



FEEDBACK

VOLUME 62 ISSUE 4

APRIL 2017

MASSILLON AMATEUR RADIO CLUB OFFICERS

PRESIDENT
Tony Casebolt
KD8UXK
dawghouse53058@yahoo.com

VICE PRESIDENT
Perry Ballinger
W8AU
w8au@sssnet.com

SECRETARY
Fred Reed
KD8SMO
reedfl@sssnet.com

TREASURER
Mike McManara
KB8OTK
kb8otk@yahoo.com

**MRN NET Sundays 8:00 PM
3599.5 KHz**

**WEST STARK INFO NET
Fridays 8:00 PM 147.18
MHZ
(except 1st Friday of month)**

CONTENTS

Secretary Report	2
N8ATZ Column	4
VP W8AU Column	5
Prez Column	6
KB6NU Column	7
ARRL News	8
MARC Antenna Puzzle	9
MARC Puzzle	10
K8INN Calendar	11
MARC Back Page	12

APRIL MEETING

The meeting for the month of April will be held on April 7th at 8:00 PM at the **AFFINITY HOSPITAL CONFERENCE ROOM # 1.**

A little better weather has been slowly coming around for Spring to start flowing. With better weather comes time to repair all the weather beaten antennas. Including one of my own. A quick repair to one of the support ropes is on the agenda as soon as the weather breaks.

Well it looks like we will be meeting at Shriver Park for Field Day this year. The only obstacle to become is permission to stay overnight and that should come shortly. We will keep you informed on progress in this matter. I will place final instructions on directions in the June issue of Feedback.



Field day is an exciting time of year for our new members and others alike. It brings out the "great outdoors" combined with Amateur Radio. Make sure you start to make plans for Field Day now so you won't miss a single thing!

APRIL PROGRAM

The program, for the month of April will be a visit by Mr. Charles W Johnston JR. W8JNE.

I was originally licensed 25 Nov 1955 as a Novice as WN8IHW. In 1962 I became W8IHW as a General Class License. In 1965 the call letters became W4ONH being located in Lynn Haven, Florida. In 1968 after moving back to Columbus, Ohio my call letters became W8KWA. After my father's passing on 25 Aug 18982 and applying for his call letters, they became a vanity license as W8JNE on 02 Feb 2004.

I enjoy D-Star on 145.490 & 444.000 MHz with all of its growing pains also learning the Yaesu Fusion C4FM technology.

Member of: ARRL, Madison County Amateur Radio Club, QCWA #35207, Franklin & Ross County Genealogical Societies.

I retired from at&t in 2010 after 42 years working in the mobile telephone, Video, paging, & carrier groups.

Chuck Johnston (Thanks to QRZ.com)

Please read our VP's column for an explanation of the program for April along with some nice pictures all on page 5 of this issue!

MARC Minutes March 3, 2017

Tony KD8UXK, called the meeting to order at 8:00 PM. After the pledge of allegiance, there was a roll call with 25 people present. After the roll call, Tony announced that the program for the evening would take place first, as the presenters needed to leave early.

March Program:

The program for this evening was presented by Scott Yonnally, N8SY Ohio Section Manager, and John Myers, KD8MQ Affiliated Clubs Coordinator. Scott presented a very detailed explanation of the Ohio Section, its members, and a lot of details about the size of the section and what its goals are. Scott mentioned that there are 71 ARRL sections in the United States. This is because some of the large states have more than 1 section, and Puerto Rico and the US Virgin Islands have divisions as well. Ohio section is the largest in the United States, with 28,000 members, of which 6,000 are ARRL members. There are 7 program directors within the section. They are:

Technical Coordinator Jeff Kopcak k8jtk@arrl.net,
 Affiliated Clubs Coordinator John Myers, KD8MQ kd8mq1@gmail.com,
 Section Emergency Coordinator Stan Broadway, N8BHL broadways@standi.com,

Public Information Coordinator John Ross, KD8IDJ john.ross3@worldnet.att.net,

Section Traffic Manager David Maynard, WA3EZN wa3ezn@att.net,

Official Observer Coordinator John Perone, W8RXX w8rxx@arrl.net ,

State Government Liaison Bob Winston, W2THU w2thu@arrl.net.

Scott described the functions and responsibilities of each of the program leaders and encouraged any member with a question for them to feel free to contact any of them with questions. Scott also stressed the need for all hams to get their ICS training courses 100, 200, 700 and 800 completed, as this is essential if you want to be able to participate in helping with emergency operations. Scott also gave us a little update on what to expect at the Dayton hamfest this year, which will be held at a different venue. All in all, this was a very interesting and detailed program about the Ohio Section, and was well received by members. Thank you Scott and John for a fine program. We appreciate the time and effort you spent to travel to our meeting and give a great program.

