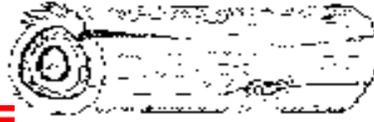




FOUNDED 1947

WEST PARK RADIOPS



LOG



Web: <http://www.westparkradiops.org>
Email: w8vm-<at>-arrrl.net

Aug. – Sept. 2010
VOL. XLV - No. 5

Our Nets 28.450/147.36 Mondays 9 p.m. local

2010 CLUB OFFICERS

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COMMITTEES

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W8IDM, W8PN

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WAS & VUCC CHECKERS
K8ME, N8CX

ARRL VE'S
AF8C, N8CX, K8TTL

ARTICLES THIS TIME
AB8HY

ANTENNAS
W8PN, W8IDM

CLUB AWARDS
W8IDM

CONTESTS, SATELLITES
W8IDM

DX
N8WS

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

EDITOR, WEBMASTER
AF8C

LABELS & ROSTERS
N8CX

WEST PARK EVENTS *

*Subject to Change

Aug. 6 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

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

Aug. 20 - Understanding Different Contest Rules

We will discuss "Understanding the Contest Rules of Different Contests" during this slack period before the contest activity starts to pick up. A little over a week later is the Ohio QSO Party already.

Sept. 3 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

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

Sept. 17 - PROGRAM - FLEXRADIO DEMONSTRATION!

Bring your aspirin because you might find out your radios that cost you all that money are now obsolete. Our special program will include a demonstration of FlexRadio with Dave Kennett, W8KFJ, as our guest speaker.

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| New FCC Rule ARRL Not Phishing | Technology Trivia - nte | Is the Internet Slowing Down ? | |

| <u>CONTESTS AND EVENTS</u> | |
|----------------------------|-------------------------|
| - de WA7BNM & ARRL | |
| Aug 7-8 | ARRL UHF CONTEST |
| Aug 12-13 | METEORSCATTER SPRINT 2M |
| Aug 21-22 | NA QSO SSB CONTEST |
| Aug 28-29 | OHIO QSO PARTY |
| Sep 4 | RUSSIAN RTTY WW CONTEST |
| Sep 11 | OSPOTA |
| Sep 11-13 | ARRL SEPT VHF TEST |
| Sep 19 | NA SPRINT SSB |
| Sep 26 | CLEVELAND HAMFEST |
| Sep 25-26 | CQ WW RTTY CONTEST |

SOAPBOX

We have made it this far through the summer.

For programs, we have a few new ideas, including a FLEX-RADIO demo.

But just around the corner on the calendar starts contest season. Have you worked out how you are going to improve your operating in contests this time around?

This document was created using Open Office 3.2.1, and a PDF creator. Usage of Microsoft products was limited to as little as possible.

Prez Sezs...

Hi Everyone,

The summer season is fast coming to a close. Field Day was a moderate success despite a skeletal crew. Don Pearson, Hal Braschwitz, Ken Harhay, and Kevin Brandstetter were all the operators at this years Field Day.

The station was manned for most of the time and the club managed to get a decent total score. The above club members deserve a special thanks for all of there efforts. Hopefully next year the attendance will be even greater improving our overall club score.

The 2 meter net has been running for over a month now on the NODXA repeater with moderate success. While there have been no new check-ins or inquiries about the club; over time, I believe running the net on 2m will increase the club exposure more so than having the net on 10m. A lot of people do scan the 2m frequencies, I know I do all the time, and will just sit and listen. If we have some interesting dialogue that is of interest to the general ham community people will join in on the conversation and give there opinions.

As always the club officers always welcome suggestions on how we can improve the club whether it be program suggestions, public service activities or just general opinion on something that we can change to make the club more interesting.

Enjoy the rest of the summer.

73 de,

Egon Fordos President

WEST PARK PUBLIC SERVICE...

The next LCAC event will probably be the food delivery on the Saturday before Thanksgiving, 2010, and again on the Saturday before Christmas.

On June 12 the West Park Radiops provided a working amateur radio station on 2 and 20/40 for the All Scouts Weekend activity in North Olmsted city park. A letter has been received from that organization thanking us for our help and inviting us back in 2011!

Al, N8CX, has for several years been on a volunteer committee at the Elyria, Ohio, Red Cross serving for possible assistance anytime there is a major emergency in the northern Ohio area. With the recent FCC decision to allow Red Cross volunteers to use amateur radio in major emergencies, the Elyria Red Cross already has an ace on standby.

