



The SKYHOOK



HOLIDAY CITY AMATEUR RADIO CLUB

www.hcarc.us

November 2011

Toms River, NJ

November Meeting

This month Dave WA2DJN will be describing his latest electronic project. He recently purchased a QRP transceiver that he has completed. The project will be on display and Dave will be describing the construction, testing and operation of this little 5 watter.

The November meeting will be our annual election meeting. There is still time for you to nominate yourself or someone you think could fill an officer position.

Dates to Remember

- November 3 Regular Membership Meeting
- November 9 VE Session
- November 14 Club Luncheon
- November 23 Executive Board Meeting
- November 29 Club Luncheon

Birthdays & Anniversaries

Birthdays

- Andy Murin 11/03
- Sandy Ottenberg 11/15
- Marie Repetti 11/14
- Dolores Smith 11/19



Anniversaries

- Russ and Jean Young 11/01
- Don and Joyce Smith 11/11



The President's Corner

By Steve N2WLH



If you've been on the air recently you've noticed that propagation has been great on several bands unlike we've seen in recent years.

The sunspots have been very favorable to radio transmissions and some very nice QSO's have been made on the higher frequency HF bands. The 2 meter band has also been open. While on a drive out to the Lakehurst Navy Base, I made a contact with a fellow out in Pennsylvania. He was using a vertical antenna at 20 feet with 25 watts of power and I was mobile. A few weeks ago I held a conversation on the 10 meter band into Germany, Cameroon and Gabon to name a few. So as you can see the bands are changing.

At the October meeting the members discussed club events and finances. Dave WA2DJN and Murray KD2IN will be doing our annual financial audit and presenting their findings to the membership at the November meeting. A discussion to keep our current insurance provider instead of switching to the current ARRL recommended provider was voted on and passed. This may change in the future at the end of our current insurance term but for the time being we will continue to do business with our current provider.

Grace Puccio has graciously volunteered to host the club party at our December meeting. It will be an hors d'oeuvres and dessert affair and all members, family and their guests are invited. Please contact Grace at (732) 349-2950 if you would like to bring refreshments to the party.

This month Dave will present his newest project of his workbench. It sure looks like a nice transceiver and I'm sure the members will be interested in seeing the presentation.

Larry K2QDY and I are always looking for articles to be entered either in the Skyhook or the club's website. Your article doesn't have to be long if you don't want it to be.

The upcoming meeting we will be asking for nominees from our members and voting in elected officials so contact Dave WA2DJN.

The very best 73,
Steve Jackson N2WLH

NEXT MEETING: November 3, 2011

Thursday 7:00PM

**Meeting Rm. #1 at Holiday City South
Clubhouse**

Mule Rd. at Santiago Drive

Dues are Due

Each year we ask our members to remember that our club is funded basically by contributions but mainly by dues. We do not run a Hamfest nor do we continually ask for extra monies.

Our dues, \$20.00, are reasonable and our club provides many interesting and educational programs each month.

SJDXA

Many of you have heard about the SJDXA (South Jersey DX Association) but perhaps you are not aware of just what they do?

First of all, SJDXA was first organized in 1977. It is a small group of DXers and Contesters who do things to promote these aspects of our great hobby. Our club call is N2CW which is a memorial call for Gary Medford who was the first SJDXA Vice President. Gary was also the first Vice President of OBARC. He became SK in 1985 at the age of 43. SJDXA meets at the old Tuckerton Wireless (WSC) site in West Creek which is now the home of WYRS which is tended to by our very own Bob Wick, N2HM. We have a club station there and we occasionally use it in contests. Also, the site is shared with the W2GD CW contest team who set up an extraordinary antenna system for three 160 CW contests each year. Some SJDXA members are also on the W2GD CW team. In late February, SJDXA operates N2CW in the CQWW 160 meter Phone Contest. In 2004, 2005 and 2007 we won this contest (USA Multi-op). This has become our primary operating event every year. One other thing that we do is QSL card processing for major DXpeditions. In 2006 we handled QSL for the 3Y0X Peter I Island DXpedition which made some 87,000 QSO's. In 2007 we handled QSLs for the VU7RG/VU7MY Lakshadweep Islands DXpedition (110,000 QSO's) and in 2009 we handled QSLs for the K5D DXpedition to Desecheo Island (115,000 QSO's). In early 2012, we will be handling the upcoming HK0NA DXpedition to Malpelo Island.

Although specific details have not been made yet, SJDXA and OBARC will jointly operate from the site in the upcoming Jamboree On The Air (JOTA) for the Boy Scouts. The tentative date is the weekend of October 15-16. More info to follow.

