

USS SHARK

Florida Keys

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The U. S. Navy Wireless Telegraph Stations at Key West and Dry Tortugas

By Thomas Neil Knowles
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On April 24, 1898 the United States declared war on Spain; four months later the fighting had ceased and all that remained to be done was the paperwork. This remarkable efficiency was due in part to both combatants having access to a telegraph system and a global network of overland lines and undersea cables. Even though the battlegrounds were primarily in Cuba and the Philippines, Spain and the United States were able to coordinate the deployment and replenishment of their fleets and armies in the Pacific and Atlantic theaters direct from Madrid and Washington.

The fast-paced conflict demonstrated the advantages of rapid, worldwide communications for a multitude of purposes including the management of fighting forces, news reporting, and the collection and dissemination of weather information. The war also underscored the limitations of a network connected by wire, the major military drawback being that it was seldom available to army units in the field and was not



The Naval Station and radio antennas looking west over the houses on Whitehead Street about WW I. Photo credit: Monroe County Library..

accessible at all to ships at sea.

Several inventors had been working on a wireless telegraph system prior to the Spanish-American War, but it was not until 1899 that the efforts of a 25-year-old Italian showed enough promise to attract the interest of the U.S. Navy. Guglielmo Marconi had come to the United States in September 1899 at the request of a New York newspaper to set up his wireless equipment on a ship to report the progress of the America Cup Races. A lack of wind caused the sailboat races to lag well into

October. Consequently, Marconi and his equipment were still in the U. S. when Admiral George Dewey's fleet arrived in New York from the Philippines. A parade of ships was organized to honor the Admiral and his men, and Marconi was asked to cover the event from one of the ships participating in the parade. The Navy assigned Lt. John B. Blish to observe the shipboard operation of the Italian's wireless telegraph.

On October 22, 1899, with Marconi manning the sending key,

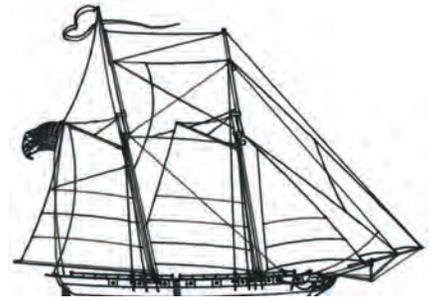
(Continued on page 3)

SOCIETY NEWS AND NOTES

By Ed Little

As I write this, "autumn" has once again return to the Florida Keys. And as society members, we can look forward to a new series of events and activities to come complement that seasonal change. Foremost, we will once again be bringing our members, and the general public, more of the speakers and free lectures that have been a cornerstone of our programs for almost twenty years. Then, there is our award – winning quarterly, the Florida Keys Sea Heritage Journal. Thanks to Tom Hambright, who almost single handedly creates each issue, our members can look forward to receiving that most welcome publication in their mailboxes. Lately, now that our Society web – page (www.keywestmaritime.org) is up and running all can use the site to access most of the back-issues of the Journal, look for Society news, get membership information, and use e-mail to contact us.

Well, that is what the Board of Directors has been doing all behalf of the membership of the Society. But there is something all those in the Society can do to help make a good thing even better. We need to recruit as many new members as possible. Slowly, our membership roles have been getting smaller. Many folks have moved out of the Keys, and that that lessens the population base that we appeal to. So, if you reading this and want to grow our Society, you need to have a hand in that work. Reach out to those in your family and to friends, who are interested in "things maritime", and get them to become members. And, don't just up with building our membership base. We are always in need of guest speakers, and articles for our Journal. Any effort you can contribute to providing us with leads or contacts for those needed things are just as important as building our membership base so let's all get to work!



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The radio towers were also a good place to get photographs of the Naval Station (now Truman Annex). On the right is the Presidential Gates and Whitehead Street. Photo credit: Monroe County Public Library.

New Members

Edward H. Aigeltinger, West Palm Beach, FL; Valerie Chellay, Key West; Carrie Cagnet, St. Pete

(Radio from page 1)

Blish had the following message transmitted from the S. S. Ponce to his superiors in Washington.

Bureau of Equipment,
Washington, D.C.

From Steamship Ponce,
underway in Naval Parade via
Navesink Station.

Mr. Marconi succeeded in
opening telegraphic communication
with shore at 12:34 p.m. Experiments
were a complete success.

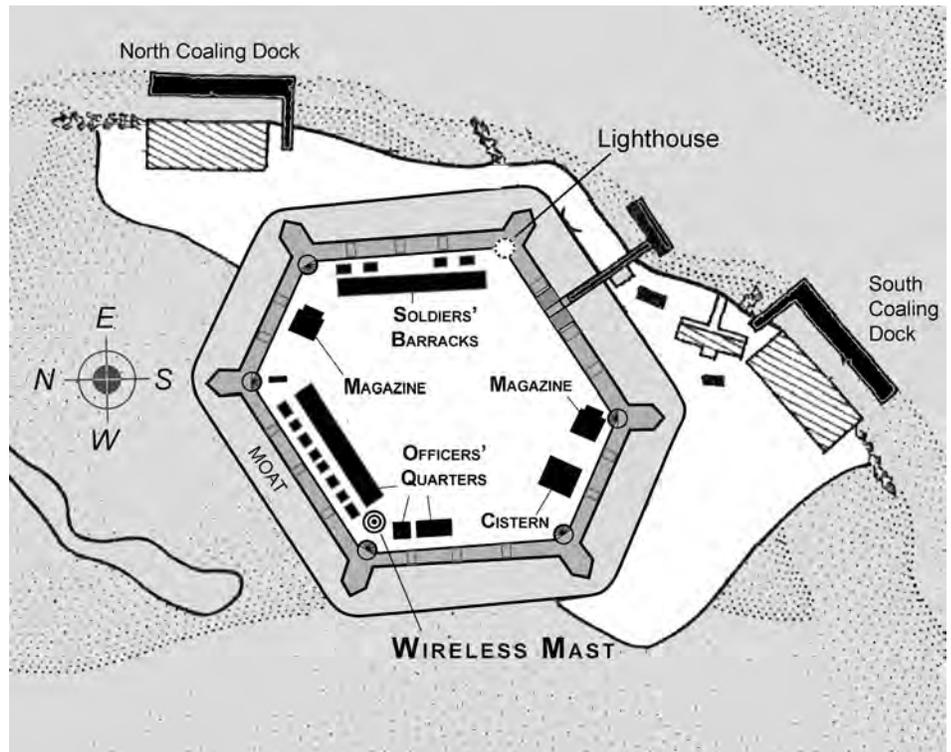
/S/ Blish, Lieutenant USN

This was the first official
message of the U. S. Navy to be sent
by wireless.

As the 20th Century began the
U.S. Navy commenced extensive
testing of equipment for shore
station and shipboard use. By
1902 six shore stations had been
established, five at east coast
lighthouses and one near San
Francisco. During that year the Navy
Yard at Norfolk, Virginia completed
the fabrication of two spars to serve
as antenna masts for stations at Key
West and Dry Tortugas. The primary
components of these stations were a
single antenna mast 180 feet tall, a
3-kilowatt spark transmitter, and a
receiver.

The Key West station was setup
on land acquired by the federal
government in 1902. The area
from Whitehead Street to the west
shoreline and from Fleming to
Fitzpatrick streets was condemned
for military use. Within this parcel,
the block bounded by Caroline,
Whitehead, Eaton, and Thomas
streets became the center of naval
wireless communications at Key
West.

