

Pikes Peak Amateur Radio Emergency Service

Colorado ARES District 14

ANNEX N: NET PROCEDURES

15 May 2008

**IN AN EMERGENCY OPERATION, NET TIME IS VERY PRECIOUS
WE MUST MINIMIZE THE TIME OUR RADIO IS TRANSMITTING**

I. Types of Nets, General Instructions

There are two types of nets used by PPARES: directed and non-directed.

In a “directed” net there is a Net Control Station (NCS). For any station with traffic or the net, the first transmission must always be directed to NCS.

In a “non-directed” net there is no Net Control Station, all other net protocols still apply. Stations call one another direct without having to go through a NCS. Non-directed nets are generally used when the volume of message traffic is light. There is frequently an ARES staff member monitoring the net, tactical “Coordinator,” available to answer questions or solve problems that might arise.

The most important rule is to gather your thoughts and formulate what you are going to say BEFORE you key your radio. Listen before you talk to make sure no one is using the frequency. Key your radio and WAIT ½ second before talking. Pass your message and always END with your full call sign (this indicates you are finished and clear). If you do these things, you will be efficient and meet all FCC identification requirements. You must strive to get your message through clearly and accurately the first time – take your time and don’t rush (remember the station on the other end has to write the information down in their log).

II. Tactical Callsigns and Net Operations

A “tactical” callsign designates your location, function or both (i.e. “Tejon Shelter,” “Penrose Main,” “EOC,” “Red Cross,” etc.) The rule is “TACTICAL IN, CALLSIGN OUT” – use your tactical callsign to contact NCS so they immediately know your location/function and give your callsign at the end of communication to indicate you are clear. Tactical callsigns for selected areas PPARES supports are listed in Annex T.

Example:

Station calling: *“Penrose Main”* [Tactical In]

Net control: *“Penrose Main Go”*

Penrose Main: *"I have a John Doe ready for pickup at the emergency room entrance. He needs to go to 2468 Austin Bluff Parkway. WØABC"* [Callsign Out]

Net control: *"Roger, WØNET"*

In a directed net, your first call is automatically directed to the Net Control Station (NCS); therefore it is redundant and wasteful to say "*Net Control, this is Penrose Main.*" Instead, simply say your tactical call sign, i.e., "Penrose Main," and NCS should respond with "Penrose Main Go." (See example above)

If you have not yet been assigned a tactical call, use your callsign suffix (preferred, or full call sign) as if it were a tactical call.

Example:

Station calling: *"HBZ"* (or *"KØHBZ"*) [Tactical In]

Net Control: *"HBZ Go"* (or *"KØHBZ Go"*)

KØHBZ: *"Available for assignment."*

Net Control: *"Report to the Red Cross Shelter at Coronado High School, 1590 West Filmore, set up a portable station inside, assume tactical "Coronado Shelter" when operational."*

KØHBZ: *"Roger, ETA 20 minutes. KØHBZ"* [Callsign Out]

Net Control: *"WØNET"*

To contact another station during a directed net, give your tactical call, WAIT for net control to acknowledge you, then call the other station direct and pass your traffic. If NCS has emergency or priority traffic pending on the frequency, or doesn't want you to use the frequency for whatever reason, NCS will ask you to "standby" or "wait."

Example:

Station calling: *"Penrose Main"* [Tactical In]

Net Control: *"Penrose Main Go"*

Penrose Main: *"Mobile 1, Penrose Main"*

Mobile 1: *"Mobile 1"*

Penrose Main: *"I have a John Doe ready for pickup in the emergency room north entrance. He needs to go to 2468 Austin Bluffs Parkway."*

Mobile 1: *"Roger, ETA 10 minutes. NØMOB"* [Callsign Out]

Penrose Main: *"WØABC"*

The practice of calling another station direct after NCS acknowledges you is a technique that has been in use for over 10 years and was developed here in PPARES. When working with other radio groups or ARES districts, you may have

to ask NCS for permission before going direct with another station on the net. When working with other groups, always listen for the appropriate protocol.

When another station calls you, respond with YOUR tactical call sign only. This confirms that the calling station is, in fact, talking to the station they called.

Example:

Penrose Main: *“Mobile 1, Penrose Main”*

Mobile 1: *“Mobile 1”*

or

Mobile 1: *“Penrose Main, Mobile 1”*

Penrose Main: *“Penrose Main”*

III. General Operating Tips

III.a. Repeater Operation

Remember that repeaters take a moment to detect your signal and respond (usually about ½ second). Linked repeater systems take even longer (sometimes 1 to 2 seconds). If you key your microphone and speak immediately the repeater will miss the first part of what you say. Get in the habit of keying your microphone, waiting (say the word “WAIT” to yourself), then speaking. If NCS says you are “clipping,” this means the first part of your transmission is being lost. After keying the microphone, always “WAIT” before you speak.

III.b. Standard Phrases:

- “Break” (by itself indicates Priority or Emergency traffic – all stations immediately stand by, let NCS handle)
- “Clear” (finished transmitting)
- “Direct” (as in "on direct" mean transmitting and receiving on repeater output)
- “Emergency Traffic Only” (used by Net Control to indicate an emergency exists on the frequency, all stations except those directly involved in the emergency should stand by)
- “Over” (only used in noisy/hard to hear conditions, like on HF)
- “Roger” or “Message Received” (acknowledgment)
- “Say again” (repeat)
- “Stand by” (means EXACTLY what it says, and should preferably only be used by the NCS!)

III.c. General Operating Tips

Speak in a normal voice – do not shout – speak slowly and enunciate clearly, especially if your message needs to be written down at the receiving station.

Use only standard ITU phonetics when phonetic spelling is required.

Un-keying your microphone implies "over." Always leave 2-3 seconds between transmissions in case a station has to "Break" in with emergency or priority traffic. Failure to leave time between transmissions is referred to as "quick keying" the microphone.

Giving your call sign at the end implies you have completed your traffic and are clear (once in a great while, especially after a rare long communication, adding the word "clear" after your call sign might be appropriate).

An emergency normally means an immediate or imminent threat to life or property. Emergency traffic ALWAYS has priority. Don't use the word "emergency" unless it really is!

If you have urgent, time sensitive traffic, but it isn't an emergency, this is called "Priority Traffic." Always advise NCS when you have either "emergency" or "priority" traffic (i.e., "Mobile One, emergency *[or priority]* traffic")

III.d. Identification

Under Part 97, FCC Rules & Regulations, you are required to identify using your legal call sign once every ten minutes AND at the end of communication. Notice that you are not required to give your legal call sign at the beginning of communication. This is what makes tactical call signs legal – they're at the beginning [TACTICAL IN, CALLSIGN OUT]. In emergency communications, it is extremely rare that anyone should be conversing in excess of 10 minutes – but should that situation arise, you must ID with your callsign at least once every 10 minutes (watch a clock and ID on the even 10 minutes or ID each time you hear the repeater ID).