

The SKYHOOK



HOLIDAY CITY AMATEUR RADIO CLUB

www.hcarc.us

March 2018

Toms River, NJ

Our March Meeting: Satellites



The March meeting program will be a satellite update and how to use the AMSAT website to find satellite information. This is to be presented at our March 1 meeting by Carl Lee W2PTZ.

The President's Message

I want to thank those who ran the February meeting while I was under the weather.

I got good feedback on ideas from the members. One thing I want to start at this coming meeting is a time to ask questions on things anyone may need help on. So bring your questions and we will try to answer them. Also if you have ideas for programs please bring them also.

I look forward to seeing everyone at the meeting.

Carl Lee, W2PTZ

Let's Say Happy Birthday To:

Ira Dechowicz N2RKV

Ray Kozakiewicz KC2TPK

John Roberts KQ4WR

Julie Dobrolovich

Susan Graber

Sarah Punderson



(We have no March wedding anniversaries to report)

Ocean County ARES® News



March, 2018

As most of you are aware, there is no ARES meeting for February, usually because attendance is low due to the weather. This year we will have temperatures in the 70's around meeting time, but with the flu outbreak it is still prudent not to be bringing large groups of people together. The next ARES meeting will be April 18th at 7:00 PM at the Ocean County EOC.

Skywarn has migrated over to groups.io and so has Ocean County ARES (ocares@groups.io). Yahoo was just out of control with file management and it was taking days to get a message distributed. Ocean County ARES also has a backup discussion group using qth.net (ocares@mailman.qth.net) should groups.io have a problem. In all cases, groups.io will be the priority discussion group and contains almost all the pictures and files that were once part of the Yahoo group.

This year's MS tour will take place on May 19 and 20. The tour will be radically different this year because the tour will only be going to Island Beach State Park the first day, then turn around and stay in Point Pleasant Beach that evening. The next day the tour returns to Monmouth University.

As soon as I get definitive routes and instructions, I'll be making recommendations to MS for communications assignments in Ocean County.

73 de WX2NJ

Bob Murdock

Ocean County Amateur Radio Emergency Service® EC

NEXT REGULAR MEETING:
Thursday March 1 at 7:00 PM
Bldg A, Meeting Rm. #1
Holiday City South Clubhouse
Santiago Drive at Mule Road
Toms River, NJ

SKYWARN

A note from Keith - KC2OON,
Ocean County Skywarn Coordinator



February isn't over yet, but it's been a pretty typical one for the record books so far. Pretty average for rain and snow as well. Tuesday March 20th is the first day of Spring and usually the start of rainier months until the middle of April. Then comes thunderstorm season, one of my favorite weather phenomena.

We are going to be looking into getting a Skywarn training session in Ocean County this year so people in our general area don't have to travel so far if they would like to join the Skywarn crew. It's free and you get your Skywarn number to be able to participate in officially gathering weather data for the NWS (National Weather Service). We would like to have a good turnout since the presenter from the NWS usually travels pretty far to do the class for us. More to follow as we get the information.

If you haven't noticed already or you were unaware, the Ocean County Skywarn Yahoo Group migrated to "groups.io" It's a better service and Yahoo was seriously lacking in a support structure for the older service.

If you are a member of Ocean County Skywarn and have not joined the group yet, log on to your email service and shoot us an email at OceanCountySkywarn+subscribe@groups.io

We will get you on the group. That is where all the official information, reminders and severe weather Skywarn activations will be posted.

Keep your eyes to the sky....

Keith, KC2OON

SNJ ARES ASEC, Severe Weather Coordinator

Ocean County ARES Asst. EC
Ocean County Skywarn Coordinator



Never Give Up On A QSL Card

By Urb LeJeune W1UL ©2018 all rights reserved.

Introduction: At a recent club meeting one of the members was complaining that he had sent a QSL card with some green stamps and it was six months and he had not received a QSL card. After I stopped laughing I tried to explain that hams today are spoiled with instant confirmation. Using LoTW it is frequently possible to receive credit for a contact with a DXpedition while the operation is still active.

VP8BK South Georgia: To make my point, I pointed out that in the "good old days" it was not unusual to wait years to get a QSL from a rare station. In the fall of 1956 I worked VP8BK on South Georgia. The operator was Einar LA1RC and he had recently arrived for a one year tour on the frozen wasteland. There would be no QSL cards until he returned home at the end of 1957. I dutifully sent my QSL, along with a green stamp. In late 1958 I received the VP8BK card, however, there was a problem, Einar had interposed my call sign, it read W2DCE and I was W2DEC at the time. The facts that the QSL said thanks Urb and there was no W2DCE at the time did not sway the ARRL DXCC desk. Another QSL, green stamp and a restart of the patience stop watch. In due course I receive a new QSL with a correct corrected call. After almost three years after the QSO I finally had South Georgia confirmed. This was not the longest wait, hold onto your seat. First a little background.