With the program finished, regular business followed.

Secretary's report for February:

Tony asked for a motion to accept last month's Secretary's minutes as published in the newsletter. First Dan N8DZM, Second Don W8DEA. Motion passed

Treasurer's Report:

Mike KB8OTK then gave a report of club finances. There were no extraordinary items in February. A motion to accept was made by Gary WC8W and seconded by Patty KD8UXL. Motion passed.

Vice Present's Report:

Perry W8AU mentioned that there is a newsletter from the Dayton ARA at the table for those interested to read. Perry also presented the Field Day award to Mike Daughenbaugh, who was not present at the February meeting. Mike also received a humorous "Confused Cashier" certificate from his help at the hamfest. Congratulations Mike! Perry discussed access to the club shack at the Senior Center. Anyone wanting to visit the shack during normal SC hours should present their MARC membership card to the director, and they will be given the key to the elevator. Also, they will need a key to the shack. These are available to any member in good standing for the cost of the key, (\$1.00). Contact Mike KB8OTK for a key if you are interested.

Committee Reports:

Wade WD8MIU mentioned that a mentoring session will be present by Mike WA8MKH on Saturday March 18 at Affinity regarding antenna topics. There is also an April session for a visit to the repeater site on Saturday, April 22. If the

weather is bad, this will be re-scheduled. Wade passed out a sign up sheet for those interested in either session. Perry also explained that repairs to the repeater were made to correct a failing battery charger connection that caused low power transmission.

Old Business:

Tony then went on to discuss Mike Sciarini's proposal for financial and efficiency matters that was the subject of a special committee meeting held Saturday March 26 to explore the proposal and make recommendations to the club. The minutes of the meeting were read to the club, and a lot of discussion followed. There was discussion regarding an increase to member dues, sale or disposal of obsolete/unused equipment, vacating the shack at the Senior Center, license plates for the club trailer and relocation of some equipment from the shack to the trailer. Mike's proposal favors abandoning the shack, but there are many questions regarding how that would actually be done. There would be significant expense to remove the tower, and where the items in the shack could be stored are the most significant questions. Most agreed that there is a lot of club history and legacy in the shack, and it would be a loss to the club if it were gone. Obviously a permanent new location for a clubhouse/shack would be ideal, but that is not financially possible at this time. All members should keep this in mind however, in case by some stroke of luck something should become available. Don W8DEA suggested that the club table any motion to take down the tower until estimates of the cost are obtained and other antenna matters settled. It was decided that having permanent plates on the trailer should happen. A motion to buy plates was made by Lee KD8UEA and seconded by Ralph K8HSQ. The motion passed. On the matter of moving the better shack equipment for field day use, there may be some training necessary, and this might be a possibility for a mentoring class in May.

It was also mentioned that we should hold a special event in recognition of the 90th anniversary of the club. This could be done at the club shack or from people's homes, using the club callsign on a scheduled basis. Perry will explore this, which could be a real fun opportunity.

Gary WC8W mentioned training classes for technician license will begin at the Senior Center on March 17th, from 7pm until 9pm concurrent with Perry's CW class. Contact Gary if you are interested at 330-323-3678 or WC8W@SSSNET.COM.

New Business:

Lori KE8EHF is preparing a proposal for fund raising utilizing our 90th anniversary as a theme. She will be ready to present her ideas at the next meeting. Thank you Lori!

Terry N8ATZ announced that a contract for the Boys and Girls Club has been obtained for the hamfest, which will be held on Sunday October 29th, and ARRL approval for a sanctioned hamfest has been obtained. Thanks for your work on this Terry. He also mentioned that annual SkyWarn training will be held at Jackson HS on Wednesday March 22 at 6:30 PM.

Tony then asked for volunteers to take over the West Stark Information Net that is held every Friday at 8:00PM. Tony has handled this for a long time, and now with his duties as president, it is time for someone else to step up and handle this. So, if you can, let's get Tony some relief and take over this duty. It is not a particularly hard thing to do, and Tony will help get you oriented.

With all business concluded, Tony asked for a motion to adjourn. First Don W8DEA, second Mike WA8MKH. Motion passed.

The 50:50 Raffle was won by Terry N8ATZ who generously donated the proceeds back to the club. Thank you Terry.

After the meeting there were donuts that had to be eaten and coffee to drink. Thank you to those who supplied the goodies.

Submitted by Fred KD8SMO

... RADIO SHACK RIP ...

Once the go-to store for radio amateurs, electronics tinkerers, and shortwave listeners, RadioShack has filed for Chapter 11 bankruptcy for the second time in 2 years, placing the future of its remaining stores in jeopardy. The 1743 retail outlets that survived RadioShack's 2015 bankruptcy were acquired by General Wireless Inc, an affiliate of Standard General LP, which, at the time, received US Bankruptcy Court approval to acquire the inventory and assume the leases of the RadioShack stores. Now down to 1,500 stores, RadioShack once boasted more than 5,000 stores nationwide. At least some of RadioShack's 5,900 employees could be affected. That figure is down from 7,500 workers 2 years ago.

