

February 2013

The 20/9 Resonator

www.20over9.org



Special Interest Articles:

Boy Scouts Approve Amateur Radio Rating Strip

2012 Highest Year for Amateur Radio Licenses

Portable Ham shack

Upcoming Events

March 1st, 2nd & 3rd
Sportsman Show
Eastwood Expo

March 10th St.
Patrick's Day Parade

March 24th Spaghetti
Dinner

Upcoming Meetings

Officers Meeting:
Tuesday March 5th
Denny's Austintown

Club Meeting:
Tuesday March 12th
Austintown Senior
Center
100 Westchester Dr

All Meetings are at
7:00PM

Contact us at:
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20/9 ARC
4939 East Radio Rd.
Austintown, OH 44515

From the President

Wintertime brings changes and plenty of time to be indoors from the cold. This year there has been a change in our meeting location for the Officer's Meeting which is now held at Denny's on Mahoning Ave. at 7PM. Also ARES in Mahoning County has changed hands with new appointments by the ARRL leadership in Ohio, Wes Boyd W8IZC is the new Emergency Coordinator for the county. With change we can hope for more progress and programs to

keep us on our toes. What has not changed is training time for Skywarn® it is about 40 days till we'll be meeting again at the Austintown High School Auditorium. Last month was Winterfest great food at the Senior Center and everyone had a good time. Service Awards this year were decided by the Trustees, it was a nice mixer for everyone to have enjoyed.

With some time left for building projects how about a portable ham shack with multiple purposes? I imagine most of you have

heard of our seen Go-Boxes, a portable self contained radio and power system plus interfaces and other assorted accessories. However it has more use than just EmComm or a special event, as it would not all of us have ham shacks we can go to and have everything laid out to get on the airwaves, these projects can vary by usage so if you want to operate on a hilltop, beach or back yard look at page 4 for more on this idea. 73's KC8RJS
George Meleski

In the VP's Words

Warm welcome to February after a chilly January, the next couple months should set the tone for the rest of our year. March leads with the Sportsman Show at the Eastwood Expo Center 1st-3rd, March 10th we'll be back out in Boardman on Market St. for the St. Patrick's Day Parade. For this year we won't be taking out the club trailer but will be on Bob McCully's (AB8OP) flatbed trailer and MULE transport. We have not yet received our marching orders on where to assemble and what time, but in our previous years we have met at the old Red Cross Building on

Tod Ave. by the new St. Elizabeth's Hospital around 11AM. March 12th our special guest speaker will be Jim Loboy from WYTV 33. He is the morning meteorologist that co hosts with Len Rome on Daybreak. He will be talking about our areas climatology and the severe weather season that will soon be upon us all. That following week March 20th the Mahoning County Skywarn® group will be hosting the annual National Weather Service Skywarn® Training at 6PM at the Austintown Fitch High School Auditorium. March 24th 12-5PM will be our All You Can Eat Spaghetti Dinner

at the Austintown Senior Center. We had a great first run in December as we have not held a spaghetti dinner in a few years, and with more advertising we should see better returns and more flexibility in our programs. March is definitely full of events and as always the events we hold are open to anyone so feel free to stop by to listen to Jim Loboy starting at 7PM, and stop by March 24th for a big plate of all you can eat spaghetti and meatballs. 73's
Dotti
KC8SYF

BSA to Offer Amateur Radio Operator Rating Strip



The rating strip the boy scouts
Will be issued

"We are always looking for ways to promote Amateur Radio, both within Scouting and to the world."

The Boy Scouts of America ([BSA](#)) has approved an Amateur Radio Operator rating strip for Scouts and Scouters to wear on their uniforms. According to BSA Communication Services Director Jim Wilson, K5ND, the strip recognizes the Scout or Scouter's availability as an Amateur Radio operator for communication services for events and activities, as well as emergencies. All registered youth members and adult leaders who also hold a valid FCC-issued Amateur Radio license of any class are eligible to wear the rating strip.

