



FOUNDED 1947

WEST PARK RADIOPS



LOG



Web: <http://www.westparkradiops.org>

Email: w8vm-at-arrrl.net

SKCC #12111

Our Nets 147.36 Mondays 9 p.m. local

Feb. – Mar. 2015
VOL. L No. 2

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W8IDM and N8WB

DX REPORTER
N8WS

8TH AREA BUREAU LETTER MGRS.
N8WS (T) & (W), AF8C (V)

EDITOR, WEBMASTER, ARRL OO
AF8C

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N8CX



WEST PARK EVENTS *

*Subject to change

Feb. 6 - BUSINESS MEETING/FIXIT NIGHT*

Bring your questions or answers to the radio problems of the day/week/month.

Feb. 20 - PROGRAM NIGHT JT65-HF DEMONSTRATION*

There is new help for DX enthusiasts who wish they could make contacts on the air, on whatever band they choose, at whatever time they choose. We will have a theory and Show and Tell demonstration of JT65-HF with recorded signals and QSOs played back live at the meeting.

Mar. 6 - BUSINESS MEETING/FIXIT NIGHT*

Bring your questions or answers to the radio problems of the day/week/month.

Mar. 20 - PROGRAM NIGHT - DXpedition Video*

One of the many Dxpediton videos in our trove supplied by Dwaine, K8ME, will be the featured video screen presentation tonight.

IN THIS ISSUE

Page 2:
President's Thoughts

Club Nets
Public Service

FCC Actions
No Paper Licenses

Page 3:
ARRL DXCC Changes
Giant Capacitors

Page 4:
DX Upcoming
City Ham Filters

Page 5:
C4FM Digital
FUSION
Winding Wires

CONTESTS AND EVENTS

- de WA7BNM & ARRL

- Feb 7 10-10 Inter. Test, SSB
- Feb 14 CQ WW RTTY WPX
- Feb 21 ARRL Inter. DX CW
- Feb 28 NA QSO Party, RTTY
- Feb 28 CQ 160-Meter SSB
- Mar 7 ARRL Inter. DX SSB
- Mar 15 NA Sprint RTTY
- Mar 21 BARTG HF RTTY
- Mar 28 CQ WW WPX SSB

SOAPBOX

West Park Radiops technical interests include Go-Boxes, recent digital radio technologies, new antenna projects, contesting.

For Public Service, we have LCAC cleaning supplies deliveries on May 9.

Our Monday night nets have moved to the 147.36 repeater. Listen or check in. Join the fun.

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Prez Sez...

Welcome to 2015 and thanks for your confidence in me to lead you in 2015. We are looking forward in having a very good year with the West Park Radiops. It is not too soon to be thinking about Field day 2015. Now is the time to check some of your gear while everything else has slowed down and the weather is cold and wintry.

We will be having a board meeting and planning session and hope to come up with a calender full of fun meetings. If you have any suggestions for programs please come to our board meeting or let one of the board members know.

There will be a lot of good DX out there and you will want to take advantage of conditions while they last. It won't be long before the solar conditions go down hill so stay tuned....

See you at the next meeting
73 Bill N8WS

WEST PARK PUBLIC SERVICE...

For many years West Park Radiops volunteers have helped LCAC volunteers sort and deliver articles to the needy. As an ARRL Special Service Club, our members assist this activity every year. Our next opportunity will be on May 9, 2015. More members helping would be welcome.

RECENT NETS & TALK...

For the Club's nets, we have switched over to only operating on 2m on 147.36+. Many interesting discussions are being summarized in our almost weekly net reports. However, you must have a clear shot at the repeater's receiving antenna to use an HT. Please consider your 2m antenna systems and how they perform for the net.

2015 MEETING PROGRAMS...

The following topics are still on the list for programs: SKYPE with Bob Heil, shack videos, a possible fox hunt in nice weather. Now we have some new ideas in the making, such as comparing different Web browsers, Echolink and/or IRLP, or one of the old standbys such as Smith Chart or Transmission Line Analysis.

Of course new program suggestions are always welcome.

NO MORE PAPER LICENSE...

(from the ARRL Web pages January 29, 2015)

Starting February 17, the FCC no longer will routinely issue paper license documents to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS), although the FCC has continued to print and mail hard copy licenses.

Under the new procedures, licensees will access their current official authorization ("Active" status only) via the ULS License Manager. The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one. Licensees also will be able to print out an official authorization - as well as an unofficial "reference copy" - from the ULS License Manager.

The FCC said that applicants or licensees who include a valid e-mail address under "Applicant Information" in the ULS will receive an official electronic authorization via e-mail. New license applicants who do not provide a FCC Registration Number at the examination point will receive a printed license as well as an FRN and a temporary password to access the Commission Registration System (CORES).

