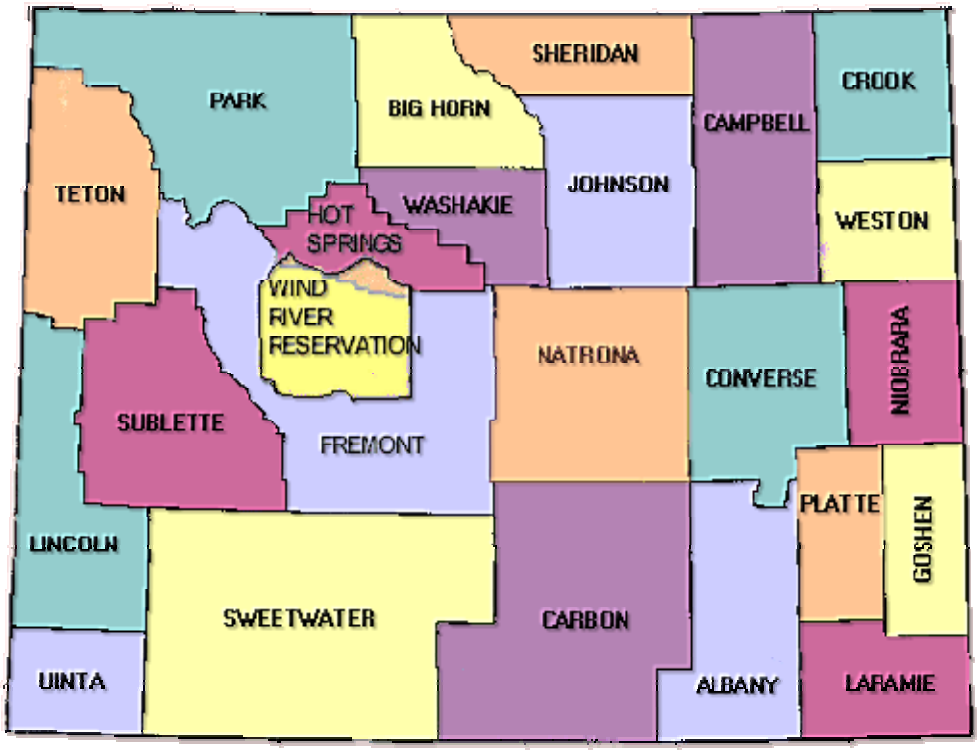
Regional Planning Committee
Region 46



700 MHz Frequency Plan

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APPENDICES

I. REGIONAL CHAIRPERSON

The Regional Planning Committee has had two Chairpersons since its inception. The current Chairperson was appointed by the outgoing Chairperson until that Chairperson was elected by the Committee's bylaws.

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II. RPC MEMBERSHIP

III. DESCRIPTION OF THE REGION

Membership	Name	Eligibility	Address	Phone	E-Mail
Voting	Alexander, Jeff	General	Sublette CO Communications, Inc. 99 West Mill Pinedale, WY 82941	307-367-2475(V) 307-367-2152(F)	radioman@compuserve.com
Voting	Dumars, Phil	EMS	Wheatland Emergency Management 600 9th Street Wheatland, WY 82201	307-322-2962(V) 307-322-2968(F)	moses@netcommander.com
Secretary – Voting	Fleming, Bill	General	C/0 Motorola 2407 Creekwood Drive Fort Collins, CO 80525	970-416-0123(V) 970-416-0044(F)	w.fleming@motorola.com
Voting	Hamilton, Kelly	Police	Wyoming Livestock Board 2020 Carey Avenue, 4th Floor Cheyenne, WY 82002	307-777-6441(V) 307-777-6561(F)	khami@state.wy.us
Non-voting	Howard, Steve	General	M/A-COM 950 West Elliot Road, Suite 109 Tempe, AZ 85284	480-839-2500(V) 480-839-2524(F)	howardst@tycoelectronics.com
Voting	Johnson, Jim	General	Command Director P.O. Box 5 Encampment, WY 82325	307-327-5501(V)	jimmyjohn@worldnet.att.net
Chairperson - Voting	Joiner, Mark	Federal Fire & Law	U.S. Department of Interior Bureau of Land Management / Wyoming 1335 Main St. Lander, WY 82520	307-332-8460(V) 307-332-8465(F)	mark_joiner@blm.gov
Voting	Perko, Dan	Forestry	Wyoming Div of Forestry 1100 West 22nd Street Cheyenne, WY 82002	307-777-5659(V) 307-777-5986(F)	dperko@state.wy.us
Voting	Post, Craig	General	Two Way Radio Service 418 North Conwell Casper, WY 82601	307-237-9112(V) 307-473-2501(F)	cpost@coffey.com
Non-voting	Prindel, Jim	General	M/A-COM 2731 North Hollybrook Place Eagle, ID 83616-8211	208-938-8220(V) 208-938-8211(F)	prindelj@tycoelectronics.com
Voting	Sheridan, Larry	Highway	WYDOT PO Box 1709 90Cheyenne, WY 82003-1708	307-777-4440(V) 307-777-4764(F)	larry.sheridan@wydot.state.wy.us

A. Definition of the Region

Region 46 is defined as the area encompassed by the borders of the State of Wyoming, and includes all counties and municipalities therein. Excluded from the Region 46 area is

that portion of the northwestern corner of Wyoming, known as Yellowstone and Grand Teton National Parks.

Of the total area of the State of Wyoming, approximately one-fourth is made up of mountains, which contributes to the fact that the average elevation for the entire state is over 6,700 feet. There are eleven mountain ranges in the state, and within these ranges are several subdivisions and other independent smaller ranges. The Continental Divide is very unique in Wyoming. It splits into two parts and spreads around what is called the Great Divide Basin. These topographical features have obvious implications for the creation of sub-regions given the near line-of-sight propagation characteristics of 700 MHz radio signals. Within Wyoming, approximately 48,198,800 acres of land is used for farming and grazing. Wyoming's population is 500,000 and its land area encompasses 97,914 square miles, resulting in a population density of fewer than 5 people per square mile. Major population centers are the cities of Casper, Cheyenne, Laramie, Gillette, and Rock Springs.

There are two major Native American tribes that inhabit Wyoming; they are the Arapaho and the Shoshone. There is one Native American reservation in Wyoming, the Wind River Reservation, with headquarters at Fort Washakie. The reservation is the home of 2,357 members of the Shoshone tribe and 3,501 members of the Arapaho tribe. The total acreage of the reservation is 1,888,334, exclusive of lands owned by the Bureau of Reclamation and other patented lands within the exterior boundaries.

Region 46 is divided into five sub-regions: Sub-region 1 – the southeastern part of the state, includes Carbon, Albany, and Laramie counties. Sub-region 2 – the mid-eastern part of the state includes Natrona, Converse, Niobrara, Platte, and Goshen counties. Sub region 3 – the northeastern part of the state includes Sheridan, Johnson, Campbell, Crook, and Weston counties. Sub-region 4 - the mid-northern part of the state includes Park, Big Horn, Hot Springs, Washakie, and Fremont counties. Sub-region 5 – the southwestern and western part of the state includes Teton, Sublette, Lincoln, Uinta, and Sweetwater counties.

Counties

County	Address	City, ZIP Code
Albany County Commissioners	Albany County Courthouse Room 210	Laramie WY 82070
Big Horn County Commissioners	P.O. Box 31	Basin WY 82410
Campbell County Commissioners	500 S. Gillette Ave.	Gillette WY 82716
Carbon County Commissioners	Box 246	Saratoga WY 82331
Converse County Commissioners	P.O. Box 990	Douglas WY 82633
Crook County Commissioners	P.O. Box 37	Sundance WY 82729
Fremont County Commissioners	450 North Second Room 220	Lander WY 82520
Goshen County Commissioners	P.O. Box 160	Torrington WY 82240
Hot Springs County	415 Arapahoe	Thermopolis WY 82443

Commissioners		
Johnson County Commissioners	76 North Main Street	Buffalo WY 82834
Laramie County Commissioners	P.O. Box 608	Cheyenne WY 82003
Lincoln County Commissioners	925 Sage Avenue	Kemmerer WY 83101
Natrona County Commissioners	P.O. Box 863	Casper WY 82602
Niobrara County Commissioners	P.O. Box 1238	Lusk WY 82225
Park County Commissioners	1002 Sheridan Ave.	Cody WY 82414
Platte County Commissioners	P.O. Box 728	Wheatland WY 82201
Sheridan County Commissioners	224 South Main St Suite B-1	Sheridan WY 82801
Sublette County Commissioners	P.O. Box 250	Pinedale WY 82941
Sweetwater County Commissioners	P.O. Box 730	Green River WY 82935
Teton County Commissioners	P.O. Box 3594	Jackson WY 83001
Uinta County Commissioners	P.O. Box 810	Evanston WY 82931
Washakie County Commissioners	P.O. Box 260	Worland WY 82401
Weston County Commissioners	1 West Main St.	Newcastle WY 82701

Census Information by County 2000

County	Population	Housing Units	Households	Land Area	People per Sq. Mile
Albany	32,014	15,215	13,269	4,274	7.5
Big Horn	11,461	5,105	4,312	3,137	3.7
Campbell	33,698	13,288	12,207	4,797	7.0
Carbon	15,639	8,307	6,129	7,897	2.0
Converse	12,052	5,669	4,694	4,255	2.8
Crook	5,887	2,935	2,308	2,859	2.1
Fremont	35,804	15,541	13,545	9,183	3.9
Goshen	12,538	5,881	5,061	2,226	5.6
Hot Springs	4,882	2,536	2,108	2,004	2.4
Johnson	7,075	3,503	2,959	4,166	1.7
Laramie	81,607	34,213	31,927	2,686	30.4
Lincoln	14,573	6,831	5,266	4,069	3.6
Natrona	66,533	29,882	26,819	5,340	12.5
Niobrara	2,407	1,338	1,011	2,626	0.9
Park	25,786	11,869	10,312	6,943	3.7
Platte	8,807	4,528	3,625	2,085	4.2
Sheridan	26,560	12,577	11,167	2,523	10.5
Sublette	5,920	3,552	2,371	4,882	1.2
Sweetwater	37,613	15,921	14,105	10,426	3.6
Teton	18,251	10,267	7,688	4,008	4.6
Uinta	19,742	8,011	6,823	2,082	9.5
Washakie	8,289	3,654	3,278	2,240	3.7
Weston	6,644	3,231	2,624	2,398	2.8

B. Surrounding Regions

Six FCC Regions border Region 46:

Region 7 – Colorado	Region 12 – Idaho
Region 25 – Montana	Region 26 – Nebraska
Region 38 – South Dakota	Region 41 – Utah

C. Public Safety Entities

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Public safety entities in the State of Wyoming have jurisdiction over their own areas of responsibility. The State Department of Transportation operates and maintains systems for Highway Engineers, Highway Maintenance, State Police, Game & Fish, Brand Inspectors, State Parks & Recreation, and the Division of Criminal Investigation. There is also participation by some federal entities that need to have communications with state law enforcement. Counties operate and maintain systems within their boundaries, as do municipalities.

D. Types of Public Safety

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Wyoming currently operates single channel, VHF, UHF, and in some areas low band, systems in all aspects of public safety: police, fire, local government, highway, forestry, special emergency, and medical.

E. Existing Interoperability Contracts, Compacts, Mutual Aid Agreements, etc.

At this time in Wyoming interoperability consists of one public safety agency granting permission for another to carry their frequency in their mobiles and handhelds. This is generally limited to local areas of operation. There is one statewide mutual aid channel that is licensed and maintained by the Department of Transportation, and dispatched on a statewide basis by the Wyoming Highway Patrol dispatch center in Cheyenne. Contracts exist between the DOT and county and municipal law enforcement entities that define authorized use of the mutual aid channel.

The State of Wyoming elected to go forward with a statewide VHF Project 25 trunking system, called WyoLink. This system will incorporate integrated voice and data, encryption, and many other features available with the new digital P25 technologies.

F. The Effect of the Addition of the 700 MHz Interoperability Channels.

The State of Wyoming has an 800 MHz spectrum utilization plan on file with the FCC, however there is very little application of 800 MHz in the state at this time. The City of Casper owns a single site digital, trunked, 800 MHz system in use by the fire and police departments. The City of Cheyenne, currently leases 800 MHz services for it's fire department, and is in the process of purchasing a system similar to that of Casper.

The addition of 700 MHz channels in Region 46 will no have any near term affect with regard to voice communications in the foreseeable future, however, long range plans for

WyoLink take into consideration the possibility of incorporating a 700 MHz data overlay for high speed mobile data.

IV. NOTIFICATION PROCESS

A. The dates and publications in which the meetings were announced and copies of the announcements as they appeared in the publications

1. February 15, 2001 – Cheyenne, WY. Initial formation meeting.
2. November 28, 2001 – Casper, WY. First committee meeting to review progress of plan notebook. Held in conjunction with annual Wyoming APCO Conference.
3. November 18, 2002 – Casper, WY. Held in conjunction with annual Wyoming APCO Conference.
4. November 17, 2003 – Casper, WY. Held in conjunction with annual Wyoming APCO Conference.
5. Please see Appendix I for copies of the actual meeting notices.
6. Notice was published 60 Days prior to the first meeting.

B. The dates and websites on which the meetings were announced. Detail which website targeted which public safety disciplines.

1. http://wireless.fcc.gov/publicsafety/700MHz/regions/region46.html
2. http://wyolink.state.wy.us
3. October 6, 2003 - http://wireless.fcc.gov/publicsafety/700MHz/regions/region46.html

C. A description of how Native American Tribal Governments (if any) within the Region were notified of the initial or subsequent meetings. If there are no Tribal Governments within the Region, this must be stated in this section of the plan

D. A description of how State Emergency Management, Homeland Security, National Security and other Federal agencies were notified of the initial or subsequent meetings.

1. The Yellowstone National Park was contacted by email about participating in the creation of the 700 MHz Plan.
2. The current Chairman of the 700 MHz RPC works for the DOI/Bureau of Land Management and represents the Federal Government in Wyoming on the Wyoming State's Public Safety Communications Commission.

E. A description of the process by which comments were solicited from all eligible parties

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For the initial effort in developing the Region 46 plan, input was provided through the efforts of the chairman following the NPSTC Regional Planning Guide, and from discussions held at planning meetings. Region 46 is currently in the process of trying to implement a plan for a statewide digital, trunked, Project 25, VHF system, and it is anticipated county and municipal public safety entities will eventually come onto this system. There is little interest in 700 MHz at this time, with the possibility of a 700

MHz data overlay at some time in the future, so interest/involvement from eligible parties is practically nonexistent.

F. A summary of all comments and submissions obtained through the process. Minutes of meetings and copies of submissions are to be retained by the Regional Chairperson.

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See Appendix k for copies of meeting minutes.

G. A description of the process used to consider the comments submitted by concerned parties,

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Regional planning meetings are open to the public. Concerned parties are invited to present at these meetings, or they may approach any of the committee officers directly.

V. REGIONAL PLAN SUMMARY

A. Structure and Procedures for the Operation of the RPC

The membership of the 700 MHz Regional Planning Committee will be drawn from representatives of Public Safety agencies and eligible within Region 46 Authority for the Committee to carry out its assigned tasks is derived from the Federal Communications Commission (FCC Report and Order, Docket 96-86).

This Regional Plan is in conformity with the NPSTC Regional Planning Guidebook. By officially sanctioning the Plan, the FCC agrees to its conformity to the guidelines put forth in the guidebook in accordance with the recommendations of the National Coordination Committee (NCC). Nothing in the plan is to interfere with the proper function and duties of the organizations appointed by the FCC for frequency coordination in the Private Land Mobile Service, but rather it provides procedures that are the consensus of the Public Safety Radio Service user agencies in the Region. If there is a perceived conflict, the judgment of the FCC will prevail.

Regional Planning Committee meetings will be set by the Chairman with at least ten (10) days notice to all Committee members. The agenda will be set by the Chairman. Issues of importance may be added to the agenda by a majority vote of attending members.

All meetings will be open to any interested party. Each member agency is entitled to one vote for each distinct eligibility category (Appendix E, Article 2.1). Only properly registered committee members may vote. Membership shall be in accordance with the bylaws (Article 2.2). Committee membership is open to any representative from any eligible Public Safety Radio System Agency; no distinction is made regarding federal, state, county or municipal levels of government. However, membership must have been in force 30 days prior to that member exercising his/her voting privileges.

