

Phoenix Neighborhood Patrol / Block Watch Communication Requirements – Radio

Phoenix Neighborhood Patrol (PNP) and Block Watch (BW) members have a need for effective, efficient, compatible, reliable and secure communication.



PNP/BW members observe and patrol their own neighborhoods on a regular basis and routinely join with other citywide PNP in organized groups to patrol other neighborhoods and special events.

Effective communication is essential to promote safety. Radios are a key to provide reliable communication, and if used, they must be able to work within various ranges and conditions. Certain obstacles can block or hinder this type of communications and such limitations must be considered so that you can work around such problems during the communications process.

Area coverage can be effected by variables such as: terrain, buildings, trees or any obstacles between the communicating members this includes use inside a vehicle and not using an external antenna.

Ultra High Frequency (UHF) Portable Radios

PNP/BW groups normally use UHF portable radios to facilitate and coordinate these events.

These radios have 5 watts of power and up to a 16 channel capacity (think of channels as “radio stations,” frequencies that can be switched to communicate with different groups). Anyone listening on a channel hears all that is broadcast on the channel being used by the group of radios tuned to that channel.

All radios operate in a similar manner, using compatible frequencies.

Some frequencies can provide communications that are not normally available to the general public.

When used in conjunction with available UHF repeaters, communication can be available throughout the city with exception of blocking obstacles such as mountains, valleys and solid masonry objects which may create reception “shadows”.

The repeater used in Phoenix is privately owned by RadioLink Corporation and is provided at no charge to the PNP/BW community for members purchasing their equipment through ProComm, it's sister company. This repeater only functions in the UHF band with radios that are capable of being programmed in repeater narrowband mode with digital privacy codes.

General Mobile Radio Service (GMRS) / Family Radio Service (FRS) Portable Radios Generically referred to as “Walkie Talkies”

http://en.wikipedia.org/wiki/General_Mobile_Radio_Service

[About Walkie Talkies
“Toy Radios”](#)

- The extremely low “1/2 watt power” of these radios greatly limits range, typically 1/4 to 1/2 mile line of sight).
- Use of the majority of the channels requires a FCC license.
- Frequencies are very susceptible to jamming.
- Operation can be complex and it is easy to unintentionally change frequencies.
- Controls are not standard between manufacturers and models.

As an example of manufacturers having varied settings: Channel B on

a Midland brand may not be the same on a Cobra brand. After confirming the problem the situation can be a cause of confusion.

Value for Money

- The Vertex VX-231 UHF radios currently (2012-05) cost \$202.50 with a 3 year parts and labor warranty. This radio clips to your belt or carried in a pocket; it is about the size of a large cell phone
- GMRS/FRS radios usually are sold in sets of two or more and have a range of prices: lows of around \$30 to the mid \$100s and typically have a 6 to 24 month warranty.

While less expensive in dollars, the GMRS/FRS radios have short range and their extremely limited ability does not meet requirements for effective, efficient, compatible, reliable and secure communication.

Supporting UHF commercial radios is in the interests of our communities and the City of Phoenix, not only relating to everyday life of anomalies, if not crime in our neighborhoods and allowing possible immediate contact, but what if you personally lost contact with your “outside world”? What if your communications infrastructure and your phone and or power wires were lost, or considering the following what if it happened to you? Forget your land line phone, and your cell phone could become a pocket warmer.

The following is a an actual historical news release, an extra ordinary example of what can happen to completely disrupt a normal average day in your life:

Continued...

HEADLINES!

"Thousands still without power after California winds?"

"Date: 20111205; PASADENA, Cal

Southern Californians were struggling Monday to clean up millions of dollars in damage and restore power to thousands of people still in the dark nearly a week after one of the worst windstorms in years ripped through communities along the San Gabriel Mountains east of Los Angeles. Meanwhile, forecasters said strong winds could return but without nearly the punch that downed trees and utility poles by the thousands and damaged scores of homes. About 21,000 Southern California Edison customers remained without electricity Monday. -Wire services"

Sound Familiar?

How many times in the past years has our local news reported "...dozens of power lines snapped like twigs, thousands without power!" In those areas, the folks very likely cannot communicate. If some of them had UHF radios, some of those "stranded" victims could tune into the various frequencies and receive and report information that could be crucial to their very life and survival, it could not only be comforting, it could save the lives of themselves, their families, their pets, neighbors and the entire community!

After reading this example, create your own scenario:

You live in an area that is in a floodplain, such as the Phoenix valley that has not seen flood water for the past hundreds of years, but a chain of reservoirs have been constructed to retain millions of gallons of water upstream. You awake, you smell and or hear unusual stimuli. You sit up, swing your feet over the edge of the bed, put your feet on the floor and you are up

to your ankles in cold water. You reach for a light switch and flip it... nothing happens! You pick up the phone... it is silent. You grab your cell phone... no signal!

You are in trouble, what has happened? What are your alternatives? YOU ARE ALONE AND LOST!

Maybe not!...

With just a little foresight and minimal cost, you could avoid total panic and apparent desolation and isolation.

With a UHF radio you normally leave sitting in the charger cradle, and an emergency Stinger brand flashlight in the charging cradle in case you ever needed it, you could be ready for such an emergency!

Grab the radio from its charging cradle and switch through channels and listen for others who were prepared like you, and another... and another... now you are in a community, familiar ground, and you can collect and disseminate information and prepare for what you now understand, something with which you can cope!

What would that be worth to you?

For a nominal one time expense of \$210 for several years of value, and a lithium battery replacement every few years. It could help to save lives, you, your family and your entire community!

Invest a few hours in Phoenix Neighborhood Patrol (PNP) training, so you know the friends you have in your neighborhood who are also trained about such items, and who want to be part of a support group for you, and find they have the same concerns, and values as you.

Phoenix Neighborhood Patrol (PNP) is a fast growing neighborhood presence and if you are reading this and are concerned, you are already interested in PNP!

This report was created for the neighborhood Block Watch Grant Oversight Committee: Equipment -Radios; PNP & BW Communication Standards:

RevDate: 20120500 by Jerry Cline

For additional information:

PNPMembers.com

PNPmembers.Radios

The Vertex VX-231 UHF radio is easy to use. Off/On, Volume & 16 channels.



With its charger stand.

