St. George's light to shine this evening

Saturday, Oct. 19, 2002

By SUSAN SCHELL
Pilot Staff Writer

The countdown is on. Tonight the St. George Reef Lighthouse will awaken from its 27-year slumber and burst forth a shower of light.

At 8 p.m. the darkness surrounding the rocky reef will be pierced by a beam that can be seen up to 25 miles away on a clear night.

The light was hauled out to the reef by a chopper and placed in the lantern room by volunteers on Wednesday.

Among those volunteers was Glenn Williamson, the benefactor who made it all possible.

Williamson, who moved to Smith River from southern California last summer, purchased the light in memory of his late wife, who wanted to move to a house with a view of the St. George Reef Lighthouse.

Williamson contacted Guy Towers, the president of the St. George Reef Lighthouse Preservation Society, and offered to purchase all of the equipment necessary to make the beacon shine again.

"It's fabulous. It's a dream come true," Towers said.

The light will be powered by a solar panel and wind generator. A light-sensitive sensor will activate the beam at dusk and on dark, cloudy days.

See Lighthouse, Page 3A

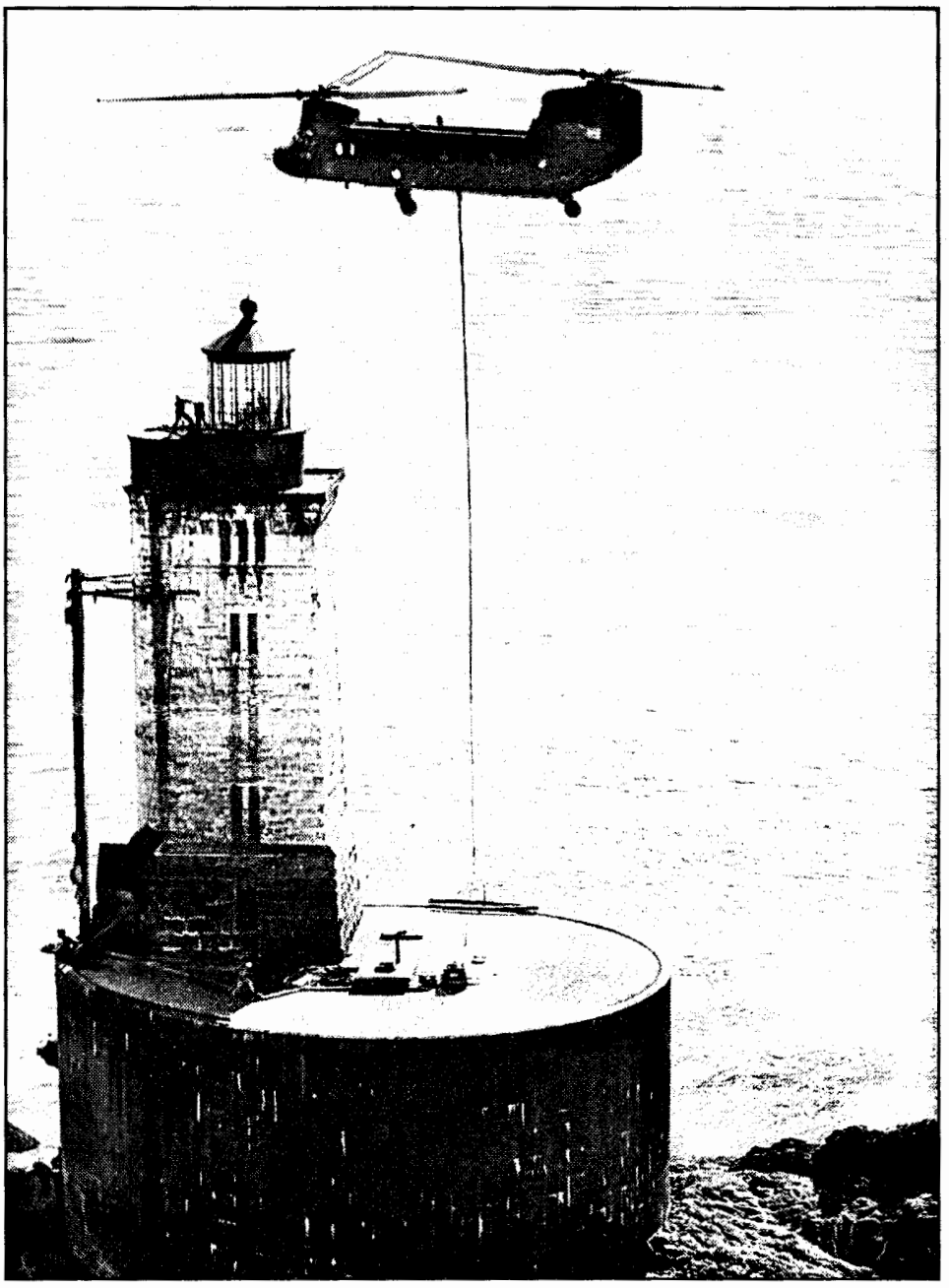


Photo by Stephen M. Corley

A helicopter from the Air National Guard helps ferry equipment to the lighthouse Friday in preparation for tonight's lighting.

The Daily Triplicate – Tuesday, October 15, 2002

Editorials

Lighthouse wizards bring back the beacon

Just when you thought the wizards of the St. George Reef Lighthouse were done pulling rabbits from their hats, now comes the news that the great light will shine again this weekend.

This new step toward lighthouse renovation comes to fruition because of donations from the Coast Guard and Glenn Williamson of Smith River. Glenn's wife, who recently passed away, was a lighthouse enthusiast. The beaming St. George light will be her lasting memorial.

I've said it before, but it bears repeating. The volunteers on this project are outperforming just about everybody else on the planet. With almost no money, and driven only by their passion to see the lighthouse preserved, they are working miracles.

What a thrill it will be to see the lighthouse blink on in the darkness six miles from our shore. It's as if this group happened upon a lifeless accident victim, performed CPR and surprised everyone by watching as the victim took a breath on his own.

A beaming St. George Reef Lighthouse becomes a symbol for us all. It is a reminder of all the people who have taken to the sea but did not return, starting with the crew and passengers of the Brother Jonathan and including every boater since.

It is at once a symbol of pride and of perseverance. A single tower, standing alone on a rocky outcropping, whipped by winds and lashed by waves, but still standing, still proud, still a beacon in the night.

Watch this weekend after darkn as the light goes on. I dare you to not be moved.

— Fred Obee
Triplicate editor

Oct. 19, 2002, Curry Coastal Pilot



At the Helm

SCOTT GRAVES

Lighting the way once more

Ever since I moved to Brookings, I've wondered what it must have been like decades ago when people, looking out over the ocean from the beach, saw the beacon of the St. George Reef Lighthouse slicing through the night.

I won't have to wonder anymore after tonight. If all goes as planned, the tower will beam again – 27 years after its light was extinguished.

Designed by two members of the St. George Reef Lighthouse Preservation Society, the lamp and attached mechanism of large re-chargeable batteries, solar panels and a wind machine will project a light out to 27 miles.

That's plenty of distance for most people on the Brookings-Harbor coastline to see.

While the need for such a light is no longer necessary – boats use high-tech gadgets for navigation these days, looking out on clear nights and seeing the light will add a visual element to the coastal "atmosphere" that so many of us enjoy.

Until now, that atmosphere has consisted of sounds such as crashing waves, the wind in the trees, the clanging bell and mournful moaning of offshore buoys. The only visual elements have been the ghostly fog and the glowing lights of fishing boats on the horizon.

The lighting of the lighthouse tonight will commemorate the beacon's 110th anniversary. It wouldn't have happened if not for the dedicated efforts of the preservation society and the generous donations from citizens in both Curry and Del Norte County.

Good places to view the lighthouse, on a clear night, include Sporthaven Beach at the Port of Brookings Harbor, McVay Beach on Oceanview Drive, and Chetco Point and Cape Ferrello, just north of town. Other spots include the two public beaches just south of the Oregon/California border. Near Crescent City, good viewing stations include the Point St. George bluffs near the airport and Pebble Beach Drive at the corner of Ninth Street.

The lighting of the lighthouse is a momentous occasion. I'm sure I won't be the only one flocking to the coast tonight to watch it happen.

From: Redwood Nat'l Park Book.

ST George Reef Inspection File

ST. GEORGE REEF LIGHT

Northwest Seal Rock, now known as Saint George's Reef, is in latitude 41 50.2 N and longitutde 124 22.5 West. It is Six miles out to sea from Point George, located midway between Cape Mendicino, and Cape Blanco.

The lighthouse will always be a remindur of the terrible shipwreck which occured in the vicinity on July 30, 1865, before it was built, the steamer Brother Johnathan sank to her doom taking with her two hundred passengers.

Because of the wreck of the Brother Jonathan and several other craft the government finally took action to build a lighthouse in the vicinity, and it was arranged to aquire a schooner which could be anchored near the Northwest Seal Rock which was unanimously chosen as the site for a beacon.

After considerable negotiation, the new 127 ton topsail schooner La Ninfa was selected, as she had been used as a temporary marker for the wreck of the Escambia on San Francisco Bar. The steamer Whitelaw was chosen to tow the La Ninfa out to her new position.

Mr. A.Ballantyne, was appointed superintendant of the construction work because of his remarkable record at Tillamook Rock, had brought several of his trusted workmen with him for the new task.

He landed at Northwest Seal Rock for the first time in 1882 but found it so rough that in four weeks he could go ashore only three times. On April 3, 1883, he visited the rock again to start active operations and found the sea breaking entirely over it. A 12,000 pound mooring was brought out to a location nearby on April 9, 1883, and dropped into position, but before the smaller buoys could be placed, the sea became to dangerous for work. The schooner was secured to the mooring and swung helplessly as the storm increased.

-/-

The steamer , meanwhile, lay outside the area, waiting for the storm to die down, but it was not until April 16 that the seas had quieted sufficiently for work to be resumed.

The Whitelaw then conducted sounding operations prior to letting down the buoys, and found that the coast chart had not accurately indicated the extreme depths around the rock, necessitating Ballantynes return to Humboldt Bay to obtain larger spar buoys.

Meanwhile another gale hit the area, and on the night of April 22 the La Ninfa's new eight inch hawser parted with a snap, and she was blown far out to the North. Then the wind changed, and the schooner was buffeted Southward again, until on April 30 she was off Cape Mendicino.

While all this was transpiring the Whitelaw had been loaded with the larger spar buoys, and upon arriving at the rock on April 28 her captair could find neither the schooner or thr large mooring. The steamer cruised in the area for five days and then returned to Humboldt Bay, where A.H. Payson, U.S.Army Engineers, had his feadquarters for the project.

While at Humboldt Bay Ballantyne was told that the La Ninfa had been sighted off Cape Mendicino. He put out to sea at once aboard the Whitelaw and on May 6 located the missing schooner 25 miles South of Crescent City.

The steamer towed the schooner back to the rock, where for the second time the La Ninfa was placed in position. There was almoast a dead calm that morning, and a landing was made at once on the rock, which is about 600 feet in diameter. Ring bolts were quicklyput in, a temporrary traveler rigged, and work was actually started.

A short time later, however, the Southerly winds gave way to a series of violent Northwesters, and there was little progress made.

Meanwhile a donkey engine had been put on the La Ninfa, and a new bad weather mooring set down, as the old one had parted and could not be located.

Finally in the first week of July, the weather improved and the workmen made good progress on the rocky ledge. The dangerous section of the rock was the northern low bench, only 25 feet above the sea, and the men there, continually drenched in spray, often had to be taken off in a hurry when the seas began to make up.

It is strange but true how accustomed to danger the average human can become. At first the men were terribly frightened upon going ashore and every minute seemed like an hour. But after a few weeks had gone by and no one had drowned, they grew braver.

Where at first they demanded to be sent ashore in the breeches buoy, in a few weeks they decided that the great cage which had been installed to get the gear and the heavy equipment ashore was ideal for thier own transportation, and soon four at a time and later six were using this means of transportation to and from the rock. Ballantyne was impressed by the way the experienced men would jump ashore one by one holding on to the lifeline as the sea rose and fell fully fifteen feet on the precipitous east face of the ledge.

To support the cage a traveler block had been constructed from two peices of boiler plate bolted together to form the bearings for the axles of four grooved gun metal wheels, which carefully held the pair of cables apart, making it practically impossible to snarl or catch.

Often now the men were taken on board dry, which had never been the case when they had used the breeches buoy. Toward theend of the year they were staying on the rock until great seas were running continuously over all the working levels. Then they had to lash their tools to ring bolts provided for that purpose, and make a run for the cage. With 4 to 6 passengers to a load, each round trip of the cage took no more than 3 minutes. As an average of from 25 to 35 men worked on the ledge, the cage was able to get them all aboard the La Ninfa in an incredible time of 20 minutes.

During this time there was only one accident, when the cable parted in a great sea, but at that time the passengers had barely climbed into the cage, and it bumped down 2 feet onto the rock, with the workers jumping out unharmed.

Substantial progress was made that summer of 1883, but on September 10 came the first indication that the season was drawing to a close. That morning two quarrymen had been drilling a deep hole on the lee side, when without warning a gigantic wave swept completelyover the rock, washing them down the steep soutern slope nearly 30 feet, where they clung desperatly, bruised and bleeding, until rescued.

Another eighteen days wont by, however, and the weather was still calm. The crew worked vigorously to meet their schedule for the year and were succesful, for at two O'clock on the afternoon of Sept. 28, everything which had been planned for the season was completed. That very evening all the tools were taken aboard the La Ninfa.

Within a few hours the first [illegible] of the season hit the vicinity, and by 2 o'clock the next morning, every cable holding the schooner in position except one had parted.

That morning the men watched helplessly from the vessel as gigantic crushing combers smashed into the rocky ledge where they had labored all that summer. They became alarmed when rocks weighing tons were moved by the force of the sea. Theose boulders had been drilled off from the lower north bench to level it for further building, and the great stones were swept like chips of wood from out of the sea, rolling along the entire length of the bench, and deposited helter skelter against the east wall of the ledge.

All that day and all the next the gale continued, with the schooner anchored by a single line to the outer buoy. By the following midnight the wind began to diminish, and early the next day the storm subsided.

The relief steamer Crescent City appeared that morning at daybreak, and those aboard the schooner decided to cut their final mooring and make a run for it, around to the lee of Point St. George, and follow the steamer in as best they could.

Upon reaching the Engineers headquarters at Pt. St. George, the stonecutters and quarrymen were taken ashore, and the La Ninfa sailed for San Francisco, arriving there in a strong northerly gale. The work for 1883 was ended.

Congress did not appropriate additional money that year following until after the season began. Meanwhile the Whitelaw reached the rock in the spring, resetthe giant derrick in anticipation for the summers work, and replaced the moorings. Then congress voted a meger $30,000 and as the amount was to small for operating expenses, it was devoted to preparation of material at Humboldt Bay.

Economy minded congress thus made the work cost almost twice as much as planned, but it was hard to explain to men who had never visited St. Georges Reef, the problems of the situation. Small appropriations forced abandonment of work already undertaken, the waste of much money in useless preparation and the suspention of all constructive labor.

Granite was then discovered on the Mad River near the railroad tracks running from Humboldt, and the next year ambitious plans were made for building the tower itself.

Congress again dissappointed the engineers by appropriating only $40,000 and the following year voted no money at all.

Finally, on March 3, 1887, congress appropriated an additional $120,000 and the engineers made active preperations for laying the stone already prepared on the mainland. With good weather they estimated that they would finish the first eight courses by the end of the working season of 1887, and they carried out thier plans.

The structure was finally completed in 1891. The total cost of $702,000 makes it among the worlds most expensive lighthouses, and represents about twice the cost of Minots Ledge Light in Massachusetts.

The foundation had been made in the shape of an irregular oval, eighty six feet in longest diameter, faced with cut granite and filled with concrete, except for service rooms. Horizontal terraces were arranged by cutting them into the natural rock, to give the structure sufficent area. The top of the pier itself is seventy feet above the water, and on it stands the granite tower, square in shape. The top of the lantern is 134 feet above the base of the pier, with the light itself showing 146 feet above the sea.

There were 1359 dressed granite blocks used in the face of the tower their average weight being 2½ tons, and they are so finished that the last stone of each course dipped into place with joints on each side 3/16" wide. Although it had been feared that the granite blocks would chip when being landed, heavy rope nets were used, and every one reached its position in perfect shape.

At present the light has a candle power of 110,000 and can be seen 18 miles from the rock. It flashes every 15 seconds, each flash lasting about 2½ seconds. Painted white, the lighthouse is listed in the records as a white square pyramidal tower on rock. From November 1 to March 1 the light is displayed from one hour before sunset to one hour after sunrise. The station has a radiobeacon and a diaphone, which gives out two blasts every 45 seconds.

Perhaps the greatest storm at the lighthouse was the gale of 1923, which came from the Northwest, breaking huge seas on the platform of the seventy feet above the water, with such tremendous force that the hoist engine house was torn loose from its foundations

no acquis # listed

St. Geo. Reef Litt. File

Office of Light-House Engineer,

TWELFTH DISTRICT,

San Francisco, Cal., 4th April, 1883

Principal Keeper
Crescent Cy.

Sir:

The schooner Lalunifa hares here today with a force to begin work on the Mt. Seal Rock = As I shall only get direct communication with her twice a month or so I am very anxious about her safety I wish you would when the vessel is at the station report to me by every mail what you know of her =

These reports generally need simply be the bare announcement, as briefly stated as possible that the schooner has been seen since ~~to~~ the last report and where = whether apparently all right or not =

Of course I shall be glad of any information regarding her or her party wh. you may be able to send me.

Yours Respy
A. H. Payson
Captain of Eng
L. H. E.

From Humboldt [illegible]
March 28, 19[illegible]

By ERNIE COAN

CRESCENT CITY — When the little windjammers Paragon, Cameo and Laura Virginia anchored outside on the rough, blue waters of the crescent-shaped bay just south of Point St. George in April of 1852, there was no beacon to warn them of the ragged rocks or dogholes along the rugged coastline. No "wickies" to keep trim a beaconing light to guide them into a port of safety.

And, old mariners say there is nothing dinky about the fortysix miles of Del Norte coastline. It is a sealine of heavy breakers, big trees, jagged rocks and sunken reefs, strong winds and soupy fogs.

From Battery Point at Crescent City, north, is a rockbound coast, wild and rugged. Overhanging bluffs, high an washboardy, against which the ocean beats with bulldogged fury. Rocks, like sentinels of the deep, giant-like storm-beaten, corrugated by the churning, silvery spray, pierce the coastline. Stunted trees, hoary with age, coated with moss, wind-blown, bending with the storm, silent admirers of its grandeur in calm.

The bantam-sized brigs and sidewheel schooners just wallowed in the troughs of the sea– if rigging was gone, they were at the mercy of the snarling deep.

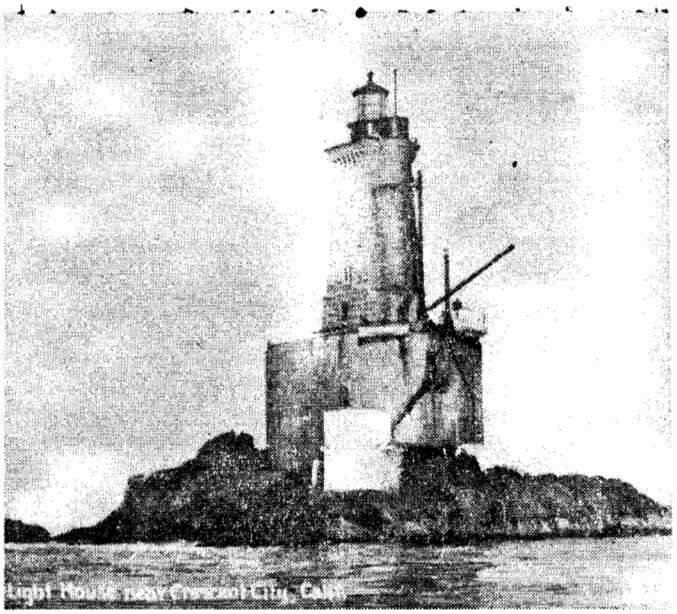
There was no means of communication– no beacon to fling its welcome beam. Doughty crews, who took their rum straight, manned the gallant wind jammers which were picked up by the heavy seas and slammed against the rocks or on a sandy strand as if a wet match. Probably none of the old mariners knew little of Weem, but master seamanship, won the hard way, guided the masted schooners through the slits of dogholes, into the shallow ports with the stars as their beacon and the riffle of the waters their warning.

BIRTH OF THE CRESCENT LIGHT

The Lighthouse Board of San Francisco, recognizing the need of a light in the open roadstead at Crescent City, which connected the life stream of a vast inland country, commenced the erection of a lighthouse on the Battery Point side of the forty-acre Federal Reservation extending to portions of the Crescent City townsite. .

On December 10th, 1856, Construction Engineer Potter and his assistant, Van Court, lit the new sperm oil lamp, with its brass weights and lantern accessories bearing the label, "Made in France." Fifteen days later on Christmas morning, Theo. Magruder became the first official "wicky" of the Crescent City light, constructed at a cost of $25,000, which for near unto a century of years lighted the way to thousands of vessels into the port of refuge.

Through the years the worn, faded logbook and register tells the story of the keepers, their lonely job– sometimes in longhand, other times in peculiar



The most expensive lighthouse in the world — the Seal Rock at Point St. George, 8 miles offshore north of Crescent City. It cost $750,000. Built of hewn granite blocks from Mad River, the sentinel serves dutifully today. There is a hoist for unloading supplies from boats.—Photo by Wally Griffin.

in such close proximity the breakers toss their churning spray high up on the two-story lighthouse structure. "Great is the art of beginning– but greater the art is of ending."

GREAT WORK OF CONSTRUCTION

The Twelfth Lighthouse District extends from the boundary line of California and Lower California, a distance of some 800 miles of coastline.

Many of the lighthouses cost huge sums of money for construction, so much in fact, that it is impossible to even estimate the amount of money invested in the Twelfth District alone.

The Northwest Seal Rock Lighthouse, situated on an isolated rock eight miles off shore north of Crescent City in the storm center of the north coast and marks a dangerous reef on which many vessels have come to grief, cost $750,00 and represents 8 years of arduous and dangerous construction.

From Point St. George extend the Crescent City Reefs or Dragon Rocks, some 6 miles. The passage inside these reefs was used by steamers. Outside there are a few outlying rocks and, in storms, many vessels have been lost on sunken rocks, among them the Brother Jonathan in July, 1865.

The rock upon which the lighthouse stands is 40,000 square feet above the sea. The tower contains 6,000 square feet. There are 20 fathoms of water on the east side of Seal Rock, on the western side sheer interminable depths. The lighthouse is built of granite blocks, rough-hewn, then turned and finished. The building is 175 feet above the sea level, containing five stories and the lantern. The San Francisco Chronicle of June 9, 1892 said: "... it is one of the finest feats of engineering in America." On October 15, 1892, the Del Norte Record headlined, "Next Thursday night, the 20th, the Northwest Seal Rock Lighthouse is to be lighted up. It can be seen from Lover's Rock or Pebble Beach."

Captain Olsen, keeper of the light to 1913 and his four assistants, were virtual prisoners the year round on Seal Rock, as it is impossible to step out of doors due to winds of gale proportion. During moderate weather they were permitted to shore leave in turn. When Captain Olsen resigned from the service in 1913, Captain Jon Luckman took over until 1918, when he was transferred and Captain George Roux assumed the responsibilities. After World War II the control and management of the lighthouse service was absorbed by the U. S. Coast Guard service.

(Copyrighted 1957 by Ernie Coan)

shorthand. Tells of broken chimneys, warming of thick lard oil, testing of the new mineral oil (Kerosene) of sickness and storms, of accident and beached derelicts, of casks of oil and passing ships. The comings of distinguished visitors from home and across the sea, of repairs and wicks– life of the "wicky", chronicled in cold, dry ink, faded now, of his faithfulness to detail, of the lonely, secluded job entrusted to him.

THE LIGHT'S STANCH WICKIES

Following Thos. Magruder as keeper came Charles Edwards, D. S. Hartwell, G. W. Emery, John Henecy. 1875 saw John Jeffreys take over the duties of keeping the light trimmed and the lens shining to the sea for forty long years. During the two wars and the years between, John Lund, J. Marhoffer, Jim Simonsen and Fred Saunders served their keepership for the side-wheelers and steamers. In 1946 Wayne R. Piland, with his gracious wife, Martha, and their two children, were transferred to the Crescent City Light.

Under the constant keepership of Piland, who could boast of the best maintained equipment, buildings and grounds in the west coast district, and the wickies before him the old solid brass mineral oil lamp, replacing the first sperm oil type, which in turn yielded to the powerful two hundred and fifty watt electric bulb in 1936– was in fitness to be lit and carry-on in event the modern equipment should temporarily fail. From the rock basement, up the winding stairs, to the lantern tower, everything was ship-shape. The old Howard and Davis banjo clock has been clicking off the minutes steadily over the century– with polished brass kettles and urns and utensils vieing with gleaming white modern fixtures.

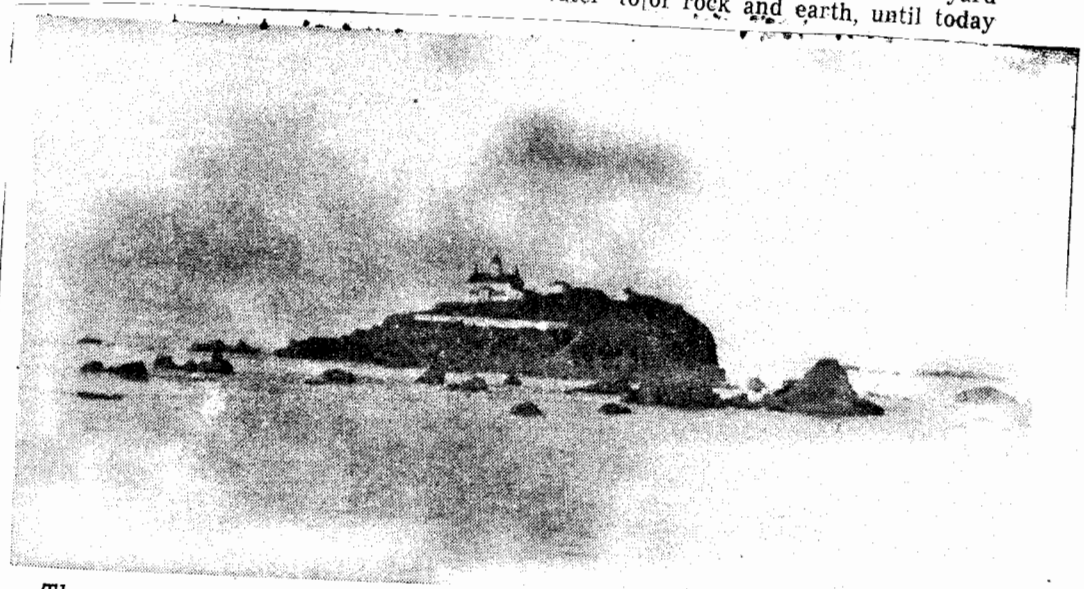
The visitor's register was opened July 23, 1893, with C. C. Strout, a teamster, as the first to top the clean page with nearly four thousand guests to follow through the years– until after World War II when the station was closed to the public. Visitors from far and near were honored with the lighthouse hospitality.

FINIS OF THE CRESCENT LIGHT

On October 31, 1947, keeper Piland received this notice: "Subject: Crescent City Light Station: Present information indicates that this light as now located is of little or no use to vessels entering Crescent City. With the completion of the U. S. Department breakwater to Round Rock it is intended to construct a modern light and fog signal on this rock. If certain unlighted buoys were replaced by lighted buoys in the approaches to the harbor, would it be possible to abandon this light in the interim period?"

With the keeper's affirmative response it was seen that before the venerable outpost of Del Norte civilization was to reach her century anniversary she would be abandoned. Today the light is switched off– only the well-kept buildings look out on the frolicsome seals playing among the rocks and the school of spouting whales– the responsibility of their care now rests with the Del Norte Historical Society.

Time takes her toll– be it flesh or rock. It swallows everything in stride. Since Piland began his duties at the Crescent Light, the pounding and lashing of the sea against Battery Point has taken yard after yard of rock and earth, until today



The century old Crescent City lighthou at high tide.
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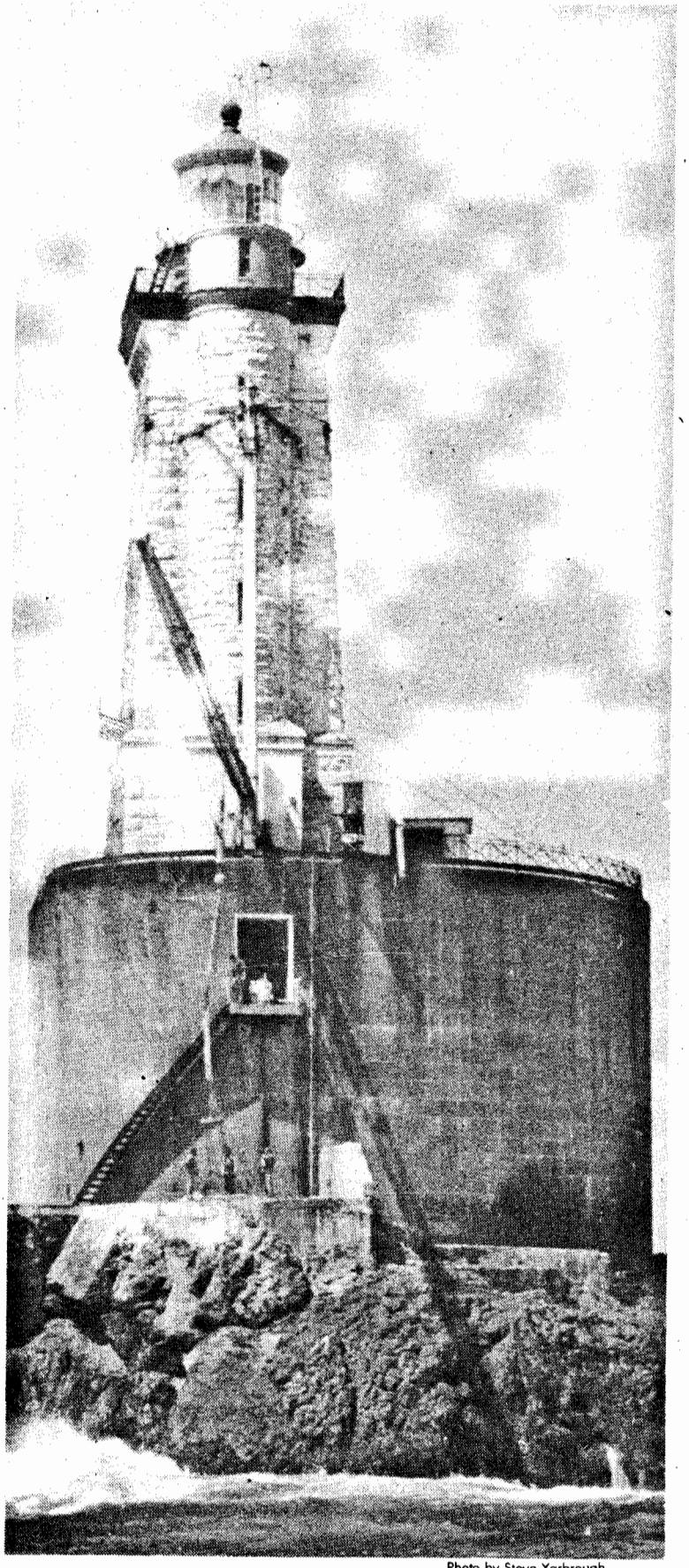


Photo by Steve Yarbrough

Allocating History

Eighty-three years of protection and service to those who brave the sea is about to be deserted and its fate is still undecided.

The Point St. George Lighthouse is soon to be replaced by a large navigations buoy one mile left of where the lighthouse stands now. The buoy is 400 feet in diameter and will have a light, radio beacon and fog horn. It is similar to the ones on Blunts Reef, according to Commander Theodore Nutting of the U.S. Coast Guard in Eureka.

Commander Nutting told The Triplicate that much of the equipment would probably be abandoned and that what did come off the rock would be kept by the federal government. As for the tiems of historical value, Nutting said their future was still undecided.

Sometime in April or May someone is to take inventory of the equipment at the lighthouse and decide what might have historical value and be worth prevervation. The final decision is to be made by the 12th District Coast Guard in San Francisco, probably around April.

Nutting said these items would probably be given to a historical society or museum but he did not know if it would be in Del Norte County.

The lens in the old lighthouse was made in 1892 in Paris, France. According to Commander Nutting it will be so difficult to move that he's not sure at this time if it will be removed or left in place.

In a letter to the Coast Guard, Stephen Veirs, president of the Del Norte County Historical Society, requested that the lightkeepers' logbooks, visitors registers, instruments and other articles and paraphernalia unique to and generally associated with the lighthouse be donated to the Historical Society. The society would house these items in the Crescent City Lighthouse Museum on Battery Point.

City Manager Michael Young has also written to ask that anything of historical value be saved from the lighthouse. He said the city council will support the Historical Society and if they had no place to keep these things the city would find one.

Young further asked that someone either from the city or historical society be allowed to go with the Coast Guard when the lighthouse is evaluated.

"The lens and books really should stay here," Young said. "They're of no value to anyone other than Del Norte County."

St. George Reef Lighthouse

Among hundreds of American lighthouses, three sentinels stand out as unparalleled engineering accomplishments: of the three, St. George Reef in California is the tallest and largest. It cost more and took longer to build, and it has proven more dangerous to those who manned it than the other two.

Completed in 1892, the lighthouse was the tallest on the Pacific Coast, 134 feet, and cost $704,000. The massive structure had consumed 175,260 cubic feet of granite. The ships had carried 14,307 tons of stone, 1,439 tons of sand, 335 tons of brick, and 272 tons of gravel out to the reef to be used in construction. Interior work had been finished using such fine woods as Port Orford cedar, redwood, and oak. The entire project - from soundings to lighting the lens - had required eleven years, the most prolonged construction period in American lighthouse history.

The beautiful first order lens had cost the Lighthouse Service $15,000. The first order Fresnel lens was 7'10" high and 6'1" in diameter. Mounted on its stand it weighed approximately 5,000 pounds. When installed in 1892, it featured plates of red glass covering alternation panels of prisms and bull's eyes which projected an alternating red and white flash with a 15-second interval between flashes. (Later the red glass plates would be removed, producing a white-only flash.) Beams from the lens warned mariners of the reef any time that they approached within 18 miles of the light.

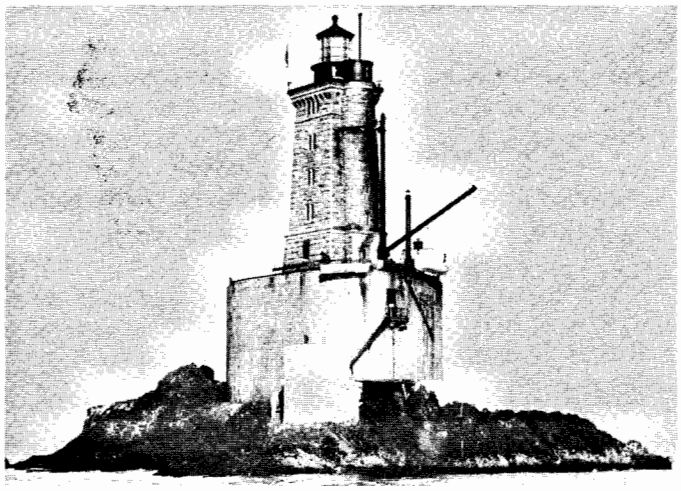
Life was incredibly hard on the reef station. Among the 80 men who would serve the lighthouse from 1891 through 1930, 37 would resign and 26 would seek transfers to other stations. The winter of 1952 was the worst in the reef's history. During one storm, waves at least one hundred sixty feet high swept over the top of the St. George Reef lighthouse, shattering the windowpanes in the lantern room 146 feet above normal water.

The last Christmas at St. George Reef was in 1974. Plans were well underway to abandon the light station and to moor a large navigational buoy nearby as as replacement. On May 13, 1975, the Coast Guard lowered the colors for the last time, chained the door shut and left the light station completely intact. America's greatest lighthouse is now dark, but a part of it still lives on.

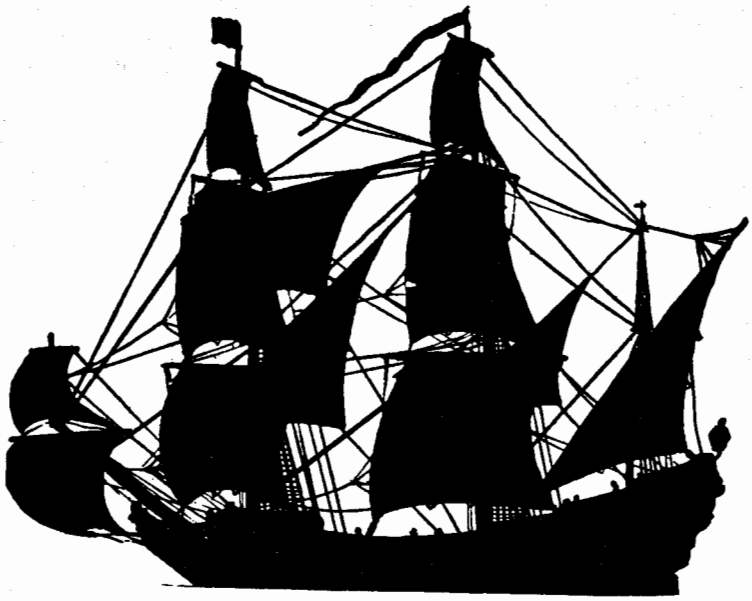
The lighthouse is now home to hundreds of seals that have taken it over. The prism of the lighthouse - a rare and valuable French-made lens - was removed this summer. For two years, the residents of Crescent City held fund raisers to obtain the money needed to build a house for the lens. The "Lens House" now holds the lens and is in the custody of the Del Norte Historical Society.

The Society had worked closely with the U.S. Coast Guard, which removed the lens, for the last three years to make this project come true. Through the efforts of the Society, Coast Guard, and Mr. Wayne Wheeler (renowned lighthouse historian and preservationist) the lens will be available for viewing to the public in the Spring of 1984.

Historical material from: **Lighthouses and Lifeboats on the Redwood Coast**, Ralph and Janetta Shanks



ST. GEORGE REEF LIGHTHOUSE, THE TALLEST AND LARGEST LIGHTHOUSE IN CALIFORNIA. PHOTO COURTESY DEL NORTE HISTORICAL SOCIETY.



SPECIAL BOOK PROMOTION of publication, *THERE'S ONLY ONE COKE*, by Berenice Lamson written in collaboration with the late DR. R. COKE WOOD. The major portion of the book consists of unpublished, primary source material taken from taped interviews, family records, letters and diaries. Mother Lode Press, Sonora, 1981, paperback, 264 p., $12.00. Sale price **$9.00**, shipped prepaid through December 31, 1983. Add sales tax. Order from: Mrs. Berenice Lamson, 3253 Calhoun Way, Stockton, CA 95209. Author will donate $10.00 to CCHS for each order received for 20 copies.

Cresent City lighthouse still symbol of ro

CRESCENT CITY - The St. George Reef Light Station is described as a "daredevil hermit's dream." It looks quite romantic and intriguing as pictured on page 41 in the August, 1987 edition of Life Magazine.

But if there was ever an "orphan of the storms" unlikely to be adopted in the U.S. Coast Guard's "adopt a lighthouse" program, it is St. George.

Dangerous and forbidding, the lighthouse sits on Seal Rock, 300 feet in diameter, some 10 miles off the Crescent City coast. It is perched at the end of a treacherous, mostly hidden, six-mile reef which extends along the coast from Point St. George.

It was the pride of the Lighthouse Service when completed in 1892. It was the tallest, 134 feet, the most expensive, $704,000, and took the longest to build, 11 years.

The wreck of many ships, including the Brother Jonathon in 1865, impelled the service to build there, despite the obstacles.

Built on a solid block of concrete and granite, the lighthouse was constructed of large, hand-hewn rocks mined on the Mad River in Humboldt County. The smallest weighed 2.5 tons, the largest, 17 tons.

From there, the rocks were hauled to Eureka and shipped to the site. All 1,339 of them.

The interior of the lighthouse was finished in fine woods, including Port Orford cedar.

Workers lived aboard a boat they attempted to keep anchored in the rough waters, plagued by waves that often washed over the rock.

In later years, waves were known to wash over the five-story lighthouse itself. Lighthouse keepers usually stayed months at a time, if they stayed at all, rather than risk the perilous journey too often.

At least one keeper was killed and many were injured during the light's 84 years of service. In 1951 three Coast Guardsmen were swept to sea when their boat capsized while being lowered into the water for the trip back to Crescent City.



St. George Reef was once guarded by this isolated lighthouse.

The lighthouse was decommissioned by the Coast Guard in 1975, and replaced by a $1 million navigational buoy.

It now stands abandoned to the sea lions that flock there, but its unique lens continues to shine in the Del Norte County Historical Society's main museum in Crescent City.

The lens, 7 feet 10 inches high and 6 feet, 1 inch in diameter, has 24 glass panels. It was imported from France at the then astronomical cost of $15,000 and was mounted on a 5,000-pound stand. Its light could be seen for 18 miles, warning ships away.

The lens gears were first powered by a system of pulleys and weights. The keeper had to wind it up every four hours.

The whale oil wicks were first replaced by kerosene and then by electricity in 1940.

Peter Cadra of Brookings made the change to electricity. His widow, Ruth, is still a member of the historical society from whose archives this information was compiled.

It took two years of ice cream socials and other projects to raise the approximately $25,000 needed to rescue the lens.

[illegible] special two-story an[illegible]nex had to be added museum to house it.

Robert Bolen of Smi[illegible] built the annex, with a [illegible]ditional volunteer help.

The Coast Guard [illegible]sembled the light,

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Chapel
Funeral Direct[illegible]
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Remember...
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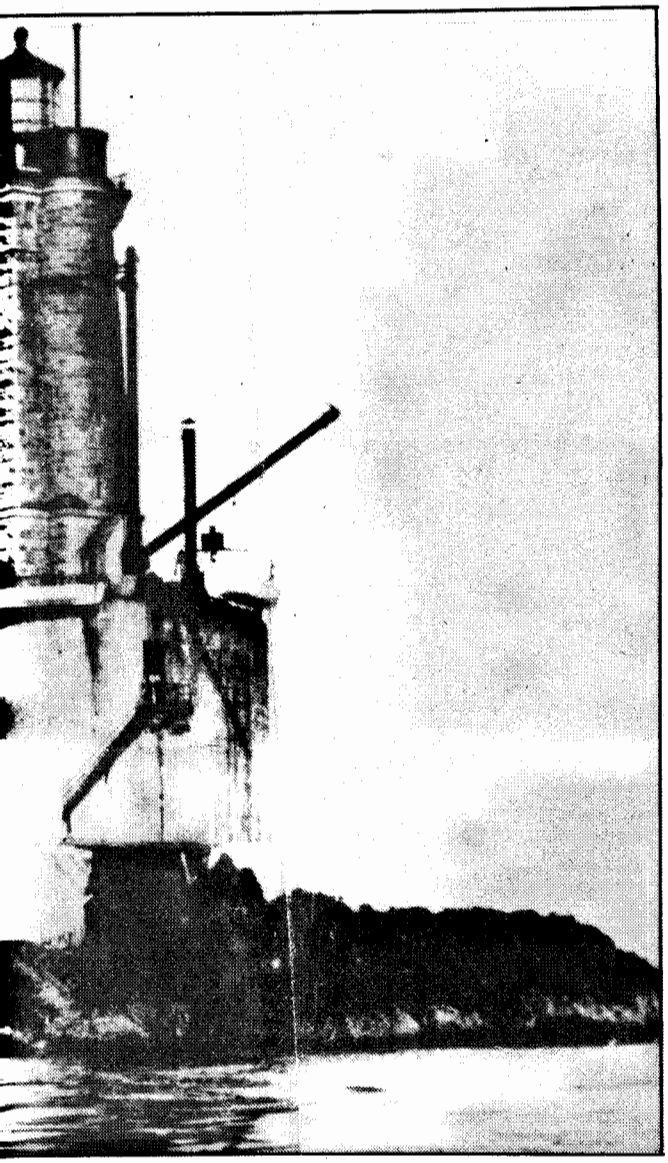
till symbol of romance and intrigue



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nex had to be added to the museum to house it.

Robert Bolen of Smith River built the annex, with a little additional volunteer help.

The Coast Guard disassembled the light, securely wrapping each prism, and transported it to the museum, where Bolen reassembled it in 1983.

"They had carefully marked each part as they took it apart, so it would be easier for me to put it back together," Bolen recalled recently. "But then, the fellow who had the list went off with it!"

Visitors to the museum can now see the lens rotate and listen to a recorded account of its history.

That is as close as anyone is likely to get to the St. George Lighthouse. But if there should happen be a daredevil hermit looking to adopt a lighthouse, apply to the Coast Guard's U.S. Lighthouse Section, 130 St. Elmo Way, San Francisco, CA 94127.

But you will have to prove the task.

FREE Batteries

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"We're hear when you need us."

Free hearing test and evaluation. We accept VISA and MasterCard.

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Junior sizes 3 to 13

P. O. Box 2423. Telephone 633.

Office of U. S. Light-House Inspector,

Inclosures.

TWELFTH DISTRICT.

Subject 77. APPRAISER'S BUILDING.

San Francisco, Cal., December 18, 1893.

Mr. John H. Jeffrey,

Keeper Crescent City,

Sir:

As the presence of one of the keepers at St. George Reef Light-Station is required in San Francisco in connection with the settlement of the estate of the late William Erickson, orders have been forwarded by this same mail for John E.Lind to report at this office as soon as possible. It is presumed that these orders will arrive at Crescent City in time to be forwarded by the boat you have already been authorized to send out about the 20th instant. Please forward all mail received to date, and instruct the parties in charge of the boat to bring Mr.Lind back from the rock if it is possible to do so. Also if it is possible to obtain a substitute in Crescent City, please engage one at a rate not to exceed $550.per annum and send out by the same means.

Respectfully,

H.E.Nichols
T.
Commander U.S.N.

Inspector.

#809-7

Ferguson reigns over parade

Life was never boring on lighthouse, Grand Marshal says

By Joan Riley
Triplicate staff writer

Duane M. Ferguson Sr. is a fitting choice for grand marshal of the 1992 Fourth of July Parade, which is dedicated this year to the St. George Reef Lighthouse Centennial.

While a member of the U.S. Coast Guard, Ferguson was actually stationed at the lighthouse for a total of 37 months between 1955 and 1962.

"Life on the rock was lonely at times and also dangerous, but never boring," he recalled.

As an engineer, he was responsible for maintaining six diesel engines, generators and other electrical and mechanical equipment, plus standing a six-hour daily watch.

Ferguson was also assigned for a time to Humboldt Bay Station at Samoa, where his duties in the maintenance and repair detachment saw him serving St. George and other lighthouses up and down the Pacific Coast.

His experiences caused him to develop an abiding interest in lighthouses and their histories.

Ironically, he participated in research which led to the closing of St. George.

"While stationed on the cutter Walnut in 1970, I was involved in deep sea mooring experiments off San Clemente Island," he said.

"We perfected a way to deep moor sea buoys and be able to service and retrieve the buoy moorings."

Ferguson received a Commendation Medal for his efforts.

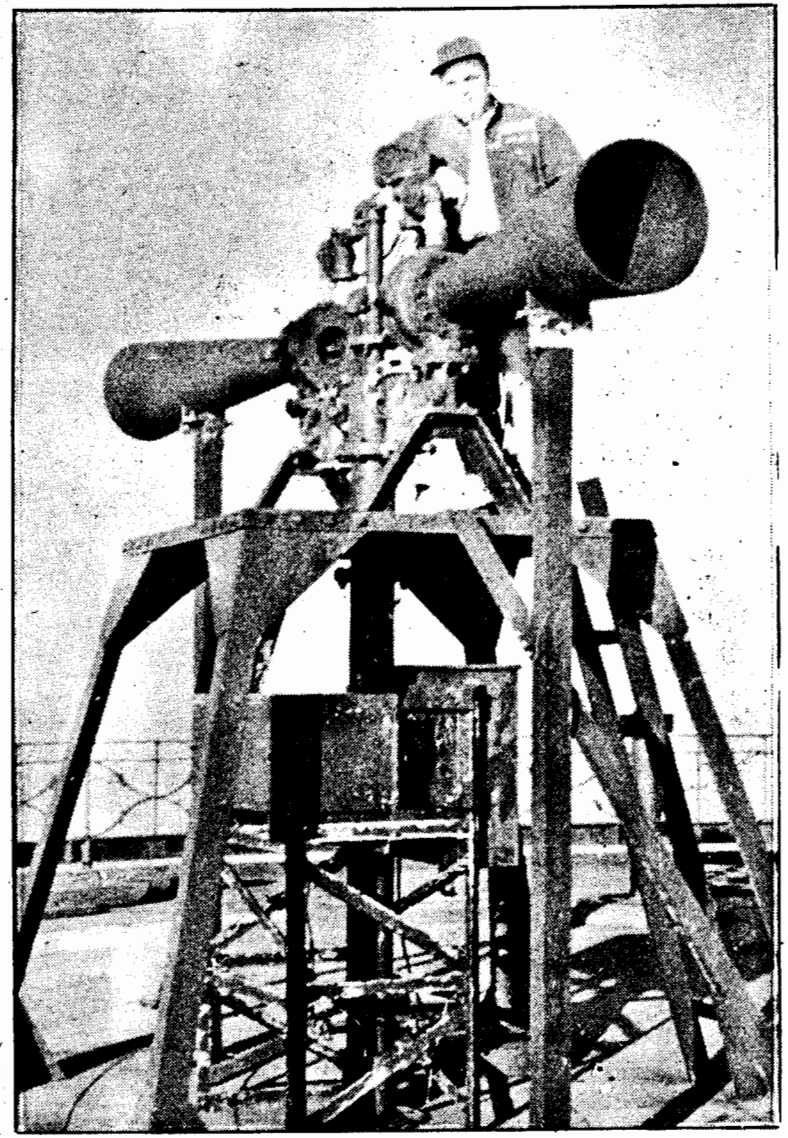
The techniques enabled the Coast Guard to establish a large navigational buoy in the deep waters near St. George and close the dangerous and expensive-to-maintain lighthouse in 1973.

Ferguson and his wife Josephine have been permanent residents of Del Norte County since 1971, following his retirement from the Coast Guard.

"After years in engine rooms, smog and asbestos didn't mix well with my lungs," he said. "I liked the climate and clean air here and have never had any problems."

He lives in Hiouchi and owns Fergy's Fast Lube in Crescent City, where his three sons, Duane Jr., Ron and Roger (and Roger's wife Trisha) assist him.

Ferguson's favorite hobby (next to lighthouses) is fishing, he said — another reason to like Del Norte County.



Ferguson got to know the lighthouse inside and out

Fireworks display scheduled

What would the Fourth of July be without fireworks?

Once again, Del Norte County residents will be able to see fireworks in all their glory Saturday starting shortly after dusk.

The fireworks will be displayed over Battery Point. The event is funded by the City of Crescent City and by proceeds from the annual July 4th Deck Party.

The B Street Pier area will close at 7 p.m. until after the show.

Fully

SERVING THE CALIFORNIA NORTH COAST SINC

DEL NORTE T

Volume 105, No. 33, Wednesday, May 2, 1984 — 22 pages — 25 cents

St. George Light lens unveiling set

Coast Guard, Keene on hand Saturday

Official presentation of the Point St. George Reef Lighthouse lens to the Del Norte County Historical Society is scheduled for 1 p.m. Saturday at the 577 H St. museum.

