



FEEDBACK

VOLUME 62 ISSUE 1

JANUARY 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 McNamara
KB8OTK
kb8otk@yahoo.com

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

**WEST STARK INFO
NET
Fridays 8:00 PM 1417.18
MHz**

CONTENTS

Secretary Report	2
Parity Act	3
N8ATZ Column	4
KB6NU Column	5
ARRL News	6
10 Phone Patch	7
10 Phone Patch pg. 2	8
Calendar by K8INN	9
MARC Back Page	10

**SPECIAL NOTICE JANUARY
AWARDS BANQUET MEET-
ING**

The meeting for the month of January will be our annual Awards Banquet Meeting. This year it will be held at the Knights of Columbus hall at 988 Cherry Road NW. Doors open at 5:30 PM to allow time for paper work to be finished.

Reservations must be in by January 2, 2017. Cost will be \$ 16.50 per plate. Meal consists of 3 meats, potatoes, a salad and desert (provided be Ladies). The “entertainment” for the evening will be presentation of the “serious” awards followed by the “not-so-serious” awards. We all look forward to see who Perry has selected to receive the usually “funny” awards ! Finally we will have the swearing in of the new officers. A great evening is in store for all who attends. See you at the Banquet !



**CONGRATULATIONS TO
OUR NEW OFFICERS FOR
2017**

At the December meeting, members made their choice of new Officers for the MARC. They are:

- Tony Casebolt KD8UXK President
- Perry Ballinger W8AU Vice President
- Froe Reed KD8SMO (incumbent) Secretary
- Mike Mc McNamara KB8OTK Treasurer
- Ted Armstrong K8TWA Trustee

DUES ARE DUE

With the coming of the New Year that means that the Dues for MARC are now due.. This can be fixed real easy by sending your \$ 15.00 dues to Treasurer (outgoing) to:

Gary Kline WC8W :
6500 Highton ST SW
Navarre, Ohio 44662-9786

I am going to substitute for Mike KB8OTK until he recovers from his surgery in January.

MARC Minutes December 2, 2016

President Ralph K8HSQ, opened the meeting at 8:00 PM, and after the Pledge of Allegiance, there was a role call, with 36 persons present.

Acceptance of last month's minutes:

Ralph asked if there were any changes or additions to last month's meeting notes. None being heard, a motion to accept the report was made by BudWA8KWD and seconded by Ken K8WAY. Motion passed.

Treasurer's Report:

Gary WC8W then gave a detailed report on club finances. Gary has also made a deposit to the KofC for the upcoming banquet on Jan. 7th. After summarizing the finances for the club, Gary also gave the final reports for the hamfest. While we did make a modest profit, the real value of the hamfest is with the good PR it generates for the club, and the all the good eyeball QSO's that come from it. Everyone agreed that the hamfest was well worth the effort, and we look forward to another good one in 2017. A motion to accept the report was made by Jim WA8GXM and seconded by Dan N8DZM. Motion passed.

VP Report:

The only Hamfests this month that is reasonably close is the Fulton County "Winterfest 2016" held on Saturday December 3rd, 8:00am – 12:00pm at the Delta American Legion Hall Post 373, 5939 State Route 109, Delta, OH 43515. Birthdays this month are: Ralph K8HSQ (really old!), Larry KC8RKU, Fred KD8SMO (also pretty old), Gene W8KXR and Joanne Wetzel (not very old at all). Happy Birthday to all. Terry, along with Perry W8AU gave a wrap-up report on the holiday parade. As usual, MARC did a bang-up job, in spite of the cold, wet weather. MARC volunteers even had to deal with a real-life fire department emergency that affected traffic patterns. All in all, it turned out well, and after the parade, all the volunteers got together for a nice lunch at B&K restaurant. Thanks to all the people that helped make this a success. There is a nice write-up regarding the history of the parade and MARC's involvement on the clubs website (www.W8NP.ORG)

Announcements:

Rex N8XG announced that VE classes and exams will be held on Tuesday Dec. 13th in Alliance. Rex didn't have all the details yet, but anyone interested in taking the test and/training session should contact Rex for more details.

Committee Reports:

Repeater report by Jim WA8GXM. Jim mentioned that the repeater is working fine. There haven't been any reports of problems, so the antenna replacement project was a cure for the noise problems that we had.

