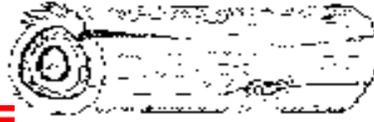




FOUNDED 1947

WEST PARK RADIOPS



LOG



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

Oct. – Nov. 2010
VOL. XLV - No. 6

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

2010 CLUB OFFICERS

President	
Egon Fordos	AB8HY
(216)-712-4378	
Vice President	
Joe Mate	K8YN
(440) 979- 0038	
Secretary	
Glenn Williams	AF8C
(440) 835-4897	
Treasurer	
Kevin Brandstetter	K8VUS
(440) 734-5532	
Trustee	
Alan Moriarty	N8CX
(216) 221-3682	

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

Oct. 1 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

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

Oct. 15 - MODERN COMPUTERIZED VEHICLES / HOW THEY WORK

We will discuss the theory of operation of how modern cars on the road since 2002-2010 operate with dozens (!) of microprocessors controlling everything from engine fuel injection, gas pedal, radio, tire pressure, etc. How do they do that?

Nov. 5 - FIRST FRIDAY BUSINESS/ FIXIT NIGHT

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

Nov. 19 - PROGRAM - DIGITAL VOICE FOR AMATEUR RADIO

This hour-long video presents "live" examples of digital voice over amateur radio, both on HF and on VHF/repeaters.

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ARRL vs.
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CONTESTS AND EVENTS

- de WA7BNM & ARRL

Oct 2 TARA PSK RUMBLE

Oct 2-3 CA QSO PARTY

Oct 9-10 PA QSO PARTY

Oct 18 RUN FOR THE BACON QRP

Oct 30-31 CQ WW DX PHONE

Oct 30-31 10-10 FALL CONTEST DIG

Nov 6-8 ARRL SS CW

Nov 13-14 WAE DX RTTY

Nov 22 RUN FOR THE BACON QRP

Nov 20-22 ARRL SS PHONE

Nov 27-28 CQ WW DX CW

SOAPBOX

Summer is officially gone. Antennas need to be given a checkup before the bad weather hits. For programs, we have a few new ideas,

Have you worked out how you are going to improve your operating in contests this time around? Try simulated CW contesting with software apps!

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,

Another year is fast coming to a close and before you know it elections will be held for new officers for our club. I am grateful for the opportunity to serve as your president and will continue to support the club any way that I can. Lately, my work has been interfering with the club activities and that is unfortunate; hopefully next year will be better as far as that goes.

The upcoming months begins the season of contesting and requires we perform the regular maintenance work on our station and antennas before the snow starts falling. Checking and cleaning the PL-259 connections, checking the balun for whether it still works properly, cleaning out the antenna traps, checking the antenna at the feed-point with an antenna analyzer is but a few things that can be done. Also, checking the outside coax for cracks in the insulation allowing moisture to get inside is also important.

One final thought, keep thinking of new programs for our meetings. It is always difficult coming up with new ideas, but if we put our heads together we can come up with some interesting programs. The program on Software Defined Radio I found to be very informative and interesting. More programs like this is what is needed.

73s de, Egon, AB8HY 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. We have no recent news on when the Bay Scouts are having their big outings.

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. Of late we have been picking up some attention during our second and fourth Monday 2m net.

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, 9 p.m.

LATEST SUNRISE...

The change back to Eastern Standard Time will occur at 2 a.m. on Sunday November 7 this year. So the morning of Saturday November 6 will have the latest "local clock time" sunrise.

FORUM NEWS FROM THE CLEVELAND HAMFEST...