"RadioShack.com, stores and dealer locations across the country are still currently open for business and serving customers," the company said in a news release. "The Company is closing approximately 200 stores and evaluating options on the remaining 1,300. The Company and its advisors are currently exploring all available strategic alternatives to maximize value for creditors, including the possibility of keeping stores open on an ongoing basis."

The acquisition by General Wireless followed a bankruptcy auction in 2015. Plans at the time called for "co-branding" about 1440 of the surviving stores with cellular phone provider Sprint Corp. RadioShack also has closed more stores and slashed operating expenses by more than 20%, but it wasn't enough. CEO Dene Rogers cited weak mobile phone sales as a factor. Chapter 11 gives RadioShack another opportunity to restructure and stay in business. The retailer joins other brick-and-mortar stores forced to shutter outlets in the face of declining sales and fiscal losses, and electronics stores have been especially hard hit. Dating its founding to 1921, RadioShack once offered a considerable array of name-brand Amateur Radio equipment — even beams and towers — along with home entertainment gear and discrete components — including transistors, resistors, and capacitors. Its iconic 1960s-era catalog ran to more than 300 pages. In later years, it sold a fairly popular 2 meter handheld transceiver for a time, as well as Citizens Band equipment, 10-meter single-banders, and shortwave receivers. RadioShack's website is announcing a clearance sale, with some items steeply discounted.

"RadioShack did more to spread the early technology

culture in the US than any other commercial institution," ARRL CEO Tom Gallagher, NY2RF, observed. "Its catalog was the Boys' Life of electronics." Sadly, it would appear that all of the local Radio Shack stores in our area will be closing probably by this May including the Canton - 30th Street, Akron - Arlington Road and the Wadsworth Store. Currently all stores are offering closeout prices.

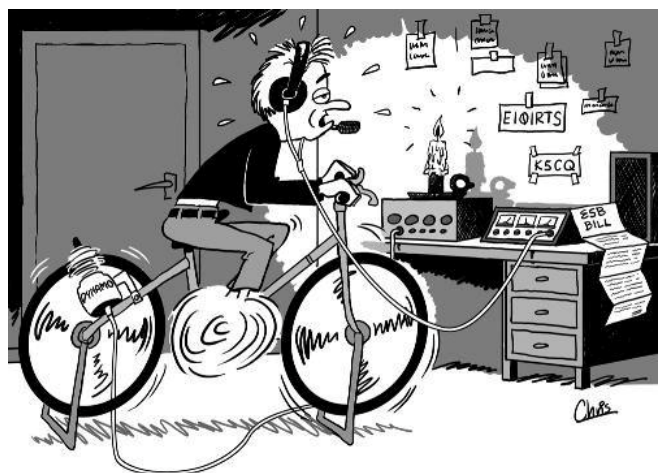
... ALKALINE BATTERIES OK FOR TRASH ...

Here is some interesting news thanks to the Monday Morning Message from John Myers, KD8MQ. When taking a load of batteries to the recycle center recently, I was told that they are no longer accepting Alkaline cells. Their reason is that alkalines are now approved for the landfill. Being the skeptical sort, I checked further, and found that since 1993, Duracell has discontinued the use of Mercury in their batteries. The cells manufactured since are approved for the landfills.

According to their website, "you should recycle rechargeable, lithium, lithium ion, and zinc air batteries."

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

73's
Terry – N8ATZ



"Sorry OM, I can only work QRP at the moment!"

Veep's Voice

As we look at some of the upcoming events we see the Cuyahoga Falls ARC Hamfest will take place the morning after our next meeting April 7. Same place, Emidio's Party Center at the corner of Bath and State roads. 8 am – 1 pm. \$6 at the door.

MARC Code and Tech classes are proceeding each Friday evening at the Senior Center 3rd floor where we are assisted by the availability of the W8NP radio room for “hands on” experience.



Our April club meeting, Friday April 7, will have as it's program a presentation of “The History of the Ohio State Highway Patrol Radio System.” Many of you know of the location of the Massillon Post of the OSHP on Lincoln Way West, but the involvement of hundreds of Amateurs in the Radio Operator and Technician ranks since it's inception in the mid-1930's has been forgotten. This was when patrol cars had receivers only and listened for the “calling all cars,” or “all points bulletins” sent out on 1700 kHz AM broadcasts. (just below 160 meters).



Many local hams were employed at the Massillon Post, as station operators and technicians. The last one we had as a club member was Steve Garwood, NØCZV, who was transferred to Bucyrus about ten years ago.