The Dry Tortugas radio station
was installed on Garden Key within
the walls of Fort Jefferson. The
small island played a strategic
role during the Spanish-American
War because its natural deep-water



The wireless telegraph antenna mast installed at Dry Tortugas in 1902 was located on Garden Key inside Fort Jefferson. Photo credit: The Author.



Each segment of the wooden towers was massive and extremely heavy. This close-up shows the large timbers used and how they were bolted together. Note the size of the man relative to the timbers comprising the segment. Photo credit: Wright Langley Archives.

harbor could accommodate large
warships. At that time the water
adjacent to the coaling facilities at
Key West was not deep enough for
such vessels so coaling facilities

were constructed at Garden Key.
The fort's primary function during
the conflict was to provide housing

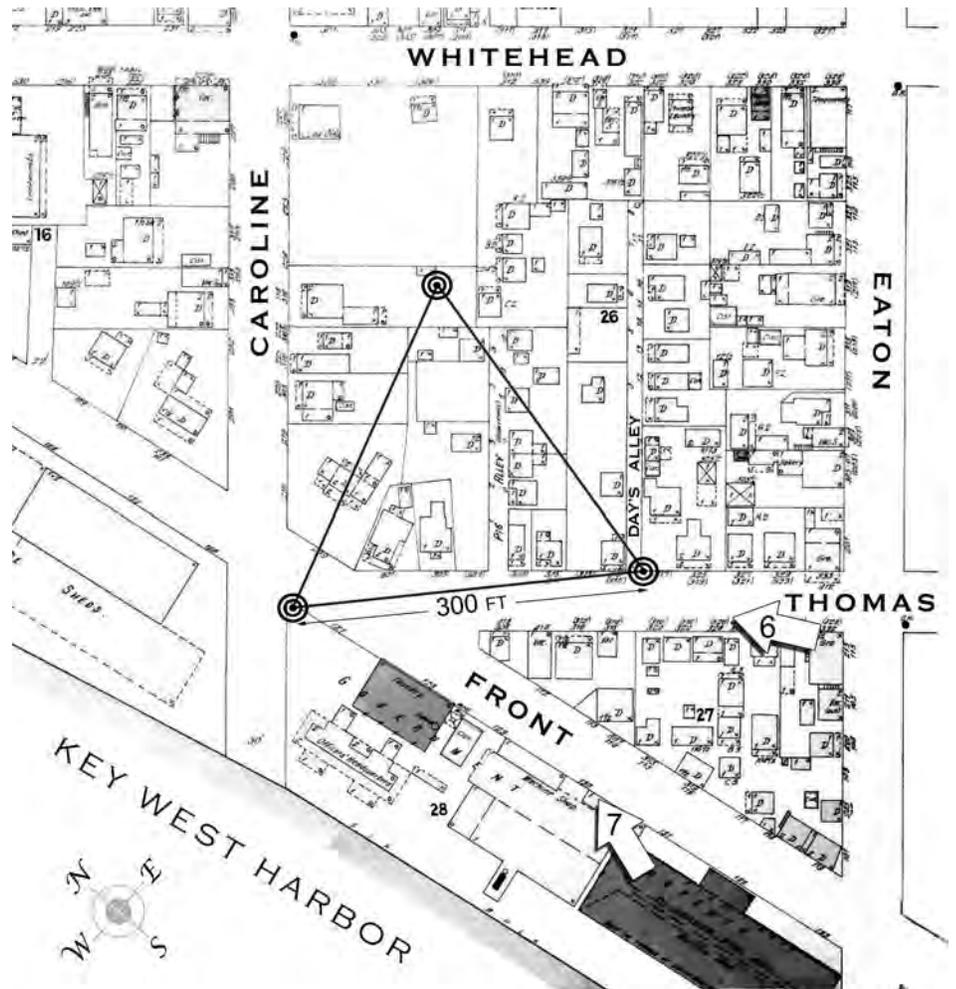
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(Radio from page 3)

for the men who manned the coal docks. Garden Key is 70 nautical miles west of Key West; the only means of communication in 1898 was by dispatch boat. Its isolation and tropical climate were thought to make it a good test site for a wireless station.

In 1903 wireless equipment from different manufacturers was installed on U. S. Navy warships and tested in exercises at sea. Various other government agencies including the Army and the Weather Bureau also conducted tests and constructed wireless stations independently. In 1904 problems with radio interference and duplication of effort among the federal agencies caused President Theodore Roosevelt to appoint a committee to investigate the situation and make recommendations regarding the government's wireless development and operations. As a result of the committee's recommendations the government's wireless research and development was divided between the Navy, who performed such work on the seas and along coastal areas, and the Army who did likewise in the interior. Although the Weather Bureau was directed to cease its wireless research, provisions were made to accommodate the collection and dissemination of weather information using military facilities.

During the second week of June 1904, the United States government entered into a contract with the American De Forest Wireless Telegraph Company for the construction of five, high-powered wireless stations at Pensacola; Key West; the Panama Canal Zone; Guantanamo, Cuba; and San Juan, Porto Rico. Lee De Forest held a Ph. D. from Yale and had been working on perfecting a wireless telegraph



The wooden towers were spaced 300 feet apart. In the above diagram, the tower locations (indicated by target symbols) are plotted on the 1899 Sanborn Fire Map to show the waterfront context. The arrows lettered A and B indicates the points of view on page 7 and page 5. Photo credit: The Author.

for over ten years. The New York Times noted in an article published June 10, 1904 "... the Government has entered into a reciprocal contract with the company, which makes them, in a sense, allies." The terms of the contract required that all stations and ships where De Forest equipment was installed would be required to handle commercial messages. War vessels and military bases equipped with De Forest wireless had to relay commercial messages as well as handle military traffic. The Times' article went on to say, "... the Government is guaranteed against the employment of the system in any manner which might prove detrimental to its interests."

The Canal Zone and Cuba stations were completed in late 1905. The Key West station was operating in 1905, but was not finished until 1906.

At the Panama, Guantanamo, and Key West stations, the antennas consisted of three, cable-stayed, wooden towers each over 200 feet high with their bases spaced 300 feet apart in the form of an equilateral triangle. They supported a caged antenna array. Frank Butler, De Forrest's assistant who supervised the installations, described the antennas as follows.

Suspended from the cross cables at the top was a big fan antenna from each of the three sides of the triangle. Heavy, seven-strand

phosphor bronze wire was used and each triangle consisted of about 15,000 feet of wire or a total of 45,000 feet for the entire cage.

During testing of the Key West station in February 1905 messages were exchanged with an ocean liner 200 miles east of New York City and with shore stations at Chicago and Washington, D.C. Key West historian Jefferson Browne noted that in 1906 the station was one of the most powerful in the world and that "... messages sent from here have been caught by the Mare Island station, a distance of twenty-six hundred miles."

The following comment was included in the annual report of the Navy for 1906.

