

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

## Prior to your work party:

You may find it helpful to contact Columbia Dispatch via email ([waccc@dms.nwcg.gov](mailto:waccc@dms.nwcg.gov)) or telephone (**360.891.5140** or **800.387.6806**), to let them know you are a volunteer PCTA unit and pass on your itinerary. That way you do not have to look up the location details, etc. while on the air. Besides, it's a nice touch to have some personal contact and chat with the folks who are looking out for you. You can also use your cell phone to check in and out with them. that The Dispatch operating hours change seasonally; Make sure you know their operating hours so you can call them with your out of service message before they close for the day. We try to keep the hours up to date on our Mt. Hood Chapter site.

## Basic Operation:

- Turn the Radio on using the **OFF-VOL** dial on the top 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 "USFS Work" (also called Project 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 send and receive transmissions from the correct repeater – usually the one nearest to you or with the best signal for your location. 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 next to the **OFF-VOL** dial on top of the radio. The small marker on the radio 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, pointing the dial to channel 3 on the dial will result in **MH Timberline** appearing on the LCD display.
- 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 last name of the person (or Dispatch entity) she is calling, her own last name, and the name of the channel or repeater she is using on. For example:

*“Hawley, this is Owen on Hickman”* or  
*“Cobb this is Queen on Work”*

- Then, the person receiving the call repeats her caller’s name, then their own name:  
*“Queen, Cobb”* or *“Queen this is Cobb go ahead”*
- Then the conversation takes place in an efficient, brief manner. Remember that every radio for hundreds of miles can hear you:  
*“I am leaving the trailhead and am heading back to Zigzag”*
- Assuming the receiver hears the transmission, they confirm as much:  
*“I copy that. I’ll meet you there.”*
- Finally, the caller signs off with their name, followed by the receiver:  
*“Cobb clear”*  
*“Queen”*
- 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 follow the same format, with “Columbia Dispatch” or “Columbia” used for the dispatcher’s name. At the end of a conversation, the dispatcher might sign off with a time and a call number such as *“KOE598, 0729”*
- Columbia dispatch may also ask you for a Township, Range, and Section number for the area you are referring to. These can be found along the margins of your District Map, or a communications cheat sheet that you prepared in advance (Cheat sheets for our routine work areas are available on the Mt Hood Chapt web site.) The Township is listed down the sides of the map, the Range along the top/bottom, and the Section number in boxes on the map in a grid. To use these numbers while talking to dispatch, for example:
- 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

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

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

Kim: *Owen plus 8 is in service at the Ramona Falls Trail head. We are a PCTA volunteer work crew headed to Ramona Falls today – and plan to return to the trail head by 1600.”*

Dispatch: *Copy that Owen do you have the coordinates for your work destination?*

Kim: *Affirmative Dispatch. We will be working at Township 3 South, Range 8 East, Section 12.”*

Dispatch: *Copy Owen, give a call when you are back at the trail head. “KOE598 0828 clear”*

Kim: *“Owen”*

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

Kim: *Columbia Dispatch this is Owen on Hickman*

Dispatch: *Owen this is Columbia, go ahead*

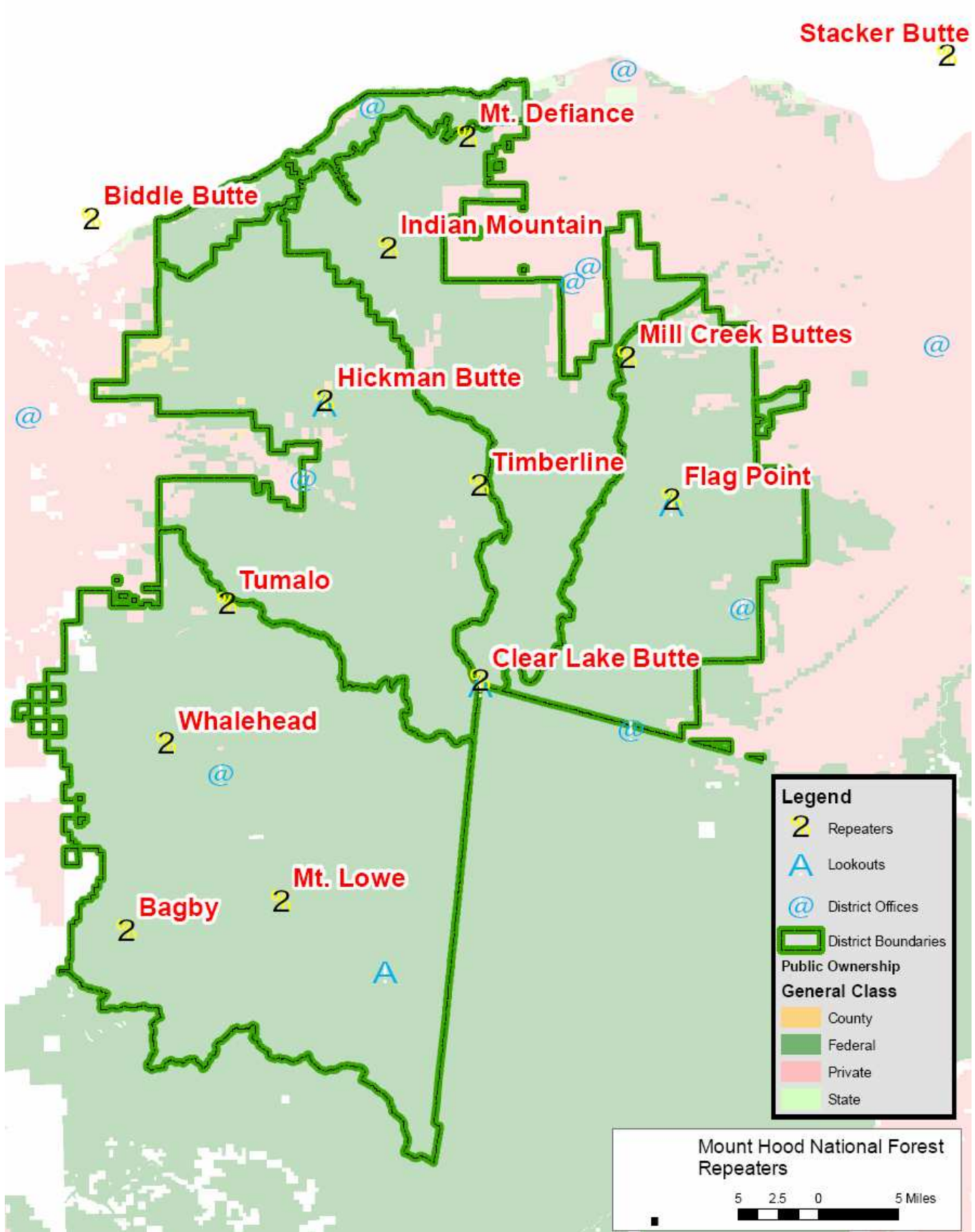
Kim: *Columbia, Owen plus 8 are out of service for the day at the Ramona Falls Trailhead.*

Dispatch: *Copy Owen, have a good evening, KOE598 1605 clear.*

Kim: *Owen*

### **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.



**Legend**

- 2 Repeaters
- A Lookouts
- @ District Offices
- District Boundaries

**Public Ownership**

**General Class**

- County
- Federal
- Private
- State

**Mount Hood National Forest Repeaters**

5 2.5 0 5 Miles