Region 46 will have a 700 MHz Frequency Advisory Committee. The purpose of this committee will be to approve the applications of agencies requesting the use of 700 Spectrum. Approval of this committee will be required before an agency can forward

the application for coordination and licensing. The committee will consist of the current 700 RPC Chairperson and two members elected from the membership of the Regional Planning Committee. Members of the committee will be elected by a majority of the RPC membership at the annual meeting. There will be no limits to the number of terms that an individual can serve on the advisory committee This committee will approve and forward applications for both voice and data channels. Approval is by a majority vote of the three members of the committee.

B. Procedure for Requesting Channels.

All requests for 700 MHz frequencies to be used for Public Safety Communications must be submitted to the Frequency Advisory Committee for approval. Eligible applicants include any entity authorized under 47 CFR 90.20, 47 CFR 90.523, or 47 CFR 2.103 (See Appendix E, Article 2.1). The Committee shall review the application to determine its compliance with the Regional Plan as indicated below. Upon application, an objective evaluation procedure shall be instituted. If the request for frequencies is not approved by the Frequency Advisory Committee, the request will be returned to the applicant for revision and correction before being resubmitted for reconsideration. Please se Section X for details.

C. Procedure for evaluating mutually exclusive requests.

All applications for channels will be approved on a first come basis except when multiple applications are received at the same time. A scoring matrix will be used to evaluate competing applications. The applications receiving the highest number of points will receive the channels. Please see Section VIII for details.

D. The database Region 46 will utilize for coordination of frequencies.

This Plan from the standpoint of spectrum allotment and coordination will use the pre-packed database in CAPRAD. Since the CAPRAD pre-pack took into consideration both demographic and topographic considerations, we have determined that the allotments of spectrum based on county geographical areas, as expressed in Appendix A, are the most reasonable basis for initial allocation under this Plan. Further, Region 46 will be maintaining the CAPRAD database as any subsequent specific frequency assignments are made for specific system implementations. Therefore, the CAPRAD database will serve as a single repository of all RPC approved assignments and allow us to carefully manage co-channel and adjacent-channel interference issues with the system designers and frequency coordinators,

E. Pre-coordination allocation method used at the Region's borders.

In our conversations with some of our adjacent regions – Region 7 (Colorado), Region 12(Idaho) and Region 41(Utah) – they have indicated that they intend to use the CAPRAD pre-pack as their preferred allotment mechanism, and plan on maintaining that database for future frequency assignments. It is our hope that the remaining adjacent regions will adopt the CAPRAD pre-pack as their preferred allotment mechanism. Their concurrence with this Plan confirms that understanding. Therefore, we have every

expectation that current and future frequency assignments in border areas will be easily managed and coordinated through the CAPRAD database since most of these areas are very rural.

F. Spectrum Utilization agreements with other Regions.

This plan was sent and concurred by the six adjacent regions to Region 46(Wyoming) see Appendix AB.

G. The Region's interoperability plans and interoperability requirements.

The Region 46 Planning Committee is responsible for administering the I/O Channels. The RPC will ensure that the I/O Channels will be used in accordance with the NCC's recommendations.

H. The guidelines and procedures for protection of incumbent TV/DTV stations.

Counties that have incumbent TV/DTV stations within or near its borders will not be approved for the pre-allotment frequencies that would interfere with those stations until those frequencies are vacated.

I. A description of the planning process and how the Plan was approved.

The first draft of the 700 MHz was written by the Chairman of the 700 MHz Regional Planning Committee. The draft plan was submitted to all members of the RPC for review and comment. Subsequent drafts were written to include the comments received. When no more comments were received from the committee members the plan was submitted to the Governor appointed Public Safety Communications Commission for review and comment. The comments received were incorporated into the plan with the RPC approval. The final plan was approved by the RPC and submitted to the adjacent regions for review and concurrence. When we received concurrence from the adjacent regions the plan was submitted to the FCC for approval. If there were any changes made to the plan to allow it to be approved, the RPC approved all changes prior to making the change.

VI. UTILIZATION OF INTEROPERABILITY CHANNELS

The ability of Agencies to effectively respond to emergency and disaster situations will be better facilitated by the ability to communicate. Wyoming has a rural population and diverse geography that require cooperative efforts between agencies. In the VHF and 800 MHz Bands, frequencies and common talk groups have been set aside to establish links for the purpose of mutual aid and dispatch communications. In order to facilitate use and interoperability on the 700 MHz band, Region 46 will use the same philosophy in developing common calling channels in the 700 MHz spectrum. Administration of the interoperability channels will be done by the Region 46 Regional Planning Committee. This committee will work in concert with the Wyoming Public Safety Communications Committee.

A. Calling Channels

Region 46 will utilize the table of interoperability channels that are prescribed by the National Coordination Committee Process.

Table of Interoperability Channels
For Specific Users / Services
(Adopted by the FCC in the 4th MO & O, WT Docket 96-86 Dated March 5,2002)

Television Channels 63 / 64
Note: Only Base Transmit Side of Channel Pairs is Shown

CHANNEL SETS	DESCRIPTION	LABEL
Channel 23 & 24	***General Public Safety Services (secondary trunked)***	***7GTAC05***
Channel 103 & 104	***General Public Safety Services (secondary trunked)***	***7GTAC07***
Channel 183 & 184	***General Public Safety Services (secondary trunked)***	***7GTAC09***
Channel 263 & 264	***General Public Safety Services (secondary trunked)***	***7GTAC11***
Channel 39 & 40	Calling Channel	7CALLA
Channel 119 & 120	General Public Safety Service	7GTAC13
Channel 199 & 200	General Public Safety Service	7GTAC15
Channel 279 & 280	General Public Safety Service (Data only)	7DTAC17
Channel 63 & 64	Emergency Medical Service	7ETAC19
Channel 143 & 144	Fire Service	7FTAC21
Channel 223 & 224	Law Enforcement	7LTAC23
Channel 303 & 304	Mobile Repeater	7MTAC25
Channel 79 & 80	Emergency Medical Service	7ETAC27
Channel 159 & 160	Fire Service	7FTAC29
Channel 239 & 240	Law Enforcement	7LTAC31
Channel 319 & 320	Other Public Services	7OTAC33

Trunking is permitted on the 4 channel sets indicated in bold italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidth.

1. Channel nomenclature and reserving specific channels for first responders, (EMS, Fire, Law Enforcement) are subjects of Petitions for Reconsideration to the4th Report & Order in Docket 98-86. While these Petitions were denied by the FCC for codification into its rules, the FCC nonetheless recognized the importance of such Standardization if it was implemented at the State and / or Regional Level

2. Tactical channel numbering was started at "5" to avoid confusion with TAC 1 through TAC 4 in the 800 MHz NPSPAC Band.

3. Only ANSI/TIA/EIA 102 (Project 25) data standard compliant equipment is permitted to use the data channels.

Television Channels 68/ 69

Note: Only Base Transmit Side of Channel Pairs is Shown

CHANNEL SETS	DESCRIPTION	LABEL
Channel 681 & 682	***General Public Safety Services (secondary trunked)***	***7GTAC35***
Channel 737 & 738	***General Public Safety Services (secondary trunked)***	***7GTAC37***
Channel 817 & 818	***General Public Safety Services (secondary trunked)***	***7GTAC39***
Channel 921 & 922	***General Public Safety Services (secondary trunked)***	***7GTAC41***
Channel 681 & 682	Calling Channel	7CALLB
Channel 761 & 762	General Public Safety Service	7GTAC43
Channel 841 & 842	General Public Safety Service	7GTAC45
Channel 921 & 922	General Public Safety Service (Data only)	7DTAC47
Channel 641 & 642	Emergency Medical Service	7ETAC49
Channel 721 & 722	Fire Service	7FTAC51
Channel 801 & 802	Law Enforcement	7LTAC53
Channel 881 & 882	Mobile Repeater	7MTAC55
Channel 697 & 698	Emergency Medical Service	7ETAC57
Channel 777 & 778	Fire Service	7FTAC59
Channel 857 & 858	Law Enforcement	7LTAC61
Channel 037 & 936	Other Public Services	7OTAC63

Trunking is permitted on the 4 channel sets indicated in bold italics. The two channels immediately below each of these channels are reserve channels that may be combined with these channels for trunking systems that use 25 kHz channel bandwidth.

B. Tactical Channels

Region 46 will not set aside additional tactical channels for interoperability. We feel that the sixty-four channels set aside by the FCC will be sufficient to provide interoperability for Voice and Data within Region 46. Agencies who desire to utilize the 700 MHz spectrum will need to include as a minimum the channels called for in the NCC guidelines.

C. Encryption

The use of encryption will be prohibited on calling channels and all other interoperability channels. A standard encryption algorithm for use on interoperability channels must be TIA/EIA IS AAAAA Project 25 DES encryption protocol. Information on encryption may be found in 90.553 of the CRF.

D. Deployable Systems

General Public Safety Services channels labeled 7GTAC5 through 7GTAC15, 7GTAC35 through 7GTAC45, or both, shall be made available for "deployable"

equipment used during disasters and other emergency events that place a heavy, unplanned burden upon in-place radio systems. The RPC shall consider the need for both "deployable trunked" and "deployable conventional" systems and make those channels available to all entities in the state.

E. Trunking on the Interoperability Channels

Trunking the interoperability channels on a secondary basis shall be limited to operation on eight specific 12.5 kHz channel sets, divided into two subsets of four 12.5 kHz channels. One subset is defined by 7GTAC5 through 7GTAC11 and the other by 7GTAC35 through 7GTAC41. Any licensee implementing base station operation a trunking mode on interoperability channels shall provide and maintain on a continuous (24 hour x 7 day) basis as its primary dispatch facility the capability to easily remove one or more of these interoperability channels, up to the maximum number of such trunking channels implemented, from trunking operation when a conventional access priority that is equal to or higher than their current priority is implemented.

While it may be desirable for the RPC to permit trunked systems to incorporate one or more interoperability channels into a single trunking system as a means of enhancing the use of the systems interoperability purposes (and by implication allow those channels to be routinely used for normal day-to-day communications), care will be taken to ensure that those channels will not become such an integral part of the trunked system that it becomes politically and technically impossible to extract them from the trunked system in the event of an emergency event having higher priority. For this reason the RPC is limiting the number of interoperability channels that may be integrated into any single trunked system for the following amounts:

For systems having 10 or fewer "general use" voice paths allocated, one (1) trunked interoperability channel is permitted. For systems having more than 10 "general use" voice paths allocated, two (2) trunked interoperability channel sets are permitted.

Region 46 may consider allocating additional interoperability channel set(s) for trunked radio systems having more than 20 "general use" voice paths allocated upon a showing of need and upon a determination that assignments of interoperability channel set(s) will not adversely impact availability of those channels to other trunked and / or conventional radio systems in the area (e.g. a single consolidated trunked system servicing all public safety agencies in an area might satisfy this criterion). The maximum number of interoperability channel sets for trunked system permitted for use by an individual licensee is four.

The channels (two 6.25 kHz pairs) in reserve spectrum immediately adjacent to the 7GTAC channels where secondary trunking is permitted (21, 22), (101, 102) etc. are available for secondary trunking, but only in conjunction with the adjacent interoperability 12.5 kHz channel pair in a 25 kHz trunked system and will be administered by the Region 46. If Region 46 should elect to permit 25 kHz trunking on interoperability channels, these reserve spectrum guard channels would become part of the trunking channels. In making a decision to allow 25 kHz trunking on these interoperability channels, Region 46 will consider the impact on the channels adjacent to those 25 kHz trunking channels. Additionally the Region 46 will consider the impact of

these 25 kHz channels to be immediately reverted to 12.5 kHz conventional interoperability use.

F. Operating Procedures on the Trunking I/O Channels for I/O Situations Above Level 4

The safety and security of life and property determines appropriate interoperable priorities of access and/or reverting from secondary trunking to conventional operation. In the event secondary trunked access conflicts with conventional access for the same priority, conventional access shall take precedence. Access priority for "mission critical" communications (shall not include nor imply administrative or non mission critical applications) is recommended as follows:

1. Disaster and extreme emergency operations for mutual aid and interagency Communications;
2. Emergency or urgent operation involving imminent danger to life of property;
3. Special event control, generally of a preplanned nature (including Task Force operations);
4. Single agency secondary communications. Priority 4 is the default priority when no higher priority has been declared. The fourth priority would not allow shedding traffic long in duration or overloading the non-interoperable system; but is not "two or more different entities" as defined in paragraph 76 of FCC 98-191.

For those systems employing I/O channels in the trunked mode, the RPC will set up interoperability talk groups and priority levels for those talk groups so that it is easy for dispatch to determine whether the trunked I/O conversation in progress has priority over the requested conventional I/O use

G. Standardized Nomenclature

Region 46 will support standardized nomenclature as recommended nationwide such that all 700 MHz public safety equipment using an alphanumeric display only be permitted to show the recommended label as identified in the Table of Interoperability Channels, when the radio is programmed to operate on the associated 700 MHz channel set. The table shows the recommended label for equipment operating in the mobile relay (repeater) mode. When operating in the direct (simplex) mode, the letter "D" appended to the end of the label will be used.

H. Data Only Use of the I/O Channels

Narrowband data-only interoperability operation on the interoperability channels on a secondary basis will be limited to two specific 12.5 kHz channel sets. One set is defined by 7DTAC17 and the other by 7DTAC47. Refer to 90.548(a)(ii) for data interoperability standard documents.

I. Wideband Data Standards

Within the 12 MHz of spectrum designated for high capacity, wide bandwidth (50 to 150 kHz) channel usage, there are eighteen 50 kHz (or six 150 kHz) channels designated for wideband interoperability use. Region 46 will recommend that the established TIA standard (the Telecommunications Industry Association), as noted in Section 11.0 for wideband data be used when deploying the wideband interoperability channels.

J. State Interoperability Executive Committees

A FCC recognized State Interoperability Executive Committee will not be formed. The Region 46 Planning Committee will administer a State interoperability plan within Region 46. This committee's chairman will meet quarterly with the Wyoming Public Safety Communications Commission to discuss and review the State interoperability plan. If any changes are recommended by the Wyoming Public Safety Communications Commission these changes will be reviewed by the RPC and approved if warranted.

Region 46 will use the Incident Command System (NIMS) as the guideline in developing the regional interoperability plan. Region 46 RPC will have oversight of the administration and technical parameters of the infrastructure for interoperability channel within Region 46.

K. Minimal Channel Quantities

The minimum channel quantity for Calling and tactical channel sets requires 8 I/O channel slots in each subscriber unit. Including direct (simplex) mode on these channel sets, up to 16 slots in each radio will be programmed to the I/O purpose. Backbone issues are deferred to the RPC. Subscriber units, which routinely roam through more than one jurisdiction up to nationwide travel will require more than the minimum channel quantity.

The Calling channel sets (7CALLA and 7CALLB) shall be implemented in all voice subscriber units in repeat-mode and direct (simplex) mode. "Direct" mode will be permitted in the absence of repeater operation or upon prior dispatch center coordination. If a local Calling channel set is not known, 7CALLA shall be attempted first, then 7CALLB. Attempts shall be made on the repeater mode first then on the direct (simplex) mode.

A minimum set of Tactical (TAC) channels shall be implemented in every voice subscriber unit in the direct (simplex) mode. Specific channel set shown below (RPC will have the option to exceed this minimum requirement).

7GTAC13 & 7GTAC43 channel sets
7MTAC25 & 7MTAC55 channel sets
7OTAC33 & 70TAC63 channel sets

NOTE: Selection of the above TAC channels based on revised Table of Interoperability Channels. Channel labels are a compromise between 4th R & O and IO-0062D-20010118.

Voice subscriber units subject to multi-jurisdictional or nationwide roaming should have all I/O voice channels, including direct (simplex) mode, programmed for use.

L. Direct (Simplex) Mode

In direct (simplex) mode, transmitting and receiving on the output (transmit) side of the repeater pair for subscriber unit-to-subscriber unit communications at the scene does not congest the repeater station with unnecessary traffic. However, should someone need the repeater to communicate with the party who is in "direct" mode, the party would rear the repeated message, switch back to the repeater channel, and join the communications. Therefore, operating in direct (simplex) mode shall only be permitted on the repeater output side of the voice I/O channel set.