"Last year, the BSA Awards and Insignia Committee [introduced the Morse Code Interpreter Strip](#) upon the recommendation of the BSA's National Radio Scouting Committee," Wilson told the ARRL. "We are always looking for ways to promote Amateur Radio, both within Scouting and to the world. The National Radio Scouting Committee thought this new Amateur Radio rating strip was a wonderful way to do exactly that, as it readily identifies to everyone that the wearer is a licensed radio amateur, prepared to be useful and to help others."

Wilson, who heads up the National Radio Scouting Committee, said that the Amateur Radio Operator rating strip is similar to the Amateur Radio Operator badge offered as a proficiency badge by Scouts Australia, as well as the badge recently introduced by Scouting Netherlands. It follows in the footsteps of the Scout Radioman personal interest badge for Senior Scouts and Explorer Scouts that was offered by the Boy Scouts of America in the 1940s.

**** Taken from the ARRL website. All rights belong to the ARRL.**

A Little Ham Humor!! Ha Ha...

ANTENNA ROMANCE ... From the Internets!

Two antennas met on a roof, fell in love and got married. The ceremony wasn't much, but the reception was excellent. Since they were a perfect match, soon they generated harmonics. Wrapped the harmonics in dipoles. But later the harmonics turned out to be parasitic elements.

The true story -- she was a tri-bander and he felt trapped, so they went on separate beam headings.



2012 Marks All-Time High for Amateur Radio Licenses

As 2012 came to a close, ARRL VEC Manager Maria Somma, AB1FM, had a good reason to cheer: The number of radio amateurs in the US reached an all-time high of almost 710,000. "2012 was definitely a banner year for the number of Amateur Radio operators here in the US," she said. "It is amazing to see these new numbers and to know that Amateur Radio is experiencing such a healthy trend."

In looking at new and upgraded licenses, as well as licensees per ARRL Division (see the charts below), Somma also crunched the numbers looking for growth within each license class -- and all of Amateur Radio -- over the last 40 years. "This is an all-time high for Technician, General and Amateur Extra class licensees," she said. "When looking at the three current license classes, the number of Technicians, Generals and Amateur Extras peaked in December at 345,369, 163,370 and 130,736, respectively."

Somma explained that the total number of US amateurs in the FCC

database also continues to grow each year: "As of December 31, 2012, the number of licensees reached an all-time high of 709,575; year-end totals were 702,056 for 2011 and 696,041 for 2010. The number of licensees increased at an average rate of 21 per day, while the number of US licensees has increased by 7 percent since 2008!" More than 3000 new licenses were issued in 2012 than in 2011, while upgraded license activity remained steady in 2012.

In the past 40 years, the number of Amateur Radio operators in the US has grown at a remarkable rate:

- December 1971: 285,000
- December 1981: 433,000
- December 1991: 494,000
- December 2001: 683,000
- December 2012: 709,500

Source: 1971, 1981, 1991: print editions of [Radio Amateur Callbook](#). 2001, 2012: www.ah0a.org/FCC/Graphs.html. Please note: While the number

of licensees has grown considerably over the years, we realize that these numbers include some who are no longer active in Amateur Radio. A recent survey of ARRL members, however, indicates that more than 80 percent of those responding are active.

ARRL VEC Program Statistics

The ARRL VEC is by far the largest of the 14 Volunteer Examiner Coordinator (VEC) groups in the country, coordinating approximately 70 percent of all Amateur Radio exams. "When looking at the statistics over the last year, the ARRL VEC sponsored exam sessions and exam elements taken were up in 2012, which is a good sign for Amateur Radio overall," Somma said. "Compared with 2011, ARRL VEC exam sessions in 2012 were up by 8 percent. A total of 6831 exam sessions were administered in



2012, compared to 6352 in 2011. Exam elements were slightly up from 41,096 last year, to 42,473 this year. The total number of accredited ARRL Volunteer Examiners (VEs) has reached an all-time high of 36,682. The ARRL VEC has been busy meeting the needs of the Amateur Radio community by helping people become radio amateurs or upgrade their existing licenses. 2012 was a very good year for Amateur Radio -- I can't wait to see what 2013 brings!

**** Taken from the ARRL website. All rights belong to the ARRL.**



Don't have a ham shack? Make a Go-Box.