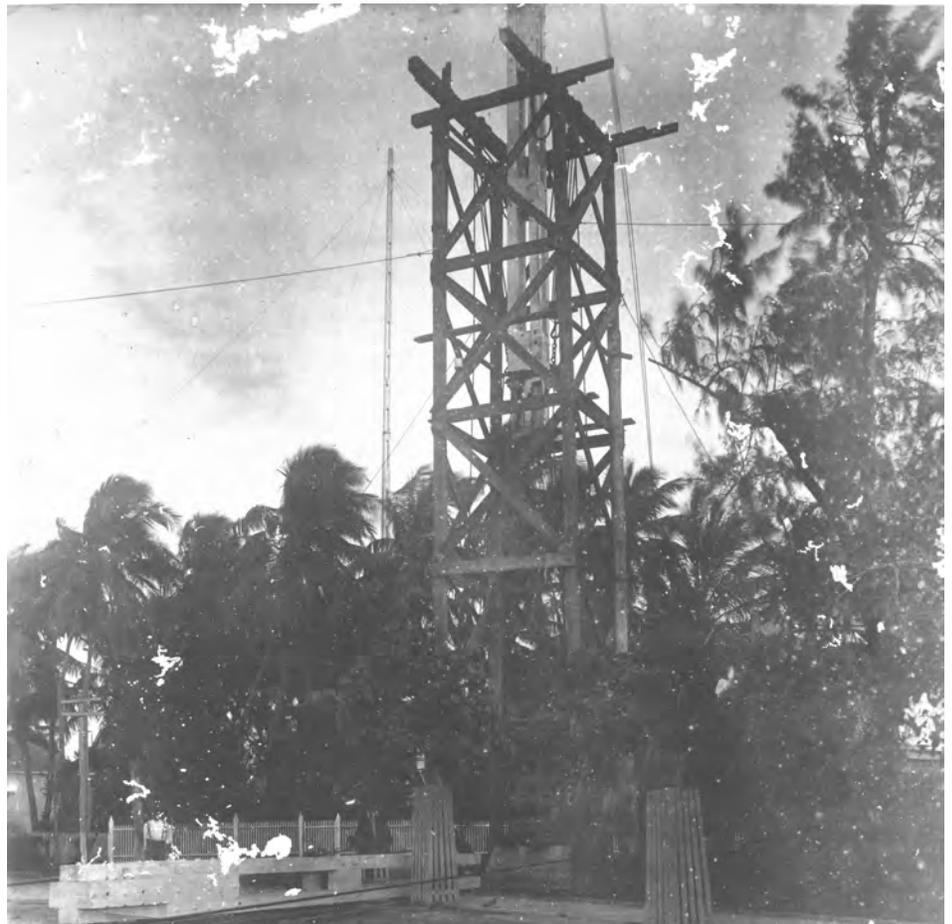
The wireless stations at Key West and Dry Tortugas have been in operation during the year.

The station at Key West was designed for long-distance transmission and messages have been exchanged with Guantanamo, San Juan, Colon, Panama, and Pensacola, but as yet absolutely reliable communication has not been established. It is believed, however, that the use of a flat-top aerial will give satisfactory results, and experiments with this end in view are now in progress.

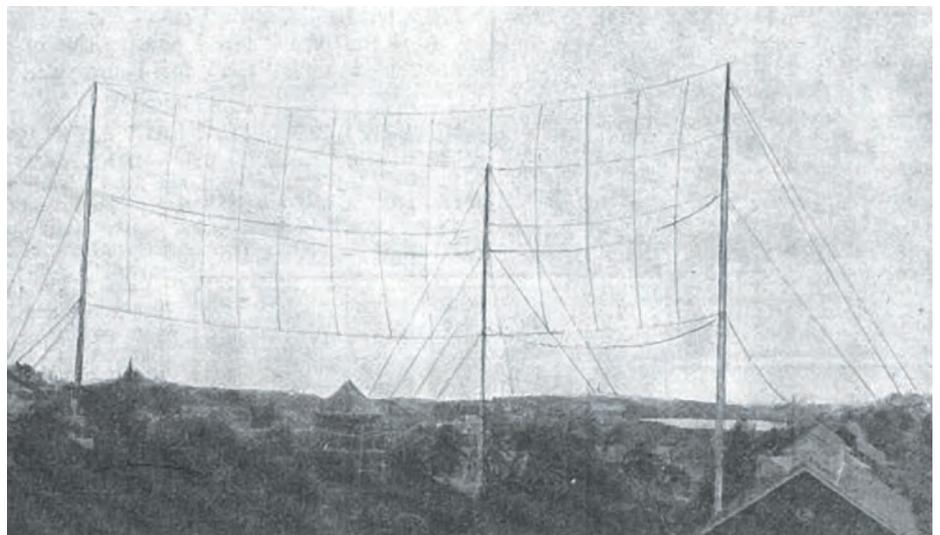
The present location of the plant has proved undesirable and a new operating house has been designed. It is hoped it will be completed and the apparatus installed therein before the coming winter.

The station at Dry Tortugas has operated satisfactorily and experiments indicate the probability of greater range of transmission than originally contemplated. Messages have been read from New York, Colon, and other remarkable distances.

While the station at Dry Tortugas was a technical success, the focus of naval activity in the Florida Keys was on Key West. The government began



The American De Forest Company used this hoisting rig in 1914 to assemble pre-fabricated segments together to form a tower. In the view above, the hoisting rig supports the segments already joined together while another segment lies on the ground ready to be loaded into the rig. A completed tower can be seen in the background. Photo credit: Wright Langley Archives.



The three wooden towers supported over a third of a ton of heavy, seven-strand phosphor bronze wire. This view (arrow 7 on page 4) looks toward the northeast. Photo credit: Monroe County Public Library.

dredging the harbor so that large warships could be accommodated and coaling facilities were

improved. As improvements in transmitters and receivers increased

(Continued on page 6)



After 1914, the Navy's wireless facilities in Key West were comprised of two stations; the transmitter station was located on the west end of the island in the Navy Yard (Inset A--the towers are indicated by a white circle with a dot in the middle) while the receiving station was located on the east end of the island (Inset B) in a relatively undeveloped area. This arrangement helped isolate the sensitive receivers from interference from static generated by local industrial activities. The chart above was issued in 1932 after the boulevard was constructed. Photo credit: The Author.

(Radio from page 5)

the range and reliability of wireless communications, the Dry Tortugas installation became less important as a relay station. By 1909 the costs to operate and maintain the Dry Tortugas station could not be justified and it was discontinued. That year traffic was heavy at the Key West station. Even though it did not operate on Sundays and holidays, 2,557 messages were transmitted and 2,244 were received during 1909.

In addition to messages, Navy radio stations transmitted time signals for ships at sea to use in setting their chronometers. Accurate time is an essential factor in the

calculation of a ship's longitude. Capt. L. S. Howeth in his "History of Communications-Electronics in the United States Navy" published in 1963 reported improvements continued to be made in making time signals available to all ships at sea.

During 1904 the stations at Cape Cod, Mass., and Norfolk, Va., were directed to transmit time signals and, during the next year, Portsmouth, N. H., Key West, Fla., and Mare Island, Calif., were added to the list. Since the reliable range of these transmissions was about 50 miles, they were only of aid to vessels near the coast. By 1909 the number of stations transmitting

time signals had been increased to 19 and the reliable range to about 100 miles. This service was another which enhanced the safety of lives at sea by affording more accurate navigation for those approaching land. No other country attempted to broadcast time signals until 1927.

