

FEEDBACK

VOLUME 52 ISSUE 3

MARCH 2007

MASSILLON AMATEUR RADIO CLUB OFFICERS

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K8HSQ

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N3JJT

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--- SHORT SKIP ---

No more Morse code test ? So why even bother with an exam ? Just sell FCC license's like any other license. Better yet, buy a new rig and the manufacture will pay for your ticket. Just read the enclosed booklet ...

Perhaps our government could use the money to help pay down their \$ 9,000,000,000,000,000,000,000,000 deficit

73 de WB80WM

MARCH MEETING

The meeting for the month of March will be held at the Massillon Senior Center in downtown Massillon on March 2nd 2007 at 8:00 PM.

This month's meeting will bring a plethora of subjects to be discussed. Among them are the 147.18MHz Repeater interference and what to do about it. It seems that most of the interference is being caused by a pager system getting into the repeater. Perhaps Perry W8AU, can enlighten us?

DUES ARE NOW DUE !!!

Yes this is "crunch" month meaning if you haven't paid your dues for 2007, we will be forced to drop you from the membership roles. I hope that those who haven't renewed yet will pay them at the meeting, but if you cannot make the meeting then please send our Treasurer Anne N8GAF the \$10.00 fee for the year. Ann's address is;

Anne Ballinger N8GAF
2468 Bellevue Ave SW
Massillon, Ohio 44647-7212

MARCH PROGRAM

The program for the month of March will be a presentation by one of our own members, Mike Sciarini, WA8MKH. Mike will present an introduction to PSK 31. In order to save time and to keep from dragging out the presentation, Mike has sent an introduction to PSK 31 in this issue of Feedback. It begins on page 4 and extends to page 7. It contains all the basic information that you will need to fully understand the presentation. Mike requests that all members read and print the 4 pages and bring them to the meeting so he can answer all your questions concerning the material.

Mike realizes that all members do not receive the e-mailed version of Feedback, which is in color. Therefore some of the pictures included in the text will be hard to discern in black & white, so he will bring a disk and some color copies that can be handed out for viewing.

This presentation is just the first in perhaps a series of technical and informative subjects that our Officers are planning and many members have asked for this year.

MARC MINUTES

February 7th, 2007

The Massillon Amateur Radio Club meeting was held at the Massillon Senior Center with 39 members and guests present. MARC President Ralph K8HSQ opened the meeting at 8:00 P.M. The Pledge of Allegiance was given and a round of introductions was made.

The January minutes were accepted as stated in the FEEDBACK with no changes or additions.

MARC Treasurer Anne N8GAF gave the financial report.

Vice President Scott N3JJT gave the correspondence report. He had the usual newsletters from other Amateur Radio Clubs.

Committees

Fox Hunt - Dan N8DZM Interest has dropped again and will wait for more interest before having another Fox Hunt.

Classes – Tech class will start on March 5th 7pm – 9pm for 6 weeks each Monday.

Grant – A decision should be made this month.

Old Business

We need more volunteers to be Net Control for the West Stark Information Net.

We are still receiving inference on the .18 repeater.

Club's rotor and beam are repaired. We are just waiting for the right day to install them.

New Business

Byron had a few more QSL cards for the club.

Tech class is starting on Mar 5th each Monday 7pm – 9pm for 6 weeks. There will also be a code class starting Friday Feb 16th 6pm – 8pm.

Two safety breaks were requested along with a chance to fill in for a cancellation.

If anybody has any of the FEMA certification courses completed, please let Terry N8ATZ know. Club might provide a class and testing for the ICS100 certification.

Ralph and Terry will give a demo on installing Airmail at the Akron ARES meeting Feb 22nd.

Terry has updated the club's Website and renewed the domain and hosting. www.marcradio.org This is the 73rd year the club is affiliated with the ARRL. Special Service Club status has also been renewed.

Motion by Steve KD8ACF seconded by Igor K8INN to donate \$50 to Jessica to help her trip to Australia was passed. She is a student ambassador for People to People to represent the US in Australia, New Zealand, and Fiji.

