Public Safety Communications Commission

We would like to thank you for your interest in Wyoming's PSCC. We welcome any questions, comments, or suggestions you may have to this publication. You may direct them to Bob Symons at 307.777.5065 or by email at bsymon@wyo.gov

Interoperability—Standard Channel Naming

An incident in Wyoming involving three counties, two State agencies and six different radio systems provided a lesson on the importance of standard channel naming in radios. All of the responders had a need to communicate with each other to successfully mitigate the situation.

The first solution to providing interoperable communications was through radio swapping between the agencies. Unfortunately, there were not enough radios for everyone that would provide interoperability between all agencies. The next solution was to find a common channel that would work on radios. Due to the sensitivity of the incident, the use of Wyoming Mutual Aid Channel was not practical. The responders next checked the responder's radios for a common channel. After much trial and error, a channel was identified in all of the radios. Unfortunately, that channel was not named the same in the radios.

This incident emphasizes the need for standard channel naming and the importance of having WyoLink, Wyoming's statewide public safety interoperable communication system. The National Public Safety Telecommunications Council (NPSTC) has created a standard naming format for all of the Interoperability Channels. NPSTC has initiated a request to the FCC to mandate the Standard Channel naming. The WyoLink Handbook (Section VIII – Talkgroups, sub-section A – Statewide Talkgroups, page 27) provides information on the standard channel name, cross referenced to what is being used in Wyoming, and the frequencies for the interoperable channels.

For Example: Most law enforcement agencies have already programmed the National Law Enforcement Mutual Aid channel into their radios. Some of the radios named the channel NLECS (National Law Enforcement Communications System), NLEN (National Law Enforcement Network), National Mutual Aid (NMA) or VLAW31. Some agencies have named this channel a different name, but these are the four most notable names used.

Any public safety agency which holds a public safety license with the FCC is authorized to use the Interoperability Channels. The Interoperability Channels are not authorized for routine or administrative uses. There are limitations on the use of these interoperable channels and guidelines on the use of Continuous Tone Controlled Squelch System (CTCSS) tones. The limitations refer to sections of 47 CFR Part 90, the FCC's Rules and Regulations for Public Safety. (Refer to Table 1) For analog operations, the use of CTCSS tone 156.7 Hz has been adopted. All analog transmitters will encode 156.7 Hz. and receivers should be set for carrier squelch operations for the VCALL and VTAC channels. The receivers may be setup to encode 156.7 Hz, but need have the capability to switch to carrier squelch.

More information may be found at http://www.npstc.org/channelNaming.jsp.

Narrowbanding Update

The Federal Communications Commission (FCC) released a Public Notice on December 11, 2009, reminding licensees, Frequency Coordinators and Equipment Manufacturers of the narrowband migration deadlines. (1) Beginning **January 1, 2011**, the FCC will no longer accept applications for: (a) new wideband 25 kHz operations and (b) Modification of existing wideband 25 kHz stations the expands the authorized interference contour (19 dBu for VHF), and (2) by **January 1, 2013**, Industrial/Business and Public Safety Radio Pool licensees must (a) operate on 12.5 kHz or narrower channels or (b) employ a technology that achieves the narrowband equivalent of one channel per 12.5 kHz of channel bandwidth.

How should licensees notify the FCC they are in compliance with the January 1, 2013 deadline to migrate to narrowband? The answer depends on how and when the station came into compliance.

Licensees of stations that already satisfy the narrowbanding requirements because their authorized bandwidth does not exceed 12.5 kHz do not need to notify the FCC.

Licensees of stations that are currently authorized to operate with a bandwidth exceeding 12.5 kHz and are transitioning to 12.5 kHz or narrower operations must file a modification application to add a narrowband emission designator or change the wideband emission designator to a narrowband emission designator. Note—Adding or changing an emission designator does not trigger a new construction requirement, so there is no need to file a new construction notification.

Licensees of stations that currently are authorized to operate with a bandwidth exceeding 12.5 kHz and have complied or will comply with the narrowbanding deadline by adopting narrowband equivalent equipment will be required to certify compliance with the deadline. The FCC plans to implement the certification requirement by revising a future version of the relevant application form for new, renewed and modified station licenses to require licensees subject to the narrowbanding mandate to indicate whether or not the requested operations comply. The FCC also will have discretion to inquire of licensees regarding existing licenses for which no certification is received because the licenses were not renewed or modified before January 1, 2013.

May a station that does not meet the January 1, 2013 narrowbanding deadline operate after that date? No, As of January 1, 2013 the FCC rules will prohibit Industrial/Business and public safety radio pool licensees in the 150-174 MHz and 421-512 MHz bands from operating with wideband channels, unless their equipment meets the narrowband efficiency standard, even if the license still lists a wideband designator. Operation in violation of the FCC's rules may subject licensees to enforcement action, including admonishments, monetary forfeitures and/or license revocation.

More information may be found at http://www.npstc.org/narrowbanding.jsp.

WyoLink Use Story – Submitted by Dan Perko, Wyoming Forestry Division

The Office of State Lands and Investments – Forestry Division established a wildland fire seasonal contract helicopter base at the Duncan Ranch, South of Glenrock in Converse County during Spring/Summer 2009. The location was ideal for the base except for direct communications with the Interagency Dispatch Center, located at the Bureau of Land Management office in Casper. It was limited to cell phone and had no redundant communication capability. Land line phone service was going to cost fifteen thousand dollars to run a phone lines to the helibase.

