



**ODNR Office of Law Enforcement.**  
**ODNR MARCS TRAINING BULLETIN**  
**03/13/07-01-rev b**

**Topic: Vehicular Repeater System Use.**

**Problem Solving:**

*Due to infrequent use, many ODNR radio users have forgotten how to use the VRS, or are confused regarding its proper use.*

**Background:**

**Terms:**

**Mobile Mode**= *The VRS is ready to accept a command from the portable radio using the VRS zone, but is not transmitting on 700mhz at that moment.*

**System Mode**= *The VRS is ready to accept a command from the portable radio using the VRS zone and is re-transmitting on 700mhz everything it hears.*

**Local Mode**= *The VRS is ready to serve a portable using the "Local VRS" channel. The local channel is off system and is similar to a "talk around" channel that is boosting out of the VRS.*

**DNR DIG**= *A digital talk around channel only within the VRS zone on the portable radio.*

**VRS Zone**: = *The zone in the portable radio that must be used to access the VRS.*

**Steering**= *Through use of the portable radio VRS zone you can change the mobile radio & the talkgroup you want to transmit on.*

*Only Full Install Law Enforcement vehicles have a VRS installed.*

*When a law enforcement portable radio is out of system coverage, the portable radio user can access the VRS (Vehicular Repeater System) through the portable radio. The VRS in turn sends the portable transmission to a tower creating an on system transmission.*

*For the portable to access the VRS, the mobile radio must be turned on, and the VRS function activated and in the mobile or system mode. The Mobile radio VRS button will work only on talkgroups that are found in the Portable VRS Zone. (See the list below next to the portable radio picture)*

*A portable radio using the VRS zone can steer the mobile radio to any of the talkgroups or channels listed in the VRS zone.*

**Fixing the problem:**

**\*\*\*Do this every time your mobile radio is turned on:**

- *Hit the home button until your home talkgroup is showing.*
- *Press the VRS button until you see "MOBILE" flashing in the mobile radio display.*
- *The VRS is now ready to be accessed by your portable when you need it.*
- *When your portable goes out of coverage, navigate to the portable zone named "VRS" and transmit on the system talkgroup you select.*
- *If the mobile radio has been moved to a non VRS talkgroup (you will know this because the VRS triangle icon will not be lighted under the VRS button.) & you want to access the VRS, simply hit the home button and it will return to a VRS accessible talkgroup.*
- **THE ABOVE SEQUENCE MUST BE REPEATED EVERYTIME THE MOBILE RADIO IS POWERED OFF & THEN ON!**

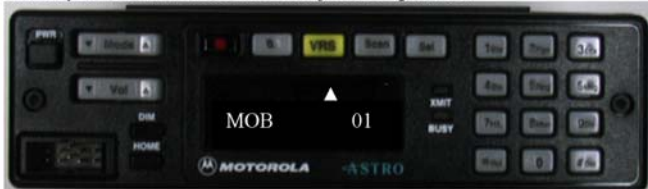
**SEE THE EXAMPLES BELOW:**

VRS Activated:



Mobile Mode:

- Flashes mobile, then returns to the VRS capable talkgroup.
- Mobile is ready to receive a VRS command from the portable.



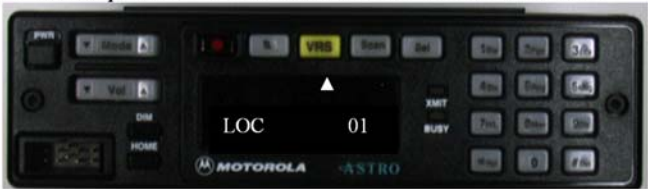
System Mode:

- Flashes system and then returns to the VRS capable talkgroup.
- The VRS immediately begins transmitting anything it hears to any listening ODNR - VRS zone selected portable radio.
- Is ready to be steered to another VRS talkgroup or channel.



Local Mode:

- Flashes local and then will read "Blank".
- A portable using the Local VRS function will have its signal boosted to other local portables that have the VRS zone selected.
- Acts like a boosted Talk Around channel or intercom.
- Is ready to be steered to another VRS talkgroup or channel
- A "Local" selected portable can communicate with the "Local" mobile radio.



The VRS Zone in the portable radio is comprised of the following talkgroups and Channels.  
The VRS button on the Mobile radio can only be activated when one of these talkgroups are showing in the radio display.



CALL-XX  
XX-DNR  
DNR-TAC  
DNR-LOC  
PR-TAC-X  
WC-TAC-X  
WL-DX-A  
DNR-DIG  
EMERG

**Additional resources:**

*For a complete discussion on VRS including emergency button activations, Refer to module 2.27 of your ODNR MARCS Go live training student outline. There are 20 slides that deal with VRS in depth.*

**For more information contact:**

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