Background: In the annual DXCC listing in the December 1964 issue of QST I was one country off the top of the honor roll, as W2DEC. There were only 149 people worldwide who were on the honor roll and I was number 25 on that list. My missing country was VK0 Heard Island.

I started drifting away from active DX-ing for a few different reasons; the main cause was the rapid emergence of lists. You had to cozy up to a list manager and get a number. Contacts required no operating skill. I took up other challenges including making Five Band WAS with only 50 operators with 1 X 2 calls, No special endorsement.

VK0CW Heard Island: In early February 1983 I was visiting my very dear friend Phil W2LNB who is now a

SK. Phil casually mentioned he finally worked VK0CW on 80 meters to which I replied, "Heard Island?" Phil said they were easy to work on 20 meters. I headed home and fired up my rig and loaded my antenna and everything seemed to be working just fine. That evening there they were with an honest S9+ signal and I worked them on the third call. Several new countries were added to the ARRL list during my extended DX hibernation so a card from VK0CW would no longer put me on the top of the honor roll and put off sending for a card.

Fast forward to 2009 and I have a new job, new wife, new QTH and antique radio gear. I was then 46 countries off the bottom of the honor roll. I sent a VK0CW card to Dan N2DT who was the QSL manager for North American and a few days later Dan sent a note informing me that half of the VK0CW the paper logs and QSL card were destroyed due to flooding in his basement.

Dan was very friendly with North Jersey DX Association (NJDXA) NJDXA member Elliot W2DIE. At a NJDXA I was telling Elliot about Dan's letter. Elliot told me he would go to Dan's basement and rummage around looking for logs and QSL cards.

On December 22, 2010 I received a letter from Dan as follows:

Hi Urb:

Merry Christmas:



As you know about half of the paper logs were ruined about 10 years ago due to flooding in my basement. In addition, I didn't recall having any more VK0CW SQL.

But because of my affection for Elliot and the NJDXA, Elliot and I dug through the water-distended packages and found an entry for you. Elliot and I then tore apart my store room and came upon three blank SQL!

Enjoy.

73 Dan N2DT

Epilog: So there you have it. VK0CW QSO on February 1, 1983; VK0CW QSL received on December 24, 2010, almost 28 years later. Keep this in mind the next time you're tempted to complain that it took you a year to get a new country confirmed.

73 Urb W1UL

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 6:30pm 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 an appointment.
Directions: From either Route 37 W or Davenport Road, take Mule Road to Santiago Drive. Clubhouse A is the building nearest the street corner.

CLUB COMMITTEES

Refreshments: Tony [KD2GSO](#) 732-930-5779
Webmaster: Steve [N2WLH](#) N2WLH@yahoo.com
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.hcarc.us

President	Carl Lee	W2PTZ	732-575-7558
Vice President	Billy Locke	KD2MHA	732 281-0151
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	732-966 4665
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, except December.

Location: Meeting Room #1 in the Holiday City South Clubhouse A.

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.-

The SKYHOOK is published monthly as the HCARC's official newsletter.
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Our Get-Together Group Schedule

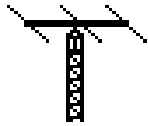
March 5th Noon Lunch at the Lisa's Restaurant

March 12th 9:00 Breakfast at the Holiday City Diner

March 19th Noon Lunch at the Holiday City Diner

March 26 9:00 Breakfast at the Holiday City Diner

We're friendly and informal, and you're welcome.



Holiday City ARC VE Testing



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.

Our Local 2-meter Net

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

Use a 127.3 Hz tone and a 600 kHz negative 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.

Henry & The Electromagnet

By Bob Buus, W2OD

Andre Ampere discovered in 1823 that a wire wound in a solenoid would maximize the magnetic field along the center axis due to current flow in the wire (see June 2016 Propagator). Experimenters then attempted to increase the magnetic field by putting an iron rod in the center of the solenoid. Although the magnetic effect was enhanced, it still was relatively weak. The next enhancement was to varnish the iron rod and then wind the solenoid directly on the insulated rod. This strengthened the magnet but not significantly. The problem was that the number of turns on the rod was limited because the bare copper wire used had to have the turns spaced to keep from shorting them out.



In the late 1820s, a teacher at the Albany (NY) Institute by the name of Joseph Henry came up with the idea of insulating the wire used in an electromagnet and thus was able to wind the turns close together and in several layers to obtain a rather powerful electromagnet.