If you have any interest in DXing and/or contesting you would be most welcome at SJDXA.

Our web page can be found at www.sjdxa.org

See ya' in the Pileups!
73!
Bob Schenck, N200

HCARC Official Badge Ordering

The club's official badge maker is the Capital Engraving Co. in Longview, WA. To order a badge, simply call Capital at 1-800-628-4985 after 1PM M-F. All that is required is to give your call and first name and your mail address. Use your credit card to pay. Cost is \$12.50 plus \$2 S&H. Al Ross WA7UQE will take care of you and create an official logo and club name on your personal badge.

Our VE Crew

Murray KD2IN, Bill AC2F, John K2JWH, Ed W1EAP, Larry K2QDY, Jamie W2QO, John KQ4WR, Stan KB2PD, Steve N2WLH, Kevin W2FA, Ed WA2NDA, Walter KC2LFD.

CLUB COMMITTEES

Refreshments: Carl WA2IQE, Carl W2PTZ

www.hcarc.us Webmaster: Steve N2WLH, Kevin W2FA

Publicity: Vacant

Programs: Dave WA2DJN

Sunshine: Dave WA2DJN

Event Food Committee: Open

Field Day: Larry K2QDY

VE Sessions: Bill AC2F, Larry K2QDY plus the 'crew'

Skyhook: Larry K2QDY

Funds Raising: Vacant

Membership: Murray KD2IN

HOLIDAY CITY AMATEUR RADIO CLUB

Toms River, New Jersey

Web Site www.hcarc.us

President	Steve Jackson	N2WLH	732 255-7916
Vice President	Vacant		
Secretary	Carl Lee	W2PTZ	732 237-2421
Treasurer	Larry Puccio	K2QDY	732-349-2950
Executive Board	Don Smith	W2III	732-505-4821
Executive Board	Dave Ottenberg	WA2DJN	732 505-5953
Executive Board	Bill Haldane	AC2F	732-240-7064
Executive Board	Carl Lee	W2PTZ	732-237-2421
W2HC Trustee	Don Smith	W2III	732-505-4821

Membership is open to all interested persons. Ham license is not required.

Dues are \$20.00 per year, payable Jan. 1st. Members joining during the year will have the dues prorated. Family membership \$30.00

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: Go to Mule Rd. and to the corner of Santiago Drive. Turn into Santiago Dr., then into the parking lot in front of the pool. Enter bldg. on right.

The SKYHOOK is published monthly.

Editor and Publisher:

Larry Puccio K2QDY phone: 732 349-2950 E-mail lpuccio1@comcast.net

Send all newsletter items to: Larry Puccio 22 Sabinas Street
Toms River, NJ 08757-6445

Executive Board Openings

The club is required to have four executive board members to assist the officers in decision making and directions for the club. At this time we need two more executive board members. The executive board meets only once per month, usually the Wednesday before the club meeting. If you would be interested in one of these positions please contact any one of the club officers and let them know your intentions.

Holiday Party

This year we are again planning a holiday party to be held December 1st at our regular monthly meeting. Grace Puccio has volunteered to organize the function. We are hoping to have volunteers to make Hor'd orves which can be hot or cold. For those that cannot make something we will be in need of soda and other paper goods.

Please contact Grace at (732) 349-2950 to advise her as to what you could bring.

Ham Cram Urb LeJeune W2DEC

OBARC is planning another ham cram in the very near future. A one day cram allows no time to reinforce studied material so we are trying a different format this time. The cram spans two consecutive Saturdays with 4 hour sessions on each day and a VE session at the end of the second day. The first session is an exposure to the things that are not intuitively obvious such as ham bands and basic electronics. At the end of the first session the candidates are given a copy of the question pool containing all question and only the correct answer. In the past there was confusion because a candidate would recognize a answer but couldn't remember if it was a correct or incorrect answer.

Studying the test material with only the correct answers is much sounder pedagogically than the method used previously. There will also be a discussion list where students can ask question during the week. Student questions about the test bank are the thrust of the second session.

The wonderful facilities of West Creek's WYRS, are the site of the former marine-coastal station WSC. WYRS is hosting both session of the cram providing the number of candidates is within reason. This gives candidates a chance to get some hands-on experience operating a world-class ham rig. A fee of about \$20 covers supplies, snacks and beverages at each session of the cram.

If you know anyone who might have an interest in the cram please provide me with their names and email addresses. If they do not have an email address give me the name of a contact person and their email or snail mail address. If you have previously given me the name of a candidate please resubmit since I lost the former list during an email system crash.

Please try and beat the bushes a bit, we need to do our bit to increase the ham population.