RECENT NETS & TALK...

For the Club's nets, 28450 kHz +/- and 147.36, lots of discussions have been summarized in our almost weekly net reports.

2M NET...

We did it. We now have a regular net. Our grateful thanks to the Northern Ohio DX Association for permitting us to use their repeater for two one-hour sessions per month, 2nd and 4th Mondays, 147.36 MHz, up +600 kHz, PL 107.2 Hz.

NEW FCC RULE (Update)...

(from *The ARRL Letter*, July 22, 2010)

Public Service: FCC Modifies Rules to Allow Limited Employee Participation in Disaster and Emergency Drills

In a Report and Order (R&O) released Wednesday, July 14, the FCC amended Part 97.113 to allow amateurs to participate without an FCC waiver in government-sponsored disaster preparedness drills on behalf of their employers participating in the exercise. The FCC also has amended the rules to allow employees to participate in non-government drills and exercises up to one hour per week and up to two 72 hour periods during the year. The effective date of the R&O is to be determined and will be 30 days after its publication in the Federal Register. Read more on the ARRL Web site.

(and from *The ARRL Letter*, June 24, 2010)

E-MAILS ASKING FOR PERSONAL INFORMATION ARE NOT FROM ARRL

We have received several reports from ARRL members with arrl.net e-mail accounts who have recently been contacted via e-mail asking for personal information, such as user names and passwords. Please be assured that these e-mails are fraudulent attempts at phishing and did not originate from ARRL. "This is a very crude attempt at phishing, using an easily determined spoof of the originating/return address," said ARRL Chief Financial Officer Barry Shelley, N1VXY. "There is never a time when we would ask via mass e-mail for user names and passwords of arrl.net users. There is simply no need to ever do so." If you receive an e-mail asking for personal information and it looks like it originated from ARRL, please do not respond, just delete it.

CONGRATULATIONS TO HAL, W8PN...

Kudos go to Hal Braschwitz, W8PN, esteemed member of the Society of Amateur Radio Astronomers (SARA).

At SARA's recent annual meeting July 4 - 7 at the National Radio Astronomy Observatory at Green Bank, West Virginia, Hal was honored with a Lifetime Achievement Award certificate in recognition for his outstanding service to SARA. Hal has been a member since 1984, and during the year 1991 through 2007 Hal has served as their treasurer, or secretary and later as a director. SARA has one meeting which is a conference, at the fabulous site of NRAO.

For the award to Hal, ex-presidential board adviser Tom Crowley, KT4XN, praised Hal for his many contributions. Besides helping elmer Tom who needed to pass the exam to become an amateur radio operator for the second time, Hal also "invented" an interesting form of radio telescope 408 MHz Quagi antenna for SARA. The radio telescope receiver was packaged inside a PVC pipe, which was then buried in order to have the receiver run at constant temperature (an idea by SARA member Chuck Forster).

The SARA website is < <http://www.radio-astronomy.org/> > and the NRAO website is < <http://www.nrao.edu/> >.

CONUNDRUM...

(using some material borrowed from Internet sources)

So the problem is that the technology-based world, which recently has actually become THE world for the most part, has become acutely dependent on high technology items, often electronics, for our entertainment, business, and generally our standard of living on and off work.

Think about those common components of electronics, resistors, capacitors and inductors. One form of commonly used electrolytic capacitor is the tantalum capacitor. Tantalum capacitors, used in all sophisticated and simple modern electronics - cell phones, large screen TVs, laptops - made from coltan from the Democratic Republic of the Congo. Coltan?

Once known as Zaire, the Democratic Republic of the Congo is big - four times the size of Texas with a population twice as large as California's. After fifty years of dictatorships and rebel uprisings, events in the Democratic Republic of the Congo now rarely make the headline news. While most of us may not be aware of the fighting in the Congo, our need for one of its natural resources makes it a prize that drives much of the violence. Coltan, short for Columbite-tantalite, is a black tar-like mineral that is a vital component in cell-phones, laptop computers, and pagers. And eighty percent of the world's coltan is found in the eastern areas of the Congo where rebels backed by neighboring Rwanda and Uganda fight the government forces

there, putting both the fates of gorillas and coltan in the hands of armed foot soldiers. [The "columbite" portion of the mineral's name is from the element niobium (formerly columbium).]

Indium, used in OLED flat-panel displays such as TVs, a fairly rare element that is rumored to be mined out in twenty years or so. Whether that is true or not is being debated in industry circles.

