Kaula—An Island of Hawaii

By E. H. Bryan, Jr.

"Wanalia was the man
And Hanala'a was the woman;
Of them was born Niihau, a land, an island.
There were three children of them
Born in the same day,
Niihau, Kaula, ending with Nihoa.
The mother then conceived no more,
No other island appeared thereafter."
(Mele composed by Kahakuikamoana;
as recorded by Fornander, IV:1, page 10.)

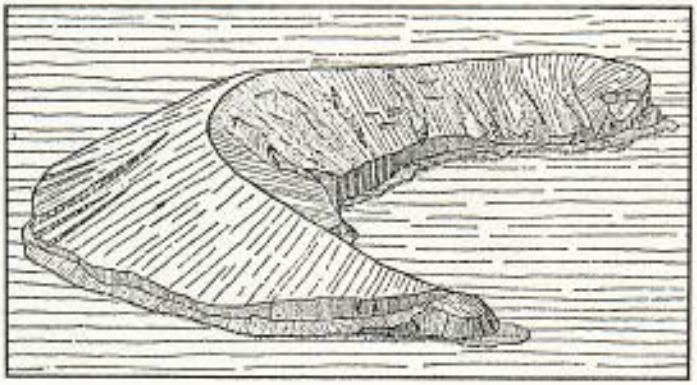
KAULA is a small, isolated islet, lying about 20 sea miles or 23 land miles to the west-southwest of the southern end of Niihau, and 150 sea miles west and a little north of Honolulu. Its position is about 21° 39′ North, and 160° 31′ 30″ West. Estimates of its height have been getting progressively smaller, until they are now between 500 and 600 feet, with the U. S. Coast and Geodotic Map of 1934 giving it 550 feet. Estimates of its area likewise very, from 108 to 136 acres. Submarine soundings show that the islet lies near to the southeast edge of a submarine platform having an area of at least 30 square miles, with depths of from 6 to 50 fathoms.

Kaula is crescent-shaped, two-thirds of its ridge having a fairly level crest, but the south end sloping down gradually. The concave side of the crescent is toward the east, from which side, at a distance the island looks likes a sleeping seal with its head to the north. The lower slopes have been cut back into a sea cliff which makes the slopes almost impossible to climb, even after one has succeeded in landing on the wave-cut terrace, which cannot be done unless the sea is moderately calm. The Lighthouse Service has had to blast and build a way to the summit of the convex (west) side, and sometimes it is necessary to land by means of a hoist.

Kaula has been known for a long time to the Hawaiians, its name appearing frequently in the old meles, especially those of Kauai. Reference to the island may signify a place far away, on the very edge of the group of islands, as in the legend of Paka'a. When Kaewenuiaumi said to Pakaa's spirit "I am coming to search for you," the spirit of Paka'a answered, "I am living on Kaula," or in other words, the back of beyond. The islet also must have been visited at times for sea birds, for there are references such as the following, from the legend of Kawelo. That famous warrior chanted to his wife, Kanewahinukiaoha:

"When Hanalei thou shalt possess,
And the mats of Niihau thou shalt wear,
And the birds of Kaula thou shalt eat . . . "

There is another version of how Kaula came to be "born," besides the one at the beginning of this article. It runs as follows: After giving birth to Hawaii and Maui, Papa (the earth-mother) left her husband Wakea (the sky-father) and went back to Tahiti. After a short time wifeless, Wakea took to himself Kaulawahine, who as a result gave birth to Lanai. Tiring of her, he sought the company of Hina, who a little later gave birth to Molokai. Meanwhile Eaukaula, the plover, told Papa of her husband's faithlessness. Returning quickly to Hawaii, and learning what he had been doing, Papa deserted Wakea in a fury, and took Lua



Sketch of Kaula Rock—By H. S. Palmer, Courtesy Bishop Museum

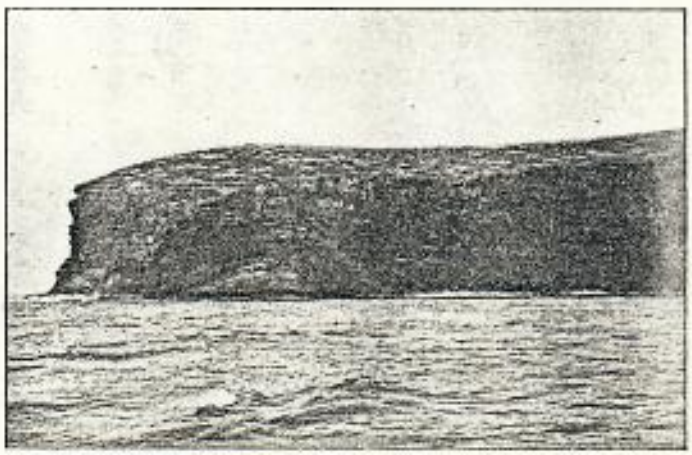
for a husband. They had a child, Oahu, known as Oahu-a-lua. Finally Papa went back to Wakea, and by him gave birth to Kamawaelualanimoku (the "child of heavenly qualities"—Kauai), Niihau, Kaula, and Lehua. The mele (Fornander, IV:1, pp. 14, 18; V1: p. 360.) runs:

"Papa then went back to live with Wakea,
Papa was restless with child sickness,
Papa conceived the island of Kauai
And gave birth to Kamawaelualanimoku.
Niihau was only the after-birth,
Lehua separated them,
And Kaula was the closing one."

The lighthouse men when they finally succeeded in reaching the summit, in July, 1925, found on the northern part of the crest the remains of two stone structures which might have been heiaus (temples). On the concave (east) side, just below the summit, they also found a shelter cave, across the mouth of which was a low wall, suggesting that it, too, had been used by visiting Hawaiians.

The establishment of a light on the inaccessible summit of Kaula forms one of the most interesting and important events in the history of that seldom visited islet. The need for a light there had been felt for several years, because the island lies close to the direct route of vessels bound for the Orient. In 1921 Superintendent A. E. Arledge visited the

Continued on Page Thirty-eight



Great Sea Cave, Kaula Island—E. H. Bryan, Jr. Courtesy Bishop Museum

of Kali's crop this year to be sold with 40 or 50,000 coffee trees and they look very green. So also is Captain Rose's coffee. Why do not the Hawaiians plant coffee? The Elele urges them in this direction, but they do not obey, and only sit around.

L (for Limaikaika—Armstrong.)

"A SILENT CALL TO ARMS"

Continued from Page Twenty-six

service of their fellow citizens. Most of these calls come for the rescue of persons during flood disasters, while the call for riot duty and suppression of civil disorders and maintenance of law and order follow closely the number of calls for rescues from floods and storms. When the Guardsmen respond to an emergency call they do not face the situation in a haphazard manner. This has not always been the case, however, for there were times when considerable efficiency was lacking in the training of the Militia. Those days, we believe, have passed and now all National Guard units have a well-trained, efficiently-organized staff which has prepared plans and is constantly improving them for each type of call that may be made upon the Guardsmen to serve their fellow mankind or their country.

Mr. Average Citizen can take great pride and satisfaction in knowing that the Guardsmen are at all times ready for emergencies and desirous of supporting constitutional law and order. The ideals of this "democracy within a Republic" have their highest type of staunch supporters in the National Guardsmen of this community. The people of the Territory of Hawaii should feel proud of their all too small military force.

KAULA—AN ISLAND OF HAWAII

Continued from Page Twenty-seven

island on the lighthouse tender *Kukui*, but was unable to find a landing place, although the sea was moderately calm. He gave copies of the pictures which he took at that time to the German geologist, Immanuel Friedlaender, who published a paper on the geology and topography of the island in a German scientific journal. Friedlaender interpreted the photographs as showing that Kaula consists of ash or tuff ejected at two different times, and that it forms about a quarter of the circular rim of a crater, the rest of which has disappeared.

On July 1, 1923, the U. S. S. *Tanager*, returning from a scientific cruise to the northwest Hawaiian islands, circled the island, and a ship's boat rowed along the lee side and into the sea cave at the northeast end. At that time the writer reached his nearest approach to the island by touching the wall of the cave with a boat hook. No official landing was made, although two or three of the more daring members of the party succeeded in getting ashore on a rocky ledge, from which they could only work their way a few yards up the cliff face. A few photographs and longe-range observations were made from the ship.

Superintendent Ralph R. Tinkham also visited the island in 1923, without being able to make a landing. George Gay, manager of the Niihau ranch, is credited as being the first white man to have landed on the island, having swam ashore several years previous. He was unable to get off again through the breakers, and had to remain on the islet over night, until rescued by an Hawaiian crew in an outrigger canoe next day.