The program will be presented by Chuck Johnston, W8JNE, of Grove City, OH, and will include information from the early 1930s up to the present MARCS statewide trunking system. He will be staying overnight at the Hampton Inn, our next door neighbor – a first for any of our out-of-town speakers. Chuck's associate in the program production, Bob Ballantine, W8SU, the former Radio Chief of the Warren-Youngstown division was planning to join us but eye problems have prevented him from driving. However, we should have in our presence the afore-mentioned Steve, NØCZV. It will be a great time, and all are welcome to come and enjoy.

73, Perry, W8AU VP & Activities Mgr



Good morning everyone,
It was good having Scott Yonnally and John Myers from the ARRL Ohio Section with us this past meeting , I enjoy meeting people involved in amateur radio.

I would like to thank Mike KE8EHG for coming to my QTH to see how the West Stark Information Net is put together, and Russ N8PII to helping with the net, it good to have someone interested in helping the other net controllers on Friday nights

Went to DX engineering and seen the showroom for the time, I was impressed with their display of radios and accessories that they had. I also talked to them about their Skype presentation and taking a group on their tour. I also was looking for a Kenwood MC-60 microphone and they had one stock , so I got one.

I also had the opportunity attend Mike WA8MKH antenna program which was very interesting and learned more about antennas. I'm hoping in the future I can attend more programs put on by the members of MARC and other operators.

Looking forward to seeing everyone at the next meeting and hope to catch you on the air.

73 de Tony KD8UXK

UNIVERSAL RADIO

ICOM
IC-7300



The **icom IC-7300** HF/6 meter 100 watt transceiver hosts new capabilities and technologies for its class. SDR architecture with brilliant color TFT touch screen provides real-time spectrum display with waterfall. Plus built-in tuner, voice memory, CW/RTTY keyer/decode and SD port.

YAESU
FTdx1200



The **FTdx1200** provides sophisticated 160 to 6 meter operation with the latest 32 Bit high speed DSP technology. With three roofing filters, TFT color display, waterfall scope, built-in antenna tuner, IF shift/notch & more!

YAESU
FT-991A



The **Yaesu FT-991A** does it all. HF to 70cm with 100W on HF/6m. Multimode including C4FM Digital, HF/6m tuner, stunning 3.5" color TFT touch panel with spectrum display and color waterfall. 3 year limited warr.

CommRadio
CTX-10



The multi-mission **CommRadio CTX-10** SDR QRP transceiver covers 160-10 meters CW/SSB 1 to 10 watts. Receive 200 kHz to 30 MHz. Integrated CW reader and antenna tuner enhances portability. Optimized for low power consumption. Made in USA. Expected early 2017. This device has not been approved by the F.C.C. This device may not be offered for sale or lease or be sold or leased until approval of the F.C.C. has been obtained.

**universal
radio inc.**

Universal Radio, Inc.
6830 Americana Pkwy.
Reynoldsburg, Ohio 43068
800 431-3939 Prices & Orders
614 866-4267 Information
dx@universal-radio.com
www.universal-radio.com
Quality Equipment Since 1942

Interesting gadgets I wish I had time for

By Dan Romanchik, KB6NU

I'm on a lot of mailing lists and participate in a bunch of amateur radio forums. As a result, I see a lot of interesting gadgets that guys are buying or are thinking about buying. Here are three of the latest that look interesting to me. I wish I had time (and money) to purchase all of these and try them out.

Android antenna analyzer

On Reddit (https://www.reddit.com/r/amateurradio-coments/60nnp1finally_got_my_mini60_ebay_antenna_analyzer_time/), some of the guys have been talking about the Mini60 Antenna Analyzer (<http://www.ebay.com/itm/CW-USB-Interface-Cable-WINKEYER-compatible-3-5mm-plug-/132121085623?hash=itemlec307c6b7:g:up8AAOSw241YeTei>). Its frequency range is 1 - 60MHz, but the cool thing about this device is that you can use it standalone with the built-in LCD display or with some software (http://www.jtelectronics.co.nz/information_links/MINI60/Add-Bluetooth-Module-To-MINI60-Antenna-Analyser.htm) and a tablet with a Bluetooth interface to get fancy frequency vs. SWR plots. See <http://www.kb6nu.com/wp-content/uploads/2017/03/mini60-ant-analyzer.jpg> for a photo of the Mini60 Antenna Analyzer being used with an Android tablet.

Of course, this is made in China, but how can you beat the price? It costs \$112 shipped.