M. Common Channel Access Parameters

Common channel access parameters will provide uniform I/O communications regardless of jurisdiction, system, manufacture, etc. Thus, the Calling and TAC channels (all of them) will include a common NAC as the national standard. The secondary, trunked I/O channels would be excluded in the trunked mode. However, when reverted to conventional I/O, the common NAC would then apply. The national requirement should apply to base stations and subscriber units. This should apply to fixed or temporary operations. This should apply to tactical, or other mutual aide conventional I/O use.

Common channel access parameters for all voice I/O shall utilize the default values (ANSI/TIA/EIA-102, BAAX-2000, approved April 25, 2000) provided in every radio regardless of manufacturer. Any common channel access parameters not provided will be programmed accordingly. These parameters include the following:

P25 Network Access Code --$293 (default value)
P25 Manufacturing ID--$00 (default value)
P25 Designation ID --$FFFFFF (designates everyone)
P25 Talk Group ID --$0001 (default value)
P25 Message Indicator $000000…0, out to 24 zeros (unencrypted)
P25 Key ID -- $0000 (default value)
P25 Algorithm ID --$80 (unencrypted)

Any deviation from $293 will not be permitted unless the RPC can demonstrate in a plan amendment through the FCC –approved process that the intent of $293 will be preserved on all conventional voice I/O channels-Transmit and receive.

N. Interference Protection

The frequency allotment list is based on an assumption that the systems will be engineered on an interference-limited basis not a noise floor-limited basis. Agencies are expected to design their systems for maximum signal levels within their coverage area and minimum levels in the coverage area of other co-channel users. Coverage area is normally the geographical boundaries of the Agency(s) served plus an eight-mile area beyond. Systems should be designed for minimum signal strength of 40 dBμ in the

system coverage area while minimizing signal power out of the coverage area. TIA/EIA TSB88-B (or latest version) will be used to determine harmful interference assuming 40 dBμ, or greater, signal in all systems coverage areas. This may require patterned antennas and extra sites compared to a design that assumes noise limited coverage. To maximize spectrum utilization, receivers of the highest quality must be used in systems. Given a choice of radios to choose from in a given technology family, agencies should use the units with the best specifications. This **plan will not protect** agencies from interference if their systems utilize low quality receivers.

VII. SPECTRUM SET ASIDE FOR INTEROPERABILITY WITHIN THE REGION

Region 46 will not assign additional spectrum within the region for interoperability.

VIII. ALLOCATION OF GENERAL USE SPECTRUM

Channel allotments will be made on the basis of one 25 KHz channel for every two (2) voice channel requests and one 12.5 KHz channel for each narrowband data channel request. Allotments will be made in 25 KHz groups to allow for various digital technologies to be implemented. Agencies using Frequency Division Multiplexing (FDMA) will be expected to maintain 12.5 KHz equivalency when developing systems and will be required to utilize BOTH 12.5 KHz portions of the 25 KHz block. In most cases, this will require the geographic separation of each 12.5 KHz adjacent channel. In order to promote spectrum efficiency, Region 46 will ensure that systems allocated 25 KHz channel blocks will utilize all of the channels and not "orphan" any portions of a system designated channel.

A. Low Power Secondary Operations

To facilitate portable operation by any licensee, and to provide channels for such operation without impacting the use of primary channels, certain low power secondary use will be permitted. Any public safety entity otherwise licensed to use one or more channels under this Plan may receive authorization to license any additional channel for secondary use, subject to the following criteria:

1. All operation of units on such authorized channels will be considered secondary to other licensees on both co-channel and adjacent channels.

2. No channels on, or adjacent to, those designated in the Plan for wide area operation and/or mutual aid use will be authorized.

3. Channels will be authorized for use in specific areas only, such areas to be within the licensees authorized operational area.

4. Maximum power will be limited to 6 watts ERP.

5. Use aboard aircraft is prohibited.

Applications for channels may be submitted to the Review and Revision

Committee for consideration at any time and must be accompanied by a showing of need. The Committee may select and authorize licensing of these secondary use channels after consideration of potential interference to co-channel and adjacent channel allotments, allocations and licensees. Authorization may be granted for use of any suitable channel, without prior allotment or allocation to the requesting agency.

In the event the channels authorized for low power secondary operation are needed by others during any window opening for reassignment, no protection will be afforded to the licensed secondary user, and they may be required to change frequencies or surrender licenses to prevent interference to primary use channels.

B. Low Power Channels

The FCC in the 700 MHz band plan set aside channels 1 - 8 paired with 961 – 968 and 949 – 958 paired with 1909 – 1918 for low power use for on-scene incident response purposes using mobiles and portables subject to Commission-approved regional planning committee regional plans. Transmitter power must not exceed 2 watts (ERP). Channels 9 –12 paired with 969 – 972 and 959 – 960 paired with 1919 – 1920 are licensed nationwide for itinerant operation. Transmitter power must not exceed 2 watts (ERP).

These channels may operate using analog operation. To facilitate analog modulation this plan will allow aggregation of two channels for 12.5 kHz bandwidth. On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) with an antenna height limit of 6.1 meter (20 feet) above the ground. However, users are encouraged to operate in simplex mode whenever possible. This plan does not limit use to only analog operations, these channels are intended for use in a wide variety of applications that may require digital modulation types.

In its dialog leading up to CFR §90.531 allocating the twenty-four low power 6.25 kHz frequency pairs (of which eighteen fall under RPC jurisdiction)3, the Federal Communications Commission (FCC) suggested that there is a potential for multiple low power applications, and absent a compelling showing, a sharing approach be employed rather than making exclusive assignments for each specific application because low power operations can co-exist [in relatively close proximity] on the same frequencies with minimal potential for interference due to the 2 watt power restriction.

Whereas advantages exist in not making assignments, the reverse is also true. If, for example, firefighters operate on a specific frequency or set of frequencies in one area, there is some logic in replicating that template throughout the region for firefighter equipment. If there are no assignments, such a replication is unlikely. In seeking the middle ground with positive attributes showing up both for assignments and no assignments, we recommend the following regarding assignments associated with the eighteen narrowband channels for which the RPC's have responsibility.

1. Channel #'s 1-4 and 949-952 are set aside as *generic* channels for use by public safety agencies operating within Region 41, and the complementary channel #'s 961-964 and 1909-1912 are set aside as *generic* channels also for use

by public safety agencies including GPS differential correction telemetry for channels 961- 964 and 1909-1912 likewise operating within Region 41.

2. Channel #'s 5-8 are designated as *Fire Protection* channels for licensing and exclusive use by the Fire Protection discipline, and the complementary channel #'s 965-968 are set aside as *Law Enforcement* channels also for licensing and exclusive use by the Law Enforcement discipline.

3. Channel #'s 955-956 are set aside as *Fire Protection* channels for licensing and exclusive use by the Fire Protection discipline, and the complementary channel #'s 1915-1916 are set aside as *Law Enforcement* channels also for licensing and exclusive use by the Law Enforcement discipline. Channel #'s 957-958 are set aside as *Fire Protection/Law Enforcement* channels for licensing and use by the Fire Protection and Law Enforcement disciplines, and the complementary channel #'s 1917-1918 are set aside as *Fire Protection/Law Enforcement* Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on scene use among all agencies involved. Users should license multiple channels and be prepared to operate on alternate channels at any given operational area.

C. Wideband Data

Forty-eight wideband data channel pairs are available in the General Use allocation provided by the FCC. This represents 96 total channels, 48 base transmit channels and 48 mobile transmit channels. These channels are 50 kHz each, but may be aggregated to 150 kHz. Certain throughput requirements must be met when channels are combined. It is the intent of the plan to encourage multiple agencies to join together in designing and implementing mobile data systems. Pre-allocation of frequencies may result in too few frequencies being allocated to areas of the region which require multiple frequencies, and too many frequencies being allocated to areas of the region which may never use them. The Telecommunications Industry Association (TIA) is working on a wideband data standard TIA 902-SAM. While TIA has not completed work on the interoperability standard, Region 46 will give priority allocations to users who plan to use the completed standard. Knowledge of the throughput and other technical details of the interoperability standard would assist the regional planning committee in allocating the wideband channels.

Based on the limited number of channels available, Region 46 will withhold any pre-allocation of the wideband data channels until further study and needs assessments are completed and until TIA issues directives on standards related to these channels. Region 46 plans to use the pre-allotment pack provided by CAPRAD when it's ready. The committee will continue to monitor the progress of the issues mentioned above and would recommend submitting an amended plan to the commission at some time in the future.

Once the region is ready to allocate wideband data channels, Region 46 will take the following action: Entities/agencies could apply for wideband data channels which would be assigned on a first come basis. Entities applying for channels would be required to provide a detailed description of their wireless project, including shared agency

agreements, and evidence that a budget for their project is in place, and a detailed time frame for completion of the project phase(s). Budget documentation should cover all phases of the project. Frequencies assigned would be subject to recall if agencies do not use the channels within an allotted time frame. Recalled channels would then be available in the reserve pool.

Additional requirements for application, including engineering studies, would be similar to those in place for the narrowband General Use channels. Frequencies in the wideband data range would be managed with other frequencies in the 700 MHz band using the CAPRAD database.

IX. HOW NEEDS WERE ASSIGNED PRIORITIES IN ALL AREAS.

All applications for channels will be approved on a first come basis except when multiple applications are received at the same time. A scoring matrix will be used to evaluate competing applications. The applications receiving the highest number of points will receive the channels. There are seven scoring categories:

1. **Service (Maximum score 350 points)**

Police, fire, local government, combined systems, multi-jurisdictional systems, etc.

2. **Intersystem & Intra-system interoperability (Maximum score 100 points)**

How well the proposed system will be able to communicate with other levels of government and services during an emergency on "regular" channels, not the I/O channels. Interoperability must exist among many agencies to successfully accomplish the highest level of service delivery to the public during a major incident, accident, natural disaster or terrorist attack. Applicants requesting 700 MHz spectrum shall inform the region of how and with whom they have been achieving interoperability in their present system.

The applicant shall stipulate how they will accomplish interoperability in their proposed system (gateway, switch, cross-band repeater, console cross-patch, software defined radio or other means) for each of the priorities listed below:

a) Disaster and extreme emergency operation for mutual aid and interagency communications.

b) Emergency or urgent operation involving imminent danger to life or property.

c) Special event control, generally of a preplanned nature (including task force operations).

d) Single agency secondary communications. Priority 4 is the default priority when no other priority is declared and includes routine day-to-day (non-emergency) operations.

3. **Loading (Maximum score 150 points)**

Is the system part of a cooperative, multi-organization system? Is the application an expansion of an existing 800 MHz system? Have all 821 channels been assigned (where technically feasible)? A showing of maximum efficiency or a demonstration of the system's mobile usage pattern could be required in addition to loading information. Based on population, number of units (if number of units, are they take home, how many per officer), what are the talk groups?

4. **Spectrum Efficient Technology (Maximum score 350 points)**

How spectrally efficient is the system's technology? Trunked systems are considered efficient "as well as any technological systems feature, which is designed to enhance the efficiency of the system and provide for the efficient use of the spectrum."

5. **Systems Implementation Factors (Maximum score 100 points)**

Demonstrate funding, demonstrate system planning. Provide a construction and implementation schedule. Is this going to be slow growth (within the next five years) or is it something that's ready to be implemented now? A document stipulating what the agency is planning to implement signed by an official within the organization who handles the money is required. Some concerns expressed in this category were: how one legally provided a document that proves subsequent year funding; the money does not start flowing until the equipment is in place; some agencies cannot bond until they have the frequencies.

6. **Geographic Efficient (Maximum Score 100 points)**

The ratio of subscriber units to area covered and the channel reuse potential were the two subcategories in this one. "The higher the ratio (mobiles divided by square miles of coverage) the more efficient the use of the frequencies. … Those systems which cover large geographic areas will have a greater potential for channel reuse and will therefore receive a high score in this subcategory."

7. **Givebacks (Maximum score 200 points)**

Consider the number of channels given back Consider the extent of availability and usability of those channels to others.

Total evaluation points above add up to 1350.

X. HOW ALL THE REGION ELIGIBLES' NEEDS WERE CONSIDERED

All requests for 700 MHz frequencies to be used for Public Safety Communications must be submitted to the Frequency Advisory Committee for approval. Eligible applicants include any entity authorized under 47 CFR 90.20, 47 CFR 90.523, or 47 CFR 2.103 (See Appendix E, Article 2.1). The Committee shall review the application to determine its compliance with the Regional Plan as indicated below. Upon application, an objective evaluation procedure shall be instituted. If the request for frequencies is not approved by the Frequency Advisory Committee, the request will be returned to the applicant for revision and correction before being resubmitted for reconsideration.

The request shall contain information to justify the frequencies requested and shall demonstrate compliance with the Regional Plan. As a minimum, the request shall consist of the following:

(1) Name, address and phone number of the applicant agency(ies) involved. The name of a person that the Committee may contact regarding technical details of the application must also be included.

(2) Appropriate FCC and APCO coordination forms.

(3) Funding statement or resolution from the appropriate governing Council, Agency, or Executive indicating that sufficient funds will be available to meet the proposed Implementation Schedule (#4 below).

(4) Proposed Implementation Schedule: a timetable indicating the anticipated start and completion dates, as well as intermediate dates/milestones.

(5) Existing frequency statement, listing frequencies currently licensed to the applicant, and indicating which frequencies the applicant intends to turn back to the FCC for reassignment, or that there are no 800 MHz frequencies available in the applicant's area of proposed operation.

(6) System design information, listing all relevant technical information, including:

   a) Geographic coordinates for all site(s).

   b) Geographic coordinates for the coverage area, squared off, i.e. the northernmost latitude combined with the western-most longitude; also the southernmost latitude and the eastern-most longitude.

   c) The technical specification for all transmitter and receiver equipment.

   d) A statement regarding whether this is a new system or a modification of an existing system.

e) The coverage area, indicated on a map, which also shows all governmental boundaries within the coverage area.

f) Number of frequencies requested and proposed loading.

g) Mutual Aid Channel requirements (minimum of one).

h) Base station transmitted power, ERP, antenna height above average terrain (HAAT), antenna pattern (vertical and horizontal), ground elevation, and absolute antenna height.

(7) Discuss any significant difference between the service area and the coverage area and what steps will be taken to eliminate interference to other jurisdictions, if the coverage area exceeds the service area.

Before applicants submit an application to one of the FCC recognized frequency coordinators, the application must be reviewed at a frequency meeting of the Frequency Advisory Committee. The Committee will review the application to ensure it complies with all elements of the Regional Plan. This will NOT be a review to ensure the application form meets FCC requirements for filing.

The applicants must submit a copy of the FCC application and supporting documents to the Regional Plan Chair. An interference prediction map must be included in the documentation. TIA/EIA TSB88-A (or latest version) guidelines will be used to produce the interference map. The map must show all interference predicted using TSB88-A guidelines. Any agency with co-channel or adjacent channel allotments may request field tests of signal levels to verify interference signal levels. Agencies must be prepared to conduct these field tests if a request is made. All agencies must meet the coverage criteria of Section 7.

The frequency meetings will be held as needed to review applications. The FCC certified frequency coordinators will be notified of the meetings.

XI. ADJACENT REGION COORDINATION

Upon completion of the Final Draft of the Region 46 Plan, the chairman will send copies of the plan to the adjacent regions chairperson. Since we are utilizing the CAPRAD allocation of channels, Wyoming and the adjacent regions should be able to satisfy all border requests in conjunction with other regions. If any adjacent region has issues with providing the requests in their area, Region 46 pledges to work with that area to resolve any concerns. Since the majority of the border regions to Wyoming are very rural, there appears to be little concern. Interregional coordination documents are located in Appendix AB.

XII. HOW THE PLAN PUT SPECTRUM TO THE BEST POSSIBLE USE

As described elsewhere in this Plan, the initial allotment of channels in Region 46 was made through the CAPRAD pre-packing process that utilized a combination of population, geography and signal propagation parameters to determine channel distribution. Population is the most significant driver in predicting call for service demands on public safety agencies, and call for service demand is one of the largest drivers in the need for spectrum. Therefore, the melding of propagation influences across population aggregations on a county-area basis

provides a distribution model that most closely reflects the spectrum demands of the public safety agencies within those areas.