HALEIWA BEACH, OAHU

In order to learn more of the island an airplane photograph of it was urgently desired. In November, 1923, Brigadier General William Mitchell was in Hawaii inspecting army air corps. He volunteered to get pictures of Kaula. That was before the days of inter-island flights, so the plane was loaded onto the lighthouse tender *Kukui* and transported to Koloa, where it had to be taken apart in order to get it ashore in small boats. Meanwhile Commander John Rodgers, in command of the local navy air service, learned about General Mitchell's plans. That same spirit of rivalry which marks the Army-Navy game made its appearance. Why should the Navy let the Army run off with the honor of being the first to fly a plane over and photograph Kaula? So two navy flying boats were loaded on the *Pelican* and another minesweeper, and they set off for Kauai. There one of the planes was safely launched; and while the army plane was being made ready at a small field near Eric Knudsen's beach house, on the morning of November 8, Lieutenant E. Chourre piloted the navy plane over Kaula so photographer B. L. Houser was able to take the first picture of the islet from the air. Later a number of photographs were made by the 11th Photo Section, U. S. Army, from which Mr. Tinkham was able to construct maps and plans for the development of the light project.

In 1925 a party under the direction of Fred. A. Edgecomb, present Lighthouse Superintendent, succeeded in making a landing on July 10, and worked until the 21st building a trail and ladder to the summit. On August 21, 1931, Lighthouse Engineer Neil W. Wetherby, in making a reconnaissance of the islet, was washed off the cliff from a spot 30 feet above sea level. An old Hawaiian in the party maintained that this had happened because he had not first rowed into the sea cave to pay his respects to the shark god which dwelt there and ruled the islet. In spite of this omission he wasn't seriously hurt, and returned on August 2, 1932, with a carpenter, mechanic, and six laborers, to complete the installation of the derrick, shelter houses, and light. The light was finally put in commission August 18, 1932.

At this time, August 16 to 19, Dr. Harold S. Palmer, professor of geology at the University of Hawaii, and E. L. Caum, botanist with the Experiment Station, H. S. P. A., were able to make a study of the geology, plants, and bird life of the island. In a publication (B. P. Bishop Museum Bulletin 35) issued in 1927, Dr. Palmer described the geological formation of the island. He outlines the geologic history of Kaula as follows: First the eruption of volcanic rocks built up the platform upon which the islet stands to about sea level. Then it was eroded away. Then corals grew upon the summit of this planed-off mountain peak. After that there was a second period of volcanic activity and the tuff cone was formed, with its highest side toward the west. This tuff crater-rim was next eroded by wind, waves, and running water, the waves cutting a submarine terrace almost around the island. The level of the sea then dropped about fifteen feet with reference to the wave-cut terrace. And finally the present cycle of erosion took place. It is the wave-cut sea cliff, which turns the stream cut gulches into hanging valleys, that makes the faces of Kaula so difficult to climb.

Mr. Caum, in Bishop Museum Occasional Papers, Vol. XI, No. 21, 1936, discusses the vegetation and the bird life. Fifteen species of plants were found growing on Kaula. This August visit having followed a very dry summer, great areas of the slope appeared entirely barren, which following a rainy period might have supported grass and sedge. A grass, *Panicum lanaiense;* cactus, *Opuntia megacantha;* aweoweo, *Chenopodium sandwicheum; Amaranthus viridus; Portulaca caumii,* a new species of purslane and the commoner *Portulaca lutea* and *Portulaca oleracea;* the puncture vine, *Tribulus cistoides;* and *Euphorbia celastoides* were the most abundant species.

The noddy tern, *Anous stolidus,* was the most numerous species of bird. Other birds were white tern, the Necker Island tern, the sooty tern, the gray-back tern, Bulwer's petrel, wedge-tailed shearwater, red-tailed tropic bird, the blue-faced, red-footed, and common boobys, frigate birds, and the golden plover.

Mr. Caum also collected specimens of 15 species of insects: 2 kinds of ants, 2 wasps, 4 species of flies, 2 species of lady beetles, a moth, a leafhopper, a thrip, the familiar embiid, and some pseudo-scorpions.

The lighthouse personnel have also captured specimens of a rat and a mouse, and report dry wood termites in lumber on the island.

The light atop Kaula is the second highest under the jurisdiction of the United States Lighthouse Service, being 562 feet above sea level. It is exceeded in height only by the Lehua light, 707 feet, off the northern end of Niihau. Lights at such elevations are only possible in regions, such as Hawaii, where there are no fogs. The Kaula light consists of a double 375 mm. acetylene beacon lantern, a type developed in Hawaii by M. Peter, Lighthouse Service mechanic. Each of the two lanterns has a 480 candle power light, visible at least 12 miles. The height is such that, under exceptional conditions of clearness, it might be seen at a distance of 27 miles from sea level. The upper light is automatically turned on when the sun stops shining on it. Should it burn out, the lower light would automatically turn on. The lights are supplied with gas from storage tanks lower down on the west side, where a hoist can lift the heavy tanks from the shore. Two independent pipes, each 1500 feet long, supply the lights. Two tanks each hold enough gas to keep the light burning for 15 months. The light could keep burning for two and a half years without refueling, if necessary.