Multi-functional component tester

Here's another marvel of Chinese engineering and manufacture - a smart component tester (http://www.banggood.com/3_5inch-Colorful-Display-Multi-functional-TFT-Backlight-Transistor-Tester-p-1083042.html) for only \$30, shipped. It identifies and characterizes NPN and PNP transistors, capacitors, resistors, diodes (including Zener diodes), N-channel and P-channel MOSFET, IGBT, JFET, triacs, and batteries.

This isn't the first smart component tester to hit the market, but the unique thing about this unit is that it has a graphical display that not only identifies the type

tester (http://www.banggood.com/3_5inch-Colorful-Display-Multi-functional-TFT-Backlight-Transistor-Tester-p-1083042.html) for only \$30, shipped. It identifies and characterizes NPN and PNP transistors, capacitors, resistors, diodes (including Zener diodes), N-channel and P-channel MOSFET, IGBT, JFET, triacs, and batteries.

This isn't the first smart component tester to hit the market, but the unique thing about this unit is that it has a graphical display that not only identifies the type of component that you've connected to it, but also draws the schematic symbol of the part. You can see a video of this tester in action at <https://www.youtube.com/watch?v=07FH6tjzwWg>.

Make your Raspberry Pi into a desktop PC

Newark/element 14 will soon start selling a kit of part that will make it easier to turn your Raspberry Pi into a desktop PC (https://www.element14.com/community/docs/DOC-83477?CMP=e-email-SEPO-210317-e14PI&et_cid=28941683&et_rid=1231362216&cmp=). The kit includes:

- Intelligent and Safe Power Controller
- Interface to connect mSATA SSD (upto 1TB)
- Real Time Clock to keep track of time
- Heat Sink
- Enclosure

They don't list the price just yet, but this might be what I need to actually make use of the Raspberry Pi 3 I bought several months ago.

(Cont next page)

of component that you've connected to it, but also draws the schematic symbol of the part. You can see a video of this tester in action at <https://www.youtube.com/watch?v=07FH6tjzwWg>.

If you have one of these gadgets, or buy one in the future, please let me know how you like it. I'll put your review up on my blog, so that everyone can benefit from your experience.

When he's not drooling over electronic gadgets, Dan blogs about amateur radio at KB6NU.Com, writes the "No Nonsense" amateur radio study guides, and teaches ham classes. You can contact him by e-mailing cwgeek@kb6nu.com.

ARRL NEWS

AMSAT Reschedules Fox Series Launches

03/28/2017

[AMSAT](#) has announced that the launches of its Fox-1Cliff and Fox-1D CubeSats have been rebooked from a single launch to separate launches. Both satellites initially were set to go into space on the Spaceflight [Formosat-5](#)/Sherpa mission aboard a SpaceX Falcon 9 (Sherpa is launched as a rideshare program for small, low-budget satellites). Fox-1Cliff will launch on Spaceflight's SSO-A dedicated rideshare mission aboard a SpaceX Falcon 9 scheduled to launch from California's Vandenberg Air Force Base in late 2017 or early 2018. Fox-1D will ride into orbit on an Indian Polar Satellite Launch Vehicle set to launch late this year.

"These moves will serve to expedite the launch of these two satellites, both of which carry an Amateur Radio U/V FM repeater and an experimental L/V FM repeater," AMSAT said. "The satellites also carry scientific experiments from university partners Penn State, Vanderbilt University ISDE, Virginia Tech, and University of Iowa."

Spaceflight said the recently announced 2017 SpaceX manifest would have a "significant" impact on the Formosat-5 mission. "We learned our launch would occur potentially much later than expected," Spaceflight President Curt Blake, said in a March 2 statement. Spaceflight rebooked its Formosat-5 mission customers and found an alternative launch for each one, he said.

In addition to the launch of Fox-1Cliff and Fox-1D, AMSAT is awaiting the launches of RadFxSat and RadFxSat-2. RadFxSat is currently scheduled to launch this August 29 aboard the NASA Educational Launch of Nanosatellites (ELaNa) XIV mission, as a secondary payload with the Joint Polar Satellite System ([JPSS-1](#)) on a Delta II vehicle from Vandenberg Air Force Base. RadFxSat-2 will be launched no sooner than December 2017 by Virgin Galactic on its LauncherOne air launch system from Mojave, California on the ELaNa XX mission.

North of the Border, the University of Alberta's AlbertaSat team has announced that Ex-Alta-1 — its first CubeSat — now has a ride. Ex-Alta-1 is set to launch this week aboard an Atlas V rocket from Cape Canaveral to the International Space Station for later deployment into low-Earth orbit.

Ex-Alta-1 is part of the [QB50](#) project, an international network of 2U and 3U university-designed and built CubeSats deployed in a "string-of-pearls" configuration to carry out space weather and atmospheric studies for up to 18 months. Ex-Alta-1 will carry a digital fluxgate magnetometer and use the 70-centimeter Amateur Radio band (436.705 MHz, 9600 kB GMSK) to downlink its telemetry.

