

The SKYHOOK



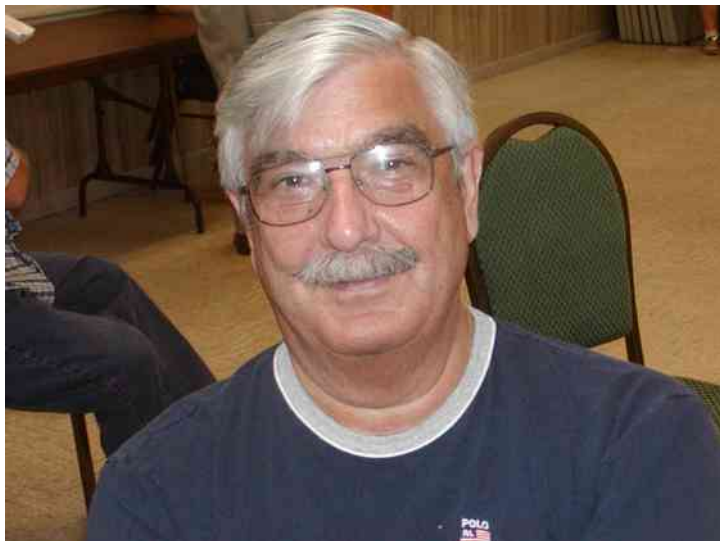
HOLIDAY CITY AMATEUR RADIO CLUB

www.hcarc.us

October 2017

Toms River, NJ

The October Presentation



There's always something new in amateur radio. One of the newest is Broadband-Hamnet™. Tony's planning to tell us all about it at our Thursday evening meeting.

Broadband-Hamnet™ (formerly called HSMM-Mesh™) is a high speed, self discovering, self configuring, fault tolerant, wireless computer network that can run for days from a fully charged car battery, or indefinitely with the addition of a modest solar array or other supplemental power source. The focus is on emergency communications.

Election Notice

Notice is hereby given that there will be a Holiday City Amateur Radio Club Election of Officers at our October meeting, 7:00 pm October 5. Elections are held each year at the October meeting. Final nominations will be accepted before nominations will be closed. Then the election should proceed swiftly, as we already have at least one nomination and acceptance for each office.

The Board consists of:

President, Vice President, Secretary, Treasurer, and two Members At Large.

Presidents Corner

Where did the year go? As my term comes to an end, I look back on improvements that have been made in the club by the officers and board members and work that is still ongoing.

Membership is still our #1 priority and ways to increase membership discussed. It's not only a HCARC problem, but interest in Ham Radio in general.

I will remain as club program coordinator and continue to listen to the needs of the club membership.

I will continue the yearly surveys as to what topics the membership is interested in.

It has been a honor to serve the members of the HCARC and will continue to work to improve our club.

73, Tony

Our Tuesday Evening Net

The Holiday City ARC hosts a voice net on Tuesday evenings at 7:00 PM on the WA2JWR, 146.655, repeater.

No tone is required, however there is a -600 offset.

All are welcomed and the topics are varied.

We have a very congenial group and would like to hear from you.

Usually there is a designated net control, however the net is also free running so why not join us.

**OUR OCTOBER MEETING:
Thursday October 5 at 7:00 PM
Bldg A, Meeting Rm. #1
Holiday City South Clubhouse A
Santiago Drive at Mule Road
Toms River, NJ**

FCC Amateur Radio License Exams



The Holiday City ARC holds VE testing (FCC license exams) at the Holiday City South club house located at 139 Santiago Drive (at Mule Rd), Toms River, NJ on the **second Wednesday of each month** at 7:00 PM in room 1 of building A.

The testing is done on a scheduled basis only (no walk-ins). Two pieces of identification are required and one must be a picture ID such as a driver's license. The fee is \$15.00 by check payable to the American Radio League; cash will also be accepted. If you currently have an amateur radio license, bring the original and a copy. If you have a CSCE from a previous testing session please bring that also.

