



## Jupiter Inlet Lighthouse Facts

<i>Officially First Lighted</i>	July 10, 1860
<i>Location</i>	Latitude 26° 56.9' 37" North, Longitude 80° 4.9' 17" West
<i>Construction</i>	Double brick masonry walls. Outer wall conical, tapering from 31.5" (8 bricks thick) at ground to 18 inches (3 bricks thick) at base of lantern. Inner wall cylindrical and 2 bricks thick throughout. Circumference at base is about 65' and at top about 43'. Exact number of bricks used is unknown but estimated at 500,000. Brick and coquina foundation. Iron lantern and gallery deck. Granite brackets support the gallery deck.
<i>Height</i>	156' - 108' tower on a 48' hill, a natural parabolic sand dune topped with a layer of shell.
<i>Focal Plane</i>	146'. This is the level at which the beam of light is emitted.
<i>Steps</i>	105 cast iron stairs spiraling counterclockwise around a central iron column with three landings. All stairs are original, except five replicas each marked with an asterisk on the central column. These were damaged stairs replaced during the 1999-2000 restoration.
<i>Present Optic</i>	First-order Fresnel lens, manufactured in Paris by Henry-Lepaute. Active since 1866. Of the six regular orders of Fresnel lenses, the first is the largest.
<i>Past Optics</i>	First-order Fresnel lens, manufactured in Paris by L. Sautter et Cie. Active 1860-1861. Replaced after the American Civil War.
<i>Present Lamp</i>	1000-watt, 120 volt, GE incandescent bulb socketed in a CG2P lampchanger with an identical spare. The second bulb rotates into position and turns on if the first bulb fails.
<i>Past Lamps</i>	Meade or Funck hydraulic lamp with five concentric wicks, 1860-1909. Incandescent oil vapor (IOV) lamp, 1909-1928. Three 250-watt bulbs in a row, 1928-1966 (reduced to one 60-watt bulb during World War II). CG2P lampchanger with GE quartz-iodine bulbs (one active, one backup), 1966-2017.
<i>Lamp Fuels Used</i>	Whale oil (spermaceti), 1860-1861. Lard oil, 1866-1886. Kerosene, 1886-1928.
<i>Range</i>	17-25 miles. This is the distance that the light can be seen on a ship at sea. To someone in an airplane, the light could be visible 40-50 miles away.
<i>Electrified</i>	1928. One 1/3 horsepower motor turns the lens carriage, with a second backup motor.
<i>Rotation Mechanism</i>	Prior to 1928, a system of clockwork gears, cable, and weights (like a grandfather clock) filled the role of the electric motor. The weights for the original lens descended through a drop tube in the wall, visible above the third landing. The weights for the present lens descended through a hole deliberately cut in the 92 <sup>nd</sup> stair (now covered by Plexiglas). The weight had to be wound up with a crank at least once every six hours, sometimes more often. The weights used were variable (100-250 lbs.) The lens originally rotated on brass chariot wheels, but these repeatedly wore out and were permanently replaced by ball bearings in 1912. With electricity the lens makes one complete rotation per minute.