By June 1914 most ships in the United States Navy were equipped with wireless communication capability. Large vessels such as battleships carried powerful transmitters and sensitive receivers. This combined with a network of shore stations gave the U. S. Navy the ability to communicate via its wireless headquarters at Arlington, Virginia with its fleets almost

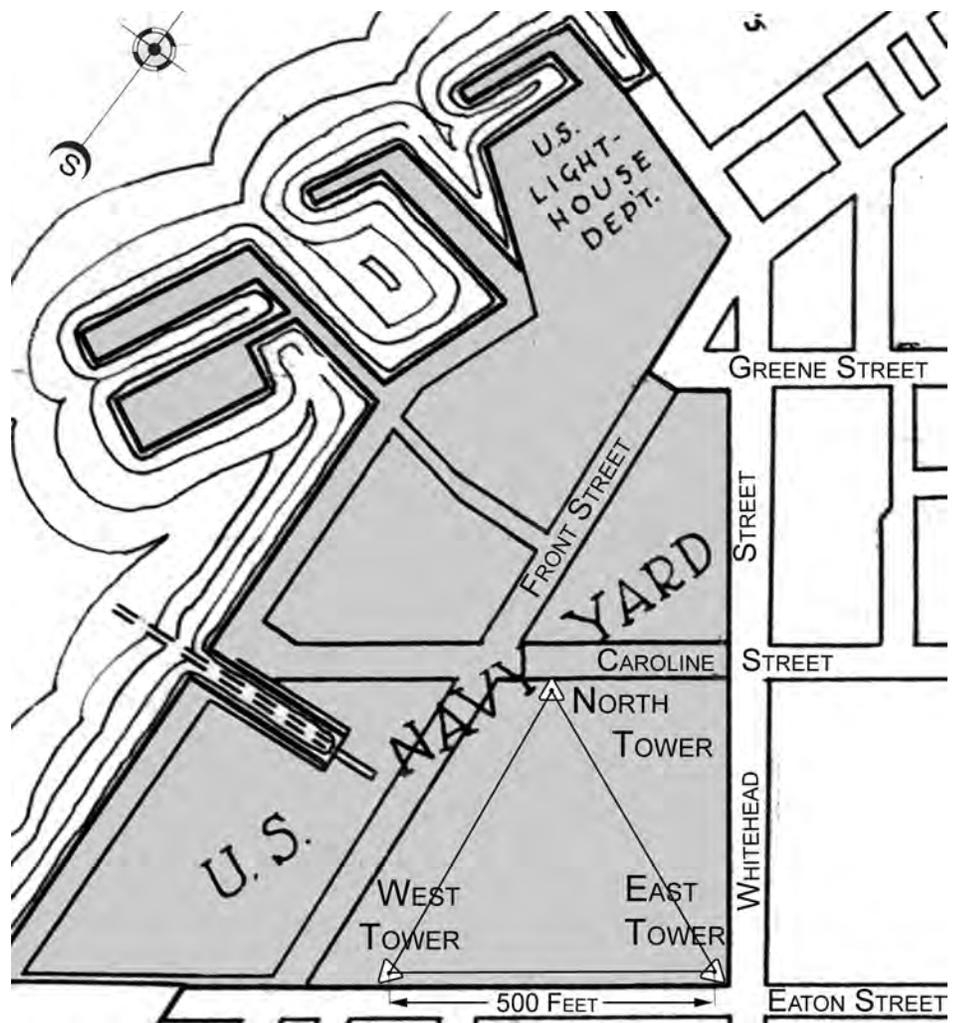


This view (arrow 6 on page 4) was taken from the second floor porch of the two-story house at the corner of Eaton and Thomas Streets. The towers were about three feet square at the base and tapered to one foot square at the top. Photo credit: Wright Langley Archives.

anywhere on the high seas.

That year a change was made at the Key West station that was to become a prominent part of the City's skyline for the next 60 years. The wooden towers installed in 1905 were replaced with three, self-standing, 300-foot steel towers that were visible for miles. The new towers supported antennas for powerful transmitters. Another station with sensitive receivers was constructed at the east end of the island. It is believed that the wooden masts replaced by the metal towers were reassembled at that location to serve the receiving station.

The transmission of time signals for use in shipboard navigation continued to be a high priority. With more powerful transmitters increasing reliable reception range, the number of stations transmitting time signals was reduced. In June 1914 the New York Times reported "Signals from Arlington are sent out every day in the year, twice a day, at noon and at 10 P.M., seventy-



In 1914 three, self-supporting steel towers replaced the wooden towers. The new towers were installed 500 feet from each other with their centers at the points of an equilateral triangle. One side of the triangle was parallel with Eaton Street. Photo credit: The Author.

(Continued on page 8)

(Radio from page 7)

fifth meridian time. Time signals are now sent out on the Atlantic Coast only through the radio stations at Arlington, Key West, and New Orleans. ... daily weather reports and storm warnings are sent from Arlington and Key West a few minutes after the 10 o'clock time signal at night, but important storm warnings are sent whenever necessary."

Continuous upgrades of equipment as advancements in radio technology occurred allowed the Key West station to remain a vital link in the Navy's communication system. The most dramatic statement of its value to the system occurred in 1932 when the naval base at Key West was deactivated as a cost-cutting measure during the Great Depression. For a period of seven years, the Naval Radio Station with a complement of 17 men was the only U. S. Navy presence in the Island City.

In 1969 the three, 300-foot steel towers were dismantled and replaced by a single mast topped with a microwave antenna. From spark transmitters to computers, the naval radio station at Key West has undergone many changes in equipment and organization over the years. According to its current parent department, the Naval Computer and Telecommunications Station Jacksonville, the Key West facility holds the distinction of being the first and the oldest continuously existing telecommunications station in the U. S. Department of Navy.

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SHORE STATIONS BELONGING TO THE UNITED STATES NAVY							
Station Name	Call Letters	Power (Watts)	Frequency	Receiver	Service	Plans (Type, Height, etc.)	Max. Range (Miles)
Key West, Fla. (U.S. Naval)	RY	75	1500000	1500000	Naval and Coast Guard	1 - 310' - 310'	1750 (Day) 1750 (Night) 1750
Key Largo, Fla.	SL	1	1500000	1500000	U.S. Naval	1 - 100' - 100'	—
Naval Station, Jacksonville, Fla.	RS	10	1500000	1500000	U.S. Naval	1 - 100' - 100'	—
Naval Station, Key West, Fla.	RY	75	1500000	1500000	U.S. Naval	1 - 310' - 310'	—
Naval Station, Key West, Fla.	RY	75	1500000	1500000	U.S. Naval	1 - 310' - 310'	—
Naval Station, Key West, Fla.	RY	75	1500000	1500000	U.S. Naval	1 - 310' - 310'	—
SHORE STATIONS BELONGING TO OTHERS							
Key West, Fla.	YW	3	1500000	1500000	—	—	1750

A partial listing of wireless stations in operation in 1907. Extracted from "Wireless-Telegraph Stations Of The World". Navy Department, Bureau of Equipment. Government Printing Office, Wash. D.C. 1907. Photo credit: The Author.



On June 23, 1902 work was underway on the foundations for a radio antenna mast in the northwest corner of Fort Jefferson. According to the National Park Service, this was the first official Navy radio station. Photo credit: Monroe County Library.

