

THE RADIOGRAM

THE EC REPORT:

Pat (W7PAT)

Training is an essential part of our program and should be taken seriously. Whether it is from ARES or online classes on your own, I hope that you are continually trying to learn all you can about emergency communications in a disaster.

Our Training Committee is working on the idea that we will be providing education on the requirements in the Washington County ARES Task Book. We will need members to step up and be a part of the Training Committee and do presentations.

I am also looking to add a member or two who may not have completed their Task Book Level 1, or who may be confused about the process. We need to make sure that we steer the training process in the right direction. Currently, the Training Committee consists of Aaron (K7ALF), Bill (KD7EFP), Dale (WB6BYU), Ed (KC7ZBI), John (KX7YT), Paul (KD7ISA), Randall (NW7T), Steve (N7BEF), and recently added are Chris (KU7PDX), Mark (W7MML), Bob (KI7RUR), and Michelle (KM7DKK). We do not have an AEC in charge of training at this time. I am hoping someone will volunteer to take the lead.

The Task Books are required by the Oregon ARES and mandated by the ARRL. There are three books in one printout. If you don't have a copy, go to washcoares.org, download and print it.

"GEAR SEW"

Paul (KD7ISA)

This project involves sewing ham gear and accessories together. The sewing project is a 6 ft. antenna and mast bag. The main bag is 600D Cordura material and a 6 ft. long #10 zipper. The nylon webbing is 2 inches. The handle has a nylon rope sewn in to give it more comfort during use.

The inside has a pocket for a big stack of 8.5" x 11" documents. One end is double-reinforced and the other end has a "D" ring to allow hanging it out of the way.



The material cost came to approximately \$55.00. One of the ham radio suppliers featured a similar but smaller bag for \$100.00. Comparable bags can be found by searching for "flag mast pole bag."

ALTERNATIVES TO KNOTS FOR ANTENNA WORK

Dale (WB6BYU)

For those who aren't comfortable tying knots, there are a number of alternatives for setting up antennas (and other uses.) Some of these may require tying a knot initially (or finding someone else to do it for you), but won't need it each time you set up an antenna.

Note that most devices work best over a particular range of rope diameters. Make sure they fit your rope for best results.



Carabiners come in many sizes and styles.

Most common is a **carabiner**, or similar small clips. These can connect a loop at the end of a rope to another rope, insulator, a screw eye, chain link

THE RADIOGRAM

fence, etc. The smaller ones are adequate for most temporary antenna work.

Anchoring something that is too large for the carabiner to clip around, a **pre-tied loop** of rope can be passed around the object and the carabiner hooked to it.



These black plastic tensioners work well with smaller ropes.

Common tent rope tighteners aren't as easy to tie around a larger object and may have a limited adjustment range.



One of the more challenging applications is adjusting a rope; perhaps for guying a mast or tying off the end of an antenna. Several different types of devices are sold as **tent rope tighteners**: the simplest is a metal or plastic bar with two or three holes in it. These work well when you can slip the resulting loop over the top of a tent stake but are more difficult to use with a tree or signpost. There are some others like the ones in the photo that can be used in the middle of a rope and anchored with a carabiner. If you have a pre-tied loop of rope, you can wrap it around your main rope to make a **Prusik knot**, which can be slid along the rope, then it will hold under tension.

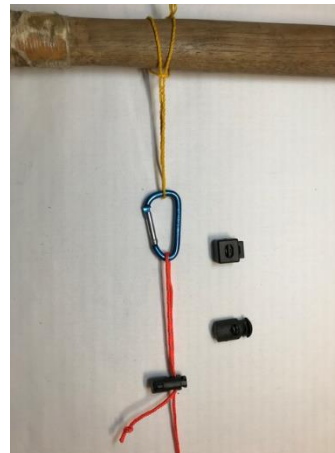


Red aluminum "snail" tensioners can be used several different ways. Note the pre-tied loops used to attach them to the anchor.



The Cam-Jam has a ratchet cam to hold the rope. The end of the rope is passed through the hole, then pulled into the cam. Pulling the rope back toward the antenna tightens the rope. Pulling it toward the camera releases it.

A more elaborate device is a **Cam-Jam**, with a clip like a carabiner and a ratchet to hold the rope. These can also be used in the middle of a rope, as long as the end of the rope holding the tension is locked in the cam. This can be clipped to an anchor, the end of the rope pulled through the ratchet cam until the rope has the desired tension.



A cord lock can be used to adjust the rope, as long as it provides enough friction. Here, a pre-tied loop is placed around the anchor and connected to a carabiner.

A cord lock is used to adjust the resonant frequency of a wire antenna. Sliding the cord lock up the wire, so the "tail" is shorter, will raise the frequency. Moving it toward the insulator, so the end hanging down is longer, will lower the frequency.