Mentoring Program:

Fred KD8SMO explained that he is planning to have a class for those who are not so familiar with how a radio actually works internally. He is planning to have the session at his QTH, with perhaps 4-6 persons. The class could be held more than once if the interest warrants it. Fred passed around a sign-up sheet, and asked that anyone interested note their e-mail address. He will contact interested parties by e-mail after the details are ironed out. The class will be held sometime in February.

If anyone has an idea for other mentoring classes, they should contact Wade WD8MIU who is the club's committee person for these sessions.

Perry W8AU mentioned that in past days we used to offer classes for General and Extra class licenses, in addition to just the Technician level. He noted that we have the sufficient area to hold more than one class at a time, and asked that anyone interested in teaching for the General or Extra class get in contact with him.

Old Business:

Regarding the January banquet, it will be held at the Massillon KofC, January 7th, at 6:00 PM. There was a spirited discussion about how many choices of meat will be available, and it was decided to have three. The board will decide what three are offered. The cost will be \$16.50 / person. The "Ladies Auxiliary" will furnish dessert. Many thanks to them for the many and varied things they do for the club! Make sure that if you want to attend, get your information to Gary WC8W as soon as possible!!

New Business:

Now came the fun part. Nominations for officer's positions were taken and ballots cast. It was very heartening to see volunteers step up to replace those who have served for so long. It is a bit lengthy to go into the entire voting etc., but the results are as follows:

President: Tony Casebolt KD8UXK

Vice President: Perry Ballinger W8AU

Treasurer: Mike McNamara KB8OTK

Secretary: Fred Reed KD8SMO

Trustee: Ted Armstrong K8TWA

Many thanks to those who volunteered, and we wish them great success in their new positions. After the voting Terry gave a very nice "State of the Union" talk about the 2016 accomplishments of the club, and wished the new officers success.

As his last official duty, Ralph explained the new 2017 budget that the executive committee developed. Next year's budget is not very different from the last, except there will be some savings from the elimination of the ATT phone line, and other minor changes to equipment repair etc. No questions being asked, a motion to accept budget was made by Lee KD8UEA and seconded by Dan N8DZM. Motion passed

With all business concluded, Ralph asked for a motion to adjourn. . First Jim WA8GXM, second Ken K8WAY. Motion passed.

50:50 Raffle: The raffle was won by Rex NX8G who donated the proceeds back to the club. Thank you Rex.

After the meeting everybody enjoyed some time making conversation and eating some delicious brownies.

Thank you Steve and Shirley and any others who helped for providing refreshments!

Submitted by Fred KD8SMO

ARRL Vows Continued Pursuit of the Amateur Radio Parity Act in the 115th Congress

The Amateur Radio Parity Act, H.R. 1301, died an unbecoming death as the 114th Congress of the United States drew to a close today. After having passed the House of Representatives on a unanimous vote, the bill stalled in the Senate due to the intervention of only one member, Sen. Bill Nelson (D-FL).

Over the course of the past year, Sen. Nelson has received thousands of e-mails, letters, and phone calls from concerned constituents asking for his support of H.R. 1301. Numerous meetings were held with his senior staff in an effort to move the legislation forward. Negotiations, which led to an agreement with the national association of homeowner's associations and publicly supported by CAI and ARRL, were brushed aside by Sen. Nelson as irrelevant.

In a final meeting with the Senator's staff earlier this week, it became clear that no matter what was said or done, the Senator opposed the bill and refused to allow it to move forward. Unfortunately, as the bill did not receive floor time, the only manner in which it could get passed in the Senate would be through a process that required unanimous consent, which means no one opposes the bill.

The legislation will be reintroduced in both houses of Congress after the 115th Session begins in January. We have already been in contact with the sponsors of the bill to allow for an early introduction, which will give us more time to obtain success. We believe that we can get his bill adopted given the fact that we were inches away from crossing the goal line. We will continue to need the support of the membership, particularly in Florida, as we go forward through the next year.

... **HAPPY NEW YEAR !** ...

2016 was another good year for the club. Attendance at monthly meetings was also strong. When people attend meetings I believe it's because they enjoy being there. We have always tried to be professional during our meetings but still have some fun. I stand by a firm set of rules - and Rule No 5 is to have a little fun every day, it helps to keep me sane !.

