

## **Monitoring a Trunked Radio Systems Voice Traffic without a Trunk Tracking Radio Conventional Scanning of 800 MHz Voice Frequencies in Washington County**

Any conventional scanner, 800 MHz capable, can receive the voice frequencies of a trunk radio system. Conversations can be clearly heard as long as the transmissions are non-digital (analog). In a normal trunked radio system, there are three different types of information transmitted by the repeater. This information includes voice traffic, a sub-audible data stream that is carried along with the voice traffic, identifying the talk group and radio ID of the mobile radio and a control channel that provides talk group and other system information and commands.

There are limitations when monitoring a trunk radio system by this method. In a trunked radio system, many or all of the voice frequencies can be active at the same time. Without a trunk tracking radio there is no way to sort out this traffic. A conventional scanner simply scans for a busy frequency and stops on it until it goes quiet, and then resumes scanning until it reaches the next busy frequency. There is no guarantee that a conversation will remain on the same frequency. The result is, you will hear part of one conversation, and then jump to another frequency which may be the same conversation or may be part of a different conversation.

In Washington County there are eight repeater sites that make up the local 800 MHz trunked radio system. The repeaters are located on (1) Webb Hill, a simulcast site, which includes sites in Santa Clara near Fire Station 1 and Washington City near an area known as Grapevine, (2) Toquerville Hill, (3) Utah Hill, (4) Big Mountain, (5) Little Creek and (6) Rockville.

Most of Washington County's activity can be heard by monitoring just the Webb Hill repeater. The simulcast sites, Santa Clara and Grapevine, share their frequencies with (1) Webb Hill. To ensure complete county wide coverage, include the Toquerville Hill and Utah Hill repeaters. There is little benefit in monitoring Big Mountain, Little Creek (Apple Valley area) or Rockville (Virgin, Springdale, Zion NP area) unless you are geographically located in these locations.

Voice Frequencies for Washington County 800 MHz (UCAN Sites 1-6) as of 6/17/2013

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Webb Hill (Simulcast) WQJT596</b>	<b>Toquerville Hill WQJT594</b>	<b>Utah Hill WQJT595</b>	<b>Big Mountain WQJT945</b>	<b>Little Creek WQQE671</b>	<b>Rockville WQQE670</b>
851.1875	851.2375	851.3125	851.825	852.4125	851.9125
851.6000	851.6500	851.8125	852.125	852.9250	852.9500
851.8375	851.9750	852.2250	852.9375	853.4375	853.5125
852.0375	852.3500	853.1500	853.6625		
	853.0625				