



# Connected



The Newsletter of the Multnomah County Amateur Radio Emergency Services

April, 2019

## Meetings

### Multnomah County ARES

Every 4<sup>th</sup> Thursday  
7:00 P.M.

Informal Q&A begins 6:15  
Portland Fire & Rescue CTR  
4800 NE 122<sup>nd</sup> Avenue, Portland  
<http://www.multnomahares.org/>

### PARC Meeting

Every 2<sup>nd</sup> Monday  
7:30 P.M.

4415 NE 87<sup>th</sup> Ave., Portland  
<http://www.w7lt.org/>

### HARC Meeting

Every 3<sup>rd</sup> Thursday  
Mount Hood Comm. College  
Room 1001  
<http://www.wb7qiw.org/>

## Nets

### Multnomah Co. ARES Net

Wednesdays at 7:00 P.M.  
146.84 (no Tone)

### District 1 ARES Net

Daily at 7:30 P.M.  
147.320 (PL Tone 100.0)

### Digital Modes Training Net

1<sup>st</sup> Tuesday at 8:00 P.M.  
440.400 (PL Tone 123.0)



SSTV drill image!

## Upcoming Events

**Thursday, April 25—General Meeting:** Antennas.

**Friday-Saturday, April 26-27—Statewide Spring SET:** Drill Guide coming this weekend

**Saturday, May 4—HF Workshop:** Details coming via email

**Saturday, May 11—Walk MS: at Oregon Zoo.**

**Sunday, May 19—Cars for a Cause:**

**Friday-Sunday, September 13-15—MCARES Annual HF Campout:** Pine Point Campground at Timothy Lake. \$20 per person. Contact Eli eliza.pride@gmail.com to sign up.

## From the EC Desk

By Nate NA7EE

### Grounds and Grounding

There has been a lot of activity in the station building front in MC ARES over the past few months. As I receive stories and reports I am greatly encouraged by everyone's willingness to jump in and build a better radio station. One of the main topics of concern folks have when installing a new radio station is proper grounding. There is considerable confusion and strong feelings over this topic. I cannot hope to clarify the technical aspects of station bonding and grounding in a newsletter setting, but I do want to make sure that everyone is looking in the right places and asking the right questions when they consider their station grounds. First off, the best way



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to get the right information is to research the situation oneself from the appropriate resources! MC ARES is adamant that the ARRL technical publications are the best place to find information that has been vetted by competent engineers and will lead to safe and effective station construction. The two best publications are Grounding and Bonding for Radio Amateur and The ARRL Handbook. Additionally, The ARRL Antenna Book for Radio Communications has very good in-depth information regarding RF grounds and their effects on radiated signal.

When one begins their shack and antenna grounding journey, be sure to consider the four types of grounding/bonding that are part of proper station design. These are:

- Electrical Safety Bonding
  - o The ground that provides the path for over-current protection and provides chassis shock protection.
  - o This is the third prong / green wire in your house distribution
- RF Ground
  - o It is important to keep the shack equipment at the same reference potential to avoid current flows or potential differences that can affect the operation of modern equipment.
- Chassis Ground
  - o These are the connections we think of for grounding inside the shack, the individual chassis connections to a great fat ground bar that makes its way to a good earth ground.
  - o Bonding of equipment to prevent RF flow between them can be difficult, so

make sure your ground strap setup is as clean and short as possible.

- Lightning Dissipation
  - o The design of these systems can be complicated, make sure to review your desired results before implementing lightning protection.

Again, review the appropriate technical references when you go to setup your operating station! And stay away from QRZ and eHam forums, you'll find too much time there will make you want to give up on grounding altogether.

### Membership News By Deb KK7DEB

Join me in welcoming our newest member Todd K7EMI. Todd is a Legacy Good Sam Hospital responder. He will be placed on our Supporting Members list.

### Technician and General Classes and License Exams

Hoodview Amateur Radio Club presents a General Class on May 4th and continues on May 11th with a VE test session on May 18th at Mt. Hood Community College Fisheries building. Classes are from 9:00 AM-4:00 PM. Classes are free, but the book is \$23 and the VE test is \$15. Text-book: Ham Radio School by Stu Turner (available online at Amazon, be sure to get the General book). To register call Cory at 503-781- 9095 or email ka7iug@frontier.com

### Training News By Eli W7ELI

The on-line FEMA class IS-800 is now a federal requirement. We have gone through our records and almost half of our active members have sent in their completion certificate. We will be sending a separate email with a list of call signs of the certificates we do have. If your call sign is not on the list, please take the class and send in your certificate toeliza.pride@gmail.com. We know this is not a fun task, so we are giving you until October 1, 2019 to get it done. We will send periodic reminders for the procrastinators among us.

Here is the link to the class:  
<https://training.fema.gov/is/courseoverview.aspx?code=IS-800.c>

### Weekly Net News By Deb KK7DEB

At our April 11 leadership meeting we decided to make some changes to the weekly Wednesday night net. Checkins will be by team instead of by call sign suffix. This encourages members to learn to recognize their team members. Also checkins will follow training gems, traffic and announcements so please try to tune in on time at 7:00 p.m. Our net manager, Rachel KI7NMB, will update the net scripts and announce when these changes will go into effect.



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## Additional Nets

### **District 1 ARES Net:**

Daily at 7:10 P.M.  
147.320 Mhz and 147.04  
Both with PL Tone 100

### **NTTN:**

Daily at 6:05 P.M.  
145.27, 145.43, 145.47  
146.80, 442.875, & 107.2

### **Portland NET Net:**

**Sunday 8:00 P.M.**  
147.040 PL tone 100.00