



PostScript
**Ohio
Section**



December 04 Edition

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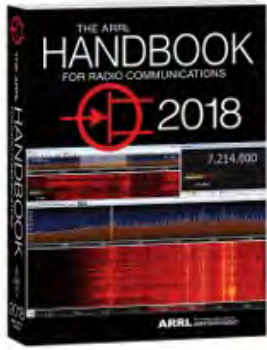
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Handbook Give Away



Hey Gang,

Here's the WINNERS – Yes, that right, WINNERS from the November drawing...

ROLAND UDE, W8BUZ won the Handbook.

Tom Porter, W8KYZ and **Roy Cotts, KB8SSH** won Ohio Section Knit Caps!

I want to thank EVERYONE that participated!! See ya' real soon with a brand-new drawing for Christmas!!

Keep a watch out for the big RED arrow on the main page. That will signal to you that you need to get registered for a chance to win!! Oh yes, there's gonna' be much more given away than just a Handbook for sure! You never know, YOU may just be the next recipient!!

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One Question Questionnaire

Hey Gang...

There's another NEW – one question – questionnaire on the Ohio Section Website! <http://arrlohio.org> This one was an interesting one for sure. We have 76% of you that are Right Handed and around 17% that are Left Handed, and the surprise was that there are about 6% that are ambidextrous! Wow.. who would have thought that there would be that many that can go either way! Anyway, it's all in fun and I hope that you are enjoying answering these "ONE QUESTION" questionnaires.



Now... Since we are on a roll with having some fun at this, let's see how you answer this next one. It again comes from Jim Yoder, W8ERW. **"How many Hand-Held Radios Do You Take To A Hamfest?"**

The survey will only take 2 seconds for you to answer it, and you can see how your answer stacks up with others instantly. If you haven't done it yet, please do. I really want to hear from you. Hey.. If you've got a question that you'd like to see on our questionnaire, please send it to me!

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How many 330 ohm resistances in parallel are required to carry 20 amperes on 220 volts?

I thought it would be a fun exercise for all of us and do a little Ohm's Law work. You remember Ohm's Law don't you? You had to learn it to get your license. Try working it out before going back to the last page for the answer!

JOTA “Alive and Doing Well,” Although 2017 Participation Down from Last Year

(from arrl bulletins)

Nearly 8,000 Scouts got on the air for the 60th Jamboree on the Air (JOTA) over the third weekend in October, National JOTA Coordinator Jim Wilson, K5ND said. Wilson this week released the [2017 JOTA report](#), which declared, “Radio Scouting and Jamboree on the Air are alive and doing well.” Facilitating the October JOTA activity were more than 900 radio amateurs at 525 stations.

“Propagation wasn’t our friend, but, even so, [radio amateurs in] almost 90 countries and all 50 states engaged in conversations with Scouts during the weekend,” Wilson said. “In addition to HF, VHF, and UHF many Amateur Radio digital modes were in use, as well as online Jamboree on the Internet channels.”

The tally for JOTA 2017 was 7,872 Scouts on the air, which, Wilson pointed out, was down from the 10,761 who took part in JOTA 2016, but more in line with 2015’s participation. Reports were filed by 226 JOTA locations.

“The Boy Scouts of America National Radio Scouting Committee will be exploring several improvement projects for 2018,” Wilson said. These would include establishing a JOTA Frequency Task Force to explore updated frequency listing and operating recommendations, looking into new ways to alert participants in real time about other JOTA stations that are on the air.

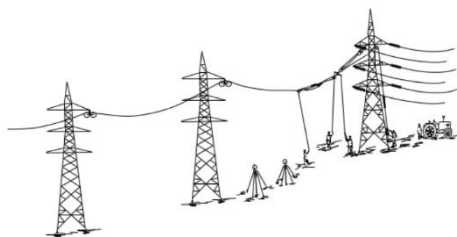
The Radio Scouting Committee’s work in 2017 resulted in the introduction of new Radio Merit Badge [requirements](#), which included a new option for Amateur Direction Finding (ARDF) — or “foxhunting.” The panel also developed documents to help Scout leaders incorporate radio and JOTA in their unit activities — “[Cub Scout Program Helps for JOTA](#)” and “[Boy Scout Troop Meeting Plan for Radio](#).”

Wilson pointed out that the “very successful” K2BSA operation at the [2017 National Scout Jamboree](#) in July introduced Amateur Radio to nearly 2,500 Scouts, with 305 earning the Radio merit badge.

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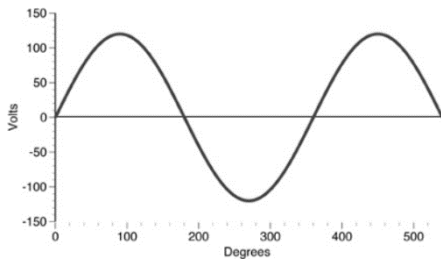
Why can't DC current be transmitted over long distances like AC current can?