50/50 was won by Jessica Wade for \$19 **73's de Dan N8DZM**

CW CLASSES FOR ALL INTERESTED PERSONS

Friday evenings 7 - 9 p.m. (except for first Friday of month) at MARC club headquarters, Senior Center, 39 Lincoln Way W. downtown Massillon. Newcomers, Technician and General class wishing to increase skills and make CW a conversational joy instead of a chore. Learn how to be the Encoder and Decoder of this great old digital mode. No additional equipment required...just your head and fingers which are already standard equipment!

... Stark County Skywarn ...

As I prepare this month's column I am looking out at about 7 inches of snow in my backyard with more falling again today. It's hard to realize that Ohio's Severe Weather Season is only a few short months away. March is traditionally the time when we prepare ourselves for the coming severe weather season. With that in mind here are a few dates for you to note on your calendar. This year Ohio's Severe Weather Awareness Week is scheduled for March 25th to the 31st.

Several important events will happen during this time that I hope many of you will participate in. Starting the week prior on Wednesday, March 21st in cooperation with the Stark County Emergency Management Agency and the Cleveland National Weather Service the annual Skywarn Spotter Training meeting will take place at Stark State College of Technology. The meeting will start promptly at 6:30 PM. Training will be provided by Gary Garnet, Weather Coordinating Meteorologist from the Cleveland NWS. As in previous years representatives will be on hand to verify current Skywarn Spotter Registration information and issue new Spotter numbers to new attendees.

This year's training will again include discussion of exactly what severe weather is, how to identify potentially serious weather patterns and how to report this information to the National Weather Service. A powerpoint presentation will augment the training and assist you in identifying cloud formations. The meeting will last approximately two hours and include one break.

This year's meeting will once again be held at the main auditorium of Stark State College of Technology located at 6200 Frank Avenue N.W., N. Canton, OH 44720. All interested persons are welcome and encouraged to attend especially local Amateur Radio Operators, public safety forces, schools, hospital representatives and the general public. Representatives will be on hand to answer questions and provide additional information.

Also attending this year's meeting will be Marvin Secret of M & K Engraving, our official supplier of Skywarn ID badges that will be available for a nominal fee.

We do encourage everyone to attend this free severe weather training seminar and take advantage of this important information. You need only to have seen recent news reports of the extreme weather that has caused severe destruction and deaths in the south to realize the importance of this training and the need for accurate Spotter reports to the National Weather Service. Contact information for this meeting is Terry Russ – N8ATZ at (330) 837-3091 or by email at truss@sssnet.com.

Local ham radio operators are encouraged to be available on Wednesday morning March 28th at 9:50 AM for Ohio's State-

wide Tornado Test. Please help us by reporting your location and local warning siren information by checking in via the 147.12 Repeater. Be prepared to provide your callsign, location and if you hear any local warning sirens. For many residents, these sirens are their only means of realizing severe weather is approaching.

.. 2006 Public Service Report ..

Each year the Stark County Amateur Radio Emergency Service provides countless hours of support communications to many local civic organizations, area hospitals, the American Red Cross, public safety forces, our Emergency Operations Center and of course during the Pro Football Hall of Fame Festival.

The FCC rules list emergency communications as one of the purposes of the Amateur Radio Service – and in reality, our ability to provide emergency communications justifies our Hobby's continued existence. The FCC has long recognized Amateur Radio as being among the most reliable means of communications in disaster situations.

2006 was another busy year for the Stark County ARES. As we do each year, we have prepared a detailed report of our public service activities and posted the results for your review. It's available on the Stark County ARES website at www.wd8aye.org. This report is noteworthy as the majority of last year's emergency communications efforts were thanks to the many dedicated members of the Massillon Amateur Radio Club. Give yourselves a pat on the back !

.. ARES & Winlink News ..

The Stark County ARES and Winlink Committee will be busy this month with several meetings and presentations on our schedule. By the time you read this, we will have again visited the Summit County ARES to assist them as they continue their progress toward establishing an operational Winlink System. Having already seen our introduction to Winlink presentation, they are now ready to setup Airmail stations. A full report on this meeting next month.