For registration and to confirm a seat please contact Larry Puccio, K2QDY, at 732 349-2950.

Ocean County ARES® News

October, 2017

The next meeting of Ocean County ARES will be on October 18th at 7:00 PM, Ocean County EOC, Robert J. Miller Airpark, Berkeley Township. For those who ordered ARES shirts, I will have them ready for you to pick up at the meeting. Short sleeve are \$10 and long sleeve are \$15.

I have shirts for the following operators: WB2ALJ, KC2ODQ, KC2UHG, N2RPQ, K2NGX, N3IE, N2QXB and KC2IJR. If you are not going to be at the meeting, please make arrangements to pick up your shirt.

In my usual tradition, I tried to take vacation during hurricane season and sure enough, we had some excitement from at least one. Hurricane Jose (ho-ZAY) stayed several hundred miles off the coast of New Jersey, but caused some exciting flooding in some areas during high tides. Below is a picture I took of a Philadelphia news van making a report at the North Wildwood sea wall along JFK Blvd. The worst conditions were on Tuesday, September 19th at the 8:13 PM high tide when the sea wall was breached multiple times and hundreds of people showed up to

view and film the event. Locals had stated that it was the worst flooding in that area in over 10 years. All of the beach was lost at the 3rd Street Pavilion, but municipal services were hard at work the next day replacing the beach, fencing, etc.



North Wildwood Sea Wall, September 19, 2017

Photo by WX2NJ

Meanwhile, Hurricane Maria (ma-REE-ah) was bearing down on Puerto Rico, which was literally destroyed on Wednesday, September 20th. All electricity is gone and most, if not all of cell communications is down for Puerto Rico. Amateur Radio communications will be playing an extensive vital role in getting and keeping this area safe for the residents driven from their homes into shelters. Remember, if you want to travel to Puerto Rico to help, you must be registered through the proper authorities. Do NOT attempt to deploy on your own.

73 de WX2NJ

Bob Murdock

Ocean County Amateur Radio Emergency Service® EC

Get-togethers

Get-togethers are very informal meetings for noon lunch & breakfast. You're welcome to join in. **See the calendar on the last page for times and places.** HC Diner refers to the Holiday City Diner on Mule Rd near Davenport Rd. Lisa's is a restaurant in the little shopping center on Route 37W opposite Mule Rd.

We Say Happy Birthday To:

Larry Puccio K2QDY

Kathlen Kozakowski

Harriet LeFevre

Charlotte Militano



And Happy Anniversary To:

Ray & Kathleen Kozakowski

Morton & Elaine Levy

Larry & Janice Loscalzo

Joe & Charlotte Militano



Meet Stan Stafiej KB2PD



A Meet the Members article by Doug Poray KC2TZC.

Stan Stafiej has been a member of the Holiday City Amateur Radio Club since 1994. He was a chemist for 35 years involved in various aspects of research, development, production, safety, and governmental regulations. Stan retired from the Toms River Chemical Co. in 1991.

Stan was first licensed in 1961, holds an Extra Class License, and uses the call sign KB2PD.

He uses a Yaesu FT-900 transceiver with a Yaesu FL-7000 amplifier (500 watts) for HF operation. Stan's antenna complement consists of a 3 element Yagi for 10, 15, and 20 meters with a rotatable dipole for 12 and 17 meters. The rotatable dipole is mounted on the boom of the Yagi.

[Continued on page 4]

Our VE Crew

Larry [K2QDY](#) (Liaison) 732-349-2950,
Urb [W1UL](#), John [KQ4WR](#), Stan [KB2PD](#), Steve [N2WLH](#),
Murray [KD2IN](#), Paul [N2QXB](#), Larry [WA2VLR](#), Tony [KD2GSO](#).
License exams are given by appointment at 7pm on the second Wednesday of each month at Holiday City South Clubhouse, Bldg A, which is at the corner of Mule Rd. and Santiago Dr. Call Larry Puccio, K2QDY, at 732-349-2950 for information.
Directions: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive, and park near the pool. Enter the building nearest the intersection.

