visitor is at Cape Mendocino. The road descends the massive bluff which is the cape, and the high rock just offshore to the north is Sugar Loaf. Drive south along the beach a half mile or more and look back to see the upper portion of the lighthouse. Above it, the automatic airways beacon flashes day and night. Here is the farthest west and most exposed of all California's headlands.

[illegible] Sugar Loaf was much far long been associated in sailors' memories [illegible] The automatic lights can be seen in the [illegible] [illegible] the "[illegible] most place Cape Mendocino [illegible] [illegible] Pacific Coast lighthouses built in the 1850's and 1860's [illegible]

A Condensed Timeline of Significant Events in the History
of
The Cape Mendocino Lighthouse
Now Located at Shelter Cove, California

INITIAL SITE LOCATION

1851 The original Cape Mendocino survey and site selection began on this date. A lighthouse was sorely needed, but it would turn out that its construction would be delayed by the events of the Civil War.

c.1862 President Lincoln noted that the lighthouse could be made shorter, with a cost saving, if it were located on an alternate, higher site than the one originally chosen. His recommendation was accepted and implemented.

CONSTRUCTION

1867 The forged iron components of the lower half of the lighthouse were begun by Joseph Bein, a machinist, in San Francisco.

The First Order Fresnell lens was begun in Paris, France by L. Sautter at a cost of $79,000.

1868 The forged iron components for the lower half were shipped to Cape Mendocino from San Francisco.

The Fresnell lens and top half (lantern cage) of the lighthouse were brought from Eureka to Cape Menocino by wagon.

The light was lit for the first time.

HEIGHT/WEIGHT: The lighthouse stands 43 feet tall from its base to the top of the lantern cage. The weight of the forged steel bottom half is around 28 tons. The weight of the top half and lens are approximately 17 tons, with the lens itself weighing 4 tons.

IN-SERVICE PERIOD

From 1868 to 1971 the Cape Mendocino lighthouse provided a beacon of directional light and timely warnings needed by merchant ships on the rugged Northern California coast.

1888 The light which shone from the lighthouse was originally created from the burning of lard oil. After this date, mineral oil and then incandescent oil vapor was used. Output was increased from 71,000 to 340,000 candlepower.

1891 When use of the original Point Loma lighthouse was discontinued, the Cape Mendocino lighthouse became the highest lighthouse in the country, at 422 feet above sea level.

1906 The San Francisco earthquake caused the Mendocino lighthouse station chimney to fall, and damaged other stations as well.

1951 The lighthouse was automated with modern navigational aid facilities. The Fresnell lens was no longer needed and was taken to Ferndale, California, where it could be protected. It has been exhibited often at the Ferndale Fair.

PERIOD OF DECOMMISSION AND NEGLECT

1971 The lighthouse was decommissioned and declared out of service. It had become obsolete after many years of erosion and earthquakes had compromised the site. Conditions were such that it might slip off its base and into the sea.

1994 The lighthouse was declared as surplus property and essentially put up for auction to those who could refurbish and maintain it.

RELOCATION, REFURBISHMENT, AND REASSEMBLY

1997 Shelter Cove was awarded ownership of the lighthouse, but without the lens, which was still in possesion of Ferndale.

1998 The lighthouse was disassembled at Cape Menocino and moved to the Whitethorn Construction Company, near Whitethorn, California. At this location, all forged iron components of the bottom half were cleaned, sanded, repaired, and painted.

1999 The lantern room was taken from the lighthouse at Cape Mendocino by National Guard helicopter to Mal Coombs Park in Shelter Cove and refurbished there.
The iron components of the bottom portion of the lighthouse, after refurbishing, were transported from Whitethorn to Shelter Cove for reassembly.
This project was completed by reuniting the lantern room to the lower portion.

2016 Maintenance and repair were necessary for the Fresnell lens at Ferndale and it was removed to a Federal repair facility. A new final location of the repaired lens is yet to be determined, and may require the building of a museum-quality facility.

CURRENT OPERATION AT SHELTER COVE

2017 The lighthouse has become a notable and well-received landmark. It has proven to be a true asset in attracting visitors to the Cove. Hundreds of travelers admire and visit the lighthouse each year.

Summer Schedule: Memorial Day to Labor Day
11a.m to 3:30p.m.daily

Even when not formally open for visitors the rest of the year, the lighthouse serves as a welcome community symbol. Its lantern room is creatively decorated, lit, and enjoyed by all on almost every national holiday and festival day, including Mother's Day, Father's Day, and St. Patrick's Day.