



FOUNDED 1947

WEST PARK RADIOPS



LOG



Web: <http://members.core.com/~af8c/westpark/>
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Dec. 2004 – Jan. 2005
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2004 CLUB OFFICERS

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COMMITTEES

FIELD EVENTS
W8IDM, K8AB, N8WS

PUBLIC SERVICE
KA8YQL

WAS & VUCC CHECKERS
K8ME, N8CX

ARRL VE'S
AF8C, N8CX, K8TTL

ARTICLES
K8AB, W8IDM

ANTENNAS
W8PN, W8IDM, W8IMF

CLUB AWARDS
W8IDM

CONTESTS
W8IDM

DX
W8IMF

EDITOR, WEBMASTER
AF8C

LABELS & ROSTER
N8CX

WEST PARK EVENTS *

*Subject to Change

Dec. 3 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

Meet in the usual place. Bring your questions or answers to the radio problems of the day/week/month. NOTICE: At the November meetings the club passed a motion (white ballot) to re-elect the first term officers for a second term per the club constitution's limits of two-year terms for leading officers. Any protests must be filed at the December 3 meeting by bringing a sealed write-in ballot to the meeting.

Dec. 17 - Annual Cookies and Cheer

Plan now for your bright ties, sweaters, and yummy cookies and goodies.

Jan. 7 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

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

Jan. 21 - Program Night – Field Day Planning

Field Day is only so many shopping days away. Ask not what Field Day can do for you, but what you can do for Field Day. A penny saved is a penny earned for building our new Field Day technology goodies. See a review of new antennas .

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CONTESTS AND EVENTS

De WA7BNM Contest List

Dec-03	ARRL 160-M Contest
Dec-11	ARRL 10-M Contest
Jan-01	ARRL Straight Key Night
Jan-08	ARRL RTTY Roundup
Jan-08	North Am. QSO Party, CW
Jan-09	Kid's Day Contest
Jan-15	MI QRP Jan. CW Contest
Jan-22	BARTG RTTY Sprint
Jan-22	ARRL Jan. VHF Sweeps
Jan-29	CQ 160-M Contest, CW

SOAPBOX

According to recent statistics, the average age of U.S. radio amateurs is climbing almost one year every year. More than a ho-hum statistic, this rate of climb means that our hobby is growing old almost as fast as we are. So we should continue to search for ways to introduce our hobby to the young folks and get them interested and involved. This is something we should talk up at all our meetings.

THE PRESIDENTS FORUM

My Last Will and Testament: To my dear colleagues I leave West Park Radiops in good condition, ready for a great future with fresh leadership. To the next Board of Directors I leave the Herculean job of motivating more members to engage in club operating, social, and public service events, magnifying our presence to the media and public. I also challenge our newer and younger members to come forward to guide our club to greater distinction in the future. To Glenn AF8C, our Secretary, Newsletter Editor, and Club Web Page Host, a heartfelt Thank You for the many years performing these demanding jobs. To Treasurer K8VUS, Kevin, thanks for a job well done managing our fiscal responsibilities. Thanks also to Egon (AB8HY), Vice President and snack chairman. A big Thank You to those members who gave of their time and talents presenting programs or participating in club activities.

Let's join together next year to keep West Park Radiop's one of North East Ohio's oldest and finest Amateur Radio Clubs.

Word's of Wisdom: (Attributed to Dalai Lama.)

"Share your knowledge, it's a way to immortality."

"Judge your success by what you had to give up to achieve it."

73 - Respectfully Dick K8AB

GREAT LAKES DIVISION SPEAK OUT, Part Two...

(CLEVELAND HAMFEST ARRL FORUM)

Sunday September 26—Berea, Ohio

Jim Weaver, K8JE, and Joe Phillips, K8QOE, spoke on several topics at the ARRL Forum. We reviewed their discussions of BPL here in our last edition of the *LOG*. In other topics, our Ohio Section Manager, Joe Phillips, K8QOE, discussed the status of the old Voice of America site in southern Ohio. This site has been turned into a broadcast arts radio museum. The Westchester Township Parks Department claims some of the territory. A veteran's group is involved with use of the area. More relevant to us, the radio museum is also now home of the Eighth Area QSL Bureau.