CLUB COMMITTEES

Refreshments: John Rogers & Tony Kuzinski
Webmaster: Steve [N2WLH](#) N2WLH@yahoo.com
Publicity: Paul [N2QXB](#) 732-279-3911
Programs: Tony [KD2GSO](#) 732-930-5779
Sunshine: Dave [WA2DJN](#) WA2DJN3@verizon.net
Field Day: Larry [K2QDY](#) 732-349-2950
VE Sessions: Larry [K2QDY](#) 732-349-2950
Membership: Doug [KC2TZC](#) 732-928-2316

Holiday City Amateur Radio Club Toms River, New Jersey

Web Site www.hcsrc.us

President	Tony Kuzinski	KD2GSO	732-930-5779
Vice President	Paul Hansen	N2QXB	732-279-3911
Treasurer	Larry Puccio	K2QDY	732-349-2950
Secretary	Marge Penn	KD2LNT	732-736-0115
Executive Board	Doug Poray	KC2TZC	732-928-2316
Executive Board	John Roberts	KQ4WR	732-350-1162 ext 33
W2HC Trustee	Larry Puccio	K2QDY	732-349-2950

Membership is open to all interested persons. Ham license is not required. Dues are \$25.00 per year, payable Jan 1st. Members joining during the year will have the dues prorated. Family membership \$30.00 per family.

Meetings are held on the first Thursday of every month, at 7:00 pm.
Location: Meeting Room #1 in the Holiday City South Clubhouse.
Directions: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Turn into the parking lot from Santiago Drive and park near the pool. Enter the building nearest the street corner:-

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e-mail KQ4WR@arrl.net 732 350-1162 ext 33

[Meet Stan Stafiej, continued]

For 160, 80, 40, and 30 meters he uses a quarter wave sloper fed at the high end of the tower. He enjoys all of the HF bands picking those available dependent on the solar activity.

Stan has assembled many Heathkits including his first transmitter, the DX60. He has also built an electronic keyer and a short wave converter with instructions from QST articles.

He became interested in amateur radio by listening to short wave broadcasts from Voice of America, the BBC, and Deutsche Welle. By listening to these broadcasts he discovered ham radio operators and wanted to join them.

Stan's most memorable amateur experience was the first visit to his home of a foreign ham, PY2AC, together with his wife, daughter, and granddaughter. Other interests enjoyed by him include family genealogy and trying to learn selected foreign languages.

His travels have included spending two weeks with ZL2RK in New Zealand and three weeks with VK amateurs in Australia. These visits were the results of developing warm friendships through ham radio.

We all enjoy talking to Stan at our meetings and especially enjoy hearing about his experiences contacting hams in different countries.

From Frog Legs To Batteries

By Bob Buus, W2OD

Our story begins with an Italian Medical Doctor and Surgeon named Luigi Galvani (1737-1798) who lectured at the University of Bologna. In 1780, Galvani noticed that a dead frog would twitch as if alive when "zapped" with a static discharge. He hypothesized that electricity might be what causes life and movement and called it "animal electricity". For the rest of his life, he conducted many experiments to learn more about animal electricity. By 1790, he published results of experiments conducted on a pair of dead frogs legs suspended on a brass hook with an iron wire connected to the brass hook. He found that if he touched the other end of the iron wire to the other extremity of the frog's leg, the leg muscle would

contract and the leg move upward.

Alessandro Volta (1745-1827), a contemporary friend (and later rival) of Galvani, taught Physics at the University of Pavia. Volta repeated Galvani's experiments and got the same results proving the existence of animal electricity. However, as Volta thought about the experiments in more detail, he concluded that the movement was not caused by animal electricity but was instead the result of the dissimilar metals inserted into the frog muscle causing the electric current to flow.