The Cleveland Hamfest this past Sunday, September 26, had four interesting forums. Matt W8DEC conducted a morning forum on Ohio ARES and coordinated the GO-BOX competition in the early afternoon. Dee, W1HEO, discussed CPARS. The ARRL Forum at 11:15 was conducted by Ohio Section Manager KI8GW Frank Piper. There will be an Ohio Section Conference on October 16 near Columbus. Google for info. A Tennessee white paper study on how to make the National Traffic System net operations relevant to the 21st century. Can net operations be restructured/improved for the emergency communication nets? The Ohio section web site is now < <http://www.arrl-ohio.org/> > and the Great Lakes Division web site is < <http://www.arrl-greatlakes.org/> >. The web sites may be adding Facebook and Twitter click-thru logos. In the Ohio legislature, the amateur radio portion of amended S.B. 218 ("Ohio's PRB-1") is moving slowly and there is a concern that the bill will be tabled before the November election. Go to the section web site and fill out the survey there. The Great Lakes Division leadership is looking for opinions in order to help make service to ham radio better:

< http://www.arrl-greatlakes.org/survey_101510.html >

KK8O Rick Swain discussed Official Observer events. There has been good news: the number of OO complaints mailed has been dropping. But is this due to fewer new hams making mistakes? Is it due to the lack of HF band propagation, fewer Dxpedition "police", or what?

The GO BOX competition that Matt put on was about bringing your portable emergency station that is all packed up and ready to haul out on an emergency communications task. There was a judging and a competition winner. The Ohio Section News should announce it.

FLARE SCARE ...

We all know that the current sunspot cycle 24 has been a bit lame. This is starting to worry scientists who believe that the magnetic fields inside the sun "wrap" up like rubber windings on a golf ball and eventually "snap" out of the solar surface to make sunspots.

So ---

Recently a British scientists have published predictions that flares from the Sun, currently passively sitting in the duldrums of Cycle 24, could create big solar blasts comparable to the 1859 event, the largest on record. The electromagnetic transient effects could become so serious as to damage electronic devices all over the earth.

On the sun, high-intensity magnetic fields are created from which violent eruptions of material can occur. Each one of these solar storms is a magnetic bubble containing around a billion tons of material from the hot solar atmosphere traveling at a million miles an hour.

When a solar storm is launched into space, the material accelerated with it represents a hazard to space-borne electronics and astronauts. Aurora are created when hot solar particles enter the Earth's protective magnetic bubble and energize the atmosphere high above the north and south poles are representative of the possible magnetic effects.

As the charged particles flow through the Earth's ionosphere they have been known to introduce surges into the world's power grids that can damage vital transformers. The Sun produces a "perfect storm" at Earth once per century. The event in 1859, just before the U.S. Civil War, caused major disruptions to the US telegraph system. In 1989 a solar storm caused the power-grid in Quebec to fail. Because we are now so dependent on satellite technology we will need a reliable space weather forecast.

As we head towards the next peak in solar activity in 2013, researchers at Lancaster University (UK) are developing computer models to investigate the effects of such currents on national grid systems.

The speed, intensity and frequency of these solar storms is very variable and predicting their occurrence is the holy grail of solar science. Missions such as the two NASA STEREO spacecraft are doing much to advance our understanding.

Viewing the Sun from positions on either side of the Earth, these spacecraft have made the first 3D images of the Sun, allowing complex changes in the Sun's magnetic field to be studied in great detail prior to the eruption of a solar storm.

The STEREO mission also carries two UK-built cameras that image the space between the Sun and the Earth so that Earth-directed storms can be tracked all the way to our planet.

Government forecasters in the UK and in the U.S. are working to improve predictions of a storm's arrival at Earth.

Some may even help predict the arrival of the next solar storm at Earth. Given enough warning, satellite operators can hibernate sensitive electronics, power companies can prepare for surges and astronauts reschedule spacewalks. With over 100,000 images collected from the UK cameras so far, keeping up with the Sun's tantrums is a full-time job.

As a result, the UK STEREO team have joined forces with the Royal Observatory, Greenwich and the Galaxy Zoo team to create "solar stormwatch" where member of the public can assist this pioneering research by identifying and tracking storms in STEREO images.

Smith Chart Amateur Radio Society, K400...

The Smith Chart Amateur Radio Society is a group of amateur radio operators dedicated to the preservation, enrichment, and implementation of various technical skills related to amateur radio. They are not a club in the traditional definition in that they don't have regular meetings, etc. Their primary focus is on various technical topics and skills, community service, and education. This doesn't just include a lot of electrical engineering subjects as they relate to amateur radio, but also includes things like tower design and erection, thermal design issues, and other non electrical subjects. If you have questions, there's someone who can likely answer it or find you an answer.