This will be the first time the newly restored lens will be on public display. Judy Knitter of the Historical Society says the Coast Guard contingent will include Captain William F. Merlin, chief of staff, Commander Michael Stenger, of the Humboldt Bay group, and Lt. Commander Richard Brandes, of the vessel Black Haw, who was involved with removing the historic lens from its offshore home.

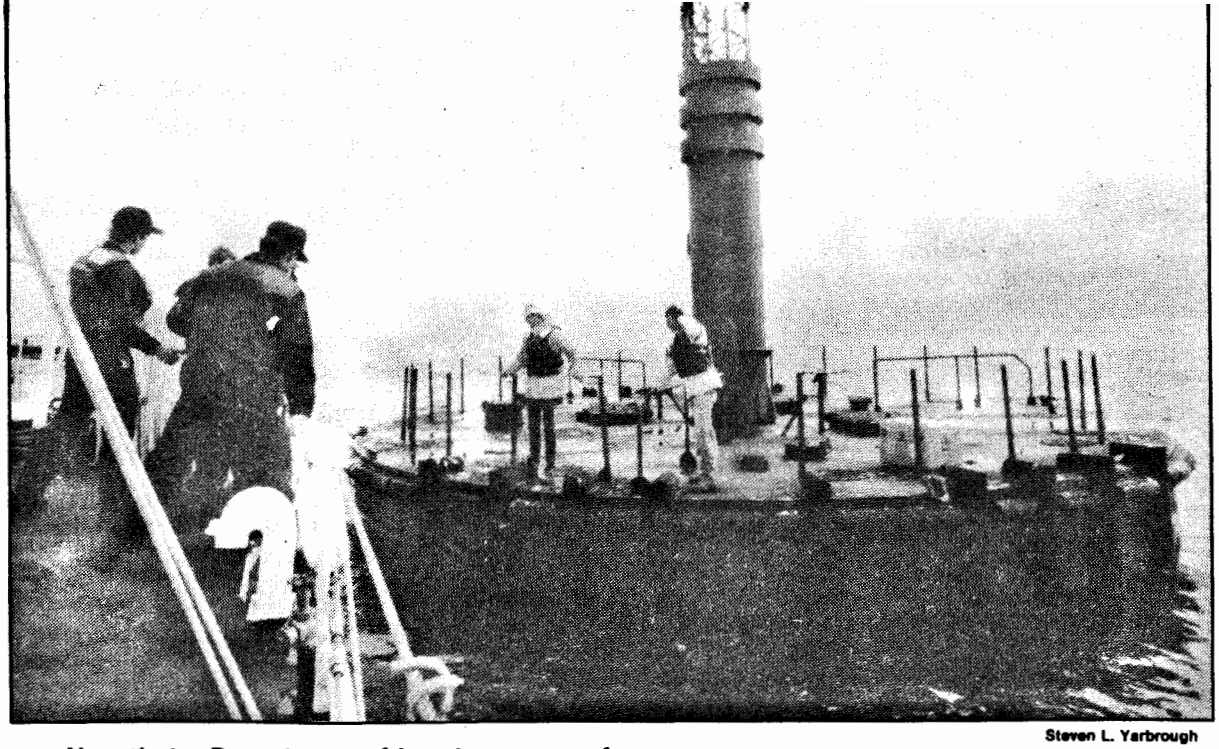
Lighthouse historian Wayne Wheeler and state Senator Barry Keene also will attend.

Knitter welcomes the public and says the museum will be open from 1 to 5 p.m. both Saturday and Sunday. To help with museum funding, a $2 donation will be asked at the door.



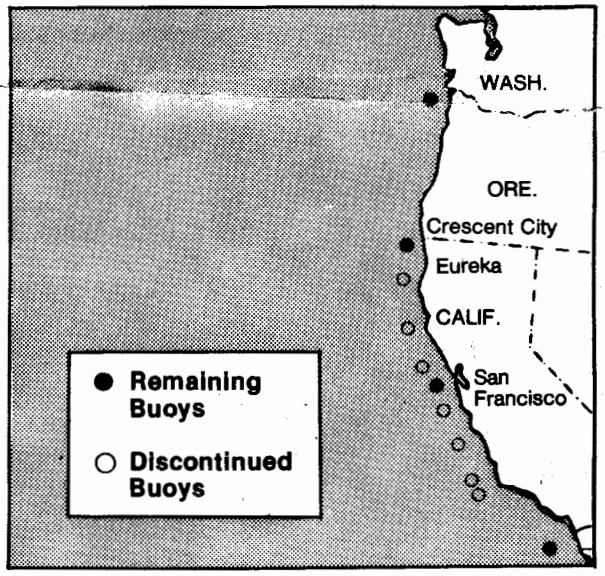
Four people responsible for much of the shine and polish on the newly restored Point St. George Reef Lighthouse lens are, from left, Dave George, Bob Bolen, Phyllis Tedsen and Coast Guardsman Terry McGannon, who repaired damaged glass.





Steven L. Yarbrough

Now that a Department of Interior survey of Pacific storm conditions is complete, eight buoys scattered along the West Coast may be pulled next summer. But this one off Point St. George will be one of four remaining.



Bye, bye, buoys. . .

Data collectors may be docked

Eight of the 12 buoys off the West Coast which provide a network for collecting weather information may be hauled to shore by next summer.

The platform located off Point St. George, however, is one of the four scheduled to remain. The buoys which may be dry docked are all funded by the U.S. Department of Interior Mineral Management. If the National Weather Service doesn't come up with an additional $1 million for their maintenance, the West Coast may lose most of the buoys in its weather-warning network.

The U.S. Interior Department originally installed the eight floating platforms stationed from Southern California's Channel Islands north to the Columbia River to survey storm conditions affecting offshore oil rigs. Over the years, the buoys have gained wider use as data collectors for the weather service.

The survey is now complete, and the Department of Interior doesn't want to continue the $1 million annually for their upkeep. So buoys along the entire West Coast are scheduled to be hauled to shore next June. Those remaining would be three buoys operated the Coast Guard and one operated by the Army Corps of Engineers.

Government and commercial users of the offshore weather information have been studying ways to come up with funds to retain the buoys. They've concluded the Navy and Coast Guard may be the only ones with the money to keep the platforms operating. But neither service has commented on their plans.

If the buoys are discontinued, the few ships at sea will provide the advanced storm warnings. The loss will have a "critical effect" of the Weather Service's ability to give advance warning to the public on Pacific storms, says Dale Goudeau, deputy meterologist. His agency also fears the loss of its only operating weather satellite due to mechanical failure, he says, which would compound the problem.

State Assembly candidate Danny Walsh, acting in his capacity as Humboldt County supervisor, says he will offer a resolution next week calling upon Humboldt County and all counties served by the network to seek ways together to save the weather buoys.

When asked if the counties served by the buoy network should pay the $1-million-a-year maintenance, Walsh said, "That is certainly one alternative, particularly if the Navy and the Coast Guard cannot or will not pick up the tab.

"When you think about the millions of dollars in damage which could occur, and potential for loss of life without adequate storm warning mechanism, the shared yearly costs of a good storm warning system may be cheap."

CALIFORNIA - HUMBOLDT BAY - AID TO BE CHANGED ABOUT 1 APRIL 1975

Humboldt Bay Light 6 (LL 1150) will be temporarily changed for evaluation, to Flashing Red 4 seconds, with a nominal range of 3 miles. The light will be visible all around.

APPROXIMATE POSITION 40°45'24"N., 124°14'00"W.

Comments on subject change are requested prior to 1 May 1975.

18622 (C&GS 5832).

2, CG San Francisco, 19 March 1975)

) CHANGED IN AIDS TO NAVIGATION - NONE

ANCIES AND CORRECTIONS

ge	Name of Aid	Status	Chart	Reference
	Souza Rock Lighted Gong Buoy	Reduced Candle-power	18704 (C&GS 5386) 18700 (C&GS 5302) 18022 (C&GS 5020)	BNM 109/75
	San Francisco Northern Traffic Lane Lighted Whistle Buoy C	500 yards 252 degrees from charted position	18645 (C&GS 5072) 18680 (C&GS 5402) 18640 (C&GS 5502) 18010 (C&GS 5021) 18022 (C&GS 5020)	BNM 113/75
	Crescent City Harbor Gong Buoy 5	Temporarily discontinued for about 1 week	18603 (C&GS 5895)	BNM 127/75
Pg 78	Humboldt Bay Entrance Bell Buoy 2	Temporarily discontinued for about 1 week	18622 (C&GS 5832) 18620 (C&GS 5602)	BNM 130/75

DESTROYED AIDS

LL or Page	Name of Aid	Status	Chart	Reference
1138	Noyo River Entrance Light 5	Destroyed	18626 (C&GS 5703) 18620 (C&GS 5602)	BNM 128/75

GENERAL

PUBLICATIONS - U.S. COAST GUARD LIGHT LIST VOLUME III - PACIFIC COAST AND PACIFIC ISLANDS - 1975 EDITION - AMENDMENTS

The following Light List Numbers have been changed:

ORIGINAL LLNR	NAME OF AID	NEW LLNR
	San Joaquin River	
895	Light 17	895.10
897	Light 19	897.10
898	Light 21	898.10
899	Light 23	899.10
901	Light 25	901.10
903	Light 28	903.10
908	Light 30	908.10
909	Light 32	909.10
912	Light 35	909.12
915	Light 38	916.10
916	Light 39	916.20

ST. GEORGE REEF LIGHT STA

4100
25 OCTOBER 1974

From: Officer-in-Charge, CG LTSTA ST. George Reef
To: ALL HANDS

Subj: Fuel and Water Conservation

1. Latest word recieved from CCGD 12, indicates decommissioning of this unit during May 1975. A request for fuel and water, in sufficient quatities to substain our unit through decommissioning, has been made to CGC Comanche and CG Group Humboldt Bay. This is expected to be accomplished during November 1974. It is imperative that ALL HANDS conserve fuel and water to prevente a return visit by CGC Comanche.

2. Use of the washing machine and drier, as well as showers should be held to a minimum. All unnecessary lighting will be secured when compartments are not occupied. Thermostats will be set at 68 degrees.

3. In no way does the foregoing suggest and condone unsanitary or uncomfortable conditions for each individual. It does direct a conservation minded approach to our energy and water supply by ALL HANDS.

J. W. SEBASTIAN

PROPERTY OF
DEL NORTE HISTORICAL SOCIETY
CRESCENT CITY, CALIFORNIA

Smith River.....James Brooking

Board of Supervisors.

First District.....John Miller
Second District.....John N. McVay
Third District.....John W. Kerr
Regular Sessions, first Monday in February May, August, and November.

TIMBER LAND NOTICE.

U. S. Land Office, Humboldt, Cala., May 14, 1883.

NOTICE is hereby given to whom it may concern, that James L. Beckstead of Smith River, Del Norte county, Cala., has made an application to the Government of the United States to purchase the following described tract of timber land, under the provisions of an Act for the sale of timber land in California, Oregon, Nevada, and in Washington Territory, approved June 3, 1878, to wit: the SE¼ of SW¼ Sec. 14 T 18 N, R 1 W. H. M., containing 40 acres. All persons holding adverse claim thereto, are hereby required to present the same before the Register and Receiver within sixty days from the date hereof, or the entry will be perfected under the provisions of said Act.

C. F. ROBERTS,
6.10w Register.

NOTICE FOR PUBLICATION.

Land Office at Humboldt, Cala. May 2, 1883.

NOTICE is hereby given that the following-named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before Hon. J. E. Murphy, Superior Judge at Crescent City, Del Norte county, Cala. on Saturday, June 16, 1883, viz: Samuel H. McVay Homestead Application No. 1894 for the NW¼ Sec. 24 Tp. 18 North, Range 1 West H. M. He names the following witnesses to prove his continuous residence upon, and cultivation of, said land, viz: George Tack, Henry Simon, Green Adams, Joseph McCormick, of Smith River, Del Norte Co. Cala.

C. F. ROBERTS,
2 5. Register.

ESTABLISHED IN 1852

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California Street, S. F.

The Del Norte Record is kept on file at the office of L. P. Fisher.

CHAS. LACH THE TAILOR.

FRONT STREET, CRESCENT CITY.

SUITS AND SINGLE GARMENTS MADE TO ORDER, OF THE LATEST FASHION, AND WARRANTED TO FIT.

GOODS BOTH FOREIGN AND DOMESTIC ALWAYS ON HAND TO SUIT.

CHAS. LACH.

R. S. McLELLAN,



LIVERY AND FEED STABLE.

Cor. SECOND AND I STREETS,
CRESCENT CITY, - CALIFORNIA.

chants, and the proprietor of the famous "Gasquet Ranch" at the Forks of Smith river, has been spending several days in town during the present week.

Tom Collins paid Crescent City one of his periodical visits on last Sunday, and, as is usual upon such occasions, made his musical voice heard about the street corners during the greater part of the day.

James Beckstead, of Smith River, who has been below for some weeks, returned by Thursday's steamer. The RECORD office was remembered by the gentleman in the way of late papers from the Bay City

C. W. Babcock, tonsorial artist, keeps the O K barber establishment in the Del Norte Hotel building. Ladies desiring shampooing or hair dressing will be attended at their residences on Fridays.

We learn that Thos. McNamara and John Malone, who are on a trip to Oregon, caught a young elk somewhere in the mountains and sent it down to Ellensburg to have it shipped on the *Hume* to Crescent City.

Martin Cuddihy of Happy Camp, and Douglas of the same place came over the mountains the fore part of the present week, having been summoned as jurors in the Woods case, but both were excused from serving.

We learn that L. J. Lockwood's eldest boy fell from a fence on last Tuesday, breaking his arm in two places. Dr. Thorwarth was called and attended to the injuries, and at last accounts he was doing as well as could be expected under the circumstances.

The second monthly social given by the Order of A. O. U. W., took place on last Tuesday evening, which was attended by a goodly number of the young people of our town, besides by many of the older class of ladies and gentlemen, and the evening was spent very pleasantly by those in attendance.

George Cook, an old-timer of Del Norte, who, of late years has been mining at French Hill, and has not been in Crescent City for two or three years, paid the town, including the RECORD office a visit this week. Although not exactly of the Falstaff style, nevertheless, he looks tough and hearty.

Blasting at Seal Rock, the site of the new Lighthouse is going on, the reports being distinctly heard along the coast. Captain Green, who made preparations for seal hunting in the neighborhood of Point St. George has given up the enterprise, as the blasting has driven all the seals away, and he has moved his camp to town again.

Mrs. [illegible] informs us that she has been solicited by many friends to open a private school at Crescent City, and that, on Monday next she will receive a limited number of pupils at her residence on E street. Mrs. Ring has had much experience in teaching, and we bespeak for her the patronage of those having young children to educate.

Subscribe for the RECORD.

evidence who does not believe that the jury made a fatal blunder.

A year ago last July, when it was proposed to build a wagon road over the mountains on the Howard survey, and the people of Crescent City, as their portion should construct this end to the South Fork of Smith river, the ladies, showing a much greater spirit of enterprise than the men, got up a ball, the proceeds of which were to be paid into the wagon road fund, and thus contribute their mite toward the building of this much needed road. The net proceeds of the ball were $164.50 which the committee having the matter in charge placed on deposit and as the road project was given up the money has never been used, but still remains locked up. Now, this committee propose using the money toward fitting up the Plaza, several and probably all of which are in favor of expending the money there. To have an understanding in the matter, and that all interested may be satisfied, we are requested to say, that the members of said committee will meet at Mrs. Steele's on Second street, who was the treasurer, on next Monday afternoon, at two o'clock for the purpose of a consultation about the matter. We think this a very wise plan on the part of the ladies, as the Plaza is much in need of being beautified, and this money might as well be used in that way as to let it lay idle.

During the greater part of this week our usually quiet town has assumed something of a City appearance. The streets have been filled with people from all sections of the county, besides some from our adjoining State. The trial of Woods created quite a stampede to the County Seat. The Board of Supervisors brought many to town, so that anyone not acquainted in the place, and who happened along during the week naturally thought our town one of the liveliest of the lively. But now, a change has come over the place, and quiet again reigns supreme. The Happy Campers have all left for their homes on the other side of the mountains, the Smithriverites have wended their way to their several homes in the valley, and the Egyptians and the dwellers in that land and beyond the river, are off, or going on the first boat. Well, we have met numerous old friends during the week, which had it not have been for this unusual occurrence, we might not have seen for some time. A number of new subscriber's names have been added to our list, and many old ones have dropped in to "square up," so we have no reason to grumble, in fact, we are pleased, and quite happy. Come again gentlemen—Call often.

PAY YOUR HOSPITAL POLL TAX.—The Hospital Poll Tax for the year 1883 is now due and payable to Tax Collector, W. H. Otto or a Deputy. If the same is not paid on or before the first Monday in August, one dollar will be added thereto. Payment will be strictly enforced against all persons liable therefor.

In this issue of the RECORD will be found the ad. of N. Tack, Jr., who has just opened the "Snug," a new saloon on the corner of I and Second streets.

Crescent City and [illegible]
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Billy Woods, a ha
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Notice is hereby g
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before said Board.

John S. Wallace,
Rebecca Wallace, m
R. Wallace deceased
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Edward Levens, w
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proposes to locate.

P. Costelloe, wh
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Del Norte Record - original June 9, 1883

Reprinted Cres. City American Sept 18, 1959

Del Norte Record.

Crescent City, - July 30, 1892.

Local Department.

Republican County Convention notice in this issue.

The steamer *Crescent City* is due here this morning.

H. Harvey is building an addition to his Fifth street cottage.

Don't forget the horse races at Smith River next Monday. They will be great.

Diagonal Brocade and Henrietta cloth 20 cts., per yard at Lannes McLaren's.

Wonder when Crescent City harbor is to be surveyed, for the purpose of improving it.

During the month of June, 510,459 feet of lumber was shipped from this port to San Francisco.

Del Norte is one of the few counties of this State that has had no coyote scalp bills to pay, so far.

D. L. Gordon will paint the new Presbyterian Church, having received the contract from the Trustees.

The mail carrier now drives a wagon from this place to the end of the Klamath wagon road, a distance of about 12 miles.

Plaid Worsted 40 cts., at Lannes McLaren's.

The steamer *Crescent City* took 120 boxes, 1 tierce and 1 keg of butter, besides other produce, on her last trip to the city.

The fog whistle on Northwest Seal Rock could be plainly heard on Thursday night. It is about 12 miles from this place.

The lenses for the Northwest Seal Rock Lighthouse are in San Francisco and will probably be shipped on the steamer *Emily*, due to-day.

Fred Corrin brought his crew and tools in from Smith River on Wednesday having completed repairs on Rowdy creek wagon road bridge.

The Elk River Mill and all the logging camps closed down Thursday at noon to allow the employes to attend the funeral of George F. Morrill.

In our last issue it was stated that John L. Burns had been committed for insanity. The Cononel was released on

Read Smith's Cash Store ad on first page.

File your bills against the county with the Clerk, to-day.

Regular monthly meeting of the City Trustees next Monday night.

Regular quarterly meeting of the Board of Supervisors next Monday.

The *West Oakland Sun*, a new paper, has been received at this office. Long may it shine.

The brass band, under the leadership of A. B. Prentis, is doing well, and we shall soon have good music for all occasions.

Men's Red and Blue Flannel undershirts $1.25 at Lannes McLaren's.

A new minister is expected on the steamer this morning to fill the pulpit in the Presbyterian Church.

Quite a number of ladies, gentlemen and children, went out to Jordan creek on the excursion train last Saturday, to gather blackberries and spend the day.

The Gold Beach *Gazette* of the 22nd inst., entered upon Vol., IX. The *Gazette* has always been a welcome exchange at this office and we wish it continued prosperity.

We learn that Indians are daily arriving at the Klamath for the purpose of receiving their allotment of land. From reports, there will be more Indians collect there than was ever known to belong in that section.

Children's canvas shoes 95 cents at McLaren's.

The Board of Supervisors of Humboldt county have appropriated $1000 for assisting to make a county exhibit at the World's Fair. Del Norte should follow suit and not be the only county in the State not represented there.

Overland to Portland, Sacramento and San Francisco, via Gasquets Stage Line and S. P. Railroad. Through tickets $20.00 to any of above named points.

Lannes McLaren,
Agent, Crescent City.

A letter has been received here by J. B. Endert, from the John Jack Company, who were at Astoria on the 24 inst. They were waiting for a steamer and are expected to arrive here daily. Due notice will be given upon their arrival.

Some of the workmen at Boyet's camp on the Klamath wagon road moved very suddenly from their camp last Friday night, a female panther with two half grown cubs who were prowling around the camp was the cause of their hurried

Personals.

D. Leishman, of Requa, is up.

C. D. Moody, of Requa, was up this week.

Mrs. A. Grow, of Gold Beach, is visiting in this city.

Silas White, of Hunter creek, was up for a few days.

Attorney J. D. Nagle returned to the city on the *Emily*.

Capt. R. Bradley, of the steamer *El Capitan*, is here on a visit.

Joseph A. and Miss M. Bertsch have gone on a visit to the city.

E. C. Crawford left on the *Emily* for Eureka, by way of Trinidad.

Gen. J. G. Wall, of the firm of Hobbs, Wall & Co., is up on a short visit.

H. Westbrook, a prominent Smith River merchant, was in town this week.

Col. Yates took the stage for Gold Beach, Or., on a business visit, yesterday.

Mr. S. Bailey and sister Kate, of Smith River, paid our city a visit during the week.

Mr. Jas. Wakefield, of Pine Grove, made this office a pleasant call last Saturday.

Miss Laura Vorlander, school teacher at Requa, paid her relatives a visit Saturday.

Mrs. W. A. Fleming has gone to join her husband, at Gold Beach, Or., going overland yesterday.

Jack Martin, one of the Fire Commissioners of San Francisco, arrived on the *Del Norte*, Friday.

Miss Flora Wakefield, daughter of Jas. Wakefield, of this place, is attending school at Selma, Wash.

Miss Kulcher, who has been visiting her sister, Mrs. O. K. Steiger, departed on the last *Crescent City* for home.

Messrs. R. Soliss and A. M. Ryan, were in town this week, in the interest of the Stockton-Fresno Business College.

Mrs. H. Swords left on the *Crescent City* last Saturday, accompanied by her son Henry, who goes to attend the Santa Clara college.

G. Goldsmith, of the North West Seal Rock Lighthouse, was down for several days, making the RECORD office a call during his stay.

Mrs. J. G. Anthony, of Smith River, who has been on a visit to her daughter, Mrs. C. Winsor, of San Francisco, returned by the *Del Norte* on Friday.

L. F. Cooper and J. M. Richert returned from upper Smith River Sunday evening. Fish were plentiful, but as we well knew, there was a "hoodo" along.

A. Hackmeier, of San Francisco, who has been on a visit here for the past month, for the benefit of his health, returned home on the last *Crescent City*, greatly improved.

Raleigh Scott of Lone Ranch, Curry

Highest of all in Leave

Roya

ABS

Sawmill Gossip.

Elk River Mill, July

M. Larkin got a slight flesh finger by an edger saw the othe

The *Crescent City* took eigh loads of box shooks on her la San Francisco.

An order of 500 M feet of re redwood was finished the midd week, to go to a foreign market.

A. and R. Pierce, who have tract of "sticking" all the sprus sawed, are doing well, both bei and industrious young men.

A number of "kids" who atte in town, are working in the during vacation. If some of the happen to get their "heels they will feel sorry for ever w a box factory. The small boy curiosity about him than a buz and generally gets the worst of

Doc performed an operation lately. A friend wished to k marked, and Doc in his usual " style did a neat job. The cat' beautifully mortised with hi knife, and its tail cut po which he calls a bias cut in hi talk. "The ear marks show nent," as "Rancher," and us writers would say.

Three of our "pretty boys" ising for a pie-eating match place at Winchuck, Or., next The manner in which Fred c onto the hind quarter of a pi it, one would be led to Jud would get away with the pr the others are not slow, as th the perpetual, self-feeding, tra self-oiling, transfer system of down pretty fine.

The excursionists to the Seal Rock Lighthouse must our teamster rather rough, f counts—at least the trip did. came down here that evening lean, lank and hungry, as tho been pumped out by a steam f like the one the City Truste going to get. He has got back, and that captivating the pretty girls.

Three of the boys went ou blackberries last Sunday,

Submitted photo

Rare visitors sat next to the huge rocks workers hand-fitted at the lighthouse location.

It was no day at the beach

Building lighthouse was close to impossible

Editor's note: This is the second in a series of stories commemorating the St. George Reef Lighthouse Centennial year. The St. George Reef Lighthouse Preservation Society is working to preserve the lighthouse and welcomes new members. Information: Call President Guy Towers at 464-5339.

By Joan Riley
Triplicate staff writer

St. George Reef Lighthouse, completed in 1892, was the greatest engineering achievement in the history of the U.S. Lighthouse Service.

It was also a great human achievement.

Just surveying the chosen site on Northwest Seal Rock was formidable.

The area of rock above the low water line was about 40,000 square feet. The highest point on the wave-washed rock was 54 feet.

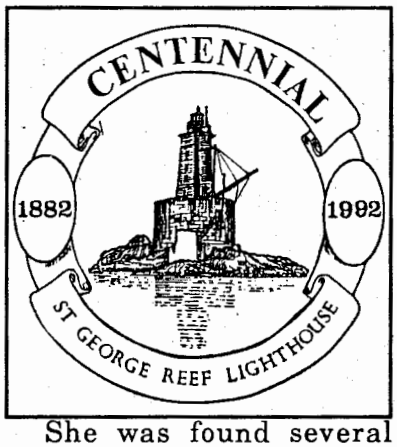
The first surveyor was there one hour when the water began to rise and he had to flee.

Later the chosen superintendent of construction, A. Ballantyne, completed a survey. In four weeks, he managed three trips to the rock with the help of local seal hunters.

Then in 1883, the steamer *Whitelaw* towed the sailing schooner *La Ninfa* from San Francisco to serve as barracks for about 25 workmen.

After turning back twice, the *Whitlow* made it to the rock, only to discover the water 12 fathoms deeper than expected.

While she went in search of more anchoring equipment, the *La Ninfa* disappeared.



She was found several weeks later, driven twenty-five miles away by the winds.

The schooner was finally anchored and a wire pulley was rigged to transport men and material 300 feet to the top of the rock.

In the words of Ballantyne, "(The pulley) worked excellently, only parting once as the men were getting into the cage on the rock, letting them fall a few feet, but doing little damage except a few bruises."

The day after landing in that summer of 1883, the men started blasting 10-foot wide benches around the outline of the pier. A center storage vault was blasted out to store 77,000 gallons of fresh water.

With every blast, men and ships were pelted with debris.

And the workmen lived with the constant threat that the storm-buffeted explosive powder stored on the rock might blow up.

The workers were consistently drenched with frigid water and buffeted by waves strong enough to wrench a 3.5-ton stone from its bed 30 feet above sea level.

In 1884, a large boom derrick was secured to hoist surfboats and materials, including two-to-six ton stones, ashore.

There was never room for more than 50 workmen on the rock. Those billeted there once awoke to find their quarters flooded. And frequently they had to run for their lives when storms hit.

With practice, they could evacuate everyone from the rock in 20 minutes, six at a time.

Remarkably, although there were many minor accidents and close calls during the 10 years of construction, only one life was lost. A rigger in the tower, letting go of a derrick tag line, was carried over the pier and killed.

Foot by foot and year by year, the caisson-like base and then the 78-foot tower of the lighthouse grew.

It was a solid, granite fortress of giant hand-fitted stones, built to last 100 years or more — and it has.

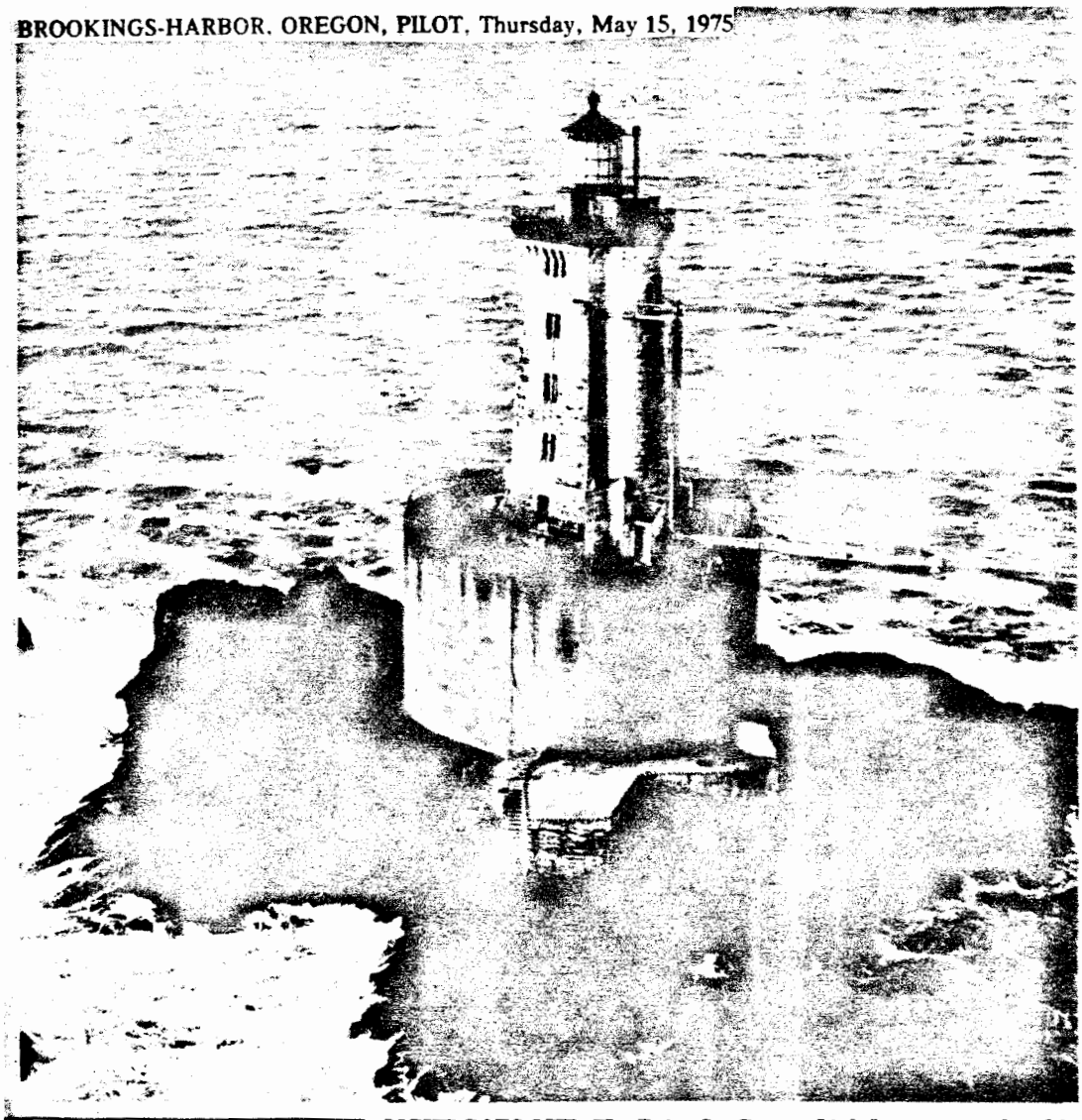
Inside, the floor of the keeper's quarters was tongued and grooved seasoned and polished Humboldt pine.

The inside trim was of Port Orford cedar and redwood. The outside doors and windows were oak. The metal work received four coats of paint.

Work was actually finished by the end of October 1891, but storms kept the men on the rock until November 8.

All the lighthouse lacked was its lens, which arrived from Paris in 1892.

(Next month – How that incredible lens came to St.



LIGHT GOES OUT--The Point St. George Lighthouse, completed in 1893, was decommissioned Tuesday, May 13. It took 10 years to construct the lighthouse at a cost of more than $1 million, the most costly lighthouse in the United States. The pier is 70 feet above normal water height and is topped with a granite tower. A new type buoy was placed in position seward from the lighthouse last month which contains a powerful strobe light which flashes every two seconds. The new buoy is also equipped with a fog signal and radio beacon. Formal de-commissioning ceremonies for the old lighthouse took place on Citizen's Dock in Crescent City.

2 C.C. American Reporters Guests On Coast Guard Boat

By George Merriman

On April 2nd, Millie and George Merriman, reporters for the Crescent City American, were honored with an invitation by the 12th Coast Guard District by Lt. (jg) Allen Rolland, Commanding Officer of the U.S. Coast Guard Cutter "Cape Carter", stationed at Crescent City.

Being shown around the ship while tied up at Citizen's Dock, the Commanding Officer asked whether we would be interested in taking a trip to the Coast Guard Light Station on St. George Reef to deliver some heavy equipment, as well as seeing first hand, a Coast Guard Cutter on actual duty.

This being a good chance to bring to our readers some of the activities of this time-honored tradition of a branch of the U.S. Government, we both accepted the invitation.

Lt. Rolland, the Commanding Officer, gave us a brief sketch of the origin of what is now known as the United States Coast Guard, in that it is the oldest sea-going service in the history of our Country, dating back to 1790.

Once known as the U. S.

During peace time, the Coast Guard is under the Treasury Department, and during war time, comes under the jurisdiction of the Defense Department.

Once known as the U. S. Lighthouse Service in later years it was combined with the Life Saving Service and Revenue Cutter Service to form the Coast Guard.

It was pointed out that the Revenue Cutter Service was the forerunner of the United States Navy.

On January 28, 1915, President Woodrow Wilson approved the act of merging the Life Saving Serving Service with the Revenue Cutter Service to form the Coast Guard.

Then on July 1, 1939, the Lighthouse Service was almagimated with the Coast Guard which now handles all of these facilities under one Department.

This ship, orginally designated as C.G. 95309, was built in 1953 at the Coast Guard Yards, Curtis Bay, Maryland.

She is 95 feet long, with an approximate weight of 100 tons, and has twin screws. Powered with four 500 h.p. high speed diesel engines, she can deliver 1,000 h.p. to each screw.

Equipped with the newest radar equipment and instru- hours.

The day that we were privileged to be invited aboard, it was the job of the "Cape Carter" to deliver some needed equipment that had been lashed to the forward deck. After this had been completed, the ship was to remain in the general area while workmen climbed out on the boom to install the lights, in case of mishap. In case of a fall, it was over a 100 foot drop into the ocean, and it would be almost impossible to effect any rescue from the reef, due to the heavy seas and current, which would put the responsibility fully upon the crew of the cutter.

Fortunately nothing happened, even though the winds were blowing about 25 knots, with heavy seas running, which caused the ship to list approximately 35 degrees.

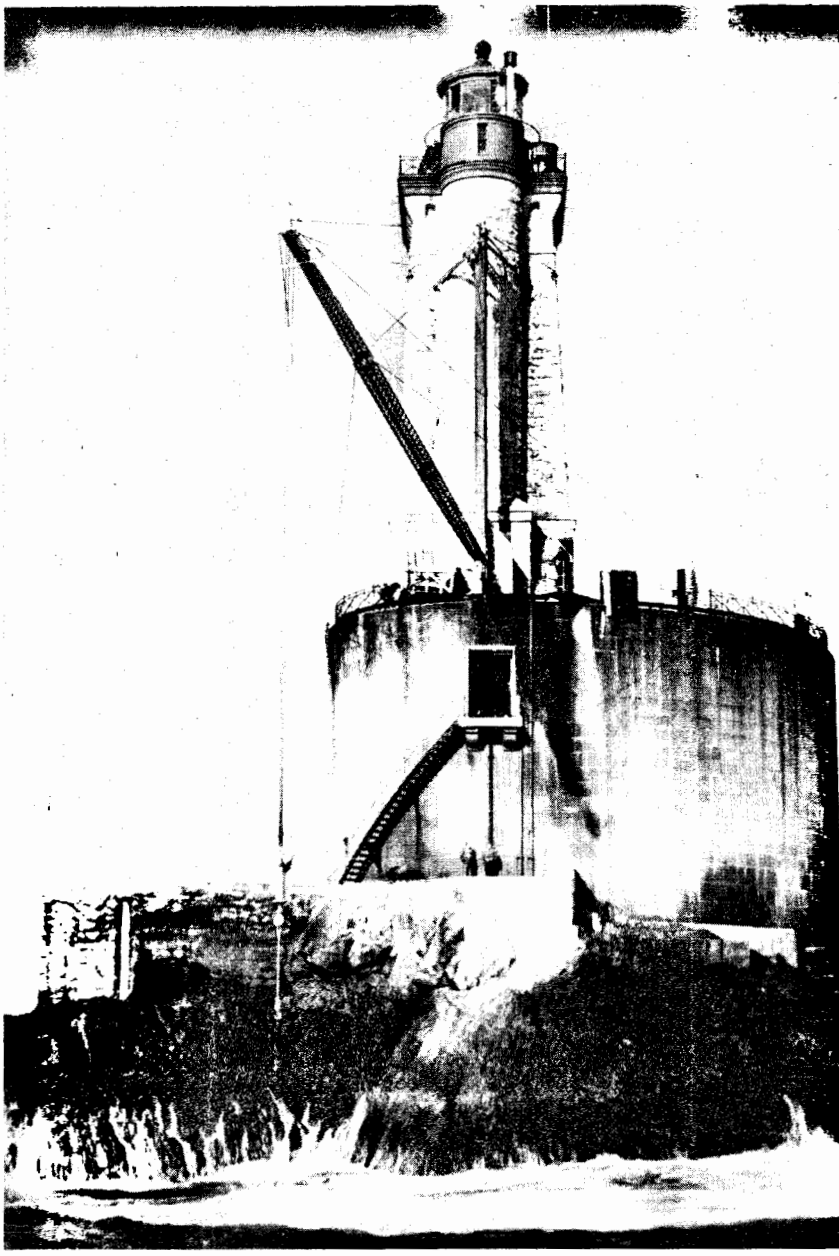
Skill and training of these men was shown time and time again, as the Cutter inched in towards this huge outcropping of rock, battered by the running seas to within 4-5 feet from the bow. Perfect seamanship, plus exact timing was needed as we made about six trips in close, where, in a matter of seconds, the crewmen had attached the boom line and the gear was whisked up into the air, to be placed on high ground. At times, only four or five feet separated the prow of the ship from the ragged rocks. Yet, by calculating the wind, the drift, the force of the waves and the weight of the ship, these men handled the ship as though she was a baby buggy. Never once, did Millie or I feel any uneasiness, knowing full well that these men knew their business.

This was further brought home after an interview with the crew, and of being told of how much training they have received.

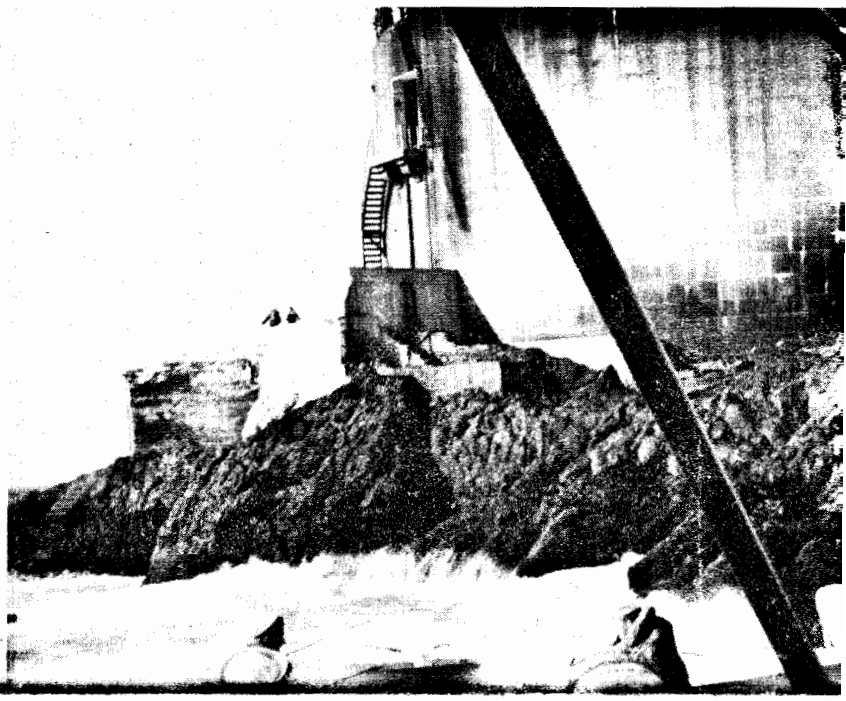
Lt. Rolland is married, and he and his wife have a six month old boy. After graduating from the Coast Guard Academy in New London, Connecticut in 1962, he is completing three years of active service, for a total of seven years.

The Lieutanant hopes to make this his career. To further this statement, he has received his orders to report to M.I.T., in Cambridge, Massachusetts at the end of this month, for a two year course in electronic engineering.

Donald Dobbs, Quartermaster Chief, is an eleven year veteran of the Coast Guard, and



PT. SAINT GEORGE lighthouse taken from deck of U.S. Coast Guard Cutte



By ERNIE COAN

CRESCENT CITY — When the little windjammers Paragon, Cameo and Laura Virginia anchored outside on the rough, blue waters of the crescent-shaped bay just south of Point St. George in April of 1852, there was no beacon to warn them of the ragged rocks or dogholes along the rugged coastline. No "wickies", to keep trim a beaconing light to guide them into a port of safety.

And, old mariners say there is nothing dinky about the fortysix miles of Del Norte coastline. It is a sealine of heavy breakers, big trees, jagged rocks and sunken reefs, strong winds and soupy fogs.

From Battery Point at Crescent City, north, is a rockbound coast, wild and rugged. Overhanging bluffs, high an washboardy, against which the ocean beats with bulldogged fury. Rocks, like sentinels of the deep, giant-like storm-beaten, corrugated by the churning, silvery spray, pierce the coastline. Stunted trees, hoary with age, coated with moss, wind-blown, bending with the storm, silent admirers of its grandeur in calm.

The bantam-sized brigs and sidewheel schooners just wallowed in the troughs of the sea– if rigging was gone, they were at the mercy of the snarling deep.

There was no means of communication– no beacon to fling its welcome beam. Doughty crews, who took their rum straight, manned the gallant wind jammers which were picked up by the heavy seas and slammed against the rocks or on a sandy strand as if a wet match. Probably none of the old mariners knew little of Weem, but master seamanship, won the hard way, guided the masted schooners through the slits of dogholes, into the shallow ports with the stars as their beacon and the riffle of the waters their warning.

BIRTH OF THE CRESCENT LIGHT

The Lighthouse Board of San Francisco, recognizing the need of a light in the open roadstead at Crescent City, which connected the life stream of a vast inland country, commenced the erection of a lighthouse on the Battery Point side of the forty-acre Federal Reservation extending to portions of the Crescent City townsite.

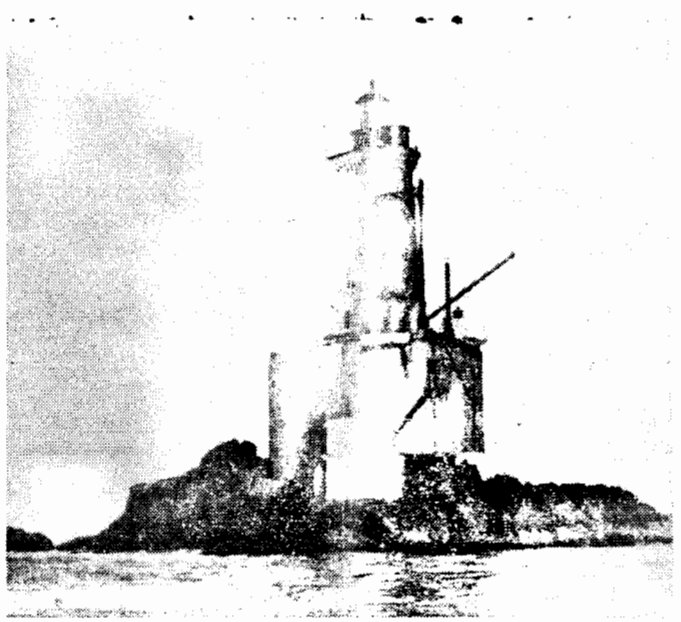
On December 10th, 1856, Construction Engineer Potter and his assistant, Van Court, lit the new sperm oil lamp, with its brass weights and lantern accessories bearing the label, "Made in France." Fifteen days later on Christmas morning, Theo. Magruder became the first official "wicky" of the Crescent City light, constructed at a cost of $25,000, which for near unto a century of years lighted the way to thousands of vessels into the port of refuge.

Through the years the worn, shorthand. Tells of broken chimneys, warming of thick lard oil, testing of the new mineral oil (Kerosene) of sickness and storms, of accident and beached derelicts, of casks of oil and passing ships. The comings of distinguished visitors from home and across the sea, of repairs and wicks– life of the "wicky", chronicled in cold, dry ink, faded now, of his faithfulness to detail, of the lonely, secluded job entrusted to him.

THE LIGHT'S STANCH WICKIES

Following Thos. Magruder as keeper came Charles Edwards, D. S. Hartwell, G. W. Emery, John Henecy. 1875 saw John Jeffreys take over the duties of keeping the light trimmed and the lens shining to the sea for forty long years. During the two wars and the years between, John Lund, J. Marhoffer, Jim Simonsen and Fred Saunders served their keeperships for the side-wheelers and steamers. In 1946 Wayne R. Piland, with his gracious wife, Martha, and their two children, were transferred to the Crescent City Light.

Under the constant keepership of Piland, who could boast of the best maintained equipment, buildings and grounds in the west coast district, and the wickies before him the old solid brass mineral oil lamp, replacing the first sperm oil type, which in turn yielded to the powerful two hundred and fifty watt electric bulb in 1936– was in fitness to be lit and carry-on in event the modern equipment should temporarily fail. From the rock basement, up



The most expensive lighthouse in the world — the Seal Rock at Point St. George, 8 miles offshore north of Crescent City. It cost $750,000. Built of hewn granite blocks from Mad River, the sentinel serves dutifully today. There is a hoist for unloading supplies from boats.—Photo by Wally Griffin.

the winding stairs, to the lantern tower, everything was ship-shape. The old Howard and Davis banjo clock has been clicking off the minutes steadily over the century– with polished brass kettles and urns and utensils vieing with gleaming white modern fixtures.

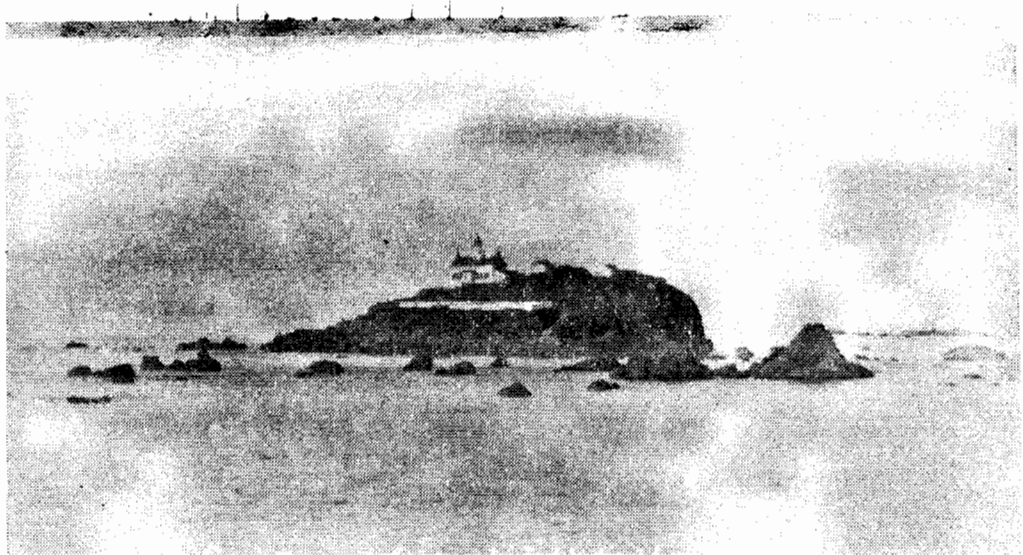
The visitor's register was opened July 23, 1893, with C. C. Strout, a teamster, as the first to top the clean page with nearly four thousand guests to follow through the years– until after World War II when the station was closed to the public. Visitors from far and near were honored with the lighthouse hospitality.

FINIS OF THE CRESCENT LIGHT

On October 31, 1947, keeper Piland received this notice: "Subject: Crescent City Light Station: Present information indicates that this light as now located is of little or no use to vessels entering Crescent City. With the completion of the U. S. Department breakwater to Round Rock it is intended to construct a modern light and fog signal on this rock. If certain unlighted buoys were replaced by lighted buoys in the approaches to the harbor, would it be possible to abandon this light in the interim period?"

With the keeper's affirmative response it was seen that before the venerable outpost of Del Norte civilization was to reach her century anniversary she would be abandoned. Today the light is switched off– only the well-kept buildings look out on the frolicsome seals playing among the rocks and the school of spouting whales– the responsibility of their care now rests with the Del Norte Historical Society.

Time takes her toll– be it flesh or rock. It swallows everything in stride. Since Piland began his duties at the Crescent Light, the pounding and lashing of the sea against Battery Point has taken yard after yard of rock and earth, until today



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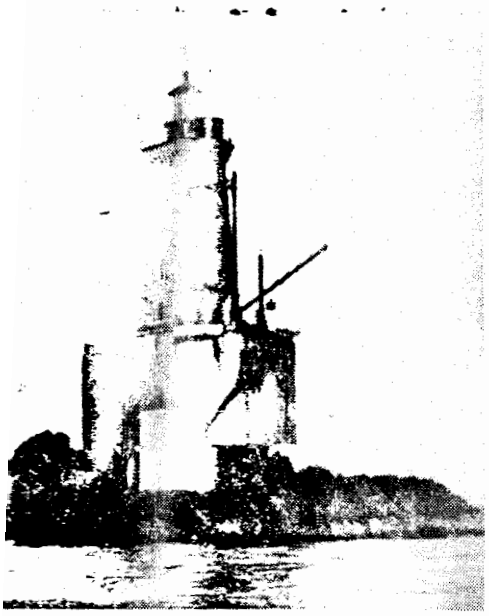

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Time takes her toll– be it flesh or rock. It swallows everything in stride. Since Piland began his duties at the Crescent Light, the pounding and lashing of the sea against Battery Point has taken yard after yard of rock and earth, until today in such close proximity the breakers toss their churning spray high up on the two-story lighthouse structure. "Great is the art of beginning– but greater the art is of ending."

GREAT WORK OF CONSTRUCTION

The Twelfth Lighthouse District extends from the boundary line of California and Lower California, a distance of some 800 miles of coastline.

Many of the lighthouses cost huge sums of money for construction, so much in fact, that it is impossible to even estimate the amount of money invested in the Twelfth District alone.

The Northwest Seal Rock Lighthouse, situated on an isolated rock eight miles off shore north of Crescent City in the storm center of the north coast and marks a dangerous reef on which many vessels have come to grief, cost $750,00 and represents 8 years of arduous and dangerous construction.

From Point St. George extend the Crescent City Reefs or Dragon Rocks, some 6 miles. The passage inside these reefs was used by steamers. Outside there are a few outlying rocks and, in storms, many vessels have been lost on sunken rocks, among them the Brother Jonathan in July, 1865.

The rock upon which the lighthouse stands is 40,000 square feet above the sea. The tower contains 6,000 square feet. There are 20 fathoms of water on the east side of Seal Rock, on the western side sheer interminable depths. The lighthouse is built of granite blocks, rough-hewn, then turned and finished. The building is 175 feet above the sea level, containing five stories and the lantern. The San Francisco Chronicle of June 9, 1892 said: "...it is one of the finest feats of engineering in America." On October 15, 1892, the Del Norte Record headlined, "Next Thursday night, the 20th, the Northwest Seal Rock Lighthouse is to be lighted up. It can be seen from Lover's Rock or Pebble Beach."