The topic of the proposed new bandwidth regulation changes was also discussed. What's that all about? Well, technology is moving on and there are new modulation modes coming over the horizon. One example is digital modulation methods to "send" voice signals that could be received as static free. These techniques are already in experimental phases. So the "old" statements in Part 97 need to evolve with the times.

PUBLIC SERVICE...

Saturday, October 16, was Jamboree on the Air. West Park Radiops supported the Bay Village, Ohio, scout troops again this year at the Firelands Campground. We had a location inside the mess hall this year so that we weren't out in the cold (it was chilly!) with our radios, a situation that would not have been conducive toward impressing the young scouts that amateur radio is fun. We had two stations set up, with PSK31 demonstrated by K8AB and general HF QSOs operated by N8CX. Bill, N8WS, and Judi, WD8ASV, were in attendance for moral support. Both Dick and Al provided their equipment and portable antennas. Al's antenna structure is of a new design that is being checked out for Field Day 2005 and other operating events. Unfortunately the propagation was very poor that day.

Saturday, October 2, N8CX and AF8C supported the NASA Glenn Amateur Radio club at the Lorain County Fairgrounds for another scouting event for the Lorain, Medina county scouts. Around 4500 scouts were camped out that weekend and many saw our station equipments.

Saturday, November 20 was a nice day for a change, as N8CX, W8IDM, AF8C and Linda (KA8YQL's XYL) supported Lakewood Community Assistance Corp. by bagging and driving around Thanksgiving food basket for the needy. We will do this again around December 18.

RECENT DISCUSSIONS ON THE 10M NET...

The Club's 10 Meter Net topics have included skunks, taxidermy, horn/antler/tusk differences, Hummers, microphone equalization, RFI cures, tomatoes, sunshine reports, latest sunrise this year, ants, the World Series, lady bugs, aurora (visible on November 15), leaf raking, Windows XP and SP2, hearing aids, Juno email, DX, contest scores, Florida hurricane-caused tower damage, Rosebud Tea, email spam, and probably a whole list of things I forgot to write down. The above list is an indication of how much fun we have on the Monday night 10 meter nets on 28450 KHz at 10 p.m. local.

VACANT TV CHANNELS FOR UNLICENSED BROADBAND...

(from TMRA *Amateur Radio Beacon*, 8/04, ed. KBIUP)

Per FCC NPRM 04-113, the FCC proposes to classify broadband devices that can use unused TV channels in the UHF bands. Devices would include "personal/portable" devices such as Wi-Fi-like cards in laptop computers or home networks, and higher power "fixed/access" wireless networking. Devices would have to be guaranteed not to interfere with in-use TV channels.

CAUTION: BPL OPINION...

It is my educated opinion (and NOT the opinion of West Park Radiops) that all the fuss about BPL and the possibility of it causing RFI to our amateur bands, will turn out to be like the proverbial tempest in a teapot. The problem has several aspects that to me imply it is a doomed technology. (A) attempting to transmit high speed data down single wire transmission lines (ground is a long way down), (B) the cost of supporting the rural folks with really long line lengths, (C) rural folks aren't necessarily dependent on the Internet, (D) I have it on good authority that rural "ISPs" have less expertise with customer support, servers, etc. – de AF8C

DIGITAL VOICE ON THE BANDS...

(from *The ARRL Letter*, 10/29/04)

[The paradigm is shifting. Watch out for speed bumps in the technology – de AF8C]

A digital broadcast signal on 3995 kHz has prompted some members of the amateur community to contact ARRL to say it's QRMing the top 10 kHz of 75 meters and asking what can be done about it. Not much, as it turns out. The signal, from Deutsche Welle in Germany, is legal since radio amateurs share that part of the band with broadcasters in Region 1 (which includes Europe). [Deutsche Welle is pronounced "DOIT-shu VELL-uh" as in "oi" in oil and "shu" as shut.] The international Radio Regulations do leave the door open to request that the station reduce power or change its antenna pattern, however. "Digital shortwave will revolutionize cross-border broadcasts and will initiate a worldwide renaissance of radio," Deutsche Welle Director General Erik Bettermann said this month during a panel discussion at Munich Media Days. Deutsche Welle plans to gradually shut down its analog shortwave transmissions, he said, as DRM receivers became more available globally--something not anticipated until late 2005.