I hope you enjoyed the programs we were able to put together as well. With Perry, W8AU as new Vice-President I have pledged to help him with programs for the year. I already have some new ideas for programs for 2017 and I know Perry also has some great ideas to. Plan on joining us for the year and see what we have in store for everyone. Two new programs we are working on are one about Drones that we'll be presented by Jim, WA8GXM and me. It will include a some show and tell as well as a flight in the hospital parking lot. I also found a great video that shows what the new Dayton Hamvention location looks like. This should be fun !.

Club participation at our events was also better than ever, including Field Day, the Swiss Festival and our annual Hamfest. We all appreciated your help and all our events were very successful.

During the year our club repeaters were fully repaired and are now back in great working condition thanks to hard work from multiple club members. Several other projects were completed throughout the year thanks to the officers and members.

I hope you will continue to support our club in 2017 and our new officers look forward to serving you.. If we all do our part we will have another successful year !

... **DX ENGINEERING** ...

The last several years DX Engineering

(DXE) has held an open house during the first few months of the year that was very enjoyable and fun to attend. While I haven't heard anything planned for 2017, I did find something on their website that you might find interesting especially if you have not had a chance to visit their new retail store.

With the closing of Amateur Electronics Supply last year, it's nice to know we have a great ham radio store just up the road in Akron. DXE has posted a new video tour hosted by Tim Duffy, K3LR that shows the new store and lots of info on all the new products they now carry. They even have a new guest operator table where you can tune around using the newest ham gear. Just point your internet web browser to www.dxengineering.com and look under Tech Articles.

... **OTHER STUFF** ...

Ralph, K8HSQ has indicated we should have use of the hospital conference room on some Saturday mornings during the early part of this year and we hope to have a few monitoring programs to offer the club. We are always looking for topics for programs.

Wade, WD8MIU is helping us again this year with our monitoring series and would like to hear from you with any ideas you have..

That's it for now, I hope to see many of you at our annual banquet and at monthly meetings !

73's
Terry - N8ATZ

On page 7 and 8 of this issue is an article about phone patches that can be easily and cheaply built. This was sent to us by member Charles Scherger KB8STV. There are more articles in the series. Please let me know if you like them or dislike them. ARRL articles in this issue are from ARRL members Only columns. Thanks de Editor WC8W

KB6NU COLUMN

Is there a market for a \$400 "prepper" radio?

By Dan Romanchik, KB6NU

A couple of days ago, a reader wrote:

"I would like to know if it would be feasible to build a radio with the following features:

- * SSB operation (only SSB is required, CW would be an additional benefit)
- * 20 - 50W of power
- * Portable-friendly (lightweight, capable of operating at lower voltages from small portable batteries)
- * Low receiver current drain
- * Coverage of 40m and 80m bands. Very limited coverage is acceptable. Even channelized coverage of a few select frequencies would be acceptable.
- * S-meter

"It strikes me that there is a large market for ham radio products for "preppers," and there has been a lot of interest in the Baofeng line of radios from that market. I think there would be a LOT of interest in a radio that could go far beyond line-of-sight and contact friends or family hundreds of miles away. Preppers would have little interest in contacts more than a state or two away, and no interest at all in novel operating modes. I wonder if a radio that trims away excess features (all-mode operation, wide frequency coverage, high power output, sophisticated audio filtering) could be produced for a lot less cost than currently available HF rigs. If so, and it was paired with a decent NVIS dipole and some General-class study materials and sold as a package deal, it could be a huge hit. Something you could tuck in a bug-out-bag, set up in the field, and use to make contacts in a reasonably local area, or set up in your backyard at home and use minimal power to operate.

"Is there a reason why I don't see radios like this on the market, some kind of technological limitation that would make this sort of thing impractical? If something like this

was built, what kind of cost and performance would you expect? I'm certainly not expecting any kind of detailed analysis, but even just a speculation about if such a project could be feasible would be appreciated."

I replied:

"I think one of the reasons you don't see radios with the feature set you describe is that more full-featured radios are already pretty inexpensive. The Yaesu FT-450D, for example, costs less than \$800 and offers 100W output. The FT-817ND, which is designed for portable operation, costs less than \$700. Is that too much for preppers?