On Sunday, March 18th, Ralph Bugg, K8HSQ and I will once again attend this year's Multi-County Coalition meeting held at Tuscora Park Pavilion in New Philadelphia beginning at 2:00 PM. As part of this year's meeting we will present a program on Amateur Radio Communications in Disasters. All amateurs are welcome to attend.

Lastly on Saturday, March 31st, we will be attending the Annual Ohio State ARES Conference in Columbus. This annual meeting includes ARES representatives from numerous Ohio Counties and is moderated by Ohio's Section Emergency Coordinator Frank Piper, KI8GW.

The meeting includes reports of various ARES activities from around the state and other committee reports. This year's

(cont.on page 8)

Massillon Amateur Radio Club PSK-31 Presentation March 2007

Included in this presentation:

1. Introduction
 - Basic PSK-31 information, Getting Started
2. Basic Wiring
 - Wiring information
 - Web site address for further reference and study
3. Software
 - Program for PSK-31, DigiPan 2
4. Display Screen Pictures
5. MARC has a CD (for loan) that includes the following:
 - DigiPan 2 PSK-31 Software
 - Adobe Reader 7.08 to read PDF files
 - NTE Software to cross reference electronic parts for repair/replacement

INTRODUCTION:

Phase Shift Keying (PSK31) is digital wireless communication using a Transmitter- Receiver (Transceiver), computer, and software. PSK31 uses 31.25 Hz (cycles) of bandwidth as compared to the old days of 850 Hz and later 170 Hz. This allows more stations to operate on the same band. Popular frequencies are 40 meters 7.070 MHz and 20 meters 14.070 MHz. There are other suggested frequencies for each band.

The following information is from the internet:

“**B**ased on an idea by **SP9VRC** and developed by **Peter Martinez, G3PLX** a new Amateur Mode called **PSK31** is emerging. Instead of keying using Frequency Shift, **FSK**, this mode uses **Phase Shift Keying, PSK**. It uses an alphabet similar to Morse which gives a text speed of about 50 wpm. Our experience to date shows that even without an error correcting algorithm, copy is as good as any and better than most at low signal levels. It is a particularly attractive mode since it requires no lock condition or handshaking with a second radio station, and roundtable QSO's with more than two stations can be enjoyed.

Since the bandwidth is equal to the baud rate and the chosen **baud rate is 31.25** we can now use a bandwidth of 31Hz and narrow CW filters can be employed. This is good news because it can work at much lower signal levels in the crowded digital bands. The normal bandwidth of other modes is in the order of 300-500Hz.

It uses the **Sound card** of the computer instead of a TNC.”

BASIC WIRING: (In some cases, may require transformer isolation)

1. Connect the Transceiver Speaker to the Computer sound card line-in receptacle. Generally a direct connection. **Suggest using this receive mode connection and gain some receiving experience before connecting the transmitter cable.**
2. Connect the Computer sound card speaker output to the Transceiver microphone input. Typically 100 to 1 reduction of audio is required. Two resistors are needed.

Page 2:

NOTE: Commercial interfaces including connectors and isolation between the Transceiver and computer may be available for a reasonable cost. There are many do-it-yourself diagrams available. The following web site lists links for radio manufacturers, interfaces, diagrams, wiring, kits, and more.

<http://www.qsl.net/wm2u/interface.html>

SOFTWARE:

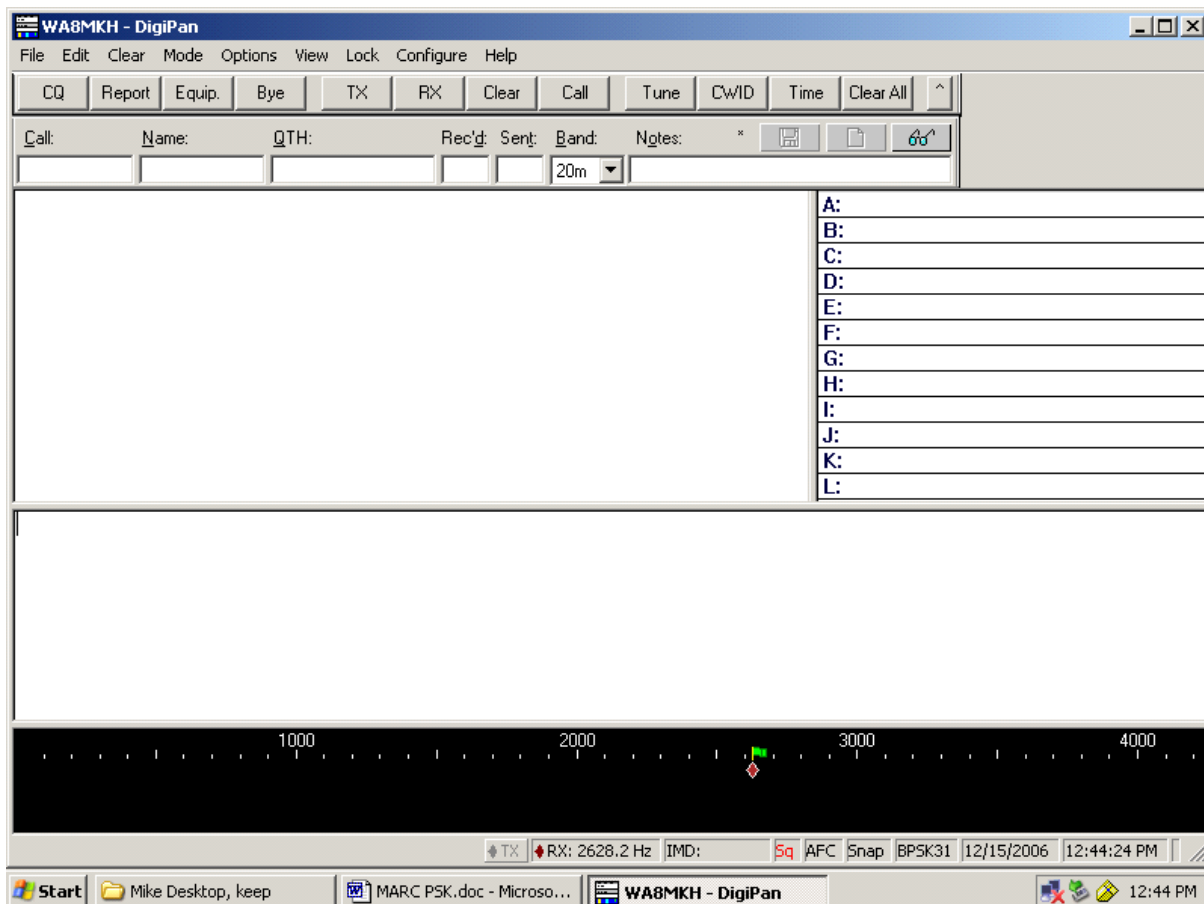
Web site for digipan2 downloads:

<http://www.digipan.net/>

Load the DigiPan2 software into the computer using the default settings.

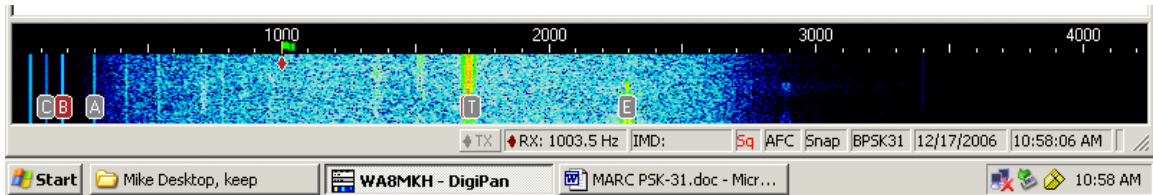
Connect the Transceiver to the computer.

Click on the DigiPan2 Icon. The screen should look like the following example:



Page 3

On the top Menu Bar, click Mode, then BPSK31. Set the Transceiver volume to an audible level, tune to either 7.070 MHz or 14.070 MHz. When the band is open a warble sound should be heard and the bottom of the screen should look like a waterfall. The waterfall should be speckled but not solid. Adjust the volume on the Transceiver accordingly. Adjust the Transceiver frequency dial back and forth several KHz so that the bright lines are centered in the waterfall display around 800 Hz to 2500 Hz.