Actually, the opposite is true. DC is preferred for long distance transmission hauls and that’s where the economics of a DC line really shine. DC is more efficient than AC at high voltages and has lower line losses. The line has lower losses, no reactive power is needed, and the power flow can be fully controlled.

This question was relevant for many decades after the introduction of commercial power delivery. The very first systems were DC. However, at household voltages, distributing DC is inefficient, so generators had to be relatively close to the end consumers.

The transmission of power is much more efficient for a given size of wire when you use a high voltage. However, in the early days, there was no economical way to convert from high voltage DC to the lower voltage which could be delivered into a home. However, with AC transmission, it is easy to convert from high voltage to low with a transformer. Thus, AC transmission began to dominate fairly early in the electrification of homes and industry.



Wire diameter is limited for AC transmission lines due to the “skin effect” that prevents an AC current from penetrating to the center of a large wire, whereas a DC line can be arbitrarily thick. At 60 Hz, the skin effect becomes significant for wires greater in diameter than about an inch. Because of the skin effect in part, multiple wires arranged in a circular pattern and separated by polymer spacers are often used in high capacity high voltage AC transmission lines. Thus, overhead HVDC powerlines can transport significantly more power for greater distances

than AC lines, for two main reasons: the effective voltage can be higher, and the wires can be bigger.

DC transmission lines become cost effective with AC lines at around 300 miles for overhead and 30 miles for underground power transmission. This is because the the cost of converter stations for a DC line are much greater than the cost of a transformer. At those distances, the line costs equalize and for longer lines, DC is more efficient.

Nowadays we do have the means to convert from high voltage DC to low, but it is still not economical unless the high voltage DC transmission line is very long (100s of miles). Nevertheless, in the long-haul situations, DC is now actually the preferable way to go because AC suffers from other losses from which DC does not.

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Go Kit Inspection

(from Ohio District 3 ARES Program)



Now that *all* of us have Go-Kits, have you ever thought about exercising yours? It seems like a low-stress opportunity to see how well you selected your kit's contents. Consider bringing your kit along on your next visit to relatives for the holidays.

If your kit includes water, did you leave expansion room in the water container in case that water temporarily turns to ice? If not, things could get ugly indeed in your trunk when that ice melts! Did you include enough emergency food rations? If you finished off all of the energy bars in under three days of traveling the answer might be no.

Did you try operating your handheld from a motel room only to discover that you omitted the BNC to SO-239 adaptor that lets you use any antenna other than the rubber duck?

And, most importantly of all, did you remember enough extra clean underwear and socks? One of my most vivid disaster memories was talking with a police officer who didn't have extras in a town where all laundry services were off line due to contamination issues. Ouch!

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Fun Things To Do & Hamfest Too
(from various newsletters and sources)



Santa Claus Net

The Mahoning Valley Amateur Radio Association, in conjunction with Akron Children's Hospital, Boardman Campus will be having the annual Santa Claus Net Thursday

December 21, 2017 at 7:00 PM on 146.745. For those who are new, MVARA members take 2-meter radios into Akron Children's Hospital and let the kids talk

to Santa over the air. We need operators for this event but you must register with the Hospital. Please contact me and I will put you in touch with the Hospital contact person. We would love to have you, your children, grandchildren, neighbors or anybody that wants to talk to Santa also check-in.



Seneca Amateur Radio Club Classes



Amateur Radio Technician License Class 2018, a free training course with the only cost being materials and test fee. The Seneca Radio Club (W8ID) is presenting the course which will be held at the Public Safety Building at the Seneca County Fairgrounds.

The start date is **January 10, 2018** from 6:30pm to 9:30pm and will meet one night each week for 12 weeks. An application for the course can be found on the W8ID website at www.W8ID.org.

10 Meter Contest

December 09-10 Starts 0000 UTC Saturday; runs through 2359 UTC Sunday

The Objective: For Amateurs worldwide to exchange QSO information with as many stations as possible on the 10 meter band.

For full details, go to: <http://www.arrl.org/10-meter>

Online Log Submission: Participants can now submit their Cabrillo-formatted contest logs via the web. A new [online log submission web page](#) can be used to upload your log as a file or by copy-and-pasting the log text into a text window. The log will then be checked for proper formatting and completeness before uploading to the log-checking database. You will then receive a confirmation number and a confirming email. If any errors or discrepancies are discovered, they will be clearly labeled so that you can fix the log and try again. The email log submission process is still available if you prefer to use that method and all accepted logs will be listed on the [ARRL Logs Received](#) page.