The FCC said the watermark "Official Copy" will be printed on each page of an official authorization that a licensee prints out from the ULS, should the licensee need to submit a paper copy of the license to an auto title bureau, etc.

Once the final procedures go into effect designating electronic access as the default, licensees can change the ULS License Manager setting so that the Bureau will print and mail a license document. Licensees also may contact FCC Support via the web at, http://esupport.fcc.gov/index.htm?job=contact_fcc_support , or via telephone or mail to request paper licenses.

CHANGES TO DXCC PROGRAM...

(from ARRL Letter 01/21/2015)

The ARRL Board of Directors has tweaked the DX Century Club (DXCC) rules to clarify and expand their recognition of remotely controlled station technology. It also has added a rule that puts greater ethical responsibility on operators with respect to remotely controlled operation. In addition, the Board adopted changes to the ARRL VHF/UHF contest rules that are aimed at encouraging greater participation. The Board took the actions during its annual meeting January 16-17 in Windsor, Connecticut.

The DXCC Rules changes, which affect Section I, subsections 8 and 9, explain and extend how contacts with remotely controlled stations now may be applied toward the DXCC award. As ARRL CEO David Sumner, K1ZZ, explained, the changes are subtle but significant. The modified rules make clear that contacts with legally licensed, land-based, remotely controlled stations count for DXCC, but the control point — the operator's location — of a **remotely controlled station** no longer has to be land based; the operator can be literally **anywhere**.

"It has always been permitted for a QSO to count for both stations, if either station was operated remotely from a control point within the same DXCC entity," Sumner explained. "Now the location of the operator doesn't matter; the operator could be on the far side of the Moon if he or she could figure out how to remotely control a station on land back on Earth from there."

Transmitter location continues to define a station's location, and, for DXCC purposes, all transmitters and receivers must be located within a 500 meter diameter circle, excluding antennas.

Under the old rules, if either station was operated from a control point in another DXCC entity, the contact did not count for DXCC for either station. "This was unenforceable unless someone was transparent about what they were doing," Sumner said.

The Board further adopted a new rule, now Subsection 11 (subsequent rules will be renumbered accordingly), that acknowledges the reality of the technology enabling remote operation, and it puts greater responsibility on individuals when it comes to applying that technology ethically and responsibly.

"Issues concerning remotely controlled operating and DXCC are best dealt with by each individual carefully considering the ethical limits that he/she will accept for his/her DXCC and other operating awards," the new rule states. It adds, in part, "the owner of these achievements needs to be comfortable standing behind his/her award and numbers. Peer attention has always been a part of awards chasing, of course, but in these times with so many awards

and so many players, it is more important than even to 'play the game ethically.'"

Subsection 11 acknowledges that technological advances "add to the difficulty in defining rules for DXCC," but stresses that the intent of the rules is what's important. "It will continue to be up to the operator to decide what types of legal remote control operating he/she will use (if any) to contribute to an operating award," the new rule concludes.

The Board also adopted amendments to the General Rules for ARRL Contests Above 50 MHz to encourage greater participation and band utilization. The changes become effective with the 2015 June ARRL VHF Contest. The revisions stemmed from recommendations offered by the Board's Programs and Services Committee's ad hoc VHF and Above Revitalization subcommittee, composed of active VHF/UHF contesters, and they received strong support from the VHF/UHF community.

The subcommittee was charged with developing recommendations to increase the level and breadth of ARRL VHF and above contest participation and encourage operation on lesser-used bands. As a start to the process, the Board approved three changes that will permit assistance for all operator categories, with no effect on entry category; permit self-spotting for all operator categories, and allow single operators to transmit on more than one band at a time.

The changes will permit assistance in arranging contacts, but not in conducting contacts. They will, for example, allow a station to announce its location in a chat room, on a repeater, or even via e-mail.

GIANT SKY-GROUND CAPACITORS...

In college my mechanical design professor told the following story which I cannot verify, but it sounds plausible. Contractors were constructing the famous Haystack antenna for MIT. Near the construction site was a really long barbed wire fence with a farm gate made out of the wire with some wooden supports. The gate was closed with some kind of metallic latch. One day, during an approaching thunderstorm, with large gray clouds moving overhead, someone for some reason wanted to open the gate. Well, the long wire fence and gate were acting as a long "plate" as part of a giant capacitor formed by the fence and the storm cloud. As the cloud moved in the sky, there was a current in the wire below. The contractor realized before it was too late that he was about to become part of the current path should he try to break the circuit by opening the gate. So he carefully abandoned his actions.