Captain Olsen, keeper of the light to 1913 and his four assistants, were virtual prisoners the year round on Seal Rock, as it is impossible to step out of doors due to winds of gale proportion. During moderate weather they were permitted to shore leave in turn. When Captain Olsen resigned from the service in 1913, Captain Jon Luckman took over until 1918, when he was transferred and Captain George Roux assumed the responsibilities. After World War II the control and management of the light-

highest honor.

By BILL SCHLICHTING
Pilot Staff Writer

CRESCENT CITY – Bob Bolen became one of only a handful of people in the United States to receive the Keeper of the Light award, the highest honor bestowed upon by the American Lighthouse Foundation.

Bolen, 82, is a resident of Addie Meedom House, an assisted living facility. It was there the St. George Reef Lighthouse Preservation Society met to present the award Aug. 24.

Brookings resident Phil Cox presented the award, which he said "is given to people who have volunteered above and beyond what would ever be expected from one individual in the promotion and saving of lighthouses and their history."

"This project has been a challenge," Bolen said after receiving his award. "Lots of people have been working in the background and I want to thank you all."

Bolen took action when the lantern room restoration was complete.

The glass room was removed from the top of the 146-foot-tall lighthouse situated on a rock northwest of Point St. George. The lantern was put in place in 1890 where it stood for 110 years.

Although the lantern room, which already had most of the glass destroyed, came crashing onto the beach two years ago, Dale Long, owner of Fashion Blacksmith in Crescent City, was able to restore the 19-foot-tall structure after 362 hours of labor, Cox said in an article published in Lighthouse Digest.

Unfortunately, all that remained was the $24,000 needed to hire a qualified air crane pilot to take the lantern room back to the lighthouse, lower it onto the pedestal so all 32 bolt holes would line up.

Cox wrote in the article: "When Bob Bolen heard that funds were not available to bring the restored lantern room back to the lighthouse, he decided he would do something about it. ... Bob sold a home (part of his retirement income) and donated the $24,000 needed to bring the lens back to the lighthouse." (Note: The lens was not returned. It is housed in the Del Norte Historical Society Museum).

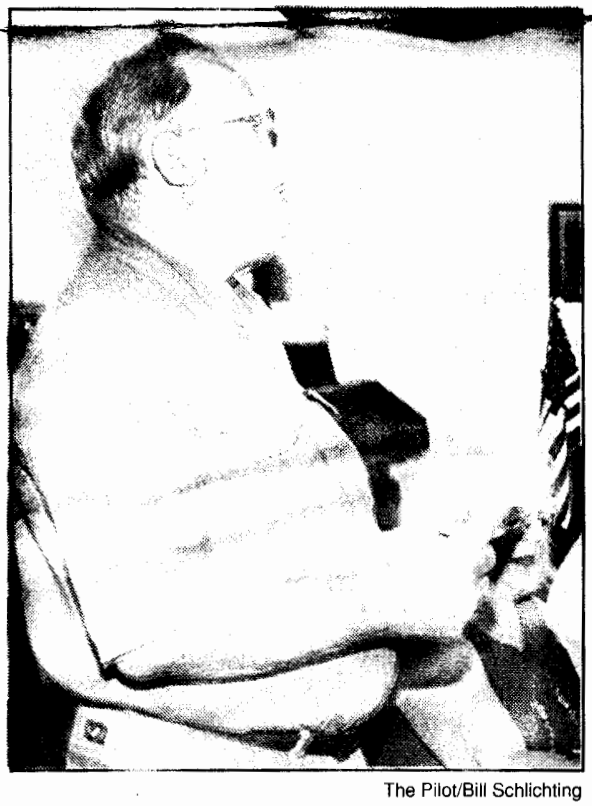
His only request was that he be allowed to have a seat in the chase helicopter to watch the lantern room being replaced.

The wish was granted. [illegible] a helicopter lower the 10,000 [illegible] onto the top of the lighthouse [illegible] owned by Erickson Air-[illegible] Point. Marty Martin piloted [illegible] air crane with a 72-foot diameter [illegible] two engines generating 4,500 [illegible]

See Lig

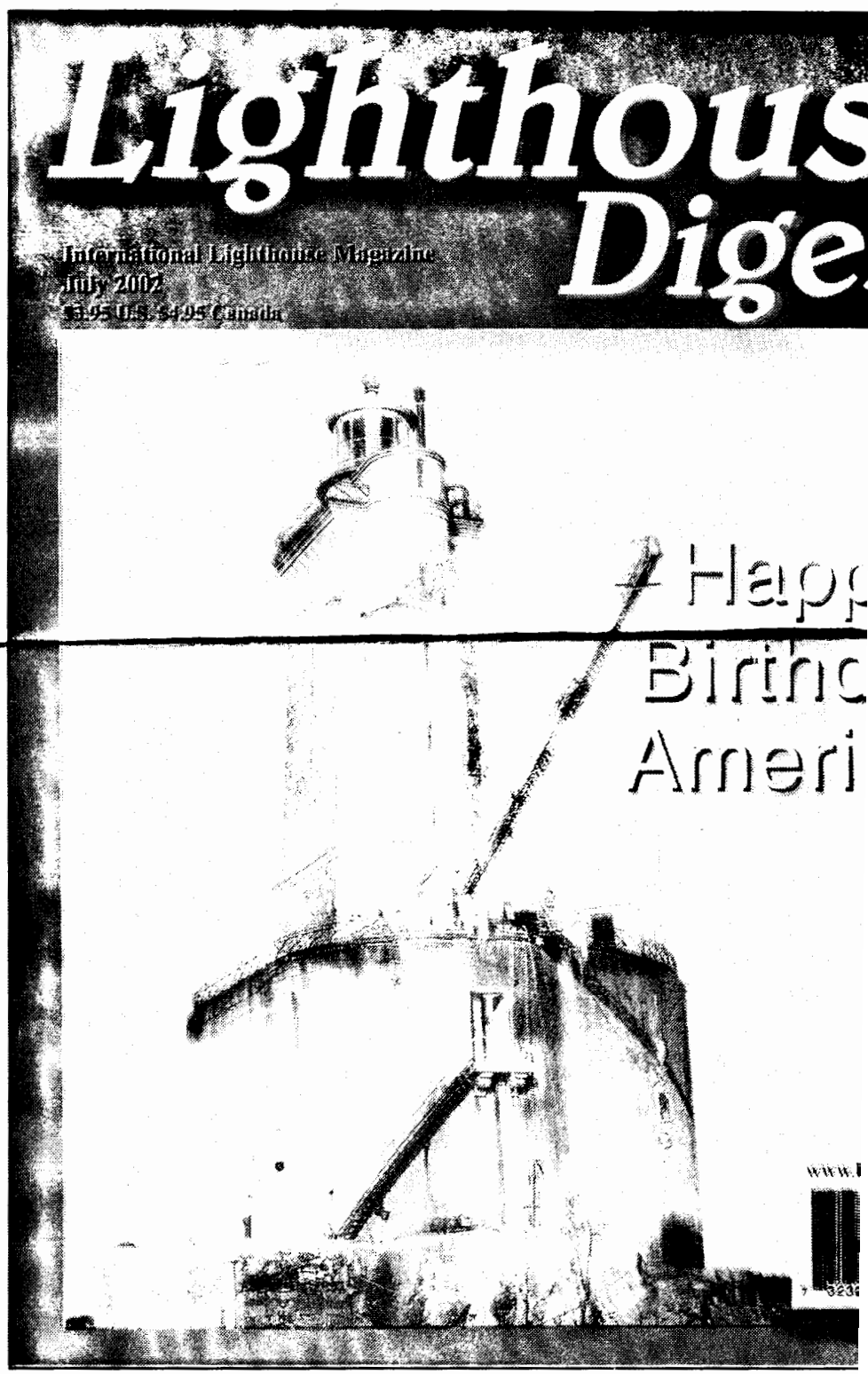


Family friend Barbara Wright looks at Keeper of the Light award wi



The Pilot/Bill Schlichting

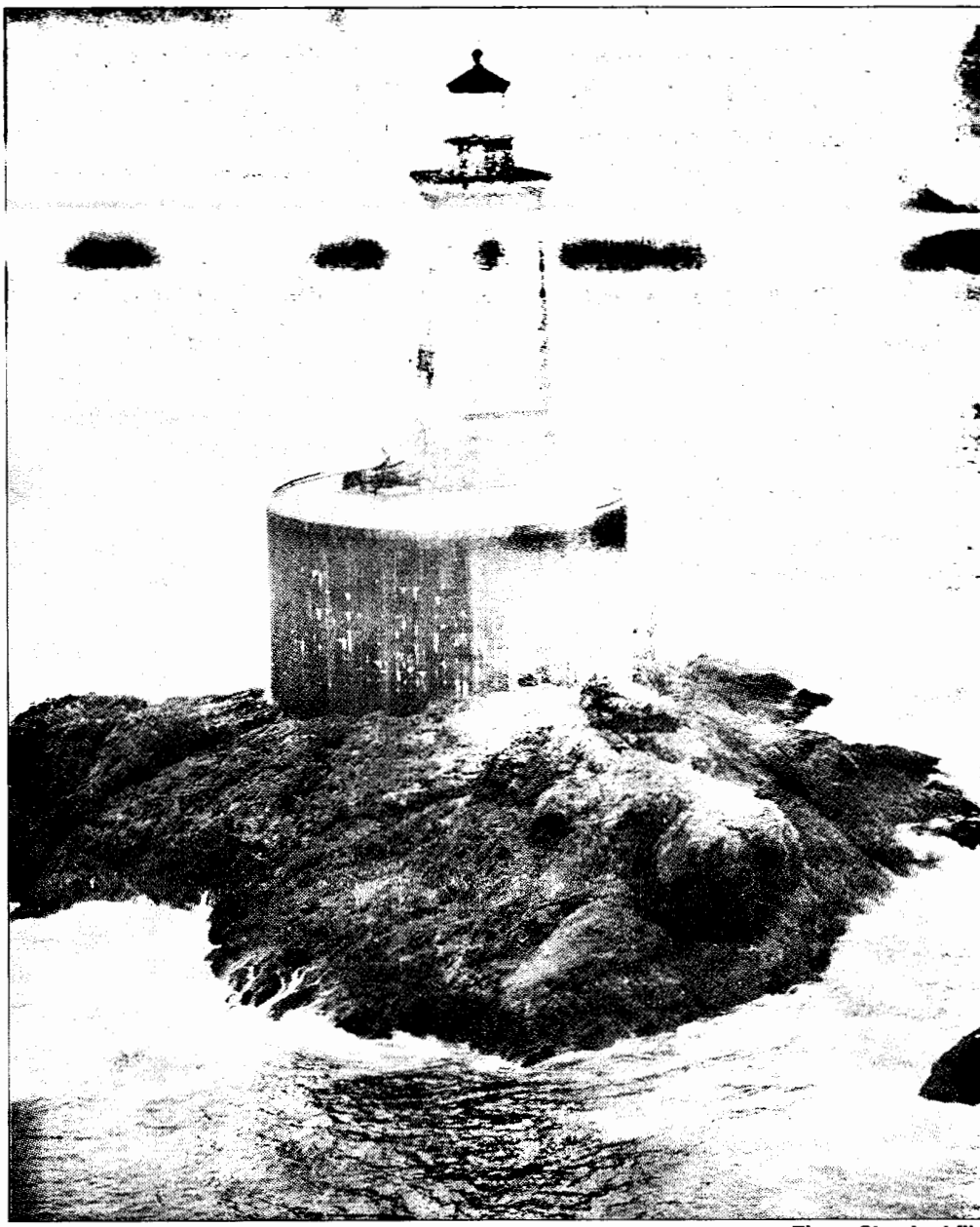
Brookings resident Phil Cox, author of Lighthouse Digest magazine article, reads letter from American Lighthouse foundation about Bob Bolen



Lighthouse Digest magazine featured a 1964 photo of St. George R in its July issue. Inside was an article about Bob Bolen and th restoration and its return to the top of the structure

Lantern room restored

Top of St. George Reef Lighthouse is on way back to Dragon Rocks



Times-Standard file

St. George Reef Lighthouse, located six miles offshore from Crescent City maritime landmark listed on the National Register of Historic Places.

CRESCENT CITY — After more than a year of reconstruction under the direction of the St. George Reef Lighthouse Preservation Society, the lantern room of St. George Reef Lighthouse is poised for a return to its former home atop a 70-foot granite tower on Dragon Rocks.

The lantern room was removed by a heavy lift helicopter last April, destined for Fashion Blacksmith, a shipbuilding and repair facility in Crescent City, where it was slated for repairs, reports Guy Towers, Preservation Society spokesman.

The structure, built of massive cast iron, consisted of a circular roof and, beneath this, 48 window frames, all of which formerly housed a giant Fresnel lens which warned mariners of the reef's dangers for nearly a century until the lighthouse was abandoned in 1975.

"During the relocation attempt, however, the helo, in an accident which received national media coverage, dragged its six-ton load on the beach as it approached the landing site, destroying the window frame and causing slight damage to the dome," Towers said.

After examining the damage, the Preservation Society and Dale Long, owner of Fashion Blacksmith, concluded the accident was fortunate after it was revealed that the cast iron in the frames was badly decayed and could have failed in the future in spite of restoration, Towers said.

A plan was developed to rebuild the window supports of stainless steel, reattaching them to the roof, which only needed minor repairs. In succeeding months, funds were raised to purchase the stainless steel and 48 new panels of polycardonate to replace glass removed before the relocation attempt.

Construction on the lighthouse lantern room is now complete, Towers said, except for installation of the windows and mating with the dome. This work, he said, is expected to take place in the next few weeks.

The Preservation Society hopes to return it to the tower this fall. Contact has been made with a private helicopter company in Oregon, and a major fund-raising campaign is under way to raise $25,600 to pay for the sky crane heavy lift craft needed for the job, along with $13,000 in construction costs.

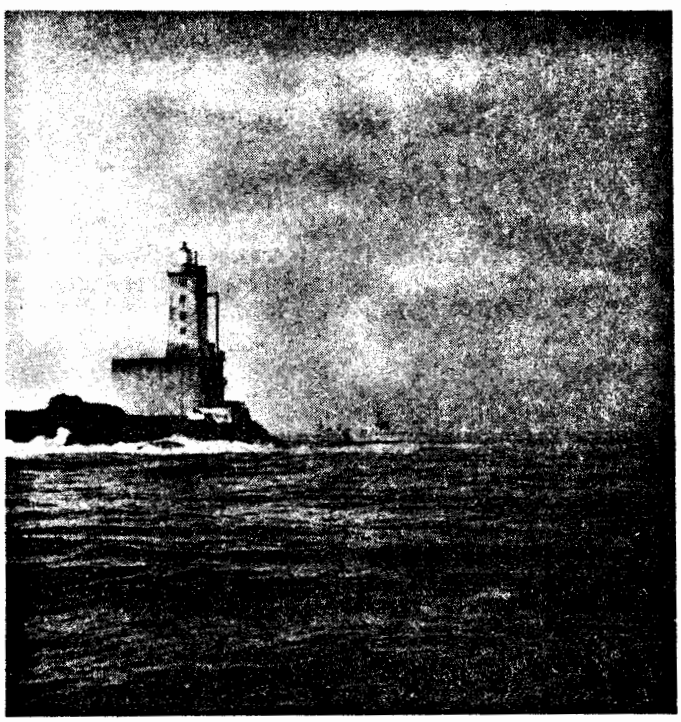
The St. George Reef Lighthouse Preservation Society was formed in 1986, and its goal is to restore the maritime landmark, which is listed on the National Register of Historic Places, and to make it accessible to the public by offering helicopter tours of the site, located six miles at sea and minutes by air from the Crescent airport. Completion of this phase of the re tion plan will allow tours to start as early next spring.

The Preservation Society raises funds th donations, sales of merchandise and mem ships. The organization may be contacted writing to P.O. Box 577, Crescent City, 95

Light House
File
St. Geo. Reef

AMERICAN, Crescent City, Calif., Saturday, January 4, 1969

OUR MILITARY IN SERVICE



CHRISTMAS DAY AT LAST — Two men stationed on St. George Reef Light, BM1Ronald N. Adams and EN3 Larry B. Wetzel, were due to be disembarked on Monday, December 23, to be home with their families for Christmas. High winds and seas prevented the Coast Guard Cutter Cape Carter from transferring relief personnel onto the lighthouse until Thursday, December 26. Shown above is a picture of the relief operation taken from CG44311 stationed in Brookings, Ore. The 44 footer acts as a backup vessel in case something goes wrong in this tricky manuever.

Next Thursday night is the time set for the Northwest Seal Rock Lighthouse to be lighted up. It can be seen from Lover's Rock or Pebble Beach, and no doubt if the weather is fine, many will take the trip up the coast to see it.

Del Norte Record
Oct. 15, 1892

Times-Standard Wednesday, April 10, 1991

North Coast Yesterdays / April 10

☐ 25 years ago, 1966: St. George Reef Lighthouse near Crescent City, which was built in response to a shipwreck which cost 213 lives and $300,000, may be doused because of the risk and expense of operating it today.

☐ 50 years ago, 1941: An imaginary eye-witness account of the events of the first Good Friday, based strictly on the Scriptures, will be broadcast at 9:20 p.m. tomorrow over station KIEM.

☐ 75 years ago, 1916: The S.S. City of Topeka sails for San Francisco at 4 p.m. today. Cabins sell from $6 to $8 one way and $12 roundtrip.

☐ 100 years ago, 1891: Upon the completion of the new Odd Fellows Hall at Blue Lake, Professor Holland will give a masquerade ball there.

Sources: Humboldt Times, Humboldt Standard

May 17, 1975 Crescent City, California Del Norte Triplicate

They Were The Last Men To Run The Lighthouse

Officers and crews who served on the Pt. St. George Reef light during its 84 years of existence were commended for their devotion to duty and special awards were given the crew which spent the final tour on the rock in a ceremony held at Citizens Dock Tuesday afternoon.

Awarded plaques were Chief Petty Officers James Sebastian, officer in charge of the light in the final tour, Petty Officer First Class Louis W. Salter, MK2 Rusty Woodward, Seaman James Dunham and Seaman Apprentice Gary Newberry. Sebastian was also presented the last flag which flew over the Pt. St. George light station.

Presiding at the ceremonies was Lt. Theodore Nutting, commander of the Humboldt Bay station, who reviewed the construction and history of the Pt. St. George light.

In earlier days, he said, Coastguardsmen who served on the rock had to row ashore. Later they were given a power boat which was stored on davits when not in use. After five men were lost in 1955, however, the system was changed and men were taken to and from larger Coast Guard vessels with a derrick arrangement.

Commander Nutting, in presenting plaques to the final crew, said they maintained the station in top condition until the very end.

WHO'S WHO IN DEL NORTE!

The 1951 Hero of the Year lives in Del Norte county. He is Chief Boatswain Mate Fred Permenter, USCG, officer in charge of the Pt. St. George reef light station. A career coast guardsman, he entered service in 1938 at the age of 19.

The Mississippi lad who went to sea all the way from the Mississippi river to New Guinea last week was given the Gold Medal of Valor by the American Legion Post No. 27, Baltimore, Maryland, at a banquet held in the Emerson hotel. Rear Admiral Russell E. Wood, representing the commandant, pinned the medal on him.



FRED PERMENTER

The Treasury Department Gold Life Saving Medal was presented to him last Tuesday in the office of Secretary of the Treasury Snyder in Washington, D.C.

The 33-year-old coast guardsman lives with his wife and four young sons on the shore station near the Pt. St. George reef light station.

"I'm so proud of him," says Mrs. Permenter, "and I'm just bursting, waiting for him to come home."

Mrs. Permenter, who has lived with her husband in many places since she left her native Memphis,

(Continued on Page 10)

WHO'S WHO

(Continued from Page 1)

Tennessee, 11 years ago, is delighted with life at the isolated quarters. They have always lived in cities. Their sons, Richard 8, Fred 5, Douglas 3, and Steven 15 months, can "run wild." The coast guard pickup serves as school bus for Richard.

Mrs. Permenter is also grateful that her husband lived through the tragedy which took the lives of three mates.

His official citation tells the story:

"For extreme and heroic daring on 5 April 1951, when he went to the assistance of five men who had been thrown into the sea when their motor launch was capsized by heavy seas at St. George Reef Light Station, Crescent City, California. PERMENTER immediately sent out a call for assistance and directed operations to hoist the swamped launch and recover a life raft. Then, climbing down to the base of the tower with the life raft, PERMENTER, completely disregarding his own personal safety and despite the rocks and heavy swells below, threw out the raft and jumped 20 feet into the sea. Swimming after the drifting raft, he climbed aboard and paddled past a mooring buoy on which two of the men that secured themselves. Ascertaining their safety, he located and picked up a third man, who was unconscious, and pulled him aboard. when PERMENTER, due to physical exhaustion, was unable to pick up a fourth man, he lashed him to the raft and continued, without success, his efforts to locate the fifth victim. Some time later, a fishing boat arrived on the scene and all were taken aboard. PERMENTER'S outstanding courage, initiative, fortitude and unwavering devotion to duty while endangering his life during this rescue reflect great credit upon himself and the United States Coast Guard."

Permenter's two new medals will be added to a wartime collection which include: unit commendation ribbon, Asiatic-Pacific ribbon with two stars, Philippine liberation with one star, American theater, Pre-Pearl Harbor, World War II victory medal and the good conduct medal with two stars.

His war service took him from duty on the Mississippi to escort duty in the Atlantic aboard the vessel E. 15 montl in the Sc ing return for duty.

He tok February, 1 medals two adays his du but he stand ery 10 days.

● BUTAN

Lite House File

~~POINT~~ ST. GEORGE REEF LIGHT STATION

~~Point~~ St. George Light Station is located on a rock north of Crescent City, eight miles offshore. A rocky reef extends 6 miles along the coast from Pt. St. George. Many ships have used the inside passage while other ships use the safer passage west of the light station. A number of ships have been wrecked on this reef, among them the Brother Jonathon in 1865 and the Queen Christina in 1907. The rock on which the lighthouse was built contains 40,000 squarefeet above sea level, while the tower contains 6,000 square feet. On the shore side of the rock the water is 20 fathoms deep while on the west side the bottom of the ocean extends much further down. The building is five stories high and the light is 175 feet above sea level. The structure was built of hugh granite blocks that were hand hewn and mined on Mad River in Humboldt County. From this location the blocks were hauled to Eureka where they were loaded onto boats that carried them to the location where the light house was built. It was a very dangerous and difficult job to unload the heavy blocks onto the rock in the face of very rough seas and heavy north wind that blows most of the time, all year long. It took 8 years to complete the long and dangerous work at a cost of $750,000. It was the most expensive lighthouse in the world to build.

The light can be seen for many miles up and down the coast on clear nights. Captain Olsen was a keeper of the lighthouse until 1913 with the help of four assistants. The men had to stay in the lighthouse for months at a time, as it was too dangerous to go out in the open in face of heavy seas, that at times washed completely over the rock and to stand up against the heavy northwest wind.

After Capt. Olsen resigned, John Luckman was in charge until 1918. When Luckman's time was up, George Roux took over. After the second world war the operation of the lighthouse was taken over by the United States Coast Guard Service.

HANDWRITTEN BY RALPH HUGHES DATE UNKNOWN---received by the museum in July of 1984



File photo

Robert Bolen and Dave George spent four months assembling the two-ton Fresnel lens

Bolen saved lighthouse's lens

Editor's note – This is the eighth in a series of stories commemorating the St. George Reef Lighthouse Centennial year. The St. George Reef Lighthouse Preservation Society is working to preserve the lighthouse and welcomes new members. Information: Call President Guy Towers at 464-5339.

By Joan Riley
Triplicate staff writer

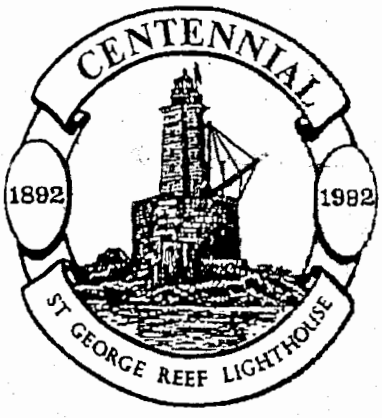
The magnificent first order Fresnel lens remained in the St. George Reef Lighthouse for eight years after the lighthouse was abandoned by the Coast Guard in May, 1975.

In 1982, Del Norte County Historical Society trustee Robert Bolen learned the lens was to be removed and placed in the Coast Guard Museum on Treasure Island in San Francisco Bay.

But retired Coast Guard Officer Wayne Wheeler, who was in charge of preservation and restoration of lighthouses, told Bolen, "If you have a place for it, you can have it."

By coincidence, Bolen had just started to build an addition to the main museum on H Street in Crescent City.

It took many ice cream so-



cial and other fund raisers, plus county contributions, to complete the building.

In 1983, when Bolen notified Wheeler he was ready, the Coast Guard buoy tender Blackhaw from San Francisco was loaned and the crew donated four days of their time to the task of removing the lens.

When the men entered the lighthouse they were greeted by a life-sized dummy dressed in rain gear, hanging from a rope — a joke by the last Coast Guardsmen to leave eight years earlier.

Dismantling the lens – which stood 7-foot, 10-inches high and 73 inches in diameter – proved to be a hot job, with the sun's heat magnified by the lens.

One man, Bolen recalled, was working in the vortex of the magnifying glass when his pants caught on fire. Another [illegible] a cigarette using the heat at the focal point.

The lens was lowered from the tower to the deck of the lighthouse, one piece at a time, with a 10-foot boom.

The Blackhaw was anchored approximately 250 feet away. A line was run from the lighthouse to the boat, and the lens pieces, sandwiched between old surplus mattresses, were pulled across to the boat.

Only one piece broke. It was put back together, but it later shattered while being cleaned at the museum.

At Crescent City, the pieces were placed on a borrowed flat-bed truck for the trip to the museum. There were 36 crates, each weighing about 250 pounds.

Each piece was carefully numbered as it was being dismantled — and then the Coast Guard took the list away with them!

"So we reassembled it using common sense, aided by the original numbers the maker had put on them," Bolen said.

The task took Bolen and his helper, Dave George, four months.

"We learned as we went along," said Bolen, a retired aircraft maintenance man who "was always fascinated by lighthouses."

The assembled lens stood 18.5 feet high, was 7 feet wide and weighed more than 2 tons.

The restored and reassembled lens was unveiled in early May, 1984.

It sits on a pedestal which rotates and now has a 100 - walt bulb where once 1,000 watts shined.

Visitors to the main museum, which is open through the summer months, may listen to the recorded story of the St. George Reef Lighthouse and its lens.

The lens originally cost the U.S. Lighthouse Service $15,000. Today, it is valued at between $1 and $3 million.

There will never be another lens like it – nor another lighthouse like St. George Reef.

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The St. George Reef Lighthouse as it appeared in 1964. The 146-foot tower took ten years to build and at $726,000 it was the most expensive lighthouse built by the United States Lighthouse Service. It originally housed a first order Fresnel lens that was shipped from France and first lit in 1892. The lighthouse was abandoned in 1975 when it was replaced by a lighted buoy. Photograph taken in 1964 by Lt. Larry Munhall (USCG Ret.)



Dome returned to St. George Reef Lighthouse, see story on page 14.

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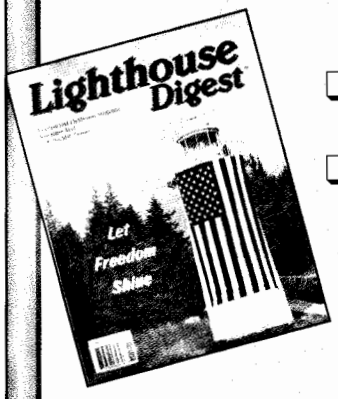

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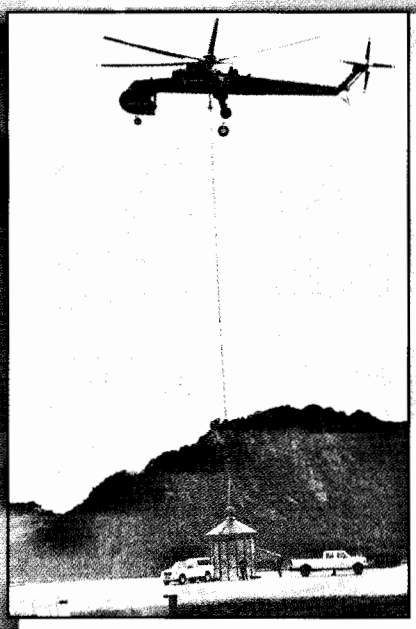
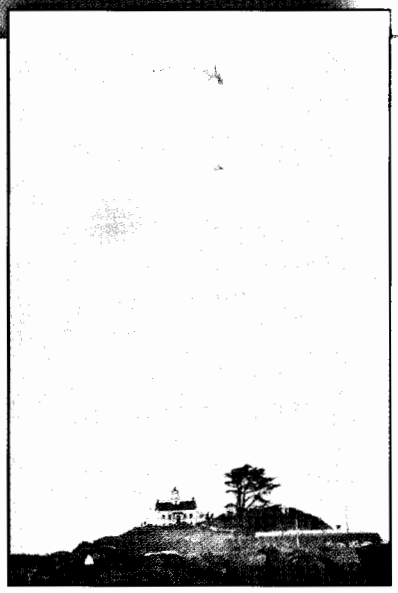
Yes, Angels Do Fly! Dome Returned to St. George Reef Lighthouse



The air-crane (helicopter) is about to lift off with the lantern room for the six-mile trip out in the ocean to the St. George Reef Lighthouse. Photograph by Phil Cox of Brookings, Oregon.



Air-Crane and lantern room pass over Battery Point Lighthouse on their way to St. George Reef Lighthouse. Photograph by Phil Cox.

By Phil Cox

It was two years ago that the St. George Reef Lighthouse Preservation Society's plans for a quick restoration of the lantern room of the historic St. George lighthouse were dashed when the lantern room, while being removed by helicopter, smashed to pieces on the beach after being airlifted from the lighthouse to the mainland. We covered the story extensively in *Lighthouse Digest*. For those of you who saw the recent program "Save Our History-American Lighthouses" on the History Channel, this past April, you viewed the crashing of lens as it was caught on film. It made a lot of us want to cry.

However, two years later the lantern room was finally restored, a major feat in itself, but the small nonprofit group did not have the $24,000 needed to bring the lantern room back to the off shore lighthouse.

Enter Bob Bolen, a man who knows what saving history is all about. To refresh our reader's memories we ask that you refer to the April 2001 issue of *Lighthouse Digest* for a story titled, "Bob Bolen - What Volunteerism is all about." By reading that story you will soon come to realize that Bob Bolen is truly one of America's lighthouse heroes.

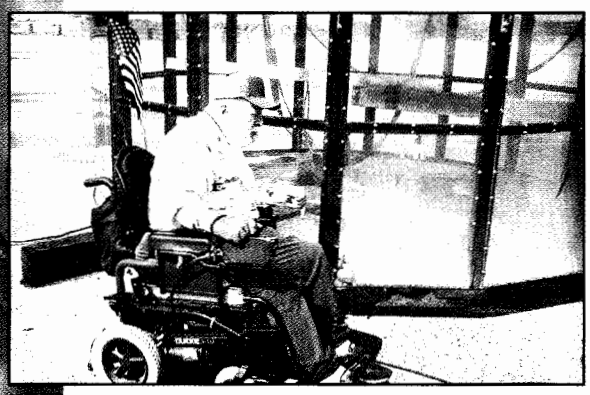
When Bob Bolen heard that funds were not available to bring the restored lantern room back to the lighthouse, he decided he would do something about it. Bob Bolen is a man of modest means. He lives in an assisted care facility and uses a wheelchair to get around. Bob sold a home (part of his retirement income) and donated the $24,000 needed to bring the lens back to the lighthouse. He had only one request, that he be allowed to have a seat in the chase helicopter and watch the lantern room being replaced.

The day the event was to happen, Bob was not content to wait for the transportation to take him to the site. Instead he drove his electric wheelchair from his care home in North Crescent City, CA, the 3 1/2 miles to the Whalers Island Pier Parking Lot, which was the staging area where the lantern room awaited to be airlifted back to its rightful place atop the lighthouse. This is one determined man! Unfortunately, fog prevented the lantern room to be airlifted that day. Bob would have to wait until tomorrow. He headed home, and halfway back the battery on his electric wheel chair died. It was left at an accommodating business and he hitched a ride home.

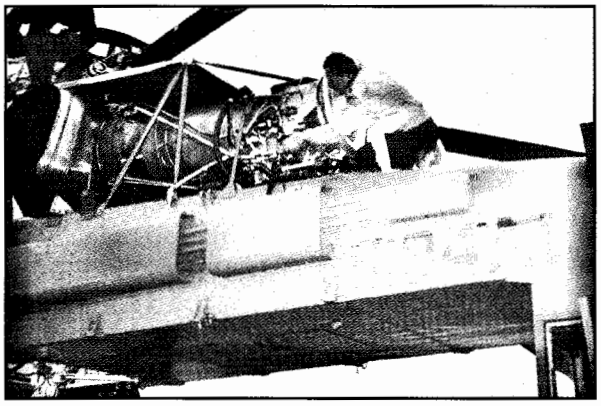
The next morning Bob arrived in a car, with just a regular wheelchair. And min-



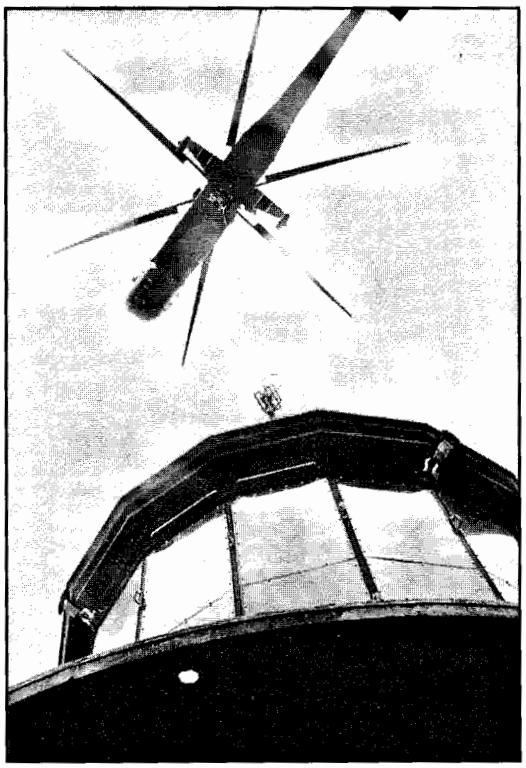
The arrival of the Erickson Air Crane Co. Photograph by Phil Cox



Bob Bolen on site at Whalers Island Pier Parking Lot, the day before lift off. The restored lantern room is behind him. Photograph by Phil Cox.



Air-Crane pilot Guy "Marty" Martin making preflight inspection before lift off to take the newly restored lantern room to St. George Reef Lighthouse.



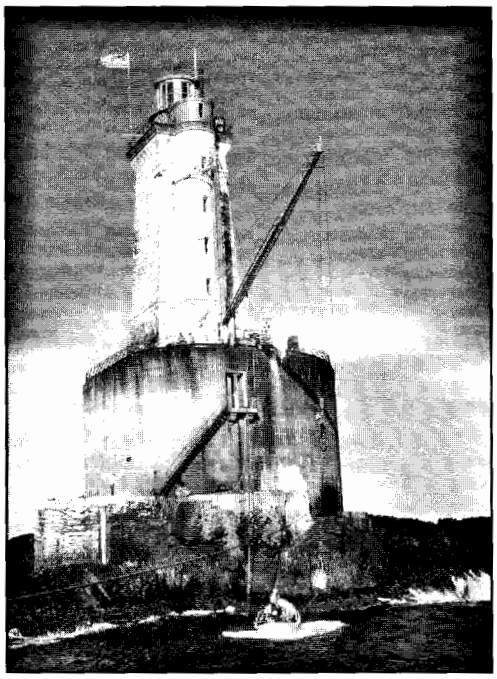
The giant sky crane helicopter lowers the lantern room into place atop St. George Reef Lighthouse. Photograph by Jennifer Grimes, courtesy of the Daily Triplicate Newspaper, Crescent City, CA.



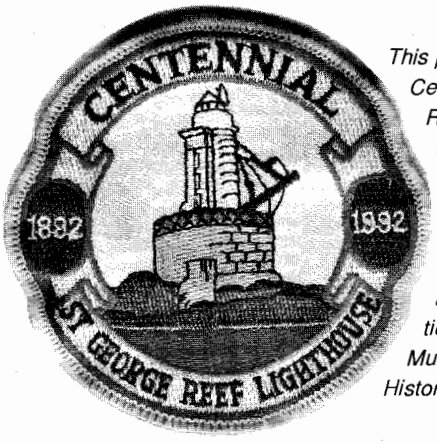
Greg Acton (left) and Nick McNamara (right) preparing the surface of the lighthouse that the dome will fasten to. Photograph by Jennifer Grimes, courtesy of the Daily Triplicate Newspaper, Crescent City, CA.



Guy Towers, president of the St. George Reef Lighthouse Preservation Society, gives a thumbs up after the lantern room is put safely in its place. Photograph by Jennifer Grimes, courtesy of the Daily Triplicate Newspaper, Crescent City, CA.



The St. George Reef Lighthouse as it appeared in 1964. The 146-foot tower took ten years to build and at $726,000 it was the most expensive lighthouse built by the United States Lighthouse Service. It originally housed a first order Fresnel lens that was shipped from France and first lit in 1892. The lighthouse was abandoned in 1975 when it was replaced by a lighted buoy. Photograph taken in 1964 by Lt. Larry Munhall (USCG Ret.)



This patch featuring the Centennial of St. George Reef Lighthouse was sent to us by Dennis Streng of Placentia, CA. Dennis was stationed at this remote lighthouse in 1963. The patch will be added to our patch collection on display at the Museum of Lighthouse History in Wells, Maine.



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Guardian of St. George Reef

by Donald Rutherford

A gray tower rearing from the ocean is visible on a clear day from Point St. George, just north of Crescent City, California. Completed in 1892, the tower is St. George Reef Lighthouse, America's costliest—because it was the most difficult to build. When a storm sweeps in from the Pacific, the lighthouse disappears into the rain and mist. The six miles of ocean covering St. George Reef that separates the lighthouse from the shore becomes a maelstrom of surf, foam and spray.

No lighthouse guarded the reef during a summer storm in 1865 as the steamer *Brother Jonathan*, its paddle wheels flailing, crept past. Though the captain had protested about overloading, the owners threatened to fire him if he did not sail from San Francisco for the Columbia River. Shortly after passing St. George Reef, heavy seas and gale winds forced *Brother Jonathan* to a standstill. The skipper, an experienced seaman, reversed the course of the steamer and headed for shelter at Crescent City.

Brother Jonathan never made it. An outlying rock of St. George Reef impaled the steamer. Less than an hour later, *Brother Jonathan* slid off the rock and plunged to the bottom. On board were 165 men, women and children. One lifeboat managed to fight clear of the wreck. On board were the only survivors—five women, three children, ten sailors and the third mate. For days afterward, volunteers from Crescent City searched the beaches for bodies. It was the worst maritime disaster on the Pacific coast.

The *Brother Jonathon* wreck underscored the need for a lighthouse to mark St. George Reef. President Andrew Johnson designated Northwest Seal Rock, about one and a half miles west of the main body of the reef, for that purpose.

Following the Civil War, Congress had little appetite for sinking money into the sea. Not until 1882, some seventeen years after *Brother Jonathan* sank, did the lawmakers loosen the purse strings. They appropriated only $50,000, scarcely a down payment on a lighthouse that would cost fifteen times that much.

The Lighthouse Service chose A. Ballantyne to build the new lighthouse on Northwest Seal Rock. He had built Tillamook Rock Lighthouse in Oregon, one of the more difficult feats of lighthouse construction up to that time.

On an April morning in 1883, Ballantyne arrived at Northwest Seal Rock aboard the salvage steamer *Whitelaw*. The steamer towed the schooner *La Ninfa*, which would serve as a barracks and store ship. The seasick workers aboard the two ships included quarrymen, masons and a blacksmith. Tools, supplies and explosives needed for the first season's work crammed the holds of the two vessels.

The *Whitelaw*'s crew tried to set four moorings to anchor the schooner near the rock, but they found the water deeper than reported. The mooring chains weren't long enough for the extra depth and the spar buoys couldn't support the weight of additional chain. Setting one mooring, to which he secured the schooner, Ballantyne steamed off to Humboldt Bay for more chain and bigger buoys. A storm came up, and when he got back to the scene two weeks later, schooner and mooring were gone. Getting a report that the schooner had been sighted off Cape Mendocino, he took off after her, brought her back and set to work mooring her securely near the rock.

To transfer men and equipment between *La Ninfa* and the rock, he had an aerial tramway erected between the two. A "cage," a four-foot-diameter iron ring with planks fastened to it, hung from a block riding on a traveler cable.

Ballantyne had surveyed Northwest Seal Rock during the previous summer.

. . . a calm sea could change quickly . . . . While the men worked, Ballantyne kept one eye on the sea. At his warning cry, the thirty or so workers secured their tools and headed for the cage.

While there, he learned that a calm sea could change quickly into swells that broke over the rock. While the men worked, Ballantyne kept one eye on the sea. At his warning cry, the thirty or so workers secured their tools and headed for the cage. When five or six men were aboard, Ballantyne release the cage and it slid rapidly down the traveler to the schooner. There, a donkey engine attached to an endless cable hauled the cage up to the rock for another load. It took less than twenty minutes to evacuate everyone from the rock.

The men prepared the foundation for the pier of the lighthouse by hand. To drill holes in the rock for explosive charges, one man held a stationary drill while his partner struck it repeatedly with a sledgehammer. A quarryman then loaded the holes with explosives. When Ballantyne shouted "fire in the hole," the men scurried into any available niche in the rock. Even so, shards of rock showered them. The schooner fared even worse. Her bulwarks and decks bore many scars and, on one occasion, a large rock flattened a deck house.

By the time the last charge was fired, the rock had a flat top and a series of ledges, giving it the appearance of an Aztec pyramid. The ledges would provide a footing for the massive stones for the pier.

Towards the end of September, autumn storms forced an end to work for 1883. According to the final report on the project that Ballantyne wrote in 1892, waves from one storm repositioned blasted rocks, some weighing more than a ton, that had been dumped over the side. He wrote that they were "swept like chips along the whole length [of the rock] and over again on the east side." He also reported that waves washed two men off the rock, but they were rescued.

That fall, Ballantyne discovered a deposit of granite suitable for the pier and tower at Mad River, a few miles north of Humboldt Bay. During the winter, stone blocks weighing two tons or more were quarried, roughly shaped and shipped by rail to Humboldt Bay.

In a 120-foot-long shed, stone cutters finished the blocks, guided by full-scale metal templates. They cut a mortise into one end of each block and a tenon into the other. Each block had to fit a precise location in the lighthouse pier, so the men checked every one.

When assembled at the lighthouse site, each block would be locked by the mortise and the tenon to its neighbors on either side. Dowels—lengths of bronze rod 2½ inches in diameter set into drilled holes—would secure it to the block above and to the rock or block below. The dowels and interlocking blocks would enable the lighthouse to withstand the severest storm.

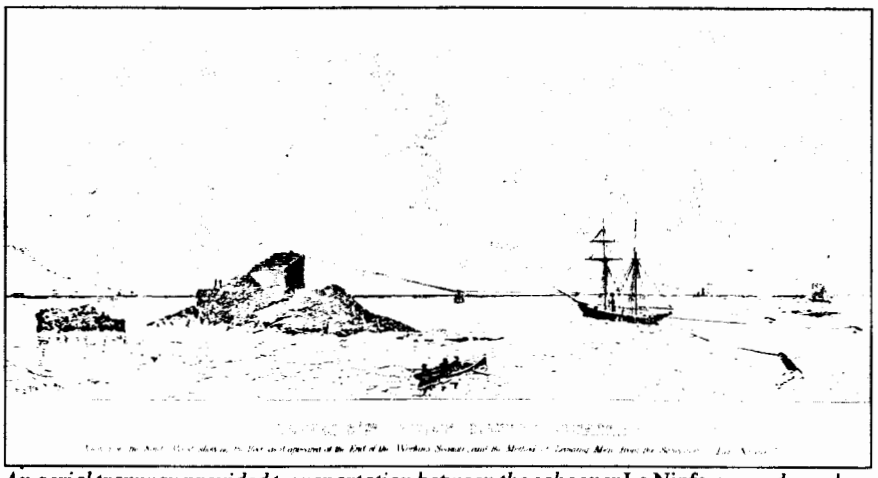


PHOTO: US COAST GUARD

An aerial tramway provided transportation between the schooner La Ninfa *moored nearby and the work site, as crews worked to build the pier for the St. George Reef Light.*

In May of 1884, Ballantyne again chartered *Whitelaw* and sailed for Northwest Seal Rock to prepare for the season's work. Aboard were the four large moorings for securing the barracks ship and a large boom derrick. When erected on the rock, the derrick would transfer stone blocks from ship to shore and then set them in place. The mast for the derrick measured fifty feet and the boom ninety. Each was made from a single piece of timber and measured twenty inches on a side.

Exceptionally calm weather prevailed and, by July, the workers had set the moorings and erected the derrick. It was all in vain. Congress, still in a niggardly mood, appropriated only $30,000, instead of the $150,000 requested. Bitterly disappointed, Ballantyne and the District Engineer suspended work on the rock for that year. The money was used to quarry and shape stone for the pier.

In 1885, Congress appropriated only $40,000, once again not enough to proceed with work at the lighthouse site. That June, Ballantyne chartered a steamer. He and his men lifted three of the four moorings set the previous year and secured the derrick against storms. Then they erected a temporary platform over the foundation. On the platform, Ballantyne laid out a 76- by 94-foot oval for the pier and used the templates to mark the outline of each stone in the first course. The outlines fit the oval to a tee. The quarrying and shaping of stone continued until money ran out in October 1885.

No money was appropriated in 1886. Ballantyne must have been discouraged. In his final report, he wrote,

> "In four years only one working season of about one hundred working days [was] utilized advantageously on the rock . . . work could not be carried on . . . at a less expenditure than $15,000 per month, or say $75,000 for the season."

Work resumed in 1887 with an appropriation of $120,000. Ballantyne soon discovered that inactivity had resulted in

Drawing showing steps cut into the rock to receive the large stones for the pier of St. George Reef Light.

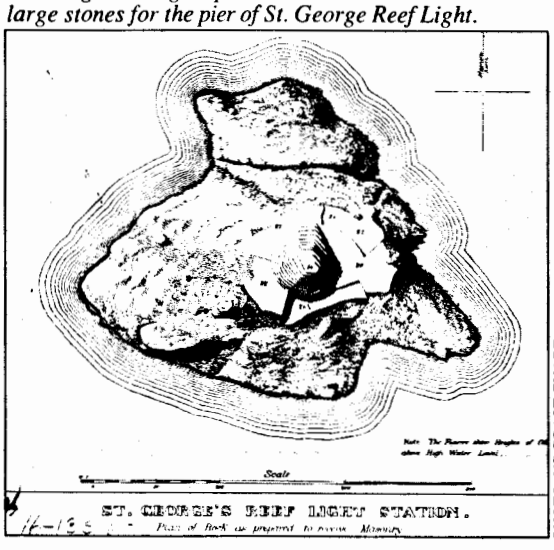


PHOTO: US COAST GUARD

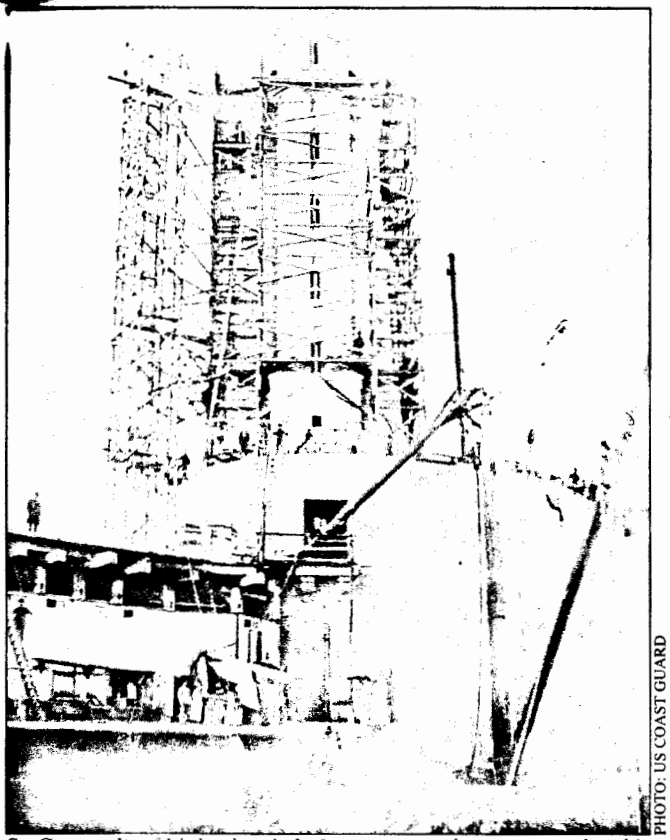


PHOTO: US COAST GUARD

St. George Reef Light shortly before construction was completed in 1891. The building under the structure at the left provided living quarters for the workers.

considerable damage to shore facilities. At the Mad River quarry, mud slides triggered by winter rains blocked the railroad tracks and buried the quarried stone. Fifteen hundred tons of roughly shaped stones had slid downhill and lay buried in mud. Teredos—marine worms with a voracious appetite for wood—had damaged the pilings of the Humboldt Bay pier, causing it to collapse.

Early in May, Ballantyne arrived at Northwest Seal Rock aboard the steamer *Santa Maria* to find more damage. Storm waves had cracked the 20-inch-square mast for the derrick, even though stored 40 feet above sea level. After mooring the schooner *Sparrow* for use as a barracks, Ballantyne's men repaired the derrick mast with iron bands. Then they erected the large derrick and four smaller ones, and installed a lifting engine. Next, they built a temporary wharf for landing the stone blocks for the pier. Living quarters for the workmen were built under the wharf.

Bids had gone out for a vessel to carry stones to the lighthouse site. Ballantyne had to charter the small steamer *Alliance*, because the bid was $10,000 less than the bid for *Santa Maria*. The *Alliance* arrived at the rock early in June with the first load of stones for the pier. But, as Ballantyne later complained in his report:

"I found she was not properly rigged for handling the heavy stone and at once put our riggers aboard and had her suitably rigged for service."

After a couple of trips, Ballantyne reported to the lighthouse engineer that *Alliance* "was unfit to carry out her contract, as she had neither the power nor carrying capacity to complete the work during the season available." As a result, he chartered the *Santa Maria*, and both steamers delivered stone to the lighthouse site.

A succession of summer gales slowed the work and made the daily transfer of men extremely hazardous. In June, storm waves tore a 3½-ton stone from its mortar base and carried it to a higher level in the foundation. Fall storms ended the building season on October 3. By then, the men had laid nine courses of stone, raising the pier to a height of 22 feet.

Congress appropriated $150,000 in 1888 and $200,000 the following year. By the end of these two building seasons, the pier had risen to its final height of 70 feet. In addition, the men had built the inside walls for the engine and store rooms and roofed them over. They also completed a water tank, filled the rest of the pier with reinforced concrete, and paved the top with large stone slabs.

Regarding the summer of 1889, Ballantyne wrote in his final report:

> "The weather this year was more severe than in 1888, but rather an improvement over 1887. The men's quarters . . . were smashed in during a gale about 2 o'clock one morning in May. No one was injured, but some of the men were washed out of their bunks."

Preparation of stones for the tower continued at Humboldt Bay during the winter and spring. By July 1, 1890, all were complete. The money, however, had run out, so the blocks sat at Humboldt Bay. Congress didn't get around to appropriating $81,000 until September 30. It was too little and too late to allow any more work that year.