Henry found that by bending the bar magnet into a horseshoe shape resulted in even stronger attraction. He then wound several separate coils on the horseshoe-shaped bar and found that if the windings were wired in parallel, the magnetic strength was increased using a single galvanic cell. In fact, the more windings he connected in parallel, the stronger the magnet providing that the plates for the galvanic cell were increased in size. He called such a device a magnitude electromagnet. Similarly, if he wired the windings in series, he could get maximum magnetic attraction by powering with a voltaic pile (what we would call a higher voltage battery). He called such a device an intensity electromagnet.

Joseph Henry's next invention consisted of a bar magnet on a pivot with an electromagnet near one end. When he energized the electromagnet, the bar magnet would be attracted to it so would pivot and the other end of the bar magnet would strike a bell. He found that if the bell were placed a long distance from

the voltaic pile, best results were obtained by using an intensity electromagnet for the bell. By this means, he wired his house in 1830 so that by connecting the circuit in one room, he could ring the bell in a different room. This has come to be accepted as the first electric telegraph.

A few years later, to extend the range of his bell "telegraph", Henry invented the relay which is an electromagnet that, upon energizing, would close a contact to put a fresh voltaic pile on the line thus extending the range of his telegraph. Like Ben Franklin, Henry never patented any of his inventions but instead put his ideas in the public domain so that others could improve on his findings.

Henry went on in 1831 to invent a "motor" using a rocking electromagnet powered through a commutator that reversed the electromagnet to cause it to rock back and forth.

Joseph Henry's inventions were soon put to practical use. The powerful electromagnets were used to separate iron particles from ore. Electromagnets played a key role in the development of the telegraph which we'll get to next month. Electric motors and even Bell's telephone all depended on Henry's electromagnet. So now you know.

Zero To 20 In 2 Weeks

Ludwig Koch was a psychologist who did research for the Nazi military. The purpose was to find the fastest way to teach Morse code. Students learned to read 20 words a minute in two weeks. You can download G4FON's free Koch Method Morse code trainer from

<http://www.g4fon.net/CW%20Trainer.htm>

Also, IZ2UUIF wrote an Android version

<http://www.iz2uuf.net/wp/index.php/2012/07/02/koch/>



The main point of the Koch method is that students must be taught to not think, just react.

Visual memory distracts from sound recognition, so students must not see any visual aids, such as code charts, anywhere (including at home) before or during the course. Bad habits die hard.

It was found that two half-hour sessions a day (morning and afternoon) is the optimum speed to learn 20 wpm in 2 weeks.

To prevent students from hearing dots and dashes, code should start at no slower than 12 wpm. Higher speed will be required if the student has difficulty unifying the sound of each character.

Characters are to be taught in 5-character randomized code groups, with standard (not Farnsworth) spacing between characters, so students cannot think between characters.

In the first session, students are taught simply to parse, but not identify, the 5 characters of a code group, by writing a raised dot for each character.

In all later sessions, to prevent the student from wasting time on unknown characters, any character that is not immediately recognized is to be shown as a raised dot. That gives a sense of completion, clearing the mind for the next character.

New characters are introduced in descending degree of difficulty. Doing the hardest ones first is less confusing to the student, and gives them the most exposure.

A new character is introduced only when 90% copy is achieved, so the student learns only one character at a time.

In a classroom course, the newly introduced character is not identified until the student recognizes that it is the new character.

Once a character is learned, at least ten instances of it must be included in each session's practice groups, lest its memory be "overwritten" by more recent characters.

How Do I Make My First Contact?

This month's "Elmer" is Larry Puccio K2QDY

Well we have passed your Technician or General class FCC license test have your new license and call letters, and have purchased some station equipment.

We have also erected an antenna, which may be a Vertical or a Dipole.

In the radio shack our equipment is tested and ready to make contacts, but we are a little shy or maybe don't know exactly what to do.

Whether you have a Tech license or a General class license,

you are allowed to make CW contacts on some HF bands. Of course you need to have knowledge of CW to do this.

You may also just want to get on a repeater and operate FM with a repeater group. With the General class license you also have some privileges on HF bands to operate SSB, which is a voice mode.

Let's talk about making CW contacts for the moment.

Once you have mastered the code and can copy at least five words per minute, you are in a good position to make contacts.

"But how do I start?"

Well first determine what frequency ranges you can operate with the class of license you have. This can be found on the ARRL web site at www.arrl.org.

As an example, a Technician or General Class operator can operate CW on 80 meters between 3.525 and 3.600 kHz, and on 40 meters between 7.025 and 7.125 kHz. There are frequencies available on the other bands as well.