Noble gases, such as helium, xenon, and neon are used in plasma display TVs. These gases are fairly rare and the high demand for helium has started to become a supply and demand problem while the gas is refined from sources.

TECHNOLOGY TRIVIA...

A liquid crystal is a particular type of substance that is "halfway" between a liquid and a crystal. In 1888, Austrian botanical physiologist Friedrich Reinitzer was working with a form of cholesterol called a derivative, in this case cholesteryl benzoate, and noticed that the substance seemed to have two melting temperatures. When heated, the substance would melt into a cloudy liquid near 300 degrees F and into a clear liquid at about 350 degrees F. Various other researchers occasionally tinkered with substances having similar effects, but not much changed from almost 80 years. Then in 1969 some new work by Hans Kelker was published, making the phrase "liquid crystal" permanent. And in 1991 Pierre-Gilles de Gennes received a Nobel prize in physics for his work in polymers and liquid crystal materials.

Without getting overly technical here, the cloudy form of melted cholesterol benzoate was cloudy because of some small crystalline structures in the liquid. In liquid crystals of some types, the floating structures resemble hot-dog shaped units that can line up under certain influences and become opaque. One of the ways to create the influence that does that is to use a type of liquid crystal that is sensitive to electric fields, so that when the internal structures line up with the field, the material acts as a polarized light filter.

By the way, soap and the tobacco mosaic virus are liquid crystals!

For Liquid Crystal Displays, Sardari Arora and Alfred Saupe at Ohio's Kent State University, hold a fundamental patent on LCD technology. Here special liquid crystals are used with thin electrodes between thin plates to enable turning on or off the polarization filter effect, thus making the display appear darkened or lighter in "pixel" areas.

NUMBERS STATIONS...

On July 17, 2010, National Public Radio ran a story on unlicensed “Numbers stations.” Numbers stations are unlicensed, which makes it hard to figure out where they’re located. But they appear on certain frequencies on the shortwave bands. You can hear mechanical-sounding voices counting off endless strings of numbers — in English, Czech, Russian and German — and also some Morse code.

The stations have been thought to be part of international espionage operations. No government has ever officially admitted to using numbers stations. No one’s really sure when the stations began broadcasting, though they’re most likely a Cold War-era invention. Because a message can be broadcast over areas larger than whole countries, even over continents.

On the Internet, information packets used to carry email, Web site views, or now even television, are all packets that can leave trails. But over shortwave nothing “sticks” unless it is heard and copied down.

Thousands of enthusiasts all over the world track numbers station broadcasts, but no one’s been able to crack them yet, because the transmissions use an unbreakable encryption system called a one-time pad: the encryption key is completely random and changes with every message.

There are plenty of websites that list the stations that may be on the air as you read this. You can have fun tuning around looking for them.

[I don’t know if the pirate radio magazines would have frequencies for numbers stations. – ed. AF8C].

GO ARMCHAIR HUNTING FOR “NEW” ASTEROID CRATERS?...

Here’s another hobby to try, especially for anyone with a good fast computer and available time. Go on Google Earth[™] and learn how to zoom in on areas of land anywhere on earth. Next, learn how to identify from known circular land formations that have resulted from known collisions of the earth and asteroids, the shapes of asteroid craters that have become nearly invisible to due many thousands or millions of years of erosion by weather, wind, and water.

Finally, newly armed with the skill of identifying almost circular “ring” patterns in land, sand, or forests, you can start “zooming” around open land anywhere, looking for the telltale markings that may belie an

ancient crater just sitting there. Recently a pristine crater in dry Egyptian desert was found that way.

INTERNET SLOWING DOWN?...

A recent West Park newsletter pointed out the explosive growth of smart-phone technology is an indicator of another paradigm shift in information technology tools and techniques. Such shifts will affect how our computers will evolve over time.

In the last two months the technology markets have shown how millions of smart-phones can be sold in mere days or weeks (Apple’s iPhone 4 and Motorola’s Droid X, for examples).

This article this time however is making another point. The sudden shift toward hand-held palm-sized “smartphones” is now straining all the available bandwidth of telecommunications companies as mobile technophiles start to use smart-phones to browse the web or watch TV “over the telephone” !! So if you are on the Web and think your computer is acting slow, calm down and go get a cup of coffee. It just might be that 14963 Cleveland Browns fans are watching the game on their “telephone” and tying up cell-towers and Internet routers all over America!

SUNSPOT HYPE...

Memory seems short these days. I’m talking about the number of sunspots that we are having and all the hype about their size, etc. Remember that typical peak sunspot cycle years will show a dozen or so groups of sunspots with large and small counts of individual spots in each group.