On April 21, 1891, the steam schooner *Sunol* arrived at Northwest Seal Rock with fifty workers on board. New moorings had to be set, the living quarters repaired and the large derrick erected. The masons set the first stone for the 68-foot rectangular tower on May 13 and the last one thirteen weeks later. The only death during construction of the light occurred during this period. "On June 15," wrote Ballantyne in his final report, "one of the riggers, while letting go a tag line of the big derrick boom, was carried over the pier and killed." Over the years that followed, the keepers paid a much higher toll.

By the end of October, the boilers and machinery for two steam fog whistles were in place and the last coat of paint applied. St. George Reef Lighthouse was almost complete. Heavy seas prevented Ballantyne and his men from boarding a steamer. Not until November 8 did it sail for San Francisco. Three men remained on the lighthouse as keepers. Two of them, head keeper John Olsen and assistant keeper John Lind, had helped build the lighthouse.

The most essential part of the lighthouse, however, was missing. Not until July 1892 did a magnificent first-order Fresnel lens arrive in San Francisco for shipment to the lighthouse site. Over seven-and-a-half-feet tall and six feet in diameter, the lens contained more than 1,000 hand-cut prisms and bullseyes. The lens had twelve sides, each with a bullseye lens.

St. George Reef Lighthouse was a major feat of lighthouse construction. With the light shining 141 feet above the water, it was the tallest lighthouse on the Pacific coast of North America. The pier contained 1,339 dressed stones. None weighed less than two tons; some weighed as much as six tons. Over 14,000 tons of stone went into the pier and tower. The lighthouse had taken longer to build—nine years—and cost more—$715,633.78 according to Ballantyne—than any other in the United States.

Assignment to St. George Reef Lighthouse was no sinecure. Because of conditions there, the legendary George R. Putnam, Commissioner of Lighthouses at the time, approved the assignment of five keepers. No other US lighthouse, except Tillamook Rock, warranted that large a staff. Neither were approved as

Keepers feared storms above all, and with good reason. One wave smashed the thick windows in the lantern, more than twelve stories above the ocean.

[illegible] stations, so the keepers' families had to [illegible] on shore. From 1891 to 1930, [illegible] keepers served on St. George Reef. [illegible]en resigned and twenty-six [illegible] for transfers.

One District Inspector wrote of St. George Reef Light:

> "It tries and proves men. Show me the man who has put in the required time of service there, and I'll show you a man . . . and a lighthouse keeper, too!"

He may well have had John Olsen, the first head keeper, in mind. For twenty-two years, Olsen ran the station, taking whatever wind and wave brought him. That included spending seventeen hours in an eighteen foot open sailboat on a trip that should have lasted two hours. One of Olsen's assistants probably qualified, too. When, in 1903, the engine in the launch quit, he drifted for fifty-six hours.

John Olsen was not the only keeper that St. George Reef challenged. In 1893, William Ericcson set out for Crescent City in the station sailboat. Neither Ericcson nor the boat were ever seen again. Eight years later, Gottfried Olden broke a leg when a wave struck the station boat as the boom lifted it from the water. In 1902, Julius Charter became ill and died later in Crescent City. The following year, Charles Steiner was taken ashore after becoming seriously ill.

Keepers feared storms above all, and with good reason. One wave smashed the thick windows in the lantern, more than twelve stories above the ocean. George Roux, the third head keeper, spent two decades on the rock. During that time, he endured some of the worst weather ever recorded at the lighthouse. On one occasion, huge waves, breaking over the reef, marooned Roux and his assistant keepers for sixty days. Supplies ran short and the possibility of starvation loomed. The usually harmonious keepers seldom spoke to one another. Even asking for salt at mealtime could trigger a rage.

In 1951, George Permenter, the officer-in-charge of the light, swung the derrick boom out over the water. The station boat with five Coast Guardsmen aboard hung from the boom. Two were keepers going on leave and two were electrician's mates, who had visited the light to make repairs. The fifth man would bring the boat back. Carefully gauging the waves, Permenter lowered the boat between two of them—a routine launching. Then, as he watched the crew unhook the bridle, a freak, rogue swell capsized the boat. Five men began fighting for their lives in the churning water. Despite heroic efforts, which earned Permenter the Silver Lifesaving Medal, three Coast Guardsmen died that day. It was the worst lighthouse accident in California history.

The Coast Guard searched for safer ways to service the lighthouse. St. George Reef Light was too important to abandon and automation was still in its infancy. High winds and the lack of landing space made helicopter landings impossible.

Following that black day in 1951, a Coast Guard cutter stood by whenever men transferred from the light. The policy paid off. Seven years later a fitting securing the bridle to the station boat broke, spilling four men into the ocean. The crew of the cutter *Ewing* reacted quickly and plucked the men from the water.

In 1960, the assignment of a 94-foot cutter, the *Cape Carter*, to Crescent City made transfers even safer. The cutter would ease in under the end of the boom. As a swell lifted the *Cape Carter*, one or two men climbed into a Billy Pugh net hanging from the end of the boom. As the cutter fell away with the swell, she backed away and the derrick whisked the men up. The Billy Pugh net was a simple platform surrounded by a net. Those who used it seldom forgot the exciting ride.

In February 1975, Chief James Sebastian, the officer-in-charge, wrote in the station log book:

> "This winter has been a long and lonely one. The weather doesn't always cooperate when it comes time to change crews and go home to families. We have spent extra weeks on St. George due to high winds and rough seas. We hope it will soon be over."

It was! Coast Guardsmen would never spend another winter on St. George Reef Light. That April, a tug towed a large navigational buoy (LNB) to St. George Reef and moored it a mile west of the light. The Coast Guard had developed LNBs to replace lightships. Fully automated and with backup systems, a LNB was a floating lighthouse. To verify reliable operation of the LNB, the keepers monitored the light, fog signal and radio beacon for several weeks.

Then, on May 13, the *Cape Carter* made a final personnel transfer at the lighthouse. Chief Sebastian lowered the colors. Then he used the derrick to transfer two keepers to the deck of the cutter. After securing the derrick and chaining the lighthouse door, Sebastian and Petty Officer Louis Salter clambered into a rubber boat and motored out to the *Cape Carter*. That night, for the first time in 83 years, the guardian of St. George Reef was dark. ■

Moments after this picture of the station boat being lowered into the surf was taken at St. George Reef Light in 1958, a fitting securing the bridle to the boat snapped. The four Coast Guardsmen aboard were dumped into the sea, but the presence of USCG cutter Ewing *assured their quick recovery.*

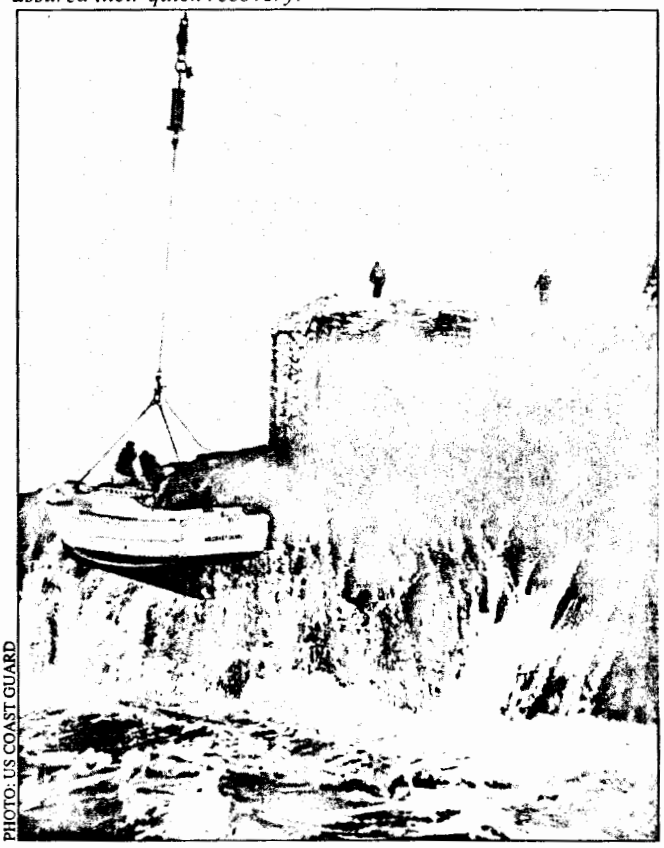
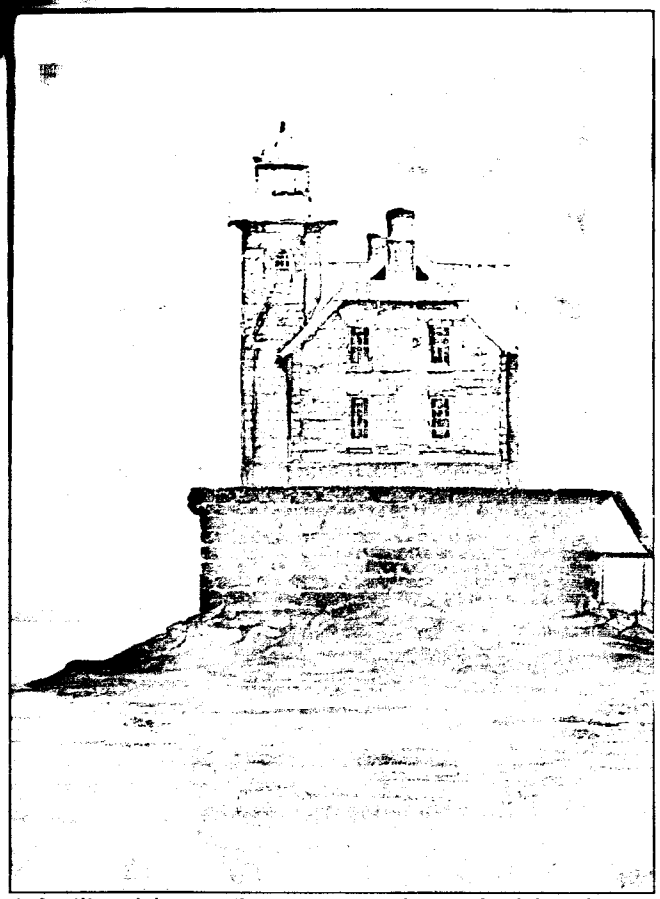


PHOTO: US COAST GUARD

Donald Rutherford is the author of a number of books and articles on lighthouses.

MARINE ART: Looking at

by Norma Stanford



A familiar sight to sailors on eastern Long Island Sound is the lighthouse at Race Rock, off the west end of Fishers Island, NY. Fierce tidal currents and a large rock formation just three feet below the surface at low tide made the Race one of the most dangerous passages on the East Coast. "Race Rock Light," by Patricia Kelbaugh, watercolor, 20" x 15"

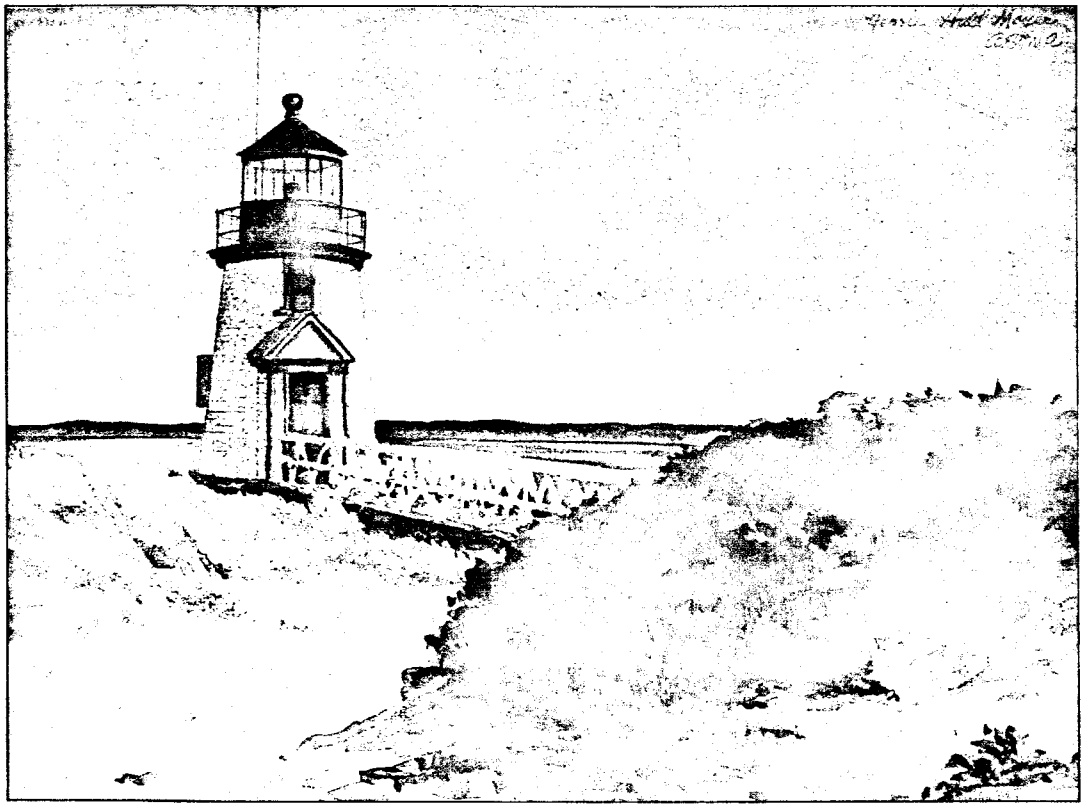
What is it about lighthouses that attracts us so? They dominate the landscape, overwhelming the natural beauty of their surroundings. They are big, simple, utilitarian structures, usually stark white, but occasionally garishly striped in red and white spirals or crude black and white bands.

If they weren't lighthouses, we might find them ugly.

Perhaps it's the associations: summer afternoons on the beach, a landfall after a difficult passage, stories of brave keepers who saved ships and lives. Sadly, the keepers are gone now, replaced by automation. The lights still beam out their welcome signals and the fog horns boom, but there is no one to return a wave as you sail past, as the young Coast Guardsmen used to do, pausing, perhaps, in a game of touch football, to admire a passing schooner; there are no lines of wash flapping in the breeze. Always lonely, the lighthouse has become an even lonelier place.

But, still, we love them. We hike up to them, we photograph them, we try to capture them in ink and paint. And, in the best of circumstances, we protect them from vandalism and demolition through community efforts and the work of the lighthouse preservation groups across the country.

The paintings on these pages portray lighthouses in a variety of moods, from cheerful to somber. And in some of them, the sea is not even visible. But, like Edward Hopper's memorable "The Lighthouse at Two Lights," one doesn't need to see the water to feel its presence in the paintings. It is there in the cast of the sunlight, or in the mist; in the bending grass and the clouds. One can hear it, smell it and feel its salt breeze even in its visual absence. ■



This is the sunny day at the shore that we dream about in mid-January. But Ms. Mayer's title reminds us that the sea is awesomely beautiful in all seasons. "Brant Point Light in October," by Jessie Hull Mayer, watercolor, 11" x 14"

1996

Del Norte Record.

Crescent City, - October 15, 1892.

Local Department.

Get registered before the 24th inst.

Mrs. Endert accompanied her husband over to Yreka, Monday.

A social dance is advertised to take place at Endert's Hall to-night.

The rainfall during the storm last Saturday and through the week was 1.78 inches.

The Burtschell residence, on H street, being built by A. Barnaburg, is a credit to the town.

The depot building, under the supervision of N. F. Burgett, is rapidly nearing completion.

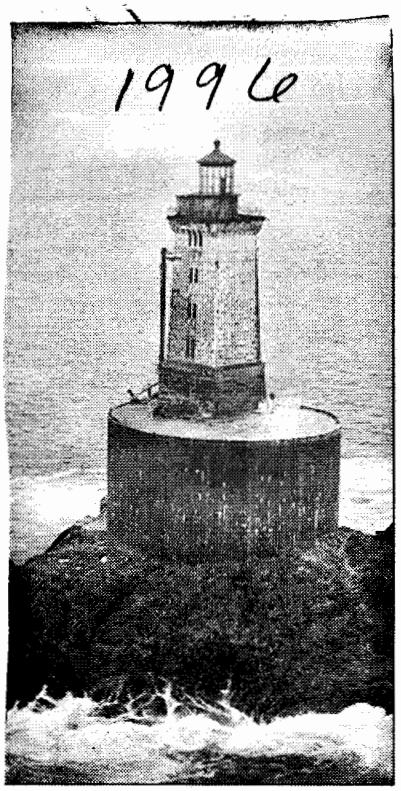
Thos. McNamara sent out six horses this week, to be wintered on Gordon creek, near Big Flat.

Next Thursday night is the time set for the Northwest Seal Rock Lighthouse to be lighted up. It can be seen from Lover's Rock or Pebble Beach, and no doubt if the weather is fine, many will take the trip up the coast to see it.

Several of the large panes of glass in the front of the school house have been broken out, and should be replaced. The rain during the last storm beat through the openings into the school house.

Miss Letsy Haight has gone on a week's visit to Smith River, after which she will return and attend the High School.

Bathing in the surf is pleasant pastime when the sea is smooth, but as it was last Sunday, a heavy sea running, it is dangerous.



AP PHOTO

AWASH IN HISTORY AND MYTHS: The St. George Reef Lighthouse has a mythology of its own — from tales of keepers committing suicide to otherworldly spirits keeping watch.

Crew battles perils to revive lighthouse

ENVIRONMENT: Stormy weather kept original keepers stranded for months.

THE ASSOCIATED PRESS

CRESCENT CITY, Calif. — The new caretakers of an aging lighthouse braved cloudy skies and the threat of rain for a pulse-quickening helicopter landing on their rocky sliver of wave-washed property — St. George Reef.

The Coast Guard, which decommissioned the lighthouse in 1975, used to drop men and supplies by basket from a large clattering helicopter because the rock was too tiny to land on.

But this week, aficionados, a repair crew and guests of the St. George Reef Lighthouse Preservation Society climbed aboard a small helicopter for the trip — five minutes by air — to the gray tower 6 miles west of Crescent City airport.

Within minutes, the first flight to the lighthouse was skimming above the waves with a cargo of tools and eager people set to begin restoring the 104-year-old beacon, dark since 1975.

Ownership of the lighthouse, located in the sometimes-treacherous waters about 25 miles south of the Oregon border, was recently transferred to Del Norte County, with the understanding the society would restore the tower.

As the helicopter neared the 150-foot beacon, it circled and prepared for a wind-whipped landing on a 34-foot platform near the lighthouse base.

Flashlights in hand, society officials and guests entered the lighthouse and mounted the spiraling steps inside. Light, creeping in past wooden window covers, gave an occasional glimpse of the isolated keepers' home.

Inside, worker Don Hubbard secured plywood squares to cover gaping window openings. Towers unfurled a U.S. flag and unwrapped posters commemorating the return of people to the lighthouse.

"There's very few people in the world who have ever stood here," said Jim McLaughlin. "When I was growing up, the light used to flash in my window."

The St. George Reef Lighthouse Preservation Society hopes to bring more visitors to the site eventually, Towers said.

The soaring structure has a mythology of its own — from tales of keepers committing suicide to otherworldly spirits keeping watch.

The beacon was maintained and staffed by the Lighthouse Service until 1939. Stormy weather often prevented keepers from leaving for months at a time, Towers said. At least twice in the lighthouse's history, waves have broken over the 150-foot structure.

ST. GEO. REEF LIGHTHOUSE FILE MISC.

C. C. NEWS — MARCH 5, 1905

Captain John Olsen of Seal Rock Light Station will shortly make a visit to San Francisco to secure a new steam launch for use between the Rock and the mainland.

52 YEARS AGO — 1891
DEL NORTE RECORD

John Olsen, chief lighthouse keeper at the North West Seal Rock, came down from there Monday morning, in a 12 foot boat belonging to the station. A Record reporter who interviewed him learned that during the heavy storm of the last week in December, the ocean as seen from the light house was a magnificent sight The waves were running high, with the sea white with foam, and as they struck the rock the spray would come flying over the roof of the building in sheets.

1-12-1945

D.N.RECORD OCT.15 1892

Next Thursday night is the time set for the Northwest Seal Rock Lighthouse to be lighted up. It can be seen from Lover's Rock or Pebble Beach, and no doubt if the weather is fine, many will take the trip up the coast to see it.

40 YEARS AGO — 1901

DEL NORTE RECORD, Nov. 9.

Father Moran came up from San Francisco on the steamer Crescent City Thursday and will open a mission at the St. Joseph church Sunday November 10th.

Our friend, Captain Olsen of the Northwes Seal Rock Lighthouse, took a party of us on a cruise, around the bay last Sunday afternoon on his gasoline launch. The Captain handled the engine while Joe Crawford managed the til'er, when near the bell buoy we ran into a school of sea lions Jack Duffy had his rifle along and proceeded to empty the contents three of into them.

ST GEO LH FILE

Del Norte Record.

Crescent City, - July 30, 1892.

Local Department.

Republican County Convention notice in this issue.

The steamer *Crescent City* is due here this morning.

H. Harvey is building an addition to his Fifth street cottage.

Don't forget the horse races at Smith River next Monday. They will be great.

A new minister is expected on the steamer this morning to fill the pulpit in the Presbyterian Church.

Quite a number of ladies, gentlemen and children, went out to Jordan creek on the excureicn train last Saturday, to gather blackberries and spend the day.

X The fog whistle on Northwest Seal Rock could be plainly heard on Thursday night. It is about 12 miles from this place.

X The lenses for the Northwest Seal Rock Lighthouse are in San Francisco and will probably be shipped on the steamer *Emily*, due to-day.

Fred Corrin brought his crew and tools in from Smith River on Wednesday having completed repairs on Rowdy creek wagon road bridge.

X G. Goldsmith, of the North West Seal Rock Lighthouse, was down for several days, making the Record office a call during his stay.

FRIDAY, JULY 31, 1942

Mr. and Mrs. Samuelson of the Seal Rock Lighthouse returned home the first of the week, following a short visit with relatives and friends in Fort Bragg.

40 YEARS AGO — 1901

CRES. CITY NEWS, SEPT. 6

Julius C. Charter and E. B. Cushan came in from the North West Seal Rock light house Sunday afternoon, and remained in town several days.

LONG, LONG AGO

What Our Dads and Grand-dads Were Doing In The Good Old Days

40 YEARS AGO 40
Crescent City News
February 14, 1896

Geo. Jeffrey and Tom McNamara came in from the Seal Rock lighthouse Tuesday. Tom has resigned the stewardship, and Albert Ahrens has accepted the same.

35 YEARS AGO — 1906

DEL NORTE RECORD, Dec. 8.

Joe Wendel and A. B. Evans came in from Seal Rock Light house last Saturday, experiencing rough weather. Mr. Evans, who has been cook at the Station, resigned, having filled the position almost a year.

Chronology for Start of SGRLH

1. 1867 Light House Board (LHB) reserves off shore islands 1)

2. 1874 to 1876 Site Options - on shore suggested by District engineer but LHB prefers rock islands 1)

3. 1881 - NW Seal Rock visited for 1 hour and crudely measured and sketched. 2)
   - This visit is credited with starting SGRLH project 6)

4. 1882 May 11 - District Engineer Capt. Pagan of Engineers Corps was given LH plan From LHB and told to survey NW Seal Rock 3)

5. 1882 Apr. May - Accurate survey is done by Ballantyne, at Pagan's direction. Ballantyne will later become superintendent of construction 4)

6. 1882 Accurate survey is embodied in LH plan 4) with 3' contours + model with 15' to 1" scale

7. 1882 Aug 7 1882 Congress gives $50,000 appropriation 4)

8. 1883 Feb Congress appropriates another $50,000 6)
   Preliminary LH plan is made by LHB

9. 1883 LH plans proceed & preliminary work plan to remove 6)
   Mar 5 rock to form a foundation is made

10. 1883 LHB approves LH plan modified slightly from 5)
    April 2 Feb plan

11. 1883 - Rock is removed by Sept 10th to Form foundation for pier 6)

References

1. USCG's historian account
2. 1881 - Annual Light House Board Report (ALHBR)
3. RG-26 - Book 600 Vol I pg 205 National Archives
4. ALHBR 1882
5. Dated LHB Drawing Nat. Arch
6. ALHBR 1883 Appx I (Pagson acct + prologue)

L H File

THE STORY OF ST. GEORGE REEF LIGHTHOUSE

One year after Abraham Lincoln's assassination in 1865, the U.S. Lighthouse Board asked that California lands at Point St. George be reserved for construction of a lighthouse. Extending seaward over 7 miles from the Point is the Crescent City Reef, a very dangerous collection of rocks. The perilous rocks are those that appear only at low tide and those that are hidden 3 or 4 feet below the surface. The Lighthouse Board reported that "The steamer BROTHER JONATHAN was wrecked on this reef on July 30, 1865 during a fog, and 209 lives were lost....A lighthouse and fog signal should be erected there."

In 1867, Pres. Andrew Johnson set aside "all the rocky islets of Point St. George." A ten year debate among engineers and government administrators ensued over the best location for the navigational beacon. By 1875, attention focused on the exposed rock islands called "Dragon Rocks". An engineer reported that, "Northwest Seal Rock is the outermost rock of the reef. A light on this would undoubtedly be of very great benefit to general commerce, but I would conceive it a very difficult task to procure foundation for it. The rock is exposed to the full force of the sea, and with any unusual swell the sea breaks over it."

The Board's debate continued through the next three Presidents' terms and into Chester Arthur's second year. Finally, in 1882, Congress appropriated the first $50,000 of an estimated $333,000 total cost. The Lighthouse Board had selected Northwest Seal Rock, 7½ miles from the coast, 300 ft in diameter and only 45 ft. high. Construction of a lighthouse and fog signal could begin.

More money was appropriated the following year and preparation of the rock for the lighthouse base was begun. "As there was no place of shelter near the rock, a schooner was secured and fitted for accomodation. This was towed from San Francisco by steamer which laid moorings and attached the schooner despite storm-tossed seas." Work was often disrupted because of broken equipment or bad weather. With construction costing $15,000 per month, construction was forced to stop in 1884. Congress responded to the Board's request for more money with meager funds. Most of the funds went to remove and protect equipment on the rock and to prepare stones at the Humboldt Bay quarry, sixty miles away.

When funds again ran out, the 15,052 cubic yards of stone already cut had to wait two years for additional moneys. Work proceeded in earnest in 1887 to build as much as possible during the short, warm storm-free season. 4 small derricks were rigged up, the boiler and steam engine installed and a timber landing was built to receive the stones. On June 5, 1887, the first load of stone blocks arrived. Two steamers were chartered to deliver the stones. By the time that storms and decreasing funds forced the work to stop, 8 courses of rock had been laid. Congress gave $150,000, and by the end of June 1888, 3 more courses of masonry had been finished and the workers were able to sleep in quarters on the island. Construction costs were now averaging $30,000 per month.

Costs kept mounting and a $200,000 supplement was granted in 1889. Congress was anxious to finish the the job, so another steamer was hired. "The weather during the winter had been unusually severe, and the men's quarters were several times washed by the heavy sea and damaged. The walls were already 61 ft. above sea level, yet the spray dashed over the top...so that is was frequently impossible for hours at a time to lay masonry. The spray would wash the cement mortar off the beds before the stones could be set." All but the deck stones of the base were in place by October 1889.

Congress approved the final $81,000 to complete the job. Most of the masonry of the base and the square light tower was finished by 1890. The Fresnel lamp was installed October 20, 1892. Total cost of the lighthouse and base was $704,634; over 200% of the original estimate.

St. George Reef Lighthouse was a sentinel for ships for 83 years until it was decommissioned in May 1975 and replaced by the St. George Reef Lighted Horn Buoy. The Coast Guard removed the lens, base, and clockwork in 1983. The 6,000 lb. lens, crafted in France with its 504 hand-cut prisms is now on display at the Del Norte County Museum, Crescent City, Ca.

The last entry of the St. George Light Station log reads, "Farewell St. George Reef Lighthouse. You've been abandoned but you will never be forgotten."

This is from the brochure, the LH Pres. Soc had in 1992

ST. GEORGE REEF LIGHTHOUSE

The wreck of the Brother Jonathan on St. George Reef on June 30, 1865, and the loss of around 200 lives shocked the people of our country. The people said. "Money is not as important as the lives of human beings. We will build a tower on those rocks with a light on it so that ships can see the light and keep off the rocks. It will cost money, but it will save lives." And so they began to plan to build the St. George Reef Lighthouse.

Several other boats were wrecked on the same reef before the government was able to get started building the lighthouse. The engineers decided to build it on Seal Rock which is near the end of the reef, and is six miles out to sea from the shore of Point St. George. Two times each day the tides covered the rock with huge waves. The workmen needed to be near so that whenever the tide was low enough they could get out on the rock and work. The government brought a large boat there to be a floating hotel so the men could live near their work.

The boss who made the Tillamook Rock Lighthouse brought several of his best workmen with him to help build this new lighthouse in Del Norte County. In April, 1883, (17 years after the Brother Jonathan went down) the work actually began. A 12,000 pound mooring was brought out and dropped to the bottom. Several smaller buoys were to be placed around to hold the floating hotel in position. But before the smaller buoys could be fastened to the ship the sea became very rough, and so when the storm came the ship was fastened to only the one heavy mooring. It swung helplessly back and forth as the wind blew and the big waves came. The storm was so strong that the men did not dare get onto this floating hotel yet. Before they could fasten the ship safely, another gale hit the rock and on April 22, in the night,

#21-69 E

the 8-inch thick cable that held the floating hotel to the mooring broke with a snap and the ship disappeared without anyone aboard. They hunted and hunted for the runaway ship. Finally, two weeks later, they found her drifting in a bank of fog miles from the reef. She was brought back and ball-and-chained so strongly that it would have taken a tidal wave to get her loose next time.

As soon as they could, the workmen fastened ring-bolts to the rock and ran a heavy cable back to their floating hotel. When they wanted to go to the rock to work they had to go one at a time. A man sat in a canvas bag with holes for his legs to hang out. This canvas bag or breeches-buoy was hauled on a pulley on the rope over to the rock; and then it came back to the floating hotel for another workman. Always the men were wet when they got to work because the rope was so slack they were dragged in the spray. Finally, they fixed a heavier cable and a big cage to take their tools over to the rock. Then the men rode in the cage, too, and didn't get wet.

At first the men were afraid of the big waves, but soon they grew braver and would work while the tide was low and the rock was out of the water. They could work only a few hours at a time. Then, when the waves got higher they would quickly fasten their tools to the ring-bolts so they wouldn't wash away, and the men would dash for the cage. Four to six men made a load, and a round trip from the rock to the floating hotel took 3 minutes. Twenty-five or thirty-five men worked on the rock at a time; so the cage had to make a number of trips to get them all safely back. It usually took about 20 minutes to do this.

The men worked from April until September, 1883, and then they had to quit for that year because the big winter storms came. Before they could get away a gale hit them, and all the cables holding their floating hotel broke except one. Next morning the men watched from the boat while the big waves smashed down on the rocky ledge where they had worked all summer.

They were very much frightened when they saw rocks weighing tons moved by the force of the sea. These big rocks had been drilled off from the north side to make the top level so they could build on it next summer. These great stones were washed around by the waves like chips of wood.

The next year the men came back in the spring, but Congress did not vote enough money so they didn't get much work done. The men in Washington couldn't understand how hard it was going to be and how much money it was going to cost to fight the waves and the tides to get this lighthouse built.

Granite was discovered in Humboldt County on the Mad River and the big rocks for the base of the tower were cut there. The base was oval shape and it was built on top of the rock. The base was faced with granite stones and filled in with concrete, except for service rooms. The smallest stone used weighed 2½ tons, and the largest was 17 tons. The base or pier, is 70 feet above the water. On top of the base is a square granite tower, and on top of that is the light. The light is 134 feet above the base of the pier, and it can be seen 18 miles at sea.

It took almost 10 years to build this important lighthouse. Each year Congress was slow voting enough money, and the workmen could work only in the few summer months anyway. And during those summer months they could work only during low tide at first. That meant they could work only a few hours a day, and they could work only on days when the water was calm. When they got the pier high enough to be out of the water most of the time the work could go faster.

It took almost 10 years to build this lighthouse, and it cost more than any other lighthouse the U. S. government ever built. It cost 3/4 of a million dollars to build it. But it has been worth every cent that it cost because its light has warned ships to stay clear of the dangerous reef and there have been no bad wrecks on the reef since the lighthouse has been built.

Former Coast Guard seaman returns to visit St. George Reef Lighthouse in stroll down memory lane

By Jennifer Henion
Triplicate staff writer

At 81, Robert Trulove knows that some things in life are simply unforgettable.

The former "hooligan"– the nickname for young U.S. Coast Guard seamen – still vividly recalls the two perilous trips he made to the St. George Reef Lighthouse in 1945, when he was stationed at Crescent City.

"It wasn't very safe," Trulove ... trips to the lighthouse. "We were expendable back then. You kind of said your prayers before you went."

▼ Lighthouse museum moves closer to reality: Page A3.

Nearly 60 years later, Trulove came back to Crescent City yesterday from his home in Blythe, Calif., to visit the historic beacon and tell some old sea tales.

He was 23 years old and stationed at the Humboldt Bay Coast Guard Station when he was called up to Crescent City for duty.

At that time, the St. George Reef Lighthouse, perched six miles off the coast on a large dragon reef rock, was manned by four Coast Guard seamen who served a monthlong term on the reef.

It was Trulove's job to take a fresh crew in and bring the resident crew back to shore.

"We went out on a motorized dory and it was pretty rough," he said.

Now rusted and broken, the lighthouse boom was fully functional 58 years ago. Back then, the wooden boom and lift chains were swung out over the dory as it rocked in the waves. The chains were attached to the dory and the little crew boat was lifted slowly upward onto the lighthouse's lower concrete platform. After the incoming crewmen had off-loaded and the outgoing crew had climbed into the dory, it was lowered back into the waves.

Over the years, several Coast Guard men died in that process.

The only reward was seeing the happy faces of men ready to go home.

"The guys were out there for a month and were awful anxious to see their wives and girlfriends," Trulove said.

On his second trip to the lighthouse, Trulove said, the sea was particularly rough. His supervisor ordered him to start the dory's water-cooled engine while the boat was being lowered toward the water.

"As we were lowering down and that engine got hotter, I just knew it was going to crack when it hit that cold saltwater," Trulove said. "And the guys who were anxious to get back home were worried about it, too. Luckily, it kept going after we hit the water."

"His life hung in the balance using that boom," said Guy Towers, president of the St. George Reef Lighthouse Preservation Society.

Towers met with Trulove yesterday just before the Coast Guard veteran departed on his boat tour to the old lighthouse.



The Daily Triplicate/

Robert Trulove prepares to get off the boat that took he and his family out to view the St. Lighthouse. Trulove recounted his experiences as a young Coast Guardsman when he trips to the lighthouse to drop off or pick up people who manned the beacon.

As keeper of many of the historic lighthouse's artifacts, Towers dug out the old Coast Guard log that was kept at the beacon for visitors to sign. He found the page that Trulove had signed on March 3, 1945, copied it and put it in a frame for Trulove to take home.

Yesterday, winds kicked up waves too rough for the small patrol boat that carried Trulove and his family toward the lighthouse. Though they got within eye shot of the old sea tower to turn back before it reached its inte tion.

The jovial 81-year-old wasn't toc Towers informed him that helicopt lighthouse begin Oct. 12 and told always welcome.

Towers, who is developing a vi tary of the restoration of the St. Lighthouse, said he hopes to film Trulove about his personal experie

In 1867, President Andrew Johnson set aside "all the rocky islets off Point St. George." A ten year debate among engineers and government administrators ensued over the best location for the navigational beacon. By 1875, attention focused on the exposed rock islands called "Dragon Rocks." An engineer reported that, "Northwest Seal Rock is the outermost rock of the reef. A light on this would undoubtedly be of very great benefit to general commerce, but I would conceive it a very difficult task to procure foundation for it. The rock is exposed to the full force of the sea, and with any unusual swell the sea breaks over it."

The Board's debate continued through President Grant's term, through the terms of Presidents Rutherford B. Hayes and James A. Garfield, into Chester Arthur's second year. Finally, in 1882, Congress appropriated the first $50,000 of an estimated $333,000 total cost. The Lighthouse Board had selected Northwest Seal Rock, 7½ miles from the nearest coast and only 45 feet high. Construction of a lighthouse and fog signal could begin.

More money was appropriated the following year and preparation of the rock for the lighthouse base was begun. "As there was no place of shelter near the rock, a schooner was secured and fitted for accomodation. This was towed from San Francisco by steamer which laid moorings and attached the schooner despite storm-tossed seas." Work was often disrupted because of broken equipment or bad weather. Luckily no one was hurt. "By mid-1883, sufficient progress had been made to justify the belief that the top of the rock would be prepared before winter set in." With construction costing $15,000 per month, construction was forced to stop in 1884. Meanwhile, another president, Grover Cleveland, entered office. Congress responded to the Board's requests for more money with meager funds. Most of the funds went to remove and protect equipment on the rock and to prepare stones at the Humboldt Bay quarry, sixty miles away.

When funds again ran out, the 15,052 cubic yards of stone already cut had to wait two years for additional moneys. Work proceeded in earnest in 1887 to build as much as possible during the short season of warm and relatively storm-free weather. The existing derrick was repaired, four smaller derricks rigged up, boiler and steam engine installed and timber landing built to receive the stones. On June 5, 1887, the first load of stone blocks arrived from Humboldt Bay, and the men soon had the up to six ton dimension stones set in place. Because the men were often idle waiting for the single steamer to deliver stones, a second steamer was chartered. Between the two vessels, enough rocks were landed to keep the crew busy. By the time that increasing storms and decreasing funds forced work to stop, eight courses of rock had been laid. During one strong gale, a two ton dimension stone already set in place about 30 feet above the sea, was plucked out by a wave, tipped over and broken. A committed Congress gave $150,000 and by the end of June 1888, three more courses of masonry had been finished and the workers were able to sleep in quarters on the island. Construction costs were now averaging

$30,000 per month. With workmen setting stones as fast as they arrived, the thirteenth course was finished. Benjamin Harrison was inaugurated President.

Costs kept mounting and a $200,000 supplement was granted in March of 1889. Congress by now was anxious to finish the job, so another steamer was hired. "The weather during the winter had been unusually severe, and the men's quarters, though very strongly constructed, were several times washed by the heavy sea and damaged. The walls were already 61 feet above sea level, yet the spray dashed over the top of the pier so that it was frequently impossible for hours at a time to lay masonry. The spray would wash the cement mortar off the beds before the stones could be set." All but the deck stones of the base were in place by October 1889.

Once again when the men returned in the spring, they found the worker's quarters destroyed by waves. Congress had approved the final $81,000 to complete the job the previous September so another steamer was hired. Most of the masonry of the base and the square light tower was finished in 1890. Finally, in August of 1891, the first order Fresnel lamp was installed and exhibited for the first time on October 20, 1892. Total cost of the lighthouse and base was $704,634; over 200 per cent of the original estimate.

The St. George Reef Light Station was not only costly in monetary terms. The first assistant light keeper was lost at sea in October of 1893 while attempting a landing on the treacherous rock.

From the time the land was first reserved, seven presidential administrations were involved in the building of the St. George Reef Lighthouse. The 83 year old sentinel was decommissioned in May 1975 and replaced by the St. George Reef Lighted Horn Buoy. The Coast Guard removed the lens, base and clockwork from the abandoned tower in 1983. The 6,000 pound lens, crafted in France, with its 504 hand-cut glass prisms set into 14 brass frames is now on display at the Del Norte County Museum, Crescent City, California.

The last entry of the St. George Light Station log reads, "Farewell St. George Reef Lighthouse. You've been abandoned but you will never be forgotten."

Neil W. Ross

GISTER of Visitors at ST. GEORGE REEF Light-Station.

NAME.	RESIDENCE.	ADDRESS IN—

IT IS WITH MUCH SENTIMENT THAT I PEN THIS, THE FINAL ENTRY: 13 MAY 1975...
AFTER FOUR SCORE AND THREE YEARS, ST. GEORGE REEF LIGHT IS DARK. NO LONGER WILL YOUR BRILLIANT BEAMS OF LIGHT BE SEEN, NOR YOUR BELLOWING FOG SIGNAL BE HEARD BY THE MARINER. GONE ARE YOUR KEEPERS. ONLY BY YOUR FAITHFUL SERVICE HAS MANY A DISASTER BEEN PREVENTED ON THE TREACHEROUS ST. GEORGE REEF. YOU STAND TODAY, AS YOU HAVE DOWN THROUGH THE YEARS, A TRIBUTE TO HUMANITY AND WORTHY OF OUR HIGHEST RESPECT. CUT FROM THE SOUL OF OUR COUNTRY, YOU HAVE VALIANTLY EARNED YOUR PLACE IN AMERICA'S HISTORY. IN YOUR PASSING, THE ERA OF THE LONELY SEA SENTINEL HAS TRULY ENDED. MAY MOTHER NATURE SHOW YOU MERCY. YOU HAVE BEEN ABANDONED, BUT NEVER WILL YOU BE FORGOTTEN. FAREWELL, ST. GEORGE REEF LIGHT.

J. R. LeBoutillier, BMC
OFFICER IN CHARGE

GUEST OF THE MONTH

#145-2

St. Geo. Reef LH File



FRED PERMENTER, BMC.

OUR GUEST OF THE MONTH is a modest, soft-spoken Chief Petty Officer who was recently awarded the Treasury Department's Gold Life Saving Medal and the Medal of Valor, an annual presentation made by American Legion Post 27, Baltimore, Md., to the enlisted Coast Guardsman designated for the title of Hero of the Year.

His name? Fred Permenter.

His rate? Chief Boatswain's Mate (AN) (P).

What did he do to gain those two cherished medals? Let the cold, terse words of the official Citation tell the story:

"For extreme and heroic daring on 5 April, 1951, when he went to the assistance of five men who had been thrown into the sea when their motor launch was capsized by heavy seas at St. George Reef Light Station, Crescent City, California. Permenter immediately sent out a call for assistance and directed operations to hoist the swamped launch and recover a life raft. Then climbing down to the base of the tower with the life raft, Permenter, completely disregarding his own personal safety and despite the rocks and heavy swells below, threw out the raft and jumped twenty feet into the sea. Swimming after the drifting raft, he climbed aboard and paddled past a mooring buoy on which two of the men had secured themselves. Ascertaining their safety, he located and picked up a third man, who was unconscious, and pulled him aboard. When Permenter, due to physical exhaustion, was unable to pick up a fourth man, he lashed him to the raft and continued, without success, his efforts to locate the fifth victim. Some time later, a fishing boat arrived on the scene and all were taken aboard. Permenter's outstanding courage, initiative, fortitude and unwavering devotion to duty while endangering his life during this rescue reflect great credit upon himself and the United States Coast Guard."

Fred Permenter was born April 28, 1919, in Noxapater, Mississippi, the son of Mr. and Mrs. Seale Permenter. His father traversed the State of Mississippi extensively as a deputy sheriff. Consequently, Fred received his education at various small Mississippi towns and he completed the 10th grade at the Burnside (Miss.) High School

Permenter entered the Coast Guard at the age of 19 in August of 1938 when he served aboard the CGC BIBB out of Norfolk, Virginia. After less than a year on the BIBB, he boarded the CGC SEBAGO, also out of Norfolk. Then came a tour of duty at the Lifeboat

Station in Louisville, Kentucky, and another ship, the buoy tender WAKEROBIN, which operated out of St. Louis, Missouri.

Late in 1941, Permenter had charge of numerous reserve small boats on the Mississippi River. He went to Curtis Bay, Maryland, in 1942 and boarded the vessel E. M. MARGARET which performed escort duty in the Atlantic.

His next assignment took Permenter to the South Pacific where he boarded LST-202 at New Guinea. Seven invasions, several decorations and fifteen months later, on January 1, 1945, he left the Philippine Area to return to the States for duty at the Coast Guard Base, Alameda, California.

He was on the CGC ESCANABA when that vessel was commissioned at San Pedro, Calif., in 1949, and several months later, attended the Coast Guard's Aids to Navigation School at Groton, Connecticut. Next came tours of duty on the buoy tender MAGNOLIA and the lightship RELIEF, both out of San Francisco, Calif. He became Officer-in-Charge of St. George Reef Light Station off Crescent City, Calif., in February, 1951, and was promoted to Chief Boatswain's Mate (aids to navigation specialist) (provisional) in August, 1951.

Permenter's wartime decorations include: Unit Commendation ribbon, Asiatic-Pacific ribbon with two stars, Philippine Liberation with one star, American Theater, Pre-Pearl Harbor, World War II Victory medal, and the Good Conduct medal with two stars.

The presentation of the Gold Life Saving Medal was made on 29 April, 1952, in the office of the Secretary of the Treasury. The presentation of the Legion's Medal of Valor was made on the evening of May 2 at a banquet in a Baltimore hotel, with Rear Admiral Russell E. Wood making the presentation in behalf of the Commandant. The Baltimore ceremonies were sponsored by Legion Post No. 27. For the past seventeen years Post 27 has annually conducted similar ceremonies in honor of the enlisted Coast Guardsman earning the title of Hero of the Year.

ACCIDENT AT [redacted] ST. GEORGE REEF LIGHTHOUSE

July 18, 1997

June 4, 1953 the supply ship Yocona was anchored off [redacted] St. George Reef Lighthouse pumping fresh water to it. Keepers Bill Baldwin and Pat Griffin were tending the hose on the Lighthouse end. This is a written account of the accident This should be added to Lighthouse records.

Bob Bolen

This attached letter is pretty accurate except for Bills injury. So as not to excite my mother I kept it purely simple

The blow to his head was pretty large and a great deal of blood and tissue flowed out I held my palm against the wound to stop any further bleeding and tissue if possible. He was also experiencing some short term convulsions. I supported his head with my foul weather jacket and wrapped him in several blankets

I tied him in a wire litter sent over by the cattle and made a bridle from twine to reins and we hoisted him into the awaiting barge.

Bill and I got together in Frisco about a month later and he got a pass to leave for the day. We had a nice time and he seemed to be making a lot of progress. His speech was slow but it would just take time.

His father sent the office a nice letter to all involved and thats about the last I heard

611 North Tenth Seventh Floor Saint Louis Missouri 63101 314 | 421-0805 FAX 421-5647

June 5 1953

Dear Mom:

I usually start off most of these letters with, their isn't mush to say today. Well theirs a lot to say today and it gives a fella chills when he thinks of what happened here. Last nite on watch I stated in my latter that one of the cutters was coming along side this morning to pick up a generator that we had packed for her. The Yocona anchored about a 100 yards away from the rock and then sent their small boat over to us and we lowered the parts to her and she returned to the ship. After that we started to take on fuel and then water. In order to do this two two inch hoses are strung from the ship through the water to the rock with the help of the small boat again. After taking on fuel for about five or six hours they had already reeled in the fuel hose and were now pumping all the remaining water out of the water hose. Bill Baldwin and I were standing on the little porch which is on top of the stair on the outside of the rock as you can see in one of my slides. As the remaining water was being pumped out of hose we could see the hose rise from the bottom of the sea and gradually come toward us we could see that itswasn't long before it would reach the end that we had on the porch. As you can emagine by the time it got to the nossle it would have quite a kick in it with all

the pressure that it takes tp pump that much water out of the hose. In fact just before it reached the end Bill told me to stand back because it has a teriffic kick. Well he wasn't kiding, about a minute later the hose jumped into the air and shot water at the two of us with teriffic pressure like you would see come out of a firemans hose and the end of the hose which had a brass coupling was flying back and forth wildly and we both turned and started into the passage way , I was a couple of steps ahead of Bill and part of the hose brushed over my head but Bill wasn't so lucky. After getting into the passage way a little ways I turned around and I see Bill laying across the doorway, the brass coupling had hit him in the head and knocked him unconcious putting a good gash mnxt to his left ear. Gene got on the radio and called the Yocona and then they sent their samll boat over and we lowered our box and he climbed into it (first air man) and their wasn't much that he could do so we had the small boat bring over a metal litter that we could hook on and lower him over to them. He lost quite a bit of blood but it was a good thing that it was raining and cool, it helped to stop the flow. After it was all over and Gene adn I had everything taken care of and the cutter was under way for Crescent City where a ambulance was waiting for them we went up stairs to stand by the radio to see just how bad he was. It was twelve o'clock and we had been working since 5:30 that morning and me having the mid

watch, I didn't have much sleep at all so I went up stairs to tget some. Now that Bill isn't here we have to stand 8 on and 4 off for the time being. I came on watch again just a while ago (8:00 tnis even ng) and Gene told me before he went up to bed that when he made the check (radio) that they said Bill had still now regained concinous, at that time it was six hours since the accident. I believe they might fly him out of Crescent to Frisco. Believe me I was one shocked boy when I turned around in that passage way and seen him laying their with that cut. I went up stairs and got about three or four of the blanket and put them on him and made a rest for his head, their wasn't really much that I could do. Now that I read this letter over I dont know if I should mail it or not, it might give you all kind of ideas. I don't want you to get all upset now, it was something that would very seldom happen and if he would have started into the passage way when I did I guess it might have never happened. Well thats enough excitement for me for one day, I'm still shakeing.

Yours truly

RED

ST. GEORGE REEF

Among hundreds of American lighthouses, three sentinels stand out as unparalleled engineering accomplishments: of the three St. George Reef in California is the tallest and largest. It cost more and took longer to build, and it has proven more dangerous to those who manned it than the other two.

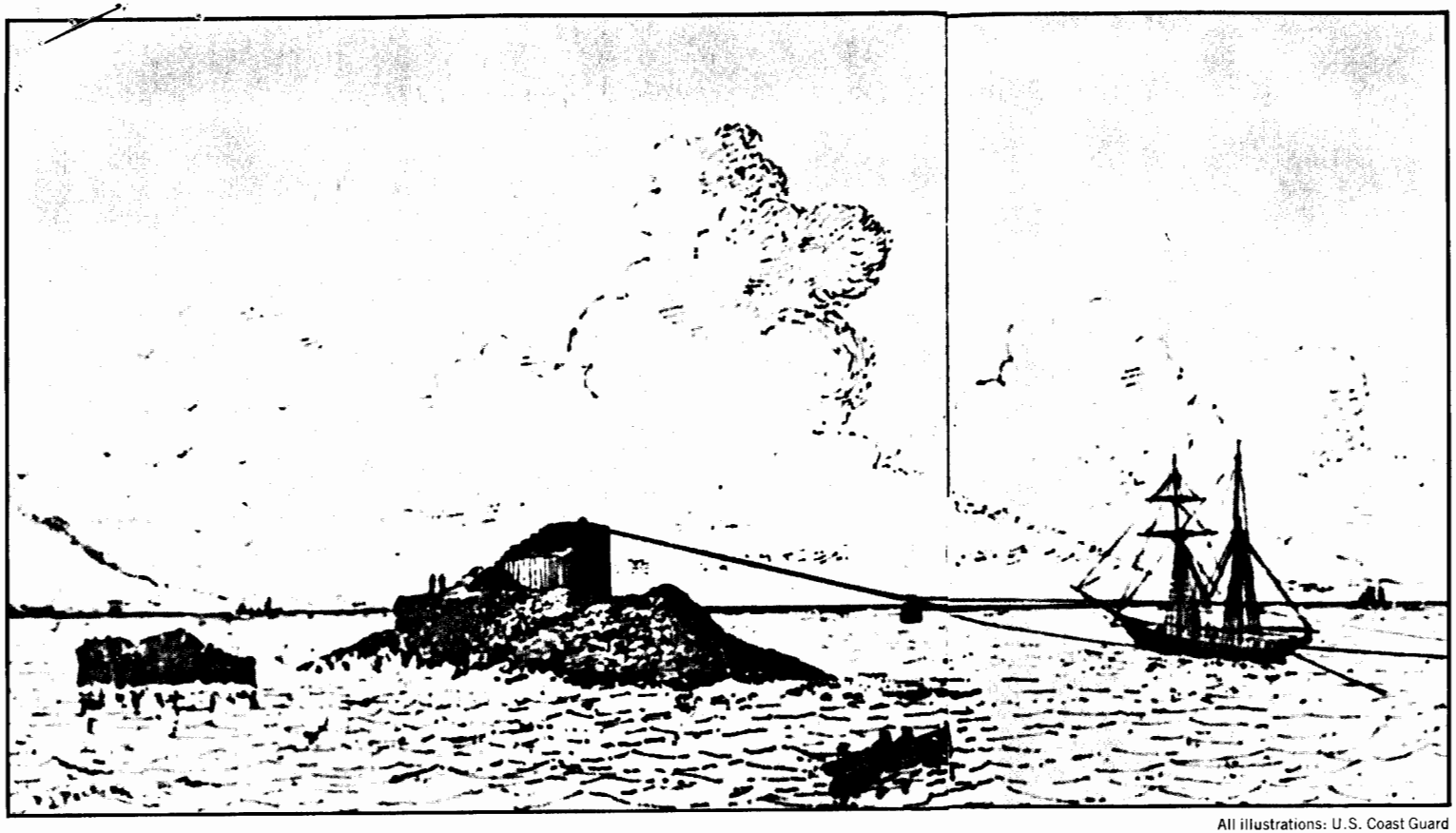
Completed in 1892 the lighthouse was the tallest on the Pacific Coast, 134 feet, and cost $704,000. The massive structure had consumed 175,260 cubic feet of granite. The ships had carried 14,307 tons of stone, 1,439 tons of sand, 335 tons of brick, and 27 272 tons of gravel out to the reef to be used in construction. Interior work had been finished using such fine woods as Port Orford cedar, redwood, and oak. The entire project - from soundings to lighting the lens - had required eleven years, the most prolonged construction period in American lighthouse history.