The argument over animal electricity raged for years but in 1799 (a year after Galvani's death), Volta demonstrated what he called a Galvanic cell which was a wine glass filled with salt water and containing a copper electrode separated from a zinc electrode. Each electrode had an iron wire attached and the other end of the iron wires went to opposite ends of a frog's leg and caused the muscle to contract just like the animal electricity experiments conducted earlier by Galvani. In this case the electricity came from the Galvanic cell and was not internal to the frog's leg.

In 1800, Volta further improved on the Galvanic cell by making a "dry" version with a copper plate separated from a zinc plate with a blotter paper soaked in brine (or a weak acid). This Galvanic cell (later also called a Voltaic cell) was the first source of continuous (rather than static) electricity.

Volta went on to stack several of these new Galvanic cells in a pile to enhance the "force" (we now call it voltage) of the pile. The Voltaic pile served as a very versatile source of electricity with the available power proportional to the size of the metal plates and the force or voltage determined by the number of plates stacked in the pile. Recalling that Ben Franklin called a collection of Leyden jars a "battery", it wasn't long before a Voltaic pile was referred to as a battery. In fact, we often incorrectly refer AA, C, and D dry cells as "batteries" but technically a battery is a collection of cells. So we have 6, 9, and 12 volt batteries but the 1.5 volt dry cell is a Galvanic or Voltaic cell and not a battery.

After his death, Galvani was honored by having the galvanometer named after him as well as galvanizing of steel. The author Mary Shelly heard a lecture about

Galvani's work shortly before she wrote the novel "Frankenstein". The Voltaic pile or battery was used by many experimenters in the 19th century to make major discoveries about electricity. Volta is honored for his discoveries by having the unit of electromotive force, the Volt, being named after him. So now you know.

A Correction

Russ WA2VQV noticed that in the September 2017 issue, I confused the FOC with FISTS.

FOC (First Class operators Club) was founded in 1938, is 79 years old, and requires that you can send & receive at least at 25 WPM. You must work some FOC members and then be nominated to join. Check it out in Wikipedia on-line. Russ, WA2VQV qualifies, but is not a member.

FISTS, "The International Morse Preservation Society", is only 30 years old, and the only requirement to join is an interest in sending & receiving Morse code.

To join, you do not need to be nominated, although many are. WA2VQV has been a member of FISTS since 1997.

Thank you, Russ.

I hereby apologize and stand corrected.

John Roberts KQ4WR, Editor.

Cathodes And Anodes

When thinking of vacuum tubes, the cathode is the negative voltage element and the anode is the positive one, but in a battery (oops, I should say "cell"), the cathode is positive, and the anode is negative. How can this be?

It's a matter of definition. By definition, the part that emits electrons to the other element is the cathode, and the one that receives the electrons is the anode.

Within a cell, the current of electrons goes from the cathode to the anode. Because electrons are bits of negative charge, that makes the anode negative, and the cathode positive. But in a load, electrons are attracted by the positive voltage applied to the anode, and repelled by the negative voltage applied to cathode. Like people, a positive attitude is attractive.

Some History Of Marconi In NJ

by Marconi Chapter 138 QCWA (Quarter Century Wireless Association)

This article was written years ago, and is presented here as received, without updates other than format.

The New Jersey area is rich in the history and the pioneering work of radio communications. Early radio can be said to have been developed, refined, and manufactured in this area. Pioneers such as Bell, Edison, Tesla, Marconi, Fessenden, De Forest, Armstrong, Sarnoff, and a host of others worked and lived in the area.

Of particular interest is Guglielmo Marconi. He experimented and manufactured early transoceanic and ship-to-shore equipment in the New Jersey area. Many of the Marconi Chapter 138 members were directly impacted by Marconi, and some participated in his early work. It was felt that Marconi most closely represented the QCWA chapter membership and it would be a fitting tribute to name the chapter after him.

1. Twin Lights at Highlands, NJ, USA (1899-1907)

On the 21st of September 1899, Marconi arrived in New York. He arrived to a wild reception and was obligated to answer hundreds of questions from the reporters who crowded the quayway to meet him and who waited for him at his hotel.

