



FEEDBACK

VOLUME 54 ISSUE 5

MAY 2009

MASSILLON AMATEUR RADIO CLUB OFFICERS

PRESIDENT
Rodger Trompower
KA8FTS
hts@cannet.com

VICE PRESIDENT
Carl Cunnert
AB8CC
ccunert@yahoo.com

SECRETARY
Dan Anastis
N8DZM
ddan@sbcglobal.net

TREASURER
Joe Herrick
WD8BGW
josephherrick@sbcglobal.net

MRN NET Tue, Thur, & Sun
7:30 PM 3.600 MHZ
CLUB REPEATERS
147.18 & 442.850 MHz.

Contents

Secretary's Report -----2

N8ATZ Column -----3

Clock Mod by KB8STV-----4

PI by WA8MKH -----5

Prez Sez -----7

ARRL News-----8

Line Noise -----8

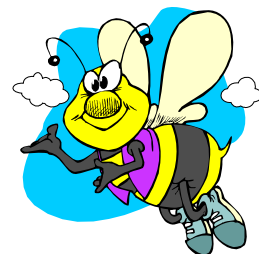
Calendar by K8I8NN -----9

-- SHORT SKIP --

May flowers are here with their bees and so is antenna repair time. A closer look for winters toll is in order. But above all, let us not forget our safety belt when climbing.

Hey Bunkey, speaking of bees, I wonder if Noah kept his bees in his ArchIves ?

73 de WB80WM



MAY MEETING

The meeting for the month of May will be held at the Massillon Senior Center on May 1st, 2009 at 8:00 PM.

April showers bring May flowers, I sure hope so because the last few days have been nothing but rain - cold rain ! The month of May will bring you a few surprises. Be sure to read the Prez Sez on page 7 of this issue. Recent discussions at the meetings concern replacement of the Safety Break fund raiser for the Club. Nothing has materialized as yet but we have many "irons in the fire" so to speak. Discussions will continue, however I think that we will be just fine for this year. However next year we will definitely will begin to feel the "pinch"

We will no doubt begin "in earnest" discussions on **Field Day 2009**. Yes it's that time again; only one more month & it will be here ! Plans must be made so we will have another Great Field Day again this year. See you at the meeting !

MAY PROGRAM

The program for May will be a presentation by Mr. Lane Yerian, KD8JJF, from Wadsworth Oh. Mr. Yerian is a relatively new ham who builds his own dual band VHF/UHF antennas. It is not known if he is a member of the Medina Two Meter Group or not but we do know he works for Clinton Aluminum and he gets scrap aluminum to use in his building projects. He is enthusiastic about the hobby and the tools he uses to make the threads on the elements which may help all of us in the future. I think you will find his technique and his results very interesting.

This week the meeting will begin at the expected time of 8:00 PM.

That's all for now 73's de AB8CC



MARC MINUTES

April 3rd 2009

The Massillon Amateur Radio Club meeting was held at the Massillon Senior Center with 33 members and guests present (signed-in).

Before the meeting Carol KB8IMH gave a program on Genealogy.

The Pledge of Allegiance was given and a round of introductions made.

Mike KD8ENV made a motion with a second by Steve WD8MIJ to approve the minutes as printed in the Feedback. Motion Passed.

Joe, WD8BGW gave the Treasure's report.

Carl, AB8CC gave the VP report Various club newsletters, Dayton Hamvention info and the MS walk.

Committees - Classes – There are four students in the Tech class and two in the code class.

VE – Next VE session will be May 9th at the E.O.C.

Old Business - Our Safety Break did not do very well this time. Hopefully we can get another one this summer before it closes.

New business

Bruce KC8RKS mentioned help needed for the Tour de Cure bike race in Akron on Sunday June 14th.

MS walk in Massillon will be Saturday April 25th 9:00 am.

Rex, NX8G discussed about how to get more information about contesting from the ARRL.

