

Mecklenburg County ARES®

ARES Tool Kit?

Being deployed in the field it's sometimes necessary to fix our equipment in the field. Coax and power cords can be easily damaged when we deploy outdoors or even to a shelter. In addition to radios, antennas, coax and batteries; we need the tools to fix minor breakdowns that may occasionally occur. Whether the damage is caused by wear and tear or by accident, if we prepare ourselves to solve these problems then we can resume our duties in a timely fashion.

So, what's in a good ARES Tool Kit? I can tell you that I have in my tool kit to give you an example.

1. Fuses – You need fuses appropriate for all of your equipment. I have two kinds of fuses. Automotive blade fuses and barrel fuses.
2. Roll of Solder, soldering iron and stand for soldering iron.
3. 6 – PL-259 connectors for RG-213 or LMR-400.
4. 6 - Screw in adapters for using a PL-259 on RG-8x coax.
5. 4 - Screw in adapters for using a PL-259 on RG-58 coax.
6. Coax Seal – the asphalt tape for weather proofing coax connectors.
7. Electrical tape – has many uses. Wrap connectors with electrical tape before you apply coax seal to make it much easier to disassemble the station.
8. Head phone adapters ¼" to 1/8th" and 1/8th" stereo to 1/8th" mono.
9. 2 - Barrel Connectors for joining runs of coax. It's good to have one barrel connector for each coax roll you bring.
10. 1 - BNC to PL-259 connector or pigtail – enables you to connect an HT to an outside antenna.
11. 1 - SMA Female to BNC connector or pigtail - enables you to connect a Chinese HT to an outside antenna.
12. 4 - Clip on Ferrite beads – used to stop common mode currents and RF from effecting adjacent equipment. If theses fail to solve the issue then your best alternative is to move the station or antenna to eliminate interference.
13. Extra Anderson Power Pole connectors and the crimper needed to install them.
14. Knife – used to cut wire and prepare coax cable for connectors.
15. Screw Driver with Philips and flat head– I use a set from Radio Shack that has Phillips, flat, hex and torx just to cover all the bases.
16. 50' rope – for installing wire antennas.
17. Cable ties
18. Duct Tape – tape your coax to the floor to prevent a tripping hazard.
19. Flashlight
20. Volt-ohm meter – used to check AC outlets or continuity of coax cable.
21. Wire nuts – used for fixing damaged AC or DC power cords.

Other handy tools:

Multi tool or Needle nose pliers

12 volt Soldering Iron

Wire Stripper

Adjustable Wrench

DC extension cord

Automotive blade fuse holders w/ Anderson Power Poles.

The majority of field repairs are fixing broken wires, replacing coax connectors or solving RF interference issues. If we have the tools to fix these problems then we can effectively get our stations up and running shortly after they occur.

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