The beautiful first order lens had cost the Lighthouse Service $15,000. First order Fresnel lens were 7'10" heigh and 6'1" in diameter, mounted on its stand it weight approximately 5,000#. When installed in 1892 it featured plates of red glass covering alternation panels of prisms and bull's eyes which producted an alternating red and white flash with a 15-second interval between flashes. (Later the red glass plates would be removed, producing a white-only flash.) Beams from the lens warned mariners of the reef any time that they approached within 18 miles of the light.

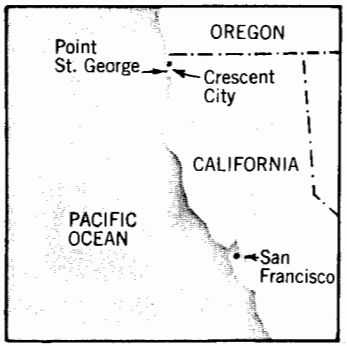
Life was incredibly hard on the reef station. Among the 80 men who would serve the lighthouse from 1891 through 1930, 37 would resign and 26 would seek transfers to other stations. The winter of 1952 was the worst in the reef's history. During one storm, waves at least one hundred sixty feet high swept over the top of St. George Reef lighthouse, shattering the windowpanes in the lantern room 146 feet above normal water.

1974 was the last Christmas at St. George Reef. Plans were well underway to abandon the light station and to moor a large navigational buoy nearby as a replacement. On May 13, 1975 the Coast Guard lowered the colors for the last time, chained the door shut and left the lightstation completely intact. America's greatest lighthouse is now dark.

reference: Lighthouses and Lifeboats on the Redwood Coast
by: Ralph and Janetta Shanks.



All illustrations: U.S. Coast Guard
Map: Susan M. Markley



FREQUENTLY SWAMPED *by waves, Northwest Seal Rock, off Point St. George, could not house workers until the base was completed. A schooner was moored off the rock and used as a barracks and for storage during much of the construction. A tramway, rigged from the rock to the schooner, served to transfer men and supplies, and provided for emergency evacuations.*

St. George Reef Light

Guardian of Dragon Rocks

by DONALD RUTHERFORD

"IT TRIES and proves men. Show me the man who has put in the required time of service there, and I'll show you a man — and a lighthouse keeper, too."

Thus, did a district superintendent of the Lighthouse Service describe a gray granite lighthouse perched on Northwest Seal Rock, 6 nautical miles off the coast of northern California. A maze of reefs and islets lies between that rock and Point St. George, just north of Crescent City. Though Captain George Vancouver, the English explorer, named the point after England's patron saint, with typical English humor he dubbed the maze "Dragon Rocks."

White water hides the hazards in all but the calmest weather and, during storms, St. George Reef "smokes," so dense is the wind-whipped spray. The reef was hidden by spray during a summer storm in 1865 when the master of the badly overladen steamer *Brother Jonathan* decided to put about and seek refuge at Crescent City to the south. A short time later, an outlying portion of the reef ripped open the hull of *Brother Jonathan*. Only 19 of the 232 persons aboard survived — five women, three children, ten crewmen, and the mate.

After the worst maritime disaster on the Pacific coast, the need for a light to mark the reef should have been self-evident. It was — to the Lighthouse Board and the sailors who plied those waters. Even after the site had been chosen on Northwest Seal Rock, 1½ miles west of the main body of the reef, and several requests for an appropriation made, Congress did not make money available until 17 years later and then merely $50,000.

The man selected to supervise the building of the lighthouse was A. Ballantyne, the foreman of the men who built the lighthouse on Oregon's

1½ miles = 2.4 kilometers

Tillamook Rock, a feat that gained him renown among the select few who built wave-swept lighthouses. On an April morning in 1883, the salvage steamer *Whitelaw*, with the schooner *La Ninfa* in tow, arrived at the rock after a stormy passage from San Francisco. The schooner would serve as a permanent barracks and store ship. On board the two vessels were quarrymen, stonecutters, and a blacksmith, as well as all the tools, supplies, and explosives needed for the first season's work. The crew of the salvage steamer set one 6-ton mooring and made the schooner fast. The water, however, proved almost twice as deep as reported by a lighthouse tender two years before. So *Whitelaw*, with Ballantyne aboard, sailed for Humboldt Bay to pick up larger spar buoys and more chain.

Vanished schooner

When *Whitelaw* arrived back two weeks later, the schooner and mooring had vanished. The salvage steamer's crew set three more moorings and then dragged unsuccessfully for the missing one. The errant *La Ninfa* did not appear, so Ballantyne ordered the return of *Whitelaw* to Humboldt Bay where he learned that the vessel had been sighted off Cape Mendocino during a storm. Pausing only to coal the salvage steamer and load another 6-ton mooring, Ballantyne sailed after the wayward schooner. By May 9, he had *La Ninfa* moored securely within 350 feet of the rock.

Ballantyne had surveyed the rock the previous year. The surge, sometimes as high as 15 feet, had added an unwanted thrill to getting on and off the rock. When swells, building up from a calm sea within a couple of hours, had threatened to swamp the rock, Ballantyne and his seal-hunter guides cut the survey short. Because of these experiences, he had his men build a tramway from the top of the rock to a spar buoy moored beyond the schooner to land men and equipment. Where the traveler cable passed over the schooner, it ran through a block supported by halyards from the schooner's masts. A "cage," actually a 4-foot diameter iron ring with planks fastened to it, hung from another block riding on the traveler cable. Ballantyne always had one eye watching the sea while on the rock. At his warning cry, the 30 to 35 men working there lashed their tools to eyebolts and made for the cage. Ballantyne released the cage as soon as five or six climbed aboard, and it slid rapidly down to the schooner. Then a donkey engine on board, pulling on an endless cable attached to the cage, hauled it back up for another load. Within 20 minutes, the rock was deserted.

Fire in the hole!

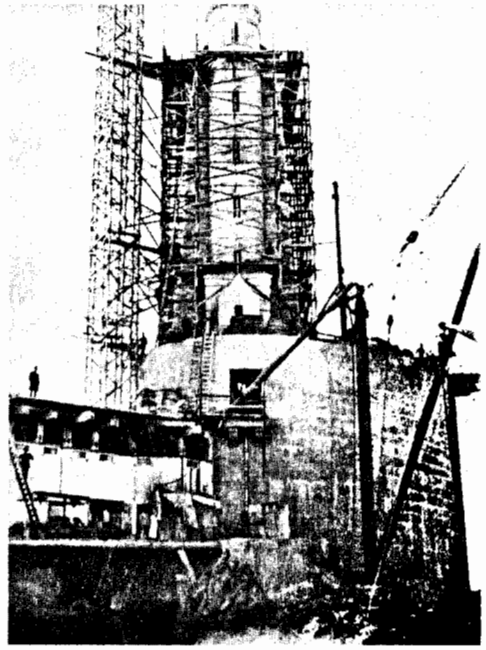
The men worked with hand drills and an early form of dynamite to excavate the rock during that first season. The work was dangerous. In the colorful words of Ballantyne, "at my cry, 'fire in the hole,' they had to hunt their holes like crabs." Even so, fragments of the hard, brittle rock showered them. The men aboard the schooner were bombarded, too. The bulwarks bore many scars, and a deckhouse was flattened by a large rock hurtling through the air. By the time September storms ended work for that year, the men had leveled off the top of the rock, cut a series of ledges like a stepped pyramid to receive dressed stones for the base, and excavated a water tank.

Niggardly appropriations by Congress for the next three years allowed work on the light to proceed only by fits and starts. In his final report, Ballantyne wrote, "In four years only one working season of about one hundred working days were utilized advantageously on the rock."

Following that first season's activities, most of the work was limited to quarrying granite at Mad River and transporting it by rail to the stoneyard at Humboldt Bay. There, stonecutters accurately shaped each block and formed a tenon at one end and a mortise at the other. Each stone had a precise location in the base and had to fit exactly without further work. The mortise and tenon would lock it to its neighbors. Each course of stone would be keyed with large-diameter bronze pins to the one below.

Congress appropriated $120,000 for the 1887 building season but, before work could begin, Ballantyne's men had to repair the effects of three years of relative inactivity. At the Mad River quarry, winter rains had buried railroad tracks, buildings, and quarried stone in mud. Some 1,500 stones, left ready for shipment, had slid downhill and disappeared into the muck at the bottom. Then, when Ballantyne arrived at Northwest Seal Rock, he discovered that winter storms had cracked a 20-inch-square wood mast for the main derrick though it had been stored 40 feet above sea level. The men repaired it with iron bands and then rigged the main derrick along with four smaller ones.

The next delay came when the steamer *Alliance*, chartered to haul stone to the rock, could not handle the large blocks, each of which weighed several tons. Even though Ballantyne had the vessel rerigged, a second steamer, *Santa Maria*, had to be chartered to keep the masons fully supplied. In his report, Ballantyne wrote of that summer on Northwest Seal

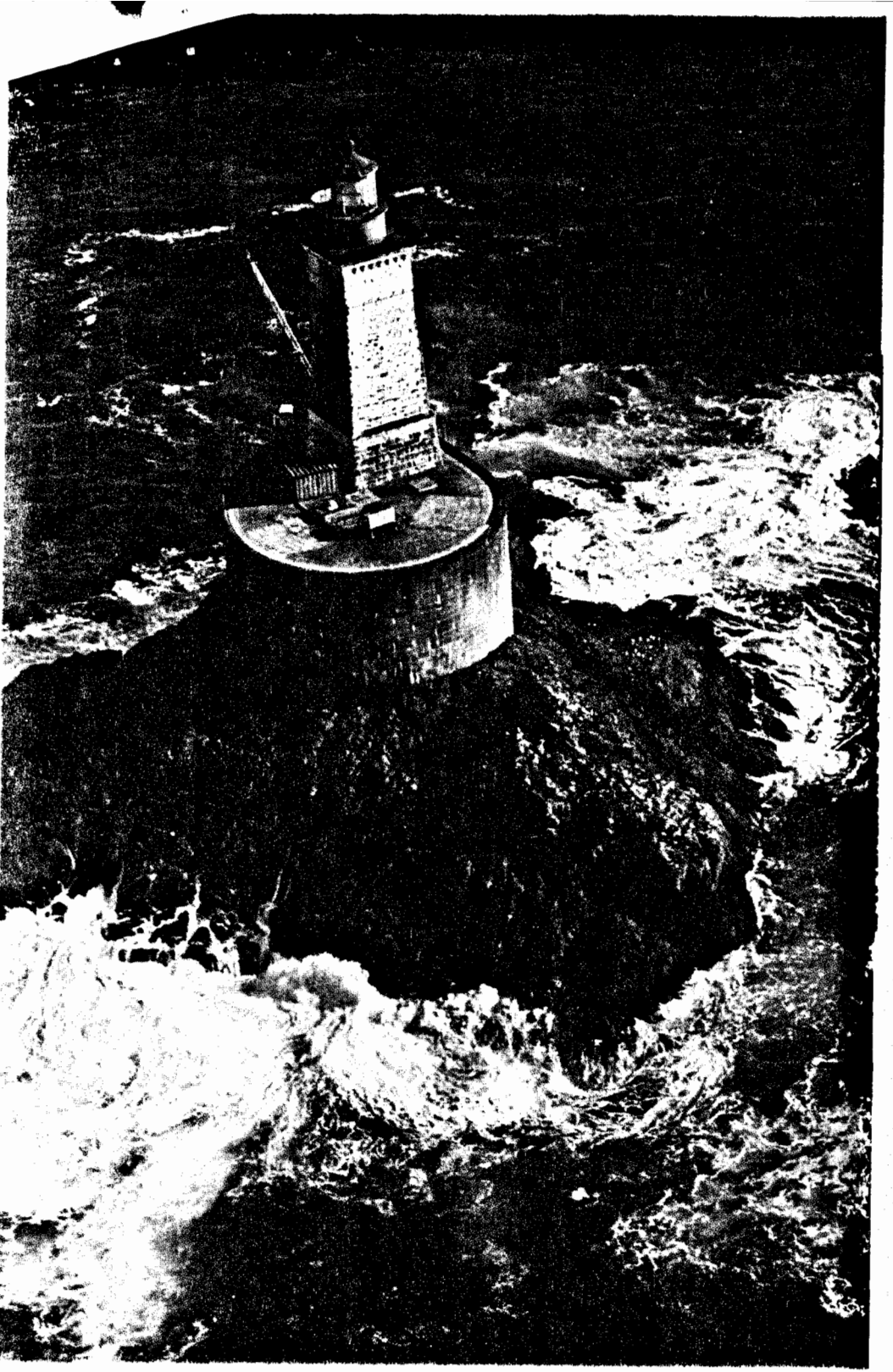


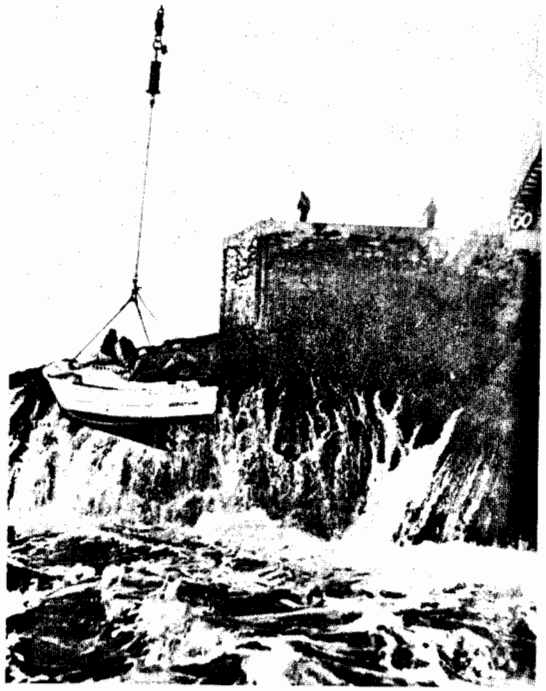
NINE YEARS, *one death, and more than $700,000 after construction started, St. George Reef Light finally sat securely on its base. The scaffolding came down shortly after this photograph was taken in summer 1891. The lens was installed, and the light lit in late 1892.*

350 feet = 106.7 meters; 15 feet = 4.6 meters

4 feet = 1.2 meters

20 inches = 50.8 centimeters; 40 feet = 12.2 meters





WAVES BREAKING *over the massive base prevented the keepers from venturing outside during storms. Even under the best conditions, the ever-present surge, breaking on the rocks, made transferring men and supplies to St. George Reef Light hazardous.*

Rock, "During a gale in the month of June a stone weighing 3½ tons was torn from its bed 30 feet above sea level and thrown on the bench above. . . ." He further stated that a succession of summer storms made the daily transfer of men extremely hazardous. In spite of delays and storms, the men laid nine courses of stone during the 1887 season, raising the 94-foot by 76-foot oval base to a height of 22 feet.

During the building seasons of 1888 and 1889, Ballantyne and his men laid 13 more courses, raising the base to its final height of 70 feet. They also built up walls inside the base for the engine and store rooms and roofed them over, lined and roofed the water tank, and filled the rest of the base with reinforced concrete. Finally, they laid granite paving stones over the top of the base. Ballantyne's report went on to recount weather conditions during the summer of 1889, "The weather this season was more severe than in 1888, but rather an improvement over 1887. The men's quarters, although strongly built, were smashed in during a gale about 2 o'clock one morning in May. No one was injured, but some of the men were washed out of their bunks."

Danger and death

No additional money was appropriated for the next building season but enough remained for work to continue through June 1890 at the quarry and stoneyard preparing stone for the tower. On May 13, 1891, the stone masons set the first stone for the 68-foot high rectangular tower and the last one on August 23. It was during this part of the construction that the only death occurred. In fact, it was the only serious accident. Ballantyne recorded the event and then went on to describe the completion of the lighthouse, ". . . on June 16, one of the riggers, while letting go a tag line of the big derrick boom, was carried over the base and killed. From August 23 to October 29 the time was occupied in taking down scaffolding, erecting ironwork, pointing stonework, putting in

30 feet = 9.1 meters;
94 by 76 feet = 28.7 by 23.2 meters; 22 feet = 6.7 meters

70 feet = 21.3 meters
68 feet = 20.7 meters

concrete arches in the tower, laying concrete floors in rooms in base and upper hallways, leveling platforms for landings, derrick seat and hoisting engine bed, plastering rooms in tower, carpenter work, painting metal work, and varnishing all woodwork, and in setting up the fog-signal boilers and machinery. All work finished by the end of October, but we were unable to get the men from the rock until November 8, owing to heavy sea. This completed the work with the exception of the lens which had not arrived from Europe."

When the steamer sailed for San Francisco with the men and equipment, three men stayed behind to serve as keepers. Two had helped to build the light, head keeper John Olsen, whose name would become synonymous with St. George Reef Light, and assistant keeper John Lind. The first-order Fresnel lens arrived in San Francisco in July 1892 and was erected in the lantern room during the following month. On October 20, John Olsen lit the light for the first time, 27 years after *Brother Jonathan* rendezvoused with the Dragon Rocks. Ten years in the building, the light cost $750,000, the most expensive American lighthouse.

Hazardous duty

Assignment to St. George Reef Light was no sinecure. Of all the lonely and dangerous lighthouses in the United States, George R. Putnam, the legendary Commissioner of Lighthouses, allowed only St. George Reef and Tillamook Rock, off the Oregon coast, to be staffed with five keepers. Ballantyne and his men had won the battle to build the light with the loss of only one man. The men of the Lighthouse Service and the Coast Guard who followed were not so fortunate.

Within the first year of operation, assistant keeper William Ericcson set out for Crescent City in the station sailboat and neither were seen again. Eight years later, Gottfried Olsen broke a leg while trying to raise the station boat from the water. In 1902, Julius Carter died in Crescent City and, in the spring of 1903, Charles Steiner was put ashore seriously ill. Of 80 men who served on the light between 1891 and 1930, 37 resigned and 26 asked for transfers to other stations.

But, John Olsen, the first head keeper, was a different breed. For 22 years he ran St. George Light, taking whatever wind and wave sent him, including 17 hours in an open boat on a run to Crescent City. During the tenure of a successor, George Roux, the men at the light were marooned for two months. During that time, they hardly dared to step outside. Supplies ran short and the prospect of starvation became real. Tempers, too, were short and silence became the rule.

The light itself took a beating as well. One storm swept away the blacksmith shop, and during another, 70-foot waves wrenched the donkey engine from its foundation. And in 1952, the worst winter in the light's history, a wave at least 160 feet high broke the windows in the lantern, 146 feet above sea level.

Seas prevented the building of a dock so the only means of landing men and supplies was with a derrick. After Gottfried Olsen broke his leg, the 60-foot boom was replaced with one 90 feet long. This allowed the station boat to be hooked on out of reach of a dangerous eddy that had caused the accident. Even so, the operation required superb seamanship by the boat crew and split-second timing by the derrick operator. With seas often running as high as 15 feet, the boat, rigged with a bridle, eased in under the boom and the crew, usually with a struggle, hooked on. Then the derrick lifted boat and cargo up on the rock. The possibility of capsizing was always a threat, the water cold, the current swift, and the chance of rescue slight.

70 feet = 21.3 meters;
160 feet = 48.8 meters; 146 feet = 44.5 meters

Tragedy and heroism

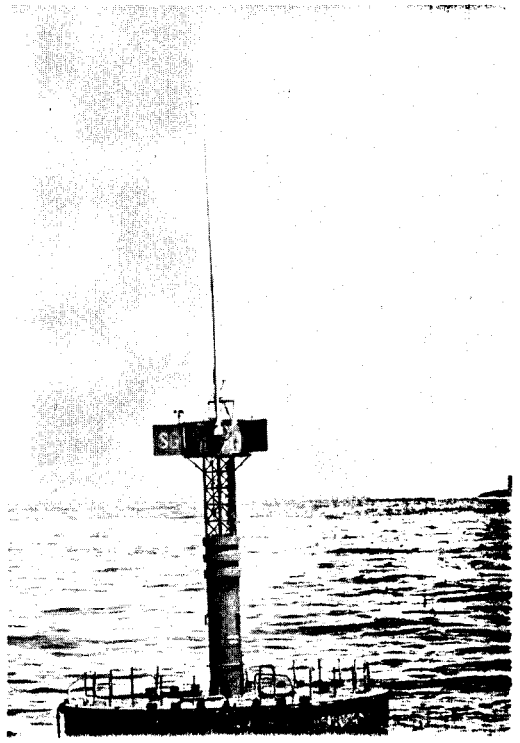
The worst accident happened in 1951. George Permenter, the officer-in-charge of the light, swung the station boat with five coastguardsmen aboard out over the water. Carefully gauging the waves, he expertly dropped the boat into the trough between two waves—a routine launching. Then, as he watched the crew unhook the bridle, a huge swell threw the launch toward the rock. The backwash of the wave from the rock overwhelmed the boat, throwing the five men into the frigid water. Despite heroic work by Permenter, who was awarded the Silver Life-Saving Medal for his efforts, three coastguardsmen died that day in the worst tragedy in California lighthouse history.

The loss spurred the Coast Guard to find a safer way to man and supply the light. It could not be abandoned; automation was in its infancy and unreliable, and space and the winds prevented the use of a helicopter. After that day in 1951, a cutter always stood by when men were transferred. The policy paid off. Seven years later a fitting broke, spilling four men into the water. Thanks to quick action by her skipper, the cutter *Ewing* moved in and the men were pulled aboard.

The assignment of a 95-foot cutter, *Cape Carter*, to Crescent City, made transfers somewhat easier. The 95-footer would ease in under the end of the boom. As a swell carried her upward, the men clambered into a Billy Pugh net, a platform surrounded by a

95 feet = 28.9 meters

SPARING COASTGUARDSMEN *the lonely and dangerous duty of manning St. George Reef Light, this automatic buoy replaced it in 1975 as guardian of Dragon Rocks. The light remains a dark, silent monument to those who built and served in it.*



net, hanging from the boom. Then, as the cutter fell away, she backed away from the rock and the men were whisked upward. For added insurance, they wore wet suits and a highly maneuverable 44-foot motor lifeboat hovered nearby.

In February 1975, officer-in-charge Sebastian wrote in the log, "This winter has been a long and lonely one. The weather does not always cooperate when it comes time to change crews and go home to families. We have spent many extra weeks on St. George due to high winds and rough seas. We hope it will soon be over."

The light goes out

That was the last winter Coast Guard light keepers spent on the rock. The Coast Guard had developed large navigational buoys (LNBs) to replace lightships. Fully automated and with backup systems, an LNB was a prime candidate to replace the lighthouse. That April, one of the big buoys was towed out and moored 1 nautical mile west of the light. Sebastian and his crew monitored the LNB for several weeks to be sure that its light, foghorn, and radio beacon operated reliably.

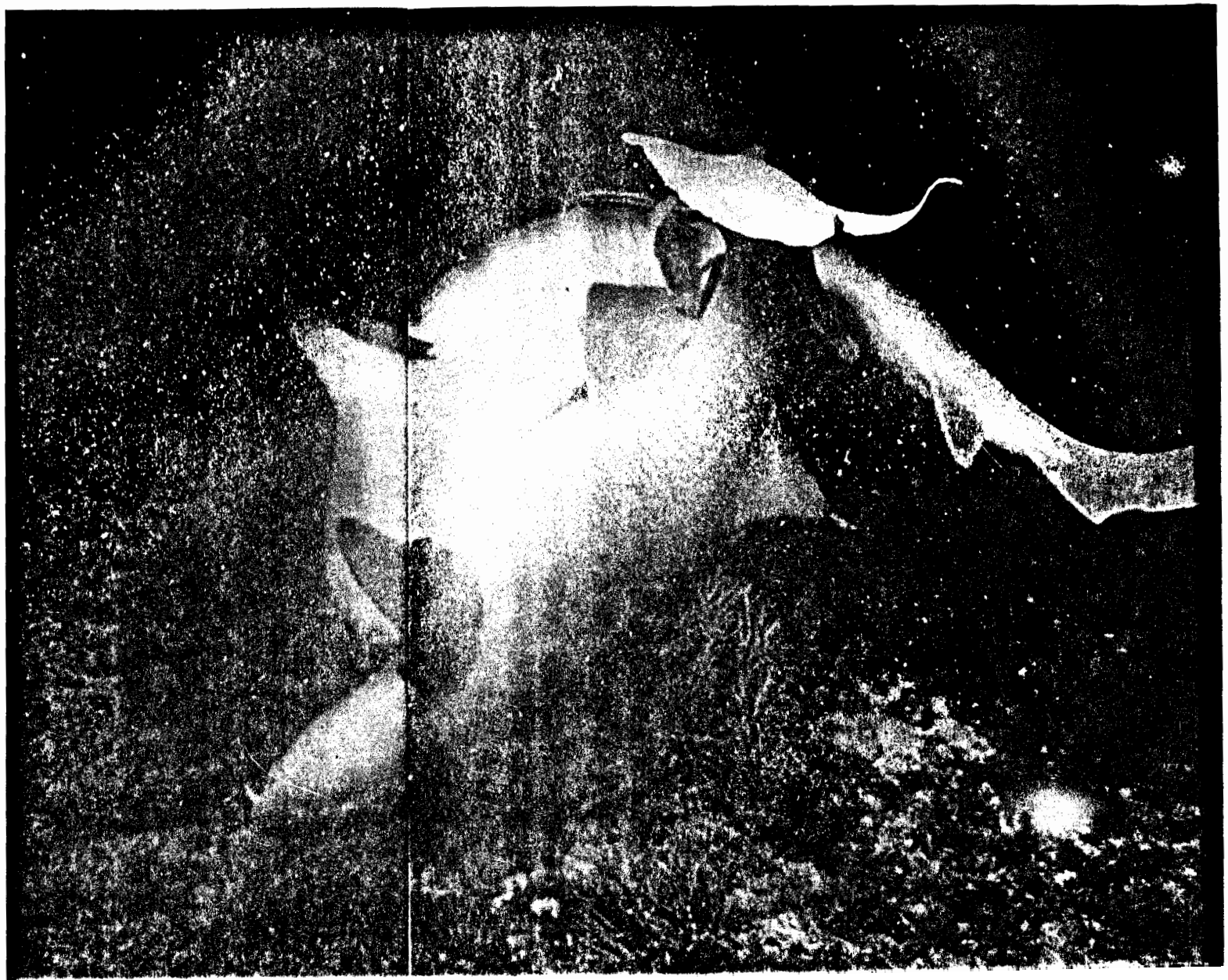
On May 13, 1975, *Cape Carter* made her final run to transfer personnel. The colors came down for the last time, and two keepers were lowered to the cutter's deck. After securing the derrick and chaining the door to the lighthouse, Chief Sebastian and Petty Officer Salter clambered into a rubber raft and motored out to the waiting cutter. That night, for the first time in 83 years, St. George Reef Light was dark. □

44 feet = 13.4 meters

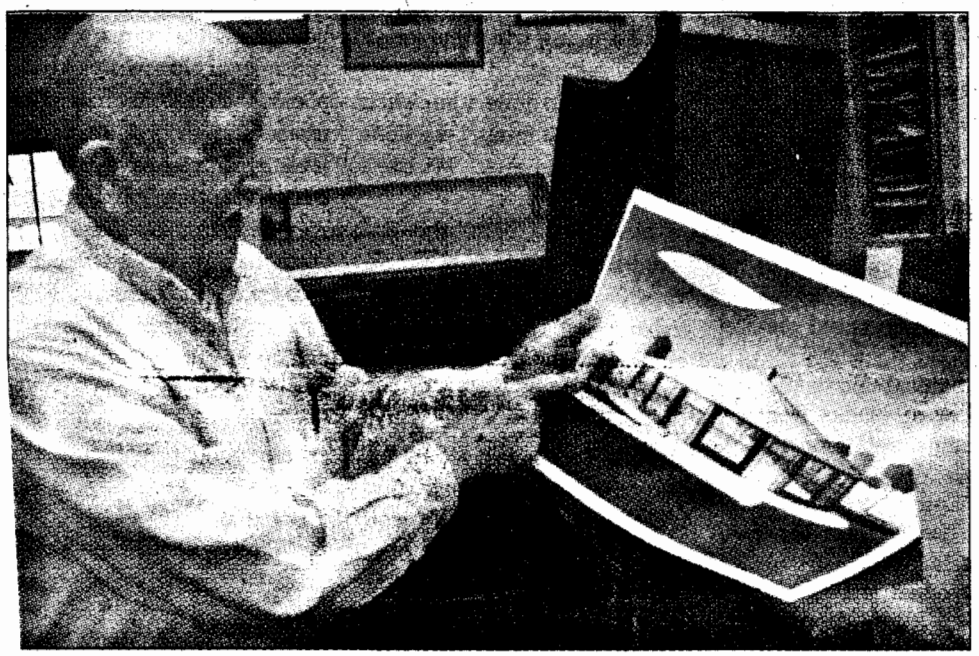
Nurse sharks' mating ballet

Photographs by NORINE ROUSE

BELOW AND OVERLEAF: *Seldom seen copulating, sharks are rarely photographed in the act. These two nurse sharks* (Ginglymostoma cirratum) *were captured on film in 110 feet of water off Palm Beach, Florida, in mid-July 1984.*



POINT ST. GEORGE MUSEUM



Dutch Dremann describes plans for a Point St. George Reef Lighthouse and Maritime Museum to be built at Crescent City Harbor.

The Daily Triplicate/**Katherine Kerlin**

A beacon of history

ighthouse museum would log area's maritime past

By Katherine Kerlin
Triplicate staff writer

While walking along the coast south of rndale, Calif., during the late 1960s, Guy Towers me upon an abandoned lighthouse — and a light ne on for him.

"I had never been that close to a lighthouse," wers said. "I started doing research and discov- d a whole new world."

Towers, along with members of the Point St. orge Reef Lighthouse Preservation Society — ich he helped form and of which he is president now wants to bring that world to Crescent City dents and visitors with a museum.

The proposed Point St. George Reef Lighthouse Maritime Museum would be located off U.S. hway 101 at the entrance to Citizen's Dock Road. Harbor Commission has approved the plan for museum. The preservation society is now seek- grants and donations for its construction.

he museum, designed by preservation society member Dutch Dremann, would be a replica of the lighthouse's lantern room. "It's a completely dramatic building," said Towers. "There's never been another museum built as a replica of a lantern room."

'We live in a pristine paradise, and we need to capitalize on it.'

— Museum designer Dutch Dremann

The lantern room at the 122-year-old lighthouse has a conical roof without support columns. The museum's design echoes that.

The single-room museum would be a polygon with 5,000 square feet of space, measuring 80 feet in diameter. A "compass" would divide the room into 16 quadrants.

(See *Museum*, Page A12)

Museum: De

(Continued from Page A1)

Drivers going by on U.S. 101 would be able to look through the glass-walled building, which would be supported by aluminum and concrete.

Towers wanted a way to share the isolated lighthouse — which is accessible only by a helicopter — with people on shore. He had been collecting artifacts for years during his work with the preservation society.

"Since I picked up the first artifact, I thought, 'This is going to get a lot bigger,'" he said.

The museum would include artifacts ranging from photographs and a 1903 manual for lighthouse keepers to a signifi-

Design based on lighthouse lantern room

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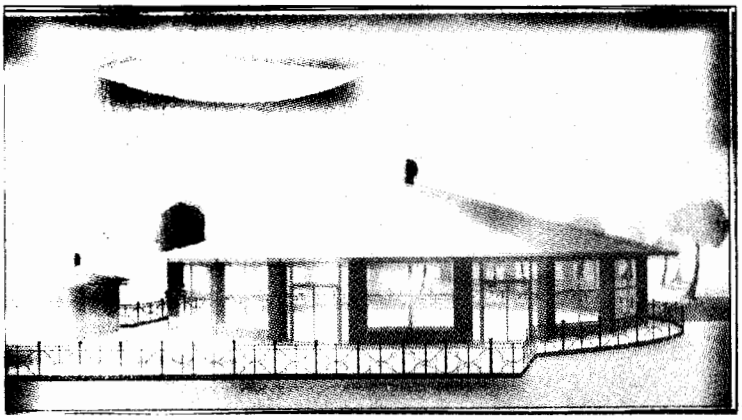

Courtesy of Dutch Dremann

This illustration shows the design for the proposed Point St. George Lighthouse and Maritime Museum, which would mirror the lighthouse's lantern room.

cant portion of the boon that extended out to lift supplies off boats.

The museum would also address local maritime history involving Native Americans, Euro-American settlement, logging, fishing and harbor development.

Dremann — a semi-retired photographer who also appears as "Dapper Dutch" on KPOD-AM radio — said lighthouses are a direct result of the maritime culture. "This county wouldn't exist without that," he noted.

Now that logging and fishing no longer key the local economy, Dremann said, tourism is almost Del Norte County's last hope.

"We live in a pristine paradise, and we need to capitalize on it," he said. "Guy and I like to think of the museum as an opening gun for the harbor."

Encl 2 (Cont'd)

History of
St. George Reef
Northwest Seal Rock
Light Station, California

On May 19, 1866, the Lighthouse Board asked the General Land Office to reserve certain lands for lighthouse purposes. These included "that portion of Point St. George which remains unsurveyed and which is not understood to be included in the 27-50/100 acres sold to James H. Richey March 26, 1859." The General Land Office on June 5, 1866 certified to the Secretary of the Interior that these lands "appear on the books of this office to be undisposed of" and recommended that the President order reservation of them be obtained "so that proper local land officers may protect the tracts of land from interference." These included "the unsurveyed part of Point St. George and also fractional section 14, of T.16 Range 2 West, Humboldt Meridian...containing 12-96/100 acres." On June 8, 1866, President Andrew Johnson reserved the lands requested for lighthouse purposes.

On January 21, 1867, the chairman of the Lighthouse Board requested the General Land Office to have reserved "all the rocky islets off Point St. George" as indicated in an accompanying Coast Survey Sketch. These were also reserved by President Andrew Johnson on January 29, 1867. State jurisdiction ceded on March 12, 1872.

These two reservations were described in a letter dated January 20, 1875 from the 12th District Light Engineer to the Lighthouse Board as follows:

> "One is a small promontory, in form a rounded hill, 156 ft. high, and about 200 feet square, the other a fractional part of a quarter section lying to the north of the other and separated from it by another fractional part of another quarter section which lies directly southeast of the other, and which contains 27-69/100 acres. The unsurveyed portion of the point has an area barely sufficient for a lighthouse, though it might be enlarged, and probably will have to be enlarged, to a greater or less extent, by cutting off the top. The other reservation of 12-96/100 acres is large enough, but is separated from the promontory by the lot of 27-69/100 acres mentioned above. The promontory and 12-96/100 acre lot are not contiguous but are separated by a small distance...the land at Point St. George is practically prairie and sand hills, with a few scrub pines. There is no wood or water on the reservation. There is no one who owns or claims land at Point St. George besides White."

In another letter of the same date he observed "...will be seen that the promontory is the highest land on Point St. George by some 70 feet and is evidently the proper place for the lighthouse tower. All the land in the vicinity is less than 90 feet. The promontory is the salient point of the cape and if the tower were located anywhere else the promontory would obscure the light, unless it were on an unnecessarily high tower. The best angle of

visibility, north or south, is from the promontory.... It would be very desirable for the United States to become possessed of a portion of inland directly east and adjoining the promontory, particularly if it (the promontory) is not large enough for all the dwellings, or if the land to the east affords better positions for them. The land owned by White is of little value intrinsically, and some of it can doubtless be purchased for a trifling sum. Possibly an arrangement may be made by which an exchange may be effected between the 12-96/100 lot and an equal area directly east of the promontory. If not, then I would recommend the purchase of ten acres of land at that locality."

In reply to this letter, the Board suggested "that perhaps it would be better to locate the lighthouse on one of the outlying rocks off Point St. George. It is true that the structure would cost considerably more, but would not the advantages resulting from the selection of such a location, when the commerce along the coast increases, more than compensate for the extra cost?" The 12th District Engineer referred this inquiry to the U. S. Coast Survey, Los Angelas, who on February 15, 1875 replied giving the heights of the "Dragon Rocks" composing Crescent City Reef lying off Point St. George and pointing out that only 3 of the rocks could be taken into consideration for lighthouse construction. These were: (1) Star Rock 64 ft. high, on port side of channel going up; (2) N. W. Seal Rock, 45 ft. high, distance 7½ miles from nearest point of shore line; and (3) S. W. Seal, in body of reef, 45 ft. high. Star Rock was an isolated peak of Sandstone "on which it might be barely possible, as a feat in engineering, to locate a light. The sea in heavy weather breaks over the rock. Its area ...will not exceed 200 meters, in circumference.... Being only a short distance from the mainland, although on the port side of the channel, a light on this rock, would not subserve any better purpose, than a light on the mainland. Northwest Seal Rock is the outermost rock of the reef. A light on this would undoubtedly be of very great benefit to general commerce, but I would conceive it a very difficult task to procure foundation for it, as the rock is exposed to the full force of the sea, and is even less in area than Star Rock. With any unusual swell the sea breaks over it. S. W. Seal is the largest in area, of the three rocks of Crescent City Reef proper, indicated, but it is located in the body of the reef, and a light on it would, I think, serve to misload rather than benefit. The cost of constructing and the difficulty of maintaining a light on any of these rocks would, in my opinion be very great. There remains only one rock, or rocky island to be considered and that is one called 'Castle Rock' on my sheets, the highest point of which is 208 feet. This large island lies south of Point St. George, proper, and you will see its shape and configuration on the tracery furnished you. The island is on the starboard side of the channel going up. A light on the highest point of this island, would overlook Point St. George, proper, and there is sufficient area for the buildings. A shipping point would be built inshore, in the little bight off White's house, and the ground, or island, is, I supposeed owned by the Government. But the erection of buildings on this island would be attended with very great expense, and I do not believe a light there would subserve a more useful purpose than one on the mainland. The light on the mainland would serve all outside coasters; the island referred to, would cut off its rays in one direction, as indicated on the tracing; and would serve all useful purposes for steamers and vessels attempting the channel at nights, at vastly less cost to the government."

The 12th District Lighthouse Engineer remarked on the above, "It is very evident in my mind, from his letter, and from the study of the chart which was sent to you with my last letter on this subject, that the only point for the lighthouse is on the promontory I have already described to you." The Engineer recommended the purchase of a small piece of land directly to the east of it. "This land is described as the fraction of the N.W. quarter of the S.W. quarter of Section 13 of T.16 N.R. 2 West Humboldt Meridian, comprising 27.69 acres. The land is principally prairie and sand hills, with some scrub pine and no wood or water. I believe it is not fenced. The intrinsic value must be very little and probably if it were purchased for %5.00 an acre that sum would be several times its true value. I have written to Crescent City to ascertain from Mr. White, the owner of the land, if he will sell that small piece of land and at what price." If the land could be purchased by July 1, when the money would be available, the engineer suggested that the lighthouse could be built that year (1875).

On August 26, 1876, Mr. Theo. White proposed to sell to the Government of the U. S. for the sum of %500, ten acres of land "lying in said county and state, in section No. 13, in township No. 16 W. of Range No. 2 West, base and Meridian of Humboldt, lying east of Point St. George." Further description of the mainland site was contained in a letter of September 1y, 1876 from the 12th District Lighthouse Engineer in part as follows: "A good natural road, about 3 miles in length, leads from Crescent City to Point St. George....this smaller reservation I find...to be in the shape of a truncated cone with an elliptical top. The coast survey map says it is 164 feet above mean low tide. The cone is quite symetrical, and its slope is about 35° from the horizontal. The truncated top, which is quite flat, I measure, and found to be 75 in a meridinal direction, and 40 feet from east to west. It is therefore amply sufficient in area for the site for a lighthouse tower, but not large enough for both tower and dwelling house. The promontory is composed of sandstone, but slightly metamorphic, seamy, and apparently, can easily be worked with the pick. The general direction of the coast in the immediate vicinity of the promontory is north west and south east, the promontory jutting out from it westwardly. The coast on either side of it has a bluff bank about 75 feet high, but the land slopes gently inland, the crest being the highest part. It would mean that this slope and the slope of the cone originally met each other, but from some cause or other the rock has been worn away, forming a hollow, the lowest part of which is about 40 feet lower than the crest. The distance across the hollow I measured, and found to be 260 feet....To comprehend and complete this description I must add that the highest part of the crest is to the south of the promontory, and within less than a quarter of a mile of it. This high ground would be the best locality for a water shed, to supply the fog signal with water. I would recommend that the tower be placed on the top of the promontory, the dwelling near the crest opposite. A bridge 270 feet long,... should be built the very first thing, from which a winding road must be cut out of the slope of the cone leading to the top. I would also recommend thata tunnel be cut directly through the promontory at about an elevation of 60 feet above the water, or a few feet lower than the bottom of the cistern, at the water shed, which is to furnish water to the fog signal to be placed at the western extremity of the tunnel." The engineer recommended the purchase of the

connecting 10 acre strip of land from Mr. Theo. White at the price of $500. "The intrinsic value of the land as grazing land is probably not more than $5.00 an acre" he added, "but as Mr. White considers it a deteriment to him to have a piece taken away from the middle of his farm," and he recommended paying it, "as the expense of condemning the land would be much more than the sum mentioned."

Regarding the comments of the coast survey of the various proposed sites on the rocks there were only two practical sites among these according to the Engineer--Star Rock and N.W. Seal Rock. "I cannot feel," he added, "that any material advantage would be gained by placing a light on Star Rock rather than on the mainland, and certainly the very great additional expense that would have to be incurred would, in my opinion, make a light there out of the question." "As for N.W. Seal Rock," the Lighthouse Engineer concluded, after quoting what the Coast Survey engineer had to say about it, "I do not know of how much importance the inner channel is, between Point St. George and the reef. If it could be safely used at night and in foggy weather; if a light and fog signal were on the point, it must be considered of importance. If, on the contrary, it is only used during the day and in clear weather, it must be of very little value, and it would be far better to put the light on N.W. Seal Rock if possible. Whether so serious an undertaking shall be attempted is a matter for the (Lighthouse) Board to decide. If a first order light and fog signal are to be established on Pt. St. George, the necessity for the present harbor light at Crescent City will not be apparent, and it is possible that it may be considered advisable to abandon it when the other is established. If, however, the future light is to be placed on N.W. Seal Rock, then the Crescent City Light should be continued."

The importance of a light at Point St. George was first stressed in the 1874 Annual Report of the Lighthouse Board which read in part: "This is one of the most important points for a sea coast light on the coast of California. The bluff point is about 130 feet high, with level land for some distance back of it. Off the point, extending some six or seven miles, is a very dangerous reef of rocks, qhite a number of which show above water, and many are awash at low tide; others have from three to four fathams of water on them. The passage between the outlying rocks of this reef and Point St. George is quite wide and is used by the coasting steamers and sailing vessels. The Steamer BROTHER JONATHAN was wrecked on this reef some years ago, during a fog, and many lives were lost; among them G neral Wright and staff, with families of himself and several of his staff. A lighthouse and fog signal should be erected here. An appropriation of %50,000 is asked to commence the work." This recommendation of the Board to Congress was repeated each year thereafter until Congress acted.

On August 7, 1882, Congress appropriated $50,000 "to commence the construction of a lighthouse and fog signal at or near Point St. George, Calif." The place chosen by the Board for the lighthouse was Northwest Seal Rock off Point Saint George, and in its annual report for 1882 the Board stated, "It is estimated that it will cost $333,000 to build this structure. Of this amount $100,000 can be profitably expended furing the coming year." In October 1881, a surveyor was landed on the rock. The sea began to rise immediately

after so that it was necessary to take him off after a stay of only an hour, during which he succeeded in getting a few rough measurements and sketches of the rock. On April 8, 1882, a civil engineer was sent to Crescent City to await suitable opportunities for a landing. Although his attempt was made during the best season, and he had a crew of men who had been in the habit of hunting sea-lions on the reef, in the four weeks of his stay he was able to make but three landings on the rock. He succeeeded, however, in making a good survey and the results, on his return to San Francisco were embodied in a plan with 3 foot contours and a model, both on a scale of 15 feet to the inch. With the first appropriation of $50,000 on August 7, 1882, the rock could now be prepared for the reception of the foundation of the pier, during the time that remained of the 1882 working season and the spring of 1883. Contracts could then be made for the entire granite masonary of the pier and an appropriation of $100,000 could be profitably be so expended during 1383.

An additional $50,000 appropriation was made for the light on March 3, 1883. The 1883 report of the Board states that plans and estimates for its construction were made early in March 1883 and soon after skilled and experienced workmen were engated and organized into a working party for the preliminary work, which involved great risk, labor and exposure. As there was no place of shelter near the rock, a schooner of 127 tons was secured and fitted for accommodation of 25 or 30 men, to be moored near the reef. This was towed from San Francisco by the Steamer WHITELAW who laid the moorings and attached the schooner to them.

On April 3, 1883, a start was made by the WHITELAW and her tow from San Francisco, and after a very stormy passage the vicinity of the rock was reached on April 8th only to find the sea breaking completely over it. The next day a 12,000 pound sinker was laid with difficulty, and the schooner made fast to the buoy; but immediately after there was a change in the weather, and from then until the 16th a furious gale prevailed from the southeast to the southwest, reaching its maximum on the morning of the 14th. On the 16th the sea permitted another attempt at laying the remaining seashore, when the fact was developed that the water in which they were to be placed was from 8 to 10 fathoms deeper than the soundings had indicated and that the buoys were too light. The superintendent of construction took the WHITELAW to Humboldt Bay, 60 miles distant, for new spars. They had to be cut in the woods, and the irons of the old ones used for them, so that the WHITELAW did not return until the 28th, when no trace could be found of either the schooner or the buoy. This was May 1st and advantage was taken of a little good weather on that and the following day to set the remaining moorings with the new buoys, and of grappling, unsuccessfully, for the lost one. The WHITELAW started again for Humboldt Bay on May 3rd to seek the missing schooner, which was found on the 7th, 25 miles southwest of Crescent City. The schooner was again placed in position and a landing made on the rock and the work combinued with suspensions of from one to ten days, on account of weather, partings of lines and other gear, but without accident to any one. By mid-1883 sufficient progress had been made to justify the belief that the top of the rock would be prepared before the winter set in.

Although the Board asked for $150,000 to continue the work for the fiscal year ending June 30, 1885, only $30,000 was appropriated for the purpose on July 7, 1884, and as the work could not be conducted advantageously on a less

expenditure than $15,000 per month, it was discontinued. In its 1884 report the Board declared, "The erection of the lighthouse cannot properly be resumed, with due regard for economy, until $150,000 is provided for its continuance. The $30,000 actually appropriated was to be used in getting dimension stones ready for use when work on the site was resumed.

In its 1884-85 estimate the Board asked for $150,000 for the work, but Congress appropriated on $40,000 on March 3, 1885. This inadequate sum did not enable the Board to resume work on the site. The Board in its 1885 report hoped the amount requested ($150,000) would be appropriated as "the delay is injuriously affecting the plant in its exposed position on the rock." The $30,000 appropriated on July 7, 1884, had been used in the preparation of material in the quarry and stone-yard on Humboldt Bay, where 6 to 8 stone cutters and 12 to 20 laborers were employed for about 11 months. With the second suspension of work on the site due to the lowered appropriation of March 3, 1885, it was decided to provide against further deterioration and possible loss of the large derrick and moorings by chartering a steamer and sending a working force from Humboldt Bay who spent the month of June in lifting all the moorings but one which was relaid and rebuoyed and in putting in good order and securing the large derrick. A temporary scaffolding the full height of the rock was raised, on which was supported a light platform covering the foundations of the pier. On this platform the pier outline was carefully laid off and the points plumbed down to the different levels of the foundation. The junctions of the different curves and centers of each header were than marked by brass brads driven into leaden plugs in the rock. The sine patterns of stone were also applied all the way around the pier outline and found to fit in with the benches satisfactorily. It was proposed to continue work at the quarry until October 1885, and then suspend work until spring. "A new appropriation," the report stated, "can hardly be made available before July 1886, when two months of the short working season will have been already lost. Six weeks, at least, will be needed to get moorings down, derricks and engines in place and vessels ready for actual construction, leaving only six weeks or two months, at most, before the winter storms can be expected. The alternate of last year will again be presented, that of making in advance costly preparations which would be useless should Congress fail to make sufficient appropriations, or of sacrificing another working season altogether.... It would be different to point out more clearly than has been already done, the uselessness of beinning construction without money enough to push to the uttermost this difficult work durin the short favorable season." In May and June 1884 it was pointed out that about $9,500 had been spent in preparation which not only became useless through the subsequent failure to make due appriations, but which left valuable property to unavoidable deterioration and possibly total loss. This year about $6,000 was again spent in removal of such property as could be taken away, and in taking precautions for the safety of the plant left on the rock. The preparations made in 1885 would have to be repeated the following year, with the same risk that they might be more futile through a third failure to secure sufficient appropriation. To these sums, had to be added unavoidable extravagence of attempting to carry on important work with scanty means.

Exaggerated cost of superintendence, hiring plant which should be purchased, deterioration of property from disuse and exposure, with other less important caused, combined to make the cost of the work excessive and correct estimates for it impossible. It was again stressed by the Board, therefore, as it had been in previous year that $150,000 was the least sum that could be appropriated during the 1886-87 fiscal year. In the meanwhile, work at the stone yard had been continued and between July 1, 1885 and October 31, 1885, 5,439 cubic feet of dimension stone had been quarried, making 15,052 cubic feet on hand with 419 blocks on hand cut and 133 blocks on hand uncut. No appropriation at all was made for the work in 1886.