Perry, W8AU found a way for fundraising, Akron is looking for groups to man their concession stands at the new football stadium. Each group will receive 10% of the profit from that stand. Don W8DEF with a second by Carol KB8IMH made a motion for the club to apply of this football season for one concession stand. Motion passed.

Field Day food committee is taking suggestions.

Don, W8DEF made a motion with Carl's, AB8CC second to not have a MAPS Special Event. Passed

We were contacted by the McKinley museum to put together an information both for their summer science fund raiser on July 10th. Need more information yet.

Gary WC8W won the 50/50 for \$31 which he donated to the new radio fund.

Minutes by Dan N8DZM

... ARRL Certification News ...

After serving the greater Amateur community for nearly nine years, the ARRL has determined that the Amateur Radio Emergency Communications Certification Program is finally due for an update. As part of this effort, the Level 2 & 3 Course will be revised to become a new Advanced Emergency Communications course that will replace both the current Level 2 and Level 3 courses. This new Certification will be released during the last quarter of 2009. The current Level 1 course will remain unchanged.

Training has always been and will continue to be an important component of Amateur Radio and ARES. All things change and over the last nine years the face of emergency communications has evolved as new ideas and techniques were developed and implemented at all levels of public service. If ARES is to remain a viable support communications tool, we too must expand and revise our current Certifications Program.

The ARRL's aim is to develop professional level courses which will be widely accepted by all organizations for the emergency communications component of Amateur Radio. They are investigating requirements that the Department of Homeland Security (DHS) is currently putting into place for approved courses, as well as other possibilities to develop emergency communications training that meets the emerging training needs surrounding emergency communications.

Those of us who currently hold multiple Level Certifications will need to complete this new Advanced Course to stay current with this new program. I expect a new study guide will be released to help you prepare for this Advanced Course. Sounds like something for us to pursue next Winter! I'll keep you aware of additional details in future columns.

.. Dayton Hamvention ..

May brings with it the beginning of Spring and most importantly the annual trek to the Mighty Mecca of Ham Radio, Dayton Hamvention. Celebrating it's 58th show this year on May 15, 16 and 17, this is one hamfest everyone should visit at least once. This year's theme is DREAM, Digital Radio Enabling Amateurs to do More, which will include special forums covering this segment of Amateur Radio.

Additionally 2009 brings back the ARRL National Convention to Dayton with all of the many special programs normally associated with any National Convention. Combine this with the now standard ARRL EXPO which is a showcase of exhibits to enhance your ham radio experience, this is going to be yet another great ham radio event.

So what exactly is Hamvention? It's a forum where you can meet the authorities on nearly all facets of our great hobby. It's 500 inside exhibit spaces where manufacturers show off their latest equipment that you can see & touch. Some is

even operational and you can "fiddle the knobs" on some really expensive radio gear. It's also 2,500 outdoor flea market spaces where everything and anything is available for sale. While general attendance has dropped over the past several years, the ARRL believes with lower fuel costs this year may see over 20,000 attendees and guests.

Another fun repeat feature this year at Hamvention will be streaming audio and video from the event via Tom, WA5KUB who will provide live video from Hamvention. If you can't make it to this year's event check out the next best thing at <http://wa5kub.com>.

If you are looking for alternative transportation to Hamvention, the Pioneer Amateur Radio Fellowship group is once again sponsoring a charter bus to Dayton on Saturday, May 16th. Complete details and costs are on their website at www.qsl.net/w8ctt. The basic Dayton Hamvention website is www.Hamvention.org and the ARRL Expo site is found at www.arrl.org/announce/nc/2009/dayton.html.

For those of you interested in ARES, their forum is always well attended and is scheduled for Hamvention Room 3 at 2:30 PM Saturday. The topic will be officially called "The Maturing of ARES" in this decade of 911 and Katrina. Some great panelists will be presented including Charles Miller, AE4UX SEC for South Carolina; representing the administration of ARES at the Section Level. Also presenting will be Southeast Division Director Greg Sarratt, W4OZK, who as Section Manager during Katrina, was the ARRL's disaster director for the event. Jack Sovik, KB8WPZ, SEC for the Ohio Section will be the moderator for this forum.

