The 3 Rs - Radios, Radar and Reckoning

The original 1931 radio tower can be seen at far left.
A new 1950 radio tower is under construction just to the right of Lighthouse.

In addition to providing a visible light for Mariners to reckon their positions, the Lighthouse also provided an audio signal for triangulation. A radio beacon was installed in 1931, and operated until 1996, sending out a unique Morse Code signal. The Cape Canaveral Morse code signal was the letter Z, or "dash dash dot dot".

From a nearby 125-foot antenna tower, the transmitter sent the signal out for one minute at a time at 21, 24, 27, 51, 54, and 57 minutes after the hour. In bad weather, the signal was sent for one minute every three minutes.

Transmissions were coordinated with the radio beacons at St. Johns River and Jupiter Inlet Lighthouses, providing ships with a cross bearing in order to help fix their positions. The signal could be received from 50 to 150 miles out to sea. A modern differential GPS beacon replaced the radio beacon in 1996.

This receiver, of the type used on a ship to pick up a radio signal sent from a Lighthouse is on display on the 3rd floor of the Lighthouse.

Attached to the lamp room on the left is the horizontal 1969 radar antenna.

Beginning in 1969, the Lighthouse also hosted sea surveillance radar equipment for several decades. The radar receiver was mounted directly on the Lighthouse railing and data was sent to flight control through an antenna tower constructed next to the Lighthouse. The data was used to identify ships and aircraft approaching the exclusion zone during launches.