

# K4NI Navassa Island—1928

BY RUSSELL DUNAJA,\* W3BBF

IN January 1928 the Radiomarine Corp. of America called me and offered me a job as Radio Operator aboard the SS *Catherine* of the Bull Insular Line in San Juan, P.R. The ship carried passengers and freight between San Juan, Santo Domingo, and St. Thomas, Fredrickstad and Christianstad in the Virgin Islands. I was taken to Puerto Rico as passenger on one of the Bull Insular line freighters, and passage was guaranteed back to the U.S.A. On arrival at San Juan, P.R. I found that I was 2nd Operator and A. J. Croner was First Operator.

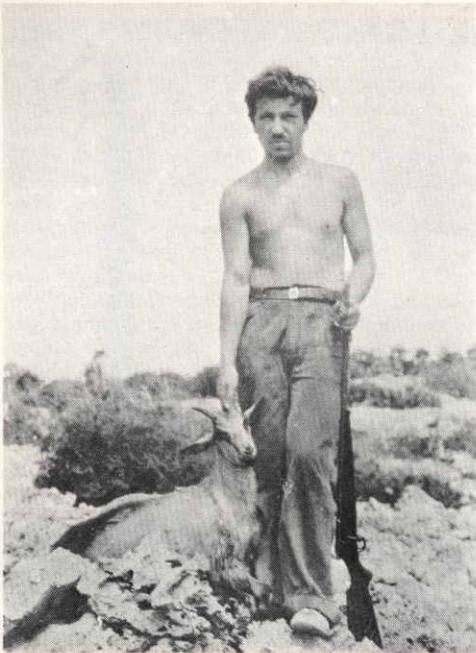
After about four months on the inter-island run, we both got tired of it and noticing on the bulletin board at the San Juan Post Office openings as Radio Operators and Lighthouse Keepers at Navassa Island, 9th US Lighthouse District, we both applied, passed the examination and were shipped to Navassa Island aboard the Lighthouse Tender *Acacia*. Before I left, I had one of the radio operators on one of the freight ships buy me a 32-20 Savage rifle and 1000 rounds of ammunition and I sent home for my 12-gauge double-barrel shot gun and 22 cal. rifle, as there were wild goats and wild pigeons and doves on the island. I also brought along my experimental radio gear that I was testing on

board the *Catherine* (mostly superregenerative receivers).

On arrival, we were hoisted out of the cargo boat in a cargo sling and found the island was in two levels. The first level was about 25 feet above the sea and a narrow-gauge railway ran to the next level and the push cars were pulled up the steep incline by a winch and steel cable and a Bull Dog gas engine. The next level ran to the dwelling and lighthouse. I guess the length of the railway was about 2½ to 3 miles.

The island was mostly limestone rock with the holes filled with guano which in the 1800s was shipped as fertilizer to Baltimore in sailboats. There were thousands of booby birds nesting in the trees. The island was covered with wild palm and wild fig trees and also a poisonous tree similar to sumac. Near the lighthouse were several papaya trees with delicious fruit and also wild limes. There were also wild peppers which were hot enough to burn your insides out. Of course, we had to try out our rifles and shot several wild goats and pigeons. The goats were stuffed with garlic to kill the wild taste and roasted and didn't taste too bad. There was a boat with supplies at the island every three months and we ordered our supplies to last six months. Most of the food was dried fruit and vegetables also canned food and smoked meats

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The Author (1928)

as we had no refrigeration. The fishing also was very good and we caught red snappers, small baracudas, and several other tropical fish. I also caught land crabs at night when they came out of their holes to eat grass. These were put in a box for several days and fed potato peelings to get rid of the grass taste. They were boiled in salt water and didn't taste bad. At night the crabs would crawl into the house and had to be swept out in the morning.

A. J. Croner left after a few months as he caught a rash similar to poison ivy. Two other Puerto Rican keepers were on the island with me and one of them had some chickens. After the feed was gone, the chickens had to eat cockroaches (about 1½" long) and scorpions and other bugs. (No more chicken for me!) The power supply here was a 110 Vdc Delco plant with storage batteries and also a Bull Dog gas engine belted to a 4 kW 110 Vdc generator. The transmitter was a 2 kW Navy Standard quenched spark set with a 500-cycle motor generator. The antenna was a "L" type flat top 4-wire from the 160-foot lighthouse tower to a 60-foot telephone pole. The receiver was a Navy Standard with 2 stages of audio. The frequencies were 355 kc. and 500 kc. and with heavy static NAW Guantanamo Bay, Cuba, could not be worked. Our call was WWEA and later WSZ.

About this time the UX 222 screen grid tube came out and one was ordered. A tin cracker box with a hinged top was used and a shield partition was soldered in. The coils were wound on old tube bases. The detector was a UV 199 with the UX 222 rf Stage. This was hooked up to the two-stage audio amplifier. All kinds of SW broadcast

stations were picked up so the coils were trimmed to 14 Mc band and stations all over the world were heard. The next thing was get permission to put up the amateur station and the call K4NI was received. An 852 was ordered and also a Cardwell 500μF transmitting condenser. With plenty of ⅜-inch copper tubing on hand a high-C Hartley coil was wound. A 12V storage battery was used for the filament and a 3000-volt tap was taken off the spark transformer (Spare transformer). The antenna was an 80-meter Zepp from the top of the tower to a 60-foot telephone pole. The spreaders for the feeders were wood boiled in beeswax. The power was 500 cycles ac but due to the high-C circuit the wave was not too broad. Hundreds of amateurs all over the world were worked and a schedule was kept with NKF at Washington, D. C. Tests with NKF were run and wavelength was lowered until we were on 13 meters which was as low as the transmitter would go (capacitor all the way out). Later, tests with an SM station was tried and it was possible to work him with only a 45V "B" battery for plate supply. That changed me to dc and I sent home for my surplus aircraft dynamotor (1500V, 233mA), which was belted to the big MG set and I went on the air with pure dc.

I had to keep light watch every third night and this gave me plenty of time to operate. Also I had to take weather observations and send them to NAW Guantanamo Bay on 355 kc spark (about 90 miles away). I had a postcard size Kodak with me and took a lot of pictures of the island. The QSL card was a picture of the Lighthouse with the call K4NI on it, but I soon ran out of cards and a lot of stations didn't get QSLs.

The light was kerosene gas with gas mantles and was turned by weights which had to be wound up about twice a night. The groceries came from the commissary at Guantanamo Bay and it cost us about 10 to 15 dollars a month to live. The water supply was rain water which was caught in a cistern. We received our mail every three months when the supply boat arrived. I was to stay on the island 9 months and then get 3 months leave with pay, but as a new automatic light was installed using acetelene gas I was asked to stay 18 months with 6 months leave with pay. So in 1929 K4NI was dismantled. The 2-kW spark was surveyed by the Navy and dumped overboard. The 500-cycle MG set and the Delco plant were removed from the island. We were taken back to San Juan, P.R.

We were the last lighthouse keepers on Navassa Island, as the light was now entirely automatic. After a few weeks in Puerto Rico I took passage to Baltimore, Md. and later got transferred to Lightships 5th Lighthouse District Baltimore, Md. as Radio Operator. I wish to thank the hundreds of amateur radio operators that made the stay on the island a pleasure and also am sorry I could not QSL 100%. It was a lonely life with only 3 of us on this island only about 8 miles square. Without amateur radio I would not have stayed.

**QST**