.. Tornado Drill Results ..

As part of Ohio's Severe Weather Awareness Week, Stark County Skywarn participated in the Statewide Tornado Test on Wednesday, March 25th. At 9:50 AM local time communities were requested to activate their sirens as part of their early warning system.

As part of this test, amateur radio operators also tested their response by participating in a simulated emergency skywarn net conducted on the Stark Co 147.12 Mhz ARES Repeater. Net control Mike Lackney - KB8MIB logged 28 local stations covering central and western Stark County.

Warning sirens were heard in nearly all areas thanks to the numerous additional warning sirens installed during the last year.

Stark Co ARES thanks all those stations who took time to participate in this drill. Full results will be reported to the Cleveland National Weather Service and to Tim Warstler, Director of the Stark County Emergency Management Agency. Special thanks to Net Manager Mike Lackney, KB8MIB who activated the net during this exercise.

That's it for this month, see you at the meeting

!

De Terry – N8ATZ

Looking for a Project for the HAMSHACK that is useful, quick and easy?

Modify a Digital clock to “DISPLAY” 24 hour time. I used a digital clock purchased from Wall Mart for under \$ 4.00. Carefully pry off the front bessel using a Small screw-driver. On this clock, the tab on the Bessel is located in the 12 and 6 o-clock positions.



Using a label maker, I used a brother P Touch, make labels for numerals 13 thru 23.

I find its OK skip 00 but this is optional. Carefully place the numerals on the clock face and position / align correctly. I found that using a small screwdriver to help position the numeral helps. You do what works for you. Replace the bessel , install the battery and you are good to go. I made one for LOCAL time and also ZULU time and are a help in the HAM Shack. This is an easy project that even “RODGER” could do it.



Charlie Scherger KB8STV

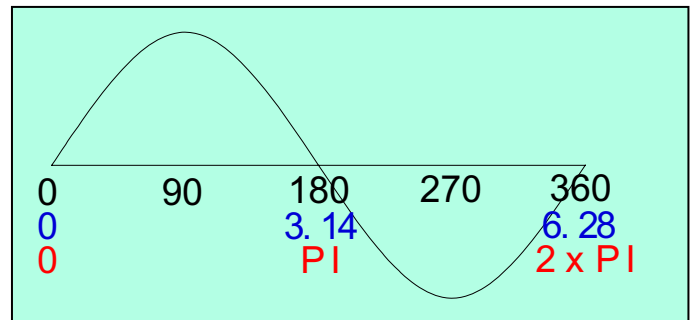
How About Some PIE or PI ?



Did you know that an 8 inch PIE is 25.12 inches around the outer edge? Sounds like a better deal for your dough! How is this possible? Well, the number PI is equal to about 3.14 and, when multiplied by the diameter of the PIE, gives a distance around the PIE of 25.12 inches (called the circumference).

PI (3.14) is an important number that is used in many fields as well as electronics and on amateur radio exams. Let's put this number to good use (like getting more dough for your dough). Consider storing this number in your brain. It cannot be picked up by airport scanners and there is no charge for extra baggage.

The most used frequency in amateur radio is the power line frequency of 60 Hertz (60 cycles per second). Shown in the picture is one cycle, called the SINE WAVE. Notice how the voltage (vertical part of the sine wave) varies throughout the cycle.



In this article, three horizontal scales will be used to describe the sine wave: First, 0 to 360 degrees, then 0 to 6.28, then 0 to 2 times PI. (Note that 2 times PI is equal to 6.28).

The degree scale is used in many areas of electronics and can be used to describe the different horizontal locations on the sine wave. Degrees are used with Leading (or Lagging) voltage and current.

This article demonstrates the use of PI.

Secrets Revealed



Remember those tough math equations on the amateur radio exam? An equation such as $XL = 2 \times \text{PI} \times F \times L$. Notice at the end of the above sine wave is $2 \times \text{PI}$. The $2 \times \text{PI}$ describes one cycle of the frequency that we are using. It doesn't matter what frequency is used, the $2 \times \text{PI}$ describes one cycle of the sine wave and is equal to 6.28.