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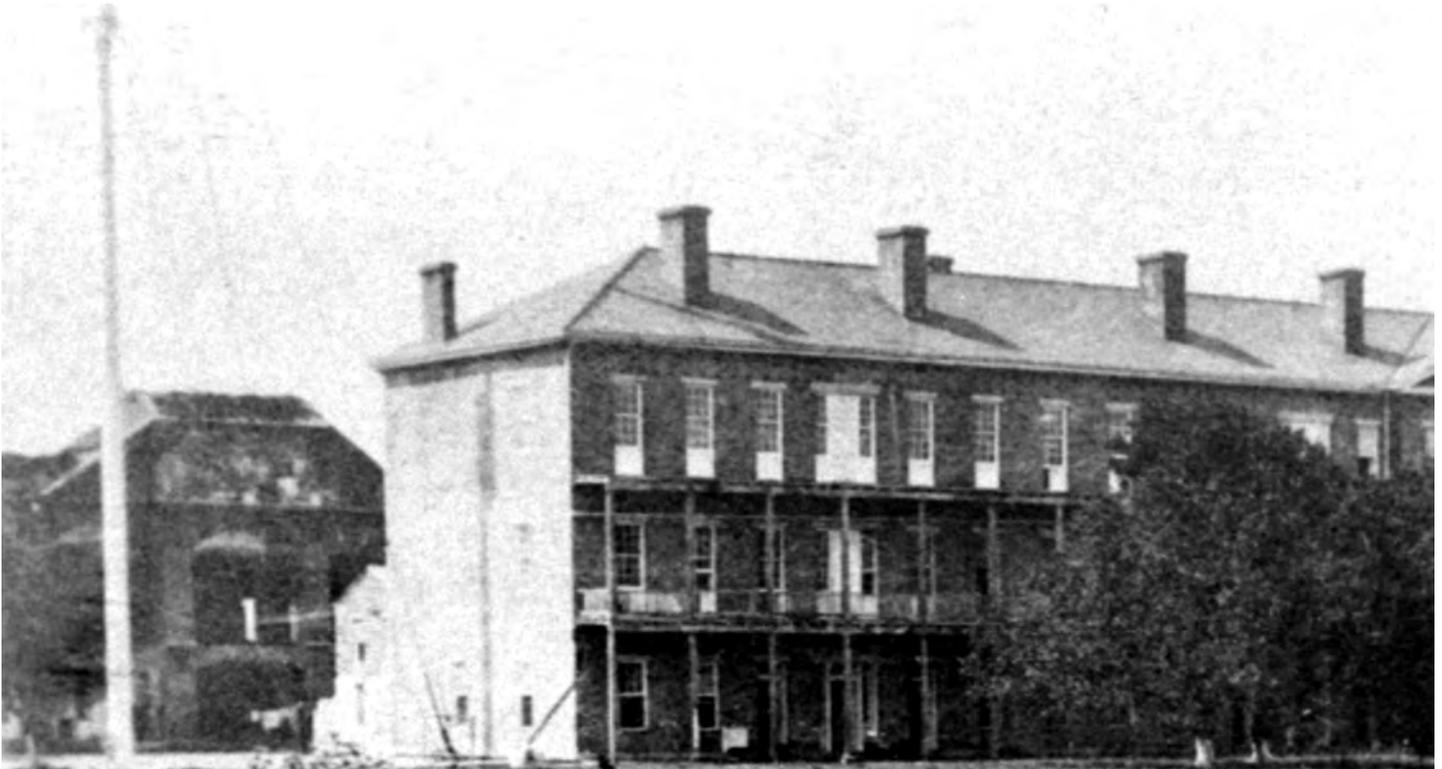
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In this photograph taken at Fort Jefferson in July 1906, the radio telegraph antenna mast (white column at left) casts its shadow onto the west end of the main officer's quarters building. The mast was one of a pair of 180-foot spars made in 1902 at the Norfolk Navy Yard specifically for this purpose. The shadow shows that the spar was composed of two long poles bound together, similar to a ship's mast. The bottom of the upper pole can be seen at the top left of the picture. The other spar/antenna mast was installed at Key West. Photo credit: Wright Langley Archives.

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Tom Knowles is a fourth generation Conch whose ancestors (Knowles and Archers) migrated from the Bahamas in the 1800s. He holds a bachelors degree in mechanical engineering from Georgia Tech and a masters in business administration from Florida State University, where he recently retired after 32 years managing the operation and construction of FSU's facilities.

Although he resides in Tallahassee, his roots remain firmly attached to the Island City, and he is currently working on a historical book about the Labor Day hurricane of 1935 which will published by in 2009 by the University Press of Florida.

Hackley's Diary

William Hackley practiced law in Key West from 1829 to 1857. He kept a diary for part of the time he was in Key West. Here is the diary for August to September 1856.

Friday, August 8. Rose at 4:30 and walked on the beach, returned home and bath. At 8 A.M. barometer 29.50, thermometer 86, wind southeast 2, clouds 8. The Governor Dudley with the mail got in from Charleston about 7 A.M. Paid Dennis \$50.00 in full for all demands for Negro hire and wood up to date, one month's wages was deducted for sickness leaving three months wages and three cords of wood. Oriana agrees to live with us and do the cooking (her hands are too sore to wash) for \$6.00 per month. The Governor Dudley went out about 4 P.M. Rained a little about 11 P.M.

Saturday, August 9. Rose at 4:30 and walked on the beach, returned home and bathed. At 8 A.M. barometer 29.47, thermometer 86, wind south by west 4, clouds 4. The brig Huntress, Captain Watlington, went to sea for New York early. A schooner from Nassau reports that the Governor Anderson is in having been ashore not much injured. There was a report of a ship ashore on the Quicksands and the pilot boats went down to her last night and have not returned. The steamer Florida got in about 3 P.M. having been detained in Tampa for three days by bad weather. The Revenue Cutter Lewis Cass (for the bay) Captain Brushwood came in and anchored off the town.

Sunday, August 10. Rose at 4:30 and took Dan with me and walked across the island saw a duck in Porters Spring and waited

for Dan at the spring to bathe and walked home by the Fort. Saw where a turtle had came up but could not find the eggs. At 8 A.M. barometer 29.57, thermometer 86, wind south southeast 2, clouds 2. The sloop Eliza Catherine and schooner Florida came up from the ship on the Quicksands loaded with cotton. The ship is off and coming up. The Globe was the first boarder. The Globe, schooner Dart, schooner Florida, sloop Vineyard and sloop Eliza Catherine are the larger wreckers. Dash came in the steamer Florida yesterday and as I have another dog I gave him to Fernando Moreno. Wrote a PS to a letter Hattie wrote to mother and wrote no other. Nearly calm and very hot in the P.M.

Monday, August 11. Rose at 4:30 and walked across to South Beach by the Lighthouse. Whipped Spring to make him obey and he ran home and when I returned I chained him and whipped him well. The Governor Dudley got in early from Havana and left before I got down. William Von Phister came in her and was sent to the Marine Hospital to stay his quarantine. Barometer 29.57 and thermometer 87. Got a barrel of flour and ½ barrel of Graham flour by the steamer Florida and paid Fernando Moreno for them \$14.65. Paid Williams for vegetables \$2.18. Very disagreeable day warm and still.

Tuesday, August 12. Rose at 4:30 and walked on the beach, returned home and bathed. At 7:30 A.M. barometer 29.511, thermometer 86, wind east southeast 2, clouds 4. The steamer Florida left about 6 A.M. Read papers. The ship Maid of Orleans came in about 2. In the afternoon William C. Greene came in and employed me for the wreckers.

Winer Bethel is employed for the ship. Matilda and the children spent the day at Charles Tift's. This is the 15th anniversary of our wedding. Dan complained of feeling badly and his tongue is coated with white fur, but he has no fever, gave him two doses of China.