After the infrastructure was in place an assessment was made of two way radio coverage. None of the State or BLM repeater sites provided coverage to the helibase. Once WyoLink coverage was available in the vicinity, coverage testing determined there was mobile coverage from the Morton Hill trunking site.

A trunking radio was installed at the helibase in August 2009. Other Forestry Division radios were also programmed with the Helitack talk group including Forestry Headquarters in Cheyenne and a radio at the BLM Center in Casper and several portable's. This is the first radio to operate on WyoLink for the Forestry Division and out of necessity for the BLM to dispatch the helicopter.

PSCC Members

Upcoming Events
Calendar posted @ http://pscc.wyoming.gov

2/22/10 * 3/29/10 * 4/26/10 Project Team Meetings   10 am—12 pm

@ WYDOT Project Development Conference Room in Administration Building—2nd Floor

This is a monthly meeting held by the WyoLink Project Manager and Motorola. The meeting gives an overview of the progress over the past month, what is taking place in the near future, and any problems or concerns that need to be addressed with WyoLink.

March 2010— PSCC Meeting—Rock Springs, WY

This is the quarterly general business meeting of the PSCC. Each committee gives a standing report; any concerns or problems are discussed and action taken, if needed. A progress report on the WyoLink project is also presented.

Standard Channel Naming—Table 1

Receive	Transmit	Eligibility/Primary Use	Standard Name	Limitations	Other Names
155.7525	155.7525	Any Public Safety	VCALL10	90.20(c)(3)[80,83]	
151.1375	151.1375	Any Public Safety	VTAC11	90.20(c)(3)[80]	
154.4525	154.4525	Any Public Safety	VTAC12	90.20(c)(3)[80]	
158.7375	158.7375	Any Public Safety	VTAC13	90.20(c)(3)[80]	
159.4725	159.4725	Any Public Safety	VTAC14	90.20(c)(3)[80]	
154.2800	154.2800	Fire	VFIRE21	90.20(c)(3)[19]	FERN
155.3400	155.3400	EMS	VMED28	90.20(c)(3)[40]	Regional EMS
155.4750	155.4750	Law Enforcement	VLAW31	90.20(c)(3)[41]	NLECS, NLEN, NMA

Limitations: 90.20(c)(3)[19] This frequency is reserved for assignment to stations in this service for inter-system operations only and these operations must be primarily base-mobile communications.
90.20(c)(3)[40] This frequency may be designated by common consent as an intersystem mutual assistance frequency under an area-wide medical communications plan.
90.20(c)(3)[41] This frequency is available nationwide for use in police emergency communications networks operated under statewide law enforcement emergency communications plans.
90.20(c)(3)[80] After December 7, 2000 this frequency is available primarily for public safety interoperability only communications. Stations licensed prior to December 7, 2000 may continue to use this frequency on a co-primary basis until January 1, 2005. After January 1, 2005, all operations will be secondary to co-channel interoperability communications.
90.20(c)(3)[83] This interoperability frequency is dedicated for the express purpose of nationwide interoperability calling.

PSCC Website: http://pscc.wyoming.gov

WyoLink Training

WyoLink user training is now available through the Wyoming Law Enforcement Academy and Wyoming Fire Marshal's Office. This training will be provided at the local level and includes information on WyoLink usage and interoperability. All WyoLink users are required to complete this training program. The training is being provided with grant funds from the Department of Homeland Security and Department of Commerce and there are no costs to the local agency.

Agencies can call Russell Clark at the Wyoming Law Enforcement Academy, 307-358-1920 or Phil Oakes at the Wyoming Fire Marshal's Office, 307-777-7288, to schedule training . The Wyoming Law Enforcement Academy has developed the following link to their training schedule. http://whstpclasses.eventbrite.com/ This link is interactive and may be used to sign up for attendance.

WyoLink Status

On January 13, 2010, five more WyoLink sites were up and functional, bringing the total number of active sites to 47. The latest sites to come on line are: Cheyenne Water Tank, enhancing portable radio coverage in Cheyenne; Dead Indian, providing coverage in northern Park County; Mount Pisgah, providing coverage in Weston County; Snow King, providing coverage in the southern part of Teton County; and Warren Peak, providing coverage in Crook County.

WyoLink and the State of Wyoming owe thanks to Chris Lewis, Department of Interior, and Jim Downes, Department of Homeland Security – Office of Emergency Communications, for their support and assistance in achieving this important milestone for the WyoLink project. We also thank the National Telecommunications and Information Administration (NTIA) for allowing Wyoming to share the Federal spectrum. Wyoming appreciates all of the efforts put forth by the many other personnel within DOI, DHS-OEC, NTIA and the FCC that helped with these requests.

How to Join WyoLink?

The WyoLink application is available on the PSCC website: http://pscc.wyoming.gov or on the Wyo-Link website: http://wyolink.wyoming.gov Once the application and the Attachment A – Relationship Manager forms are completed, they are sent to the PSCC Administrative Support, address is on the application. The Interoperability Executive Committee will review the application and pass it on to the PSCC for consideration.

Upon the approval of the PSCC, a membership agreement will be developed and signed by the PSCC and Member.

A Readiness Document for Joining WyoLink is available on the WyoLink and PSCC websites that outlines the process for migrating to WyoLink.

PSCC Mission:

The mission of the Wyoming Public Safety Communications Commission is to develop recommendations for policy and guidelines, identify technology and standards, and coordinate intergovernmental resources to facilitate statewide interoperability with emphasis on public safety.