The directors of the New York Herald hoped that commissioning Marconi's services would generate great public excitement for the upcoming America's Cup race. With scientific interest in wireless, and curiosity about Marconi to add to the sporting enthusiasm, the Herald hoped for first-class publicity.

But, the event was upstaged by the triumphant return home from the Philippines of Admiral Dewey, the victor of Manila, who was to be given a hero's welcome by New York after his successes in the war against Spain.

The yacht races were postponed so that they would not interfere with the patriotic demonstrations, and

the Herald made an attempt to get Marconi into the Dewey limelight.

Marconi hurriedly fitted his wireless to the flagship Olympia so that he could report the event. The Herald provided stations for Marconi's apparatus in the Navesink Highlands on the New Jersey coast overlooking the New York harbor; the top of a tall building on 34th Street, New York; and to the cable ship, Mackay Bennett, moored over the New York transatlantic cable which it picked up to provide immediate communications to London and Paris.

The Herald also chartered two other steamships to cover all the events with Marconi's system. Marconi was on board one of the steamers, the Ponce, along with other US Naval officials who acted as observers of wireless.

The 'experiments' were very successful. The Herald printed a most enthusiastic two column report to the world that Marconi had passed the stage of uncertainty, that wireless was adopted for use at sea, and that its value could not be too highly estimated.

At the Twin Lights site, Highlands, New Jersey, Marconi erected antenna towers to demonstrate the practicality of the transmission of information via "Hertzian" waves.

At the invitation of the editor of the New York Herald newspaper, the 25 year old Marconi set up a transmitter in a boat to follow the America's Cup race between the Shamrock of Sir Thomas Lipton and the Columbia II of JP Morgan outside of New York Harbor.

On September 30, 1899, and just prior to the race, Commodore Dewey's fleet was approaching New York Harbor, and the approach of the fleet and Dewey's victory in the Pacific in the Spanish-American war was relayed by radio from Marconi's boat to the Highlands station, and thence to New York and the newspapers.

The race was postponed and a naval review and parade was organized to welcome Dewey. Thus, this became the first reception in America of wireless messages.

By mid-October, the celebrations for Dewey were over, and on October 3 the races began. On October 16, the US yacht Columbia owned by J.P. Morgan gained the required 3 out of 5 decision over the yacht Shamrock owned by Sir Thomas Lipton. The five-hour races lasted

for 13 days and were pursued to the end, with the Columbia winning, and all the progress and conclusion of the race reported by Marconi's station.

The results were immediately printed in the New York Herald and posted in storefront windows in New York City. Some 5000 words in all were transmitted.

The Twin Lights station became the first one in the nation capable of transmitting and receiving radio messages on a regular commercial basis and remained in use until 1907.

These practical demonstrations resulted in the recognition of the value of radio and 'Marconi's' were required on all commercial ships. This in turn accounted for the rescue of the 705 survivors of Titanic when it sank in the North Atlantic."

[Adapted from exhibit material at the Twin Lights museum]

2. Shark River in Wall Township, NJ, USA (1914-1924)

In 1914 Marconi established a branch of the Marconi Wireless Telegraph Company of America in Wall Township. The Wall Township site adjoins the Shark River, a tributary to the Atlantic ocean that is approximately 2 miles to the Jersey coast and 5 miles north of the Manasquan Inlet. On this site the Marconi company built a development laboratory, dormitories, two resident houses, and other facilities. These facilities are listed on the New Jersey Historic Register and some are still in use by the Army.

The Company served as a commercial radio station for transatlantic communications. Along the banks of the Shark River, Marconi erected a number of high towers, approximately 200 feet high, to "string up" a long bronze wire antenna about one mile long. This site was used for reception of the Morse code transatlantic signals. In 1906 Guglielmo Marconi used this station for the first to reliable transmission and reception of commercial transoceanic messages.