"While it might seem like you could sell a radio with fewer features for less, I think that you hit the law of diminishing returns. At some point, removing features, doesn't reduce the cost all that much. For example, removing the CW capabilities from a transceiver capable of SSB operation really doesn't save that much because in a way CW operation is really just a subset of SSB operation. You'll save the cost of a key jack, but how much is that? Maybe a buck or two. Having said that, it could be that the big amateur radio manufacturers are overlooking an opportunity here."

We swapped a couple more e-mails about this. He noted, "Most preppers would probably rather buy a high-end AR-15 or several months worth of storage food for \$800 than a radio." I suggested, "If there was a catastrophic event, and you really needed to communicate, wouldn't it seem silly to have not spent the extra \$400 on a really decent radio?"

What do you think? Is my analysis a little too simplistic perhaps? Are amateur radio manufacturers ignoring a potential market?

=====

Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides, and blogs about amateur radio at KB6NU.Com. You can contact him by e-mailing cwgeek@kb6nu.com.

ARRL NEWS STRAIGHT KEY NIGHT

Ring in the New Year with ARRL Straight Key Night and AMSAT CW Activity Day

Every day is a good day to operate on CW, but set some time aside on New Year's Eve and Day to enjoy Straight Key Night (SKN) or to do some CW on the satellites during AMSAT CW Activity Day.

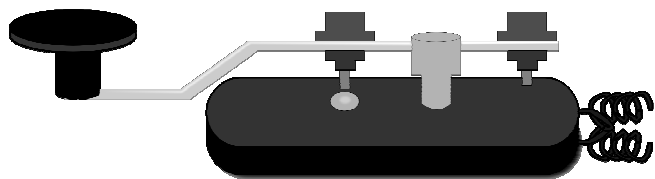
The annual SKN gets under way at 0000 UTC on January 1, 2017 (New Year's Eve in US time zones). The 24-hour event is not a contest but a day dedicated to celebrating Amateur Radio's CW heritage.

Participants are encouraged to get on the air and simply enjoy conversational CW contacts, preferably using a straight (hand) key or a semi-automatic key (bug).

Activity traditionally centers on CW segments in the HF bands. There are no points or obligatory exchange. The only requirement is just to have fun! Send a SKN list of stations worked and your vote for Best Fist and Most Interesting QSO by January 31, 2017.

AMSAT CW Activity Day formerly Satellite Straight Key Night takes place on January 1, 2017 (UTC) and run for 24 hours. As with the old Straight Key Night, this is a fun event, not a contest, and there is no required exchange. All forms of CW are welcome, from straight keys, bugs, and keyers to keyboards and decoders. Working the same station on more than one satellite is permitted.

All participants are asked to post their results, including any Soapbox comments, to AMSAT-BB. Include the satellites you used and the number of CW contacts you make on each. Participants may post their full logs, although this is not required.



(From Ohio Section News 12/30/2017)

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

A \$10 Phone Patch

— CQ Ma Bell

You don't have to spend \$40 to \$90 for a phone patch to match your new solid-state rig. This simple circuit will give perfectly adequate performance with parts purchased at your local Radio Shack. For a cost of under \$10 and one evening's work, you can have a patch that will work with a new solid-state rig or an older tube-type transceiver. This circuit (or variations of it) has been in use by several hams in this area for a number of years (see Fig. 1). With the bypass capacitors

shown, no effect from rf feedback has been experienced, even when used with a kilowatt.

S1 is a four-pole, two-position switch (Radio Shack 275-1384 or equivalent) used to switch the patch on and off. The fourth section of this switch (S1d) is used to switch the patch into the circuit in place of the usual station microphone. If your rig has a phone patch input, you can leave the mike connected to its usual jack and use the alternate connec-

tion shown by the dotted line.

S2 is a DPDT toggle or lever switch. It allows you to select XMIT (transmit) or RCV (receive) from the front panel of the patch, rather than fumbling with the microphone PTT switch, telephone handset, and receiver audio gain control all at once.

S2 is wired in such a way as to permit operation with many types of solid-state rigs. These rigs often have the novel little problem

that the receiver audio is not cut completely off while in the transmit mode. During normal operation this is not a problem. However, with many of the usual phone patches, an audio oscillation will result, with the phone patch acting as the oscillator coupling element. Switch S2 disconnects the receiver audio from the patch when in the transmit mode, thus eliminating the problem.