The RPC believes that utilizing the CAPRAD pre-packing for initial channel allotment of the narrowband spectrum, on a county-area basis, and the subsequent filing-window processing of applications for specific channel assignments, will result in the most efficient use of the spectrum as well as meeting the broadest set of needs of the eligible users of the spectrum.

XIII. DESCRIPTION OF THE FUTURE PLANNING PROCEDURES

A. Future Planning & Minutes

Region 46 will maintain a website (http://pscc.state.wy.us/spectrum.html) on which all plan documents, bylaws, meeting schedules, meeting minutes and application filing procedures will be maintained. The RPC anticipates that two types of Plan modifications will be made in the future, administrative changes that do not alter spectrum allocations in the Plan, and spectrum changes that do alter spectrum allocations in the Plan. Each of these types of changes will be handled through a different process.

B. Administrative Plan Changes

From time to time, the RPC may need to make changes to the Plan or Bylaws that are purely administrative in nature and that do not alter spectrum allocations within the county-area allocations. Examples of such changes include changes in officer positions, changes in meeting schedules, changes in application processing procedures, etc.

Administrative changes to the Plan or Bylaws will be offered to the RPC at a properly scheduled meeting and adopted at that meeting if possible. At the will of the RPC, the change may be held over for subsequent meetings to allow further information to be collected or further debate to occur. Once the change is adopted by the RPC, the amended Plan or Bylaws will be filed with the FCC for formal ratification. Copies will also be provided to the adjacent regions so they are aware of the administrative change.

C. Spectrum Allocation Changes

From time to time the RPC may need to make changes to the Plan that alter the allocation of channels between county areas. Examples of such changes include situations where one county area has fully exhausted their initial allocation and need further spectrum to meet public safety needs, and neighboring county areas have demonstrated no interest to plan for or fund utilization of the spectrum

Changes of this nature will be offered to the RPC at a properly scheduled meeting and discussed and debated at that meeting and at least one subsequent meeting. Once the change is approved by the RPC, notification of the change will be sent to adjacent Regions for coordination and concurrence. Adjacent Regions will be requested to provide comments and concerns, or consent, within 45 calendar days of receiving notice of the change.

Once the Adjacent Region comments or consent is received, or following the 45 calendar day comment period, the RPC will again consider the changes at the next scheduled meeting, incorporate any further changes needed, and vote to approve the change and submit it to the FCC for ratification.

D. Database Maintenance

Region 46 will use the CAPRAD pre-coordination database, specifically designed for use in the 746-776/794-806 MHz public safety band. This database will contain frequency availability and pre-allotment. Region 46 will use the CAPRAD database to review pending and/or complete pre-allotments for the adjacent Regions to assist in completing their respective plans.

The FCC's designated public safety frequency advisors will use the CAPRAD database during the application process (pre-coordination). Frequency advisors, as well as RPC's designated members are required to maintain the database as the applications are processed and granted by the Commission.

E. Intra-Regional Dispute Resolution Process

1. **Introduction**

The Regional Committee is established under section 90.527 of the FCC's rules and regulations which came into effect on February 15, 2001. It is an independent Committee apart form the Federal Communications Commission with authority to evaluate application for public safety uses of the spectrum allocated under FCC Docket 96-86. In addition appeals from decisions made with respect to a variety of matters regulated by the Regional Committee will be heard. The formal requirements of the appeal process are set out below.

In order to ensure that the appeal process is open and understandable to the public, the Regional Committee has developed this procedure. Those involved in the appeal process can expect the Committee and its members to follow the procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not dealt with in this document, the Committee will do whatever is necessary to enable it to adjudicate fairly, effectively and completely on the appeal. In addition, the Committee may dispense with compliance with any part or all of a particular procedure where it is appropriate in the circumstances.

As the Committee gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require a modification to the Regional Plan and will be made available to the public. The Regional Committee will make every effort to process appeals in a timely fashion and issue decisions expeditiously.

2. **Appeals**

a) Appeals Committee

The Regional Chair may organize the Committee into Sub-Committees, each comprised of one or more members, the Appeals Sub-Committee is one of those Sub-Committees. Where an appeal is scheduled to be heard by this Sub-Committee the chair is determined as follows:

(1) if the chair of the Committee is on the Sub-Committee, he/she will be the chair;

(2) if the chair of the Committee is not on the Sub-Committee but the vice-chair is, the vice-chair will be the chair; and

(3) if neither the chair nor the vice-chair is on the Sub-Committee, the Regional Committee will designate one of the members to be the chair.

b) Withdrawal or Disqualification of a Committee Member on the Grounds of Bias

Where the chair or a Committee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that a member, whether consciously or unconsciously, would not decide a matter fairly, the member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party to an appeal may challenge a member on the basis of real or a reasonable apprehension of bias.

c) Correspondence (Communicating) with the Committee

To ensure the appeal process is kept open and fair to the participants, any correspondence to the Regional Committee must be sent to the Chair and be copied to all other Committee member and other parties to the appeal, if applicable.

Committee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate.

The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

3. **Appeal Process**

a) Filing an Appeal

(1) What can be appealed

The Committee hears appeals from a determination or allocation and shall include the following: i.e. number of channels assigned, ranking in the assignment matrix, interference, or any other criteria that the region shall establish.

(2) Who can appeal

An official of the entity who filed the original application to the Regional Committee must be the person who files the appeal on behalf of the entity.

(3) How to appeal

(a) A notice of appeal must be served upon the Regional Committee. The notice of appeal may be "delivered" by mail, courier, or hand delivered to the office of the Chair and Members of the Committee as listed in the Official Membership List. The Committee will also accept a notice of appeal by facsimile to the Chair and Secretary with the original copy of the notice of appeal served as indicated above**.**

(b) Certain things must be included in a notice of appeal for it to be accepted. The notice of appeal must include:

(i) the name and address of the appellant;

(ii) the name of the person, if any, making the request for an appeal on behalf of the appellant;

(iii)the address for service of the appellant;

(iv)the grounds for appeal (a detailed explanation of the appellant's objections to the determination - describe errors in the decision);

(v) a description of the relief requested (what do you want the Committee to order at the end of the appeal);

(vi)the signature of the appellant or the appellant's representative.

(4) Time limit for filing the appeal

To appeal a determination or allocation the entity who is subject to the determination must deliver a notice of appeal within three weeks after receiving the decision. If a notice of appeal is not delivered within the time required, the right to an appeal is lost. However, the Committee is allowed to extend the deadline, either before or after its expiration based upon a majority plus one vote of the Committee.

(5) Extension of time to appeal

The Committee has the discretion to extend the time to appeal either before or after the three week deadline.

A request for an extension should be made to the Committee, in writing, and include the reasons for the delay in filing the notice of appeal and any other reasons which the requester believes support the granting of an extension of time to file the appeal. A request for an extension should accompany the notice of appeal.

In deciding whether to grant an extension, the Committee will consider whether fairness requires an extension. The Committee will take into account the length of the delay, the adequacy of the reasons for the delay, the prejudice to those affected by the delay and any impacts that may result from an extension. Other factors not identified could be relevant depending on the circumstances of the particular case.

(6) Rejection of a notice of appeal

The Committee may reject a notice of appeal if:

(a) it is determined that the appellant does not have standing to appeal; or
(b) the Committee does not have jurisdiction over the subject matter or the remedy sought.

Before a notice of appeal is rejected, the Committee will inform the appellant of this in writing, with reasons, and give the appellant a three-week opportunity to make submissions and any potential parties with an opportunity to respond.

(7) Adding parties to the appeal

In addition to the parties mentioned above, the Committee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal.

Anyone wanting to obtain party status should make a written request to the Committee as early as possible. The written request should contain the following information:

(a) the name, address, telephone and fax number, if any, of the person submitting the request;

(b) a detailed description of how the person is "affected" by the notice of appeal and

(c) the reasons why the person should be included in the appeal; and

(d) the signature of the person submitting the request.

(8) Intervener status

The Committee may also invite or permit someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. "may be affected by the appeal") but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal.

Someone wanting to take part in an appeal as an intervener should send a written request to the Committee. The written request should contain the following information: (to be determined by RPC)

Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Committee will provide all parties with an opportunity to make representations if they wish to do so.

(9) Type of appeal (written or oral) hearing

An appeal may be conducted by way of written submissions, oral hearing or a combination of both. The Committee will determine the appropriate type of appeal after a complete notice of appeal has been receive

The Committee will normally conduct an oral hearing although it may order that a hearing proceed by way of written submissions in certain cases. Where a hearing by

written submissions is being considered by the Committee, the Committee may request input from the parties.

(10) Burden of proof

The general rule is that the burden or responsibility for proving a fact is on the person who asserts it.

(11) Notification of expert evidence

The Committee requires any party that intends to present expert evidence at a hearing to provide the Committee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The notice should include a brief statement of the expert's qualifications and areas of expertise;

If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Committee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed 30 days prior to the hearing date.

(12) Documents

If a party will be referring to a document that was not provided to the Committee and all parties prior to the hearing, sufficient copies of the document must be brought to the hearing for the Committee and all other parties.

4. **Appealing the Appeals Sub-Committee's Decision**

If a party is not satisfied with the decision of the Region's Appeals Subcommittee's Decision, he or she can appeal that decision to the 700 MHz National Planning Oversight Committee.

F. Inter-Regional Dispute Resolution Process

Signed copies of Inter-Regional Coordination and Dispute Resolution agreements with the adjacent regions are attached at Appendix B.

XIV. CERTIFICATION BY THE REGIONAL PLANNING CHAIRPERSON.

I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the public.

Signed _____"

Region 46 Chairperson
Mark R. Joiner
Radio Program Manager
U.S. Department of Interior
Bureau of Land Management / Wyoming

APPENDIX A - TABLE OF INTEROPERABILITY CHANNELS
Specific Uses/Services

700 MHz Interoperability Channels, Labels, and Usage

	12.5 kHz CHANNEL PAIR	CHANNEL LABEL (proposed)	RADIO SERVICE	TALK-AROUND	CHANNEL LABEL (proposed)	USE/MISC NOTES
01	Pair 23-24/983-984	**7TAC58**	General Public Safety Service (secondary trunked)	Channel 23-24	**7TAC58D**	
02	**Pair 39-40/999-1000**	**7CAL59**	**Calling Channel**	**Channel 39-40**	**7CAL59D**	**mandatory**
03	Pair 63-64/1023-1024	**7EMS60**	EMS	Channel 63-64	**7EMS60D**	
04	Pair 79-80/1039-1040	**7EMS61**	EMS	Channel 79-80	**7EMS61D**	
05	Pair 103-104/1063-1064	**7TAC62**	General Public Safety Service (secondary trunked)	Channel 103-104	**7TAC62D**	
06	Pair 119-120/1079-1080	**7TAC63**	General Public Safety Service	Channel 119-120	**7TAC63D**	**mandatory**
07	Pair 143-144/1103-1104	**7FIR64**	Fire	Channel 143-144	**7FIR64D**	
08	Pair 159-160/1119-1120	**7FIR65**	Fire	Channel 159-160	**7FIR65D**	
09	Pair 183-184/1143-1144	**7TAC66**	General Public Safety Service (secondary trunked)	Channel 183-184	**7TAC66D**	
10	Pair 199-200/1159-1160	**7TAC67**	General Public Safety Service	Channel 199-200	**7TAC67D**	
11	Pair 223-224/1183-1184	**7LAW68**	Police	Channel 223-224	**7LAW68D**	
12	Pair 239-240/1199-1200	**7LAW69**	Police	Channel 239-240	**7LAW69D**	
13	Pair 263-264/1223-1224	**7TAC70**	General Public Safety Service (secondary trunked)	Channel 263-264	**7TAC70D**	
14	Pair 279-280/1239-1240	**7DAT71**	Mobile Data	Channel 279-280	**7DAT71D**	
15	Pair 303-304/1263-1264	**7MOB72**	Mobile Repeater	Channel 303-304	**7MOB72D**	**mandatory**
16	Pair 319-320/1279-1280	**7TAC73**	Other Public Service	Channel 319-320	**7TAC73D**	**mandatory**

Channels labeled as mandatory include both the mobile transmit and mobile receive (a total of 16 channels) for subscriber units only

700 MHz Interoperability Channels, Labels, and Usage (continued)

	12.5 kHz CHANNEL PAIR	CHANNEL LABEL	RADIO SERVICE	TALK-AROUND	CHANNEL LABEL	USE/MISC NOTES
17	Pair 641-642/1601-1602	**7EMS76**	EMS	Channel 641-642	**7EMS76D**	
18	Pair 657-658/1617-1618	**7TAC74**	General Public Safety Service (secondary trunked)	Channel 657-658	**7TAC74D**	
19	**Pair 681-682/1641-1642**	**7CAL75**	**Calling Channel**	**Channel 681-682**	**7CAL75D**	**mandatory**
20	Pair 697-698/1657-1658	**7EMS77**	EMS	Channel 697-698	**7EMS77D**	
21	Pair 721-722/1681-1682	**7FIR80**	Fire	Channel 721-722	**7FIR80D**	
22	Pair 737-738/1697-1698	**7TAC78**	General Public Safety Service (secondary trunked)	Channel 737-738	**7TAC78D**	
23	Pair 761-762/1721-1722	**7TAC79**	General Public Safety Service	Channel 761-762	**7TAC79D**	**mandatory**
24	Pair 777-778/1737-1738	**7FIR81**	Fire	Channel 777-778	**7FIR81D**	
25	Pair 801-802/1761-1762	**7LAW84**	Police	Channel 801-802	**7LAW84D**	
26	Pair 817-818/1777-1778	**7TAC82**	General Public Safety Service (secondary trunked)	Channel 817-818	**7TAC82D**	
27	Pair 841-842/1801-1802	**7TAC83**	General Public Safety Service	Channel 841-842	**7TAC83D**	
28	Pair 857-858/1817-1818	**7LAW85**	Police	Channel 857-858	**7LAW85D**	
29	Pair 881-882/1841-1842	**7MOB88**	Mobile Repeater	Channel 881-882	**7MOB88D**	**mandatory**
30	Pair 897-898/1857-1858	**7TAC86**	General Public Safety Service (secondary trunked)	Channel 897-898	**7TAC86D**	
31	Pair 921-922/1881-1882	**7DAT87**	Mobile Data	Channel 921-922	**7DAT87D**	
32	Pair 937-938/1897-1898	**7TAC89**	Other Public Service	Channel 937-938	**7TAC89D**	**mandatory**

Channels labeled as mandatory include both the mobile transmit and mobile receive (a total of 16 channels) for subscriber units only

700 MHz Interoperability Channels – Frequency List

	FREQUENCY (MHz) OR CHANNEL SET Channel Pair	CHANNEL LABEL (proposed)	USE/MISC NOTES	FREQUENCY (lower edge) (base)	(mobile)	FREQUENCY (center) (base)	(mobile)
01	Pair 23-24/983-984	**7TAC58**		764.13750	794.13750	764.14375	794.14375
02	**Pair 39-40/999-1000**	**7CAL59**	**mandatory**	764.23750	794.23750	764.24375	794.24375
03	Pair 63-64/1023-1024	**7EMS60**		764.38750	794.38750	764.39375	794.39375
04	Pair 79-80/1039-1040	**7EMS61**		764.48750	794.48750	764.49375	794.49375
05	Pair 103-104/1063-1064	**7TAC62**		764.63750	794.63750	764.64375	794.64375
06	Pair 119-120/1079-1080	**7TAC63**	nationwide	764.73750	794.73750	764.74375	794.74375
07	Pair 143-144/1103-1104	**7FIR64**		764.88750	794.88750	764.89375	794.89375
08	Pair 159-160/1119-1120	**7FIR65**		764.98750	794.98750	764.99375	794.99375
09	Pair 183-184/1143-1144	**7TAC66**		765.13750	795.13750	765.14375	795.14375
10	Pair 199-200/1159-1160	**7TAC67**	(alt)	765.23750	795.23750	765.24375	795.24375
11	Pair 223-224/1183-1184	**7LAW68**		765.38750	795.38750	765.39375	795.39375
12	Pair 239-240/1199-1200	**7LAW69**		765.48750	795.48750	765.49375	795.49375
13	Pair 263-264/1223-1224	**7TAC70**		765.63750	795.63750	765.64375	795.64375
14	Pair 279-280/1239-1240	**7DAT71**		765.73750	795.73750	765.74375	795.74375
15	Pair 303-304/1263-1264	**7MOB72**	nationwide	765.88750	795.88750	765.89375	795.89375
16	Pair 319-320/1279-1280	**7TAC73**	nationwide	765.98750	795.98750	765.99375	795.99375