The Shark River site served as the receiving location and the transmitting studio, although the transmission power station and antenna were remotely located in the New Brunswick, NJ area. The top of one of his

towers stands near the Shark River as a memorial. On this site the memorial states:

"Marconi American Wireless Company, 1913-1924, W1GM, First Commercial Transatlantic Communications Installation".

3. New Brunswick , NJ, USA (-1919)

Forty miles inland in Franklin Township, at what is now referred to as the New Brunswick Station, the transmitting station was built. Morse code telegraphy and control to the transmitting station was remoted from Shark River over telephone lines to the transmitter. Here, Marconi constructed a one mile long antenna made of bronze cable and suspended 400 feet above the ground on 13 towers along the Delaware and Raritan Canal.

This antenna was used with a 15 kilowatt high power spark transmitting station. President Woodrow Wilson's appeal for the overthrow or abdication of the Kaiser was relayed to Germany and the rest of the Europe from New Brunswick.

In 1919 the 'Radio Corporation of America (RCA)' was awarded the assets of the British-owned Marconi Company and in 1920 the New Brunswick station became one of RCA's principal transoceanic stations.

A Marconi memorial stands on the site of his former residence in the area. Two cottages remain standing which housed a team of Marconi's employees on Easton Avenue.

4. Marconi Park Complex, Wall Township, NJ (1914 - 1997)

In 1914, Marconi established a branch of the Marconi Wireless Telegraph Company of America in Wall Township, NJ, USA. The Wall Township site adjoins the Shark River and is approximately 2 miles from the Jersey coast.

On this site, the Marconi company built a development laboratory, dormitories and two resident houses. These facilities are listed on the New Jersey Historic Register and are still used by the Army.

The Company served as a commercial radio station for transatlantic communications. Along the banks of the Shark River, Marconi erected a number of high towers (200 to 400 feet high) to "string up" a long bronze wire antenna about one mile long. This site was used for reception of the Morse code transatlantic signals.

The top of one of his towers near the Shark River stand as a memorial. On this site the memorial states "Marconi American Wireless Company, 1913-1924, W1GM, First Commercial Transatlantic Communications Installation".

In 1941 the Marconi site was sold to the US Army Signal Corps at Fort Monmouth, NJ. The site was named after Colonel Paul Wesley Evans, Commander of the 101st Field Signal Battalion in W.W.I. Colonel Evans worked with Marconi on the development of radio transmitters and receivers. The Evans Area covers an area of 258 acres.

The Marconi buildings are being preserved, and plans call for a park with walking and nature trails, college campus, recreation areas and a museum. The first part of the complex will be turned over this summer with the remaining about one year later.

October						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 Get-together at HC Diner for Breakfast at 9AM (Page 2)	4	5 HCARC MEETING 7:00 PM	6	7
8	9 Get-together at Lisa's for Lunch at noon See page 2	10	11 License exams: See page 2	12	13	14
15	16	17 Get-together at HC Diner for Breakfast at 9AM (Page 2)	18	19	20	21
22	23 Get-together at HC Diner for Lunch at noon See page 2	24	25	26	27	28 CQWW SSB Contest
29 CQWW Continues	30	31 Get-together at HC Diner for Breakfast at 9AM (Page 2)			NET EVERY TUESDAY at 7PM 146.655 See page 1	

The Fox Hunt

Fox hunting is a sport that the English have participated in for many years. A fox is released and the participants, on horseback with dogs try to sniff out where the foxy fox has gone into hiding.

Well Ham radio also hosts Fox hunts. It is a group sport enjoyed by members of a radio club. Very educational and interesting! One club member goes out and finds a place to hide. The others join in groups and using directional antennas they try to locate where the foxy fox is hiding.

The fox, using a two meter handy talkie, turns on the radio every five minutes makes a brief transmission, maybe for 20 seconds or so, and the group tries to get a direction to drive in looking for the fox. This goes on until the last group locates the fox.

How about our club sponsoring a fox hunt? Who would like to participate? Let's talk about it at the next meeting.

73

Larry
K2QDY