The second section of this switch (S2b) grounds the PTT line when you wish to transmit. On a few of the new rigs, this line is called MOX rather than PTT. MOX stands for Manually Operated Xmit, similar to VOX for Voice Operated Xmit.

Impedance matching is provided by T1 and T2, which are identical 8-Ohm-to-1000-Ohm (center-tapped) audio transformers. Radio Shack lists this item as 275-1384. They are not critical, and any 8-Ohm-to-1000-Ohm or 8-Ohm-to-500-Ohm audio transformer will do. Good performance has been obtained even with a pair of 12-volt filament transformers. The 12-volt secondary is connected in place of the 8-Ohm winding and the 115-volt primary in

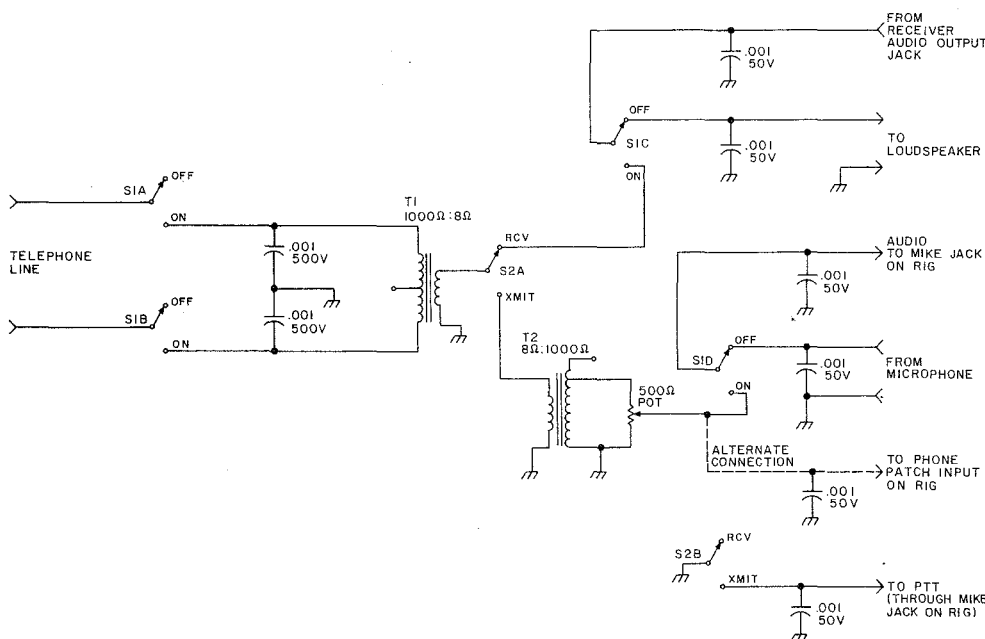


Fig. 1. Inexpensive phone patch uses readily available components.

place of the 500- or 1000-Ohm winding.

The transmit level is set by the 500-Ohm pot connected to T2. Bypass capacitors are shown on all input and output leads to prevent rf feedback. A metal enclosure for the patch is recommended.

To use the patch, set S1 to ON and S2 to RCV and listen on the telephone handset. You can get a clear line (no dial tone) by dialing the first digit of a local exchange. Tune in a station on your receiver and set the audio gain control on the receiver for a comfortable level in the telephone handset. Telephones are quite tolerant and level setting is not critical. If the audio sounds comfortable in your ear on receive while listening through the telephone handset, it probably is acceptable.

Next, put S2 in the XMIT position and talk normally into the telephone handset.

Set the 500-Ohm pot so that the meter on the final in your rig swings into its normal area as though you were using the station microphone.

There is no provision for VOX operation. Most hams prefer manual RX/TX since it both prevents an operator's accidental sneeze or cough from turning on the transmitter and allows you to cut off the speaker if he or she attempts to say something inappropriate for transmission over your station.

One tip on phone patch use—for some reason, when you tell someone on the telephone to talk louder, they will do so for a few minutes and then lapse back to their original volume. However, if you turn the audio gain control down so that they hear the other station more softly, they will automatically speak up as though to compensate. ■

Reach Out!