Three Australian-designed QB50 project satellites were delivered to the International Space Station on March 25 for later deployment — the University of New South Wales's UNSW-ECO and INSPIRE-2 (a joint project with the University of Sydney), and the University of Adelaide/University of South Australia's SUSat. All three have been coordinated for telemetry downlinks (9600 kB GMSK) in the vicinity of 436 MHz. UNSW-ECO also has a 2.4 GHz downlink. — *Thanks to AMSAT News Service via Drew Glasbrenner, KO4MA; Jerry Buxton, N0JY, Larry Reeves, and other sources.*



(Thanks to the ARRL Website for this article)

AMATEUR RADIO (ANTENNA ITEMS) WORD PUZZLE

Below is a list of words Related to Antennas.

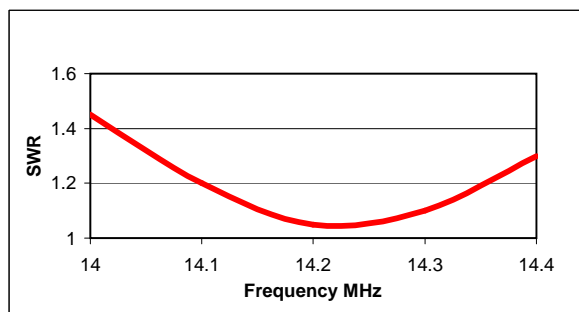
The words are located in the word puzzle vertically, horizontally, diagonally, forward, or reversed. Letters are sometimes used more than once.

Multiple words are one continuous word in puzzle.

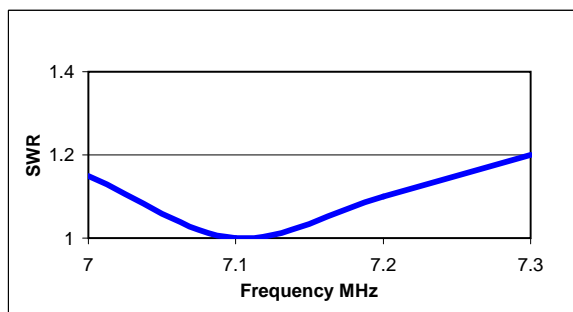
Puzzle continues on the next page.

300 OHMS	END FED	MARCONI	SLOPER
468/MHZ	EZNEC	MATCHING	SMITH CHART
5/8 WAVE	FEEDLINE	MICROWAVE	SWITCH
50 OHMS	FOLDED DIPOLE	MONOPOLE	SWR BRIDGE
75 OHMS	FREQUENCY	MULTIBAND DIPOLE	TOROID
ANALYZER	G5RV	PHASED ARRAY	TOWER
ANTENNA	GAMMA MATCH	PROPOGATION	TRANSFORMER
ANTENNA HANDBOOK	GIN POLE	QUAD	TRAP VERTICAL
BOOM	GROUND LOSS	QUARTER WAVE	TRIBAND BEAM
COAX	GROUND PLANE	RADIATION ANGLE	TUNER
COIL	GROUND ROD	RECEIVER	TWINLEAD
CONNECTOR	GUY WIRES	REFLECTOR	UHF
COUPLING LOOP	HALF WAVE	RELAY	VERTICAL
DECOUPLING	HEIGHT	RESISTANCE	VHF
DELTA LOOP	HF	RF	WINDOM
DIPOLE	IMPEDANCE	RHOMBIC	WIRE
DIRECTOR	INSULATOR	ROTOR	YAGI
DISH	INVERTED VEE	SAFETY	Z MATCH
DRIVEN ELEMENT	LADDER LINE	SAFETY BELT	ZEPP
DUMMY LOAD	LENGTH	SHIELD	



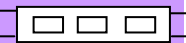
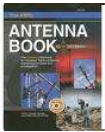
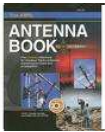
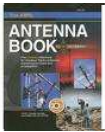
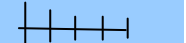




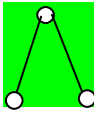
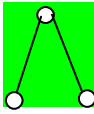
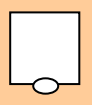
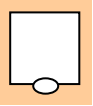
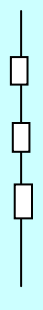
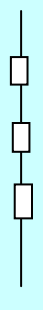
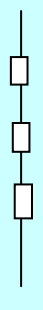