Wednesday, August 13. Rose at 5 and bathed. At 7:30 A.M. barometer 29.47, thermometer 87, wind southeast 2, clouds 3. Dan has some fever and his tongue is heavily coated with white fur, no headache or pain in the back, gave him three Globes. Aconite and required Matilda to give the same every two hours during the forenoon and to keep him quiet. I do not feel well a slice of broiled venison and a small bit of chicken I ate yesterday, the first for many months, disagreed with me. All day drawing up the libel in the case of the ship Maid of Orleans and gave it to Winer Bethel (who is for the Respondent) about 5 P.M. Dan is well.

Thursday, August 14. Rose at 5 and went round by Alexander Patterson's and took all the children and Matilda leaving the baby with Sister and went down to Bowne and Curry's to see the ship S.R. Mallory launched. As we were going up into the cupola the ship started unexpectedly about 6:20 and going about her length stopped, from what causes I know not. We then returned home for breakfast. At 8 A.M. barometer 29.53, thermometer 86, nearly calm, clouds 3 with haze. Tried the case of John W. Roberts vs. The ship Maid of Orleans, William Hull Master, respondent.

Friday, August 15. Rose at 4:30 walked on the beach, returned

home and bathed. At 7:30 A.M. barometer 29.59, thermometer 88, wind east southeast 2, clouds 2. Went down to Bowne and Curry's. They have a sloop and schooner under the ship S.R. Mallory's quarters and purchases in different direction by which to heave her off but could not start. The Judge read his decree in open court giving \$12,000 salvage and \$100 to the Union for bringing up the letter. Finished the curtain for the front piazza made of four salt sacks and put it up. Mr. and Mrs. Felix Senac came in after tea and sat till after 9. Lucia has some fever from a large boil which is coming under her arm, gave Aconite through the night.

Saturday, August 16. Rose at 4 and walked up to the beach and across the island and home by the Barracks. Bathed. At 8 A.M. barometer 29.63, thermometer 87.5, wind east by south 3, clouds 2 with haze. Saw a mouse run into the piano and took out the front, back and keys before I could catch it. It had a large nest under the keys. Bought a small spy glass from L.M. Shafer for \$5.00. At 8 went over to Bowne and Curry's and remained a good while looking at the men at work at the ship S.R. Mallory. The ship was moved five inches when the falls parted and the tide being up nothing more could be done till tomorrow. At 2 P.M. the ship Maid of Orleans sailed for New York. The Sappeers and Miners 10 in number went in her as did Judge William Marvin. Went on the Fort with a party of ladies and gents and did not get to bed till 11.

Sunday August 17. Rose at 4 and walked on the beach, returned home and bathed. At 7:45 A.M. barometer 29.61, thermometer 88, wind east southeast 2, clouds 4. Took Dan with me and made him bathe. I

did not walk far a I do not feel well I suppose from being up later than usual. Went down to Bowne and Curry's wharf and at 10:20 A.M. the ship Stephen R. Mallory was hove afloat, she is a beautiful ship and sits beautifully in the water. P.M. Remained at home and read. The inside of my mouth and my tongue are red and inflamed. Took Minviv. William Randolph came in and sat till 9. Very calm and hot.

Monday, August 18. Rose at 4:30 and walked on the beach, returned home and bathed. At 8 A.M. barometer 29.57, thermometer 87.2, wind southeast 2, clouds 4. The Spanish brig Rosita came in yesterday, she had been ashore on the reef and her cargo taken out by the sloop Dolphin and an agreement for \$6,000 salvage was made on the reef. There was also on the same day an English bark which was got off by the wreckers and the captain giving a draft on her owners for \$2,500. She proceeded on her voyage. An American brig was also ashore on the same Key but got off without assistance. The Florida is going to Havana with the Captain of the Brig and I sent by Simeon Frow \$4.25 for a Lottery Ticket. Francisco Moreno sent \$2.12 for a quarter of a ticket. Put the money in a paper and wrote directions on the outside and gave it to Simeon. P.M. Siesta.

Tuesday, August 19. Rose at 4:30 and walked as usual, returned home and bathed. At 8 A.M. barometer 29.50.5, thermometer 87, wind south southwest from a squall. Squally all round and about 6 a nice rain fell just after I got back. Received fee in the case of the ship Maid of Orleans \$263.00. A dinner to John Bartlum the builder of the ship Stephen R Mallory for which I have subscribed \$5.00 comes off today but I shall not attend it. A man

named Shelton died last night, he had got well of the fever and was imprudent and got drunk which was the case with a man named Millar who died last Sunday. Mr. Newcomb was taken sick last night and there is considerable sickness today whether of not it is yellow fever I cannot say. My tongue is quite sore, commended last night with Nux. Vom which seems to benefit it.

Wednesday, August 20. Rose at 4:30 and walked on the beach, returned home and bathed. At 8 A.M. barometer 29.48, thermometer 86, wind west northwest 3, clouds 3. Charles Tift, wife and two children and I and Matilda and four children, Kizzy and Dan went down to Sand Key in the schooner Dart and got back about dark. The wind was fresh from the west northwest and we ran down in about an hour under jib and main sails. All went up in the tower and saw the lantern and were much pleased with the trip. Charlotte and Lizzy were seasick the other not at all.

Thursday, August 21. Rose at 4:30 and walked on the beach, returned home and bathed. At 8:30 barometer 29.46.5, thermometer 86.5, wind northwest by west 3, clouds 4. Felix Senac killed this morning nine Godnit and saw a good many. About 5:30 had a nice shower from the northwest.

Friday, August 22. Rose at 4:30 and walked on the beach, returned home and bathed. At 8 A.M. barometer 29.50, thermometer 85.5, calm, clouds 7. One corner of a rain squall which passed over the Barracks passed over town. The weather looked to squally and my eyes were to sore to take my gun but I saw a flock of large snipe flying west and number were killed during the day but I blistered my heel on my morning

walk and could not go out again.

Saturday, August 23. Rose at 5 my heel too sore to walk, bathed. At 8 A.M. barometer 29.57, thermometer 87, calm, clouds 6, had several light squalls yesterday and light wind from about north all day. Left with Edward Howe \$5.00 bring being the balance due Dennis on the settlement and which I did not have with me at the time. Annie's birthday being tomorrow she had some children to tea with her. Went to Alexander Patterson's after tea. Wore my shoe down at the heel all day.

Sunday, August 24. Rose at 5 but my heel is still sore to walk, bathed. At 8:20 A.M. barometer 29.58, thermometer 87.5, wind northeast 1, clouds 2. A Conch schooner just in reports a large ship ashore loaded with cotton and four wreckers signaled the schooner Dart which also proceeded up to the wreck. The ice is all gone. Mr. Newcomb was better yesterday, pronounced out of danger. The Florida came in last night from Havana with the money for the brig Rrosita and the brig went out before night. The Governor Anderson got in about noon. The steamer Illinois from Aspinwall four and half days with 545 passengers came in about 4 P.M. Lucia was quite sick all day one of her eye teeth has made it appearance. Conquered the fever with Aconite and then gave Coffee.

Monday, August 25. Rose at 4 and went to the market, returned home and bathed. At 9 A.M. barometer 29.45, thermometer 88.3, wind calm, clouds 3. The steamer Illinois got off at half past 8 having taken on board 300 tons of coal to do it the men were working all night. Lucia very fretful gave her Bile and Cham. Al every two hours. Opened a barrel of flour

and one half barrel of Graham flour, both damaged slightly.