Although the station has been broadcasting for some time on the same frequency in conventional AM, it has attracted more notice from hams since July, when it began testing using digital format--also referred to as "DRM," (Digital Radio Mondiale, French for "Digital Radio Worldwide"). Of course, the vagaries of propagation will be a big factor as to the amount of interference US hams experience at any given time.

Radio amateurs meanwhile have been experimenting with programs such as HamDream

< <http://www.qslnet.de/member/hb9tlk/> >,

a DRM program adapted for Amateur Radio use by HB9TLK. It enables digital voice and data transmissions using bandwidths on the order of 2.3 to 2.5 kHz

HUNDREDTH ANNIVERSARY OF ELECTRONICS...

(from the ARRL Web pages)

(Nov 18, 2004) -- The AVS Science & Technology Society this week is marking the 100th anniversary of electronics. The Society is holding its 51st International Symposium and exhibition through November 19 in Anaheim, California. More than 1300 papers in all areas of vacuum-related technology are being presented. The Society considers November 16, 1904, the start of the electronic age. On that date, British scientist John Ambrose Fleming applied for a British patent for his invention of the first practical electronic device--the thermionic diode, also known as the "Fleming valve." Fleming discovered that his simple vacuum tube, containing only two electrodes--a cathode and a plate--could convert alternating current to direct current. His later research with the thermionic valve was important to the development of radio. A special AVS symposium session November 16 celebrated Fleming's seminal invention and the subsequent evolution of electronic components based on vacuum devices.—submitted by William Ricker, N1VUX

ILLEGAL "AMATEUR" TRANSCEIVERS...

(from the ARRL Web pages)

Nov 22, 2004--The FCC has proposed fining Pilot Travel Centers LLC \$125,000 for allegedly marketing unauthorized RF devices--specifically, transceivers labeled as Amateur Radio Service (ARS) equipment but intended for use on both Citizens Band and amateur frequencies. CB transmitters must receive FCC certification--formally called "type acceptance." Amateur Radio equipment does not require FCC certification. The Notice of Apparent Liability (NAL) released November 22 asserts that Pilot continued to market CB transceivers labeled as amateur gear despite multiple citations and warnings.

The Commission alleges that from October 2002 until last July, Pilot, in 47 separate instances, offered for sale various models of non-certificated Galaxy CB transceivers labeled as "amateur radios" that easily could be modified for CB operation. The FCC says in some instances, Pilot employees referred to the units as "CBs."

Following up on complaints received between 2001 and 2003, FCC Enforcement Bureau field agents visited 11 Pilot retail outlets in Texas, Oregon, California and Nevada. "At these locations, the stores displayed and offered for sale various models of non-certified CB transceivers marketed as ARS transmitters," the NAL said. Citing its concern with "the pattern of apparent violations" in the Pilot case, the FCC actually adjusted the base forfeiture amount upward from \$91,000 to \$125,000. Pilot has 30 days to respond by paying or appealing the fine.

SO WE ALL KNOW THEIR OLD WAYS WORK...

(by Gene, K1ZF, via eHam.net from *NODX RAG*, 11/04, edited by David Autry, WD8IOU)

"Hello CQ calling CQ, CQ forty..." It was a weekday afternoon and why the radio was tuned to 7.260 I don't know, but it was and here was this guy calling "CQ forty", something you don't hear as often as you used to. Hitting CTRL-S to save the document I was working on, I rolled the swivel chair over to the operating desk. " W8*** this is K1ZF," I said into the mic. He came back and we started to have what was beginning to be a very enjoyable QSO. We had several things in common besides ham radio and as happens so often in this hobby, it looked like I was going to have another friend.