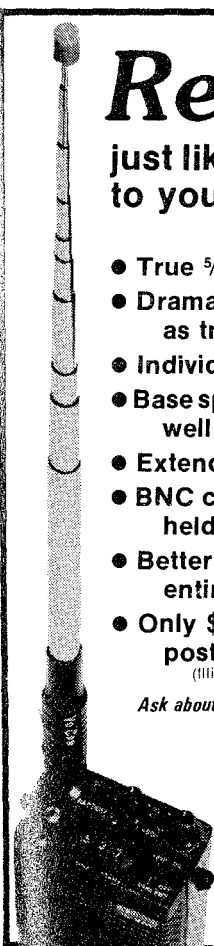
just like adding a 10-watt amp to your 2-meter hand-held...

- True 5/8 wave gain antenna
- Dramatically boosts reception as well as transmit range
- Individually tuned matching network
- Base spring/tuned coil protects radio as well as antenna from accidents
- Extends to 47", telescopes to only 8"
- BNC connector fits most current hand-held and portable radios
- Better than 1.5:1 VSWR across the entire 144-148 MHz band
- Only \$24.95 from your dealer or postpaid from VoCom

(Illinois residents please include 6% sales tax)

Ask about our 25, 50 and 100 watt amplifiers for hand-helds

VoCom ✓90
PRODUCTS CORPORATION
 65 E. Palatine Rd., Suite 111
 Prospect Heights, IL 60070
 (312) 459-3680
 Dealer Inquiries Invited



DOWNCONVERTERS

HAL 2304 MHz Downconverters (frequency range: 2000 MHz/2500 MHz), Model #1 kit: \$69.95, 2304 Model #2 kit (with preamp): \$79.95, 2304 Model #3 kit (with high-gain preamp): \$89.95. All of the above kits come with coax fittings IN and OUT, and with weatherproofed diecast housing. All of above: Factory wired and tested: \$50 additional. Power supply kit: \$19.95

FREQUENCY COUNTERS

COMPLETE KITS: CONSISTING OF EVERY ESSENTIAL PART NEEDED TO MAKE YOUR COUNTER COMPLETE. **HAL-600A** 7-DIGIT COUNTER WITH FREQUENCY RANGE OF ZERO TO 600 MHz. FEATURES TWO INPUTS: ONE FOR LOW FREQUENCY AND ONE FOR HIGH FREQUENCY. AUTOMATIC ZERO SUPPRESSION. TIME BASE IS 1.0 SEC OR .1 SEC GATE WITH OPTIONAL 10 SEC GATE AVAILABLE. ACCURACY ± .001%. UTILIZES 10-MHz CRYSTAL 5 PPM.

COMPLETE KIT.....\$129
HAL-300A 7-DIGIT COUNTER WITH FREQUENCY RANGE OF ZERO TO 300 MHz. FEATURES TWO INPUTS: ONE FOR LOW FREQUENCY AND ONE FOR HIGH FREQUENCY. AUTOMATIC ZERO SUPPRESSION. TIME BASE IS 1.0 SEC OR .1 SEC GATE WITH OPTIONAL 10 SEC GATE AVAILABLE. ACCURACY ± .001%. UTILIZES 10-MHz CRYSTAL 5 PPM.

COMPLETE KIT.....\$109
HAL-50A 8-DIGIT COUNTER WITH FREQUENCY RANGE OF ZERO TO 50 MHz OR BETTER. AUTOMATIC DECIMAL POINT. ZERO SUPPRESSION UPON DEMAND. FEATURES TWO INPUTS: ONE FOR LOW FREQUENCY INPUT, AND ONE ON PANEL FOR USE WITH ANY INTERNALLY MOUNTED HALTRONIX PRE-SCALER FOR WHICH PROVISIONS HAVE ALREADY BEEN MADE. 1.0 SEC AND .1 SEC TIME GATES. ACCURACY ± .001%. UTILIZES 10-MHz CRYSTAL 5 PPM.

COMPLETE KIT.....\$109

PRE-SCALER KITS

HAL 300 PRE.....\$14.95
 (Pre-drilled G10 board and all components)

HAL 300 A/PRE.....\$24.95
 (Same as above with preamp)

HAL 600 PRE.....\$29.95
 (Pre-drilled G10 board and all components)

HAL 600 A/PRE.....\$39.95
 (Same as above but with preamp)

TOUCH TONE DECODER KIT

HIGHLY STABLE DECODER KIT. COMES WITH 2 SIDED, PLATED THRU AND SOLDER FLOWED G-10 PC BOARD, 7-567's, 2-7402, AND ALL ELECTRONIC COMPONENTS. BOARD MEASURES 3 1/2 x 5 1/2 INCHES. HAS 12 LINES OUT ONLY **\$39.95**

DELUXE 12-BUTTON TOUCHTONE ENCODER KIT utilizing the new ICM 7206 chip. Provides both VISUAL AND AUDIO indications! Comes with its own two-tone anodized aluminum cabinet. Measures only 2 3/4 x 3 3/4" Complete with Touch-Tone pad, board, crystal, chip and all necessary components to finish the kit.