The right hand display lists many stations. Click one of the choices and the main screen will display the text. A CQ will highlight in Yellow. Also, clicking on a bright red line in the waterfall display will lock onto a station and display the text on the top left of the screen. **This article's last page shows examples of improperly adjusted volume.**

Basic communication:

Very Important:

In DigiPan2, click on Configure (at the top of the screen), then Transmitter Drive. Click the box to mute Line Input. Line Input should now have a check mark in the box.

This will keep the Transceiver from cycling when using the VOX.

Click a blank spot on the waterfall around 1500 Hz. A small flag will show the spot selected. Set the Transceiver to VOX. Adjust the Transceiver MIC Level to minimum. Click on DigiPan2 (Tune). Adjust the MIC Level for about one-fourth power output on the Transceiver output meter. Click OK to return to the Receive mode.

Look for someone sending CQ on the right screen. Click on the station. When the station stops sending, click on the TX button. Call the station using the keyboard:

N8XXX N8XXX DE W8ZZZ W8ZZZ K (enter)

Click the RX button and see if the station answers you.

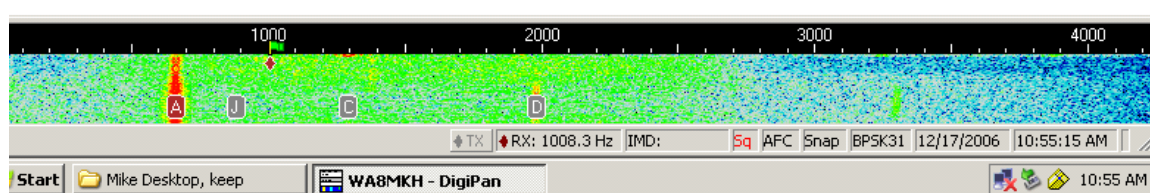
Advanced communications:

Notice there a number of options on the top information bar.

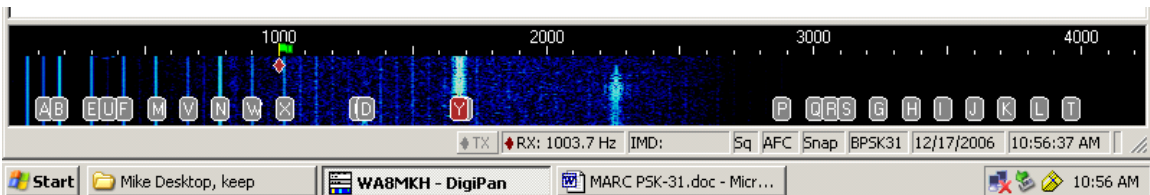
Configuration is where the personal information and CW ID data is setup.

There are automatic buttons such as CQ that can be programmed to automatically send during transmission when clicked. Personal station, location, and other data can be pre-configured for automatic sending.

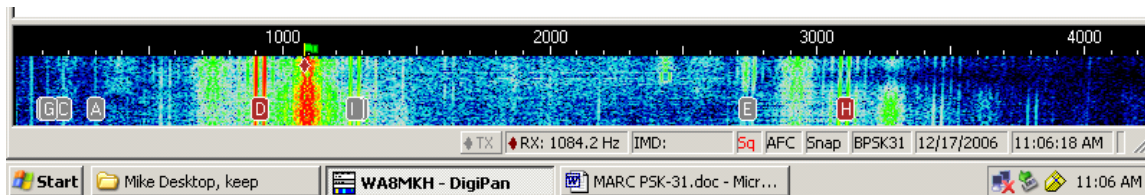
Page 4



Too much volume from receiver



Not enough volume from Transceiver. Note the thin blue lines mostly on the left are from 60 Hz or 120 Hz (Hum) from the Transceiver power supply. This does not normally cause problems unless the level is high.



Note the Red trace, second from the left, is very wide. This station is using PSK63 mode instead of PSK31 (Trace on the left). PSK63 uses more band space. There are about 10 or more green double traces caused by the excessive modulation of the PSK63 station.

