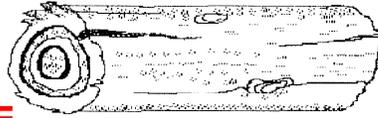




FOUNDED 1947

WEST PARK RADIOPS



LOG



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

Email: w8vm-<at>-arrl.net

SKCC #12111

Our Nets 147.36 Mondays 9 p.m. local

June – July
VOL. LIV

2019
No. 3

2019 CLUB OFFICERS

| | |
|---------------------------------------------------|--------|
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| Vice President Tom Wilkinson (216) 409-1886 | N8FDY |
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COMMITTEES

FIELD EVENTS COMMITTEE

Safety Officer
KE8NN

License Trustee
N8WB

ARRL VE'S
AF8C, N8CX, N8WB, W8MET,
N8OWS

ARTICLES THIS TIME
N8WS, N8CX

ANTENNA GURU
W8PN

CLUB AWARDS MGR
W8IDM

CONTESTS, SATELLITES
N8WS

DX REPORTER
N8WS

8TH AREA BUREAU LETTER
MGR. AF8C (8V)

EDITOR, WEBMASTER
AF8C

LABELS DATABASE
N8CX



WEST PARK EVENTS *

*Subject to change

Jun 7 - BUSINESS MEETING/FIXIT NIGHT*

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

Jun 21 - PROGRAM NIGHT - BIG RADIO ACTIVITY*

We should have a technical program or discuss Field Day with NOARS/LCARA or both.

Jul 5 - BUSINESS MEETING/FIXIT NIGHT*

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

Jul 19 - ANNUAL PICNIC*

The location for the picnic is on our Web page (listed above). This year we may have some concern about the weather.

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CONTESTS AND EVENTS

- de WA7BNM & ARRL

Jun 8 ALL SCOUTS NTH OLMSTED

Jun 15-16 Stew Perry Topband

Jun 22-23 ARRL Field Day

Jun 28 NCCC Sprint

Jul 6 FISTS Slow Speed Sprint

Jul 13-14 IARU HF World Champions

Jul 19 WPRC Picnic

Jul 24 SKCC Sprint

Aug 10 QRP In The Park

SOAPBOX

West Park Radiops technical interests include recent new amateur radio technologies, new antenna projects, contesting, and DX, to name a few.

For Public Service, we have **NORTH OLMSTED ALL SCOUTS** on **Saturday June 8.**

Our Monday night nets have moved to the 147.36+ (107.2 PL) repeater at 8 p.m. (new time). Listen or check in. Join the fun.

This document was created using LibreOffice 6.1.1.2 and a PDF creator. Use of Microsoft products was limited to as few applications as possible.

PREZ SEZ...

Please do not forget ALL Scouts Weekend coming soon to North Olmsted Park with the SKCC WEEKEND SPRINT. It will be a good time to get some straight key practice in and have fun at the same time. Of course bring your rain gear along just in case. Also the Kids Day bike event at the college will be coming soon. The contest season is winding down and it's time for some summer time outdoor operating to take place, so get all your gear together and be ready when the rain quits and go out and operate. Space X has launched 60, 500 lb satellites into a low earth orbit with nearly 12000 more to follow. These will be for high speed communications that will be some time in the future. The name for the system is Starlink and you can see the launch on YouTube.

Good DX and 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 in past years, our members assisted in this activity three times every year. **The LCAC (Lakewood Charitable Assistance Corp.) Spring cleaning supplies distribution occurred May 11 with N8CX, W8KH, K8VUS, and AF8C helping on behalf of West Park Radiops ARC.**

In general, radio net activity provides virtual public service practice and keeps our radios in tested operation and weeds out problems.

RECENT NETS & TALK...

Club nets have switched over to only using 147.36+ (107.2 PL) at **8 p.m.** local on Mondays. Many interesting discussions occur and often with no prior planning. 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.

NEW TECHNICIAN RULES COMING?...

(from the ARRL news on the Web – slightly condensed)

05/01/2019

(ARRL in 2018 asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, and 15 meters. The FCC invited comments on the proposal in April.) In reply comments to the FCC on its Petition for Rule Making (RM-11828), ARRL has stressed that updating HF privileges for the entry-level Technician license “is the sole subject and intent” of the petition. ARRL filed its reply comments on April 29, urging the FCC to disregard comments irrelevant to its petition and maintaining that Technician privileges must be relevant within the context of today’s technological environment.

