Before the
Federal Communications Commission
Washington, D.C. 20054

In the Matter of	)	
	)	
Petition for Rulemaking by	)	RM – 11635
Pyramid Communications, Inc. to	)	
Facilitate the Use of Vehicular	)	
Repeater Units by Public Safety	)	
Licensees in the VHF Band	)	

REPLY COMMENTS OF THE COMMONWEALTH OF VIRGINIA

The Commonwealth of Virginia, Department of State Police ("Commonwealth"), by its counsel, hereby submits reply comments on behalf of its Statewide Agencies Radio System ("STARS") in response to comments filed by others responding to the October 14, 2011, Notice in the above matter (DA 11-1717) inviting comments on the petition for rulemaking filed by Pyramid Communications, Inc. ("Pyramid") to facilitate the use of vehicular repeater units by public safety licensees in the VHF band.

INTRODUCTION

STARS is a twenty-one state agency public safety grade statewide integrated voice and data system. STARS uses a digital trunked VHF narrowband system, which relies heavily on 700 MHz digital vehicular repeater units ("DVRS") in over 3,000 public safety vehicles to support public safety communications. The Commonwealth, on behalf of STARS, filed comments on November 4 in support of Pyramid's request for more frequency availability for vehicular repeater units ("VRS"), but urged that this expanded use not be too narrowly restricted to fire fighting purposes, but made available for all public safety users. The Commonwealth also suggested specific technical changes or parameters for six 173 band frequencies to maximize their usefulness for public safety VRS.

COMMENTS

The Commonwealth believes that most of the comments received in this proceeding are not inconsistent with its position that six 173 band frequencies should be permitted for public safety use.

The International Municipal Signal Association and Forestry Conservation Communications Association comments expressed concern with use of the 170, 171 and 172 MHz bands now reserved for forest firefighting and conservation activities, but were neutral on VRS use of the 173 band.

The Commonwealth believes that the six frequencies on the 173 band identified in its comments are the frequencies which can be practically used for public safety VRS, and takes the position that changes should be made to 170, 171 and 172 MHz bands to allow their use in a VRS system, but for forestry purposes only.

While the Commonwealth's STARS land mobile radio network currently uses 700 MHz as its primary VRS, there are specialty units that frequently deploy farther from their vehicles than the 700 MHz VRS can support. The Commonwealth feels that such units would effectively make use of an in-band VHF VRS giving the user the ability to utilize the STARS VHF trunked system if possible, or switch to the VRS, whichever would work best.

APCO's comments reflect that it independently concluded that the same six 173 MHz band frequencies identified by the Commonwealth should be made available for public safety use. The APCO position is therefore consistent with that of the Commonwealth. APCO suggested further consideration of the technical specifics, while the Commonwealth suggested specific technical parameters, but the Commonwealth is confident that specific technical standards or parameters can be agreed upon for public safety use of these frequencies.

The comments filed by the Utilities Telecom Council and Yuba County Water Agency were opposed to VRS use by public safety by the 173 MHz band, but their objections do not seem well-founded.

The six frequencies in question are not exclusively reserved now for utility telemetry, but are shared with public safety. Under 47 CFR § 90.20(d)(34), it is noted for each of the six frequencies that "this frequency is available on a shared basis with the Industrial/Business Pool for remote control and telemetry operations."

The Utility Telecom Council and Yuba County Water Agency comments suggest that voice operations or any additional use of the six frequencies will disrupt their telemetry reporting.

While the Commonwealth has no desire to disrupt utility telemetry reporting, we would respectfully suggest that a modest expansion in the usage of these frequencies, to help fill a critical gap in public safety coverage for first responders, is a compelling public safety need which should take priority over the risk of minor delays in utility monitoring.

We believe that a great deal of critical utility infrastructure monitoring is now done by fiber optic landlines for greater reliability and that, while there may be some use of these 173 MHz band frequencies for control and monitoring of remote site water and sewer pumping stations, such remote site usage is likely to decline, not expand.

We also understand that the duty cycle of use of telemetry monitoring on those frequencies is typically low (which is one reason why shared use of the frequencies has historically worked well). Frequent transmission of pumping data is normally not necessary, so the practical risk of interference has been low (and would still remain low if VRS voice use were permitted). In utilities' control and monitoring of remote site water and sewer pumping stations,

we understand that the utilities' radios listen before transmitting and normally sequentially poll pumping stations.

There is an existing interference risk for these utility stations already on the shared frequencies, but the existing practice of listening for an interfering use before transmitting normally avoids any risk of interference or data corruption. Making the frequencies available for VRS operations (which would be sporadic and with indeterminate locations by nature) may slightly increase the chance of delaying a utility pumping data transmission by a few seconds or even minutes due to a public safety use on the same shared frequency, but that is not likely to be a critical delay in data monitoring of water or sewer pumping stations. In contrast, inability of public safety to have VRS radio communications to public safety personnel who are in the course of looking for an armed suspect, or responding to terrorists, looking for a child, or entering a burning building, are likely to be critical and life-threatening.

LMCC coordination procedures are based on the premise that the mobile is constrained to a fixed location, which establishes a service area. That model will not work for a statewide use of VRS by a statewide user such as STARS. The risk of co-channel interference still seems low enough, and the benefits to public safety so compelling, that VRS voice and data use of the six 173 MHz band frequencies is amply justified.

The Commonwealth therefore urges that the Commission grant Pyramid's petition, as modified by the Commonwealth's recommendations set forth in the Commonwealth's November 4 Comments, together with such other modifications (e.g., increase the ERP limit under 47 CFR § 90.20(d)(32)) as may be necessary to open up the six 173 MHz band frequencies in question for shared use by public safety VRS.

CONCLUSION

Vehicular Repeater Systems are a critical tool for public safety users who must go outside their vehicles or outside fixed locations. The number of VHF frequencies available for statewide VRS use should be increased, to allow first responders to select the best channel for VRS operations, least likely to cause interference and with maximum range.

The Commonwealth supports making these additional channels available, but they should be for use by public safety generally, including statewide agencies, and the technical rules governing their use must be carefully crafted, as described in our earlier comments and as noted above, to ensure maximum efficiency and utilization.

Respectfully submitted,

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF STATE POLICE

By _____

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Dated: November 17, 2011

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of November, 2011, a copy of the foregoing Comments of the Commonwealth of Virginia was sent by email to Thomas.Eng@fcc.gov.

Peter E. Broadbent, Jr.