



Radio Waves

(Written February, 2001)

There's a lot of talk about the new Valleywide radio system... but how is it all going to affect you? In the upcoming editions of FireWorks, you will be receiving mini-primers to introduce the system. It will all lead up to the in-depth training that radio users will be receiving in the next year.

Currently, every city in the Valley uses two-way radios. Each of the systems is different from the rest. With the new 800 MHz digital radios, we will all be on the same system – allowing for someone in Daisy Mountain the ability to talk to another in Ahwatukee, and the various public safety agencies within the valley's cities to talk to each other. Sounds like a very busy radio system, huh? That's where "trunking" comes in.

A "trunk" is another name for a communications path, similar to a "radio frequency" or a "channel." Trunking techniques have been in use for nearly a century, and were developed by the phone companies. Each telephone customer doesn't have a dedicated private phone line, or "trunk," for each call made. When the customer picks up the phone to make a call, switching equipment at the telephone company assigns it to a "trunk" for the duration of the call. When the customer hangs up, the switching equipment places the same "trunk" available so other customers can make a call. As a telephone user, you probably never noticed this process. That's the same way the new radio system will work. The "trunking" technology will allow a large number of users to share a small number of "trunks" (or radio frequencies). As a member of the Phoenix Fire Department, you'll be able to speak to other Valley fire and police departments on the same radio system.

The new digital system will also allow for a more clear-sounding transmission. It will allow for encryption (a tool used mainly by Police), an enormous network coverage area, and increased in-building coverage – all issues to be discussed in upcoming editions of FireWorks.

The PFD 800 MHz committee (labor, management, technicians, engineers and firefighters) is working diligently to make sure this system will work properly, and most importantly, SAFELY for firefighters. Recently, some concerns have been raised concerning troubles with trunked radio systems in other states – mainly dealing with in-building coverage. The committee wants to address each and every concern. Some committee members have been assigned to specifically collect magazine, newspaper and website articles, videos, or publications about

the 800 MHz radio system – both good and bad. The committee will address each and every issue in order to correct them.

Concerns about the new radio system will be taken very seriously. “We understand that members may have questions or concerns. We have the same concerns,” says committee member Chief Nate White. That’s why this new e-mail address has been specifically set up for members to express their concerns and get their questions answered. Questions and their responses will be posted in the Bucksip.