<i>Automated</i>	June 8, 1987. A photoelectric cell turns the bulb and motor on when the sun sets and off when the sun rises.
<i>Daymark</i>	Red tower, black lantern. Coastal lighthouses have different markings to enable ships to determine their location during the day.
<i>Characteristic</i>	Flashes 1.2 seconds, eclipses (darkens) 6.6 seconds, flashes 1.2 seconds, eclipses 21 seconds, and then repeats the cycle. The bulb does not blink (neither did the original oil lamps, which is why the lens rotated). As each bull's-eye (there are four) rapidly passes the viewer's line of sight, the beam of light is perceived as a flash.
<i>Radio Beacon</i>	Operated 1928 – ca. 1990. Transmitted Morse code letter "J". The beacon originally transmitted only in bad weather and on a limited fixed schedule. By the 1950s the radio beacon transmitted around the clock - one minute on, two minutes off. The transmitting antenna was located at the station, but not on the lighthouse itself.
<i>Fog Signal</i>	None, past or present. Only three Florida light stations ever had fog signals (Egmont Key, St. Johns, and Volusia Bar).
<i>Oil House</i>	Brick covered by stucco, freestanding. Built 1860, extended 1905.
<i>Wharf</i>	Wooden dock. Original dock built 1859 due south of lighthouse. Current dock built 1883, rebuilt 1931 and 1967. Included a two-bay boathouse, 1907-1928.
<i>Keeper Dwellings</i>	Coquina and brick 1.5-story duplex, 1860. Expanded 1905. Destroyed by fire 1927. Wooden 1.5-story single-family, 1883. Expanded 1907. Demolished 1959. Wooden 2-story duplex, 1929. Demolished 1979. Coast Guard one-story concrete block stucco, 1960. Both dwellings extant.
<i>Auxiliary Structures</i>	Radio beacon transmitter & generator building, concrete, 1928. Keepers' workshop, wooden, 1929. Three-bay garage, wooden, 1929. Laundry building, concrete block stucco, 1960. Nine other Coast Guard single-family dwellings, concrete block stucco, 1962. Coast Guard Exchange (closed), 2000. Garage and maintenance office, 2001.
<i>Head Keepers</i>	Walter F. Wolfkiel, July 1860 (temporary); Dr. Thomas Turner, 1860; Jose F. Papy, 1861; William B. Davis, 1866-69; James A. Armour, 1869-1906; Joseph A. Wells, 1906-19; Thomas Knight, 1919; Charles Seabrook, 1919-46; David W. Swain, 1946; Prentice Yerby, 1946-48; Charles U. Gardner, 1948-51; Albert M. Hunter, 1951-52; David H. Tengstedt, 1952-53; William L. Coats Jr., 1953-54; Willie B. Skinner, 1954; Daniel W. Kincaid, 1954-55; J Warren Alexander, 1955-56; Raymond C. Phillips, 1956-61; Robert Dyson, 1961-63; James R. Moon, 1963-64; Charles E. Capps, 1964-66; James P. Tabor, 1966-68; James F. Springs, 1968-72; Kit C. Campbell, 1972-75; Martin J. Hacker Jr., 1975-77; Jimmy R. Leach, 1977-78; W. Gene Hughes, 1978-79; Don Waterman, 1979-82; Alexander L. Pagano, 1982-83; D. Ken Parks, 1983-84; Mitchel W. Oakland, 1984-87
<i>Notable Asst. Keepers</i>	James A. Armour, 1866-69; Charles R. Carlin, 1871-74; Hannibal D. Pierce, 1872-73; Frederick Whitehead, 1876; Melville E. Spencer, 1878-84; H. A. Carlisle, 1881-1886; Dwight A. Allen, 1885-90; Edward M. Agee, 1886-1894; Joseph A. Wells, 1894-1906; Carl O. Svendsen, 1901-03; John E. Eriksson, 1906-08; William Lindquist, 1908-1912; Theodore T. Gaillard, 1911-16; Reinhard Heisser, 1912-18; Rev. Harry H. Jones, 1918-21; John B. Butler, 1923-26; Cardell D. Daniels, 1926-30 & 1933-35; Kenneth L. Meyer, 1930-1933; Ralph Swanson, 1928-1946; Quincy E. Atkinson, 1935-43; Lavaughn W. Knight, 1943-1945; Jack M. Peebles, 1944-1946; Charles U. Gardner, 1948; Edmond L. Arruda, 1948; Dudley C. Miller, 1953-55; Robert Dyson, 1958-1961

*Note: At least 83 civilians served permanently or temporarily as lighthouse keepers or caretakers of the Jupiter Inlet Lighthouse. At least 107 enlisted Coast Guard personnel served also served as keepers at Jupiter Inlet Light Station, plus 29 Coast Guard lookouts during World War II.*