PRICED AT.....\$29.95

For those who wish to mount the encoder in a hand-held unit, the PC board measures only 9/16" x 1 3/4". This partial kit with PC board, crystal, chip and components.

PRICED AT.....\$14.95

ACCUKEYER—MEMORY OPTION KIT THIS ACCUKEYER MEMORY KIT PROVIDES A SIMPLE, LOW COST METHOD OF ADDING MEMORY CAPABILITY TO THE WB4VVF ACCUKEYER. WHILE DESIGNED FOR DIRECT ATTACHMENT TO THE ABOVE ACCUKEYER, IT CAN ALSO BE ATTACHED TO ANY STANDARD ACCUKEYER BOARD WITH LITTLE DIFFICULTY. **\$16.95**

ACCUKEYER (KIT) THIS ACCUKEYER IS A REVISED VERSION OF THE VERY POPULAR WB4VVF ACCUKEYER ORIGINALLY DESCRIBED BY JAMES GARRETT, IN QST MAGAZINE AND THE 1975 RADIO AMATEURS HANDBOOK. **\$16.95**

ACCUKEYER—MEMORY OPTION KIT—TOGETHER ONLY \$32.00

6-DIGIT CLOCK • 12/24 HOUR

COMPLETE KIT CONSISTING OF 2 PC G10 PRE-DRILLED PC BOARDS, 1 CLOCK CHIP, 6 FND 359 READOUTS, 13 TRANSISTORS, 3 CAPS, 9 RESISTORS, 5 DIODES, 3 PUSH-BUTTON SWITCHES, POWER TRANSFORMER AND INSTRUCTIONS. DON'T BE FOOLED BY PARTIAL KITS WHERE YOU HAVE TO BUY EVERYTHING EXTRA.

PRICED AT.....\$12.95

CLOCK CASE Available and will fit any one of the above clocks. Regular Price... \$6.50 **But Only \$4.50 when bought with clock**

SIX-DIGIT ALARM CLOCK KIT for home, camper, RV, or field-day use. Operates on 12-volt AC or DC, and has its own 60-Hz time base on the board. Complete with all electronic components and two-piece, pre-drilled PC boards. Board size 4" x 3". Complete with speaker and switches. If operated on DC, there is nothing more to buy.

PRICED AT.....\$16.95

Twelve-volt AC line cord for those who wish to operate the clock from 110-volt AC. **\$2.95**

SHIPPING INFORMATION

ORDERS OVER \$20.00 WILL BE SHIPPED POSTPAID EXCEPT ON ITEMS WHERE ADDITIONAL CHARGES ARE REQUESTED. ON ORDERS LESS THAN \$20.00 PLEASE INCLUDE ADDITIONAL \$1.50 FOR HANDLING AND MAILING CHARGES. SEND SASE FOR FREE FLYER.



