2023 Visit to Point Reyes National Seashore

Point Reyes is a US National Seashore with over 1500 species of plants and animals to discover (see https://www.nps.gov/pore/index.htm), amongst the fog and all the beauty, there is an amazing tunnel of Monterey cypress trees. This leads down a road to an intriguing 1920's Art Deco Building which houses the Historic KPH Maritime Radio Receiving Station. I visited this station at the end of Summer 2023, while staying in the park.

This station, which is now a visitor attraction, was originally operated by Radio Corporation of America (RCA). For most of the 20th century, it provided more code communications to the pacific and a Ship to shore Radioteletype (RTTY) service.RCA began radio messaging services between San Francisco and Honolulu as early as April 1932 and between San Francisco and New York City by 1934. The museum now contains radio equipment, ship-to-shore Morse communications, and RTTY machines, with many working examples.

RTTY is a system consisting originally of two or more electromechanical teleprinters in different locations connected by radio rather than a wired link. It evolved from earlier landline teleprinter operations that began in the mid-1800s.

When a key of the teleprinter keyboard is pressed, a 5-bit character is generated (the number used in the original Baudot code). This offers 32 different characters. To allow transmission of both upper and lower case letters, numbers, punctuation and control codes, the teleprinter uses two states: the unshifted or letters state and the shifted or numbers or figures state. The change from one state to the other takes place when the special control codes LETTERS and FIGURES are sent from the keyboard or received. In the letters state the teleprinter prints the letters and space while in the shifted state it prints the numerals and are punctuation marks.

The groups of 5 bits are sent using asynchronous serial format by adding start and stop bauds. Before the computer mass storage era, most RTTY stations stored text on paper tape using paper tape punchers and readers. The operator would type the message on the TTY keyboard and punch the code onto the tape. The tape could then be transmitted at a steady, high rate, without typing errors.

This was a fun afternoon!