We chatted for a while, and while he was talking, it happened: There was an audible "thunk", and the hundred KW AM signal of Radio Liberia slammed into my antenna. Bummer. But all was not lost. Even though they were some 15 KC wide, by massaging a few knobs I could still copy the W8. My radio is a vintage Icom IC 765, with most, although not all the mods and, of course, no DSP. On went the attenuation switch, to 20 DB. Off went the AGC. Down went the RF gain. -- On with the notch filter. The last thing was to switch the mode to wide CW. -- Was it armchair copy? Nope. I tweaked the pass band tuning and gave the RIT a little bump up. I could hear the guy just fine under the rhetoric spouting from Radio Lib. He turned it back to me and I replied "Up ten! Up ten!" I looked up and down the band but alas! He was nowhere to be found, obviously not hearing me. As a sometimes contest-hired -gun, I've been lucky in that I get to operate a lot of different radios. Some are easier than others to use, but all of the modern sets do a pretty good job of pulling stuff out of the mud. With few exceptions, so do most of the older rigs, too. It's just that the skill level needed to do the same things is a bit higher. If I were using the latest bang box in the example above, I'd have DSP to help. That's cool. But with the older rigs, like mine, it's not as simple as pushing a button and, like a magic wand; all the bad stuff goes away. There is a learning curve here. It can be a lot of fun to pull someone out of the mud when a summer thunderstorm is between you and the guy in the middle of the country. Even if you're not in QSO with him, there's a sense of pride in being able to dig through all the hash. One of the most common mistakes in operating any receiver is allowing it to become overloaded. That's why we have AGC. But like most things automatic, AGC is a compromise. Most radios around today give you the option of Fast, Slow or No AGC. On phone, when it starts to get rough, I almost always set the AGC to Fast. That does tend to make the audio choppy to be sure, but you don't lose nearly as much as with AGC set too slow. And when it really goes down the drain, like in the extreme example

above, I turn it off altogether, and then I feather the signal using the RF gain. Again, not too smoothly, but you are able to copy. Using the wide CW filter works quite well. Narrow filters, 500Hz or less, tighten the bandwidth up a little too much. Then, the law of diminishing returns comes into play. In the old, old days, before receivers had product detectors, you had to play with the BFO to clarify a SSB signal. That took a bit of skill. Today, the radio does it for us. That's not a bad thing, but it's a lot more fun to be able to do it yourself when things get tough. With some new radios getting up there in cost, close to what we paid for a new car not all that long ago, maybe it's time to take a closer look at why old ways work.

NO KIDDING DEPARTMENT...

(from *SMOKE SIGNALS*, Indian Hills Radio Club, February, 2004, editor "Dee" Logan, W1HEO)

Texan Roger Thomas Scaggs, W5EBC, is a good ole boy who holds an Advanced class ham license.

This current QTH is a prison cell. It seems that Scaggs was convicted of killing his wife, and is serving a 32-year sentence. The FCC, after become aware of his new address, sagely announced: "Mr. Scaggs' murder conviction raises very serious questions as to whether he possesses the requisite character qualifications to be and to remain a Commission licensee and whether his license should be revoked."

NEW NET MANAGERS FOR OHIO...

(from *Ohio Section Journal*, Summer 2004, Ronald Griffin, N8AEH, editor)

Assistant Section Manager Connie Hamilton, N8IO, Marietta, was elected Net Manager for the Ohio Single Side Band Net (OSSBN) in April. Every two years this net elects its NM under the bylaws and constitution of the OSSBN. She succeeds William Baker, KC8OKJ, who chose not to run for another term.

The OSSBN meets three times daily on 75 meters (3.9725 MHz) at 10:30 a.m., 4:15 p.m., and 6:45 p.m. It is the SSB traffic net of record for Ohio with liaisons to the National Traffic Net's Eighth Region.

For CW traffic nets, Henry Koenig, WD8Q, of Mansfield, has been named Net Manager of the Ohio Slow Net (OSN) effective April 15. He succeeded Ken Buser, WB8KQJ, of Hinkley, who retired after 10 years of managing this net. The announcement was made by Ohio Section Manager Joe Phillips, K8QOE. The OSN, Ohio's longest continuing traffic net, currently passes traffic in CW at 3.708 MHz each day beginning at 6:10 p.m.

"Ken's leadership was outstanding in continuing this net in times difficult for a CW traffic net," said Phillips. "The Ohio Section thanks him for his excellent service."

LOSSY LINE AND HIGH SWR DON'T MIX...

