

International Wireless users Group

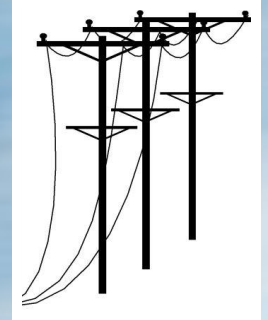
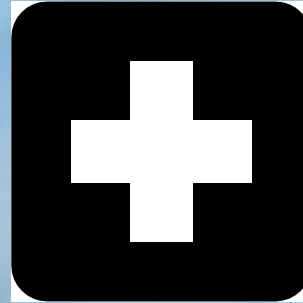
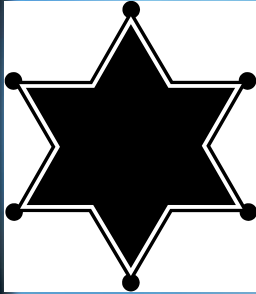
*Seth Chandler
Pyramid Communications*

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Filling The Communication Gap



Police * Fire * Paramedics * Utilities

*Radio Communications
Upgrade*

Today's Objective

- Define the radio communication needs of the Emergency Response and Utility Communities.
- Find and implement a solution to close the radio communication gap
- What is the gap?



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The Communication Gap

When department personnel exit their vehicle they now rely on a small 2 - 4 watt handheld radio to communicate. It has a range by itself of only ½ to 1 mile.



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What Is The Gap?

When personnel exit their vehicle they are totally out of radio contact with the base station.

This is a communication gap.
It is a mile wide.

Who ***Can*** They Talk To On The Handheld
After They Exit Their Vehicle?

Who **Can't** They Talk To? Is the real
question.

After they exit their vehicle,
they can not talk to anyone
who can help them.



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They Can Not Talk To

- Central Dispatch For Backup Help
- Hospitals For Paramedic Link, EKG Telemetry, or ER Prep
- Police or Utilities at the scene
- Department personnel in vehicles that are in route to the scene
- Neighboring city's Fire or Police in route to the scene

What if ?

What if they need
immediate assistance ?

What do they do ?

*They hope that
someone will hear
them calling*



Be heard. Be in control.



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The Solution

Pyramid SVR Vehicular Repeater

SVR-200

SVR-250

SVR-P250

SVR-252



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The Solution

How Does The SVR Eliminate the Communication Gap?

- Increases the effective range of the handheld radio to EQUAL the range of the vehicle's radio
- The user and handheld radio now can be up to a mile from their vehicle and maintain continuous , clear direct radio contact with any and all land and mobile radios that the user can now reach with the existing vehicle radio

How Does It Work?

The SVR-200,250 and P250 interfaces between the existing high power mobile vehicle radio and the low power handheld. If the user exits the vehicle with the handheld, then transmits via the handheld, the SVR will automatically, in real time, re-transmit using the high power mobile vehicle radio.

Conversely, if the user is out of the vehicle and the mobile vehicle radio receives an incoming transmission, the SVR re-transmits to the handheld. Simple.



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C O M M U N I C A T I O N S

Additional Features

- Multi-Vehicle Operation Logic
- Remote Frequency Tuning
- Smart Trunking Access
- Ruggedized Construction
- Compatible With Virtually All Radios
- VHF In Band Capable With Pyramid Filters



Multi-Vehicle Operation Logic

As multiple response vehicles arrive or leave a scene, the SVR-200 repeaters in each vehicle automatically network to continually re-prioritize which vehicle's repeater will be primary.

Allows continual , automatic switching for un-interrupted communication vehicle to vehicle; handheld to handheld; handheld to vehicle and vehicle to handheld. Provides an automatic priority hierarchy for up to 256 response vehicles.



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Remote Frequency Tuning

Ability to remotely change the vehicle's mobile radio frequency with the handheld radio via a DTMF keypad when the SVR is outfitted with the optional RCS-200 configuration.

Without returning to vehicle the RCS-200, allows handheld operator to remotely speak with several different agencies, to link to a frequency assigned by secondary base radio, or to change frequencies if structure or terrain are impeding the signal.

Smart Trunking Access

Trunking Compatible

Uses positive channel acquisition system rather than long PTT delay. When the SVR is connected to a trunking radio, the user can connect to the trunk system from the handheld.

Easier, faster access to trunks for continuity and versatility in communication.

Ruggedized Construction

Manufactured to Mil-Std 810 D/E Ratings:
501.2, 502.3, 507.2, 510.2, 514.3, 516.3
Operable in harsh environments; Temperature
range -30°C to $+60^{\circ}\text{C}$, Humidity 0- 100%,
blowing dust & sand, vibration from ground
vehicle Category 8, and shock test 516.3
procedure 1 Consistently delivers dependable
and reliable service. Built to stringent Military
Specifications.



Compatible With Virtually All Radios

The SVR is compatible with virtually all major makes and popular models of mobile radios in production. Optional interface cables are pre-made at the factory to assure compatibility with your existing mobile radio. Compatibility and performance are assured in a fleet where there are different makes and models of radios now in use. Installation time is minimized and guesswork eliminated.



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VHF In Band Capable

Notch and Pre-selector Filters



Pyramid Communications line of custom filter products allow VHF mobiles and VHF handhelds to work in unison with our VHF SVR

Safety Justification Points

The inability of Emergency Personnel to request help when away from their vehicle is an invitation for injury, loss of life and property damage. Additionally, there is a tremendous liability exposure from lack of adequate communication equipment. Department personnel and the citizens you are protecting deserve the benefit of the technology that is available to you today.

Life Safety issues are identified as top level priority within most budgets.

Management Justification Points

- Per City Managers, insurance costs and liabilities can be reduced if communication system is upgraded
- Pyramid Communication's SVR-200 is compatible with 99%+ of commercially used mobile radios
- Successfully used by major U.S. metropolitan Fire Departments and the United States Air Force
- Recruiting Tool – Prospective employees want a safe working environment



Summary

- Many radio communication systems have a Gap that is clearly limiting the ability to protect and serve the cities needs. The Gap also unnecessarily jeopardizes personnel when performing their jobs.
- A solution is readily available today in terms of technology, reliability, budget, and justification.

Over 14,000 SVR-200 In Use Today

Alabama State Patrol

California Highway Patrol

Detroit Edison

Egyptian Army

Florida Department of Transportation

Illinois State Police

Kentucky Commercial Vehicle Enforcement

Maryland State Police

Minnesota State Patrol

Mississippi Highway Patrol

Missouri Highway Patrol

New York State Police

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Ohio State Police

Pacific Bell

Pacific Gas & Electric

South Dakota Highway Patrol

Tennessee Department of Transportation

Tennessee Highway Patrol

United States Air Force

Virginia State Police

Washington Highway Patrol

West Virginia Highway Patrol

Wisconsin State Police





Safety and Efficiency Through Continuous Radio Communication

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