Faro de Punta Borinquen
(Punta Borinquen Light)
Punta Borinquen
Borinquen
Puerto Rico

HAER No. PR-19

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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PR
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HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

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PHOTOGRAPHER: Luis Morales, August 1978

PR-19-1 Photocopy of book illustration, undated ca. 1898; from Album de Puerto Rico

PR-19-2 Photocopy of measured drawing, ca. 1888; FLOOR PLAN OF ORIGINAL LIGHTHOUSE

PR-19-3 Photocopy of measured drawing, ca. 1888; FRONT ELEVATION OF ORIGINAL STRUCTURE

PR-19-4 Photocopy of measured drawing, ca. 1888; REAR ELEVATION OF ORIGINAL STRUCTURE

PR-19-5 Photocopy of measured drawing, ca. 1888; LATERAL ELEVATIONS SHOWING FOUNDATION PLANS

PR-19-6 Photocopy of measured drawing, ca. 1888; SECTIONS OF FOUNDATIONS

PR-19-7 Photocopy of measured drawing, ca. 1888; SECTIONS OF FOUNDATIONS

PR-19-8 Photocopy of measured drawing, ca. 1888; SECTIONS OF FOUNDATIONS

PR-19-9 AERIAL VIEW LOOKING SOUTHEAST, SHOWING SITE

PR-19-10 AERIAL VIEW LOOKING SOUTHEAST

PR-19-11 VIEW LOOKING WEST, ENTRANCE FACADE WITH LIGHT TOWER DIRECTLY BEHIND

PR-19-12 VIEW LOOKING NORTHWEST

PR-19-13 VIEW LOOKING NORTHWEST, SHOWING SEPARATE LIGHT TOWER

PR-19-14 DETAIL VIEW OF LIGHT TOWER, SHOWING BALCONY AND LANTERN

PR-19-15 DETAIL VIEW LOOKING WEST, SHOWING ENTRANCE TO LIGHT TOWER

(continued)

PR-19-16 DETAIL VIEW OF INTERIOR OF LIGHT TOWER, AT ENTRANCE LEVEL

PR-19-17 DETAIL VIEW OF BASE OF STAIRS, WITH CLOCK WORKS COLUMN AT FIRST LEVEL OF LIGHT TOWER

PR-19-18 DETAIL VIEW OF TIMING MECHANISM FOR LANTERN

PR-19-19 DETAIL VIEW OF LAMP FROM BELOW

PR-19-20 DETAIL VIEW OF LAMP

HAER
PR
11-BORN,
1-

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(Punta Borinquen Light)

PR-19

Location: On Point Borinquen, Aguadilla vicinity, Puerto Rico
Position: 18° 30.1' N - 67° 8.7' W

Date of Erection: 1889

Present Owner: U.S. Department of Commerce
U.S. Coast Guard

Original Owner: Central Lighthouse Commission
Colonial Public Works Office
Harbor and Port Section
Government of Spain

Present Use: Lighthouse

Significance: The original lighthouse was built in 1889 in position 18° 29' 26" N - 67° 9' 43" W, very close to the sea in a low sandy point. In 1918 Puerto Rico experienced an earthquake which had its epicenter somewhere on the NW part of the Island, possibly on the Puerto Rico Trench. As a result, two lighthouses were practically demolished on the NW section of Puerto Rico: Punta Borinquen and Punta Higuero (south of Punta Borinquen).

The old structure closely resembled Arecibo Light in design, although it was much smaller. As a 4th class light it had a 12 mile range showing a red and white light with alternate flashes 30" in 30". The dwelling - a 13 room unit for 2nd and 3rd class keepers - was built around the octagonal tower. Both were built of stone and brick and were painted red with white trimmings. One distinctive element was the tower's bracketed cornice arrangement, which had a clearly moorish style that sharply contrasted with the building's neo-classic simplicity. The earthquake also destroyed the lens, a major loss, since the flashes were produced by tinted panels in the central drum. It was a 3 1/2 order lens built by Barbier & Bernard, lenticular, 75 cms. in diameter. It had 8 flashing panels; the central drum had 5 panels; 10 prisms formed the upper section of each element above the central drum and 4 prisms were located below. The entire lens rotated on a chariot activated by a clock work system.

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The new light was built in 1922. The structure differed from the first in two ways: the dwelling is reinforced concrete and the tower is detached from the dwelling. Otherwise, the keepers quarters were built, even in decorative elements, following the old design. A change was introduced; the principal keeper would have 5 rooms and his assistant 4, with a connecting hall between and a common storeroom. The old light design was so closely followed that two four-furnace Spanish charcoal kitchens were built in the keepers quarters.

The dwelling is 56' 4" x 39' 6". The main entrance on the east side leads into a long east-west corridor at the end of which a door leads to an uncovered passway to the tower. South of the corridor a door opens to an 11' 10" x 11' 7" principal keeper's living room; two additional doors connect with two identical 11' 9" x 12' 3" rooms. One of these serves as a dining area which opened into the 11' 9" x 12' 3" Spanish kitchen (no longer in existence). The kitchen also opened into the largest room, an 11' 10" x 18' 7" master bedroom. The west half of the structure is identical to the east section, although the 11' 10" x 18' 7" room serves as a common storeroom. The kitchens, following the Spanish arrangement of spaces, are located in the northeast and southwest corners, respectively. Each room originally had double-leaf windows. The floors are still tiled as in the 1920's. The exterior decorative elements such as cornices, pediment, and parapet follow the Spanish colonial neo-classic style.

The light gray colored reinforced-concrete tower was built 292 ft. above water, 60 ft. above ground and is earthquake resistant. It has four stories, a watchroom, and the lantern. The tower has a 6 ft. deep, 25 ft. square foundation which is reduced by a series of four superimposed concentric exterior concrete belts into a 15' 2" circular structure that has a 12' 8" internal diameter. Each floor, having a west oriented window, is connected by a cast-iron winding stairway. In 1921 the tower had a 3rd order, 7' 1" diameter, cast-iron, brass, and glass cylindrical lantern with helical bars. It opened into a concrete balustrade and gallery.

The illuminating apparatus was formed by a 40" diameter, 3rd order, 1917 lenticular lens built by Macbeth Co. in New York. It had 12 panels, of which 8 were flashing ones. The central drum had 12 panels;

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11 prisms were located on each panel above the central drum and 1 below. The lens was mercury floated, activated by a classic clock work system that had a galvanized iron cord led through the center of the column in the tower stairway. It had a 200 lb. weight. In the 1920s the light characteristics responded to sea navigation. In 1947 the light was changed for an airway beacon for surface and air navigation. As a consequence, the lantern was transformed and the old helical bar structure removed. In its place a 36" double head revolving Crouse-Hinds apparatus was installed. The 1946 tower and light and dwelling are in existence today.

The new 1920's dwelling follows the old 1880s geographical location, structural, and architectonic characteristics. Its tower represents the only ever built by the U.S.C.G. showing the above stated specifications. The light stands at the northwest point of the Island and partially completes the north light trilogy already mentioned. But most important, it is the first eastern light in the Island's western front that guides the entrance to the Caribbean, thus forming with Mona Island and Cabo Rojo Lights the protection for the north-south bound sea navigation into the historically famous Mona Passage.

Transmitted by: Kevin Murphy, Historian HAER, August 1984; from the National Register Nomination prepared by Dr. Benjamin Nistal-Moret, August 1979.