Overdriving a transmitter causes unwanted splatter (shown as multiple traces across the band), which may interfere with many QSO's. Set the Microphone level approximately 2/3 of normal, and then adjust the software volume going to the Transceiver Mic Input so that the Transceiver is running about one-fourth power output. 25 watts maximum does a fine job on PSK31 and keeps the rig running much cooler. Copy is possible even when the signal is down to a faint red line. Some stations may be running 5 watts (or less !). DX is very common on 20 meters and easy to work.

It takes time to learn any mode so patience is important. If you have difficulty with the transmitted signal, consult the internet site mentioned in this article, QST, or other sites for PSK isolation kits for your model Transceiver.

73's de Mike WA8MKH

Editor Note: WA8MKH Background ; Mike is an Senior Design Engineer and works for the Ohio State University Agriculture Research & Development Center. Mike has been an amateur for the past 43 years. He has been a MARC member since March 2003, he is also a Life member of QCWA and a member of the ARRL.

meeting will also include progress reports on Winlink programs from around the state. Stark County Winlink will be part of this discussion as we give a short presentation on our current Winlink progress. A full report of this meeting will follow next month.

73's For Now, De Terry – N8ATZ

ARRL MARKS TRANSITION TO NEW AMATEUR SERVICE RULES

A new Amateur Radio Service regime now is in place. The requirement to demonstrate Morse code proficiency to gain HF privileges officially disappeared from the FCC's Part 97 rules February 23 at one minute past midnight Eastern Time. At the same time, some 200,000 Technician licensees without Morse code exam credit acquired HF privileges equivalent to those available to Novice licensees. The League is marking the occasion with a W1AW special event aimed at welcoming newcomers to the HF bands. The "W1AW HF Open House" has included exam sessions under both old and new rules. ARRL Chief Operating Officer Harold Kramer, WJ1B, points to the still-growing number of ARRL Volunteer Examiner Coordinator (ARRL VEC) test sessions now on the schedule across the US as evidence that the rule changes will provide a shot in the arm to Amateur Radio.

"ARRL VEC has been extremely busy scheduling new exam sessions," Kramer said. "We normally coordinate about 5500 sessions per year, but we've already scheduled close to 5000 sessions and it's only the end of February."

ARRL VEC Manager Maria Somma, AB1FM, reports some 175 ARRL VEC test sessions are on the schedule through the February 23-25 period, "and these are just the ones that have registered with us," she added. Two dozen applicants showed up at League Headquarters, either to sit for an exam or apply for license upgrades.

"I was surprised at the number of people who wanted to take the test at 12:01 AM," Somma remarked. All but two test applicants took their exams under the new rules. "After people took their exams, some went over to W1AW to use their new privileges," she added.

First out of the gate at the League's 12:01 AM test session was Joshua Rozovsky, N3YAR, of Bloomfield, Connecticut. He upgraded from Tech to Amateur Extra.

Despite snowy New England weather, a few applicants traveled some distance to take their exams. "A nice young couple that drove in from Rhode Island joined ARRL while here," said ARRL Membership Manager Katie Breen, W1KRB. "They thought this was a once-in-a-lifetime opportunity to take their upgrades here at HQ."

Breen, who upgraded to General at the February 23 exam session, has been tracking W1AW Open House events in near-real time on an ARRL Web site blog <http://www.arrl.org/blog/W1AW%20HF%20Open%20House>. She's also posted some videos to YouTube.com.

Somma says her department now is bracing for an anticipated application avalanche as paperwork from initial sessions shows up. She and Kramer predict test demand will surge even further in the days and weeks ahead. Not only has the number of test sessions increased dramatically, Kramer pointed out, the number of applicants at each session is up as well. To keep up with demand, ARRL VEC has hired additional help. Staffers from other HQ departments also have been lending a hand.

March QST includes an eight-page "tearout" section "Now, New Opportunities for Every Ham!" between pages 48 and 49. <http://www.arrl.org/HFWelcome/Welcome.pdf>. It focuses on various topics of interest to those gaining new HF privileges through upgrading or owing to the new rules as well as to veteran licensees. Among other things, it covers mentoring — or Elmering — newcomers, "The Top 10 Reasons to Try Morse Code," earning ham radio operating awards by using Logbook of the World (LoTW) and a "Welcome to the fascinating world of high frequency (HF) radio!" by ARRL CEO David Sumner, K1ZZ.