Wednesday, August 27. Yesterday morning rose at 2:30 and called by for Alexander Patterson and went down to the office where I changed my clothes. Quite a heavy squall fell while on my way down but my Gutta Pucha coat kept me dry. About 3:30 shoved off from Filor's wharf in Davis' boat. C. Johnson, Alexander Patterson, Flex Senac, William Pinkney, James C. Clapp and myself and Negro boy Yak. It was a flood tide and perfectly calm so that we drifted above Bowne and Curry's wharf and it was near six before we got away from the town and ran down to Woman's Key with a very light air and landed at the west end near to which dug a nest of fresh turtle eggs and walked down to the east end. I got a double shot at a flock of Marlin and got eight and William Pinkney two. I afterwards killed one more and Pinkney got six Godwits, Alexander Patterson killed three or four, Senac had a violet headache all morning but was better in the evening. We had a fine stew made of the birds and made a hearty dinner and had a fine fun back with a nice breeze from the north.

Thursday, August 28. Rose about 5:30 and bathed. At 8 A.M. barometer 29.37.4, thermometer 87.5, wind northeast 6, clouds 8. The wind blew fresh all night from the northeast with some rain squalls and several of them this morning with every appearance of a smart gale. The bark Emigrant which has been on shore on Alligator Reef came in last night and anchored some distance from the point buoy. Got the umbrella I sent by Captain Wilson of the Governor Anderson to be recovered which has been well done for \$4.00. Got a collar of brass made by Atwell and my name

engraved on it by Russell for all of which I paid \$1.25 and put it on the dog when I got home. Wind fresh all day with falling barometer and in the P.M. rain showers. About 3 P.M. took my gun and with Dan to take my rubber coat and Spring. Went round by the Fort Pond and Seikman and Linn's Ponds to the Salt Ponds and home by the same route. Killed two or three Godwits, three yellow shanks and three small snipe (tingae). My eyes are very sore and I shot badly. There were frequent rain showers when I would stop and put on my coat and make Dan hoist an umbrella and wait till the shower was over. I did not feel well when I got home and my pulse being rather quick and full, took three dozes of Acon. During the night blew heavy and squalls all night from about east northeast and I had to roll up the curtain to the back piazza and sleep in the room.

Thursday, August 28 continued. Woke several times during the night and looked out and found it was blowing hard all night and this morning moderated a little. The sea is breaking all over the Fort and part of the outer wharf is gone. There is a good deal of damage done to trees, fences and etc.. The grape vines are much injured and I feel will lose their fruit. The bark is lying on the point of Crayfish Key. The bark masts gone and looks as if she was full of water. A schooner came in during the night and ran ashore on the bank opposite Bowne and Curry's. At 8:30 A.M. barometer 29.36, thermometer 86, wind east southeast 9, clouds 10 with frequent squalls of rain and increasing wind passing over, blowing a heavy gale. Barometer commenced rising about 11 A.M. and the wind gradually decreased until by evening it was pleasant with a good breeze from

the southeast. I felt sore all over and my eyes very sore that could not read, so I lounged and slept all day. The schooner Dart went off to the bark and took off the crew.

Friday, August 29. Rose at 4:30 went to the market and found nothing in it. My eyes so sore that I can not see to shoot. Bathed. At 8 A.M. barometer 29.37, thermometer 85, wind southeast 5, clouds 7. There were five bales of cotton picked up by Sandy on the South Beach. I feel sore all over. Bought two pairs of green spectacles from L.M. Shafer with different shades and wore them all day. Four men from the French brig Marie came down from Samiline Key. The brig went to pieces soon after she struck and it is supposed that the rest of the crew are lost. The ship Isaac Allerton from New York to New Orleans struck off Saddle Bunch and is sunk to her upper deck, loaded with an assorted cargo. The Island of Sand Key is washed away, all the poultry lost, the light burnt all night. An unknown vessel is reported ashore.

Saturday, August 30. Rose at 4:40 and took my gun and walked round by the Fort and the Duck Ponds to Linn's Pond and back saw but one Godnet and a few Gringue. Spring got lost and took my back track home. Bathed. At 9 A.M. barometer 29.36, thermometer 85.5, wind south 6, clouds 7. Paid Captain Wilson \$4.00 for repairs of my umbrella sent by him to New York. I learned that a bark was ashore on Loggerhead Key but one man saved and a schooner in back of Bahia Honda, these are all between Key West and Indian Key. Some goods bought by a boat from the Isaac Allerton were sold by the Marshall at Bowne and Curry's the consigners. At 3 I went out to the Salt Ponds with my gun and

dog, birds very scarce and shy.

Sunday August 31. Rose at 5 and walked up above the Quarters, returned home and bathed. At 8:30 A.M. barometer 29.50, thermometer 86, wind south southwest 4, clouds 3 with hazy. My eyes still so sore that I cannot read. Samuel Filer came up from Tortugas about 8 P.M. He was coming up in the schooner Activa last Wednesday and anchored off the west end of the Marquesas and during the afternoon parted the chain and scudded for Tortugas and ran the schooner on to Buck Key Reef where she now lies bilged and all hands saved.

Monday, September 1. Rose at 4:40 and walked above the Barracks, returned home and bathed. At 8:30 A.M. barometer 29.62.5, thermometer 87, wind east southeast 2, clouds 2 with haze. Went down to Bowne and Curry's wharf where a quantity of good were sold by the Marshal. They bought very high prices and I bought nothing in the afternoon. Fernando Moreno bought Captain Baldwin of the ship Isaac Allerton to my office and recommended him to employ me which he did at Moreno's request although he had partly promised Ossian B. Hart, who had been recommended by Captain Post and who asked him for the business. I drew up a libel for restitution which was signed by Captain Baldwin and myself and I gave it to Moreno to give to the clerk and got an order of sale so as to cover the sales made this morning. About 5 took my gun and walked out to the Fort Pond and shot a few Tringas and three bats, but got only one. There were very few out though last night there were a great many.

Tuesday, September 2. Rose at 4:40 and walked above

the Barracks, returned home and bathed. At 8 A.M. barometer 29.62, thermometer 87.5, wind east southeast 1, clouds 2 with haze. The sun has not been clear since the gale and from the continuous heat of the weather I think that we will have another gale before long. The Governor Anderson came down with a few goods, her divers being worn out. Several boats have also come down and they report that a schooner has been found just outside of the reef sunk all hands must have been lost. A boat was sent up to examine further and when she returned she reported that she could not find the wreck. Fred Filor came down from Cape Florida and reports that there was no wreck from Key Vacas up and from the looks of the beach on shore the gale was not as severe above Indian Key as below. As I cannot read yet I spent most of the day on the wharf at the auction. Sales are good still selling high. I bought a lot of tinware for three dollars.

Wednesday, September 3. Rose at 4:40 and went to the market, found nothing. Walked up to the Barracks, returned home and bathed. At 8:30 A.M. barometer 29.58, thermometer 87, wind east southeast 1, clouds 7. Subscribed \$1.00 toward burying an Irishman who is dying of yellow fever at Moffatt's house. He was taken last Friday. Colonel Oliver O'Hara called me up to see the barometer of the bark Emigrant. It is a splendid instrument and has a sympiesometer attached and cost in Liverpool eight pounds. O'Hara told me that if I was not employed for the wreckers he would employ me for the Captain. Down on Bowne and Curry's wharf where a few things from the ship Issac Allerton and some rigging from rigging from the

French brig Marie. I did not stop long. Several rain squalls during the afternoon and considerable rain fell from the east northeast.