On March 3, 1887, Congress appropriated $120,000 for the work. On March 7, 1887, a project was begun for preparing and laying stone by hired labor, for the purchase of a plant in the open market and for the charter of the necessary vessels. Specifications were prepared to get bids for transporting material from the Humboldt Bay depot to the rock, where work at both quarry and yard were resumed March 21, 1887. At both places ravages of weather and insects had to be repaired following the long period of idleness. The Schooner SPARROW (200 tons) was chartered at Humboldt Bay on March 29, 1887 and fitted out with quarters for 50 men. Equipment was purchased and shipped by the steamer SANTA MARIA, which was chartered to lay moorings and set derricks on the rock, and she left San Francisco April 5, for Humboldt Bay. The steamer ALLIANCE having furnished the lowest bid for transporting the stone from Humboldt Bay, she was employed. Because of bad weather slow progress was made by the SANTA MARIA in layingmoorings. On May 11, she reached the rock towing the SPARROW and by the 18th five sets of moorings had been laid and the SANTA MARIA discharged. The working force living on the SPARROW spent the rest of May 1887 putting up the rigging and the four small derricks, setting up the engine and boiler, building the timber landing stops, and making preparations for landing material. The big derrick mast was found to be cracked half through from a blow of the sea, at a point 40 feet above sea level and had to be fished with heavy iron bands. The benches cut in the rock were found to be practically uninjured, though a good deal of material was broken out of the vertical walls left standing around the cistern space, which were probably shaken by the blasting. The ALLIANCE with the first load of stone blocks from Humboldt Bay reached the rock June 5, 1887, where she first had to be fitted with gear to handle the dimension stones, the first of which weighing 6 tons was landed on the 7th and laid in the wall on the 8th. By the 11th all the material she had brought had been put in place and the construction force was out of work. The ALLIANCE proving utterly unequal to the amount of transportation required, authority was given to charter the SANTA MARIA at $7,000 per month to supplement her efforts, but that vessel, then on voyage could not be secured before the 1st of July. The ALLIANCE reached the rock on June 15, 1887, with her second load, but in a gale on the 16th narrowly escaped a collision with the SPARROW, finally putting into Crescent City on the 17th for shelter as the gale continued. The rock was not finally discharged until the 22nd. During the storm one of the dimension stones already laid on the north face, 30 feet above the sea, weighing over 2 tons was washed out of its bed and tipped over against the back of the bench where it broke. On the 26th the construction force was again idle having laid all the stone brought by the ALLIANCE on her second trip. The vessel couldn't land her third load of stone before July 8, because of incessant gales. Meanwhile the SANTA MARIA had been chartered and had left Humboldt Bay with her first cargo of dimension stone.

It was now hoped that by October 1st, when the working season ended, the pier, including the 8th and possibly 9th course, would be finished. So far the necessity after the March 3, 1887, appropriation had become available, of making the utmost haste, and the scarcity of vessels resulting from the immense lumber trade developing to Southern California, had caused the work to cost materially more than extimated. The balance available on 1 October 1887, it was now feared, would no more than suffice for the preparation of material with a small force during the winter and not justify any steps toward construction during the summer of 1888, in advance of a new appropriation. All the work had to cease, as it turned out, in September 1887, with the eight course of masonry of the pier laid. Stone cutting at Humboldt Bay proceeded during the winter of 1887-88 but had to be suspended on March 20, 1888 because of lack of funds.

On March 30, 1888, Congress appropriated $150,000 more for the work; a new working force was organized; two new steam vessels chartered and by June 30, 1888, the 9th, 10th and 11th courses of masonry had been laid. The workmeen now living in quarters constructed on the rock, and could lay the masonry as fast as the stone could reach them. By May 1888, 52 men were working on the rock, with no room for any more to work to advantage. The quarries at Humboldt Bay were crowded with all the men who could be worked and the stone cutters at the yard were dressing the rock as fast as it reached them. The smaller of the chartered steamers was discharged July 1, 1888, and the larger one was running nights and as her services were required, the working on the pier working on Sunday when there was any stone on hand ready for setting. The weather had been very favorable and the work was progressing rapidly. The total estimated cost of the completed structure was not estimated to be $721,000, which was in fact exactly what it did cost. A steam fog signal was to cost $5,000 more bringing the total to $726,000. The expenditures were now running at about $30,000 per month, and up to June 30, 1888, $347,782.34 had been expended. A new appropriation of $200,000 for the 1889-90 fiscal year was now requested. Work continued until August 18, 1888 when the 13th course of masonry was completed. Work was continued uninterruptedly after that at the quarry all through the fiscal year 1889 with as large a force as practicable.

Congress appropriated the $200,000 additional asked for on March 2, 1889, and in April the Steamer DEL NORTE was chartered at $5,000 per month. She arrived at the Reef on April 29, 1889, with men and material to begin the new construction season. About 50 men were put to work and by the end of the 1889 fiscal year the 17th course of masonry had been laid. The weather during this season had been unusually severe, and the men's quarters, though very strongly constructed and braced like a ship were several times washed by the heavy sea and damaged, though no one was injured. The walls of the engine room, coal house, and tower, all within the pier, were being built as rapidly in height as the pier progressed. Of the eight courses required to complete the pier when the season begun, four were laid during May and June, and weather permitting it was hoped to complete the other four by the end of August. The walls were already 61 feet above sea level, yet the spray dashed over the top of the pier that it was frequently impossible, for hours at a time, to lay masonry, as the spray would wash the cement mortar off the beds before the stones could be set. While the work done thus far had been expensive, it had been kept within estimates and had been well and substantially done. $81,000 more was estimated to be necessary to complete the work. At the stone yard

and quarry all dimensions stones for the pier had been finished with the exception of 23 stones. When these had been set, the entire force at the quarry would begin preparing the flagging for the top. It was hoped to complete the work during the following season, in 1890. By October 8, 1889, the interior walls of the engine room, store room, etc., were up and arched over, and the pier entirely finished except for a small area at the top left unpaved. This was securely covered with planking, the skylight space roofed in and everything left in secure condition until resumption of work in the spring of 1890. At the quarry all stone required for completion of the station had been secured by April 1890 when the quarry was abandoned and the plant stored at the Humboldt Bay depot. Dressing of stone continued, with all arch, lintle and other dimension stones finished by June 30, 1890 and only a small force employed in storing them away, ready for shipment. By early 1891 it was expected to discharge the entire force at the yard. On September 30, 1890 Congress appropriated the final $81,000 requested.

Early in April 1891 the steamer SONOL was chartered and sailed for Humboldt Bay with a load of supplies and men. She loaded material for netting mooring and started for the rock. Little was accomplished, however, due to very bad weather, but by the end of April the moorings had been set and the first landing of the season made on the rock. The workmen's quarters were found to have been utterly destroyed by the waves and had to be rebuilt. The mooring buoys had disappeared, but were grappled for and the buoys reset. By May 1, 1891, actual construction had been resumed and was vigorously pushed whenever weather permitted. At times, however, the wind was so violent that the steamer was unable to land material and the masons were driven from the outer walls by its force. Nevertheless, progress was excellent and at the end of the fiscal year 1891 the pier pavement had been finished, the base of the tower completed and the tower with its brick lining was built and backed up for 30 feet above the base, or nearly to the window sills of the third story.

During July 1891 the lens reached San Francisco, and was erected on the site in August. The light was of the first order, flashing alterna tely red and white, with 15 second intervals between flashes illuminating the entire horizon. It was exhibited for the first time on October 20, 1892.

The superintendent of construction had been Mr. A. Ballantyne who prepared an interesting 8 page appendix to the annual report of the Lighthouse [redacted] Board for 1892. The lighthouse, this report states, had been constructed under the overall supervison of Major H. W. Havar, U.S. Army, Engineer of the 12th Lighthouse District. Mr. David Chalmers was foreman of stonecutters and Mr. Thomas W. Brown was in charge of quarrying. The work had been begun in 1883 under the direction of Captain A. H. Payson, Corps of Army Engineers, U.S. Army until the latter part of 1887.

The outline of the pier having been blasted off, the outer base ring 10 feet wide was accurately finished with patent hammers, the center cone roughly stepped to receive the mason work, provision being made for storing 77,000 gallons of water in the base. The outside courses of pier were 2 feet 6 inches high built in Flemish bond, headers 5 feet deep in bed, 2 feet 6 inches wide on face, the stretchers 2 feet 6 inches on bed by 5 feet 8 inches on base.

All the horizontal beds were connected by a 2 inch diameter dowel of gun metal in each block and projecting half its length with course below except the upper course, in which the dowels were omitted, all vertical joints of outside stones were dovetailed or joggled into each other. All the outside joints were 3/16th of an inch wide, the faces of pier stones being pointed off fine with 2 inch margins out on joints. The top of the pier was laid with stone flagging 12 inches thick. This served as a watershed with a fall of 3 inches from center to gutters cut in stone at the outer rim, and from this the water is carried in a 4 inch diameter pipe to cisterns in the base of the pier. All walls of rooms inside the pier, namely, fog signal room, coal rooms, storerooms, hallway, etc., were of square rubble laid with 1/4 inch joints and faces finished with point and pointed with round jointer, leaving a concave joint. The corners, jambs, lintels and sills of the tower were natural face with 2 inch margin joints, the corner belt courses, and porch were 8-cut patent hammer work and all the outside joints of the tower were called the same as top of pier and finished with key jointers. The brick inside of air spaces was laid in cement mortar, the brick work in staircases and lower entrance hall was laid in black mortar and finished with raised bead joints. All outside pier and tower was laid in mortar composed of one part Portland cement to one part of sand; all inside finlling and backing stone was laid in one part of Portland cement to two parts aand; etc. The keeper's quarters were of seasoned Humboldt pine 1-1/8 x 3 inches vertical grain, tongued and grooved, laid on joists beveled on upper side and set into concrete arches, all surfaces and floors being polished and varnished. The inside doors, mainscoting, egc. were of Port Orford cedar with redwood panels, all trimmings in redwood; the outside doors and windows of oak, all polished and varnished. The keeper's rooms were finished with 3 coasts of plaster, sand finished. All metal work received 4 coats of paint.

The total cost of the structure was $704,633.78 of which 42.91 percent was for labor, 21.90 percent for transportation, 9.45 percent for buildings and plant, 8.09 percent for moorings, 6.00 percent for superintendence, 2.19 percent for lens, 2.39 percent for cement, 1.74 percent for plate glass and metal work and 1.52 percent for vessels for quarters; the balance of 3.97 percent being distributed over a wide variety of items such as fuel, bricks and lime, office expenses, powder, oil and waste, fog signal apparatus, plumbers materials, carpentry work, hardware, paint, bronze dowels, gravel, drugs, adorite, royalty on stone, plugs and feathers, right of way to quarry, and boats.

On October 17, 1893, the first assistance keeper was lost in attempting to land on the rock, in a standard station boat. No vestige of boat or man was ever discovered. In 1896 the framed blacksmith shop built on the pier was destroyed by the sea and had to be rebuilt. In 1901 it was reported that the boom of the hoisting derrick was not long enough to reach beyond a dangerous eddy just off the rock and this was the cause of a serious accident to one of the keepers when attempting to hoist the launch from the water. In 1902 a

new boom 90 feet long was placed on the derrick and properly guyed to the tower. The rigging was also renewed and this improvement greatly facilitated the landing of supplies and taking the launch from the water, as the boom extended farther from the side of the rock, reaches a point beyond a bad eddy and swell which hitherto had made landing dangerous.

In 1930 the equipment on the St. George Reef Lighthouse Reservation, which was valued at $1,061,700 on .15 acre of land was a masonry tower for light; quarters and fog signal apparatus; radiobeacon equipment for Crescent City Light Station, and necessary equipment for isolated station. In addition to the above there were 14.5 acres on the seacoas6 of California in Del Norte County, T.16 W, R.2W, Humboldt Base Meridian and unsurveyed part of Point St. George valued at $1,450.

In the 1950 Light List, St. George Reef Light Station was described as a white, square, pyramidal tower on a pier, built in 1891, and the light being 141 feet above the water, a 110,000 candlepower, first order electric, visible 18 miles, which flashed white 2.5 seconds and was eclipsed 12.5 seconds. Also a diaphone two tone air fog signal. The tower was located on Northwest Seal Rock, at 41° 50.2' N, 124° 32.5' W.

From: Redwood Nat'l Park Book.

ST George Reef INSPECTION file

ST. GEORGE REEF LIGHT

Northwest Seal Rock, now known as Saint George's Reef, is in latitude 41 50.2 N and longitutde 124 22.5 West. It is Six miles out to sea from Point George, located midway between Cape Mendicino, and Cape Blanco.

The lighthouse will always be a reminder of the terrible shipwreck which occured in the vicinity on July 30, 1865, before it was built, the steamer Brother Johnathan sank to her doom taking with her two hundred passengers.

Because of the wreck of the Brother Jonathan and several other craft the government finally took action to build a lighthouse in the vicinity, and it was arranged to aquire a schooner which could be anchored near the Northwest Seal Rock which was unanimously chosen as the site for a beacon.

After considerable negotiation, the new 127 ton topsail schooner La Ninfa was selected, as she had been used as a temporary marker for the wreck of the Escambia on San Francisco Bar. The steamer Whitelaw was chosen to tow the La Ninfa out to her new position.

Mr. A.Ballantyne, was appointed superintendant of the construction work because of his remarkable record at Tillamook Rock, had brought several of his trusted workmen with him for the new task.

He landed at Northwest Seal Rock for the first time in 1882 but found it so rough that in four weeks he could go ashore only three times. On April 3, 1883, he visited the rock again to start active operations and found the sea breaking entirely over it. A 12,000 pound mooring was brought out to a location nearby on April 9, 1883, and dropped into position, but before the smaller buoys could be placed, the sea became to dangerous for work. The schooner was secured to the mooring and swung helplessly as the storm increased.

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The steamer , meanwhile, lay outside the area, waiting for the storm to die down, but it was not until April 16 that the seas had quieted sufficiently for work to be resumed.

The Whitelaw then conducted sounding operations prior to letting down the buoys, and found that the coast chart had not accurately indicated the extreme depths around the rock, necessitating Ballantynes return to Humboldt Bay to obtain larger spar buoys.

Meanwhile another gale hit the area, and on the night of April 22 the Ia Ninfa's new eight inch hawser parted with a snap, and she was blown far out to the North. Then the wind changed, and the schooner was buffeted Southward again, until on April 30 she was off Cape Mendicino.

While all this was transpiring the Whitelaw had been loaded with the larger spar buoys, and upon arriving at the rock on April 28 her captair could find neither the schooner or thr large mooring. The steamer cruised in the area for five days and then returned to Humboldt Bay, where A.H. Payson, U.S.Army Engineers, had his feadquarters for the project.

While at Humboldt Bay Ballantyne was told that the Ia Ninfa had been sighted off Cape Mendicino. He put out to sea at once aboard the Whitelaw and on May 6 located the missing schooner 25 miles South of Crescent City.

The steamer towed the schooner back to the rock, where for the second time the Ia Ninfa was placed in position. There was almoast a dead calm that morning, and a landing was made at once on the rock, which is about 600 feet in diameter. Ring bolts were quicklyput in, a temporrary traveler rigged, and work was actually started.

A short time later, however, the Southerly winds gave way to a series of violent Northwesters, and there was little progress made.

Meanwhile a donkey engine had been put on the La Ninfa, and a new bad weather mooring set down, as the old one had parted and could not be located.

Finally in the first week of July, the weather improved and the workmen made good progress on the rocky ledge. The dangerous section of the rock was the northern low bench, only 25 feet above the sea, and the men there, continually drenched in spray, often had to be taken off in a hurry when the seas began to make up.

It is strange but true how accustomed to danger the average human can become. At first the men were terribly frightened upon going ashore and every minute seemed like an hour. But after a few weeks had gone by and no one had drowned, they grew braver.

Where at first they demanded to be sent ashore in the breeches buoy, in a few weeks they decided that the great cage which had been installed to get the gear and the heavy equipment ashore was ideal for thier own transportation, and soon four at a time and later six were using this means of transportation to and from the rock. Ballantyne was impressed by the way the experienced men would jump ashore one by one holding on to the lifeline as the sea rose and fell fully fifteen feet on the precipitous east face of the ledge.

To support the cage a traveler block had been constructed from two peices of boiler plate bolted together to form the bearings for the axles of four grooved gun metal wheels, which carefully held the pair of cables apart, making it practically impossible to snarl or catch.

Often now the men were taken on board dry, which had never been the case when they had used the breeches buoy. Toward theend of the year they were staying on the rock until great seas were running continuously over all the working levels. Then they had to lash their tools to ring bolts provided for that purpose, and make a run for the cage. With 4 to 6 passengers to a load, each round trip of the cage took no more than 3 minutes. As an average of from 25 to 35 men worked on the ledge, the cage was able to get them all aboard the La Ninfa in an incredible time of 20 minutes.

During this time there was only one accident, when the cable parted in a great sea, but at that time the passengers had barely climbed into the cage, and it bumped down 2 feet onto the rock, with the workers jumping out unharmed.

Substantial progress was made that summer of 1883, but on September 10 came the first indication that the season was drawing to a close. That morning two quarrymen had been drilling a deep hole on the lee side, when without warning a gigantic wave swept completelyover the rock, washing them down the steep soutern slope nearly 30 feet, where they clung desperatly, bruised and bleeding, until rescued.

Another eighteen days went by, however, and the weather was still calm. The crew worked vigorously to meet their schedule for the year and were succesful, for at two O'clock on the afternoon of Sept. 28, everything which had been planned for the season was completed. That very evening all the tools were taken aboard the La Ninfa.

Within a few hours the first gale of the seasonhit the vicinity, and by 2 o'clock the next morning, every cable holding the schooner in position except one had parted.

That morning the men watched helplessly from the vessel as gigantic crushing combers smashed into the rocky ledge where they had labored all that summer. They became alarmed when rocks weighing tons were moved by the force of the sea. Theese boulders had been drilled off from the lower north bench to level it for further building, and the great stones were swept like chips of wood from out of the sea, rolling along the entire length of the bench, and deposited helter skelter against the east wall of the ledge.

All that day and all the next the gale continued, with the schooner anchored by a single line to the outer buoy. By the following midnight the wind began to diminish, and early the next day the storm subsided.

The relief steamer Crescent City appeared that morning at daybreak, and those aboard the schooner decided to cut their final mooring and make a run for it, around to the lee of Point St. George, and follow the steamer in as best they could.

Upon resching the Engineers headquarters at Pt. St. George, the stonecutters and quarrymen were taken ashore, and the La Ninfa sailed for San Francisco, arriving there in a strong northerly gale. The work for 1883 was ended.

Congress did not appropriate additional money that year following until after the season began. Meanwhile the Whitelaw reached the rock in the spring, resetthe giant derrick in anticipation for the summers work, and replaced the moorings. Then congress voted a meger $30,000 and as the amount was to small for operating expenses, it was devoted to preparation of material at Humboldt Bay.

Economy minded congress thus made the work cost almost twice as much as planned, but it was hard to explain to men who had never visited St. Georges Reef, the problems of the situation. Small appropriations forced abandonment of work already undertaken, the waste of much money in useless preperation and the suspention of all constructive labor.

Granite was then discovered on the Mad River near the railroad tracks running from Humboldt, and the next year ambitious plans were made for building the tower itself.

Congress again dissappointed the engineers by appropriating only $40,000 and the following year voted no money at all.

Finally, on March 3, 1887, congress appropriated an additional $120,000 and the enginsers made active preperations for laying the stone already prepared on the mainland. With good weather they estimated that they would finish the first eight courses by the end of the working season of 1887, and they carried out thier plans.

The structure was finally completed in 1891. The total cost of $702,000 makes it among the worlds most expensive lighthouses, and represents about twice the cost of Minots Ledge Light in Massachusetts.

The foundation had been made in the shape of an irregular oval, eighty six feet in longest diameter, faced with cut granite and filled with concrete, except for service rooms. Horizontal terraces were arranged by cutting them into the natural rock, to give the structure sufficent area. The top of the pier itself is seventy feet above the water, and on it stands the granite tower, square in shape. The top of the lantern is 134 feet above the base of the pier, with the light itself showing 146 feet above the sea.

There were 1339 dressed granite blocks used in the face of the tower their average weight being 2½ tons, and they are so finished that the last stone of each course slipped into place with joints on each side 3/16" wide. Although it had been feared that the granite blocks would chip when being landed, heavy rope nets were used, and every one reached its position in perfect shape.

At present the light has a candle power of 110,000 and can be seen 18 miles from the rock. It flashes every 15 seconds, each flash lasting about 2½ seconds. Painted white, the lighthouse is listed in the records as a white square pyramidal tower on rock. From November 1 to March 1 the light is displayed from one hour before sunset to one hour after sunrise. The station has a radiobeacon and a diaphone, which gives out two blasts every 45 seconds.

Perhaps the greatest storm at the lighthouse was the gale of 1923, which came from the Northwest, breaking huge seas on the platform of the seventy feet above the water, with such tremendous force that the hoist engine house was torn loose from its foundations

Lighthouses

Brookings views most expensive lighthouse

By CHUCK HAYWARD
Pilot Staff Writer

Lighthouses, a vital element in our nation's maritime past, still hold a fascination for many.

Brookings can't boast of a lighthouse of its own, but on a clear day from almost any elevation in the city you can get a view of what has been called America's most expensive lighthouse.

St. George Reef Lighthouse, built on the peak of a submerged volcanic mountain six miles off the extreme north coast of California, took more than 10 years to build and cost more than $700,000.

It was placed in service in 1892 and operated until 1972 when the Coast Guard abandoned it and replaced the light with a buoy.

The station's first-order Fresnel lens flashed from atop a134-foot, square-shaped tower built of granite quarried from near Eureka, Calif.

In addition to being the nation's most expensive lighthouse, it is also one of the most inaccessible. The only way on and off the island today is by helicopter, but tours around the lighthouse and its tiny island are offered by boat from the Port of Brookings Harbor.

In 1996, the Coast Guard transferred control of the structure to the St. George Reef Lighthouse Restoration Society.

Members of the society have been active in cleaning and restoring the lighthouse. The society eventually hopes to run helicopter tours to the lighthouse for the public.

The lens that formerly filled the lantern room of the St. George Reef Lighthouse currently occupies a specially-constructed two-story room at the Del Norte County Historical Society Museum in Crescent City.

Fresnel lenses, which were manufactured by hand in Paris, are a marvel of glass manufacturing. The prisms are designed to gather every flicker from a light source and bend it into a horizontal plane. Each lens consists of individual prisms, sometimes as many as a thousand.

The lenses come in a variety of sizes, referred to as "orders." The huge first-order lens of the St. George Reef light is six feet in diameter and 10 feet tall.

A few blocks from the museum which houses the St. George Reef light is another lighthouse.

The charter service adjacent to the boardwalk at the Port of Brookings Harbor has been taking groups to see the lighthouse. Check on the availability. Trips normally have been on Sundays.

The Battery Point Lighthouse inside Crescent City harbor is now operated as a museum. Although located on a rock only a few yards from the beach, the lighthouse has its periods of inaccessibility as well.

Although the museum is open from 10 a.m. until 4 p.m., April through September, visitors have to wait until low tide to walk to the island. It's well worth the wait, however.

Cape Blanco at Port Orford is the southernmost of Oregon's major lights.

The 59-foot tower is perched high up on the rocks of the cape raising the focal plane of the second-order Fresnel lens to 245 feet above mean sea level, making it the state's highest light. It can be seen from 22 miles at sea.

The light station takes its name from the cape's steep white cliffs which drop almost vertically to the beach below.

Seen from at sea, the cliffs are quite beautiful, especially when evening sunlight washes them with color.

The Coast Guard in recent years has opened the gate to the lighthouse and permits the public to walk the grounds around the tower. The light can also be viewed from the beach at Cape Blanco State Park.

The Coquille River Lighthouse at Bullards Beach State Park near Bandon, stood empty and ignored for nearly half a century — longer, in fact, than it served as an active lighthouse.

Gutted by vandals after the Coast Guard abandoned it in 1949, it was left to deteriorate — a sorry end for a structure that had saved so many ships from destruction in the treacherous shallows of the Coquille River.

Completed in 1895, the 40-foot lighthouse tower was built of brick covered by a layer of stucco. It was given a relatively small, fourth-order lens.

First lighted in 1896, it burned for more than four decades before it was replaced by a series of buoys and a small jetty light.

The lighthouse has been carefully restored, and is open daily during the summer. Just across the river in Old Town Bandon are several restaurants and the Lighthouse Inn, all offering excellent views of the light.

Times-Standard Tuesday, Nov. 25, 1997

ghthouses to go public

t Guard wants structures main historical landmarks

The Coast Guard is hoping to save money by getting someone else to pay for maintaining the lighthouses, either private parties or other government agenies, such as the Bureau of Land Management or the General Services Administration.

Standard

NT CITY — The St. Lighthouse is on a list state to be offered by oast Guard for public

offshore landmark was ansferred to Del Norte 1995, and is now leased George Reef Lighthouse n Society.

ently someone didn't good information when up that list," said Guy McKinleyville, a member ited States Lighthouse and if there's in error ...ody may be about

...Guard is hoping to

Guard decides it's no longer needed.

Conleybeer said the Coast Guard will be soliciting public comment in the next few months. She said notices will be published in newspapers seeking proposals from organizations or individuals outlining what they'd do if granted a lease.

Other lighthouses include three in Los Angeles County; two in Ventura County; and one each in Mendocino and Santa Barbara counties.

Service, although a small portion is still owned by the Coast Guard. Alcatraz Island is run by the National Park Service, but the Coast Guard still owns the lighthouse, she said.

Critics of the proposal say it is unnecessary and confusing.

Wayne Wheeler, president of the lighthouse society, said federal law provides for the automatic transfer of lighthouse property to the park service if the Coast

San Francisco Bay area lighthouses included in the proposal are at Point Reyes, Farallon Islands, Alcatraz, Point Diablo and Lime Point.

Conleybeer said Point Reyes Lighthouse already has been turned over to the National Park

IN APPRECIATION Thursday, Dec. 24, 1998
Thank-you notes from the community **Times-Standard**

Lighthouse society thankful for help

The lighting of the St. George Reef Lighthouse rekindled memories of many who lived within sight of the lighthouse prior to 1975, when it was decommissioned. The recent lighting was far less dramatic but marked an important point in the restoration of the lighthouse.

It is an important symbolic gesture and from a practical standpoint, proudly announces the competition of a major restoration goal, repair of a badly deteriorated electrical system.

This kind of progress carries with it a large price tag, both in monetary outlay and volunteer time. The St. George Reef Lighthouse Preservation Society wishes to thank its many friends on the North Coast who donated very generously of time, money and enthusiasm to complete this phase of a restoration which will ultimately make St. George the only offshore lighthouse in the world accessible to the public.

The society has extended its thanks to our Del Norte supporters in the Triplicate and now wishes to tip the hat to the following individuals, and organizations in Humboldt County: U.S. Coast Guard Group Humboldt Bay, Bill and Bill O'Donnell Jr., George and Kathy Hayes, Dr. Lee House, Bill Barton, Norris Harpin, Emory Readon, Arlene Hartin, Dwayne Evans, Paul Asp, Phil and Linel Haysmer, Humboldt Area Foundation, Times-Standard, and all others who made it possible to relight a darkened part of our heritage.

And, special thanks to KEET-TV for airing "Legendary Lighthouses," which featured St. George and greatly broadened public awareness not only of our group, but also of the scores of dedicated people across the country who are preserving the legacy of lighthouses.

Guy Towers
Eureka

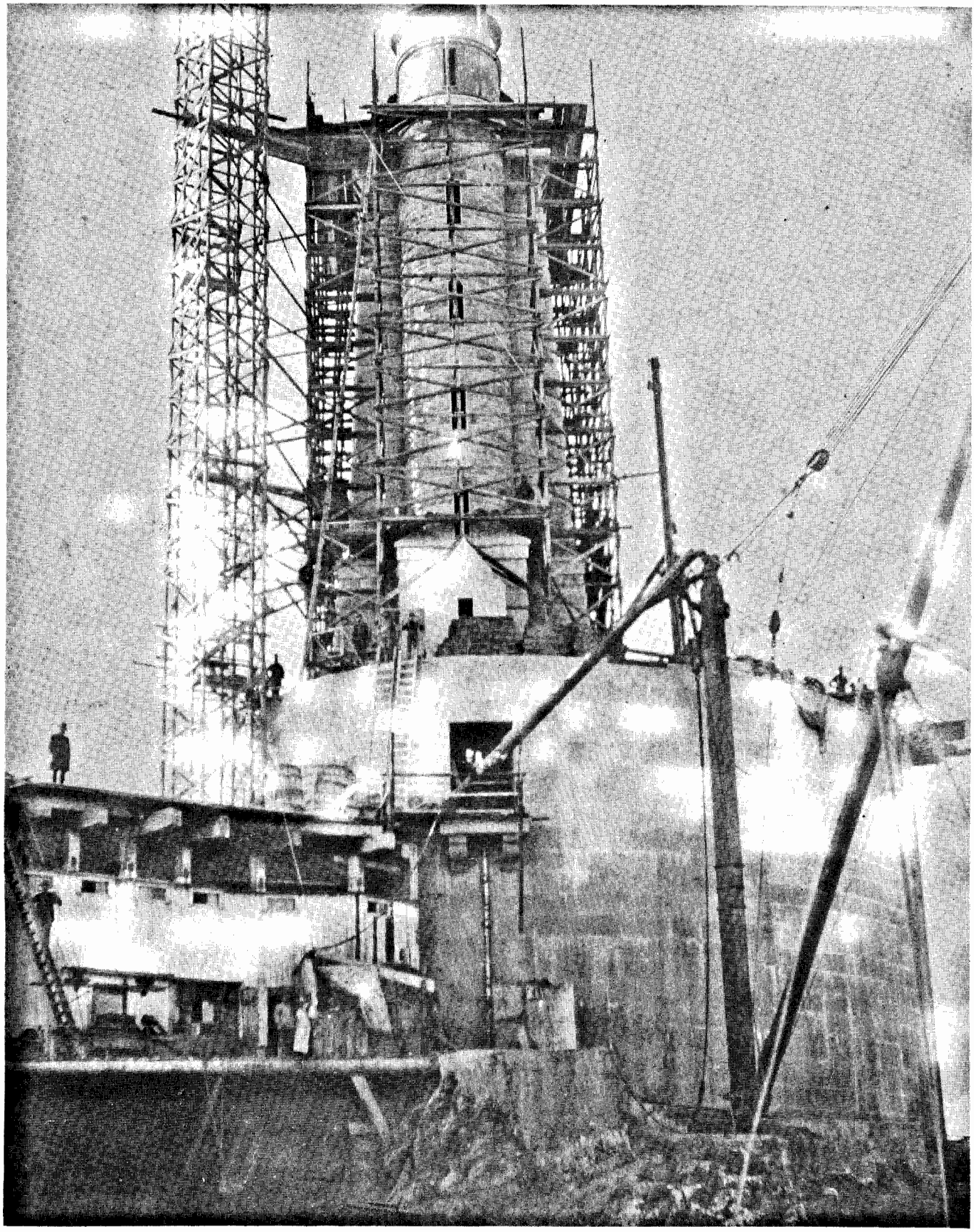
C. R. Smith
Notes

JOHN EDWARD LIND

In 1887 entered the Lighthouse Service as a rigger at the building of the St. George Light Station. In 1892 became 3rd asstnt keeper at St. George Light House. Served for 8 yr.

M. in Crescent City March 11, 1899 to Theresa McNamara, daughter of Nickolas McNamara.

Had children: John Edward Lind, Jr.
Theresa Lind
Adelaide Lind.



The building of Seal Rock Light

This photograph is eloquent testimony to man's determination to overcome obstacles, especially nature's fury and even if it takes years. This photo is of the Seal Rock Lighthouse under construction on Northwest Seal Rock in the St. George Reef off Del Norte County. It was a dangerous task and at the time was the most costly light project undertaken by the United States, costing $702,000. The tower is constructed of granite blocks, while the base is made of solid block concrete and granite. The stone was quarried from granite found on Mad River near Humboldt Bay. The huge cuts were ferried across the bay to the North Peninsula to a temporary site called Paysonville for dressing and then delivered to the lighthouse site. It was completed in 1891. This photograph was taken by Henry Buhne.

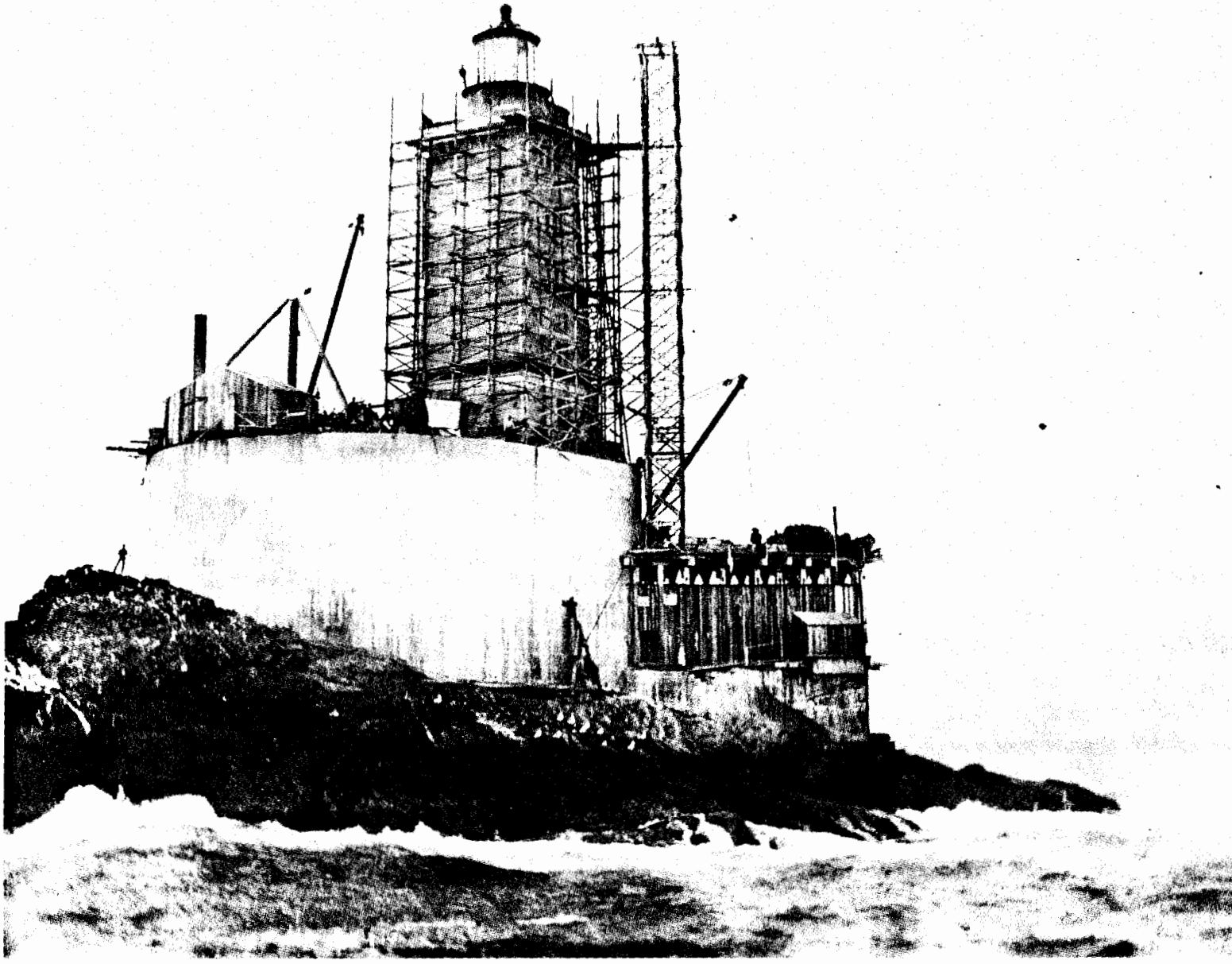


Like a tall ship slicing through a pounding sea, the St. George Lighthouse stands up to the Pacific. Constantly manned for more than eighty years, the lighthouse served from 1892 until 1972, when the Coast Guard abandoned the site. (Courtesy National Archives)

stout cage. A small derrick and hoist on the rock helped pull the men and equipment up the tramway to the construction site, while gravity provided the power for the return trip to *LaNinfa.*

As they became used to riding over the sea, the workers started using the open cage to make trips to and from the rock. As many as six men could ride in the cage at a time, and this made it possible to evacuate the work site in a matter of minutes when dangerous storms swept in off the Pacific. While his men carved the foundation and built the inverted pyramidal base on which the light tower would stand, Ballantyne kept an eye on the seaward horizon. When swells began to build and a storm threatened, he would give the alarm and send his men gliding back over the tramway in the cage to the relative safety of *LaNinfa.*

The sea was not the only danger faced by the builders. The glycerine powder used for blasting out the foundation was highly unstable, and an accidental explosion was always a threat. What is more, the hard but brittle stone of the reef shattered easily, and the crew was often showered with sharp, shrapnel-like rock fragments when the glycerine was detonated. When blasting, the workers scurried for cover like infantrymen under attack. Despite precautions, there were frequent injuries, and even *LaNinfa* was sometimes hit by blast fragments.



Workers put finishing touches on the scaffolded tower of the St. George Lighthouse, shown here under construction near Crescent City, California, during the 1890s. The tower stands on a massive base made with granite blocks, each weighing more than two tons. The Olympian task of establishing a lighthouse on this exposed, wave-swept outcropping was undertaken by the same tough engineer and crew that built the Tillamook Rock Lighthouse well to the north. They completed their work at Tillamook Rock in eighteen months; but because of bad weather and funding shortages, the St. George Lighthouse took more than five years to build. (Courtesy National Archives)

ADDRESS ALL COMMUNICATIONS TO
SUPERINTENDENT OF LIGHTHOUSES
SAN FRANCISCO, CALIF.

DEPARTMENT OF COMMERCE

LIGHTHOUSE SERVICE

WW:EMA

OFFICE OF SUPERINTENDENT, 18TH DISTRICT
CUSTOMHOUSE
SAN FRANCISCO, CALIF.

January 16, 1928.

Mr. J. E. Lind,
Keeper, Crescent City Light Station.

1. Referring to your letter of February 23, 1927, stating that you contemplated retiring on July 1, 1928, you are advised that since you will be 70 years old on May 26, 1928, it will be necessary for you to retire at the close of May 26, 1928, or make application through the Superintendent of Lighthouses asking that your time be extended for two years from May 26, 1928.

2. In either of the above cases you should make application three months in advance of the date, May 26, 1928.

H. W. Rhodes.

TErminal 4-3459 TErminal 4-7857

WILMINGTON INSTRUMENT CO.

JOHN E. LIND

332 N. FRIES AVENUE
POSTOFFICE BOX 425
WILMINGTON, CALIF.

DEPARTMENT OF COMMERCE
APPOINTMENT DIVISION
WASHINGTON

July 1, 1928.

Mr. John E. Lind,

Through the Chief, Bureau of Lighthouses.

Sir:

You are advised that under the Welch Act your compensation has been changed as indicated below, effective July 1, 1928.

By direction of the Secretary:

Respectfully,

EDW. J. GARDNER,

Chief of Appointment Division.

From: $1320

To: $1380

11—9564

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#809-3

FIFTY YEARS AGO - The Del Norte Triplicate (Dec. 1939) reported the following:

Captain Georges Roux, 62, for nearly thirty years keeper of the [redacted] St. George light house, died suddenly at the Knapp hospital here early Monday morning following a brief illness. Capt. Roux was badly battered a few days previous to his death when he attempted to reach the light house following several weeks shore leave and it is believed this experience brought on exhaustion from the effects of which he never recovered.

Capt. Roux was able to be around following his attempt to reach the light, but evidently suffered injuries which brought on a fatal illness. Cause of his death was chronic nephritis complicated by terminal pneumonia.

Captain Roux left the Hobbs, Wall wharf in the harbor about ten o'clock Tuesday morning in the small launch with a load of groceries. In spite of heavy seas he made the lighthouse all right but came near losing his life in the boiling surf when an attempt was made to fasten lines to the launch and haul it to the light landing.

After several hours' struggle Capt. Roux finally gave up and returned to the harbor, arriving about six o'clock that evening, his boat filled with water, the groceries a total loss, feeling glad to be alive after the worst experience in his long career as keeper of the dangerous light on the tiny speck of rock ten miles offshore.

Capt. Roux, who was a native of France, had no relatives in this section. Funeral services were held Wednesday afternoon from the Roeder Funeral Home, with interment in the Catholic cemetery.

June 1989 Bulletin for [illegible]

THE SALVAGE OF ~~POINT~~ SAINT GEORGE Reef LH

By Dianna Miller

(Part 2)

As we waited for the tide to get high enough for us to reach the stone steps on Seal Rock, we were told we would join the Blackhaw's Captain for lunch. A delicious Oriental meal was served, but I was excited and still slightly sea sick, so it was difficult to eat. Soon it was time to board the lighthouse. It would be tricky, at best, and the Captain advised us not to jump onto the rock if we had the slightest doubt we could land successfully. The boat was waiting. Our chance had arrived!

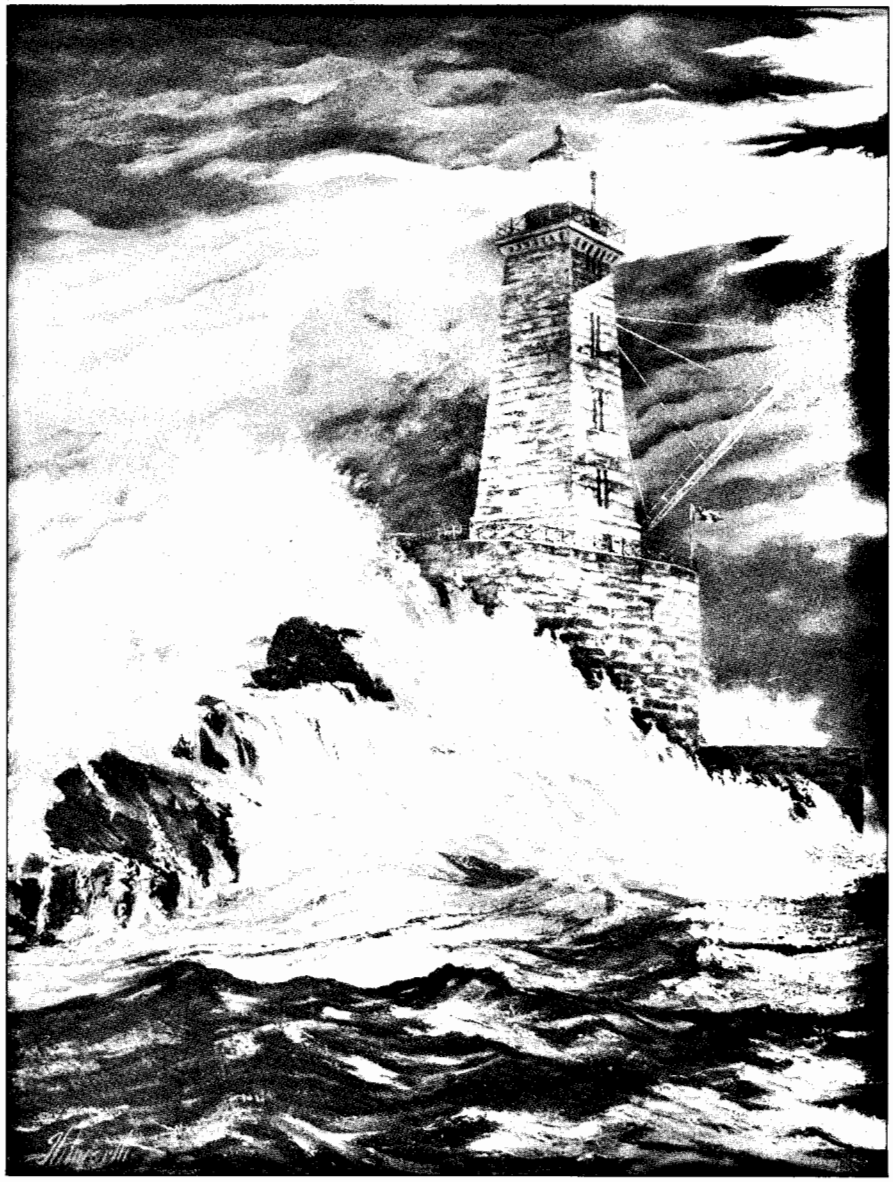
We were taken to Seal Rock and told to jump at the moment the boat's small bow bumped against the rock. Only two at a time could land because the waves kept pulling the boat away every third or fourth surge. When it was my turn, heart pounding, I jumped as hard as I could and made a grab for the safety rope held by a Coast Guard crewman. Success! My footing held and I scrambled for the iron staircase which led up to the lighthouse's great door. The odor of seals was very strong. On the main deck, we took off our life vests and went inside.

The first sensation was one of darkness and decay. Flashlights came on and when our eyes adjusted, we could make out shapes around us. The Boatswain's locker was just ahead, a row of huge generators to our right, and a wooden stairway to our left. Directly in front, a life-size dummy in Coast Guard coveralls was hung by the neck; a parting joke by the last lighthouse crew in 1975. We looked into the Boatswain's locker and it was empty, except for a few molding American flags. Next we mounted the staircase and headed for the second level, finding a laundry room complete with washer, dryer and an old refrigerator. A box of laundry soap stood nearby. Around the corner and three steps down, we came to a door which led outside to another deck. It was here we found the machinery and the enormous boom used to load personnel and supplies onto the lighthouse. The boom was completely rusted. Its metalwork looked as fragile as a spider's web. After taking a few pictures, we went inside and continued up the narrow, winding staircase into the darkness above.

The room we discovered next was the kitchen. It looked recently occupied, with an old-fashioned tea kettle on the stove, cannisters full of flour, sugar, coffee and tea bags; even a selection of spices in the cupboard. There were old newspapers and magazines scattered on the counter top. A simple table and chairs stood in the middle of the room and on the wall, a bulletin board displayed a variety of Coast Guard papers. The rest of the group continued on while I checked for more artifacts. All of the windows were boarded up, so it was quite dark. Some of the drawers were swollen with moisture and impossible to open, so I had to content myself with exploring the open ones. A full set of cooking pans, silverware and plastic dishes were neatly stacked on kitchen shelves. An old green garbage can was tucked under the sink with the usual kitchen cleansers beside it. Everywhere, the smell of decay prevailed. I finally satisfied my curiosity and went up to the next level: the bedrooms.

I found showers, toilets, beds and several chest of drawers in each bedroom. In one room, there was a filing cabinet and a couple of empty model boxes. Pillows were still on the beds. Fallen plaster from the walls and ceilings lay scattered over everything, adding to the eerie atmosphere. How sad to see this incredible building, a monumental engineering feat, slowly crumbling to dust.

St. George Reef Lighthouse



Sentinels of our shores

Guardians of ships and mariners for 130 years, California's lighthouses again flash "welcome" to landlubbers.

Story & paintings by Charles Wilmarth

The coastal mountains of California plunging recklessly into the long, driving wave of the Pacific; the rollers crashing; the spindrift sailing aloft seeking the sun—create a symphony of sight and sound. This symphony is inspiration to poet and artist but deadly challenge to the skills and courage of every mariner.

Far above, on a promontory, the silent lighthouse stands. For the mariner it is a sentinel against disaster; for the landbound it is an ageless symbol of romance. For both it is an eternal promise of safe harbor.

The Pacific coast lacks the Atlantic's broad continental shelf. Its deeps are not far offshore and allow for relatively close-in lanes of shipping. But swift and powerful currents, wicked tide rips and winds delight in nudging ships off course. The fog of the warmer months lowers a menacing, wet shroud over ship and reef alike, and scores of bony, boulder-strewn fingers of hard rock grasp at the sea lanes.

With the Gold Rush came a rash of shipping. The chorus of voices raised in Washington by shipowners and merchants caused Congress to authorize construction of a chain of lighthouses along the Pacific coast. By the turn of the century, more than 20 beacons had been built between Mexico and Oregon.

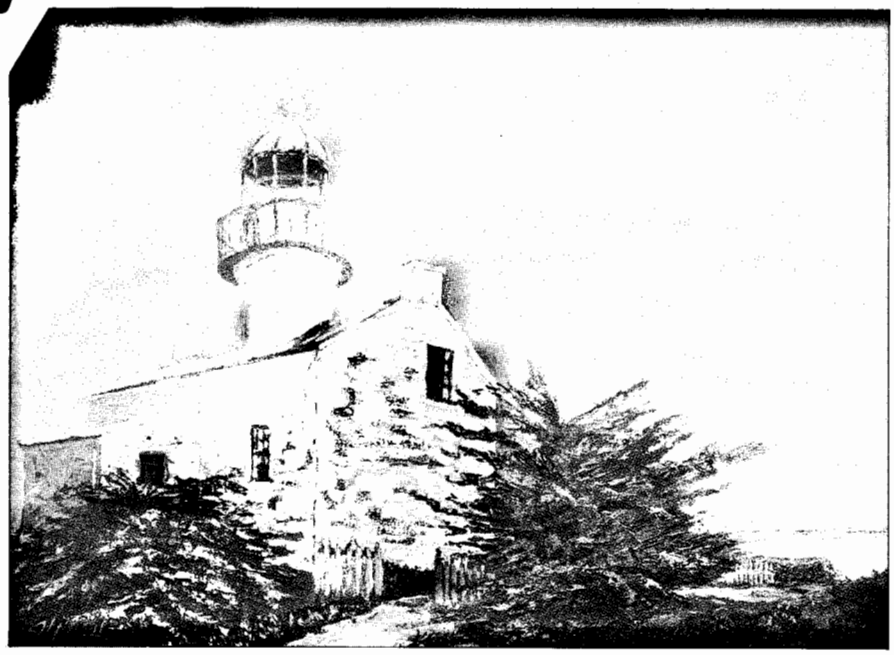
By the 1960s, automation had replaced the lighthouse keeper. While they continued to serve mariners, lighthouses became locked and unapproachable and the targets of vandals. In 1966 Congress passed the National Historical Preservation Act, which aided in the preservation of "sites, buildings, and structures. . . .significant in American history." The Coast Guard, in cooperation with local governments and private organizations, immediately began a program of lighthouse renovation, rehabilitation, and restoration to public use.

The result is a number of excellent opportunities for you to enjoy the romance of lighthouses. Some of the restored structures include a museum, a hostel, and tours. Here is a rundown of some of the lighthouses in Northern California. In planning your visit, you should always telephone ahead to confirm hours and availability of tours, open houses, and services. Hostels ask for mail reservations and deposits.

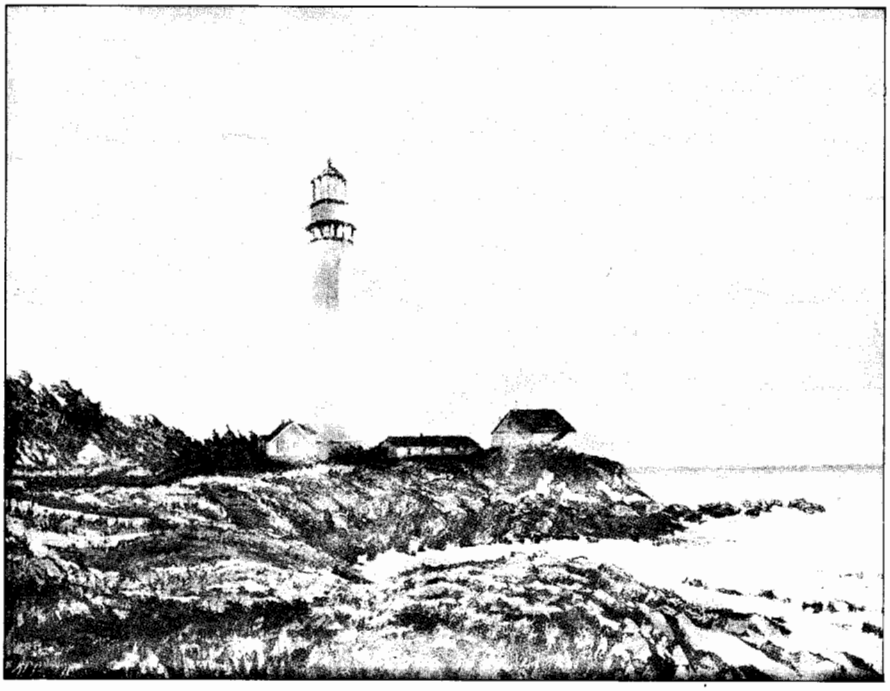
Pt. Reyes. Built in 1870, the Pt. Reyes light was the first to be sighted by Great Circle sailors en route to San Francisco. Foggiest of California's lights, it consequently has the coast's busiest electronic horn. Travelling down the more than 300 steps to the lantern — and back up—is not for acrophobes or the less than agile. There are tours Thursday through Monday from 10 a.m. to 3:30 p.m. The National Park Service headquarters number is (415)663-1092; the light's number is (415)669-1534. Take 101 and Sir Francis Drake Blvd. through Inverness to the light. For public transit information, call Golden Gate Transit at (415)332-6600.