“[T]he increasingly rapid pace of change in communications technologies, coupled with the national need for self-training in science, technology, engineering, and math” necessitate the rule changes requested, ARRL asserted. “ARRL made its request because of the gap between today’s digital technologies and the privileges accorded the current entry-level Technician license.” ARRL characterized its proposal to update the rules as “balanced and modest.” “If adopted, there would be no change to the operating privileges for all licensees classes other than those of the Technician class,” ARRL said.

ARRL said some opposition appears based on fears of increased interference potential due to additional digital operation by Technicians. “It is improbable that all, or even a majority, of Technician licensees suddenly would develop a passion for the same digital technology,” ARRL said. “Our hope and expectation is that many will engage with digital modes on the high-frequency spectrum at issue, but it is unrealistic to suggest that every Technician licensee blessed with new privileges would suddenly appear on the same band.”

The comments note the development of very efficient digital modes such as FT8, which occupies just 90 Hz of spectrum per signal. “The experience with FT8 clearly demonstrates the attraction of the digital modes and the spectrum efficiencies that can be achieved,” ARRL said. “This is why opening up limited digital opportunities to new radio amateurs so clearly would serve the broad public interest as well as the specific purposes of Amateur Radio in experimentation and innovation, as enumerated in the governing FCC rules.”

“Technology has changed dramatically in the Amateur Radio domain, and the ARRL believes the requested Technician license enhancement would foster the regulatory goals for the Amateur Service and continue to increase amateurs’ historical experimentation and service in a meaningful way,” the ARRL concluded.

QRP Fun-Day-In-The-Field Saturday, August 10th

Again this year, we will have our Annual 'QRP Fun-Day-In-The-Field'

This event has a great turnout not only from West Park Radiops, but many visitors from other clubs as well, namely, NOARS and LCARA. Both clubs have a great interest in outdoor activities.

So group, plan ahead for Saturday, August 10th

SOLAR CYCLE 25 FORECAST...

FROM: < <https://www.swpc.noaa.gov/news/solar-cycle-25-preliminary-forecast> >

Friday, April 05, 2019 19:45 UTC

The NOAA/NASA co-chaired international panel to forecast Solar Cycle 25 released a preliminary forecast for Solar Cycle 25 on April 5, 2019. The consensus: Cycle 25 will be similar in size to cycle 24. It is expected that sunspot maximum will occur no earlier than the year 2023 and no later than 2026 with a minimum peak sunspot number of 95 and a maximum of 130. In addition, the panel expects the end of Cycle 24 and start of Cycle 25 to occur no earlier than July, 2019, and no later than September, 2020. The panel hopes to release a final, detailed forecast for Cycle 25 by the end of 2019. Please read the official NOAA press release describing the international panel's forecast at

< <https://www.weather.gov/news/190504-sun-activity-in-solar-cycle> >

DIGITAL AMATEUR RADIO WORKSTATION...

FROM:

< <http://forums.qrz.com/index.php?threads/digital-amateur-radio-workstation-intro-video-draws.654476/> >

Digital Amateur Radio Workstation Intro Video
DRAWS per Discussion in 'Amateur Radio News'
started by KM9G, Apr 15, 2019.

“I made a short video introducing the DRAWS Raspberry Pi Hat and its features. After that I demonstrate how to download the Operating System image and burn it SD card using both the command line and GUI tools.”



What's a Raspberry PI? (from Wikipedia®)

The Raspberry Pi is a low-cost **credit-card sized single-board computer**. The Raspberry Pi was created in the UK by the Raspberry Pi Foundation. The Raspberry Pi Foundation's goal is to "advance the education of adults and children, particularly in the field of computers, computer science and related subjects." Many people have used the Raspberry Pi to make things like cameras, gaming machines, robots, web servers and media centers. There are a few different versions of the Raspberry Pi, each made for different uses. All of the current versions use a microSD card for the operating system and file storage. They are powered by a micro-USB port, have one HDMI port, one audio/video jack socket, and a 40-pin GPIO connector.

UPCOMING DX FOR YOU...*(Courtesy of the NG3K website)***Call , Start Date , End Date , DXCC Entity**