As we all know, an antenna impedance that does not match the transmission line impedance will act a bit like a mirror and cause some of the power to be reflected back from the antenna toward the transmitter. Assuming the station is like most of ours, and there is an antenna tuner at the output of the transmitter, the tuner will also be adjusted to show 1:1 SWR at the transmitter. But in order to achieve that goal, the tuner will then have been adjusted to "match" the mismatched impedance. That is, the tuner will also reflect some of the power coming back from the antenna and send that power back up the line toward the antenna.

Did you ever use a mirror to look into a mirror? If not, you should try it. What you get is an image of the second mirror in the first mirror. But then, the second mirror will contain an image of the first mirror if they are both roughly parallel to each other, i.e. an image of an image, and so on. A similar scenario results when both ends of an active transmission line are terminated in partially reflecting impedances. The reflected RF energy just bounces back and forth down the line with a bit of it being lost at each reflection, and a bit more being lost in heating up the transmission line ("line loss").

Almost every amateur has operated his/her station with such mismatches in place. But many times we don't realize the seriousness of the transmission line loss. However, there is a way to seek help there. Some ARRL handbooks, and also some Web sites, carry information and nomograms for calculating how much RF power is absorbed by the antenna after factoring in the SWR and the line loss.

For this article I have consulted graphs from the 1981 ARRL Handbook and nomograms in the Reference Data for Radio Engineers, 5th Ed., Howard Sams & Co. Since some of these numbers are read off the graphs, they are a bit rough at the high end. There is also a problem with this, in that the SWR is higher at the load than at the input and therefore I don't know if the charts properly adjust for unequal losses all along the line (higher at the antenna).

SWR @ TUNER	LINE LOSS (db)	SWR AT ANTENNA	TOTAL LOSS FROM SWR (100 WATTS INPUT)
1.7	2	2.4	20
1.7	3	3.2	30
2.0	2	3.25	30
2.0	3	5	50
2.5	2	5.2	50
2.5	3	13	75
3.0	2	8.5	60
3.0	3	infinity	97

AMATEUR RADIO 25 YEARS AGO...

(from *SMOKE SIGNALS*, Indian Hills Radio Club, June, 2004, editor "Dee" Logan, WIHEO)

The year 1979 is considered the year of WARC, the World Administrative Radio Conference. WARC-79 is famous for having given Amateur Radio three new bands: 30, 17, and 12 meters, to be phased in over the next several years. The conference also opened the door to our current code-free Technician License by changing from 144 MHz to 30 MHz the frequency above which code was not required as a condition for licensing.

In March of 1979, the FCC said it was going to take another look at the Communicator Class license which it originally introduced in its 1974 restructuring proposal. The new class license was shelved at that time due to heavy opposition.

The "Woodpecker" appeared, with its ratcheting, pulsating sound. The signal was tracked to Soviet over the horizon radar. Although the Russians denied responsibility, the woodpecker signal eventually went away with changes in the Russian political situation over a decade later.

In July, 1979, Mike Vestal, W0YZS, became the first amateur to gain Worked All States on 432 MHz.

In October, the Panamanian government took over the issuance of licenses in the Canal Zone. The KZ5 prefix, along with the "country" status of the Canal Zone, became history.

Emergencies in 1979 involved volunteer Amateur Radio operators. Emergencies at Three Mile Island nuclear power plant and a destructive tornado in Wichita Falls, Texas, again found hams providing communications.

A stock market crash in 1979 reminded Americans of a similar downturn: the "crash of 1929".

A popular HF ham transceiver in 1979 was the Kenwood TS-520. It featured a built-in power supply, S-2001 final amplifier tubes, along with matching accessories including the VFO-520 and SP-520 speaker.

AO-40 BATTERIES OR ? ...

(from the *RF-CARRIER*, Dayton ARA, edited by Sue Stacy, KG8X, May, 2004, by Gerd Schrick, WB8IFM)

Until late January AO-40 had glowing reports from users. Soon, battery voltage was dropping fast as if something was putting a severe drain on it. Before ground controllers could get a handle on the situation, the battery voltage had dropped so low (to an estimated 10V), that the switchover relay would not switch to the auxiliary battery.

Something was shorting out several cells of the battery. If the solar panels [ever] manage to charge the remaining cells up to the point where the relay operates (12V), the switchover to auxiliary battery might succeed. [Apparently the command receiver is operating yet, and the beacon transmitter just needs the battery to reach 20V.]

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.

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W8VM