"The FCC's decision to eliminate the Morse code examination as a licensing requirement opens the door to HF for all amateur licensees," Sumner points out in his remarks. Sumner also addresses the topic in his "It Seems to Us" editorial in March QST (page 9).

"As these new HF operators join us on our favorite bands, we old timers need to set a good example and to be patient, welcoming and positive," he writes. "Let's all remember how little we knew when we got started, and honor those who helped us along the way by doing the same for others."

The March QST special section includes a new ARRL band chart <http://www.arrl.org/FandES/field/regulations/bands.html>. (See "Revised ARRL Band Chart available" below.)

The new rules seem to be driving greater enthusiasm for ham radio in general. There's been an uptick in ARRL publication sales, particularly in licensing manuals and licensing guides, and enrollment in the online ARRL Ham Radio License Course (EC-010) <http://www.arrl.org/cce/Tech.html> is at an all-time high. Additionally, Kramer notes, DXCC applications are up by 350 from last year, while LoTW has exceeded 121 million QSO records.

"W1AW HF Open House" operation continues through the February 24-25 weekend, with primary activity from 10 AM until 5 PM Eastern Time (1500 until 2200 UTC) or later, depending on interest, propagation and participation. ARRL Publications Manager Steve Ford, WB8IMY, will compete in the North American RTTY QSO Party from W1AW.

Primary operation will be on both SSB and CW. W1AW will concentrate activity on the Technician and General class HF subbands, using its normal frequencies on most bands.

On SSB: 1.855, 3.990, 7.290, 14.290, 18.160, 21.390 and 28.480 MHz. On CW: 1.8175, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675 and 28.0675 MHz. On RTTY: 3597.5, 7.095, 14.095, 21.095 and 28.095 MHz.

From the ARRL Letter Vol. 26 No. 08 Feb 23, 2007

March 2007

W8NP Monthly Planner

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday																																																																																																						
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<p style="color: #800080; font-size: 1.2em; margin: 0;">4</p> <p>Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">5</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">6</p> <p>Massillon Radio Net - 3599.5 @ 1930 Stark County ARES Net on 147.12 at 7:00 PM VE Test Session, Cuyahoga Falls ARC, 1900, Ctc: Bruce Ferry, 330-929-2766, Stow-Monroe Falls Public Library</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">7</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">8</p> <p>Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">9</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">10</p> <p>BD N8FEB</p>																																																																																																						
<p style="color: #800080; font-size: 1.2em; margin: 0;">11</p> <p>BD WB8OWM Daylight Savings Time Begins Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">12</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">13</p> <p>Massillon Radio Net - 3599.5 @ 1930 Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">14</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">15</p> <p>BD WA8GXM Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">16</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">17</p> <p style="color: red;">St. Patrick's Day</p>																																																																																																						
<p style="color: #800080; font-size: 1.2em; margin: 0;">18</p> <p>Massillon Radio Net - 3599.5 @ 1930 TMRA Hamfest Toledo Mobile Radio Assoc., Ctc: Brian, WD8MXR, 419-385-5624</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">19</p> <p>BD W8DEA</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">20</p> <p>Massillon Radio Net - 3599.5 @ 1930 Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">21</p> <p style="color: red;">Spring begins</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">22</p> <p>Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">23</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">24</p> <p>BD K8KIP</p>																																																																																																						
<p style="color: #800080; font-size: 1.2em; margin: 0;">25</p> <p>Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">26</p> <p>BD KA8KJW</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">27</p> <p>BD KC8ZWG Massillon Radio Net - 3599.5 @ 1930 Stark County ARES Net on 147.12 at 7:00 PM</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">28</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">29</p> <p>Massillon Radio Net - 3599.5 @ 1930</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">30</p> <p>West Stark Info Net - 147.180 at 2000</p>	<p style="color: #800080; font-size: 1.2em; margin: 0;">31</p>																																																																																																						

Please contact K8INN for updates, changes, or additions.