FR,2019 May15,2019 Jun05,Reunion
 9N7BN,2019 May22,2019 Jun04,Nepal
 TG9BBV,2019 May24,2019 Jun13,Guatemala
 MJ,2019 May25,2019 May31,Jersey
 4L9S,2019 May25,2019 Jun02,Georgia
 E31A,2019 May25,2019 Jun03,Eritrea
 LX,2019 May25,2019 Jun01,Luxembourg
 SV5,2019 May25,2019 Jun14,Dodecanese
 XV9DG,2019 Jun01,2019 Jun14,Vietnam
 SV9,2019 Jun01,2019 Jun15,Crete
 5W0H,2019 Jun01,2019 Jun10,Samoa
 XV9DXB,2019 Jun01,2019 Jun15,Vietnam
 S9A,2019 Jun06,2019 Jun18,Sao Tome & Principe
 9G5GS,2019 Jun07,2019 Jul02,Ghana
 PJ2,2019 Jun09,2019 Jun16,Curacao
 JW,2019 Jun12,2019 Jun16,Svalbard
 PJ8SK,2019 Jun13,2019 Jun15,Sint Maarten
 TO1T,2019 Jun14,2019 Jun25,Guadeloupe
 FS,2019 Jun15,2019 Jun18,St Martin
 6O1OO,2019 Jun15,2019 Jul31,Somalia
 V6K,2019 Jun17,2019 Jun24,Micronesia
 V63PSK,2019 Jun19,2019 Jun22,Micronesia
 ZF2CJ,2019 Jun23,2019 Jun25,Cayman Is
 PJ5,2019 Jun25,2019 Jul02,Saba & St Eustatius
 6Y3Y,2019 Jun26,2019 Jun28,Jamaica
 9H3IK,2019 Jul05,2019 Jul12,Malta
 H44MS,2019 Jul05,2019 Jul20,Solomon Is
 V47JA,2019 Jul20,2019 Aug11,St Kitts & Nevis
 8Q7SU,2019 Jul31,2019 Aug07,Maldives
 CY9C,2019 Jul31,2019 Aug07,St Paul Is
 OH0UDG,2019 Aug03,2019 Aug17,Aland Is
 5R8PX,2019 Aug03,2019 Aug17,Madagascar
 8Q7GB,2019 Aug06,2019 Aug18,Maldives
 9U3TMM,2019 Aug31,2019 Sep17,Burundi
 3D2VR,2019 Sep02,2019 Sep09,Fiji
 5W0VR,2019 Sep09,2019 Sep16,Samoa
 T8,2019 Sep14,2019 Sep25,Guadeloupe
 3DA0AO,2019 Sep15,2019 Sep30,eSwatini
 A35J4,2019 Sep16,2019 Sep21,Tonga
 SV9,2019 Sep20,2019 Oct03,Crete
 MD,2019 Sep21,2019 Sep27,Isle of Man
 3D2,2019 Sep23,2019 Sep27,Fiji
 A35JT,2019 Sep24,2019 Oct06,Tonga
 FP,2019 Sep24,2019 Oct08,St Pierre & Miquelon
 A82X,2019 Sep28,2019 Oct11,Liberia
 D44TWO,2019 Sep29,2019 Oct13,Cape Verde Is
 7P8AO,2019 Oct01,2019 Oct15,Lesotho
 ZK3A,2019 Oct02,2019 Oct11,Tokelau
 YJ0BCP,2019 Oct03,2019 Oct10, Vanuatu
 T30GC,2019 Oct07,2019 Oct23, West Kiribati
 VK9N,2019 Oct08,2019 Nov04,Norfolk Is
 VP6R,2019 Oct18,2019 Nov01,Pitcairn Is

VU7RI,2019 Oct19,2019 Nov03,Lakshadweep Is
 D68CCC,2019 Oct20,2019 Nov01,Comoros
 YJ0RRC,2019 Nov04,2019 Nov07, Vanuatu
 9X2AW,2019 Nov04,2019 Nov16,Rwanda
 TX7T,2019 Nov06,2019 Nov19,Marquesas
 YJ0RRC,2019 Nov08,2019 Nov13, Vanuatu
 VK9CZ,2019 Nov12,2019 Nov29,Cocos Keeling
 YJ0FWA,2019 Nov14,2019 Nov20, Vanuatu
 XV9D,2019 Nov17,2019 Nov30,Vietnam
 XT2AW,2019 Dec02,2019 Dec20,Burkina Faso
 FS,2019 Dec04,2019 Dec13,St Martin
 VP8,2020 Feb20,2020 Mar05,South Orkney Is
 9J2LA,2020 Mar01,2020 Mar15,Zambia
 CY0C,2020 Oct05,2020 Oct12,Sable Is

PASSIVE INTERMODULATION BY CONNECTORS...*(from various Internet sources)*

One of the most common coaxial connectors for amateur radio use is the PL259. However in some cases a Type N or SMA connector is used for sensitive (i.e. VHF or UHF) application. So what happens in certain applications of a nickel-plated brass connector in magnetic fields? Here's a clue: nickel is a ferromagnetic material, meaning similarly affected by magnetic effects like iron is.

