



**Dave Freudenthal**  
Governor

**Steve DeCecco**  
Chairman

# State of Wyoming

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## Public Safety Communications Commission

### WyoLink Operations Work Group Meeting of September 22, 2006 Cheyenne and Phone Conference

The WyoLink Operations Work Group meeting was called to order by Chairman Jerry Kennedy at 9:05 am on September 22, 2006.

Member present were:

Jerry Kennedy – Chairman – PSCC Commissioner  
Col. Sam Powell - PSCC Commissioner  
Dave Mattis - PSCC Commissioner – Phone Conference  
Mark Harshman – PSCC Commissioner - Phone Conference  
Dan Perko – Wyoming Forestry – Wyoming APCO Chairman  
Jim Archerd – Homeland Security  
Pat Byrne – Laramie County Combined Communications  
Tom Mahon – WyoLink Project Manager  
Bob Symons – PSCC Administrative Support

Guests:

Rob Wilson – WyDOT Telecom  
Kent Drummond – WyoLink Technical Support  
Jeff Schultz – Cheyenne Police Department  
Dale Pawling – Cheyenne Fire Department  
Rich Hillegas – Laramie County Sheriff's Office  
Jack Knutson – Laramie County Commissioner  
Dave Thompson – Laramie County EMA  
Barb May – Motorola  
William Flemming – Motorola  
Leland Schliep – Motorola – Phone Conference

### Laramie County Portable Radio Testing

Discussion on the Wyoming PSCC Cheyenne Range Test Report from the portable radio testing performed August 30 and 31, 2006. Motorola was asked to help with the current portable radio coverage testing and Leland Schliep was Motorola's representative that oversaw the testing. The testing was conducted by three teams representing a member of the Cheyenne Police Department, Laramie County Sheriff's Office and Motorola. Bob Symons was located at the Laramie County Combined Communications Center (LCCCC) and Barb May was located at the WyoLink master site console. The testing methodology used a Delivered Audio Quality (DAQ) scale from 1 to 5 – unusable to easily understood. Tests were performed in cars, on the streets and inside a variety of buildings. The test involved the current Law Enforcement 1 (LE1) channel, Cheyenne Fire 800 MHz system and WyoLink.

Generally, the Cheyenne Fire Department 800 MHz system performed the best for in-building portable radio in-bound coverage, with LE1 the performing better than WyoLink. The out-bound (dispatch to portable radios) was equal for all systems.

After the testing was completed, Leland Schliep created maps charting the in-bound and out-bound radio testing by DAQ score. A comparison spreadsheet was also prepared. The maps were reviewed by the work group and attendees.

Commissioner Harshman spoke on the needs of the fire service to have in-building radio coverage and the possibilities of a hybrid radio system to improve in-building and portable radio coverage. The needs of the public safety agencies involve portable radio usage and WyoLink will need to address those needs at some time, now or in the future, and can not be envisioned as a mobile radio system only. Laramie County agencies indicated that they assured that the WyoLink system would provide better portable radio coverage or at least as good as what they presently have. A low level radio site was included in the pilot phase and that site has not been developed at this time. There was discussion on the differences of VHF and 800 MHz systems, the expected coverages, in-building penetration and the number of radio sites that may be needed to provide the expected coverages.

The next step will be to determine the options that are available, the pros and cons of each option and then the costs involved with the options. The PSCC will be discussing this issue at the September 26<sup>th</sup> meeting. The portable radio usage will need to be evaluated on a case-by-case basis as the WyoLink project progresses across the state. Local entities may have to help provide solutions and identify their role in solving the portable radio coverage issue.

The Local agencies will need to define the outcome of a radio system. There will be a review of the test results and then decide on the desired results, which need to be based upon functionality. The desired results will then be used to engineer the possible solutions. The PSCC will review the solutions and determine the best solution. *The Wyoming PSCC Cheyenne Range Test Report is attached to these minutes for reference.*

Mark Harshman was excused from the meeting at 10:15 am

### Radio Site Reviews

WyoLink Project Manager Tom Mahon provided information on potential changes to the WyoLink site locations.

Coverage maps were shown that indicated the theoretical propagation with the radio sites in the Big Horn Basin. The sites included in the comparison were Cedar Ridge, 3-Mile and a Verizon Site. Larry Sheridan has been having WyDOT Telecom complete experimental repeater coverage testing in the Wind River Canyon. Cedar Ridge is a potential low level site for radio coverage in Thermopolis. It was recommended that the Hot Springs County Public Safety agencies be asked about the current coverages and the sites being used for that coverage.

The WyoLink Operations Work Group recommends that 3-Mile stays on the current WyoLink site list and Cedar Ridge is a potential future site.

A potential site, Medicine Mountain on the Big Horn Mountains was discussed. This site provides an improvement in radio coverage for the Northern Big Horn Basin and the Big Horn Mountains. The Work Group recommended the continued research on Medicine Mountain and could become a potential future site in Phase 5 – 2008 additions. Another site in park County, Clayton was discussed. This site is still in the discussion stage with the Forest Service. A site in the Medicine Bow National Forest in Colorado, Pinkham was introduced. Tom Mahon will continue to research potential sites for coverage improvements in the southern Carbon and Albany Counties.

There are radio sites in the WyoLink contingent funds that could be used for radio coverage improvements in the original 57-site plan and the construction of these sites would be in 2008, after the roll-out of the WyoLink project.

The repeater testing work that Larry Sheridan has been performing in the Wind River Canyon does not have funding available to proceed with construction of any potential sites. Once the Copper Mountain site is constructed and working, the coverage within the Wind River Canyon will be re-assessed.

Being no further business, Chairman Jerry Kennedy adjourned the meeting at 11:55 am.

Respectfully Submitted by

Robert Symons