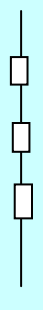

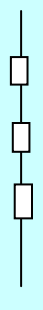

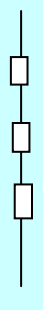

73, de Carol KB8IMH, Mike WA8MKH



GROUND MOUNTED, 2 RADIALS PER BAND



4BTV
40,20,15,10M

T L E B Y T E F A S A U H F K O L A C I T R E V P A R T
 S O H C T A M Z V  A D A W T N E M E L E N E V I R D
 P 5 / 8 W A V E R  G N S V P R O T C E L F E R S W K
 K H D S M H O 0 5 K N N A X W R A K A T K A D C W Q A R
 X A A S W K T H G I E H S E L O P N I G K C  E E
 W L 3 S T A B W H T S E G H O P O O L G N I L P U O C S
 H F 0 H E R N C N E N D I C R O  R O T A L U S N I
 T W 0 I A D T A R I I G K T X G  O T R O T O R A S
 A A O E D A A I L R A R W I D A  U D E  D T
 K V H L M U W R B Y E R I W U T O S T N O V H F H S E A
 L E M D F Y E R R F Z T A S K I H C D D D O A S H M P N
 I O S A U D W K S A D E H O A O R T S E D G D A R O M C
 O W D G D S W H W T Y J R D J N W A L D M A R C O N I E
 C D R A D I A T I O N A N G L E K T V U F M K J A O C W
 Y A L E R W R K N W F  K U S D A O L Y M M U D F P R H
 O W H D S  J R O K L E T C A D A W I K O O D
 E H R E W O T I O  U E H V O L I N E S T M D O U L W D
 K N U A J R P C M B M S M O O B E B  K A W R A E A R
 I H A H T O F R E R W K P P A U D G  U T T O Y E V F
 N S R L L  D O R S H I N Q N O N H Q O C R T L R E T
 V I H E P  F D S I D D E A R R I A D W H E N S E Z R
 E D R T S D S S O R D D R B F O D L Z H H F I R D V N A
 R  E W G N N L A E I F I T A T N P H R A W H L K I E H
 T  T F A N D U D P R R O H F C U U M S T N I W R E C C
 E  T R D N E L O T T H  E O O / D L N N T Z C S H
 D  T K U N O L R R K U  N R C 8 W E O H E A E H T
 V  H O H F E H T D G  N H K N G E 6 A R R P G T R R I
 E  R H 7 5 O H M S  E K O S D 4 O T P M E L N K M
 E G A Q U A R T E R W A V E R C T H C I B M O H R K A S