Hamfests

01/14/2018 | SCARF's 22nd Annual Hamfest

Location: Nelsonville, OH

Sponsor: Sunday Creek Amateur Radio Federation

Website: <http://www.qrz.com/db/kc8aav>



01/28/2018 | Tusco ARC Hamfest, Electronics & Computer Show

Location: Strasburg, OH

Sponsor: Tusco Amateur Radio Club

Website: <http://tuscoarc.org>

For a complete listing of Hamfest around Ohio go to: <http://arrl-ohio.org/hamfests.html>

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Ohio ARES Tiered Membership

Hey Gang,



As I'm traveling around the state I'm being asked by some... "Why am I, and the Ohio ARES program pushing these FEMA courses so hard when other Sections in the country or even my own EMA Director aren't. What's in it for me!" The answer is simple... **If they aren't pushing this, they should be!** These courses are what our "served" agencies in Ohio, and nationally, say we need. More importantly, they are requiring us to have these courses. They provide this training to us at no cost so that everyone will be working from the same page when the emergency happens. No one serving in any capacity within an emergency situation **should ever** be without training. The old adage of "baptism under fire" is not something that we

want to have happen to any of us, especially since this training is so easily available and is FREE! Are you aware that your mayor, city councilpersons, county, state and YES, even federal government officials are also being told that they need this training as well? They are!! And, if you start taking some of the classroom courses, you'll most likely be sitting beside some of them! I know, it's happened to me already.

The next question that usually follows is... "What gives you the right to require this additional training? I've been a ham for X number of years and never needed it before, why now!"

The answer to that one lies within the ARES Manual itself. Oh, you didn't know that there was an ARES Manual? There is, and here's a link to it for you to view, if you wish...

<http://www.arrl.org/files/file/Public%20Service/ARES/ARESmanual2015.pdf>



Right at the beginning of the manual (Chapter 1) it states the following:

“Chapter 1: The Amateur Radio Emergency Service: An Overview

*The Amateur Radio Emergency Service® (ARES®) consists of Amateur Radio licensees who have voluntarily registered **their qualifications** and equipment for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization, is eligible to apply for membership in ARES. **Training may be required or desired to participate fully in ARES.**”*

Here in Ohio we want to encourage everyone to be a full ARES Member of course, but how do you do this and keep your commitment to what that statement above says? How do you keep the commitment to your served agencies that we are a “trained” corps, and have these courses completed as they have required us to do?

The DEC’s, Stan and I kicked this around for some time now and we have come up with what we feel is the best solution to this situation. We’ve started a two-tiered system here in the Ohio Section for ARES membership. It works on the same principal as the FCC uses for its licensing program.



Tier II Membership

Our Tier II membership into ARES is designed for general membership. Tier II operators will be encouraged to participate in public service events, work projects with equipment and stations, and do the type of work ARES members have done for years. Tier

II members will **NOT** be activated for service during emergencies that involves operation in EOC’s, or for partner agencies who require the FEMA certification. In the event that additional manpower may be needed (The Big One) they, like spontaneous volunteer amateur operators outside Ohio’s ARES program, may be assigned to secondary tasks. While ALL time invested by our volunteers is valuable and important, Tier II operators will be at the “Entry Level” of ARES in Ohio.

Tier I operators in ARES will be those who have completed the four FEMA courses, having certificates on file with both their county EC and the Ohio ARES Training Database. These are the prime operators who will be activated when requested by our partner emergency agencies such as the EMA.



Tier I Membership

We have created incentives to entice the Tier II operators to upgrade within the ARES system. It will be the duty of each county EC to maintain a roster defining the capabilities of each member, and to maintain an activation system for Tier I members. EC’s are required, AEC’s are strongly suggested to be Tier I operators. So, we will be strongly encouraging the Tier II members to “upgrade” so that they can have all the benefits as a Tier I member does.

As a Tier I member you are able to be credentialed through our Statewide Credentialing system – EPCS. This credential is recognized throughout Ohio and comes from the Ohio Department of Homeland Security.

Emergency Partner Credentialing System (EPCS)
Multi-Emergency Personnel and Vehicle Credential

Document No: 2016EPCS-0000031	Date of Issue: 1/4/2016	
Organization: AMERICAN RADIO RELAY LEAGUE - OHIO SECTION	Date of Expiration: 7/5/2016	
NAME		*I certify, on behalf of my organization, the accuracy of the information entered into OPCS to be listed on this credential. Based on the information provided, the listed organization is responsible for my actions while this credential is in use.
LAST: Venable		
FIRST: Scott		
MI: D	STATE ID/DL NUMBER: OH	ISSUE STATE: Ohio
VEHICLE INFORMATION		
MAKE: KIA	LICENSE PLATE NUMBER: NBSY	
MODEL: Sorento	ISSUE STATE: Ohio	
YEAR: 2014		

Law Enforcement Personnel:
Able to validate these credentials through LEADS prior to granting access.
Should ID/DL should match the bearer of this document.
Has ultimate discretion to permit, write.