Try reading about a similar charging apparatus called the Kelvin Water Dropper:

< http://en.wikipedia.org/wiki/Kelvin_water_dropper >

UPCOMING DX FOR YOU...

(Courtesy of the NG3K website)

StartDate, EndDate, Entity, Call

Jan10, Feb05, Senegal, 6W7SK
 Jan12, Feb03, Haiti, HH5
 Jan14, Mar05, Belize, V31YN
 Jan15, Feb10, Seychelles, S79AC
 Jan15, Feb15, Papua New Guinea, P29NK
 Jan20, Mar01, St Kitts & Nevis, V47JA
 Jan22, Feb09, East Kiribati, T32RL
 Jan22, Feb17, Guatemala, TG9
 Jan25, Feb14, Mauritius, 3B8HC
 Jan26, Feb06, Malawai, 7Q7VW
 Jan31, Feb28, Grenada, J38GA
 Feb01, Feb06, Azores, CT8
 Feb01, Feb14, Navassa I, K1N
 Feb01, Feb28, Solomon Is, H44MS
 Feb03, Feb08, Fiji, 3D2AD
 Feb04, Feb07, Mariana Is, KH0
 Feb02, Mar30, Guadeloupe, FG
 Feb04, Feb05, St Vincent, J8
 Feb05, Mar06, Ascension, ZD8D
 Feb05, Feb25, Laos, XW8BM
 Feb06, Feb09, Grenada, J3
 Feb06, Feb13, Guantanamo Bay, KG4
 Feb06, Feb06, Cayman Is, ZF2UM
 Feb07, Feb13, Chatham Is, ZL7
 Feb08, Feb11, Samoa, 5W7A
 Feb09, Feb20, Namibia, V5
 Feb11, Feb12, American Samoa, KH8
 Feb11, Feb16, Jersey, MJ5RIC
 Feb13, Feb14, Martinique, FM
 Feb14, Feb19, Aruba, P40JP
 Feb15, Feb24, French Polynesia, FO
 Feb16, Feb23, Cocos I, TI9
 Feb16, Feb23, Micronesia, V63MJ
 Feb16, Mar08, Kenya, 5Z4
 Feb17, Feb25, Honduras, HR5
 Feb18, Feb25, Svalbard, JW
 Feb18, Mar16, Sint Maarten, PJ7AA
 Feb20, Mar08, Juan Fernandez, 3Z0GC
 Feb21, Feb28, Malawi, 7Q7GIA
 Feb24, Mar04, Juan Fernandez, CE0Z
 Feb26, Mar10, St Pierre & Miquelon, FP
 Mar10, Mar25, Dem Rep Congo, 9Q0HQ
 Mar01, Mar31, Vietnam, XV7BM
 Mar01, Mar12, Bonaire, PJ4
 Mar02, Mar06, Micronesia, V63CO
 Mar05, May06, Surinam, PZ5LP
 Mar11, Mar25, Montserrat, VP2MQT
 Mar11, Apr01, Malawi, 7QAA
 Mar12, Mar25, Grenada, J34G
 Mar14, Mar20, Cayman Is, ZF2UL
 Mar19, Mar22, Aland Is, OH0
 Mar19, Mar23, Guam, KH2
 Mar19, Apr14, Reunion, FR
 Mar25, Apr04, Nauru, C21EU
 Mar27, Apr09, Micronesia, V6
 Apr01, Apr30, Spratly Is, DX0P
 Apr09, Apr15, Svalbard, JW
 Apr13, Apr19, Vanuatu, YJ0XG
 Apr13, Apr21, St Vincent, J88PI
 Apr25, May02, Cayman Is, ZF2CI
 May02, May11, Ogasawara, JD1YBT
 May09, May15, Cayman Is, ZF2ZL
 May10, May19, Mauritius, 3B8
 May19, May24, Rodrigues I, 3B9
 Jun28, Jul04, Market Reef, OJ0V
 Jul01, Jul14, Galapagos Is, HC8
 Jul07, Jul12, Cayman Is, ZF2LL
 Jul20, Jul29, St Pierre & Miquelon, FP
 Sep04, Sep19, Wake I, K6W
 Oct02, Oct12, Chesterfield Is, TX3X
 Oct17, Oct27, Fernando de Noronha, PY0F
 Nov10, Dec22, Heard I, VK0EK
 Dec01, Dec31, Bouvet, 3Y0F
 2016 Jan15-Feb16, South Georgia Is, VP8
 2016 Jan15-Feb15, Tonga, A35
 2016 Jan15-Feb16, South Sandwich Is, VP8
 2016 Jan16-Apr15, Bouvet, 3Y
 2016 Mar01-Mar31, Palestine, E44Y

**SIMPLE LOOKUP FOR AMATEURS
IN YOUR TOWN...**

(discovered on the Internet)

Without my going through any special Web pages to get there, I found another free Web site that permits looking up radio amateur QTH, callsign, and name information for any U.S. city. Recent testing also reveals that this Web site likely has filtered FCC public domain data, because Silent Key call signs that have not been removed from the FCC list still appear in the city lists. Example URLs are listed below for three towns. Note that the first two towns have URLs showing their two-field names using hyphens. The third example shows a city with only one field.