Urb LeJeune W2DEC
urb@w2dec.com or 609-296-5856

10 is Back Urb LeJeune W2DEC

"Back!" you might exclaim, "I didn't even know it was gone." There is an entire generation of hams who have never participated in the mystical powers of 10 meters when sun spots start multiplying like teenage hormones. When 10 is hot, as it is now, the entire world can be worked with low power and very modest antennas. Another news flash, technician class licensees have SSB privileges between 28.3 and 28.5 MHz which is where the DX hangs out.

A Little Background

High Frequency (HF) propagation is dramatically affected by solar activity. Nuclear explosions on the sun's surface produce sunspots which in turn improve the possibility of long-distance communications here on mother earth. As a somewhat simplified rule, the greater the number of sunspots the higher the frequency supporting DX contacts. Sunspot activity typically follows an eleven year cycle, which is measured from when sunspots begin to rise in one cycle compared to when they started to rise in the previous cycle. During sun spot minimums there is virtually no skip propagation on 10 meters. The last sunspot cycle lasted 14 years, which means that it has been 14 years since 10 meter DXing is as good as it is now. Working all continents on 10 meters is an almost daily possibility. The nature of a sunspot cycle witnesses a rapid rise, about 3 to 4 years from through to peak followed by a slow decline. Based upon historic observations we are in the phase of the sunspot cycle which supports 10 meter DX for a period of about 5 to 6 years. Time to get in on the fun!

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The Nature of Propagation

First, a little bit of theory. The Maximum Usable Frequency (MUF) is the highest frequency at which radio waves transmitted into the ionosphere are reflected back to earth at some distant point. This phenomenon is called skip. One very important characteristic of skip communications is reduced absorption of radio waves the closer the skip frequency to the MUF. The end result of reduced absorption on 10 meters is the presence of very strong signals from distant stations during band openings. At this time of year in this part of the sunspot cycle, 10 is frequently open from shortly after sunrise into the early evening hours. Low power and very simple antennas will produce exceptional results on 10 meters.

Some Examples

During a recent sunspot cycle I modified a SSB CB rig to operate on 10 meters. I mounted the rig in my car and installed an 8 foot whip on the rear of the car. The 20 watt rig produced QSOs with just under 100 countries over a two year period. It was a thrill working European stations with the distant operators sounding like they were sitting in the passenger seat. More recently, in a single day of operation during the "Jamboree on The Air" at the WYRS chateau the scouts worked stations all over Europe, a few in South America, several in Australia and Japan and the piece de resistance, a 35 minute QSO with a Jamboree participant on the Marshall Islands. This outstanding example was accomplished with a 100 watt rig.

Antennas

Antennas get shorter the higher the operational frequency. The formula for the length of a half-wave antenna in free space is $468 / \text{Frequency in Megahertz}$. A 10 meter dipole cut for 28.350 MHz (the practical center of phone activity on the 10 meter phone band) is theoretically 16 feet 6 inches long. The actual length will vary for your location because of many considerations including, height above ground, ground conductivity, close by objects and a host of other factors. A half-wave dipole is a length 16 feet 6 inches typically fed in the center with coax cable. A very simple antenna would use zip cord (the type connected to lamp to the power outlet) split the cord for the overall length and use the remainder as a feed line. This configuration may require an antenna tuner if your rig doesn't have one built in. A flat top dipole required two elevated supports. If you have a couple of trees you're in good shape. Surplus aluminum or fiberglass mast sections also make an

excellent support. These four foot mast section usually come in a package of twelve and are available at many hamfests and are also available on EBay. You can make the center insulator and the end insulators out of a short piece of PVC tubing. If you have a high enough support you can mount the dipole vertically.

I have a preference for an inverted V antenna. An inverted V requires only one support which is a major advantage. In addition, an inverted V is less directional than a dipole because it has a large vertical component resulting in a lower angle of radiation which is just what you need for working DX. Verticals, of any type work very well if your location is reasonable close to salt water. The angle between the two quarter wave sections should be between 90 and 120 degrees. The radiating portion of the antenna should be approximately 95 percent of a flat-top antenna, a length of about 15 feet 9 inches.

When cutting an antenna always leave some extra length for trimming. Ideally, tune your antenna with an analyzer. Quite a few club members (including me) have a MFJ Antenna Analyzer which can make short work on antenna tuning. Antenna construction and tweaking might be the topic of another article if there is enough interest.

Epilog

During the period of high sunspot activity 10 meters is a truly an exciting band. During the current cycle many hams, including technician class operators, will earn DXCC (100 countries confirmed) using low power and a simple antenna. A HF rig and an afternoon of antenna construction will put you on the path to fame and glory.