"Please remember when there is a Severe Weather Net on the W8QLY 146.745 repeater to listen before transmitting."

Here is a slight twist on a project aimed toward portable emergency communications Go-boxes. It's a fact that not all of us have a spare room, or out building to store and operate our radios whenever we feel like it. This project will serve several purposes; all in one containment, portable, and can be used whenever wherever. There are a lot of different designs and how to's, basically you want a sturdy container, preferably sealable from the weather, and some building materials to mount and support the equipment you choose to put in it. Good wiring practices and an eye for detail can make a very useful project box. Some of these are designed mostly for Emergency

Communications, and that usually involves VHF/UHF mobile, power supply and battery back up to run at reduced power for several hours, and a portable antenna like a J pole or dual band vertical. While there are several combinations with equipment the main thing you will want is safety, so don't forget about fuses, and protected external connections. To the left are a few examples to get the ball rolling, along with several sites of reference to get started building, as you can see some are simple while others a very elaborate in the links, also some portable ideas to go with your station. 73's KC8RJS
George Meleski

Boxes

<http://www.kr7rk.com/gobox.htm>

<http://www.wlwaters.com/id31.html>

<http://www.n1ib.com/gobox.pdf>

<http://www.n1vqw.net/go-box/>

Portable antennas

http://www.web-features.com/ka0zlg/KA0ZLG_JPOLE_QST_Article.pdf

<http://www.mfjenterprises.com/Product.php?productid=MFJ-1754>

<https://sites.google.com/site/w3ffhomepage/homebrew-buddipole-plans>

Portable mast tripod

<http://ctaresregion2.org/forum/antenna-central/78-portable-16-extendable-mast-tripod->

Skywarn® <http://www.mahoningskywarn.org>

Spring is coming around the corner and soon so will hail and downbursts. Training for Skywarn® is required if you plan on participating in severe weather events. Trumbull County is March 19th at 6:30PM at the Kent State Branch in Champion Technology Building Room 117. Mahoning County is March 20th at 6PM at the Austintown Fitch High School Auditorium.

Gary Garnet as always puts on a great presentation with yearly updates to keep it interesting for us. For those interested in more of the scientific aspects in severe weather The Pittsburgh NWS will be

having an Advanced Class over in Mercer County April 4th 630PM at the Mercer County Dept of Public Safety, details on Pitt NWS site.

Please remember when there is a Severe Weather Net on the W8QLY 146.745 repeater to listen before transmitting. If there is not a warning issued yet for Mahoning County but there is for neighboring ones, then the repeater will probably be in a loose net mode. This means transmissions are not being directed to net control, but if you're having a conversation try to keep it short and leave

long pauses in case someone needs to bring up the net or someone has emergency traffic from one of the borders. Make sure to listen before speaking, because if there is a net in progress you do not want to interrupt. Also, if there is a question posed, let the net control operator handle all the traffic. This cuts down on unnecessary radio communications on the frequency during a need. Once a net is in progress, before you transmit your info, take a moment to think what you are going to say before you key up.

Skywarn® continued

The only reports that they will want are:

1. **Tornado, funnel cloud, or wall cloud** (location and direction of travel)
2. **Hail of any size, severe size is 1 inch** and up so quarter size, please reference hail size with pocket change, if you can't do an actual measurement.
3. **Actual wind damage**, trees down (what size, healthy or dead), measured winds 45 MPH or more.
4. **Flooding** more than 1 foot of standing water or flowing water which might lead to flash flooding.
5. **Death or serious injury from the weather.**

There may be occasions where they may ask for other reports for the National Weather Service.

Keep an eye to the sky. All help is appreciated!

Here are some useful links to review from the NWS in Norman, OK. Online basic training,

won't replace live training but it will familiarize you to the basics. While watching the presentation online keep in mind this is for Norman, OK area and not NE Ohio.