700 MHz Interoperability Channels – Frequency List (continued)

	FREQUENCY (MHz) OR CHANNEL SET Channel Pair	CHANNEL LABEL (proposed)	USE/MISC NOTES	FREQUENCY (lower edge) (base)	(mobile)	FREQUENCY (center) (base)	(mobile)
17	Pair 641-642/1601-1602	**7EMS76**		774.00000	804.00000	774.00625	804.00625
18	Pair 657-658/1617-1618	**7TAC74**		774.10000	804.10000	774.10625	804.10625
19	**Pair 681-682/1641-1642**	**7CAL75**	**mandatory**	774.25000	804.25000	774.25625	804.25625
20	Pair 697-698/1657-1658	**7EMS77**		774.35000	804.35000	774.35625	804.35625
21	Pair 721-722/1681-1682	**7FIR80**		774.50000	804.50000	774.50625	804.50625
22	Pair 737-738/1697-1698	**7TAC78**		774.60000	804.60000	774.60625	804.60625
23	Pair 761-762/1721-1722	**7TAC79**	nationwide	774.75000	804.75000	774.75625	804.75625
24	Pair 777-778/1737-1738	**7FIR81**		774.85000	804.85000	774.85625	804.85625
25	Pair 801-802/1761-1762	**7LAW84**		775.00000	805.00000	775.00625	805.00625
26	Pair 817-818/1777-1778	**7TAC82**		775.10000	805.10000	775.10625	805.10625
27	Pair 841-842/1801-1802	**7TAC83**	(alt)	775.25000	805.25000	775.25625	805.25625
28	Pair 857-858/1817-1818	**7LAW85**		775.35000	805.35000	775.35625	805.35625
29	Pair 881-882/1841-1842	**7MOB88**	nationwide	775.50000	805.50000	775.50625	805.50625
30	Pair 897-898/1857-1858	**7TAC86**		775.60000	805.60000	775.60625	805.60625
31	Pair 921-922/1881-1882	**7DAT87**		775.75000	805.75000	775.75625	805.75625
32	Pair 937-938/1897-1898	**7TAC89**	nationwide	775.85000	805.85000	775.85625	805.85625

700 MHz Interoperability Channels – Talk-around (Simplex/Direct) Frequency List

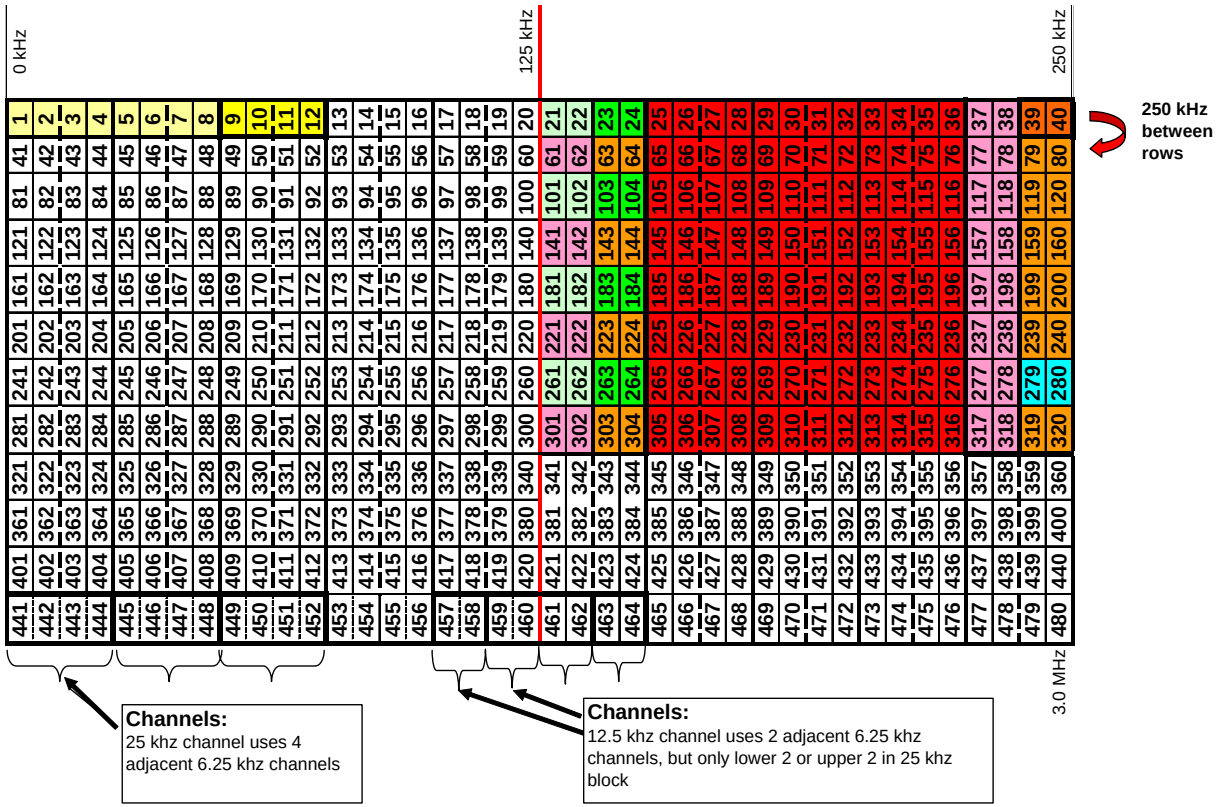
	TALK-AROUND	CHANNEL LABEL (proposed)	FREQUENCY (lower edge) (base)	(mobile)	FREQUENCY (center) (base)	(mobile)
01	Channel 23-24	**7TAC58D**	764.13750	794.13750	764.14375	794.14375
02	**Channel 39-40**	**7CAL59D**	764.23750	794.23750	764.24375	794.24375
03	Channel 63-64	**7EMS60D**	764.38750	794.38750	764.39375	794.39375
04	Channel 79-80	**7EMS61D**	764.48750	794.48750	764.49375	794.49375
05	Channel 103-104	**7TAC62D**	764.63750	794.63750	764.64375	794.64375
06	Channel 119-120	**7TAC63D**	764.73750	794.73750	764.74375	794.74375
07	Channel 143-144	**7FIR64D**	764.88750	794.88750	764.89375	794.89375
08	Channel 159-160	**7FIR65D**	764.98750	794.98750	764.99375	794.99375
09	Channel 183-184	**7TAC66D**	765.13750	795.13750	765.14375	795.14375
10	Channel 199-200	**7TAC67D**	765.23750	795.23750	765.24375	795.24375
11	Channel 223-224	**7LAW68D**	765.38750	795.38750	765.39375	795.39375
12	Channel 239-240	**7LAW69D**	765.48750	795.48750	765.49375	795.49375
13	Channel 263-264	**7TAC70D**	765.63750	795.63750	765.64375	795.64375
14	Channel 279-280	**7DAT71D**	765.73750	795.73750	765.74375	795.74375
15	Channel 303-304	**7MOB72D**	765.88750	795.88750	765.89375	795.89375
16	Channel 319-320	**7TAC73D**	765.98750	795.98750	765.99375	795.99375

700 MHz Interoperability Channels – Talk-around (Simplex/Direct) Frequency List (continued)

	TALK-AROUND	CHANNEL LABEL (proposed)	FREQUENCY (lower edge) (base)	(mobile)	FREQUENCY (center) (base)	(mobile)
17	Channel 641-642	**7EMS76D**	774.00000	804.00000	774.00625	804.00625
18	Channel 657-658	**7TAC74D**	774.10000	804.10000	774.10625	804.10625
19	**Channel 681-682**	**7CAL75D**	774.25000	804.25000	774.25625	804.25625
20	Channel 697-698	**7EMS77D**	774.35000	804.35000	774.35625	804.35625
21	Channel 721-722	**7FIR80D**	774.50000	804.50000	774.50625	804.50625
22	Channel 737-738	**7TAC78D**	774.60000	804.60000	774.60625	804.60625
23	Channel 761-762	**7TAC79D**	774.75000	804.75000	774.75625	804.75625
24	Channel 777-778	**7FIR81D**	774.85000	804.85000	774.85625	804.85625
25	Channel 801-802	**7LAW84D**	775.00000	805.00000	775.00625	805.00625
26	Channel 817-818	**7TAC82D**	775.10000	805.10000	775.10625	805.10625
27	Channel 841-842	**7TAC83D**	775.25000	805.25000	775.25625	805.25625
28	Channel 857-858	**7LAW85D**	775.35000	805.35000	775.35625	805.35625
29	Channel 881-882	**7MOB88D**	775.50000	805.50000	775.50625	805.50625
30	Channel 897-898	**7TAC86D**	775.60000	805.60000	775.60625	805.60625
31	Channel 921-922	**7DAT87D**	775.75000	805.75000	775.75625	805.75625
32	Channel 937-938	**7TAC89D**	775.85000	805.85000	775.85625	805.85625

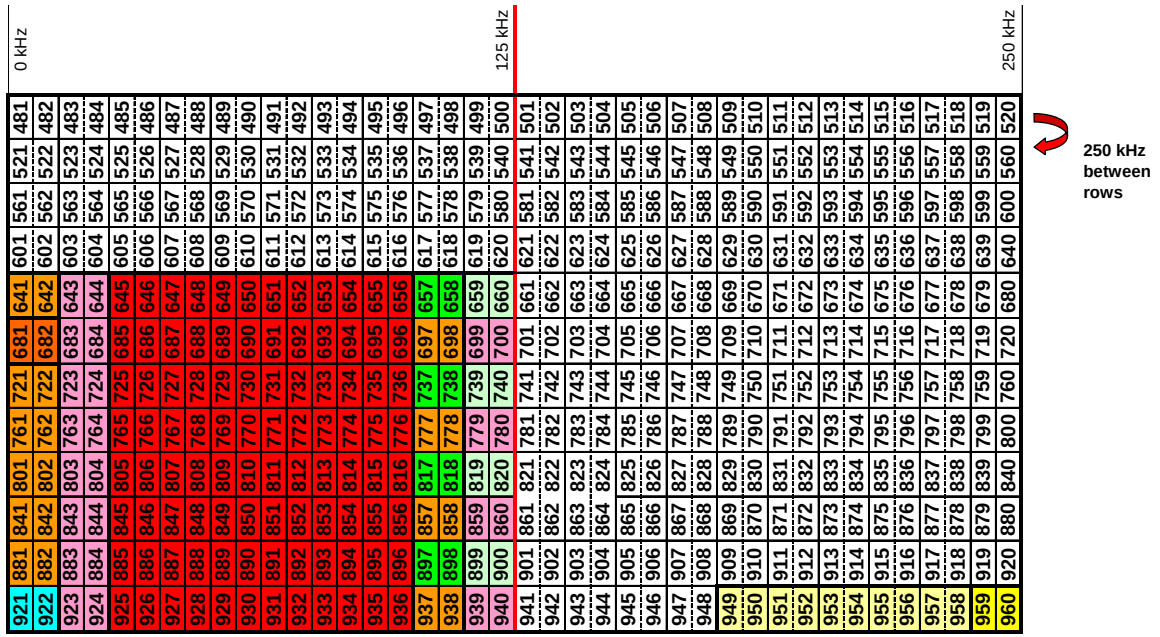
700 MHz Narrowband Channel Layout Plan – TV Channel 63-68 (764-767/794-797 MHz)

TV CH 63/68



700 MHz Narrowband Channel Layout Plan – TV Channel 64-69 (773-776/803-806 MHz)

TV CH 64/69

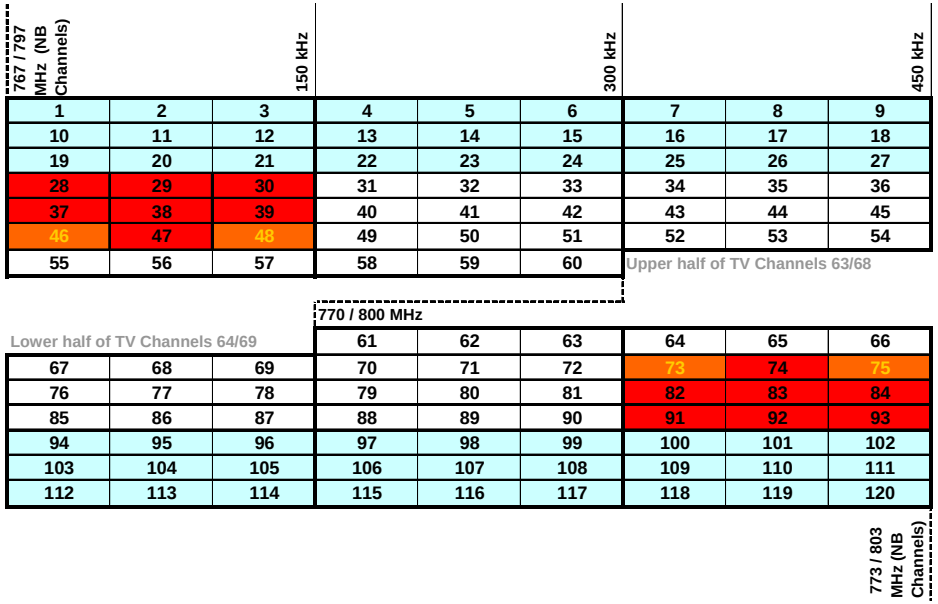


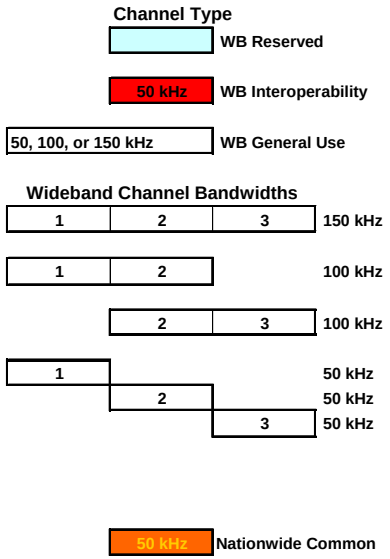
700 MHz Wideband Channel Layout Plan – 767-773/797-803 MHz