Cord locks can be used to adjust a rope by doubling the rope and passing it through the opening. They are also handy for field-tuning of wire antennas by

THE RADIOGRAM

folding part of the wire end back along the main part.

Plastic clothespins are a convenient method to anchor the end of an antenna to a branch or other object. I also use them for tuning antennas. **Pipe cleaners, twist ties, or tie wraps** can be twisted around a branch as an anchor.



A plastic clothespin is used to attach a tensioner to a branch.

A **cleat** is traditionally used for anchoring a rope on a sailing ship and is often utilized on flagpoles.



A cleat is a convenient way to anchor a rope under tension.

Bungee cords, nylon straps, or hook and loop straps (e.g. Velcro®) are convenient for securing the base of a temporary mast to a fence, signpost, or other upright.



A bungee cord (top) and nylon strap (bottom) are used to secure the base of a mast to a fence post.

This is a quick temporary mast mount using a bungee cord and a spading fork.



RADIOSPORT: "SEARCH AND POUNCE" VS "RUNNING"

Andy (KE7AUB)

In early January 2021, I guest operated for 32 out of the 48 hours in the ARRL Digital Contest (Radiosport event) as part of a team operating exclusively on RTTY (radio teletype). RTTY is easier in the sense that you don't have to speak into a microphone. There is a lot of keyboard action. RTTY is a good tool for honing your typing skills for Winlink when participating in ARES. In late January of 2021, I guest operated solo in the NAQP (North American QSO Party) SSB (Single Sideband) contest for 10 hours straight. This was a voice Radiosport event, and my breaks (rest/pauses) totaled only three minutes! I was in "Running" mode (staying

THE RADIOGRAM

on the same frequency) for five out of the 10 contest hours, averaging a high of 150 contacts per hour for two of the five hours “running.”

My highest rate for one minute of operation was five contacts, which included exchanging the call sign, my name and my State (a two-letter code / or a DX entity code if not a US/Canada station). Occasionally the names had to be spelled, just like in the ARRL Radiogram when names are spelled if the spellings are uncommon. Again, do you notice that there’s a connection here with ARES and even radiogram traffic handling? Even most of my “Search and Pounce” operations were at a rate of 45 to 60 contacts per hour, except near the end (the last 60 minutes). I was getting tired after a very full day; it was 8:00 p.m. and I had been awake since 5:00 a.m.

For both guest operating events, I had brought four water bottles, a thermos containing tea, and my own food. But I ended up just rapidly consuming a banana during a 30-second break from “Search and Pounce.” I grabbed an extra piece of clothing to stay warm.

In the NAQP, which was a voice contest, I had signals of all qualities and therefore my radio skills were challenged. The weak stations, whose signals were just about at the noise floor, only sometimes peaked above the noise floor, thus making the exchange difficult. This is a listening/operating skill that will come in handy in an ARES event. The station you’re talking to may be on low battery power and may have a weak signal, and therefore you are challenged because of this – but the information might be critical. For DX contests, during which I mainly contact Asia Pacific stations of varying power, it’s really hard work to get the exchange completely and accurately for the points to count, especially when you’re using the “Running” method and you can’t take breaks. I’ve gone seven hours straight with no real break – other than sneaking a drink of tea or water.

SITES NEEDED FOR AREDN MESH

Ken (K7ICY)

Cascade Amateur Radio Society (CARS), formerly known as “Oregon HamWAN”, has \$80,000 left from an ARDC (Amateur Radio Digital Communications) grant to spend on upgrading the AREDN (Amateur Radio Emergency Data Network) MESH Connections, mostly in the Portland Metro Area. We dropped HamWAN for AREDN MESH. Yes, that’s right! We are looking for sites to place AREDN MESH equipment. Priority will be given to locations that have a good line-of-sight to other hams. If you have any ideas and/or contacts that may work for this, please contact me: Ken Tolliver (K7ICY) ktolliver@hotmail.com 503-544-7945. I’d like to spend much of the grant on Washington County. But I need sites for the equipment. Note: Because of grant requirements, ownership of the equipment must remain with CARS. You can put your callsign on it and install it yourself. Basically, it’s your equipment, but title remains with CARS. Please think of any connections you might have to tall buildings, mountain sides, your home, commercial structures, repeater sites, high parking lots, whatever. Just get your ideas to me. Once sites are lined up, we will need volunteers to help re-flash the equipment’s firmware and to help with installations. Let me know if you can help.

Executive Editor: Pat Roberson, W7PAT,
W7PAT@washcoares.org

Please send comments, articles and images to
the Editors: Lee and Michelle Faulk at
KM7DKK@yahoo.com

Consulting Editor: Doug Foran , WA7LET