In the earlier years before NASA and other agencies launched highly technical solar telescopes, all we had was a few astronomical telescopes to view the sun in white light or in a few spectral colors. Now we know more. For example, “coronal holes” on the sun can now be photographed and we see in advance that particle radiation blasting toward the earth will affect our HF propagation and cause visible and VHF auroras. The visible ones are pretty to look at. The auroral effects on radio reception can be interesting unless you are looking for rare stations. In the latter case the effects on propagation might allow you to get your 50th state on VHF or UHF. Or you may find it impossible to work the one and only DX entity you still need. A good Web site for up-to-date solar activity and other information is < <http://www.spaceweather.com> > .

COMPUTER VIRUSES AND MALWARE...

(paranoia alert)

Just like viruses that infect living matter, computer viruses need a host. The host may be an Internet file, or a file off a thumbdrive or floppy disk or CD. When the file enters your computer any kind of bad thing might happen to your system.

Malware includes computer viruses, computer worms, Trojan horses, most rootkits, spyware, dishonest adware and other malicious and unwanted software, including true viruses. Each of these types of “bad programs” (a. k. a. malware) are different in form and function from the others.

There are likely tens of millions of viruses and other malware. Just like the human cold virus that can mutate, a certain type of virus (polymorphic virus) can change the way it works automatically, on its own, based on the original code created by the human author of the virus. Therefore not all viruses were directly written by people. But at least all computer viruses and other forms of malware started out being written by hot-shot software programmers. I think we can dare to say that with the exception of a few “kids” creating malware as experiments or as practical jokes, the vast majority of malware was created for the purpose of creating havoc with computers they infect, whether the havoc is intended to be “mean”, or to spy on computers in order to make money for some agenda or “employer”. Other than the profit or political motives, one has to wonder why “nice” people would bother to write malware that could potentially take down millions of computers worldwide.

If you are running, for example, AVG antivirus software, it's a good idea to update the “virus signatures” every few HOURS of the time the computer is up and running, and not just wait for AVG to do it automatically, because with millions of viruses out there, just morphing on their own, so they can each attempt to “take over the world”. There are only 86400 seconds in a day, a number which is a lot smaller than a plausible guess at the number of pieces of software that are out there constantly evolving to do no good.

Users running a Microsoft operating system can access Microsoft's website to run a free scan, provided they have their 20-digit registration number.

“Zombie computers” are computers that have malware inside, and the malware is itself going out onto the Internet trying to infect other computers. The malware may have the intent of also attacking government or other types of computers with malicious intents. Networks of computers that do this are called “botnets”.

Your computer could be a host for malware and botnets or viruses. Obviously you should be running any one of several special applications that check for whether your computer is compromised.

An increasing amount of malicious code is infecting computers via vulnerabilities in perfectly legitimate program code from reputable manufacturers. While the original code is NOT malware, the problem is that the authors of the code are never sure they have written code that can reject all kinds of crazy attempts to break into it by hackers. For example where you use a browser to type in, for example, “corn muffins” into the box supplied for searching on the Internet, the hacker will insert via the paste function hundreds of bytes of data, in an attempt to “override the length of a buffer” in order to overwrite original working browser code with bytes intended to send your computer off into never-never land, or infect it with botnet code.

Reinstalling the operating system is another approach to virus removal. It involves either reformatting the computer's hard drive and installing the OS and all programs from original media, or restoring the entire partition with a clean backup image. User data can be restored by booting from a Live CD, or putting the hard drive into another computer and booting from its operating system with great care not to infect the second computer by executing any infected programs on the original drive; and once the system has been restored precautions must be taken to avoid reinfection from a restored executable file. One of the well-known programs used to create a backup image (after you clean the computer) is Ghost[™]. That's why “ghosting” a hard drive is a common expression.

WEST PARK RADIOPS

LOG

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A NON-PROFIT SCIENTIFIC AND EDUCATIONAL CORPORATION, FAIRVIEW PARK, OHIO.
MEETINGS: WEST PARK RADIOPS ARC meets the FIRST and THIRD Friday evenings each month at
Ascension Lutheran Church, 28081 Lorain Road, North Olmsted, OH (across from North Olmsted Park) at 8 PM sharp.
Dues \$12/yr. We welcome anyone interested in amateur radio to our meetings.
We operate Monday night nets on 28450 kHz and 147.36 MHz Mondays at 9:00 p.m. local time.

<http://www.westparkradiops.org>
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W8VM