The next term is F. This is the frequency in Hertz (number of cycles per second). $2 \text{ times PI times F}$ is also written as $(2 \pi F)$ or sometimes as (ω) . Inductors and Capacitors behave differently at different frequencies. Therefore to determine IMPEDANCE such as XL or XC, the (2 times PI) and the FREQUENCY (F) need to be included.

Continued Next Page.....

The following are examples of equations used in amateur radio:

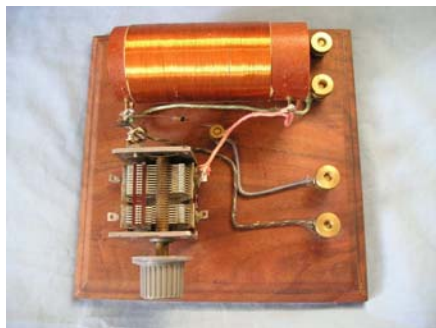
Note: Use the red highlighted form of the equation when using a calculator.

Inductive Reactance: $XL = 2 \times \pi \times F \times L$

Also written as: $XL = 2 \pi F L$, or $XL = \omega L$, or $XL = 2 * \pi * F * L$

Capacitive Reactance: $XC = 1 \text{ divided by } (2 \times \pi \times F \times C)$

Also written as: $XC = 1 / (2 \pi F C)$, or $XC = 1 / (\omega C)$, or $XC = 1 / (2 * \pi * F * C)$



REMEMBER THE OLD CRYSTAL RADIO DAYS?

A coil could be wound on a cardboard tube or an oatmeal container. The capacitor may be a variable capacitor.

The inductor (coil) had a value around 220 Microhenrys.

The capacitor had a value around 25 to 325 Picofarads.

If the coil is not variable, but the capacitor is, to hear an AM radio station at 1.200 MHz (1200 KC in the old days), the value on the capacitor needs to be adjusted to 80 picofarads.

Another Mystery Solved:

The following example uses the above equations and the crystal radio data along with a calculator or a spreadsheet.



$$XL = 2 \times \pi \times F \times L$$

$$F = 1.200 \text{ MHz}$$

$$L = 220 \text{ Microhenrys}$$

$$XL = 1658 \text{ Ohms}$$

$$XC = 1 / (2 \times \pi \times F \times C) \times 10^6$$

$$F = 1.200 \text{ MHz}$$

$$C = 80 \text{ Picofarads}$$

$$XC = 1658 \text{ Ohms}$$

Find XL	$2 * \pi * F * L$
Enter MHz	1.200
Enter Microhenrys	220
XL in Ohms =	1658

Find XC	$1 / (2 * \pi * F * C) * 10^6$
Enter MHz	1.200
Enter Picofarads	80
XC in ohms =	1658

Notice that XL and XC are the same at the desired frequency, in this case $F = 1.200 \text{ MHz}$. This is called **Resonance**.

This article attempts to help with the understanding of terms used in equations and is intended for amateurs studying for their extra class license and/or advancing their knowledge. Further study and reference to books such as the ARRL Handbook is recommended.

73 DE MIKE WA8MKH

THE PREZ SEZ

Good evening MARC members or afternoon as it maybe:

Still hoping for more money to show up from the Safety Break, but it was a poor weekend. Not too many travelers. I have heard that there could be another Safety Break in the making, the North Bound side this time. I sure hope so, the last one was so well accepted, we had no trouble in filling the shifts. Thanks again to all who participated with their time and or "goodies" donations. I also heard that the lawsuit has been resolved and the construction for the new ramps is back on.

The date for the next Safety Break has been set for June 19, 20 & 21, one week before Field Day, North Bound side.

Still looking for new ideas for "money makers" for the Club. Put your thinking caps on. Nothing has been heard yet from the Akron U. concession stand proposition. Still have not heard back from any of the locations about a possible "Spaghetti Supper" either.