	CHANNELS	CHANNEL LABEL (proposed)	USAGE PARAMETERS	FREQUENCY (lower edge) (base)	(mobile)	FREQUENCY (center) (base)	(mobile)
01	Pair 28/148	**7WDAT1A**	**50 KHz**	768.350	798.350	768.375	798.375
02	Pair 29/149	**7WDAT1B**	**50 KHz**	768.400	798.400	768.425	798.425
03	Pair 30/150	**7WDAT1C**	**50 KHz**	768.450	798.450	768.475	798.475
	Pair 28-29/148-149	**7WDAT1E**	**aggregated 100 KHz (lower)**	768.350	798.350	768.400	798.400
	Pair 29-30/149-150	**7WDAT1F**	**aggregated 100 KHz (upper)**	768.400	798.400	768.450	798.450
	Pair 28-30/148-150	**7WDAT1G**	**aggregated 150 KHz**	768.350	798.350	768.425	798.425
04	Pair 37/157	**7WDAT2A**	**50 KHz**	768.800	798.800	768.825	798.825
05	Pair 38/158	**7WDAT2B**	**50 KHz**	768.850	798.850	768.875	798.875
06	Pair 39/159	**7WDAT2C**	**50 KHz**	768.900	798.900	768.925	798.925
	Pair 37-38/157-158	**7WDAT2E**	**aggregated 100 KHz (lower)**	768.800	798.800	768.850	798.850
	Pair 38-39/158-159	**7WDAT2F**	**aggregated 100 KHz (upper)**	768.850	798.850	768.900	798.900
	Pair 37-39/157-159	**7WDAT2G**	**aggregated 150 KHz**	768.800	798.800	768.875	798.875
07	**Pair 46/166**	**7WDAT3A**	**50 KHz - no aggregation = nationwide common**	**769.300**	**799.300**	769.325	799.325
08	Pair 47/167	**7WDAT3B**	**50 KHz - no aggregation**	769.350	799.350	769.375	799.375
09	**Pair 48/168**	**7WDAT3C**	**50 KHz - no aggregation = nationwide common**	**769.400**	**799.400**	769.425	799.425
10	**Pair 73/193**	**7WDAT4A**	**50 KHz - no aggregation = nationwide common**	**770.600**	**800.600**	770.625	800.625
11	Pair 74/194	**7WDAT4B**	**50 KHz - no aggregation**	770.650	800.650	770.675	800.675
12	**Pair 75/195**	**7WDAT4C**	**50 KHz - no aggregation = nationwide common**	**770.700**	**800.700**	770.725	800.725
13	Pair 82/202	**7WDAT5A**	**50 KHz**	771.050	801.050	771.075	801.075
14	Pair 83/203	**7WDAT5B**	**50 KHz**	771.100	801.100	771.125	801.125
15	Pair 84/204	**7WDAT5C**	**50 KHz**	771.150	801.150	771.175	801.175
	Pair 82-83/202-203	**7WDAT5E**	**aggregated 100 KHz (lower)**	771.050	801.050	771.100	801.100
	Pair 83-84/203-204	**7WDAT5F**	**aggregated 100 KHz (upper)**	771.100	801.100	771.150	801.150
	Pair 82-84/202-204	**7WDAT5G**	**aggregated 150 KHz**	771.050	801.050	771.125	801.125
16	Pair 91/211	**7WDAT6A**	**50 KHz**	771.500	801.500	771.525	801.525
17	Pair 92/212	**7WDAT6B**	**50 KHz**	771.550	801.550	771.575	801.575
18	Pair 93/213	**7WDAT6C**	**50 KHz**	771.600	801.600	771.625	801.625
	Pair 91-92/211-212	**7WDAT6E**	**aggregated 100 KHz (lower)**	771.500	801.500	771.550	801.550
	Pair 92-93/212-213	**7WDAT6F**	**aggregated 100 KHz (upper)**	771.550	801.550	771.600	801.600
	Pair 91-93/202-204	**7WDAT6G**	**aggregated 150 KHz**	771.500	801.500	771.575	801.575

Note: Channels 46 & 48 and 73 & 75 are reserved
as 50 KHz Nationwide Common Channels

700 MHz Wideband Channel Layout Plan – 767-773/797-803 MHz





Note: Channels 46 & 48 and 73 & 75 are reserved as 50 KHz Nationwide Common Channels

APPENDIX AA - NOTIFICATIONS BY RPC TO SECONDARY TV STATIONS

SAMPLE NOTIFICATION OF COMMENCEMENT OF PLANNING PROCESS

Secondary LPTV and/or TV Translator Station and Call Sign
Address

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for _____ (state or regional planning area – e.g. Western Pennsylvania, Central Texas, etc.) By this letter, (TV Station Call sign/location) is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[1] You will be notified when Region __'s 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band.

Sincerely,

Mr./Ms. (Regional Chair)
Regional Chairperson Region __
Contact Info

[1] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Loflin Children's Trust – One (K64EP)
PO Box 40483
Baton Rouge, LA 70835

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K64EP is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[2] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

[2] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Mark III Media, Inc (K68DC)
2312 Sagewood
Casper, WY 82601

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K68DC is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[3] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

Mark III Media, Inc (K68DC)
2312 Sagewood
Casper, WY 82601

[3] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Cynthia Richardson (K68GL)
6731 Overhill Road
Mission Hills, KS 66208-2263

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K68GL is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[4] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

[4] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Central Wyoming College (K63BO)
2660 Peck Avenue
Riverton, WY 82501

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K63BO is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[5] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

[5] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Park County (K69CS)
1002 Sheridan Avenue
Cody, WY 82414-3532

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K69CS is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[6] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

[6] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

Wyoming Channel 2 (K69DD)
#1 Shackleford Drive
Little Rock, AR 72211

14 November, 2006

To Whom It May Concern:

This letter serves as formal notification of the commencement of the 700 MHz Regional Planning process for Wyoming Region 46. By this letter, K69DD is put on notice that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[7] You will be notified when Region 46's 700 MHz Plan has been approved by the FCC and again as public safety systems begin to be implemented in the band. If you have any questions, please contact me at phone number (307) 332-8460.

Sincerely,

Mr. Mark Joiner
Regional Chairperson
USDI/Bureau of Land Management
Telecommunications
1335 Main Street
Lander, WY 82520

[7] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

SAMPLE NOTIFICATION OF FCC APPROVAL OF 700 MHz REGIONAL PLAN

Secondary LPTV and/or TV Translator Station and Call Sign
Address

To Whom It May Concern:

This letter serves as formal notification of the FCC approval of the 700 MHz Regional Planning for _____ (state or regional planning area – e.g. Western Pennsylvania, Central Texas, etc.) By this letter, (TV Station Call sign/location) is reminded that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations.[1] You will be notified when public safety systems have been implemented in the band.

Sincerely,

Mr./Ms. (Regional Chair)
Regional Chairperson Region __
Contact Info

[1] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

SAMPLE NOTIFICATION OF IMPLEMENTATION OF
700 MHz PUBLIC SAFETY SYSTEM

Secondary LPTV and/or TV Translator Station and Call Sign
Address

To Whom It May Concern:

This letter serves as formal notification of the implementation of a public safety land mobile communications system located in (location/call sign) . By this letter, (TV Station Call sign/location) is reminded that its operations are secondary to this primary public safety land mobile operation. Low power TV stations and TV translators may not cause interference to this public safety system and must accept any interference they might receive from these operations.[1]

Sincerely,

Mr./Ms. (Regional Chair)
Regional Chairperson Region __
Contact Info

[1] The Report and Order on ET Docket No. 97-157 (FCC 97-421) for the "Reallocation of Television Channels 60-69, the 746-806 MHz Band," clearly defined Land Mobile operations as a "primary service" and that Low power TV and TV translator operations are secondary to all primary services in this band (see paragraphs 14 and 25-31).

APPENDIX AB - COVER LETTERS TO ADJACENT REGIONAL CHAIRS

SAMPLE

Chair Region __
Address

Dear _____

Attached is the Final 700 MHz Regional Plan for Region __. Please review and respond within 60 days of receipt. For your convenience, I have attached a sample Adjacent Region Concurrence letter that you can use to formally acknowledge your Region's approval of Region __'s Plan. If you have any questions, do not hesitate to contact me.

I have also attached an Inter-Regional Dispute Resolution Agreement that must be signed by you and must accompany my Regional Plan when filed with the FCC. As we have discussed, this Agreement simply formalizes the process we will use to ensure concurrence to any frequency allocations in our Regional borders and the steps we will take to resolve any disagreements.

Thank you for your time and attention to this matter.

Sincerely,

Chair, Region ____
Contact Info

APPENDIX AC - LIST OF 700 MHz NARROWBAND LOW POWER

FREQUENCIES SUBJECT TO RPC ADMINISTRATION

In the Third Report & Order in Docket 96-86, the FCC allocated twenty-four 6.25 kHz frequency pairs for low power, on-site operations such as fire-ground. Analog-primary operations are permitted on these frequencies. When allocating for analog use, 12.5 kHz bandwidth would be required. Operation on these frequencies is limited to 2 watts ERP and antenna height it limited to 20' above ground.

Six (three 12.5 kHz) of these frequency pairs are for nationwide, itinerant use, are not subject to Regional Planning. The remaining 18 (nine 12.5 kHz) low power frequency pairs are to be administered by the 700 MHz Regional Planning Committees. The chart shows frequency pairs, the base side on the left, the mobile side on the right. The middle column indicates whether the frequency is RPC-administered or nationwide, itinerant. The low power frequencies are:

Channel #	Frequency	Use	Channel #	Frequency
1	764.003125	**RPC Admin**	961	794.003125
2	764.009375	**RPC Admin**	962	794.009375
3	764.015625	**RPC Admin**	963	794.015625
4	764.021875	**RPC Admin**	964	794.021875
5	764.028125	**RPC Admin**	965	794.028125
6	764.034375	**RPC Admin**	966	794.034375
7	764.040625	**RPC Admin**	967	794.040625
8	764.046875	**RPC Admin**	968	794.046875
9	764.053125	**Itinerant**	969	794.053125
10	764.059375	**Itinerant**	970	794.059375
11	764.065625	**Itinerant**	971	794.065625
12	764.071875	**Itinerant**	972	794.071875
949	775.928125	**RPC Admin**	1909	805.928125
950	775.934375	**RPC Admin**	1910	805.934375
951	775.940625	**RPC Admin**	1911	805.940625
952	775.946875	**RPC Admin**	1912	805.946875
953	775.953125	**RPC Admin**	1913	805.953125
954	775.959375	**RPC Admin**	1914	805.959375
955	775.955625	**RPC Admin**	1915	805.955625
956	775.971875	**RPC Admin**	1916	805.971875
957	775.978125	**RPC Admin**	1917	805.978125
958	775.984375	**RPC Admin**	1918	805.984375
959	775.990625	**Itinerant**	1919	805.990726
960	775.996875	**Itinerant**	1920	805.996875

APPENDIX B - MEMORANDUM OF UNDERSTANDING

Template

Minimum Criteria Required in the MOU

TO: (signer of application and title)
(agency name)

FROM: (name), Chairman

DATE: (mm/dd/yyyy)

SUBJECT: Memorandum of Understanding for Operating the 700 MHz Interoperability Channels

This memorandum of understanding (hereafter referred to as MOU) shall be attached to the application when submitting it. By virtue of signing and submitting the application and this MOU, (agency name) (hereafter referred to as APPLICANT) affirms its willingness to comply with the proper operation of the Interoperability (interoperability) channels as dictated by the Region Planning Committee (here after referred to as RPC) as approved by the Federal Communications Commission (hereafter referred to as FCC) and by the conditions of this MOU.

The APPLICANT shall abide by the conditions of this MOU which are as follows:

- To operate by all applicable State, County, and City laws/ordinances.
- To utilize "plain language" for all transmissions.
- To monitor the Calling Channel(s) and coordinate the use of the Tactical Channels.
- To identify inappropriate use and mitigate the same from occurring in the future.
- To limit secondary Trunked operation to the interoperability channels specifically approved on the application and limited to channels listed below.
- To relinquish secondary Trunked operation of approved interoperability channels to requests for primary conventional access with same or higher priority.
- To mitigate contention for channels by exercising the Priority Levels identified in this MOU.

The preceding conditions are the primary, though not complete, requirements for operating in the interoperability channels. Refer to the Region Plan for the complete requirements list.

Priority Levels:

1. Disaster or extreme emergency operation for mutual aid and interagency communications;
2. Emergency or urgent operation involving imminent danger to life or property;
3. Special event control, generally of a preplanned nature (including Task Force operations)
4. Single agency secondary communications (default priority).

To resolve contention within the same priority, the channel should go to the organization with the wider span of control/authority. This shall be determined by the State Interoperability Executive Committee or RPC for the operation or by the levels of authority/government identified in the contention.

For clarification purposes and an aid to operate as authorized, any fixed base or mobile relay stations identified on the license for temporary locations (FCC station class FBT or FB2T, respectively) shall remain within the licensed area of operation. Similarly, vehicular/mobile repeater stations (FCC station class MO3) shall remain within the licensed area of operation. Federal agencies are permitted access to interoperability channels only as authorized by 47 CFR 2.102 (c) & 2.103 and Part 7.12 of the NTIA Manual.

Any violation of this MOU, the Region Plan, or FCC Rule shall be addressed immediately. The first level of resolution shall be between the parties involved, next the State Interoperability Executive Committee or RPC, and finally the FCC.

Secondary Trunked Channels[8]

7GTAC05 - Channel 23 & 24	7GTAC35 - Channel 657 & 658
7GTAC07 - Channel 103 & 104	7GTAC37 - Channel 737 & 738
7GTAC09 - Channel 183 & 184	7GTAC39 - Channel 817 & 818
7GTAC11 - Channel 263 & 264	7GTAC41 - Channel 897 & 898

_____ (typed or printed name of authorized signer)
_____ (authorized signer identified above and consistent with application)
_____ (date)
_____ (agency name)
_____ (agency address)
_____ (agency address)
_____ (agency address)
_____ (signer's phone)
_____ (signer's email address, if available)

[8] As adopted by the FCC in the 4th MO&O, WT Docket 96-86 dated March 5, 2002.

APPENDIX C - SHARING AGREEMENT

TEMPLATE

(Agency Letterhead of Licensee)

TO: (recipient person and title)
(recipient agency)

FROM: (authorizing person and title)
(authorizing agency)

DATE: (mm/dd/yyyy)

SUBJECT: Sharing Agreement

_____(grantor) authorizes _____(grantee) to operate _____ (quantity) mobile (vehicular or hand-held) radios. Such operation shall be per the following parameters.

Call Sign	Frequency(ies)	Max. Power	Channel Description
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(Use additional attachments as necessary for more frequencies/channels)

This written agreement applies to operations in cooperation and coordination with activities of the licensee per Region (#) Plan, FCC Rules 47 CFR Parts 2.102(c), 2.103 and 90.421 and Part 7.12 of the NTIA Manual. Furthermore, grantor reserves the right to effectively eliminate the possibility of unauthorized operation, which ultimately could result in terminating this written agreement.

_____ (typed or printed name of authorized signer)
_____ (authorized signer identified above)
_____ (date)
_____ (agency name)
_____ (agency address)
_____ (agency address)
_____ (agency address)
_____ (signer's phone)
_____ (signer's email address, if available)

APPENDIX D - REGIONAL COMMITTEE DISPUTE RESOLUTION PROCESS

INTRODUCTION

The Regional Committee is established under section 90.527 of the FCC's rules and regulations which came into effect on (date)_____. It is an independent Committee apart from the Federal Communications Commission with authority to evaluate application for public safety uses of the spectrum allocated under FCC Docket 96-86. In addition, appeals from decisions made with respect to a variety of matters regulated by the Regional Committee will be heard. The formal requirements of the appeal process are set out below.

In order to ensure that the appeal process is open and understandable to the public, the Regional Committee has developed this procedure. Those involved in the appeal process can expect the Committee and its members to follow the procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not dealt with in this document, the Committee will do whatever is necessary to enable it to adjudicate fairly, effectively and completely on the appeal. In addition, the Committee may dispense with compliance with any part or all of a particular procedure where it is appropriate in the circumstances. As the Committee gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require a modification to the Regional Plan and will be made available to the public.
The Regional Committee will make every effort to process appeals in a timely fashion and issue decisions expeditiously.

APPEALS COMMITTEE

Members

The Regional Chair may organize the Committee into Sub-Committees, each comprised of one or more members, the Appeals Sub-Committee is one of those Sub-Committees.
Where an appeal is scheduled to be heard by this Sub-Committee the chair is determined as follows: if the chair of the Committee is on the Sub-Committee, he/she will be the chair; if the chair of the Committee is not on the Sub-Committee but the vice-chair is, the vice-chair will be the chair; and if neither the chair nor the vice-chair is on the Sub-Committee, the Regional Committee will designate one of the members to be the chair.

Withdrawal or Disqualification of a Committee Member on the Grounds of Bias

Where the chair or a Committee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that a member, whether consciously or unconsciously, would not decide a matter fairly, the member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party to an appeal may challenge a member on the basis of real or a reasonable apprehension of bias.

Correspondence (Communicating) with the Committee

To ensure the appeal process is kept open and fair to the participants, any correspondence to the Regional Committee must be sent to the Chair and be copied to all other Committee members and other parties to the appeal, if applicable.

Committee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate.
The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

THE APPEAL PROCESS

Filing an Appeal

What can be appealed

The Committee hears appeals from a determination or allocation and shall include the following: i.e. number of channels assigned, ranking in the assignment matrix, interference, or any other criteria that the region shall establish.

Who can appeal

An official of the entity who filed the original application to the Regional Committee must be the person who files the appeal on behalf of the entity.

How to appeal

A notice of appeal must be served upon the Regional Committee. The notice of appeal may be "delivered" by mail, courier, or hand delivered to the office of the Chair and Members of the Committee as listed in the Official Membership List. The Committee will also accept a notice of appeal by facsimile to the Chair and Secretary with the original copy of the notice of appeal served as indicated above.