East Brother. The 1874 jewel is on a rock setting off San Pablo Point, Richmond, north of the San Rafael Bridge. Its Victorian gingerbread splendor has been restored by Contra Costa County volunteers. Resident keepers offer three antique rooms for dinner-bed-breakfast, Friday through Sunday. Overnight cost is $155-$175; day use is $7-14. To make reservations, call (415)233-2385.

Fort Point. The fourth light in service on the West Coast is atop the U.S. Army fort beneath the southern anchorage of the Golden Gate Bridge. Built in 1855, the lighthouse is part of the Golden Gate National Recreation Area. It is approachable but not open. Hours are 10 to 5 daily. For information, call the National Park Service at (415)556-1693.



Pt. Loma Lighthouse



Pigeon Point Lighthouse

Alcatraz. The original Alcatraz light appeared in 1854 and was the West Coast's first. The present fluted tower replaced the original and has survived prison riot, Indian occupation, and fire. An inspiring sight from the bay ferries, the tower is closed but you may get close on an Alcatraz guided tour. Tours are run by the National Park Service. For tickets, call any Ticketron.

Pt. Montara. The 1875 lighthouse is 25 miles south of San Francisco, one half mile south of Montara, opposite 16th St. Although you cannot enter the lighthouse itself, it is on the grounds of a youth hostel. Overnight fees are $6.50 per person; $4.50 for AYH members; half price for children. It is open 7 days a week from 4:30 p.m. to 9:30 a.m. You can take BART to Daly City, where you can get SamTrans bus 1A or 1H, one or the other of which leaves for the hostel every three hours from 8:05 a.m. to 5:50 p.m. Mail reservations only, with deposit. Montara Lighthouse Hostel, P.O. Box 737, Montara, CA 94037. (415)728-7177.

Oakland Harbor. This 1890 structure was plucked from its original site on the Oakland estuary, floated to 1951 Embarcadero Road in Oakland, and opened as Quinn's Lighthouse Restaurant. Quinn's offers lunch 5 days and dinner 7 days a week. (415)536-2050.

For observation only:

Mile Rocks is off San Francisco, outside the Golden Gate. It was first lighted in 1906, five years after the loss of the ship *City of Rio de Janiero* and 129 lives on nearby Fort Point Ledge. The original tower was removed to accommodate helicopter landings. You can see Mile Rocks from Cliff Walk, Lincoln Park Golf Course, James D. Phelan Beach, and Pt. Lobos.

Lime Point, built in 1883, is under the north tower of the Golden Gate Bridge. A prodigious coal burner in its early days as a major fog signal, the lighthouse can be seen from Fort Baker or Fort Point.

Point Bonita (1855) is an isolated light with its own tunnel and suspension bridge. It's on the outer reaches of the Marin headlands. Try for a-long view from the headlands or look north from the Presidio viewing areas along Lincoln Boulevard. Binoculars would help.

Monterey Bay Area

Pt. Pinos. This 1855 light was famous for its women keepers. Its rooms, reflecting a variety of historical periods, were furnished by the Pacific Grove Museum of Natural History. The light is open Saturdays and Sundays from 1 to 4. (408)372-4212.

Pigeon Point, built in 1872, is the tallest of the west coast towers, standing 148 feet above the breakers. A youth hostel on the grounds consists of three complete homes with three bedrooms each and can accommodate 14 persons per home. Each home has a kitchen. The lighthouse is closed to the public but the area offers tidepool walks and is an excellent picnic spot. It is about midway between Half Moon Bay and Santa Cruz on Highway 1, six miles south of Pescadero Road. The hostel charges $6.50 per person ($4.50 for AYH members) and is open seven days a week from 7:30–9:30 a.m. and 4:30–9:30 p.m. Mail reservations two weeks in advance only with deposit. Pigeon Pt. Lighthouse Hostel, Pescadero, CA 94060. (415) 879-0633.

Humboldt—Del Norte

Crescent City. This 1856 lighthouse is the oldest north of San Francisco and is being restored. Its attractions include antique furniture, artifacts of early lighthouse service, and, on a clear day, a view of the St. George Reef Lighthouse. The Crescent City Lighthouse is open April 1 through September 30, Wednesday through Sunday, 10 to 4. Battery Point. (707)464-3089.

Cornwall has not stood still since its Celtic beginnings, but it does seem to have met the 20th century with an indifferent shrug. This is a land where fact and fiction have no clear-cut boundaries and where history and legend cannot be disentangled from each other.

Here it is common practice for a man to turn over all the change in his pocket if he chances to see the new moon. Bramble berries not harvested before September are left on the vines for the fairies. In this Celtic land, surrounded by the sea and so dependent on it, life is thought to come and go with the rise and fall of the tide. Here great beacon fires are lit on Midsummers Eve—a chain of dancing light from Lands End to the border, wrought of an ancient need to hasten the return of the waning sun.

When in Cornwall, I always stop at the River Tamar to ask permission of the Piskies (Cornish little people) to enter, and this past autumn my son Sterling was just as eager to perform this small ritual as I.

Soon we were amidst the gray, windswept isolation of Bodmin Moor. The wind seems always to blow on Bodmin Moor, but inside Jamaica Inn this day, huge logs crackled a warm welcome.

After a pint and a pasty we made our way down the lane to Dozmary Pool. Many believe this reed-rimmed, windwhipped pond to be the very lake into which Sir Bedivere threw Excalibur after the last great Arthurian battle. Not far from Dozmary Pool are the Hurlers, giant circles of standing stones, possibly placed there by the builders of Stonehenge.

All the country between the River Fal and the Fowey Estuary is the sad haunt of Tristan and Isolde. Here deep, calm estuaries stretch their blue fingers inward amongst the encompassing hills clad in lush foliage not seen elsewhere in Cornwall. Driving down the High Street in Falmouth, it is easy to see that the community still is very much influenced by its business of boats and fishing. My son was fascinated by yarns of fishing and the sea spun by a local ancient mariner.

The legal drinking age in England is 18, so I was anxious to share the Blue Anchor pub with Sterling. This excellent pub in Helston is one of only four in the whole of England that still brews its own beer. We went back to the brewhouse to meet the brewer, and nothing could have made the day more complete than seeing the brewer wearing an Anchor Steam Beer Brewing Co. of San Francisco t-shirt. That's cross-cultural exchange!

Since Sterling loves to fish, we went to Porthleven, just a few miles from Helston. The entire village consists of a perfect anchorage, the quay, and a few buildings clinging to the surrounding rocks. Nets hang drying in the wind while coils of line and piles of crab baskets and lobster pots crowd the quay. Sterling fished while my camera and I became intimate with whatever may have been deposited amongst the rocks by the last tide. At noon we climbed the stone steps to the tiny, bright-pink Ship Inn, which gives the appearance of growing out of the very crags on which it perches. Inside we sat in the window devouring our steamy pasties and relishing our pints. Below, in the seaweed-clogged harbor, the small, multi-colored boats rose and fell with the undulations of the water.

If Cornwall can be considered an arm of England, reaching out into the ocean, that part of it from Penzance to Land's End and back up to St. Ives could be considered the thumb.

Penzance, as in "Pirates of . . .", offers good shopping and other facilities, including a wide range of accommodations. I prefer Mousehole (pronounced "muzzel"), however. It lies a few miles farther around Mounts Bay. Here, establishments such as the Schooner Inn and the Lobster Pot offer hospitable bed and breakfast in ancient, tottering structures on the very edge of the tiny harbor. On the horizon, an island fortress stands constant vigil at the mouth of Mounts Bay and again we are reminded of Arthur: legend has it that this is Avalon.

Land's End has little to recommend it except that it is the most westerly point of the British Isles. This meeting of land and sea once was beautiful but now has little but tourist-tacky accommodations and mobile units dispensing coolish tea and warmish soda.

We drove around the coast to Zennor, a favorite haunt of mine. The village is perched 350 feet above its bright blue cove, and after trekking down the treacherous path and back again we were more than ready for refreshment at the Tinners Arms. Sterling was spellbound by an old gentleman's tale of the Mermaid of Zennor. Legend tells that during the Middle Ages the mermaid fell in love with the singing of Mathew Trewhella and consequently lured him into the sea. In the village church you can see her image carved on the end of a pew.

St. Ives is the town of "Kits, Kats, Sacks, and Wives" fame, but although this active fishing village does abound in fat, lazy cats, there are far more tourists and facilities to accommodate them.

I am fascinated by stone circles, menhirs, dolmens, and such. The Men-an-Tole, unique among standing stones, lies a good mile and a half off the main road and it takes a determined adventurer to reach it. But the view and quiet, rolling expanse of heather and gorse are well worth the pilgrimage. Lanyon Quoit, the remains of a chieftain's burial chamber, offers interest for the less committed discoverer. It lies but a few yards off the road.

We went from one Stone Age relic to another: the Boscawen-Un, a perfect circle hidden in a farmer's field; the Merry Maidens, young girls allegedly turned to stone for dancing on the Sabbath; two pipers who provided their music; and a 21-foot monolith known as the Blind Fiddler. With map in hand we stumbled through bramble and bracken, traversed icy streams, and were cornered by a friendly donkey during our questing.

Sterling and I, both seafood fanciers, eagerly eyed the lobster tanks on the pier at Padstow. Here were thousands of giant lobsters climbing atop one another in aerated tanks where the local lobstermen deposit their catch.

A quiet fishing community most of the year, Padstow explodes into a crescendo of celebration when, at dawn on May Morn, the "'oss" (hobby horse) emerges from its stable behind the Green Lion. Amidst joyful drum, fiddle, and accordion music and shouts of "'Oss!" "'Oss!" and answers of "We 'Oss!" the 'oss begins its annual rounds. It will visit every home, business, and boat in the harbor, bringing peace, good fortune, and prosperity for yet another year.

We left Cornwall at what is perhaps its most magical spot: Tintagel. This community has managed to persuade much of the rest of the world that King Arthur was born in a castle here. Whether this claim is true or not, there is a natural mystique about the towering headland and the shimmering bay below.

It is always difficult for me to leave Cornwall. It is a tiny land, yet whether you have a few days or a few weeks to spend there, I'll bet you a pint at the Blue Anchor that you won't discover it all.

If you're going . . .

For information on a vacation in Cornwall, contact: British Tourist Authority, 612 S. Flower St., Los Angeles, CA 90017; telephone: (213) 623-8196. See your CSAA Travel Agency for airline tickets and other arrangements for your trip.

Dec 97

Hi Mary Lu

Hope you have had a good year,are you still working at the Historical Society ?

I talked to Guy Towers about a month ago, he want's Bob an I to make a video about our life on the lighthouse, hope to do this in a few weeks.I did send Guy a cassette I made with story's about my 3½ years on the Rock, and at ST. George Reef Shore Quarters.

I had a nice surprise this summer,Pat (Red)Griffen who was on the lighthouse with me for 2½ years called me.I have been trying to find him for years, and he has been trying to find me.The reason we could not find each other was that we both stopped using our first name, he found me on the internet.

We had forty years of catching up to do.I told him all about Guy trying to restore the old lighthouse, and about the wonderful St. George Lighthouse Room at the museum.I sent Red a lot of articles, pictures, and videos that I had. Red is a Graphic Designer in St. Louis MO. so he drew up a lot of good money making ideas and sent hem to Guy along with a lot of old pictures of the lighthouse, I hope they are in the museum.

In OCT. Red and his wife Sharon flew to S.F. they rented a car and drove up the coast to C.C., they arrived there on a Sat.,they met Bob Bolin at the museum, and spent 2 hours talking to Bob and looking at everything.

We are going to try and get together this spring down at the Lake of the Orzarks, Reds company has a condo down there.

HAVE A VERY MERRY CHRISTMAS AND A HAPPY NEW YEAR

John



JOHN & LORRAINE GIBBONS
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St. Geo. Reef LH file - research
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Research file

St. George Reef Lighthouse

Amoung the hundreds of American lighthouses, three sentinels stand out as unparalleled engineering accomplishments: of the three, St. George Reef off the coast of Crescent City is the tallest and largest. It cost more and took longer to build, and it has proven more dangerous to those who maned it than the other two.

Completed in 1892, the lighthouse was the tallest on the Pacific Coast, 134 feet, and cost $704,000. The massive structure comsumed 175,260 cubic feet of granite. The ships carried 14,307 tons of stone, 1,439 tons of sand, 335 tons of brick, and 272 tons of gravel out to the reef to be used in construction. Interior work included such fine woods as Port Orford cedar, redwood, and oak. The entire project - from soundings to lighting the lens - required eleven years, the most prolonged construction period in American lighthouse history.

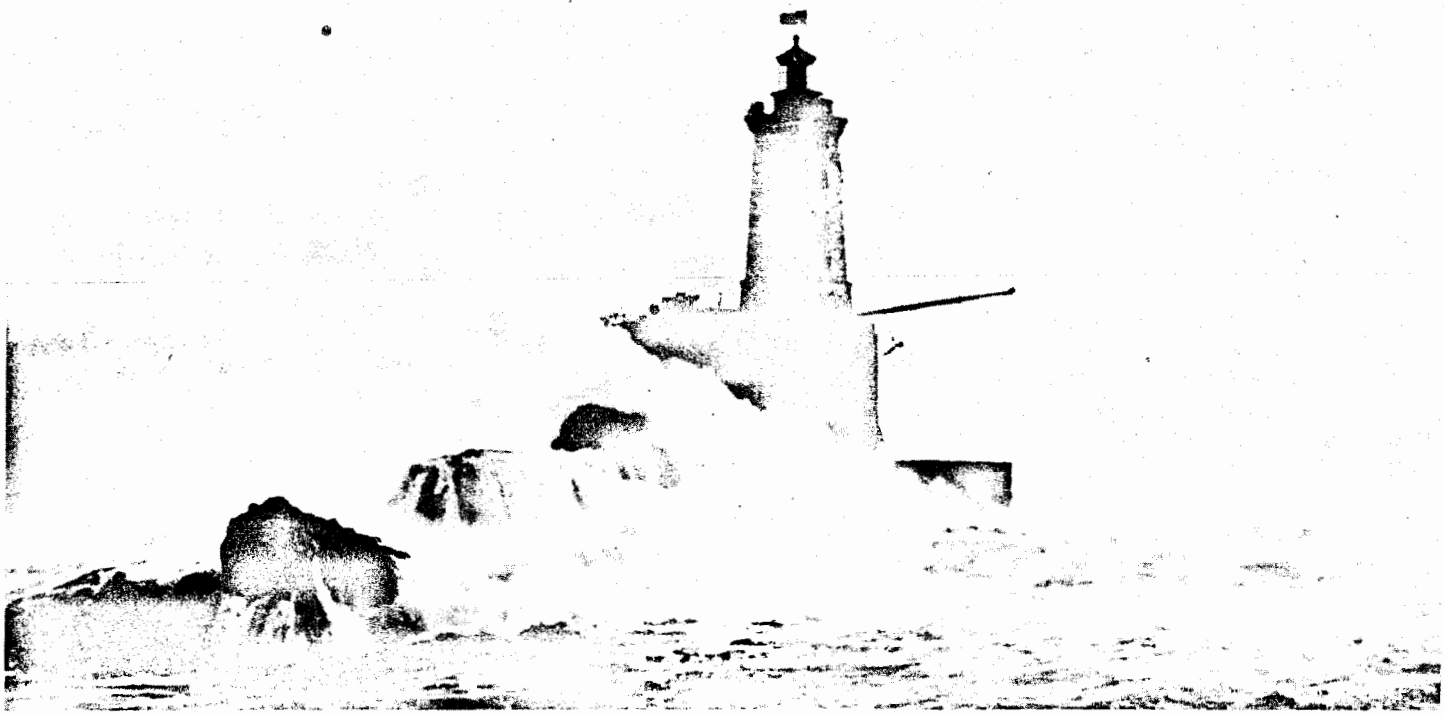
The beautiful first order Fresnel lens cost the Lighthouse Service $15,000. The lens is 7'10" high and 6'1" in diameter and mounted on its stand it weighes approximately 5,000 pounds. When installed in 1892, it featured plates of red glass covering alternating panels of prisms and bull's eyes which projected an alternating red and white flash with a 15-second interval between flashes. (Later the red glass plates would be removed, producting a white-pnly flash.) Beams from the lens warned mariners of the reef any time that they approached within 18 miles of the light.

Life was incredibly hard on the reef station. Amoung the 80 men who would serve under the Lighthouse Service from 1891 through 1930, 37 would resign and 26 would seek transfers to other stations. The winter of 1952 was the worst in the reef's history. During one storm, the Coast Guard reported waves at least one hundred sixty feet high sweeping over the top of the lighthouse, shattering the windowpanes in the lantern room 146 feet above normal water.

On May 13, 1975, the Coast Guard lowered the colors for the last time, chained the door shut and left the light station completely intact. America's greatest lighthouse is now dark.

Your viewing of this beautifully preserved lens has been made possible in part by Bob Bolen, who built this annex, the good citizens of Del Norte County, who value their heritage, the Historical Society, the U.S. Coast Guard, and Mr. Wayne Wheeler, lighthouse historian and preservationist.

LH FILE



Pt. St. George Light Station is shown taking a pounding from the sea in this 1963 U.S. Coast Guard photo.

St. George light and its heroic builders

Editor's note: Few, if any, lighthouses on the nation's coastline were more difficult to construct and service than the Point St. George structure completed in 1891 north of Crescent City after ten years of hazardous work. The Historian issue of July-August, 1981, gave a brief description of the storm-battered light tower but we are indebted to the late Raymond C. Burke, former U.S. Coast Guard Commander and long-time member of the Historical Society, whose research has made this more detailed account of its construction available.

On May 19, 1866, the Lighthouse Board asked the General Land Office to reserve certain lands for lighthouse purposes. These included "that portion of Point St. George which remains unsurveyed and which is not understood to be included in the 27-50/100 acres sold to James H. Richey March 26, 1859."

The General Land Office on June 5, 1866, certified to the Secretary of the Interior that these lands "appear on the books of this office to be undisposed of" and recommended that the President order reservation of them to be obtained "so that proper local land officers may protect the tracts of land from interference." These included "the unsurveyed part of Point St. George and also fractional section 14, of T.16 Range 2 West Humboldt Meridian...containing 12-96/100 acres." On June 8, 1866, President Andrew Johnson reserved the lands requested for lighthouse purposes.

On January 21, 1867, the chairman of the Lighthouse Board requested the General Land Office to have reserved "all the rocky islets off Point St. George" as indicated in an accompanying Coast Survey Sketch. These were also reserved by President Andrew Johnson on January 29, 1867. State jurisdiction was ceded on March 12, 1872.

In reply to site proposals in an 1875 letter from the 12th District Light Engineer, the Lighthouse Board suggested that "perhaps it would be better to locate the lighthouse on one of the outlying rocks off Point St. George. It is true that

Early kindergarten

(continued from page 7)

able. The Kindergarten is not for the poor children alone—i.e. a charity—neither is it for the rich child alone—i.e. a corrective or antidote; but it is the proper atmosphere and birthright of every child. The Kindergarten is supported by subscriptions and those wishing to contribute toward its support may hand their subscriptions to Rev. S.R. Wood."

The March 29 issue of the Enterprise reports, "Miss Merrill's Kindergarten School opened Monday with a large attendance of little ones. The school is now one of the recognized institutions of Ferndale and deserving of the most liberal support."

The program ran into what we now consider to be summer vacation and the July 12 Enterprise announced, "The Ferndale Kindergarten will close the 26th day of July for two weeks vacation and will reopen August 13 with Miss Merrill as principal and Miss Agnes Chick as assistant."

Schools in Ferndale had a delayed opening at the end of their summer break in 1895 due to an outbreak of diphtheria. The August 9 Enterprise noted, "The Ferndale schools, owing to diphtheria, did not open last Monday, but will open next Monday the 12th."

The sickness did not at first affect the small children, apparently, for on August 23rd the newspaper had this item: "Kindergarten Exhibition at Roberts Hall, Friday, September 13. Admission 15¢. Goodnight Drill by eight little girls. "I don't want to play in your yard" song and chorus in costume..."

The diphtheria outbreak eventually hit this program in October, however, for on October 18, the Enterprise said, "Miss Lucie Galloway, the Kindergartner, has concluded not to reopen the Kindergarten until the First of March on account of the recent cases of sickness among children." HH

D.N. CNTY. HISTORICAL SOCIETY
Acquisition Item #

the structure would cost considerably more, but would not the advantages resulting from the selection of such a location, when the commerce along the coast increases, more than compensate for the extra cost?"

The 12th District Engineer referred this inquiry to the U.S. Coast Survey, Los Angeles, which on February 15, 1875, replied, in part:

"Northwest Seal Rock is the outermost rock of the reef. A light on this would undoubtedly be of very great benefit to general commerce, but I would conceive it a very difficult task to procure foundation for it, as the rock is exposed to the full force of the sea, and is even less in area than Star Rock. With any unusual swell, the sea breaks over it." "S.W. Seal is the largest in area, of the three rocks of Crescent City Reef proper indicated; but it is located in the body of the reef, and a light on it would, I think, serve to mislead rather than to benefit. The cost of constructing and the difficulty of maintaining a light on any of these rocks would, in my opinion, be very great."

The 12th District Lighthouse Engineer remarked on the above, "It is very evident in my mind, from his letter, and from the study of the chart which was sent to you with my last letter on this subject, that the only point for the lighthouse is on the promontory I have already described to you." The Engineer recommended the purchase of a small piece of land directly to the east of it. This land is described as the fraction of the N.W. quarter of the S.W. quarter of section 13 of T.16 N.R. 2 West Humboldt Meridian, comprising 27.69 acres. The land is principally prairie and sand hills, with some scrub pines and no wood or water. I believe it is not fenced. The intrinsic value must be very little and probably if it were purchased for $5.00 an acre that sum would be several times its true value. I have written to Crescent City to ascertain from Mr. White, the owner of the land, if he will sell that small piece of land and at what price." If the land could be purchased by July 1, when the money would be available, the engineer suggested that the lighthouse could be built that year (1875).

On August 26, 1876, Theodore White proposed to sell to the Government of the United States for the sum of $500, ten acres of land "lying in said county and state, in section #13, in township #16 N. of Range #2 West, base and Meridian of Humboldt, lying east of Point St. George ..."

The engineer recommended the pur-

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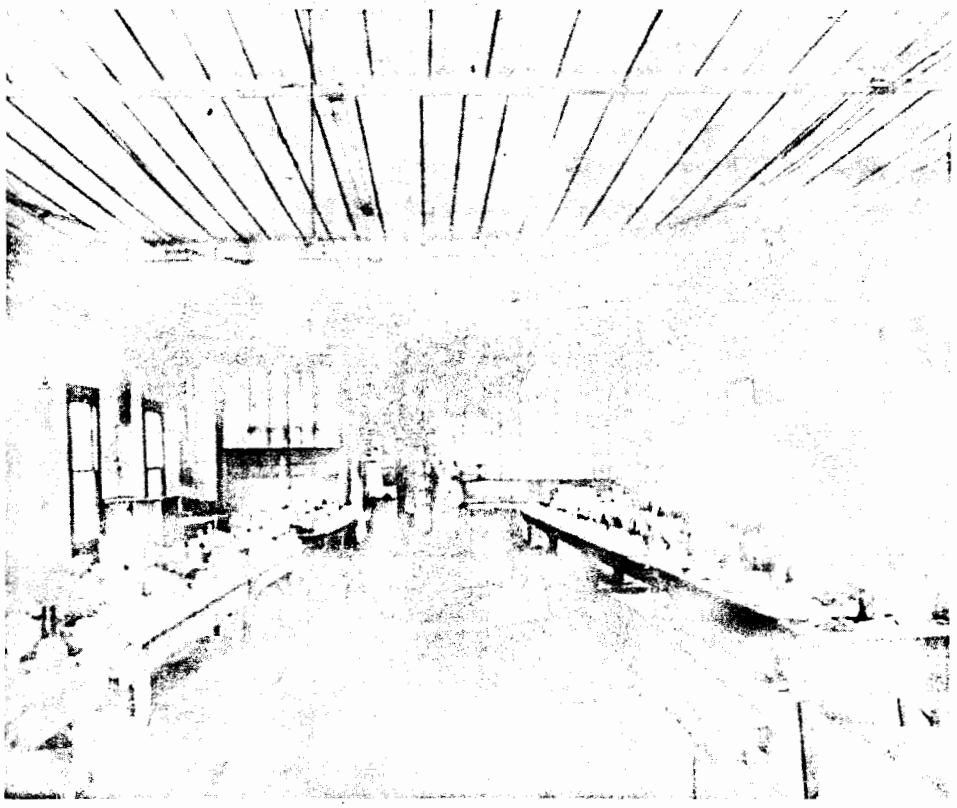

An early interior view of a cookhouse, with tables set and ready for the onrush of hungry mill workers. This was the cookhouse at Glendale Mill.

Cookhouses: A cook who served a bad meal was soon on his way out of town

by Ralph W. Dearing

Early logging camps and lumber towns in Humboldt County were all equipped with company owned cookhouses. This was because many of the working men employed were single, and lived in the remote camps with only the logging railroad as a means of transportation. The time of this story is the 1920s. All the cookhouses were in full swing, at least they were in Samoa, Korbel, Scotia and Crannell. My experience was limited to the cookhouse in Korbel, and one of the logging camps operated by The Northern Redwood Lumber Company.

The cookhouse in Korbel was a two-story, wooden structure painted a light grey. On one end, facing the main street, was a dining room equipped with tables for four, with white tablecloths and napkins. Wallpaper and some pictures were used for decoration. This dining room was for guests and executives who desired to eat meals in the cookhouse. On the other end of this building, downstairs, was the store room for all the supplies and the butcher shop. A stairway led to the second floor where individual rooms were furnished for the cooks and the waitresses. The remainder of the building downstairs was devoted to the kitchen and the main dining room.

I was lucky enough in 1927 to land a job to keep the wood rack filled for the cooks and the baker. Another boy, Elwood Nichols, had this job but his family moved to Rohnerville. His father had passed his tests to be a member of the California Highway Patrol. Elwood told the head cook that I could do the job, and I was hired.

The cook's name was Lloyd Scott, who lived in Glendale. I soon learned that the job required much more than keeping the wood rack filled. It was a part-time kid's job that had to be taken care of before and after high school, and on Saturdays and Sundays. In addition to hauling split wood from a large woodshed back of the cookhouse with a wheelbarrow, I had to open wooden boxes of canned goods that came in each week, and put the cans on shelves in the storeroom. I also had to keep the sugar bin filled, and the flour bin filled for the baker. Rice and beans were next. Whenever the menu called for beans, I had to (count the beans), as the saying was, meaning I spread them out on a large flat counter, and examined them for dirt clods. Of course I was supposed to re-

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Lighthouse builders battled the sea and bureaucrats

(continued from page 9)

chase of the connecting ten acre strip of land from Theodore White at the price of $500. "The intrinsic value of the land as grazing land is probably not more than $5.00 an acre," he added, "but as Mr. White considers it a detriment to him to have a piece taken away from the middle of his farm," the engineer recommended paying it, because the expense of condemning the land would be much more than the sum mentioned."

Regarding the comments of the coast survey on the various proposed sites on the rocks, there were only two practical sites among these according to the Engineer—Star Rock and N.W. Seal Rock. "I cannot feel," he added, "that any material advantage would be gained by placing a light on Star Rock rather than on the mainland, and certainly the very great additional expense that would have to be incurred would, in my opinion, make a light there out of the question."

The importance of a light at Point St. George was first stressed in the 1874 annual report of the Lighthouse Board which read in part:

"This is one of the most important points for a seacoast light on the coast of California. The bluff point is about 130 feet high, with level land for some distance back of it. Off the point, extending some six or seven miles, is a very dangerous reef of rocks, quite a number of which show above water and many are awash at low tide; others have from three to four fathoms of water on them.

"The passage between the outlying rocks of this reef and Point St. George is quite wide and is used by the coasting steamers and sailing vessels. The steamer Brother Jonathan was wrecked on this reef some years ago during a fog and many lives were lost, among them General Wright and staff with families of himself and several of his staff. A lighthouse and fog signal should be erected here. An appropriation of $50,000 is asked to commence the work."

This recommendation of the Board to Congress was repeated each year thereafter until Congress acted.

On August 7, 1882, Congress appropriated $50,000 "to commence the construction of a lighthouse and fog signal at or near Point St. George, California." The place chosen by the Board for the lighthouse was Northwest Seal Rock off Point St. George.

In its annual report for 1882, the Board stated, "It is estimated that it will cost $333,000 to build this structure. Of this amount $100,000 can be profitably expended during the coming year."

In October 1881, a surveyor was landed on the rock. The sea began to rise immediately after so that it was necessary to take him off after a stay of only an hour, during which he succeeded in getting a few rough measurements and sketches of the rock.

On April 8, 1882, a civil engineer was sent to Crescent City to await suitable opportunities for a landing. Although his attempt was made during the best season, and he had a crew of men who had been in the habit of hunting sealions on the reef, in the four weeks of his stay he was able to make but three landings on the rock. He succeeded, however, in making a good survey and the results on his return to San Francisco were embodied in a plan with 3 foot contours and a model, both on a scale of 15 feet to the inch.

With the first appropriation of $50,000 on August 7, 1882, the rock could now be prepared for the reception of the foundation of the pier during the time that remained of the 1882 working season and the spring of 1883. Contracts could then be made for the entire granite masonry of the pier and an appropriation of $100,000 could be profitably expended during 1883.

An additional $50,000 appropriation was made for the light on March 3, 1883. The 1883 report of the Board states that plans and estimates for its construction were made early in March 1883 and soon after skilled and experienced workers were engaged and organized into a working party for the preliminary work, which involved great risk, labor and exposure. As there was no place of shelter near the rock, a schooner of 127 tons was secured and fitted for accommodation of 25 or 30 men, to be moored near the reef. This was towed from San Francisco by the steamer Whitman whose crew laid the moorings and attached the schooner

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Cookhouses

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move all the dirt clods. I tried hard to do this. I could have missed a few. As I examined them, I pushed them into a large metal pot to soak in cold water.

After I was on the job for a few months, a new cook took over for Scott. This cook was a young man, I think he was 27 years old, and had just been discharged from a hitch in the United States Navy. He had learned his craft in the Navy, and was an excellent cook. His name was Henry Hilton. The second cook was an attractive young lady by the name of Hilda Shifflet. Hilda and Henry fell in love and were married in about a year. The rest of the crew was composed of seven waitresses, a baker and a dishwasher.

One girl had the responsibility of the front room with the small tables set with tablecloths and napkins. The same food was supplied to this room and the main room, but it was served on better dishes and silverware. The girl assigned took care of all the details, even washing her own dishes.

Six girls worked the main dining room, each girl having five tables, eight men to a table. All food was served family style. The waitresses were charged with keeping the serving dishes full and hot. Cold water pitchers were placed on each table, and when the men were ready for coffee, they were served pitchers full of hot brew. These girls were required to do more than wait on tables. They had to clean the dining room after a meal, re-set the tables, fill all the condiment containers, sweep the floor, and in the morning, after breakfast, peel vegetables for the cook.

During my junior and senior years in high school at Arcata, I worked from 5 a.m. until 7 a.m., then went to school, riding with two students who attended Humboldt State College. In the evening, after after, I worked from 5 p.m. until 7 p.m. or longer, depending on what I had to do. For this I was paid $20 per month, and my food. This was a great job for a kid going to school in 1928 and 1929. All the fine people I worked with treated me as an adult. They were good friends, and I have thought about them many times.

When I was older in the 1930s, I stayed for a time at Samoa, living in the bunkhouse and eating at the Samoa Cookhouse. The same high standards were practiced there. Men working in the woods and in sawmills in Humboldt County demanded good, wholesome food, and they got it. A cook who served a bad meal was soon on his way out of town.

Meals that are close to what the lumber workers and the loggers were served in the 1920s and 1930s can be had even today at the Samoa Cookhouse. HH

Wooden family came from Maine

by Ruthe Wooden Graham

My late father, William Herbert (Herb) Wooden, was born in Stillwater, Minn. At age 8, he and his family arrived in Humboldt County from Maine. A big farmhouse in the Elk River Valley was home. His parents were the late Mr. and Mrs. Charles Wooden, and his brothers, Fred, Walter, Robert, Ralph and Donald and his sisters were Minnie (Mrs. Charles Reeves) and Lorena (Mrs. Orran "car-a-day" Hodges), only surviving member. Their mother, Jennie Middlemist Wooden, later married Alex Forbes who founded Forbesville, now Elk River.

At age 23, my father was hired by the Phoenix Lumber Co., Fillmore St., San Francisco. His job required going to Valparaiso, Chile, South America, as foreman for donkey engines used in logging. The year was 1906.

During his stay, he met a pretty, English, Castilian-Spanish girl, Ayde Jessie Shepherd, my late mother. She was born in London, England. Her father, Thomas Shepherd, was an architect who moved his family from England to Chile. She graduated from Fowleys College, and the Conservatory of Music in Santiago, Chile. Her mother was born in Madrid, Spain. In 1907, my father and Ayde were married in Buenos Aires, Argentina.



Mr. and Mrs. William Herbert Wooden in 1907 wedding photo.

He then went to work for Cooper Construction Co. in 1908 as hoisting engineer. That year, their first child was born, named Ayde Maye. In 1909, they sailed for America on the "Spanish Prince," a Chilean vessel. On his return to the U.S., my father went to work for Mercer-Fraser Co., Contractors and Engineers, Eureka. He was construction superintendent, on his retirement at age 75.

My first recollections of life are crossing the old wooden bridge over Ryan Slough from Third and W streets to attend Franklin grammar on Myrtle Ave. Later, I learned some of our neighbors were the Simpsons, Crabtrees, Scotts, Sacchis and Rutledges. We moved to West Murray where I went to Washington grammar school on California Street. I remember a few classmates: Harmony Harper, Viola Hemenway, Wesley Nelson and Walter Campbell. We moved to C Street, south of Harris, where I finished elementary grades at Lincoln School.

More recollections: A classmate sent to pickup homemade doughnuts for the teachers' lunch at a brown house across the street. The house still stands. Winning the spelling bee in sixth grade. The prize was a tube of toothpaste. Pulling my brothers' wagon to Burgers Market to buy five loaves of bread. I had three brothers and three sisters. In order, we were Maye, Herbert Jr., Carlos, Marcial, Lucretia, Ruthe and Coral.

Remembrances of camping at Porters, Riverside, visiting the Arthur Renfros at Bridgeville, riding horseback, and enjoying Mrs. Renfros delicious hotcakes. Picnics and more camping at Mattole. Driving the Chalmers up the Wildcat, and we kids in the back on jumpseats singing, "Let the rest of the world go by." Marcial (Mar) and I on a donkey, riding into a bed of poison ivy and having a tick removed from my

St. George light

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to them.

On April 3, 1883, a start was made by the Whitman and her tow from San Francisco, and after a very stormy passage the vicinity of the rock was reached on April 8th only to find the sea breaking completely over it. The next day a 12,000 pound sinker was laid with difficulty, and the schooner made fast to the buoy; but immediately after there was a change in the weather, and from then until the 16th a furious gale prevailed from the southeast to the southwest, reaching its maximum on the morning of the 14th. On the 16th the sea permitted another attempt at laying the remaining anchors, when the fact was developed that the water in which they were to be paced was from 8 to 10 fathoms deeper than the soundings had indicated and that the buoys were too light.

The superintendent of construction took the Whitman to Humboldt Bay, 60 miles distant, for new spars. They had to be cut in the woods, and the irons of the old ones used for them, so that the Whitman did not return until the 28th when no trace could be found of either the schooner or the buoy. This was May 1st and advantage was taken of a little good weather on that and the following day to set the remaining moorings with the new buoys, and of grappling, unsuccessfully, for the lost one.

The Whitman started again for Humboldt Bay on May 3rd to seek the missing schooner which was found on the 7th, 25 miles southwest of Crescent City. The schooner was again placed in position and a landing made on the rock and the work continued with suspensions of from one to ten days, on account of weather, parting of lines and other gear, but without accident to anyone. By mid-1883, sufficient progress had been made to justify the belief that the top of the rock would be prepared before the winter set in.

Although the Board asked for $150,000 to continue the work for the fiscal year ending June 30, 1885, only $30,000 was appropriated for the purpose on July 7, 1884, and as the work could not be conducted advantageously on a less expenditure than $15,000 per month, it was discontinued. In the 1884 report the Board declared, "the erection of the lighthouse cannot properly be resumed with due regard for economy until $150,000 is provided for its continuance. The $30,000 actually appropriated was to be used in getting dimension stones ready for use when work on the site was resumed.

In its 1884-1885 estimate, the Board asked for $150,000 for the work, but Congress appropriated only $40,000 on March 3, 1885. This inadequate sum did not enable the Board to resume work on the site. The Board in its 1885 report hoped the amount requested ($150,000) would be appropriated as "the delay is injuriously affecting the plant in its exposed position on the rock."

The $30,000 appropriated on July 7,

neck by a neighbor camper.

Lucretia and I running down to Harris St., to watch Papa and the Mercer-Fraser crew paving the street. I can still smell that asphalt. Our parents grocery shopping Saturday nights, hoping they would tuck in a candy bar or two. Mar and I playing marbles under the kitchen table. Italian dinners at Monte Carlo Hotel, and at Joseph Perrone home on Third St. Being a flower girl, along with Olga Stemach at Angeline Perrone and Harry Candiotti's wedding. Dancing the Maypole dance at Masonic Temple, another little girl fouling it up by going the wrong way. Sunday School at old Episcopal Church, corner of E and Fourth streets. Confirmation and our hair veil, a gift from Mrs. J.H. Crothers.

Grandmother Jennie Wooden Forbes coming to the C Street home, teaching Mama how to cook. Sister Maye said Grandma's remark was, "Herbert goes to South America and marries a woman that can't boil water. Growing up, Mama told many stories of Valparaiso, Vina del Mar, Puert Montt, and the family cook, Florinda.

When I was old enough to realize Mama was different and outshone all of us, I asked why they came to America. Her reply was, "Your father heard them play "The Stars and Stripes Forever," and was homesick for his Mother." Mama spoke several languages and played classical piano. She had a number of pupils. I remember an Italian Opera on the screen being brought to Eureka, and



The Herbert Wooden family, left to right, back row, Carlos, Herbert Jr., and Maye; front row, Lucretia, Ruthe and Marcial. A seventh child, Coral, is not shown.

shown in the High School Auditorium. Mama was asked to play the appropriate score for each scene.

More memories:

Then it was junior high time for Lucretia and me. Moving to Trinity Street, off E into a big grey house Mama loved. Joining the Girl Reserves with Mrs. Glyndon Smith in charge. Camping trips to Fort Seward and winning a ribbon for having the neatest pile of clothes in the tent. Remembering faintly an overnight stay at the Harvey M. Harper home on E and Hillsdale with Lucretia, friends of the family and Lucretia's godparents.

One summer there was a contracting job for Mercer-Fraser in Del Norte County. Papa decided we would go, too. Packing Mama and the four youngest in a Chevy, we left for Crescent City. Mama stored the furniture. By that time, Maye was married, Herb Jr. was working in Washington and Carlos was a salesman in Long Beach.

We lived in a summer place near Hiouchi Bridge. The plant was across the Smith River. They paved the highway from Crescent City to the bridge, approximately nine miles. One day we heard a terrible explosion and were scared to death. Mama sent Mar to investigate. It was something minor, thank God. We kids had the time of our young lives that summer. Swimming, campfires, rides to Gasquet, Smith River, Fort Dick and into Crescent City on Saturday nights for movies and shopping. By fall, the job was not finished and school started. Mar, Lucretia and I rode a bus into Crescent City where we attended a combination junior and high school. Coral had her own chauffeur to take her to grammar school. Papa arranged for a young sports car driver to take her and bring her home. We lived in Del Norte County for six months.

On our return to Eureka, we moved

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1884, had been used in the preparation of material in the quarry and stone-yard on Humboldt Bay, where six to eight stone cutters and 12 to 20 laborers were employed for about 11 months. With the second suspension of work on the site due to the lowered appropriation of March 3, 1885, it was decided to provide against further deterioration and possible loss of the large derrick and moorings by chartering a steamer and sending a working force from Humboldt Bay to spend the month of June in lifting all the moorings but one, which was relaid and rebuoyed, and in putting the site in good order and securing the large derrick.

It was proposed to continue work at the quarry until October, 1885, and then suspend work until spring. "A new appropriation," the report stated, "can hardly be made available before July, 1886, when two months of the short working season will have been already lost. Six weeks, at least, will be needed to get moorings down, derricks and engines in place, and vessels ready for actual construction, leaving only six weeks or two months at most before the winter storms can be expected.

"The alternate of last year will again be presented, that of making in advance costly preparations which would be useless should Congress fail to make sufficient appropriations or of sacrificing another working season altogether...It would be difficult to point out more clearly than has been already done the uselessness of beginning construction without money enough to push to the uttermost this different work during the short favorable season."

In May and June, 1884, it was pointed out that about $9,500 had been spent in preparations which not only became useless through the subsequent failure to make due appropriations, but which left valuable property to unavoidable deterioration and possibly total loss.

This year about $6,000 was again spent in removal of such property as could be taken away, and in taking precautions for the safety of the plant left on the rock. The preparations made in 1885 would have to be repeated the following year, with the same risk that they might be more futile through a third failure to secure sufficient appropriation.

It was again stressed by the Board, therefore, as it had been in previous years, that $150,000 was the least sum that could be appropriated during the 1886-87 fiscal year. In the meantime, work at the stone-yard had been continued and between July 1, 1885, and October 31, 1885, 5,439 cubic feet of dimension stone had been quarried, making 15,152 cubic feet on hand with 419 blocks on hand cut and 133 blocks on hand uncut. No appropriation at all was made for the work in 1886.

On March 3, 1887, Congress appropriated $120,000 for the work. On March 7, 1887, a project was begun for preparing and laying stone by hired labor for the purchase of a plant in the open market and for the charter of the necessary

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Frontier justice swift but not always right

(continued from page 19)

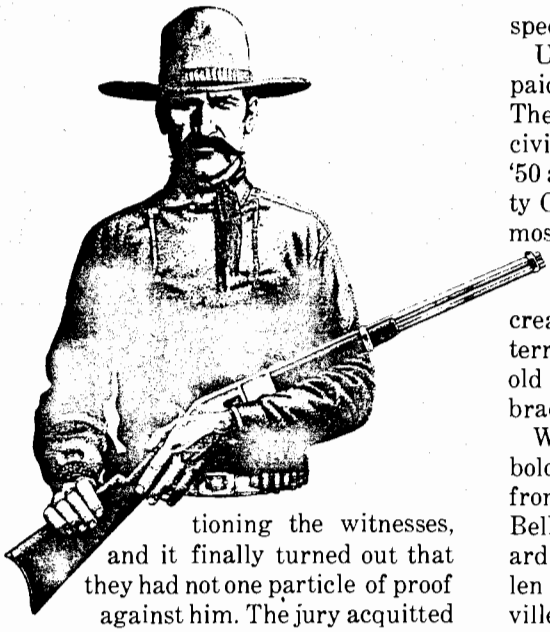
tree, to make him confess, and then let him down, asking him to confess to the robbery and make his peace with his Maker; but they could get no confession out of him. The boys had a queer way of doing things in those days on Sidney Gulch.

If a man was accused of any crime, they summoned a miners' meeting and gave him a trial. In some cases, where there was not sufficient evidence to convict, they would hang him up and then let him down for confession, as in the case of Coulter. He was strung up three times, and then warned to leave the diggings under penalty of death. The next day Coulter came to town and showed his neck. It was in a horrible condition, the skin being raw where the rope had chafed and cut it, and he was a sight to look at.

The men or residents of Weaver talked the matter over, and came to the conclusion that such doings must be stopped. Coulter was told not to leave until he saw fit, and that he would be protected, but he left in a few days from fear.

In a short time after the Coulter trouble, a man by the name of Charley Williams, now a prominent lawyer of Weaverville, and who has since been county judge of Trinity, lost some dust, said to have been stolen out of his tent. He was mining at that time, and his purse was left in his tent. Suspicion fell on a man by the name of Allen, who was arrested and kept in custody. Word was sent down to Weaverville that Charley Williams was robbed, and they had caught the thief and were going to try him that evening at the mouth of Sidney Gulch. Some of the miners who disapproved of the way Coulter had been dealt with, came down to town and talked the matter over with the boys in town, and finally about twenty-five of us went to the trial. They had the prisoner under guard. They then elected a fellow by the name of A.K. Young as judge, and a jury of twelve men was impaneled and sworn to try the case.

I was one of the twelve jurors. The evidence was given in. None of the witnesses knew of his stealing the money; only he had behaved in a very suspicious manner, and his looks ought to convict him. Some of the jury commenced questioning the witnesses, and it finally turned out that they had not one particle of proof against him. The jury acquitted him unanimously. This A.K. Young, who acted as judge, said he was guilty anyway, and would have to leave camp. The foreman of the jury spoke in reply to Young, stating that Allen had a fair and impartial trial by a jury of his countrymen and was honorably acquitted, and it was not just to make him leave. The balance of the jury sided in with the foreman while the rest of the miners present were of the same opinion. We took Allen to town with us for his better protection.



This fellow, A.K. Young, turned out to be a scoundrel of the first water, and deserved hanging more than the man he was trying. Allen stayed about town for a few weeks and left. Ten years later I called on him at his ranch in the Sacramento Valley. He was then a well-to-do farmer, and a man who was well respected by his neighbors.

Up to the summer of '51 no person paid any attention to politics or civil law. The miners made their own laws, both civil and criminal. The Legislature of '50 and '51 passed an act creating Trinity County. Shasta County was then the most northerly county of the State, and little attention was paid to the State laws there. Under the act creating Trinity County, the whole of the territory embracing Trinity, Humboldt, old Klamath and Del Norte, was embraced within the limits of Trinity.

Weaverville did pretty well by Humboldt's politicians. There were elected from Humboldt: Dixon for Sheriff, Tom Bell for County Treasurer, E.H. Howard, Public Administrator, and McMillen for the Legislature. We in Weaverville thought we were generous with the Humboldters, considering that they started in to "hog it" all. Trinity had the votes, but Humboldt had the politicians, so we "got away" with them. Our officers started in to get the county government organized. It was up-hill work, without any grease to oil the new machinery with, but Judge Price was a man of considerable ability and of over average honesty, and, in due time, things began to assume their proper shape.

Men were getting tired of lynch law, yet there were several cases tried before Judge Lynch after organizing the county. (The author uses "Judge Lynch" as a synonym for lynch law.) The county had no public buildings of any description, even no place in which to keep criminals, where they would be secure until the day of trial.

NEXT: The last of lynch justice. **HH**

St. George light

(continued from page 13)

vessels. Specifications were prepared to get bids for transporting material from the Humboldt Bay depot to the rock, where work at both quarry and yard were resumed March 21, 1887. At both places ravages of weather and insects had to be repaired following the long period of idleness.

The schooner Sparrow (200 tons) was chartered at Humboldt Bay on March 29, 1887, and fitted out with quarters for 50 men. Equipment was purchased and shipped by the steamer Santa Maria, which was chartered to lay moorings and set derricks on the rock, and she left San Francisco April 5 for Humboldt Bay. The steamer Alliance, having furnished the lowest bid for transporting the stone from Humboldt Bay, was employed.

Because of bad weather slow progress was made by the Santa Maria in laying moorings. On May 11, she reached the rock towing the Sparrow and by the 18th five sets of moorings had been laid and the Santa Maria discharged.

The working force living on the Sparrow spent the rest of May, 1887, putting up the rigging and the four small derricks, setting up the engine and boiler, building the timber-landing stops, and making preparations for landing material.

The Alliance, with the first lead of stone blocks from Humboldt Bay, reached the rock June 5, 1887, where she first had to be fitted with gear to handle the dimension stones, the first of which, weighing six tons, was landed on the 7th and laid in the wall on the 8th. By the 11th all the material she had brought had been put in place and the construction force was out of work.

Historical Society offers gift ideas for the holidays

Plan your holiday giving early with gift memberships in the Humboldt County Historical Society (see form on page 27), back issues of the Humboldt Historian and other history publications.

All orders may be placed through the society's address: Humboldt County Historical Society, P.O. Box 8000, Eureka, CA 95502, or may be picked up at the society's office at the Carnegie Building, 636 F Street, Eureka, Tuesday through Friday from noon to 4 p.m.

Items offered include the following:

HISTORIANS

Ten pre-January, 1987, Historians (our choice) in a binder, a $23.50 value for $18 (plus $2.50 if mailed).

An individual gift membership with three back issues of pre-July, 1989, Historians, a $21 value for $18 (plus $1.50 if mailed).

Five or more back issues of pre-January, 1987, Historians will be on special for $1.50 each from October 15 through December 22, 1989, for you to create your own custom-made gifts (add $1.50 for five and 10¢ each additional, if mailed).

BOOKS

(All prices include tax. Add $2 for mailing one book and 50¢ for each additional book.)

The following books are available:

Humboldt Bay Region by Owen C. Coy, $9.01.

Carson Mansion and Ingomar Theatre by Benjamin Sacks, $7.95.

Golden Adventures (An anthology of the best from the Humboldt Historian), $6.31.

Frontier Moments (An anthology of the best from the Humboldt Historian), $6.31.

Stories from Life by Curtis E. Gillis, $1.06.

MAPS

1867 Doolittle Map of Humboldt County, $3.71 (plus $3 for mailing).

1922 Belcher Map of Humboldt County, $2.65 (plus $3 for mailing).

BINDERS

Durable, three-hole binder, holds two-year collection of Historians, $5.50 for one and $4.50 for each additional (prices include tax and mailing).

The Alliance proved utterly unequal to the amount of transportation required and authority was given to charter the Santa Maria at $7,000 per month to supplement her efforts. But that vessel, then on a voyage, could not be secured before July 1. The Alliance reached the rock on June 15, 1887, with her second load, but in a gale on the 16th narrowly escaped a collision with the Sparrow, finally putting into Crescent City on the 17th for shelter as the gale continued.

The rock was not finally discharged until the 22nd. During the storm one of the dimension stones, already laid on the north face 30 feet above the sea and weighing over 2 tons, was washed out of its bed and tipped over against the back of the bench where it broke. On the 26th the construction force was again idle having laid all the stone brought by the Alliance on her second trip.

The vessel couldn't land her third load of stone before July 8 because of incessant gales. Meanwhile, the Santa Maria had been chartered and had left Humboldt Bay with her first cargo of dimension stone.

All the work had to cease, as it turned out, in September, 1887, with the eighth course of masonry of the pier laid. Stone cutting at Humboldt Bay proceeded during the winter of 1887-88 but had to be suspended on March 20, 1888, because of lack of funds.

On March 30, 1888, Congress appropriated $150,000 more for the work; a new working force was organized; two new steam vessels chartered and by June 30, 1888, the 9th, 10th and 11th courses of masonry had been laid. The workmen now living in quarters constructed on the rock, could lay the masonry as fast as the stone could reach them. By May, 1888, 52 men were working on the rock, with no room for any more to work to advantage. The quarries at Humboldt Bay were crowded with all the men who could be worked and the stonecutters at the yard were dressing the rock as fast as it reached them.

The expenditures were now running at about $30,000 per month, and up to June 30, 1888, $347,762.34 had been expended. A new appropriation of $200,000 for the 1889-90 fiscal year was now requested. Work continued until August 19, 1888, when the 13th course of masonry was completed. Work was continued uninterruptedly after that at the quarry all through the fiscal year of 1889 with as large a work force as practicable.