GMS Ohio Department of Homeland Security
37750 Ohio Road West
Columbus, Ohio 43223
Phone: 614.644.1181
Toll Free: 1.800.345.7405
www.ohiodhs.gov

For questions about this credential, contact (614) 799-6633 24/7



You are also eligible to register with “Ohio Responds” for liability protection, again under the State of Ohio. The 4 FEMA courses are requirements for both, as they are run by the State of Ohio. These two items alone are really a great benefit that goes way beyond what most Sections offer their ARES membership. How can we offer additional benefits that others can’t? We’ve partnered with the Ohio Public Private Partnership (OP3), Ohio VOAD along with the Emergency Management Association of Ohio. These partnerships are unique to Ohio, and they give us a much more

in-depth reach inside to the inner workings of our served agencies than what other Sections have. We even have a very low cost (\$9) national background check for yourself and members of your family that we can offer our Tier I members as well.

Now, there’s the new Tiered program as we have it in Ohio. I want to strongly encourage everyone that hasn’t already obtained their 4 FEMA courses (IS 100, 200, 700 & 800) to make it a goal to get them completed yet this year, and you’ll need to be sure to forward copies of your certificates to your EC and me!

Oh, by the way, the picture of the guy with the ARES vest on the front of this newsletter, that’s Troy Blair, KE8DRR, he’s the 600th registered FEMA complete person. He got the vest from me just this past week. Our new goal is 625, and we’re not very far off from that either. Could it be you pictured next week with an ARES Vest? Only “YOU” can make that possible.

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Final.. Final..

Hey Gang,

Wow, do you realize that it’s just exactly 3 weeks to the day that it will be Christmas! And, it’s only 4 weeks until it’s a New Year! I can’t believe that 2017 is almost over already. Time has really gone by fast this year. I had a fantastic time at the LEARA Christmas Party this past week. I also got to attend the OP3 Conference where I got a lot of great information about what’s happening within our “Served” agencies. I had a blast at the Marion County ARES meeting last Thursday night. It was a busy week for sure, with a really busy week coming up.



I guess I hit the right accord with my article about taking the car keys to bed with you for safety. I got a call of one of our readers. She told me a true story about a neighbor that fell in his garage and he couldn’t get up. He kept hitting the panic button on the key until finally someone got curious about the noise and investigated. They found the neighbor in distress. I have had numerous others that either have told me similar stories, or have requested to re-print the story in their newsletters. The same goes for the story about the Kidde Fire Extinguishers too! Wow, you see, it really does work!

Did you know that Ohio had an outbreak of tornadoes on November 5th? We did! We had 17 tornadoes that effected 12 counties in Ohio. If you didn't know about them be thankful, some folks lost their houses and personal belongings.

C.Q. C.Q.. Know someone that's not getting these Newsletters? Please, forward a copy of this Newsletter over to them and have them "[Opt-In](#)" to start receiving them. Heck, just have them send me an email n8sy@n8sy.com and I'll get them added to the Ohio Section Emailing list. I urge all of you to make sure that everyone, regardless of whether they are a League member or not, gets signed up to receive these Newsletters. You can always "[Opt-Out](#)" at any time if you feel this is not what you were expecting.



Got questions, concerns or would just like to sit and chat awhile? Heck, I'll even buy the coffee!! Give me a call at (419) 512-4445 or email me at: n8sy@n8sy.com



I was really upset that Ohio State, my alma mater, doesn't get to go to the playoffs after all. The game Saturday night was a real nail biter, but they prevailed!! Oh well, like the Indians, and Browns, there's always next year for that! Now... On to the Cotton Bowl!!!!

73, for now, I will catch you on down the log for sure.

Scott, N8SY...

-sk-

Answer from the riddle on page 2

Let's go back to what we learned about Ohm's Law. For a resistance on 220V to get 20A the $R=E/I$ or $R=220/20 = 11$ Ohms. If paralleling 330 Ohm resistors then to get 11 Ohms from a bank of them: $11 \text{ Ohms} = 330 \text{ Ohms}/N$ or $N=330/11 = 30$ - 330 Ohm resistors in parallel.

Keep in mind there is a power issue. $P=I^2 R$ or $20^2 \times 11 = 4,400$ watts. So, the 30 resistors would need to be at least $4400W/30 = 147$ watts each. These would be very big resistors for sure. The it works out to be 30 resistors at 11 Ohms, and each resistor would need to be 150 watts. Now a typical water heater heating element is about 4000 watts, so might consider one of these instead of resistors, it's far less expensive!

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It's FUN!!



PostScript is produced as a weekly supplement to the Ohio Section Journal (OSJ). I sincerely hope that you have enjoyed this edition of PostScript, and will encourage your friends to join with you in receiving the latest news and information about the Ohio Section, and from around the world!