Urb LeJeune W2DEC

urb@w2dec.com

Internet resources

Dipole length calculator from the Kitchener-Waterloo ARC.

<http://www.kwarc.org/ant-calc.html>

Inverted Vee design considerations from K7MEM.

http://www.k7mem.150m.com/Electronic_Notebook/antennas/inverted_vee.html

10 Meter J-Pole from KC0TKS.

http://www.kc0tk5.org/index.php?option=com_content&task=view&id=103&Itemid=42

For Sale



Johnson Jr. tuner \$90



ICOM 746pro \$750



SWR/PWR meter \$100



Spkr \$30.00



Dummy Load \$50.00



ICOM Mike \$25

For Sale

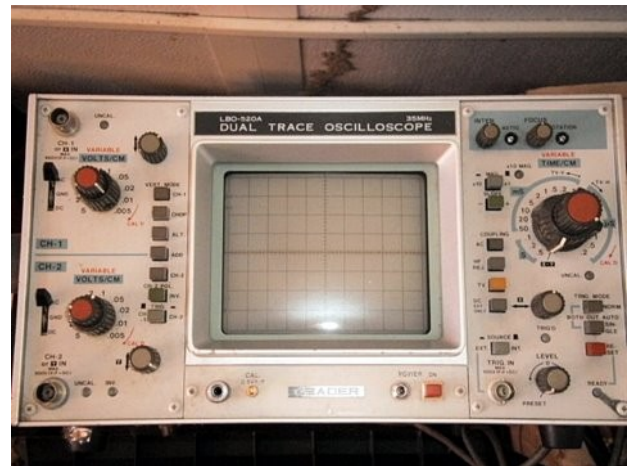
Ameritron amplifier \$400



Heil earphones \$40.00



MFJ interface switch \$25



Leader Scope \$100

I will take \$1400.00 for all the equipment
Contact Ed Picciuti W1EAP (732) 736-0955

How's DX October - November

Russ, WA2VQV worked:

On 30 Meters CW: OM5DP Slovakia, S550ACP Slovenia, T32C East Kiribati.

On 20 Meters CW FG8AR Guadeloupe, T32C East Kiribati, YT9M Serbia.

On 20 Meters SSB: HA9RT Hungary, S550ACP Slovenia, VU2PAI India.

On 20 Meters RTTY: 6V7X Senegal, CN3A Morocco, E74AA Bosnia, EA1AKS Spain, EF8M Canary Islands, GM7R Scotland, IK4MGP Italy, IT9BLB Sicily, LX7I Luxembourg, S53M Slovenia, SP9LJD Poland, TF3PPN Iceland, TG9ANF Guatemala, UW8I, UZ8M Ukraine, UA0AGI Asiatic Russia.

On 20 Meters PSK31: GM0SDV Scotland, VK4NG Australia.

On 17 Meters CW: 9A04JB Croatia, EW8O Belarus, T32C East Kiribati.

On 17 Meters SSB: EU1A Belarus.

On 17 Meters RTTY: HP1/IZ6BRN Panama.

On 15 Meters SSB: CM8AKD Cuba.

On 15 Meters PSK31: TG9AHM Guatemala

On 12 Meters CW: EU7A Belarus, F6HKA France, H77REX Nicaragua, HB9DCL Switzerland, HC1HC, HC2/KF6ZWD Ecuador, J39BS Grenada, KH2/N2NL Guam, LX1DA Luxembourg, OJ0X Market Reef, OM5DM Slovakia, OQ5A Belgium, OX3XR Greenland, RA4LW, RG4F European Russia, S57DX Slovenia, SG3U Sweden, SV2BOH Greece, T32C East Kiribati, UT5UN, UY2UA Ukraine, YU9DX Serbia.

On 12 Meters SSB: CM8AKD Cuba, CU7MD Azores, OE3DIA Austria, YR1C Romania, SV3AQR Greece, T32C East Kiribati, T18II Costa Rica, YS1RS El Salvador, ZD7FT St. Helena Island.

On 12 Meters RTTY: 6Y5/W1UE Jamaica, CT1ILT Portugal, D2QR Angola, EA7IPP Spain, IZ5UFR Italy, LU7HF Argentina, S51CK Slovenia, TF3PPN Iceland, XE1R Mexico.

On 10 Meters CW: EA4TX Spain, H77REX Nicaragua, HR2DMR Honduras, OX3XR Greenland, RW0LT Asiatic Russia, T32C East Kiribati, ZV1M Brazil.

On 10 Meters SSB: 6Y5/KJ4YDW Jamaica, SV2CXI Greece, VK3ZJ Australia.

On 10 Meters RTTY: CO4SM Cuba, T32C East Kiribati.

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