73 de Carol KB8IMH, Mike WA8MKH

April 2017

W8NP Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																		
<table border="1" style="margin: auto;"> <tr> <th colspan="7">Mar 2017</th> <th colspan="7">May 2017</th> </tr> <tr> <th>S</th><th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th> <th>S</th><th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th> </tr> <tr> <td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td> <td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td> </tr> <tr> <td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td> <td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td> </tr> <tr> <td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td> <td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td> </tr> <tr> <td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td> <td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td> </tr> <tr> <td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td>31</td><td></td> <td>28</td><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td> </tr> </table>						Mar 2017							May 2017							S	M	T	W	T	F	S	S	M	T	W	T	F	S				1	2	3	4		1	2	3	4	5	6	5	6	7	8	9	10	11	7	8	9	10	11	12	13	12	13	14	15	16	17	18	14	15	16	17	18	19	20	19	20	21	22	23	24	25	21	22	23	24	25	26	27	26	27	28	29	30	31		28	29	30	31				<p style="color: red; font-size: 2em; margin: 0;">1</p> <p style="color: red; font-size: 0.8em; margin: 0;">April Fool's Day</p> <p style="font-size: 0.7em; margin: 0;">Portsmouth ARC Hamfest, Portsmouth, OH, Ctc: Gary, 740-778-2119</p> <p style="font-size: 0.7em; margin: 0;">VE Test Session, Portage County ARS, 1000, Ctc.: Robert 330-607-3833, PCARS, Ravenna</p>
Mar 2017							May 2017																																																																																																	
S	M	T	W	T	F	S	S	M	T	W	T	F	S																																																																																											
			1	2	3	4		1	2	3	4	5	6																																																																																											
5	6	7	8	9	10	11	7	8	9	10	11	12	13																																																																																											
12	13	14	15	16	17	18	14	15	16	17	18	19	20																																																																																											
19	20	21	22	23	24	25	21	22	23	24	25	26	27																																																																																											
26	27	28	29	30	31		28	29	30	31																																																																																														
<p style="color: red; font-size: 2em; margin: 0;">2</p> <p style="font-size: 0.7em; margin: 0;">Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">3</p>	<p style="color: red; font-size: 2em; margin: 0;">4</p> <p style="font-size: 0.7em; margin: 0;">Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: red; font-size: 2em; margin: 0;">5</p>	<p style="color: red; font-size: 2em; margin: 0;">6</p>	<p style="color: red; font-size: 2em; margin: 0;">7</p> <p style="font-size: 0.7em; margin: 0;">Massillon Amateur Radio Club Meeting, Affinity Conference Room 1, 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">8</p> <p style="font-size: 0.7em; margin: 0;">Cuyahoga Falls ARC Hamfest, Emidio & Sons Party Center, Ctc: Michael, K8MAL, 234-206-0270, 08:00 - 13:00</p>																																																																																																		
<p style="color: red; font-size: 2em; margin: 0;">9</p> <p style="font-size: 0.7em; margin: 0;">Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">10</p>	<p style="color: red; font-size: 2em; margin: 0;">11</p> <p style="font-size: 0.7em; margin: 0;">BD K8GMG Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: red; font-size: 2em; margin: 0;">12</p>	<p style="color: red; font-size: 2em; margin: 0;">13</p>	<p style="color: red; font-size: 2em; margin: 0;">14</p> <p style="font-size: 0.7em; margin: 0;">West Stark Info Net - 147.180 at 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">15</p>																																																																																																		
<p style="color: red; font-size: 2em; margin: 0;">16</p> <p style="font-size: 0.7em; margin: 0;">Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">17</p>	<p style="color: red; font-size: 2em; margin: 0;">18</p> <p style="font-size: 0.7em; margin: 0;">Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: red; font-size: 2em; margin: 0;">19</p>	<p style="color: red; font-size: 2em; margin: 0;">20</p>	<p style="color: red; font-size: 2em; margin: 0;">21</p> <p style="font-size: 0.7em; margin: 0;">West Stark Info Net - 147.180 at 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">22</p> <p style="font-size: 0.7em; margin: 0;">BD KC8IUU Drumlins ARC Hamfest, Palmyra, NY, Ctc: David, 315-597-4293</p>																																																																																																		
<p style="color: red; font-size: 2em; margin: 0;">23</p> <p style="font-size: 0.7em; margin: 0;">Massillon Radio Net - 3599.5 kHz, 2000</p> <p style="font-size: 0.7em; margin: 0;">Two Rivers ARC Hamfest, Boston, PA, Ctc: William, 724-242-5347</p>	<p style="color: red; font-size: 2em; margin: 0;">24</p>	<p style="color: red; font-size: 2em; margin: 0;">25</p> <p style="font-size: 0.7em; margin: 0;">Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: red; font-size: 2em; margin: 0;">26</p> <p style="font-size: 0.7em; margin: 0;">VE Test Session, Cuyahoga Falls ARC, 1645, James, 330-929-8921, Northampton Town Hall</p>	<p style="color: red; font-size: 2em; margin: 0;">27</p>	<p style="color: red; font-size: 2em; margin: 0;">28</p> <p style="font-size: 0.7em; margin: 0;">BD K8DA West Stark Info Net - 147.180 at 2000</p>	<p style="color: red; font-size: 2em; margin: 0;">29</p> <p style="font-size: 0.7em; margin: 0;">Jackson County ARC Hamfest, Jackson, OH, Ctc: Roman, WU8R, 740-710-0174</p>																																																																																																		
<p style="color: red; font-size: 2em; margin: 0;">30</p> <p style="font-size: 0.7em; margin: 0;">Athens Hamfest, Athens, OH, Ctc: William, 740-593-7176</p> <p style="font-size: 0.7em; margin: 0;">Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="font-size: 0.7em; margin: 0;">Upcoming Events:</p> <p style="font-size: 0.7em; margin: 0;">May 7 - Jackson Hamfest, Ripley, WV</p> <p style="font-size: 0.7em; margin: 0;">May 19 - 22 - Dayton Hamvention</p> <p style="font-size: 0.7em; margin: 0;">May 27 - Stark County Area VE Team Test</p>																																																																																																							

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

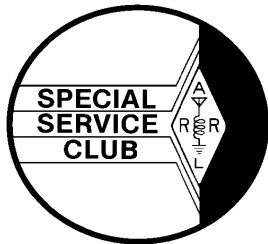
FIRST CLASS MAIL

TO:



85 Years in existence 1927-2012

VISIT US ON THE WEB AT; <http://www.w8np.org>



President	Tony Casebolt	KD8UXK
Vice President	Perry Ballinger	W8AU
Secretary	Fred Reed	KD8SMO
Treasurer	Mike McNamara	KB8OTK
Editor	Gary Kline	WC8W
Trustees	Jim Farriss	WA8GXM
	Bud Harvey	WA8KWD
	Ted Armstrong	K8TWA
W8NP Trustee	Perry Ballinger	W8AU
W8NP Webmaster	Terry Russ	N8ATZ

Published by the Massillon Amateur Radio Club, P.O. Box 73, Massillon Ohio 44648. The Club meetings are the first Friday of every month (except January) at 8:00 PM at the Massillon Senior Citizens Building at 39 Lincoln Way West, Massillon, Ohio