

How to Use the PCTA Vertex Radios with the USFS Radio System (Columbia Dispatch)

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Columbia Dispatch Contact numbers: columbiadisp@gmail.com 360.891.5140 or 800.387.6806

Prior to your work party: If you are going to use Columbia Dispatch, email them your TCP. They reported that this is extremely helpful. Columbia Dispatch said the most important information on the TCP includes: number of individuals in the party, location for the day, after hour/ emergency contacts numbers, date/times in and out of service, and crew leader name.

Check the Dispatch operating hours. Changes to hours are emailed to the caretaker group when we get them, and they are posted in the most recent caretaker meeting minutes.

If you have cell phone service at the trailhead, Columbia Dispatch prefers that you use your cell phone to check in and out with them.

Basic Operation:

- Turn the Radio on using the **OFF-VOL** dial on the top right of the handheld. This also adjusts your listening volume.
- To speak, listen to make sure there is no other traffic on the radio, then press and hold the largest button on the handheld's left side while speaking into the grated speaker area on the front. **Remember to press and hold for two seconds before starting to talk** – otherwise the beginning of your transmission will be cut off by the repeater delay.
- As volunteers, we usually communicate in one of two ways depending on which channel we have selected. One way is using the repeater system where many people such as Columbia Dispatch monitor our conversation. The other way is communicating within the work party as walkie-talkies, using the "FS Work 1" channel. If someone else is near us and is also tuned to the work channel, they might also hear our conversation.

Channels and Repeaters:

- Our Vertex radios operate on a repeater system, meaning that transmissions pass between your radio and a nearby repeater tower, which in turn relays them to the rest of the system.
- You will need to tune your radio to the correct repeater – usually the one nearest to you or with the best signal for your location, to send and receive transmissions. Note that some repeater locations have multiple frequencies and antennas that cover different areas. For example, Mt Defiance has a separate channel each for the GPNF, MHNF, and the CRGNSA.
- To change channels on your radio, turn the dial on the top center of the radio. The small marker above the speaker points to the channel the radio is tuned to, and the name of that channel appears on the LCD display on the front of the radio. For instance, rotating channel 3 on the dial to the marker might result in **MH Timberline** appearing on the LCD display. The exact repeater/name pairing is different on some radios to optimize channel use in the area in which they are used.
- To determine the correct channel to turn to, refer to the attached cheat sheets for common areas, or ask your USFS partner before heading out.
- If necessary, you can confirm that you are successfully transmitting and receiving on a given channel by briefly pressing and releasing the talk button on your radio. If you are successfully "hitting" the repeater, you will hear a moment of static and a click from your radio. You will also see a red light (while transmitting), followed by a green light (from the repeater signal) on the radio. Don't do this too much or Dispatch will think there is someone trying to reach them.

Basic Steps for Transmitting or Responding to a Radio Call:

- Conversations start by the caller saying the Dispatch entity (or last name of the person) she is calling, her own last name, and the name of the channel or repeater she is using.
- You should always call Columbia Dispatch with an “In Service” message at the start of your work party. Call Dispatch with an “Out of Service” when you are done for the day. You should also let them know if you deviate from your itinerary. Conversations with Dispatch use “Columbia Dispatch” or “Columbia” for the dispatcher’s name. At the end of a conversation, the dispatcher might sign off with a call number and time such as “KOE598, 0729”
- While compatible with actual USFS radio bricks, Mt Hood Chapter radios are programmed only with useful channels near the PCT. “Group and Channel” numbers the USFS bricks do not apply to our units. Our radio units do, however, understand the repeater names.

Example conversation at the beginning and end of the work party:

Listen to make sure the channel is clear

(note: adding “volunteer” to your name and the “Forest Unit” is new to this version)

Kim Owen: *“Columbia Dispatch, this is Volunteer Owen on Hickman”*

Dispatch: *“Owen, Dispatch, go ahead”*

Kim Owen: *“Owen plus (8) in service at Ramona Falls Trailhead, Mt Hood Forest.”*

Dispatch: *“Copy Owen KOE598 0828”*

Kim Owen: *“Owen”*

When you are back at the TH, call with an out of service message.

(note: Columbia Dispatch confirms they want the “plus 8” (size of crew) included in the out of service message)

Kim Owen: *“Columbia Dispatch this is Owen on Hickman”*

Dispatch: *“Owen, Columbia, go ahead”*

Kim Owen: *“Owen plus (8) out of service.”*

Dispatch: *“Copy Owen, have a good evening, KOE598 1605”*

Kim Owen: *“Owen”*

- The most common questions Columbia Dispatch might ask include:
 - Time expected out of service
 - Spelling of the crew leaders names (use the radio alphabet shown on the TCP)
 - Who is your supervisor or FS Contact (on the TCP)
 - (rarely now) Township/Range/Section (on the TCP)

Example conversation between members of the work party:

Kim Owen: *"Hawley, this is Owen on Hickman"* (Dispatch and anyone tuned to Hickman will hear)
Or

Roberta Cobb: *"Queen this is Cobb on Work"* (Only radios close by and tuned to FS Work will hear)

- Then, the person receiving the call repeats the caller's name, then their own name:
Steve Queen: *"Cobb, Queen"* or *"Cobb this is Queen go ahead"*
- Then the conversation takes place in an efficient, brief manner.
- Remember that if you are on a repeater, every radio tuned into that repeater can hear you
Roberta: *"I am leaving the trailhead and am heading back to Zigzag"*
- Assuming the receiver hears the transmission, they confirm as much:
Steve: *"copy that. I'll meet you there."*
- Finally, the caller signs off with their name, followed by the receiver:
Roberta: *"Cobb clear"*
Steve: *"Queen"*

Scan Mode:

- Pressing the "A" button (on the front) toggles the Scan mode on and off. In the Scan mode you will hear radio transmissions from all repeaters, but will only transmit on the channel you have selected.
- Monitoring radio traffic on all channels using Scan can give you an idea of how busy dispatch is, so you do not call them while they are talking on other channels to someone else. This can be helpful at USFS shift changes when many folks are checking out to the field and checking back in from the field. Also important when there are fire events are occurring. To me, Scan mode makes it harder to hear my specific conversation, so I turn off scan when I actually talk to someone.
- Another way to use Scan is when you have multiple radios and groups in a work party. You can Set your channel to Work and use it as a walkie-Talkie within your group, then turn on Scan. That way if your other group in the work party goes behind a ridge and they cannot raise you on Work, you can hear them calling you on the Defiance repeater, etc. You can also hear if dispatch or the Ranger Station is calling you.

Radio Storage:

- It's OK for these radios and batteries to be left plugged in indefinitely to charge. If not left plugged in, it's a good idea to plug them in overnight every six months so the battery does not discharge completely. Ditto for the spare batteries. Also, charging them below 50 degrees F will reduce their battery life.
- The Vertex radios are weather resistant, but not water proof. Please keep them out of the rain when possible.