Chose a frequency that is clear where you don't hear anyone else operating and then begin sending your CQ. The CQ is the universal code for anyone listening to hear someone wanting to have a QSO or conversation. If your callsign were K2QDY, the invitation would sound something like this:

CQ CQ CQ DE K2QDY K2QDY

CQ CQ CQ DE K2QDY K2QDY

CQ CQ CQ DE K2QDY K2QDY K

(In CW, K means "OK, now it's your turn", and DE means "this is")

Now you go in the listening mode to see if someone has heard your CQ and is going to answer you. Don't expect success on the first try. If no answer, wait a moment and try again. If someone does hear you and answers, it will sound somewhat like this:

K2QDY K2QDY DE KN2WXY KN2WXY

(or whatever the other person's call is)

Now it is time for you to come back and start the conversation which usually follows this format:

KN2WXY de K2QDY

Hi and tnx for the call

My name is Larry Larry

My QTH is Toms River NJ Toms River NJ

Ur RST is 599 599

How Copy?

W2XYZ de K2QDY K

(599 means "Your signal is perfect", or specifically "Readability=5, Strength=9, Tone=9")

Now the other ham comes back and gives you his information something like this:

K2QDY de KN2WXY

Hi Larry

My name is Bob name is Bob

My QTH is Rochester NY QTH Rochester NY

Ur RST is also 599 599

How copy Larry

K2QDY de KN2WXY K

Again it is your turn to tell Bob something about yourself for example:

KN2WXY de K2QDY

Okay Bob solid copy

My rig is a Kenwood TS 950s TS 950S

and I am running 100 Watts 100 Watts

My antenna is a dipole up 40 feet dipole up 40 feet

Weather here is rain and cloudy

How copy Bob ?

KN2WXY de K2QDY K

Now Bob will come back with his information, for example:

K2QDY de KN2WXY

Okay Larry solid copy again

My rig is a Yaesu FT 1000 running 100 watts Yaesu FT 1000 running 100 watts

My antenna is a roof mounted vertical a roof mounted vertical

Weather here is also overcast

How copy Larry ?

K2QDY de KN2WXY K

The conversation can continue from here with whatever you want to talk about, from your age to what you did for a living, and maybe whatever hobbies you might be interested in. Generally, political issues are not discussed.

At some point in time you may have to shut down, and in that case you might say,

"Thanks for the nice QSO and I hope to hear you again soon 73 for now."

SSB QSO's (contacts or conversations) are exactly the same except they are using voice transmission.

Operating FM with a repeater is also very similar to the SSB conversation, except that you are transmitting to a repeater in the local area.

Often times you will meet the same hams on a

particular repeater.

Some people like to get on repeaters from their cars on the way home from work or while at home just to talk to another friendly ham.

Whatever means you choose, get on the air and make that first QSO.

This will be the most difficult contact you ever make. However, after that gets easier and easier.

Try it. You will be very surprised at how friendly and helpful other hams are, once you break the ice.

Larry Puccio K2QDY

A Metric Prefix Chart

Each step in the chart is 1000 times the step below. So for example, 7000 kHz = 7 MHz.

Note that each step indicates a decimal point shift of three places.

An easy way to remember them all is to memorize

" afpnum kMGTPe "

Even if you design and build your own electronics, you will probably never use any of the ones above tera or below pico, but here's a more complete list anyway.

Prefix	Symbol	Scientific	Meaning
exa	E	10^{18}	
peta	P	10^{15}	
tera	T	10^{12}	trillion
giga	G	10^9	billion
mega	M	10^6	million
kilo	k	10^3	thousand
(blank)		10^0	(units)
milli	m	10^{-3}	thousandth
micro	μ	10^{-6}	millionth
nano	n	10^{-9}	trillionth
pico	p	10^{-12}	quadrillionth
femto	f	10^{-15}	
atto	a	10^{-18}	

March						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 HCARC MEETING 7:00 PM	2	3 ARRL DX SSB CONTEST arrl.org/arrl-dx
4 (contest continues)	5 Noon Lunch at Lisa's	6 HCARC Net 146.655 @7:00 PM	7	8	9	10 NORTH AMER. SPRINT RTTY CONTEST ncjweb.com
11 (contest continues)	12 9:00 AM Breakfast at HC Diner	13 HCARC Net 146.655 @7:00 PM	14 License Exams call Larry 732- 349-2950 for appointment	15	16	17
18	19 Noon Lunch at HC Diner	20 HCARC Net 146.655 @7:00 PM	21	22	23	24 CQ WW WPX Ph CONTEST cqwp.com
25 <i>Palm Sunday</i> (contest continues)	26 9:00 AM Breakfast at HC Diner	27 HCARC Net 146.655 @7:00 PM	28	29	30 <i>Good Friday</i>	31