One of the effects of magnetism on electronic connectors is Passive Intermodulation ("PIM"). Here are some good URLs on the effects of magnetism on RF connectors.

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

< <https://www.rfindustries.com/resources/white-papers/intermodulation-distortion-in-rf-connectors.php> >

< <https://www.gore.com/resources/technical-information-passive-intermodulation-pim-tech-note> >

This YouTube video demonstration used to have sound, but the picture can still tell you something

< http://www.youtube.com/watch?v=_mVPfwqEPaM >

A few years ago I was talking to a vendor at the Cleveland Hamfest who described how a repeater was seriously impacted by use of the wrong plating on connectors. The answer: use silver plated connectors. You aren't going to get solid silver ones! The underlying issue is dissimilar metals. Silver is one metal that has a very low "anodic index".

< https://en.wikipedia.org/wiki/Galvanic_corrosion >

FT4 IS COMING SOON...

(from ARRL Web pages – before recent revisions)

FT4 Digital Protocol Faster, More Contest- Friendly FT4 Digital Protocol coming soon.

A general release of the WSJT-X suite that includes FT4 is anticipated in July. The goal was a mode that could compete with RTTY contesting in terms of contact rates, while preserving many of the benefits of FT8. The WSJT-X Development Group — Joe Taylor, K1JT; Steve Franke, K9AN; and Bill Somerville, G4WJ, have begun testing a beta version of FT4.

According to the documentation FT4 is an experimental digital mode designed specifically for radio contesting that — like FT8 — uses fixed-length transmissions, structured messages with formats optimized for minimal contacts, and strong forward-error correction. Transmit-receive sequences are 6 seconds, making it 2.5 times faster than FT8 and about the same speed as conventional RTTY for radio contesting. FT4 can work with signals 10 dB weaker what would be required to decode RTTY while using much less bandwidth.

Transmissions last for 4.48 seconds, compared to 12.64 seconds for FT8. Modulation uses four-tone frequency-shift keying at approximately 23.4 baud, with tones separated by the baud rate. The occupied bandwidth is 90 Hz.

“A few parameters and operating behaviors of FT4 are still being tested and optimized,” the initial FT4 guide says. “It will be very useful to hold several more mock contest practice sessions, with a larger group of active participants.”

Even if these practice sessions reveal no serious bugs or inadequacies, the WSJT-X Development Group believes FT4 is still too new to be used in the ARRL VHF Contest (June 8 – 10) and ARRL Field Day (June 22 – 23). For that reason, release candidate WSJT-X 2.1.0-rc5 will “time out” on June 7.

< <http://www.arrl.org/news/faster-more-contest-friendly-ft4-digital-protocol-to-debut-in-a-week> >

< https://physics.princeton.edu/pulsar/k1jt/FT4_Protocol.pdf >

THE NEW RADIOS...

This year's Hamvention® attendees had the opportunity to see a large range of new HF transceivers offering up active live visualization of the activity on the bands with their built-in waterfall panadapter displays. Anyone with a fine but older transceiver might find their current equipment suddenly lacking in appeal and boring. Previously precursors like the IC-7300 and the Kenwood TS-990S resembled WebSDR in many ways.

(WebSDR is easily available on the Internet and if you haven't explored that you are missing some fun. <www.websdr.com>).

Below is a list of some of the newest transceivers found on the Internet and mentioned in emails received just prior to the Hamvention®. Now, if you are an HF DXer, it would seem that the visual displays allow peeking into a pileup to find an open space to call the DX. If you are a contester, finding a hole in the wall to begin calling CQ would be a lot faster than twiddling the VFO knob looking around. Also, if you have multiple simultaneous band displays on the same screen you can also see when other bands start to fade up or down while you are hanging out on one band. My question is how the receiver front ends compare on overload and third order intercepts, or the various filters available, in order to pick the best radio.

Elecraft K4

NSI Communications MB-1 MB1 HF 6m and 2m SDR transceiver 100W with ATU and 8GB memory

Xiegu G90 SDR HF Transceiver

TenTec The Omni 7 Plus

Icom IC-9700

Yaesu FTDX101D with 3D waterfall display

Kenwood TS-890S 100W HF/50MHz Transceiver
Kenwood TS-990S

WEST PARK RADIOPS

LOG

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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 7:30 PM sharp.
Dues \$15/yr. We welcome anyone interested in amateur radio to our meetings.
We operate Monday night nets on 147.36 MHz at 8:00 p.m. local time.

<http://www.westparkradiops.org>
<mailto:w8vm@arrl.net>

W8VM