"HAL" HAROLD C. NOWLAND
 W8ZXH

HAL-TRONIX ✓31

P. O. BOX 1101
 SOUTHGATE, MICH. 48195
 PHONE (313) 285-1782

January 2017

W8NP Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																		
<p style="color: #800080; font-weight: bold; font-size: 1.2em;">1</p> <p>BD KA8JIM Massillon Radio Net - 3599.5 kHz, 2000</p> <p style="color: #800080;">New Year's Day</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">2</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">3</p> <p>Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">4</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">5</p> <p>BD KD8UXL BD Patty Fisher</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">6</p> <p>BD N8ZQF</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">7</p> <p>MARC Awards Banquet, K of C Hall, 988 Cherry Rd. NW, Massillon, 1800</p>																																																		
<p style="color: #800080; font-weight: bold; font-size: 1.2em;">8</p> <p>BD KB8SBZ Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">9</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">10</p> <p>Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">11</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">12</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">13</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">14</p> <p>BD KB8YKE</p>																																																		
<p style="color: #800080; font-weight: bold; font-size: 1.2em;">15</p> <p>Massillon Radio Net - 3599.5 kHz, 2000</p> <p>SCARF Hamfest, Nelsonville, OH, CTC: Jeremy - 740-767-2554</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">16</p> <p style="color: #800080;">Martin Luther King, Jr.</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">17</p> <p>Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">18</p> <p>VE Test Session, Cuyahoga Falls ARC, 1900, Bruce, 234-206-1592, Stow-Monroe Falls Public Library</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">19</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">20</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">21</p>																																																		
<p style="color: #800080; font-weight: bold; font-size: 1.2em;">22</p> <p>Massillon Radio Net - 3599.5 kHz, 2000</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">23</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">24</p> <p>Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">25</p> <p>BD KC8ZCS</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">26</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">27</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">28</p> <p>Lockport ARA's Hamfest, Lockport, NY, CTC: Steve 716-754-7810</p>																																																		
<p style="color: #800080; font-weight: bold; font-size: 1.2em;">29</p> <p>Massillon Radio Net - 3599.5 kHz, 2000</p> <p>Tusco ARC Hamfest, 965 North Wooster Ave, Strasburg, Ctc: James, KB8YDK 740-922-4454</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">30</p>	<p style="color: #800080; font-weight: bold; font-size: 1.2em;">31</p> <p>Stark County ARES Net on 147.12 at 7:00 PM</p>	<p>Upcoming Events:</p> <p>2/19 - Mid-Winter Hamfest, Mansfield</p> <p>2/19 - Livonia ARC Swap-N-Shop, MI</p> <p>2/26 - WashFest 2015, Castle Shannon, PA</p>				<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="padding: 2px;">Feb 2017</th> </tr> <tr> <th style="padding: 2px;">S</th> <th style="padding: 2px;">M</th> <th style="padding: 2px;">T</th> <th style="padding: 2px;">W</th> <th style="padding: 2px;">T</th> <th style="padding: 2px;">F</th> <th style="padding: 2px;">S</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px; text-align: center;">1</td> <td style="padding: 2px; text-align: center;">2</td> <td style="padding: 2px; text-align: center;">3</td> <td style="padding: 2px; text-align: center;">4</td> </tr> <tr> <td style="padding: 2px; text-align: center;">5</td> <td style="padding: 2px; text-align: center;">6</td> <td style="padding: 2px; text-align: center;">7</td> <td style="padding: 2px; text-align: center;">8</td> <td style="padding: 2px; text-align: center;">9</td> <td style="padding: 2px; text-align: center;">10</td> <td style="padding: 2px; text-align: center;">11</td> </tr> <tr> <td style="padding: 2px; text-align: center;">12</td> <td style="padding: 2px; text-align: center;">13</td> <td style="padding: 2px; text-align: center;">14</td> <td style="padding: 2px; text-align: center;">15</td> <td style="padding: 2px; text-align: center;">16</td> <td style="padding: 2px; text-align: center;">17</td> <td style="padding: 2px; text-align: center;">18</td> </tr> <tr> <td style="padding: 2px; text-align: center;">19</td> <td style="padding: 2px; text-align: center;">20</td> <td style="padding: 2px; text-align: center;">21</td> <td style="padding: 2px; text-align: center;">22</td> <td style="padding: 2px; text-align: center;">23</td> <td style="padding: 2px; text-align: center;">24</td> <td style="padding: 2px; text-align: center;">25</td> </tr> <tr> <td style="padding: 2px; text-align: center;">26</td> <td style="padding: 2px; text-align: center;">27</td> <td style="padding: 2px; text-align: center;">28</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> </tbody> </table>	Feb 2017							S	M	T	W	T	F	S				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
Feb 2017																																																								
S	M	T	W	T	F	S																																																		
			1	2	3	4																																																		
5	6	7	8	9	10	11																																																		
12	13	14	15	16	17	18																																																		
19	20	21	22	23	24	25																																																		
26	27	28																																																						

Please contact K8INN for updates, changes, or additions.

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

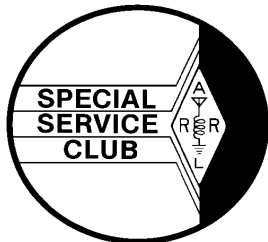
FIRST CLASS MAIL

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