I did talk to Tim Brand, the Scout Master from Troop # 902, "KD8FTO's and mine Wintertime Experience", and their "Badge Awards Program" was canceled due to a snafu from the Buckeye Council. No later date for the Awards Program has been established yet.

A special "Thanks" to Carol - KB8IMH, for her presentation on Genealogy tracing.

Enuf for now, Hope to C-U all at the Massillon Community Center for the MS Walk April 25th.

73's de KA8FTS - >(ô¿ô)<



MARCH SAFETY BREAK PICTURES



The above picture is a really good shot of the entire trailer set up on the south bound side of I 77. We will again rent the trailer for the June Safety Break. It really worked out very well for us as members kept nice & warm and out of the weather. Will the June session be the final one? Only time will tell. The picture below is a really nice shot of the "front" of the trailer with our two meter antenna installed. I for one will really miss all the activities the Safety Breaks brought us ! Thanks to Rex, N8XG for sending us these really great pictures !



ARRL NEWS

ARRL MEMBERSHIP NEWSLETTERS, BULLETINS AND NOTIFICATIONS

Did you know the ARRL offers more newsletters than just The ARRL Letter?

One of the many ARRL membership benefits includes other newsletters, such as the ARRL Contest Update (a bi-weekly contest newsletter), the ARES E-Letter (sent monthly, containing public service and emergency communications news), the ARRL Club News, the ARRL Instructor/Teacher E-Letter and the VE Newsletter, just to name a few.

You can also elect to receive news and information from your Division Director and Section Manager (keep in mind that not all Divisions/Sections send notices), as well as W1AW bulletins that relate to DX, propagation, satellites and Keplerian reports. The ARRL also offers a free notification service that lets them know when their membership and license are due to expire.

Sign up for these newsletters, bulletins and notifications on the Member Data page of the ARRL Web site <<http://www.arrl.org/members-only/memdata.html>>.

DON'T FORGET DAYTON HAMVENTION MAY 15,16,17



The Radio Pages

I have a short-wave radio, but I get nothing but a loud buzzing on it. What's wrong?

The odds are you are hearing power line noise, which is caused by poorly maintained power lines. It is becoming even more common these days as utilities slash their work forces to "position" themselves for deregulation, and linemen have a full time job just to keep the lights on. If your radio can run on batteries, try unplugging it from the wall. If the noise went away or lessened significantly, you're in luck, the noise was coming into the radio through the power supply, and you can install a brute force filter (Radio Shack sells them), which should help.

Usually, though, the noise is entering your receiver through the antenna. This is definitely the power company's fault. Unfortunately, even though they know better, many power company officials try to make you back down, hoping you'll give up and go away. They claim the signal is coming from someplace else, that they are not responsible for short-wave problems, or simply that there is nothing they can do. The power company is obliged to fix the problem, no matter what they tell you. If you (or they) doubt that, and they repeatedly refuse to fix the problem, contact the [Federal Communications Commission](#). However, many times the power company is doing the best they can, but still take months (YEARS) to resolve the problem. In this case, or if you just don't feel like fighting them, get an [MFJ](#) noise canceller. These are not cheap, and they take a little practice to learn to use, but they will work wonders on power line noise.

Thanks to Rick K8RIC for send us this article -- way back in July of 08 ! Thanks Rick !

Memorial Day

May 25th



May 2009

W8NP Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																	
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<p style="font-size: 24px; color: #800080;">31</p> <p>Massillon Radio Net - 3599.5, 1930</p>	<p>Upcoming Events:</p> <p>June 7 - Breezeshooters ARC Hamfest</p> <p>June 14 - Diabetes Tour de Cure 2009 Ride</p> <p>June 27-28 - Field Day! Petros Park</p>																																																																																																						

**MASSILLON AMATEUR RADIO CLUB
P.O. BOX 73
MASSILLON, OHIO 44648**

FIRST CLASS MAIL

TO:



75 Years in existence 1927-2002



VISIT US ON THE WEB AT; <http://www.marcradio.org>

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