Thursday, September 4. Rose at 4:40 and walked to the Barracks and to the fort, returned home and bathed. At 8 A.M. barometer 29.60, thermometer 85, wind east southeast 2, clouds 5. Yesterday gave Matilda \$14.00 to pay Mrs. Tift for good bought of her. Attending sales morning and evening. The sloops Texas, E. Catherine and Gazelle having come down most of the good sold high. I bought nothing. Two bodies have been found washed ashore, one black and one white man they were so offensive that they could not be buried but the finders piled brush over them.

Friday, September 5. Rose at 4:40 and went to the market, not a thing to be bought. Walked down to the Fort, returned home and bathed. At 8:30 A.M. barometer 29.62, thermometer 87, wind east northeast 2 with a rain squall at 8 A.M. Bought 15 pounds of white sugar to preserve 13 pounds of lemons. Matilda has been preparing for sweetmeats for some days. Christian Boyle let me have 10 pair of Navy blankets at \$.61 per pair the same he paid for them. Gave Matilda \$10.00 to pay for things purchased for her own use and gave each of the children a knife and bought one for myself costing \$.02 to \$.03, they are not much damaged. Goods still selling high, about the wharf morning and afternoon where they are selling. Bought a lot of cotton goods of various kinds for \$12.00. The mail came in from Charleston about 6 P.M. in a smack of about 28 tons. L.M. Shafer and wife came in her.

Saturday, September 6. Rose at 5 and went to the Post Office. Got a letter from the Comptroller allowing

my per diem account for \$45.00 and a draft for the same. At the sale again which I attended because I had nothing to do. Sent \$4.25 Spanish gold to Havana by the mail boat for a lottery ticket. Squally all day and a good breeze. I fear the sea will wash the goods out of the ship and drive them into the Gulf.

Sunday, September 7. Rose at 4:45 and walked on the beach, bad walking as the sand has nor filled up over the rocks yet. Returned home and bathed. At 8:30 A.M. barometer 29.51, thermometer 84.5, wind north northeast 4, clouds 7. P.M. Took a nap. Weather looks bad.

Monday, September 8. Rose at 5 and worked about the yard and bathed. At 9 A.M. barometer 29.51, thermometer 85, wind east southeast 2, clouds 4. Wrote to the Treasurer of the United States. Attended the auction sales. Bought of Gwynn eight pairs of shoes for the children. Went around Conch Town in the evening with Matilda and children. Wrote a letter to Mother and put it in the office. The California teamer George Law arrived about 7 P.M.

Tuesday, September 9. Rose at 5 and made a scrubbing bush out of Palmetto. Bathed. At 8 A.M. barometer 29.57.5, thermometer 85.5, wind south southeast 2, clouds 6. Tried on a new shirt bought for \$15.00 per dozen, fitted beautifully. No sale in the morning and but a small one in the evening which I did not attend.

Wednesday, September 10. Rose at 5:15 and bathed. At 9 A.M. barometer 29.59, thermometer 85.5, wind northeast 2, clouds 7. There was a small sell of goods in the morning. Got a pair of surveyors boots from James Filor. Alexander Patterson and Sister Sarah dined with us and she spent the day with Matilda.

Thursday, September 11. Rose

at 5 but the mosquito are too ad to walk, bathed. At 8 A.M. barometer 29.52, thermometer 85, wind east southeast 2, clouds 9. A light rain fell during the night. There were a few goods sold auction and a large bell for the First Presbyterian Church at Memphis weighing near a ton was saved and brought down. Nearly everything of value from between decks has been saved and brought down and they are trying to get up the lower deck. The sloop Dolphin and schooner William Chestnut came in during the morning loaded with sugar from the French ship Don Juan which had been ashore on Alligator Reef. She was from Havana to Marseille with 2,500 boxes of sugar the ship got in about 11 A.M. The mail boat from Havana arrived about noon, and bought me a 4/16 lottery ticket that cost \$4.25.

Friday, September 12. Rose about 5:15 and bathed. At 8 A.M. barometer 29.48, thermometer 84.5, wind east southeast 1, clouds 7. The mosquito very bad last night and I did not go to walk on account of them. Woke about 3 and was awake about ½ hour. There was a sale of wrecked goods at which I stayed for some time and took home a

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pair of surveyors boots from James Filor's and paid him \$2.50 for them. George W. Carey made me a present of an inkstand he bought a few days since it has two half-cups which are closed and open to admit the pen, it works well on the first trial. The smack for Charleston left about 2 P.M. Goods sold high as ever at the sale today. Considerable rain fell during the day. At 4 P.M. barometer 29.42.5, thermometer 84, wind west southwest 2, clouds 4.

Saturday, September 13. Rose at 5:30 and bathed. At 8 A.M. barometer 29.47, thermometer 83.5, calm, clouds 2. Rain in the night. Lucia restless at night and kept us awake a good deal. She has a cold and her teeth are troublesome at times. Put on a wet bandage on her chest. The steamship Philadelphia came in last night for mail left by the steamer George Law, she remained but a short time. In the afternoon there was a sale of wrecked goods which I did not attend. The Patterson girls spent the day with us.

Sunday, September 14. Rose at 4:45 and walked to the Barracks, returned home and bathed. At 8 A.M. barometer 29.51, thermometer 85, wind east northeast 1, clouds 2. Weather very hot with light air from the northwest at times calm. Mosquitos bad in the evening and I have prickly heat worse than I have had it if for years.

Monday, September 15. Rose at 4:40 and walked to the Barracks, returned home and bathed. At 8 A.M. barometer 29.47.5, wind nearly calm from the east, clouds 3. There was a sale on the evening but I did not stay long. Paid bill of Charles Tift for wrecked goods \$24.50. Coste retained me to libel the French ship Marie. Round at Alexander Patterson's after tea.

Tuesday, September 16. Rose at 4:50 having been awakened before the alarm by the steamer Raveswood a small boat bound for Mobile to run between that town and Blakely. Walked to the Barracks mosquito were bad. Little rain at night. At 8 A.M. barometer 29.52, thermometer 86.5, wind east 1, clouds 5. The steamer George Law got ashore inside of Conch Reef and hovered over 80 tons of coal and gave the Skinner \$500.00 to pilot him out. There was a small sale in the morning. I bought \$8.00 of china ornament for the house and gave Sarah and Aletta Patterson some. There was a box sold yesterday with a fine assortment, Henry Albury bought it. There were several light rains.

Wednesday, September 17. Rose at 4 and went out to the duck ponds, saw no ducks and but few birds. Mosquitoes bad. At 8:30 A.M. barometer 29.53, thermometer 85, wind east southeast 1, clouds 8. There was a sale this morning and evening the first of which I attended. I felt as if I was going to have a severe cold which is very prevalent and took four dozes of camphor on sugar. The dentist pulled a tooth for Charlotte and for Annie. William Randolph took tea with us.

Thursday, September 18. Rose at 4:45. The mail from Charleston having arrived during the night went down before breakfast and got my letters and papers. Received a letter from the Attorney General and one from P. Williams informing me that the warrant in Shaw's case is in his hands and that the one for J.P. Smith will soon be issued the decision having been reversed. Felix Senas has his commission as purser in the Navy. Yesterday bought an opera glass of L.M. Shafer for \$14.00 returning a spy glass bought a few weeks since he asked \$20.00 for the

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This photograph was taken at the receiving station on the east end of the island probably about 1928 since the highway bridge to Stock Island can be seen. Referring to Inset B on page 61, the photographer was probably on the south tower. In the above view, the north tower is in back of the buildings. The west tower is off to the left out of the camera range. Photo credit: Monroe County Public Library

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