

PORTABLE OPERATING CONSIDERATIONS

Here are some things to consider when you go to operate a ham radio station at some location other than your own home or vehicle. The location specific examples are referenced to equipment that may or may not be installed at Mendocino County facilities. Ham radio exists at these facilities to serve the needs of the agency or facility when normal communications services are not available or for training.

This first group consists of hardware considerations. You can use this as a check list.

- ❑ **ANTENNA** Most Mendocino County school district offices and public health facilities have had permanent antennas installed. BUT, these antennas may have been removed or damaged or are otherwise unavailable. A good practice would be to bring your own portable antenna such as a J-pole or other ground plane independent antenna that can be deployed outside the facility if required.
- ❑ **TRANSCEIVER** Many Mendocino County public health centers (including hospitals) have had 2m transceivers installed. However, you cannot assume that such equipment will be located when you arrive at the facility. School district offices, in general, do not have such transceivers. A good practice would be to bring your own mobile type transceiver to the facility and be prepared to use it. Please note that a hand held radio or HT may not be useful at all locations.
- ❑ **COAXIAL CABLES** Facilities with antennas only installed (such as school district offices) will have had coaxial cables brought down into some inside location. However, this may not be convenient to the location where you will be operating. So, bring your own coaxial cables and the necessary connectors and adapters to bring the coaxial cable to your operating position, perhaps up to 25 feet away. You may want to make the last few feet at least the smaller cable (RG-58 type) so as to not have the cable determine the position and orientation of the radio.
- ❑ **POWER SUPPLIES** Most Mendocino County school district offices and public health facilities have had AC to DC power supplies provided. BUT, these power supplies may have been removed, stored, or are otherwise unavailable. A good practice would be to bring your own power supply or even a portable battery pack just in case.
- ❑ **DC POWER CORD** The AC to DC power supplies provided have the DC output on 1/4-20 threaded studs with nuts and washers. Some may have had short cable with Anderson PowerPole connectors fitted externally. If you are supplying your own radio (such as at a school district office), you must provide a way to connect to this power supply. The preferred way would be a PowerPole connection but lugs, tinned wires, or clips could be used. If you are so inclined, you might leave a PowerPole connector cable attached to the power supply if not so equipped.
- ❑ **AC POWER CORD** You may find that an AC extension cord will be necessary. A heavy duty three conductor cord of AWG #16 or better wire with at least two 15A outlets should be a minimum. In addition, at least one AC power cord with an IEC connector (think computer power cord) may be found necessary.

The following are items to consider for actual operating at a portable location:

- ❑ **ASSISTANT** If at all possible, every portable station in facility or agency service should have at least two licensed operators present. Assistance in logging, message transfer, and operating the radio is extremely helpful. If another licensed operator is not available, an un-licensed assistant should be requested from the facility. This will not only aid the operator but be an educational experience and may result in another licensed operator in the future.
- ❑ **HEADPHONES** At most facilities you will find that headphones will considerably aid your operating efficiency by excluding other voices and noises. Also, signals that you receive will not bother other occupants of the facility. My recommendation is that you provide a small external speaker with a 1/8 inch (3.5mm) mono phone plug cable and two stereo headphone jacks with a switch to mute or not mute the speaker as needed. Also, of course, headphones.
- ❑ **PAPER AND PENCILS** These will be needed for logging and writing out messages and other operating notes. See also the Computer note.
- ❑ **MESSAGE FORMS** Much traffic is passed using standardized forms including Radiograms and various forms from the National Incident Management System (NIMS) or the Incident Command System (ICS). A supply of these forms should be available. These forms can be downloaded from the <http://mcarcs.org> web site under the Resources/McARCS Documentation tabs in either their native format (Word or Excel) or as printable pdf forms. If you are not familiar with the Radiogram format, now is time to go to the McARCS web site and read the instructions under Message Forms and Operating Tips.
- ❑ **COMPUTER** A small laptop, notebook, or netbook computer may be found to be of considerable aid in logging message traffic, creating or recording messages in various forms, printing messages in legible form, and accessing other resources that may be available. This is optional with the operator for voice message traffic but mandatory for digital message traffic..
- ❑ **PRINTER** A small computer printer may be of aid in printing out received messages for delivery to the served agency or facility. This is optional with the operator.
- ❑ **FLDIGI and FLMSG** Some locations may be using digital transmissions using both the FLDIGI and FLMSG programs operating together with the computer noted above. Information about these programs can be found on the <http://mcarcs.org> web site under the Resources/McARCS Documentation tab as the Digital Radiogram documents. These free programs can be downloaded from those documents or from <http://www.w1hki.com/download.html> Some practice in configuration and data transmission should be done before actual operations.
- ❑ **FOOD and/or WATER** For short duty service of up to a few hours, consider providing your own food and water – at least snacks and a water bottle. Of course over much longer service, you would be expected to be either be provided same or being released from duty.