They also a low key organization, primarily doing this for your own personal achievement and accomplishment. They do have a variety of projects going on from time to time, some of which benefit the larger ham community and some that are more focused on individuals in the club.

<http://home.roadrunner.com/~w4fal/FrankLynch/scars.html>

DAYTON BUS MAY 2011...

Dwaine, K8ME, is arranging on behalf of CARS a Saturday bus to the Dayton Hamvention, for \$40.00 per person. Contact Dwaine at 440-582-3462.



10.7 CM SOLAR FLUX ...

(information from Space Weather Canada)

The History of the 10.7 cm Solar Flux

The importance of the 10.7 cm Solar Flux is tied to the start of Canadian radio astronomy. After World War II Arthur Covington and others at the National Research Council in Ottawa took some military surplus radar and test equipment to build a radio telescope. The antenna was a 4 ft. dia. paraboloidal radar dish from a gun laying radar on an altazimuth mount casting. The mount was reoriented so that azimuth axis was pointed at the Pole Star, which made a polar mount for easier tracking of the Sun. The receiver was a Dicke switching receiver used during the war to test silicon mixer crystals for radar applications. The radar system operated at a frequency of 2800 MHz, that is a wavelength of 10.7 cm. (Robert Dicke was later involved with identifying the “3 degree Kelvin” microwave background radiation discovered by the Bell Labs Haystack Antenna – the very radiation that is now the center of attention for astrophysicists looking for proof of dark energy.)

This radio telescope was pointed at Jupiter, the Milky Way, aurora borealis, and the Sun. It was too insensitive to pick up anything but the Sun. But with some experimenting Covington and his team realized that the Sun's emission at 10.7 cm wavelength was varying – a total surprise. Astronomers thought that the solar emission at centimeter wavelengths would be simply black body emission from a solar plasma. The question became whether variation came from the whole solar disc or whether smaller, variable sources, perhaps associated with active regions and sunspot groups, were the cause.

The poor angular resolution of the radio telescope (a few degrees) made it impossible to determine the true difference between these two possibilities. However, an opportunity to test for new data came on November 23, 1946, when an eclipse of the Sun occurred in the area of Ottawa, Ontario. The new recordings showed proof that strong emissions at 10.7cm originated in the vicinity of sunspots. The eclipse record shows a strong dip in signal strength after 11:40 a.m, when the Moon covered a large sunspot on the solar disc.

Covington later proved that the 10.7 cm Solar Flux correlates with indices of such as sunspot number and total sunspot area, with the advantage that the measurements were completely objective, and could be

made in almost any weather conditions. Since the radiation correlated with magnetic activity, it correlated with other activity indices. Since magnetic activity modulates the Sun's total radiative energy output, the radiation was therefore a meter for the sun's total output.

The emission Covington had found is now known as the "Slowly-Varying" or S-component of solar radio emission. Subsequent investigations proved through both observation and theory, that the best wavelength to observe this component of solar radio emission is around 10 cm. Covington's decision to make observations at 10.7 cm wavelength was decided by his using radar components built for that wavelength and with nothing to do with astronomical considerations, was one of the more significant coincidences in astronomy.

The 10.7cm Solar Flux is currently one of the best indicators of solar activity that we have. The recorded database is now an uninterrupted database covering more than 50 years. Only sunspot number counts cover a longer period, going back to at least the 17th Century. However, those ancient data were subject to subjective effects in observation and evaluation, and were obviously affected by the weather.

Between 1946 and 1990, the 10.7 cm measurements were made in the Ottawa area. In 1990, following the closing of the last good observing site in that area, the program was relocated to the Dominion Radio Astrophysical Observatory at White Lake near Penticton, British Columbia.

THREE-FINGER SALUTE UNCOVERS DETAILS...

The CTRL-ALT-DEL keystroke sequence that used to reboot a DOS PC can be used in modern MS-Windows to gain access to Task Manager. When you are first booting up your PC and it seems to take many times longer than when the PC was brand new, it's usually because of all the extra things the operating system is doing now than it was doing back then.