Certain things must be included in a notice of appeal for it to be accepted. The notice of appeal **must** include:

The name and address of the appellant;
The name of the person, if any, making the request for an appeal on behalf of the appellant;
The address for service of the appellant;
The grounds for appeal (a detailed explanation of the appellant's objections to the determination - describe errors in the decision);
A description of the relief requested (What do you want the Committee to order at the end of the appeal?);
The signature of the appellant or the appellant's representative.

Time limit for filing the appeal

To appeal a determination or allocation the entity who is subject to the determination must deliver a notice of appeal within three weeks after receiving the decision. If a notice of appeal is not delivered

within the time required, the right to an appeal is lost. However, the Committee is allowed to extend the deadline, either before or after its expiration based upon a majority plus one vote of the Committee.

Extension of time to appeal

The Committee has the discretion to extend the time to appeal either before or after the three week deadline. A request for an extension should be made to the Committee, in writing, and include the reasons for the delay in filing the notice of appeal and any other reasons which the requester believes support the granting of an extension of time to file the appeal. A request for an extension should accompany the notice of appeal.

In deciding whether to grant an extension, the Committee will consider whether fairness requires an extension. The Committee will take into account the length of the delay, the adequacy of the reasons for the delay, the prejudice to those affected by the delay and any impacts that may result from an extension. Other factors not identified could be relevant depending on the circumstances of the particular case.

Rejection of a notice of appeal

The Committee may reject a notice of appeal if:

it is determined that the appellant does not have standing to appeal; or

the Committee does not have jurisdiction over the subject matter or the remedy sought.

Before a notice of appeal is rejected, the Committee will inform the appellant of this in writing, with reasons, and give the appellant a three-week opportunity to make submissions and any potential parties with an opportunity to respond.

Adding parties to the appeal

In addition to the parties mentioned above, the Committee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal. Anyone wanting to obtain party status should make a written request to the Committee as early as possible. The written request should contain the following information:

The name, address, telephone and fax number, if any, of the person submitting the request;
A detailed description of how the person is "affected" by the notice of appeal and
The reasons why the person should be included in the appeal; and
The signature of the person submitting the request.

Intervener status

The Committee may also invite or permit someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. "may be affected by the appeal") but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal.

Someone wanting to take part in an appeal as an intervener should send a written request to the Committee. The written request should contain the following information: (to be determined by RPC)

Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Committee will provide all parties with an opportunity to make representations if they wish to do so.

Type of appeal (written or oral) hearing

An appeal may be conducted by way of written submissions, oral hearing or a combination of both. The Committee will determine the appropriate type of appeal after a complete notice of appeal has been received.

The Committee will normally conduct an oral hearing although it may order that a hearing proceed by way of written submissions in certain cases. Where a hearing by written submissions is being considered by the Committee, the Committee may request input from the parties.

Burden of proof

The general rule is that the burden or responsibility for proving a fact is on the person who asserts it.

Notification of expert evidence

The Committee requires any party that intends to present expert evidence at a hearing to provide the Committee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The notice should include a brief statement of the expert's qualifications and areas of expertise.

If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Committee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed 30 days prior to the hearing date.

Documents

If a party will be referring to a document that was not provided to the Committee and all parties prior to the hearing, sufficient copies of the document must be brought to the hearing for the Committee and all other parties.

APPEALING THE APPEALS SUBCOMMITTEE'S DECISION

If a party is not satisfied with the decision of the Region's Appeals Subcommittee's Decision, he or she can appeal that decision to the 700 MHz National Planning Oversight Committee.

APPENDIX E - AGENDAS

SAMPLE

1. Introduction (By Convener)

   A. Appoint Temporary Secretary
   B. Purpose of Meeting: 96-86 700 MHz

2. Election of Chair

   A. Nominations for Chair (and Vice Chair)
   B. Elections
   C. Appointment of Secretary, Treasurer and Standing Committee Chairs
   D. Standing Committees
   E. Adoption of Bylaws
   F. Development of Draft Plan
   G. Establish Future Meetings and Locations
   H. Adjourn

AGENDA
Region 46
700 Mhz Regional Planning Committee
November 28, 2001
Holiday Inn, Casper, Wyoming

1. Call to order by Bill Smith (Regional Chairperson)

    A. Introduce members of committee.
    B. Purpose of the meeting: To review progress on 700 MHz regional plan.

2. Review plan progress and make corrections, changes, new input.

3. Determine what constitutes a quorum, with respect to RPC meetings.

4. Adoption of bylaws, based on the plan review.

5. Progress report on NIJ database development (Bill Smith)

6. Discuss accounting issues.

7. Approval of committee work to date.

8. Set date for next meeting.

9. Adjourn

APPENDIX F - BY-LAWS

BYLAWS OF REGION 46

ARTICLE 1

NAME & PURPOSE

1.1 Name and purpose. The name of this Region shall be Region 46. Its primary purpose is to foster cooperation, planning, development of regional plans and the implementation of these plans in the 700 MHz Public Safety Band.

ARTICLE II

MEMBERS

For purposes of this Article, the term "member," unless otherwise specified, refers to both voting and non-voting members.

2.1 Number, Election and Qualification. The Regional Committee shall have two classes of members, "voting members" and "non-voting members." New members may be added at annual, special, or regular meetings.

Voting Members. Voting members shall consist of one representative from any single state or federal agency, county or municipality engaged in public safety eligible to hold a license under 47 CFR 90.20, 47 CFR 90.523 or 47 CFR 2.103. Except that a single state or federal agency, county or municipality licensed in multiple eligibility categories shall be allowed no more than one vote for each distinct eligibility category (e.g. police, fire, EMS, highway) within the agency's organization or political jurisdiction. For instance, a county with several fire districts will have one vote for the fire eligibility category. In voting on any issue the individual must identify himself/herself and the agency and eligibility category which he or she represents. Voting members may not vote on issues involving their entity.

Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.

2.2 Tenure. In general, each member shall hold MEMBERSHIP from the date of acceptance until resignation or removal.

2.3 Powers and Rights. In addition to such powers and rights as are vested in them by law, or these bylaws, the members shall have such other powers and rights as the membership may determine.

2.4 Suspension and Removal. A representative may be suspended or removed with cause by vote of a majority of members after reasonable notice and opportunity to be heard. Failure to attend 50% of meetings held in a calendar year shall be a specific cause for removal from the membership.

2.5 Resignation. A member may resign by delivering written resignation to the chairman, vice-chairman, treasurer or secretary of the Regional Committee or to a meeting of the members.

2.6 Annual Meetings. The annual meeting of the members shall be held in conjunction with the annual meeting of the Wyoming Association of Public Safety Communications Officials (WYAPCO). If an annual meeting is not held as herein provided, a special meeting of the members may be held in place thereof with the same force and effect as the annual meeting, and in such case all references in these bylaws, except in this Section 2.6, to the annual meeting of the members shall be deemed to refer to such special meeting. Any such special meeting shall be called and notice shall be given as provided in Section 2.7 and 2.8.

2.7 Special Meetings. Special meetings of the members may be held at any time and at any place within the Regional Committee area. Special meetings of the members may be called by the chairman or by the vice-chairman, or in case of death, absence, incapacity, by any other officer or, upon written application of two or more members.

2.8 Call and Notice.

Annual meetings. Reasonable notice of the time and place of special meetings of the members shall be given to each member. Such notice need not specify the purposes of a meeting, unless otherwise required by law or these bylaws or unless there is to be considered at the meeting (i) amendments to these bylaws, (ii) an increase or decrease in the number of members, or (iii) removal or suspension of a member who is an officer.

Reasonable and sufficient notice. Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a member to send notice by mail at least five days or by e-mail/facsimile at least three days before the meeting, addressed to such member at this or her usual or last known business address, or, to give notice to such member in person or by telephone at least three days before the meeting.

2.9 Quorum. At any meeting of the members, a majority of the officers and a simple majority of the voting members present shall constitute a quorum. Any meeting may be adjourned to such date or dates not more than ninety days after the first session of the meeting by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

2.10 Action by Vote. Each voting member, representing a particular agency (one vote per state or federal agency, county or municipality, or one vote per eligibility category within a state agency, county or municipality) shall have one vote; non-voting members have no right to

vote. When a quorum is present at any meeting, a majority of the votes properly cast by voting members present shall decide any question, including election to any office, unless otherwise provided by law or these bylaws.

2.11 Action by Writing. Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if all members entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of the members. Such consents shall be treated for all purposes as a vote at a meeting.

2.12 Proxies. Voting members may vote either in person or by written proxy dated not more than one month before the meeting named therein, which proxies shall be filed before being noted with the secretary or other person responsible for recording the proceedings of the meeting. Unless otherwise specifically limited by their terms, such proxies shall entitle the holders thereof to vote at any adjournment of the meeting by the proxy shall terminate after the final adjournment of such meeting.

2.13 Voting on One's Own Application. At no time can a voting member vote on his/her application.

2.14 Special Interest Voting. A voting member can not have a commercial interest in any of his/her region and/or adjacent regions application(s) on which he/she is reviewing, approving and/or voting.

ARTICLE III

OFFICERS AND AGENTS

3.1 Number and qualification. The officers of the Regional Committee shall be a chairman, vice-chairman, treasurer, secretary and such other officers, if any, as the voting members may determine. All officers must be voting members of the Regional Committee.

3.2 Election. The officers shall be elected by the voting members at their second meeting and, thereafter, at the annual meeting of the members.

3.3 Tenure. The officers shall each hold office until the annual meeting of the members held within one year from the adoption of these bylaws, or until their successor, if any, is chosen, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified.

3.4 Chairman and Vice Chairman. The chairman shall be the chief executive officer of the Regional Committee and, subject to the control of the voting members, shall have general charge and supervision of the affairs of the Regional Committee. The chairman shall preside at all meetings of the Regional Committee.

3.5 The Vice Chairman, if any, shall have such duties and powers as the voting members shall determine. The vice-chairman shall have and may exercise all the powers and duties of the chairman during the absence of the chairman or in the event of his or her inability to act.

3.6 Secretary/Treasurer. The secretary/treasurer shall record and maintain records of all proceedings of the members in a file or series of files kept for that purpose, which file or files shall be kept within the Region and shall be open at all reasonable times to the inspection of any member. Such file or files shall also contain records of all meetings and the original, or attested copies, of bylaws and names of all members and the address (including e-mail address, if available) of each. If the secretary/treasurer is absent from any meeting of members, a temporary secretary/treasurer chosen at the meeting shall exercise the duties of the secretary at the meeting. The Secretary/Treasurer shall have responsibility for the region's financial affairs, however funds, and the accounting thereof, shall be maintained by the Treasurer of the Wyoming Chapter of APCO.

3.7 Suspension or Removal. An officer may be suspended with cause by vote of a majority of the voting members.

3.8 Resignation. An officer may resign by delivering his or her written resignation to the chairman, vice-chairman, treasurer, or secretary of the Regional Committee. Such resignation shall be effective upon receipt (unless specified to be effective at some other time), and acceptance thereof shall not be necessary to make it effective unless it so states.

3.9 Vacancies. If the office of any officer becomes vacant, the voting members may elect a successor. Each such successor shall hold office for the remainder of the term, and in the case of the chairman, vice chairman, treasurer and clerk until his or her successor is elected and qualified, or in each case until he or she sooner dies, resigns, is removed or become disqualified. The Chairman will appoint a successor to the vacant Chairman office if there is no Vice Chairman to fill this position. The appointed Chairman will hold the vacant office until the office is filled by a duly elected Chairman.

ARTICLE IV

AMENDMENTS

These bylaws may be altered, amended or repealed in whole or in part by vote. The voting members may by a two-thirds vote, alter, amend, or repeal any bylaws adopted by the Regional Committee members or otherwise adopt, alter, amend or repeal any provision which FCC regulation or these bylaws requires action by the voting members.

ARTICLE V

DISSOLUTION

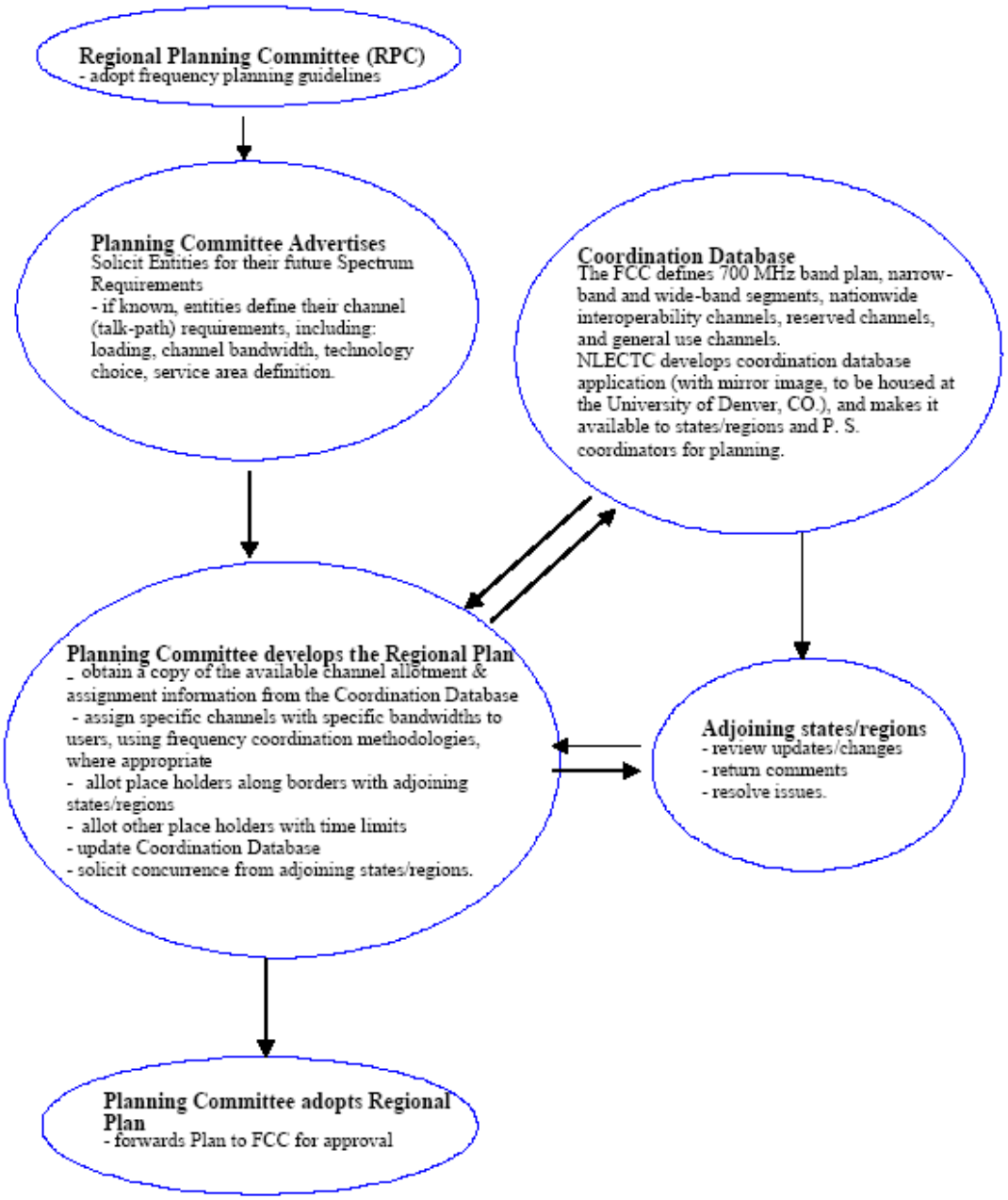
This Regional Committee may be dissolved by the consent of two-thirds plus one of the members in good standing at a special meeting called for such purpose. The FCC shall be notified.

ARTICLE VI

RULES OF PROCEDURES

The Conduct of Regional Meetings including without limitation, debate and voting, shall be governed by Robert's Rules of Order Newly Revised (10th Edition) © 2000.