<http://www.city-data.com/aradio/lic-Olmsted-Falls-Ohio.html>

<http://www.city-data.com/aradio/lic-Bay-Village-Ohio.html>

<http://www.city-data.com/aradio/lic-Lakewood-Ohio.html>

C4FM DIGITAL...

(The following information was manually extracted from the online flyer that discusses a manufacturer's new hardware offering called FUSION. The remainder of this article is intended to merely outline some of the features of their offering without becoming an advertisement.)

The manufacturer claims that C4FM is a professional standard in devices using FDMA (Frequency Division Multiple Access). They have combined C4FM features into an interesting dual band FM repeater-oriented hardware offering for amateur radio communications.

The system uses 12.5 kHz bandwidth. With Automatic Mode Select (AMS) the hardware operates in any of the three modes with the receiver(s) automatically detecting the mode in use. Modes include digital voice and digital data simultaneously filling a channel, or a full 12.5 kHz devoted to a digital voice channel, or a full 12.5 kHz devoted to a digital data channel.

It's not too much of a stretch for most amateurs to understand the meaning of "digital voice". Our club already has had two different presentations on D-STAR technology (the offering of a different manufacturer). We know that D-STAR requires purchasing single-sourced hardware, a choice that could rankle some people. With FUSION there is still that same problem: you can presently only buy hardware from one manufacturer. Albeit both D-STAR and FUSION items are sold by well-known manufacturers, but the technologies are different and the digital modes are incompatible!

A feature of FUSION that resembles texting of images via cell phones is the ability to capture a photographic image on an HT's flash card and then transmit that image via the C4FM data channel to other amateurs using similar hardware receivers. A likely use of image transfer that is important for emergency communications would be use of weather-related images in SKYWARN.

Users of handheld radios with repeaters are familiar with the problem of the sound of FM voice in weak signal path applications. With FUSION radios, if the signal path only permits weak signal communications that are borderline noisy without full quieting, the hardware will transfer into normal analog FM without the ability to transfer data.

RIGHT HAND RULE OF MAGNETIC FIELDS...

Radio amateurs that are involved in homebrewing of electronics and/or radio kit construction most likely have at one time or another dealt with winding wires onto or around transformer cores.

One common example of construction of a transformer is for building a toroidal balun for use in a home-built antenna matching unit. A key requirement for winding the wires around the core is to understand the phasing of the electron currents in the metal wire versus the magnetic fields induced when the current flows.

"Conventional" treatment of current direction versus magnetic field "flow" is modeled with the "right-hand rule". For a simple model of the flows, use your right hand to grasp a pencil, four fingers wrapping around the pencil with the thumb pointing up, and with the writing tip end of the pencil also pointing up. Then assume that the electron current flow matches the direction that the thumb and pencil are pointing. Now looking down onto the pencil point, the convention is that the magnetic field is winding (or rotating) counter-clockwise around the pencil the same way those four fingers wrap around the pencil.

Using that model then allows you to visualize how the magnetic field around a wire will "flow" into the magnetic material of the transformer core.

If the core has more than one winding on it, and one of the windings carries current in the modeled direction, and the core becomes magnetized, then the other windings will also have the same magnetic field "around" their wires. Guess what? The process reverses. The other "secondary" wires then have currents induced in them also. (For now this discussion skips the complicated details about when the primary current varies, the magnetic fields vary. Then the varying magnetic field causes the tendency for the secondary windings to carry varying currents also.)

For now, it is important to understand that when a primary winding end is the positive voltage end, all the secondary wire ends that are positive at the same time are relative to whether the core windings have the same or different clockwise or counter-clockwise winding directions. On schematics those simultaneously positive ends are indicated by dot symbols. Marking the wire ends with tape or dots of glue to match the schematic dots versus winding direction keeps the phasings correct during the build.

WEST PARK RADIOPS

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MEETINGS: WEST PARK RADIOPS ARC meets the FIRST and THIRD Friday evenings each month at
Cuyahoga Community College West Campus in the Public Safety Training Center, 11000 Pleasant Valley Dr. at 8 PM sharp.
Dues \$12/yr. We welcome anyone interested in amateur radio to our meetings.
We operate Monday night nets on 147.36 MHz at 9:00 p.m. local time.

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