After starting Task Manager, click the Performance tab to get a graph of the percentage of the CPU already used up by programs that have just started, such as your antivirus program and/or your firewall program. Later on, if you think your computer is still slow, start T-M again and this time click the Processes tab and sort the processes by CPU percentage to see time hogs.

HAM RADIOS ARE NOT CELL PHONES...

(from *The ARRL LETTER* 09/16/2010)

In many states and localities, it is illegal to talk on a cell phone (without a hands-free device) while behind the wheel -- doing so can result in a ticket and possibly a large fine. But on May 30, 2010, when a New York ham was talking on his mobile rig, he didn't think he was doing anything wrong. Except that the officer who pulled him over and cited him with a \$100 fine didn't quite see it that way.

Steve Bozak, WB2IQU, of Clifton Park, told the ARRL that when he was pulled over while driving to Troy -- about 16 miles away -- he assured the officer that he was not speaking on a cell phone, but on his handheld transceiver. But according to Bozak, the officer said "it was all the same to him." So Bozak decided to fight the ticket in court.

"Honestly, it's not the fine or the ticket, but that all the other hams who use mobile radios have to hide the fact we are mobile in Troy," he told the ARRL just days after he was cited. "I will do my best to settle this politely and correctly, for all of the ham community. So I will follow the course and have my day in court, to 'tell it to the judge.' This matter affects 38,000 hams in New York State."

Unfortunately, when Bozak had his day in court for a pre-trial conference, the prosecutor refused to dismiss the case. But he didn't give up and took his case to City Court where, on September 8, where at the request of Bozak's attorney -- ARRL Volunteer Counsel (VC) Jeremy, Rase, KC2JRD -- the judge dismissed the case in Bozak's favor. Bozak argued that his use "of a handheld Amateur Radio does not fit the definition of a mobile telephone, and as such, the present charge should be dismissed." The prosecutor's office did not submit a response in opposition.

Saying that New York's Vehicle and Traffic Law defines a "Mobile Telephone" as a "device used by subscribers and other users of wireless telephone service to access such service," and that a "Wireless Telephone Service" is defined as "two-way real time voice telecommunications service that is interconnected to a public switched telephone network and is provided by a commercial mobile radio service," the judge decided that Bozak's handheld transceiver did not fit that description.

"A review of 47 C.F.R.§20.3 reveals that Citizens Band Radio Service is defined under private mobile radio service not commercial mobile radio service," the decision read. "Therefore, the Court finds that the use of an Amateur Radio device does not fit the definition of a mobile telephone as defined under the Vehicle and Traffic Law" As such, the judge dismissed the case in Bozak's favor.

"While the court cited the Citizens Band Service instead of the Amateur Radio Service, the ruling very is favorable to amateurs on the precise point of law raised," said ARRL Regulatory Information Manager Dan Henderson, N1ND. "The principle of law is spot on. This is a great ruling in New York and exactly what we had thought would happen."

ARRL Goes Another Round with ReconRobotics...

(from *The ARRL LETTER* 09/09/2010)

As reported earlier, on August 16, ReconRobotics -- manufacturers and marketers of the Recon Scout, a remote-controlled, maneuverable surveillance robot designed for use in areas that may be too hazardous for human entry -- filed with the FCC an opposition to the ARRL's Petition to Deny Applications. The ARRL petition asked the FCC to deny dozens of pending Public Safety Pool license applications for the Recon Scout device, which operates in the 430-448 MHz band. On September 1, the ARRL filed its reply.

Calling ReconRobotics' Opposition to Petition to Deny "rather strident," the ARRL countered the firm's claim that the ARRL's petition was "frivolous" and "filed solely to cause delay." "Every one of the [84] pending applications contains serious technical errors and none is grantable," the ARRL maintained. Nor was the filing aimed at causing a delay:

"There is no domestic allocation for Public Safety land mobile services anywhere in the 420-450 MHz band," the ARRL emphasized. "Because the ReconRobotics waiver, which was limited to Part 90 service rules, is insufficient by itself to support the grant of an application by Part 90 mobile eligibles to operate the device in a band that is not allocated or available to those eligibles and because none of the subject applications requested or justified a waiver of Section 2.106 of the Commission's Rules, the subject applications are all defective and should be dismissed."

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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