<http://www.srh.noaa.gov/oun/?n=onlinespottertraining>

<http://www.nws.noaa.gov/os/brochures/SGJune6-11.pdf>

<http://www.srh.noaa.gov/oun/?n=spotter>

<http://www.nws.noaa.gov/nwr/nwrbro.htm>

Skywarn Frequencies

In order of usage

146.745- W8QLY PL110.9

146.910- W8IZC

147.000+ KB8N

147.570 Simplex

Check for updates on:

www.Mahoningskywarn.org



K8TKA Repeater 147.315+

The repeater has been doing ok for the most part it still needs work. The big deal for now in the signal chain is the antenna. We've looked at some projects and while one seemed promising it would need extra support and the tower we're using just can't support that in its current configuration. We have been looking at commercial models by Celwave, Antenna Specialists and Decibel Products, they are significant in cost. There has been some finds on the surplus market but getting it from across the country adds some difficulty. I am hopeful we can get into a more modern system in the near future and not just for linking to local repeaters but possibly adding

equipment to link into the Dstar network or other competitive versions. Once the weather breaks we will resume the tower work to increase its height an additional 20 feet (thanks Jack) with that the RF grounding needed and a good sturdy monoband antenna the coverage should improve dramatically. It may seem silly to invest in a single band antenna in a world of multibands but with dealing with duplexers a monoband is the only way to go, it is part of a delicate balance in the duplexers ability to pass and reject certain frequencies. It is possible that our current compromise antenna of the Diamond X50 is causing some erratic behavior with received

noise. We have the parts from the GE MASTR II mobile I purchased last fall in hope of repairing the original GE mobile being used in the repeater now when it stopped working in late September.

I am taking comments on having the AR Newline podcast on the net afterwards, it's about 30 minutes long. I know MVARA used to do that but not sure why they stopped. I hear it occasionally on other nets in western counties. And also formats for the Friday Night net, it has been essentially an informal net I want to gauge the interest if members would like different content or procedural format like a directed net.

Continued on page6

"It may seem silly to invest in a single band antenna in a world of multibands but with dealing with duplexers a monoband is the only way to go,"

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We're on the Web!

See us at:

www.20over9.org

www.facebook.com/hamradio.twentyovernine



K8TKA Repeater continued...

One additional feature that maybe hashed out this spring is an automatic battery backup system and with my time at an engineering firm I may have a solution for sharing the load between the power supply and the battery by using an ORing diode so that when the supply voltage drops on the Astron to one leg on the diode the other leg connected to the battery will begin conducting, once main power is restored the

battery will go back to charging. While currently 147.315 is not a backup for Skywarn or ARES, it may become one in the coming year or two. We have a mobile donated by Wes W8IZC that may be made operational for a drop in back up or used for a low power repeater for temporary deployment elsewhere in the region (might make a nice Go-Box project), and we have the parts from the other

GE MASTR II mobile I purchased last fall in hope of repairing the original GE mobile being used in the repeater now when it stopped working in late September.

Friday Night Net at 9:20PM, anyone who would like to be a net control operator is more than welcome to do so, either contact me or chime in before the net begins. 73's KC8RJS
George Meleski

Member Birthdays

Karen Ahrendt N8UVW 7th

John Douglass KB8JVW 20th

[Happy Birthday To ALL!](#)

Meet and Eat dates

The 1st Saturday of the month 20/9 Club Breakfast at the Korner Restaurant in North Jackson at 9:00 AM

The 2nd Tuesday of the month meet at the Eat N Park Restaurant in Boardman for breakfast.

The 4th Tuesday of the month meet at the Eat N Park Restaurant in Boardman for breakfast.

Membership Dues

Dues still remain the same at \$15 for an individual and \$20 for family. Please get in as soon as you can we would like to have a complete roster by April. We will be adding a PayPal link to the website soon for membership as well until then you can send checks to:

20/ARC K8TKA
4939 East Radio Rd.
Austintown, OH 44515

73's KB8YHC Rich Hamacker

VE Exam Sessions

We will start having regularly scheduled test sessions during the year like several years ago, but we need your help. The plan is for every other month whether there is a class or not but this is where your cooperation comes into play, we will be doing these on a reserved basis, and need to be notified at least 24 hours before testing if you're not coming this is simply to be fair to the examiners who volunteer their time. If you or friends are very eager to test between scheduled sessions then arraignments would need to be made with me at least 1 week to the desired date.

73's KB8JVW John Douglass