Congress appropriated the $200,000 additional asked for on March 2, 1889, and in April the Steamer Del Norte was chartered at $5,000 per month. She arrived at the reef on April 29, 1889, with men and material to begin the new construction season. About 50 men were put to work and by the end of the 1889 fiscal year the 17th course of masonry had been laid. The weather during this season had been unusually severe, and the men's quarters, though very strongly constructed and braced like a ship, were several times washed by the heavy sea and damaged, though no one was injured.

The walls of the engine room, coal house and tower, all within the pier, were being built as rapidly in height as the pier progressed. Of the eight courses required to complete the pier when the season begun, four were laid during May and June, and weather permitting, it was hoped to complete the other four by the end of August. The wall was already 61 feet above sea level, yet the spray dashed over the top of the pier and it was frequently impossible, for hours at a time, to lay masonry because the spray would wash the cement mortar off the beds before the stones could be set.

While the work done thus far had been expensive, it had been kept within estimates and had been well and substantially done. Eighty-one thousand dollars more was estimated to be necessary to complete the work. At the stone-yard and quarry, all dimensions stones for the pier had been finished with the exception of 23 stones. When these had been set, the entire force at the quarry would begin preparing the flagging for the top. It was hoped to complete the work during the following season, in 1890.

By October 8, 1889, the interior walls of the engine room, storeroom, etc., were up and arched over, and the pier entire-

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St. George light: a triumph over the elements

(continued from page 21)

ly finished except for a small area at the top left unpaved. This was securely covered with planking, the skylight space roofed in and everything left in secure condition until resumption of work in the spring of 1890.

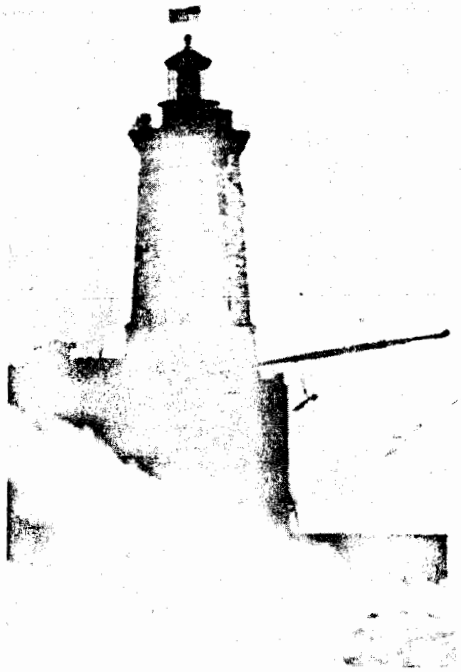
At the quarry all stone required for completion of the station had been secured by April, 1890, when the quarry was abandoned and the machinery stored at the Humboldt Bay depot. Dressing of stone continued, with all arch, lintle, and other dimension stones finished by June 30, 1890, and only a small force employed in storing them away, ready for shipment. On September 30, 1890, Congress appropriated the final $81,000 requested.

Early in April, 1891, the steamer Sumol was chartered and sailed for Humboldt Bay with a load of supplies and men. She loaded material for setting mooring and started for the rock. Little was accomplished, however, due to very bad weather, but by the end of April the moorings had been set and the first landing of the season made on the rock.

The workmen's quarters were found to have been utterly destroyed by the waves and had to be rebuilt. The mooring buoys had disappeared, but were grappled for and the buoys reset. By May 1, 1891, actual construction had been resumed and was vigorously pushed whenever weather permitted. At times, however, the wind was so violent that the steamer was unable to land material and the masons were driven from the outer walls by its force. Nevertheless progress was excellent and at the end of the fiscal year 1891, the pier pavement had been finished and the base of the tower completed. The tower, with its brick lining, was built and backed up for 30 feet above the base, or nearly to the windowsills of the third story.

During July, 1891, the lens reached San Francisco and was erected at the site in August. The light was of the first order, flashing alternately red and white, with 15 second intervals between flashes, illuminating the entire horizon. It was exhibited for the first time on October 20, 1892.

The superintendent of construction had been Mr. A. Ballantyne who prepared an interesting eight page appendix to the annual report of the Light-



house Board for 1892. The lighthouse, this report states, had been constructed under the overall supervision of Major H.W. Hauer, U.S. Army Engineer of the 12th Lighthouse District. Mr. David Chalmers was foreman of stonecutters and Mr. Thomas W. Brown was in charge of quarrying. The work had been begun in 1883 under the direction of Captain A.H. Payson, Corps of Army Engineers, U.S. Army, until the latter part of 1887.

The outline of the pier was blasted off, the outer base ring 10 feet wide was accurately finished with patent hammers, the center cone roughly stepped to receive the mason work and provision being made for storing 77,000 gallons of water in the base.

The top of the pier was laid with stone flagging 12 inches thick. This served as a watershed with a fall of three inches from center to gutters cut in stone at the outer rim, and from this the water is carried in a four-inch diameter pipe to cisterns in the base of the pier. All walls of rooms inside the pier, namely, fog signal room, coal rooms, storerooms, hallway, etc., were of square rubble laid with one quarter-inch joints and faces finished with point and pointed with round jointer, leaving a concave joint.

The keeper's quarters were of seasoned Humboldt fir, 1⅛ by 3 inches, vertical grain, tongued and grooved, laid on joists beveled on upper side and set into concrete arches, all surfaces and floors being polished and varnished. The inside doors, wainscotting, etc., were of Port Orford cedar with redwood panels and all trimmings in redwood. The outside doors and windows were of oak, all polished and varnished. The keeper's rooms were lined with three coats of plaster and sand finished. All metal work received four coats of paint.

The total cost of the structure was $704,633.78 of which 42.91 percent was for labor, 21.90 percent for transportation, 9.45 percent for buildings and plant, 8.09 percent for moorings, 6 percent for superintendence, 2.19 percent for lens, 2.309 percent for cement, 1.74 percent for plate glass and metal work and 1.52 percent for vessels for quarters. The balance of 3.97 percent was distributed over a wide variety of items such as fuel, bricks and lime, office expenses, powder, oil and waste, fog signal apparatus, plumber's materials, carpentry work, hardware, paint, bronze dowels, gravel, drugs, adorite, royalty on stone, plugs and feathers, right-of-way to quarry, and boats.

On October 17, 1893, the first assistance keeper was lost in attempting to land on the rock in a standard station boat. No vestige of boat or man was ever discovered. In 1896 the famed blacksmith shop built on the pier was destroyed by the sea and had to be rebuilt. In 1901 it was reported that the boom of the hoisting derrick was not long enough to reach beyond a dangerous eddy just off the rock and this was the cause of a serious accident to one of the keepers when attempting to hoist the launch from the water. In 1902, a new boom, 90 feet long, was placed on the derrick and properly guyed to the tower. The rigging was also renewed and this improvement greatly facilitated the landing of supplies and taking the launch from the water. The boom extended farther from the side of the rock, reaching a point beyond the hazardous eddy and swell which hitherto had made landing dangerous.

In the 1950 Light List, St. George Reef Light Station is described as a white, square, pyramidal tower on a pier, built in 1891, with the light being 141 feet above the water, a 110,000 candlepower, first order electric, visible 18 miles, and flashing white 2.5 seconds and eclipsed 12.5 seconds. Also a diaphone, two-tone, air-fog signal. The tower is located on Northwest Seal Rock, at 41 degrees, 50.2′ N, 124° 32.5′ W.

Today, the light stands alone and unoccupied, its vital function replaced by a large automated navigational buoy. But it still defies storm-tossed waves and stands high as a monument to men of another time who fought the seas of the North Coast and a sea of bureaucratic delays to erect a life-saving beacon for mariners. HH

St. George Lighthouse

By SUSAN SCHELL
Pilot Staff Writer

Gasps and moans could be heard above the surf that day in Crescent City. People on the beach could not believe their eyes.

The lighthouse lantern room hanging from the slowly moving helicopter skimmed the surface of the ocean and dragged to shore, crumbling to bits and pieces as it went.

A miscommunication between the pilot and the ground crew resulted in the chopper flying too low, sending its dangling cargo smashing to smithereens.

A debris trail ran from the water to the lantern room dome, which lay upside down on the sand, looking like a wayward satellite that crashed to earth. The crown of the St. George Reef Lighthouse lay forlornly on the beach, surrounded by a jumble of rusty, twisted iron.

The St. George Reef Lighthouse has stood on a rocky island offshore from Crescent City for more than 100 years. On a clear day it can be seen on the ocean's horizon from Brookings.

When the structure was decommissioned by the Coast Guard in 1975, it fell into ruin. The glass windows on the lantern room dome were shot out by passing boaters with rifles. But the St. George Reef Lighthouse Restoration Society, a group interested in the historical value of the lighthouse, took on the daunting task of trying to refurbish the tower.

In April, 2000, the dome room was disconnected from the top of the lighthouse, attached to a helicopter by cables and flown to shore. There, in front of horrified onlookers, it descended too low, hit the waves and was dragged to shore.

Dale Long, president and owner of Fashion Blacksmith Inc., witnessed the whole fiasco. "I happened to be on the beach that night. I saw it happen. I helped remove it from the beach."

At the time, Long didn't know he'd become so familiar with the dome. Over the next year, he ended up welding a brand new lantern room onto the dome with his own hands.

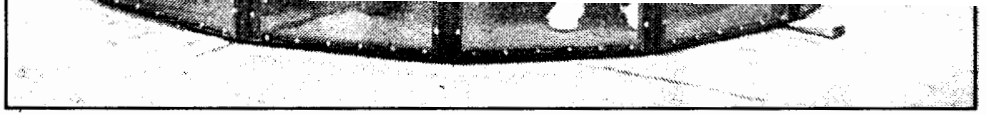
"I had read they (the preservation society) had contracted with Fashion Blacksmith. My participation sort of happened by osmosis. We had the overhead crane to pick up the dome. It was big and heavy and difficult to move. We also had the skill and equipment to do the job."

Fashion Blacksmith also had a huge building to house the dome and was close to the ocean.

Since there was almost nothing left of the dome except the roof, it had to be rebuilt from scratch. Long shrugs off any mention of the difficulty of this task.

"We're welders," he said. "We work on boats – that's what we do. We work on things intimately that are a lot more technical than that."

Long does admit that working on the project was "interesting and unusual."



Submitted photo

Volunteers clean the windows of the newly refurbished latern room that was later transported by helicopter to the lighthouse.

The veteran blacksmith is used to working on his own and found it a challenge working on a project with a group of people.

"When you work with a group, everyone has their own ideas. It becomes very democratic. I did meet some good friends, though."

Another challenge was figuring out what materials to use for the window frames, which were originally cast iron. The dome was also gray cast iron; each triangular section was made separately and pieced together with bolts.

"Gray cast iron is what they used back in the 1800s," Long explains. "They had a lot of skill back then. That's why the dome was able to withstand that environment for the last 100 years, cast iron is extremely resilient. If it had been made from ferris steel, even with the best maintenance, it would not have lasted that long."

It was finally decided that the lantern room frame would be re-constructed out of stainless steel with a marine epoxy coating to battle the extreme oceanic conditions.

Long also noted that the original frame had little bronze handles on each window section. He believes the handles were attached so the lighthouse keeper would have something to hold on to while he cleaned the outside of the windows.

"Most of them were missing," Long adds. "There were only a few of them left. They're just attached with a couple screws and easy to remove with a screwdriver. I think they stole them. Either the lighthouse keepers or vandals took them home for souvenirs."

After about a year and 340 man hours of work, the dome was completed. However, it sat in the warehouse for another year while lighthouse preservation society members raised enough money to hire a chopper to carry the dome out to the lighthouse.

After many delays due to finances and bad weather, on April 13, 2002, the dome was hitched to a sky crane helicopter and taxied out to the waiting lighthouse.

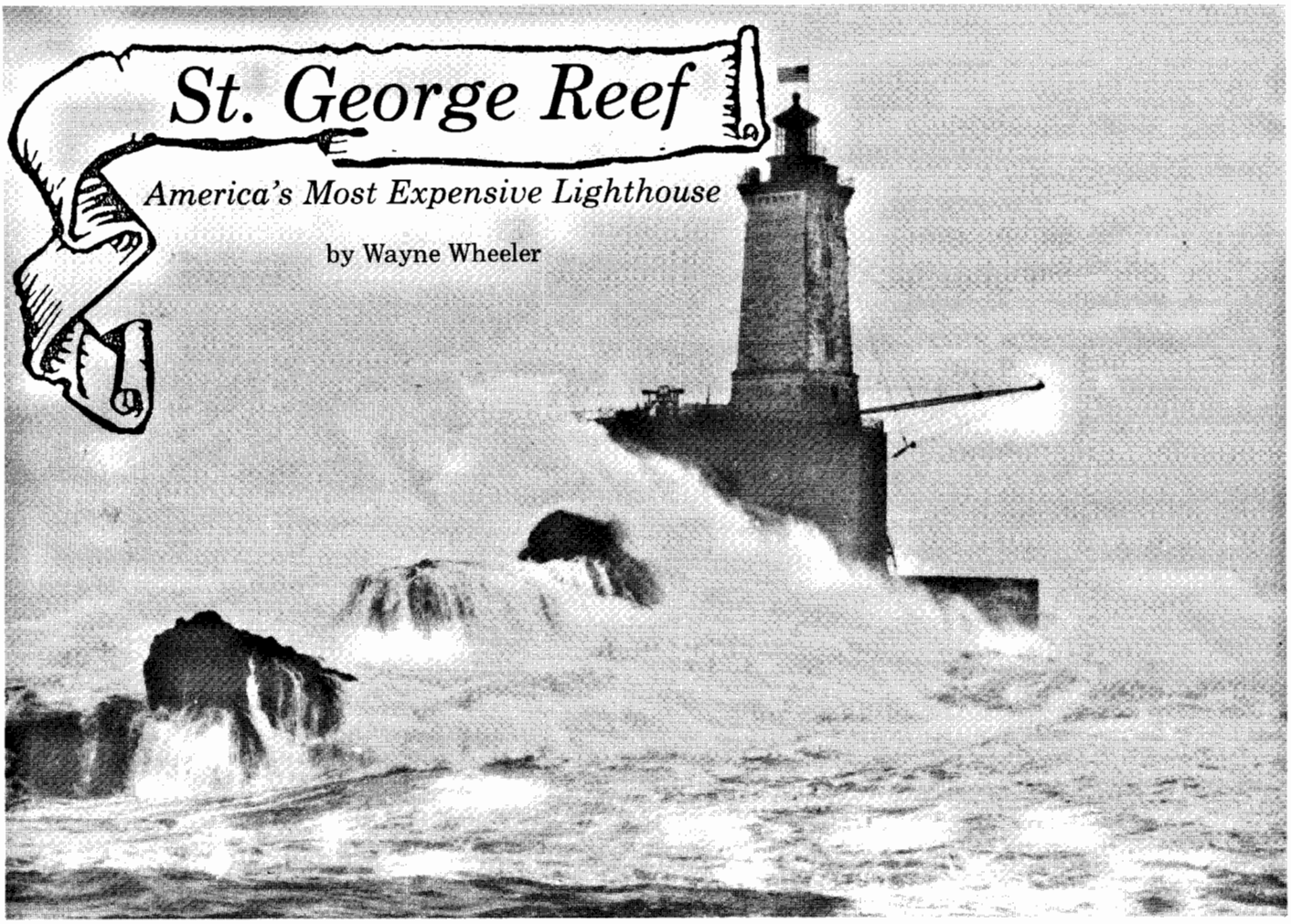
Unlike the journey to shore, the operation of placing the dome room on to the tower went as smooth as silk. It only took about 30 minutes from the time the chopper left shore to the time the dome room was fastened securely to the top of the lighthouse.

The preservation society plans to install a new light in the lantern room. In the near future, a light may once again shine at night from the tower on St. George Reef.

St. George Reef

America's Most Expensive Lighthouse

by Wayne Wheeler



In 1865 the shoals of St. George Reef (off the northern California coast) claimed the schooner *Brother Jonathan* and approximately 166 lives (only 19 managed to reach safety in a ships boat). This single wreck substantiated the U.S. Lighthouse Service's opinion that a lighthouse was needed on the outer reaches of the reef. In 1867 the Lighthouse Board unsuccessfully appealed to Congress to construct a lighthouse on the reef. Technology to build a structure on a wave swept reef was very new in that era and Congress was not favorably disposed to pour funds into the ocean, especially so soon after a very costly Civil War. However, years later in 1881 the successful completion of the Tillamook Rock Lighthouse, off the Oregon coast, gave the service hope that it was possible to construct a lighthouse on the reef of Saint George.

In 1882 Congress provided an appropriation of $50,000 to begin construction of a lighthouse on Northwest Seal Rock, the outer reaches of St. George Reef. In August of that year the man who would supervise construction, A. Ballantyne of Tillamook Rock Lighthouse fame, surveyed the rock with the assistance of local seal hunters. They only managed to land on Northwest Seal Rock three times during the month. Surely an omen of things to come.

In March of 1883 Congress approved the requested appropriation of $100,000 to begin construction. On April 3rd the Steamer *Whitelaw,* towing the schooner *La Ninfa,* sailed from San Francisco to St. George Reef. After a long stormy passage the vessels arrived on the 8th only to find waves breaking over the crew's future place of work. The next day with great difficulty the *Whitelaw* managed to set one 12,000 mooring sinker and secure the *La Ninfa,* which would act as barracks, mess hall and staging platform, to the buoy. Immediately a furious gale arose which lasted for the next week.

When the weather abated the *Whitelaw* attempted to lay the remaining three anchors and mooring buoys. However, the water, reported to be 108 feet deep, actually was 180 feet deep and the buoys would not support the additional length of chain required for that depth. Ballantyne, in *Whitelaw,* sailed to Humboldt Bay to procure larger anchor buoys. When the vessel returned to Northwest Seal Rock on the 28th of April no trace could be found of *La Ninfa* nor the moorings. The *Whitelaw* managed to set the new mooring buoys and sailed to Humboldt Bay for fuel. On the 25th of May the *La Ninfa* was located 25 miles southwest

of Crescent City, towed back to the rock and secured to her moorings. Though weather, which was to plague the entire operation of building the lighthouse, delayed any real progress of rock cutting (blasting) until July.

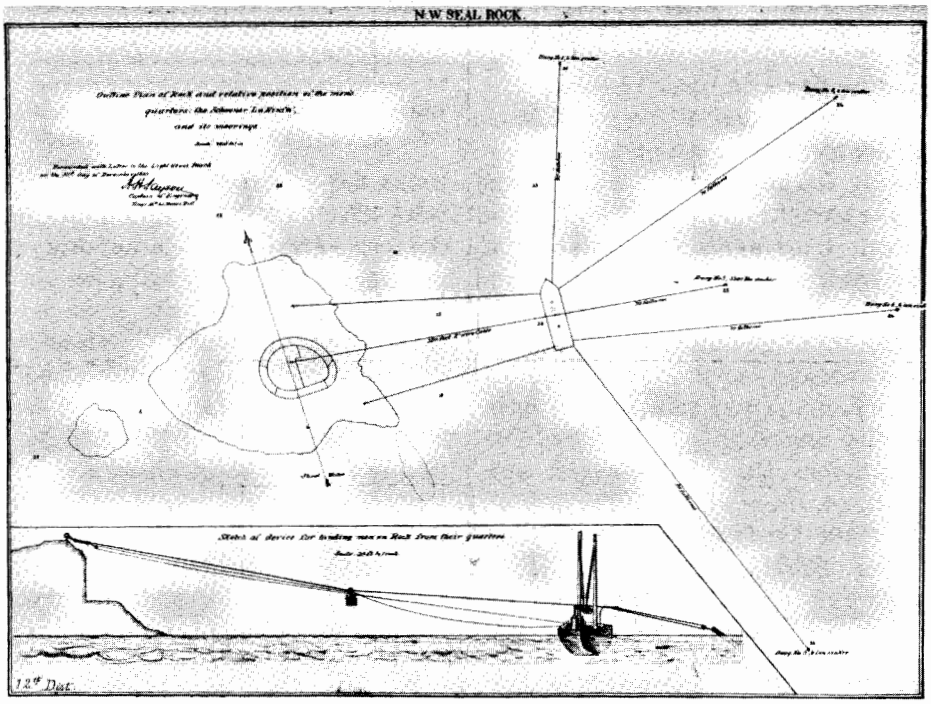
Generally, from this time forward (during this season) work progressed without event. That is to say, many days of bad weather were experienced and although they worked 25 feet above the ocean, the men were constantly drenched by waves pounding the rock. There were narrow escapes, but no one was killed or seriously injured... and work was progressing.

The workmen traveled between the schooner and the rock by a cage which consisted of a 4 foot diameter horizontal iron ring secured to an overhead traveler line from which was suspended a round platform by three lines or ropes. Four to six men at a time were crowded onto the platform and were hauled to the rock where they would jump to, hopefully, safety. The return trip was faster as the cage traveled from the higher rock to the lower vessel. When the crew first started traveling to the rock they stepped about cautiously. However after several trips back and forth they were leaping about like mountain goats. One trip only took 3 minutes and they found that they could evacuate all hands from the rock in twenty minutes. As the men became more confident, or perhaps macho, they would wait until the last moment before leaving the rock in the face of growing seas. After lashing their tools to iron rings set into the rock they would leap onto the platform as spray drenched their clothing. On one occasion the line parted just as a group on the platform was about to depart dumping the men unhurt to the rock.

By the end of September stones weighing over a ton, which had been blasted and rolled over the west side of the rock were, in the words of the foreman "swept like chips up along the whole length and over again on the east side" by the seas. Also in September a rogue wave swept two quarrymen off the rock, fortunately they were rescued. In addition to the miserable working conditions the men were also required to work in the shadow of high explosives. Preparation of the site for the foundation of the lighthouse required that sections be blasted with an early form of dynamite. There wasn't time for the work party to return to the ship after the fuse was lit. When the foreman shouted "fire in the hole," the men scurried for any available niche in the rock. Each blast caused sparks and chips to rain over the entire area, often even over the top of the masts of the schooner. On the topmost part of the reef a heavy timbered magazine was constructed to hold some 600 pounds of blasting powder. As the supervising engineer put it in one of his reports, "The presence of this large quantity of high explosives, in close neighborhood of the blasting and exposed to flying fragments, was an unavoidable source of apprehension to the men." Rather an understatement!

The last days of September saw the waves preceeding the first winter gale hit the area. The men secured the rock for the season, anxious to return to civilization, and not a day too late at that. The day after securing the rock a vicious storm struck parting all but one of *La Ninfa's* mooring lines.

That fall and winter the District Engineer, Major Payton, laid plans for the following season. They included construction of a depot on the North Spit of Humboldt Bay to cut stone, store materials and house the shore based work party. He searched for a source of 10,000 cubic feet of granite. During the winter months, in an unused courtroom in San Francisco's Appraisers Building, huge zinc patterns of each foundation stone were constructed. The tolerance between each stone, to allow for mortar, was 3/16th of an inch. Drawings and specifications for the lighthouse were made as well as for improvements for Humboldt Bay's North Spit. The depot con-



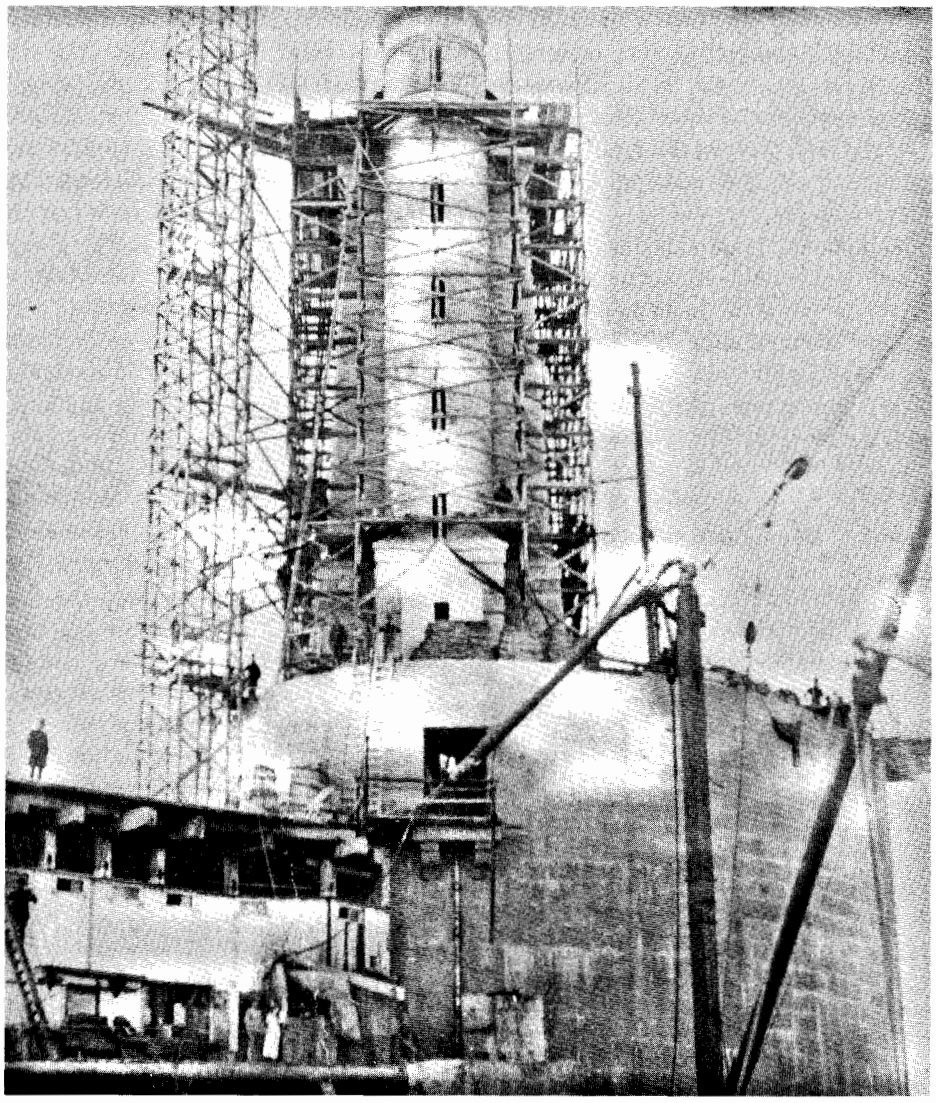
The La Ninfa was moored to four mooring buoys as well as to the rock. The men traveled between the ship and the rock via a "cage" and pulley arrangement. Official U.S. Coast Guard Photo

sisted of a 120 foot long stone cutters shed, bunk house, mess hall, wharf and two large cranes, one at the wharf and one in the stone yard. A short narrow gauge railway ran between the cranes. A total of $4,000 was allotted for the improvements on the North Spit which were built during the winter. To give you a perspective of this amount, the final cost for the St. George Reef Lighthouse was $704,000!

In December of that winter, while in Eureka on business, Ballantyne heard a rumor that there was a deposit of granite on nearby Mad River near an existing railroad line. He visited the site and found that not only was the granite of excellent quality but sufficient to meet the needs of the project.

The Mad River Railroad agreed to transport 100 tons of granite (later raised to 200 tons) a week from Mad River to the depot at Humboldt Bay for $2 a ton. The total cost of operations at the quarry that first year was $17,000, slightly higher than expected due to the haste in which work was accomplished coupled with lack of room and the "incessant rains." Excavation and grading was reported as especially difficult..."as the moistened earth slid like water almost as fast as it could be removed."

In anticipation of the passage of an ample appropriation for the following fiscal year, Ballantyne used funds from the past appropriation to secure, once again, the services of the vessel *Whitelaw*. She reported to Humboldt Bay on the second of June 1884. Because the *La Ninfa* had dragged her moorings the past season, plans were made to strengthen the moorings at the rock. The Lighthouse District requested, and obtained, three heavy anchors from the Navy Yard at Mare Island, California. *Whitelaw* sailed from Humboldt Bay on the 5th of June and returned on the 24th. She had been subjected to the typical bad weather that plagues the area. Although four of the five moorings had been set, she lost one of the spar buoys and broke her winch. Necessary repairs were effected and she sailed back to the rock on the 20th. Weather delayed the last mooring from being set until the 24th of June. Late June and early July were spent in constructing a derrick on the rock. It had a boom 20 inches square and was 50 feet long. Although good weather held during this important operation. the Lighthouse Service reported that the success was due to the skill and experience of the "super" and the zeal of the men who worked without complaint, up to 16 hours a day, during this critical time.



The tower portion of the lighthouse was constructed during the summer of 1891. This photo was taken just before the scaffold was removed, probably September 1891. The structure in the lower left was the temporary barracks used by the workmen. Official U.S. Coast Guard photo

Congress passed an appropriation to continue work that summer of 1884, but it was for a scant $30,000, in lieu of the $150,000 requested. The contractor, and district engineer, were crushed. The appropriation was "deemed" not sufficient to continue construction during the 1884-1885 year. Bitterly disappointed Major Payton decided the best he could accomplish with the funds allotted was the preparation of some stone at the depot and maintenance of the existing plant.

In March of 1885 the project suffered another setback. Congress only appropriated $40,000 of the $150,000 requested. And construction at the rock was delayed a second year. The appropriated funds were used to maintain the plant, service the moorings and install some scaffolding on

the rock. The District Engineer complained in his report to headquarters that, "It would be difficult to point out more clearly than has already been done, the uselessness of beginning construction without money enough to push to the uttermost this difficult work during the short favorable season." He further stated that a good deal of the funds were wasted in making preparations that would have to be repeated the next year as funds were not sufficient to continue work. "To these important sums, wasted through the present system of making appropriations, must be added the unavoidable extravagance of the attempt to carry on important work with scanty means." The whole situation made the project more expensive than need be and impossible to estimate. Each year the project had to await the passage of funding prior to starting work, this coupled with a short working season (because of weather) made planning very difficult. If Congress had a short session funds might be appropriated by, say, March or April. Time to take advantage of the good weather. However, should Congress become embroiled in a long session funds may not be appropriated until August, far too late in the season for anything to be accomplished.

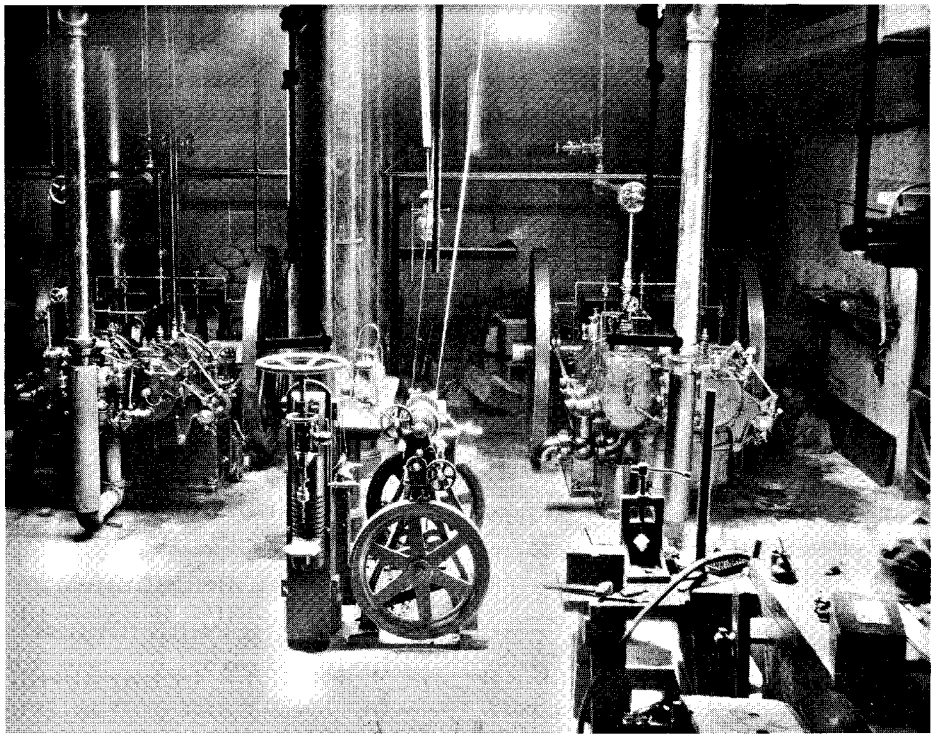
To the consternation of the District Engineer, the contractor and all involved in this heroic project, Congress saw fit not to pass any funds for the 1886 fiscal year. A request for $150,000 was made for the next fiscal year.

In March 1887 Congress appropriated $120,000 to continue work on the lighthouse. The quarry and depot began work in late March. However, much of the initial work consisted of digging out from the winter rains of the past few seasons. Immense quantities of earth had slid down the slopes of the quarry clogging the spur tracks and derricks. The main pile of 1,500 tons of dressed stone had plunged down another slope. At the depot the pilings of the wharf were badly damaged by the Teredo worm and the wharf was almost completely rebuilt. Derricks were rerigged, moorings repaired and machinery and equipment prepared to begin work.



Original 12" diameter steam powered whistle fog signals located on the deck of the caisson. The deck was used as a catchment to collect rain water. Official U.S. Coast Guard photo

By the 18th of May the Schooner *Sparrow,* with quarters for 50 men, was secured to her moorings. The crew began repairing the damaged derrick on the rock, installing the engine and constructing a platform for landing stone. The *Alliance,* because of boiler problems, did not deliver the first load of stone to the rock until early June. When *Alliance* did reach the construction site it was discovered that she was poorly fitted for the job at hand. The contractor's riggers had to rerig the vessel before stone could be unloaded. Finally, on 7 June 1877, some five years after the first appropriation had been made, the first stone of the first course, or tier, of the lighthouse pier was set. It weighed six tons. After the initial trip it was obvious that the *Alliance* was not suitable to the task. The contractor chartered the *Santa Maria* to supplement the *Al-*



The cavernous engine room of St. George Reef was located in the caisson. It provided steam and later air for the fog signal and in later years electricity. This and the one above are circa 1900. Official U.S. Coast Guard photo

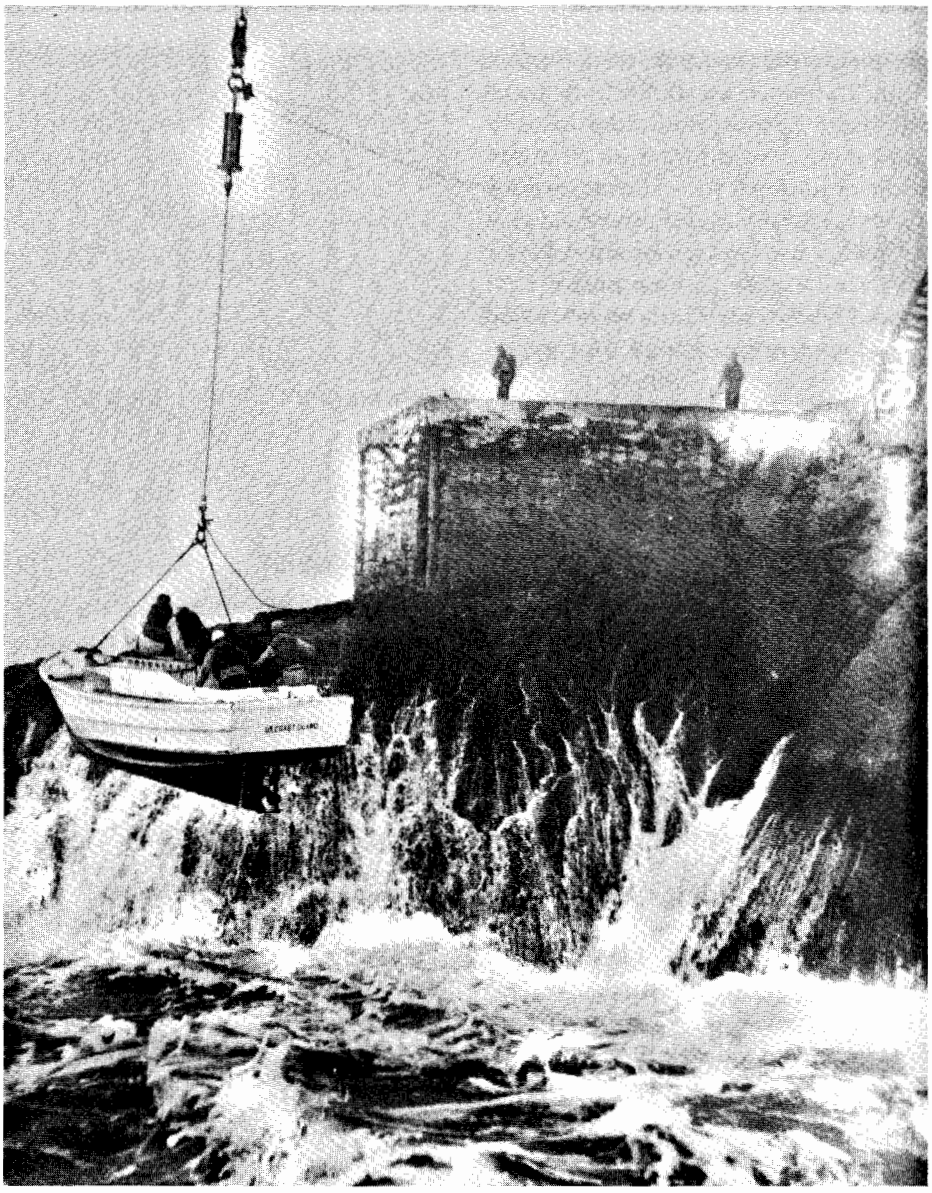
liance. By the 26th of June the workforce was out of stone. *Alliance* arrived on the 27th but heavy seas delayed her mooring and unloading cargo until the 8th of July. The *Santa Maria,* in the meantime, had completed her voyage and began transferring stone to the rock. The ninth course, or tier, of the pier was in place by the end of the season.

The ninth course or tier of the pier was in place by the end of the year.

An appropriation of $150,000 was passed by Congress for the 1888-1889 fiscal year. Two vessels were chartered, our old friend *Whitelaw* and the steam schooner *Del Norte.* The *Whitelaw* sailed through lousy weather, as usual, to Humboldt Bay, loaded men and materials and set out for the rock. Upon arrival the crew quickly finished the landing platform on the rock and constructed quarters for 50 men under the platform. Moorings were reset and the derrick and machinery repaired and set in place. On the 26th of May, the *Del Norte* arrived with the first cargo of stone. *Del Norte* proved more than able to meet the demands of delivering stone and cargo and the *Whitelaw* was discharged on July 1st. By the end of the season the 13th course had been laid. Having the men living on the rock greatly enhanced the operation. The pier was now 32 feet above the first course.

In March of the next year, 1889, the Lighthouse District's luck held as the requested $200,000 was appropriated. *Del Norte* again won the bid to transport stone and materials. The usual initial preparations of setting moorings and repairing damage to the quarters and platform made by winter storms was completed and the 14th course in place by the end of April.

One morning in May the men's quarters were inundated and, although no one was injured, the crew was washed from their bunks, truly no rest for the weary! By October the pier, save a small amount of paving on the deck, was complete. Work continued through the season at the quarry and the stoneyard. The end was clearly in sight.



St. George Reef Light. Official U.S. Coast Guard photo

The final appropriation, in 1890, was not made until the 30th of September, far too late in the season to attempt any work on the rock.

In March of 1891 the vessel *Sunol* won the bid for transporting material. She departed for the rock on the 21st of April after a lengthy delay in Humboldt Bay due to heavy seas on the entrance bar. Upon arrival at the rock they found the quarters wrecked and no mooring buoys in sight. By May 1st mooring buoys had been set, quarters repaired and the machinery placed in operation. The first stone of the lighthouse tower was set in place on the 13th of May and the last on the 23rd of August.

Tragedy struck in September when a man holding a tag line to the boom was pulled off the pier, and fell to his death. September and October saw the crew completing the interior of the tower and removing the scaffolding. All machinery was installed and the lighthouse turned

over to a crew of three. However, the lens had not arrived from France, so the crew was merely a caretaker of a very expensive tower.

In 1892 the 1st Order Fresnel lens arrived from France and was installed. The red and white light, alternating every 15 seconds, flashed out over the Pacific in October of that year. St. George Reef also provided the mariner with a steam powered fog signal in the form of a 12″ whistle. The whistle was changed to an air siren in 1931 and to an air powered diaphone horn in 1936.

St. George Reef was one of the least sought after stations in the service. One District Inspector stated, "It tries and proves men. Show me the man who has put in the required time of service there, and I'll show you a man ... and a lighthouse keeper, too!"

This station was one of the few with five keepers assigned. The families of keepers resided in small houses in Crescent City eight miles to the southeast.

Some ten years in the building, St. George Reef Lighthouse is one of the premier engineering feats of the Lighthouse Service and at the time, America's most expensive costing over $700,000. Some of the statistics are awesome; 1,339 dressed stones in the pier alone, none weighing less than two tons, many as much as 6 tons. In all 14,000 tons of stone went into the structure.

However the lens had not arrived from France...

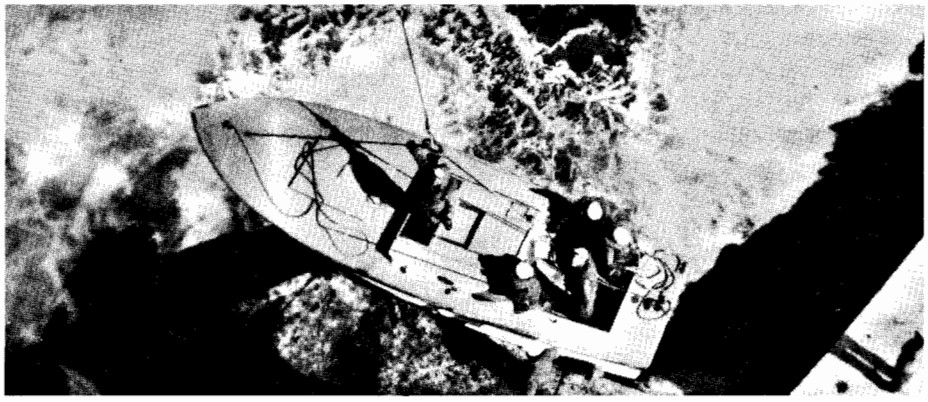
In 1939 the U.S. Lighthouse Service became part of the Coast Guard and enlisted personnel began taking over for the "wickies" (the affectionate term for lighthouse keepers). With the exception of the man killed in the construction of the lighthouse and one keeper who drowned when his boat capsized as he returned to Crescent City, many, many keepers arrived and departed the reef without incident. This held true until April of 1951.

Two young Coast Guard electrician mates visited the station to make repairs. At the end of the day they prepared to depart with the three man relief crew. All five donned their life jackets and stepped aboard the station boat. They were lowered towards a seemingly calm sea...then tragedy struck! A freak, rogue wave struck the boat filling it with water and causing the forward lifting eye to part. The bow dropped throwing the men into the water. The Officer-In-Charge, who was watching the operation, leaped into the water with a rubber raft. He managed to pull one man to the raft and lashed him to the side, however he was already dead. He then paddled to two men still alive clinging to a nearby mooring buoy. The other two could not be located. Three men dead. The Coast Guard, long aware of the dangers of



boarding and servicing St. George Reef sought a means to close this miserable and dangerous duty station. In 1975 a means arrived in the form of a Large Navigational Buoy (LNB) which could provide the mariner with almost the same aids that were furnished by the lighthouse. In 1975 St. George Reef was closed, some 83 years of faithful duty completed.



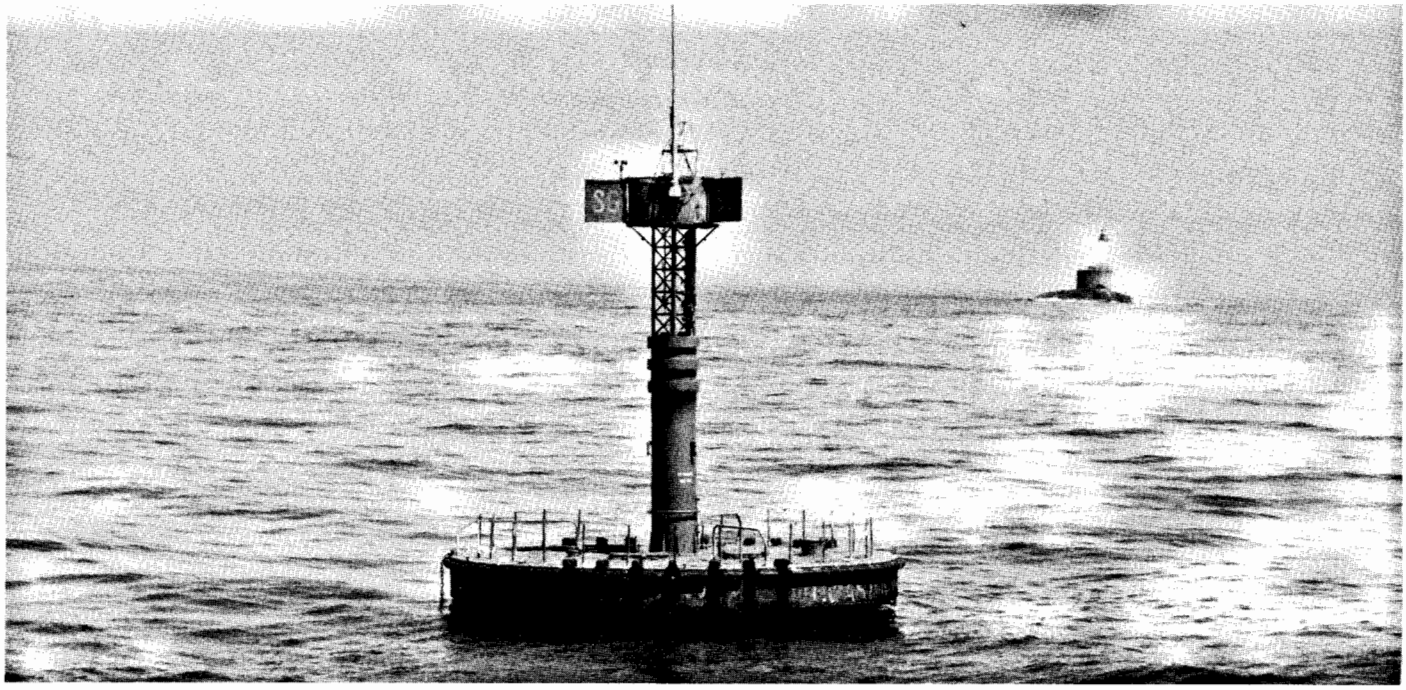


(Above) The station relief crew and electrician mates are preparing to depart in the station boat. Petty Officer Beckett, sitting on the inboard side, is talking to Walker who is fastening his life jacket. These two men and Costello, who is at the helm, will die within minutes. The other two, Mulcahy and Vandenburg will survive the disaster.

Official U.S. Coast Guard Photo

(Left) The Station Boat being lowered just a minute before the hoisting sling parted throwing the men into the frigid water.

Official U.S. Coast Guard photo



The St. George Reef Large Navigational Buoy (LNB). This 40 foot diameter "floating lighthouse" weighs 200,000 lbs. and contains small diesel powered engines that provide electrical power for the 17 mile range navigation light, radiobeacon and fog signal. The light is displayed from a 40 foot high mast. The buoy also contains U.S. Weather Service equipment. St. George Reef Lighthouse can be seen in the background.

Official U.S. Coast Guard photo

Humboldt Standard

Vol. 92 — No. 30 EUREKA, CALIF., MONDAY EVENING, FEBRUARY 4, 1963 24 Pages Today



Arrow in upper photo points to white hat of Coast Guardsman Patrick John Moran, 22, of the Coast Guard cutter Avoyel resting on his blanketed body after imported car at left plunged over a 50-foot embankment on Ridgewood Drive yesterday morning. Highway Patrol officer Kenneth Vollenweider is at right. Below, Pierce Mortuary attendants assisted by Patrol officer Merle Greenlaw (top right), deputy sheriff Leonard Lamoreaux (second from bottom) and Sheriff's Marine Posse volunteers carry the victim up the steep slope near the Elk River road intersection.

Local Coast Guardsman Killed In Sportscar Crash

One Coast Guardsman from the cutter Avoyel was killed and another from St. George Reef light was seriously injured Sunday morning when the car in which they were riding skidded off Ridgewood Drive near the Elk River road intersection and crashed some 50 feet below the roadway.

Seaman Patrick John Moran, 22, of New York is dead.

Seaman Henry Knutson Jr. of 2880 Russell Street, North Bend, Oregon, was hurt.

Highway Patrol reports said Moran was at the wheel of the car in which he was rushing back to the Avoyel at its Fields Landing berth to report before it sailed for San Francisco.

He was dead when an ambulance arrived at the scene shortly after 10:30 a.m., the time set by the Patrol on the accident.

Knutson was taken to St. Joseph Hospital where attaches today said he is being treated for major, but not critical, injuries.

The Coast Guard's headquarters in San Francisco refused today to give any information on the accident, but identity of the two men was learned from the Highway Patrol.

Other authoritative sources said Moran had received permission to drive his car to San Francisco and meet the ship there, but that he was required to report aboard before it sailed at 11:30 a. m., yesterday for a month's stay.

Patrol reports said the westbound car missed a left curve on a sharp down grade and skidded across the roadway before plunging over the embankment.

No specific address on the victim was available. It is believed that he was thrown out of the vehicle which then rolled over him.

FIVE DAY FORECAST

SAN FRANCISCO (UPI)—Five-day weather forecasts:

Northern California: Rain at start of period and again about midweek; temperatures above normal; normal low-high Sacramento 41-57, Red Bluff 40-58, Eureka 52-54, Santa Rosa 37-60, Tahoe 17-37.

Lanzarote, Canary Isla
THE EARTH PRODUCES
FLAME NOR SMOKE,
CHICKEN DROPPED
HOLE IN THE GRC

Coast Guard Lease To City Under US Accountant Fire; Blimp Base At Samoa Named

An agreement between the U. S. Coast Guard and the city of Eureka for public use of the now derelict World War II blimp base property and its seaplane ramp on the Samoa peninsula is among targets of government accountants in Washington, D. C. The run-down blimp hangar and the adjacent properties are practically unused by anyone except for a few picnic parties on the narrow strip of adjoining bayshore beach. The General Accounting Office complains that there is no monetary compensation to the service commensurate with the use-value of the lands in question.

WASHINGTON (UPI)—The General Accounting Office presented a report to congress Monday criticizing Coast Guard operations in California.

GAO examiners said the Coast Guard paid $175,360 during nine years to maintain family housing on Yerba Buena Island for two high-ranking officers.

They said that during the same period, July 1, 1951, to Sept. 30, 1960, the officers could have been paid allowances totaling $3,620 a year to live in private housing—with a saving of $141,740 to the government. They recommended that plan for the future.

The examiners said the Coast Guard does not agree with their recommendation and contends that its officers should have the same privileges as those of the other military forces.

The report said a third housing unit also was established on Yerba Buena in the 1959 fiscal year. A lighthouse keeper's quarters were converted into a house for the 12th Coast Guard District commander at a cost of $33,750. Examiners said the Coast Guard originally had estimated the cost at $20,000.

Costs at Yerba Buena included an annual salary of $6,050 for a head gardner, the GAO examiners added. They said the work of gardeners consisted chiefly of maintaining four to five acres of lawns and a fruit orchard in the immediate surroundings of the officers' quarters.

The examiners also were critical of the use of municipalities or private parties of Coast Guard land holdings at Point Pinos light station, Humboldt Bay lifeboat and light stations, and the Costroville reservation.

At Pinos point the Coast Guard leased 55 acres to the city of Pacific Grove for use as a golf course. The city pays $1 a year for the land and also built a $16,550 housing unit for the Coast Guard.

At Humboldt Bay, the Coast Guard had granted a license to the city of Eureka to use 18 acres as a seaplane ramp and parking area without payment.

At Castroville, the Coast Guard leased 70 acres of farm land for $5 an acre, although the GAO examiners said the Coast Guard estimated the land value at $360-000.