APPENDIX G
PRE-PLANNING FLOW CHART



APPENDIX H - FUNDING REQUEST FORM

APPENDIX I - MEETING NOTICES

SAMPLE

PUBLIC NOTICE

Federal Communications Commission 445 12th St., S.W.
Washington, D.C. 20554

DA 00-1852
August 18, 2000

WIRELESS TELECOM ACTION

TEXAS PUBLIC SAFETY PLANNING COMMITTEE (REG ION 51) ANNOUNCES FIRST MEETING

In accordance with provisions contained in The Development of Operational, Technical and Spectrum Requirements For Meeting Federal, State and Local Public Safety Agency Communications Requirements For Priority Access Service, *First Report and Order* and *Third Notice of Proposed Rulemaking,* WT Docket No. 96-86,14 FCC Rcd 152,190 en 77, the FCC has adopted a regional planning approach to spectrum management for specific channels though-out the 700 MHz band.

By this notice, the Region 51 (Texas - Houston) 700 MHz Public Safety Planning Committee announces that its first meeting will be held on November 8, 2000 at 9:00 a.m., C.S.T., at the George R. Brown Convention Center General Assembly Room C, 1001 A venida de las Americas, Houston, Texas. The purpose of the meeting is to begin the formation of a coordinated regional plan for Region 51, Texas - Houston, including the counties of Shelby, Nacogdoches, San Augustine, Sabine, Houston, Trinity, Angelina, Walker, San Jacinto, Polk, Tyler, Jasper, Newton, Montgomery, Liberty, Hardin, Orange, Waller, Harris, Chambers, Jefferson, Galveston, Brazoria, Fort Bend, Austin, Colorado, Wharton and Matagorda.

All parties having Public Safety interests within Region 51 are encouraged to attend. For further information, please contact:

Ronald Gillory, Convener
Region 51, 700 MHz Public Safety Planning Committee Houston Police Department,
Comms. Mngt. Div.
61 Reisner St.,
Houston. Texas 77002
(713) 247-5744 (voice); (713) 247-4368 (fax) sezron @ix.netcom.com
www.hic.net/region51

Additional information about 700 MHz National/Regional Planning and related matters can be found on the Public Safety web site located at: http://www.fcc.gov/wtb/publicsafetyI700MHz/.

2002 APCO Annual Meeting Agenda

A block of rooms at the ***Casper Holiday Inn*** (307) 235-2531 has been reserved at the special rate of $55.00/night (single) $65.00/night (double). When making your reservations, be sure to reference APCO to receive this special rate. You may also register online at www.holiday-inn.com and fill in Casper, WY, then click to find a hotel. It will prompt you to the date, enter your arrival date of November 18 or 19, 2002 and the group booking code is WHP.

Monday - November 18 - (7:00 PM – 9:00 PM)

700 MHz Committee Meeting - Kent Drummond

Tuesday - November 19 - (9:00 AM - 7:00 PM)

- ***9:00 - 10:15 AM***
  GIS Dispatch Technology - Bulberry
- ***10:15 - 10:30 AM***
  Break
- ***10:30 - 11:15 AM***
  Wireless Phase I and Phase II - Contact One
- ***11:15 AM - 12:45 PM***
  Lunch (included in registration)
- ***12:45 - 1:45 PM***
  Wireless Data /700 mHz Devices - Motorola
  (Greenhouse Project) - Gary Caprioglio
- ***1:45 - 2:00 PM***
  Break
- ***2:00 - 3:00 PM***
  Casper 800 MHz Project Update - Lt. Brian Sanborn / Mark Harshman
- ***3:00 - 6:00 PM***
  Time Dedicated to Vendor Displays
- ***6:00 - 7:00 PM***
  Holiday Inn Managers Reception – Enjoy the hospitality of the Casper Holiday Inn with beverages and hors d'oeuvres.

Wednesday - November 20 (8:00 AM - 4:00 PM)

- ***7:00 – 8:00 AM***
  Continental Breakfast
- ***8:00 – 9:00 AM***
  Wyoming HHomeland Security Update - Marty Luna
  COG - Communications Operations Group
  PICS - Portable Interoperability Communications System
- ***9:00 - 10:30 AM***
  Gene McGahey - National Law Enforcement and Corrections Technology Center (NLECTC) – Rocky Mountain Region Communications
- ***10:30 - 10:45 AM***
  Break
- ***10:45 AM - 12:00 PM***
  Meeting call to order
  General Election
  White Paper Reports
- ***12:00 - 1:00 PM***
  Lunch (included in registration)
- ***1:00 - 4:00 PM***
  PSMC - Robert Wilson and meet planning project consultant from Federal Engineering
  700 MHz Update - Kent Drummond
  National APCO Update - Dan Perko
  APCO Projects Update - Patty Bauer
  APCO Awards - Bill Gordon

updated 2002/11/01 1015

Wyoming APCO
3rd Annual Meeting

November 18-19, 2003
Casper, Wyoming
Holiday Inn

Mark your Calendar - Make your Reservations - More Information to Follow!

Monday Evening
- 700 MHz Meeting – 7:00 p.m. (Holiday Inn – Alpine Room)

Tuesday Topics *(planned)*
- Terrorist Indicators (Chuck Bayne–Wyoming Law Enforcement Academy) (a.m.)
- Basic Radio Technology for Telecommunicators (Kathy Imel–LaLoba International Inc.) (p.m.)
- Backup Communications Center-Do you have a Plan? (Larry Sheridan-WYDOT) (p.m.)
- Join us for the Holiday Inn Managers Reception – Poolside

Wednesday Topics *(planned)*
- Solving Interoperability one Agency at a Time
  - WYDOT Update (Robert Wilson-WYDOT)
  - WYOLINK
  - Linking Disparate Systems
- Federal Grant Funding (Peter Hambuch-Motorola)
- E-911; Phase I and Phase II (Shelly Guenther-Intrado)
- 700 MHz (Kent Drummond-Wyoming A&I/ITD)
- Mobile Data Today and Tomorrow (Tom Bruscino-Twin Eagle)
  - Casper Public Safety System
  - WYOLINK
  - 700 MHz
  - Satellite
- Updates
  - WYOLINK
  - Justice Project (Dave Adsit-Gillette Police Department)
  - 911 Surcharge Legislation (Rob Cleveland-Laramie County Emergency Management)
  - Portable Interoperable Communications Systems (PICS) (Brian Grimm-WOHS)
- Wyoming APCO Business Meeting
  - Election of Officers
  - Bylaws
  - Awards

If you have questions about the meeting or have a particular topic you'd like to see addressed please contact:

- Dan Perko 307-777-5659
- Patty Bauer 307-777-4325
- Kelly Hamilton 307-777-6441
- Bryan Sanborn 307-235-8338

Casper Holiday Inn Reservations: 1-877-576-8636 or 307-235-2531 - Ask for the APCO Room Rate
Motel Registration Room Block Deadline for Reservations is November 3, 2002
Conference Registration Deadline is November 10, 2003

CASPER Star Tribune
Wyoming's Statewide Newspaper

AFFIDAVIT OF PUBLICATION

STATE OF WYOMING
NATRONA COUNTY

I, the undersigned, being a person in the empl
of the CASPER STAR-TRIBUNE, a newspap
published in CASPER, NATRONA COUNTY
WYOMING, and knowing the facts herein set
do so solemnly swear that a copy of the
e as per clipping attached was printed anc
shed

daily
(weekly)

regular and entire issue of said newspape
ot in any supplement thereof, for

8 consecutive days
(weeks)

ncing with issue dated

December 17, 2000

ending with issue dated

February 4, 2001

Signed Liz Helen

Subscribed in my presence and sworn to before
me this

6th day of February,
2001.

NOTARY PUBLIC
DIANA C. CRAIG
COUNTY OF NATRONA
STATE OF WYOMING
My Commission Expires July 9, 2002

PUBLIC MEETING NOTICE

The initial meeting of the Wyoming Public Safety Region 46 planning committee for 700 MHz will be held February 15, 2001, at 10:00 A.M. at the Wyoming Department of Transportation Auditorium, 5300 Bishop Blvd., Cheyenne, Wyoming.

The FCC adopted a regional approach to spectrum management for public safety channels in the 700 MHz two-way radio band in "WT Docket No. 96-86 First Report and Order and Third Notice of Proposed Rule Making." Adopted: Aug. 6, 1998, Released: Sept. 29, 1998.

For more information, contact the convener for the meeting, Bill Smith, Communications System Supervisor for the Wyoming DOT. Write him at 5300 Bishop Blvd., Cheyenne, WY 82009. Call him at (307) 777-4440. Fax him at (307) 777-4764. Direct e-mail to bsmith1@state.wy.us.

We encourage anyone with public safety interest in Region 46 to attend.

Legal No. 434762 Publish: December 17, 24, 31, 2000; January 7, 14, 21, 28, 2001; and February 4, 2001

From: Linda Bailey
To: inet.mime("edwardst.@apco911.org")
Date: 12/8/00 2:22pm
Subject: 700 MHz Meeting

PUBLIC MEETING NOTICE

The initial meeting of the Wyoming Public Safety Region 46 planning committee for 700 MHz will be held February 15, 2001, at 10:00 A.M. at the Wyoming Department of Transportation Auditorium, 5300 Bishop Blvd., Cheyenne, Wyoming. The FCC adopted a regional approach to spectrum management for public safety channels in the 700 MHz two-way radio band in "WT Docket No. 96-86 First Report and Order and Third Notice of Proposed Rule Making." Adopted: Aug. 6, 1998, Released: Sept 29, 1998.
For more information, contact the convener for the meeting, Bill Smith, Communications System Supervisor for the Wyoming DOT. Write him at 5300 Bishop Blvd., Cheyenne, WY 82009. Call him at (307) 777-4440. Fax him at (307) 777-4764. Direct e-mail to bsmith1@state.wy.us.
We encourage anyone with public safety interest in Region 46 to attend.

Associated Public-Safety Communications Officers, Inc.

It's a privilege to belong to APCO

WYOMING CHAPTER

MEMORANDUM

TO: All State, Local, and Federal Governmental Entities

FROM: Bill Smith, Convener

DATE: December 13, 2000

SUBJECT: Wyoming's 700 Megahertz Regional Planning

Though the Balance Budget Act of 1997, Congress directed the FCC to reallocate 24 megahertz of spectrum recovered from television Channels 60-69 as a result of the digital television proceeding for public safety services. In 1998, the FCC reallocated 24 megahertz of spectrum for public safety service and sought comment on the best use of this spectrum. This led to the adoption of the 700 MHz band plan and service rules contained in the First Report and Order. Part of the band plan designated 2.6 megahertz, or 10.8% of the band, to nationwide public safety interoperability use. The FCC chartered the National Coordination Committee (NCC) as an advisory committee for the purpose of addressing and advising the FCC on certain public safety communications matters. The FCC charged the NCC to prepare a report on the technical and operational standards for interoperability frequencies in this new public safety band. The FCC has proposed to adopt the majority of the NCC's recommendation which can be found in WT Docket No. 96-86. One recommendation is to allow applicants to aggregate four contiguous 6.25 kHz channels to form 25 kHz channels, which allows higher data speed. It was concluded that states should administer the interoperability channels and have Regional Planning Committees (RPC) development Regional Plans and submit them to the FCC as Wyoming did with the Region 46 Plan for 800 MHz in 1990.

All interested parties are invited to attend a statewide meeting in Cheyenne at the Wyoming Department of Transportation auditorium, 5300 Bishop Boulevard, on February 15, 2001 at 10:00 A.M. in conjunction with a SALECS Commission meeting convening at 1:00 P.M.. The attendees should elect a chairperson and appoint a secretary, who will start the Regional Planning process.

For more information, contact the convener for the meeting, Bill Smith, Communications System Supervisor for the Wyoming DOT. Write him at 5300 Bishop Blvd., Cheyenne, WY 82009. Call him at (307) 777-4440. Fax him at (307) 777-4764. Direct e-mail to bsmith1@state.wy.us.

PUBLIC NOTICE

News media information 202 / 418-0500
Fax-On-Demand 202 / 418-2830
TTY 202 / 418-2555
Internet: http://www.fcc.gov
ftp.fcc.gov

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

DA 03-3058
October 6, 2003

WIRELESS TELECOMUNICATIONS BUREAU ACTION

REGION 46 (WYOMING) 700 MHz REGIONAL PLANNING COMMITTEE ANNOUNCES NEXT MEETING

The Region 46 (Wyoming) 700 MHz Public Safety Regional Planning Committee announces that its next meeting will be held on Monday, November 17, 2003, 7:00 p.m. at the Casper Holiday Inn, Aspen Room, 300 West "F" Street, Casper, Wyoming.

The primary purpose of the meeting is to discuss:

1. The status of the Region 46 700 MHz plan development, and
2. The new FCC requirement that each Regional Planning Committee develop a 4.9 GHz band plan.

The Region 46 (Wyoming) 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers whose sole purpose or principal purpose is to protect the safety of life, health, or property in Region 31 would utilize these frequencies. It is essential that not only public safety, but all government, Native American Tribal, and non-governmental organizations eligible under Section 90.523 of the Commission's Rules be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs.

All interested parties wishing to participate in the planning for the use of either the new public safety spectrum in the 700 MHz band or the newly allocated 4.9 GHz band are encouraged to attend. For further information about the meeting, please contact:

Kent Drummond, Chairman
700 MHz Regional Planning Committee
Department of Administration, OCIO
2001 Capitol Avenue, Room 214

Telecommunicator/ continued from page 40

That is the lesson here. All centers must plan for contingencies. You must know what you will do if the tornado hits, the floodwaters rise – or the history-making event focuses all eyes on you. And you cannot ever count on everything else being perfect so that you are optimally situated to handle "the big one" when it arrives. Chances are everything else will be far from perfect.

The trick here is to be well-trained enough, well-planned enough and well-policied enough to handle a big acute crisis on top of some chronic ones, if necessary. An old adage among pilots says the first emergency is not usually what causes the plane crash. It is a small emergency – an equipment failure, a sudden attack of nausea, a distraction – followed by another problem or series of problems. The last problem becomes unsurmountable because of an inability to handle them all at once. Then the plane crashes or, in the case of comm centers, the liabilities mount up. The pilot who survives – or in this case the comm center that copes – is the one that plans for adversity arriving in an already imperfect world.

About the Author

Jennifer Hagstrom has more than 12 years experience as a telecommunicator. You can reach her by e-mail at hagstromj@apco911.org or by phone at (888) APCO-911, ext. 2444. ■

Att:
Kent
Drummond

WYOMING
ASSOCIATION
OF MUNICIPALITIES

To: Wyoming Towns and Cities (Please Copy and Distribute as Needed)
Date: December 14, 2000
From: George Parks, Executive Director
Re: **Heads Up**

WAM INFO

- **Now is the time to meet with legislators** to make sure they understand what your community needs, so they can be effective advocates. Pinedale, Lander, Sheridan, Greybull, Thermopolis and Cheyenne are planning legislative meetings in December and January. If anyone needs information regarding legislative issues affecting cities and towns, please contact your local legislators or the WAM office.
- **EOW (Elected Officials Workshop)** is scheduled in Cheyenne for January 24-26th. We sent out registration information this week to all council members and mayors. If you have any questions, please give our office a call.
- **WAMCAT Winter Conference** is scheduled for January 10-12, Rawlins.

WYOMING INFO

- **GOOD NEWS FOR MUNICIPALITIES!** The **Corporations Committee** has declined to consider an industry proposed bill on right of way and franchises. They discussed taking the issue up as an interim topic after the legislature adjourns.
- The **Select Water Committee** has approved both the planning and construction bills—more good news to communities with projects on the list. It was also agreed the state would look into reviewing drinking water primacy. After the municipal reserve account discussion, it was agreed the concern was not with the reserve accounts themselves, but with the question of whether all sizes of municipalities can benefit equally from Water Development Projects.
- **Governor Geringer** presented the supplemental budget proposal including and increase of $4.9 million in mineral royalty grant program, administered by SLIB. *Please encourage your legislator to support this increase.*
- **De-earmarking** is being discussed by legislators and others regarding delaying the effective date till July 1, 2002. This would be a good alternative and give legislators opportunity for a comprehensive review of funding for local governments.
- The Department of **Family** Services and the Department of Corrections are jointly releasing two Requests for Proposals (RFP's) aimed to improve the availability and quality of child care. The RFP's can by obtained by contacting A&I-Purchasing at (307) 777-7253. The RFP's are:
  - #0152-H Community Child Care Systems Development
    This RFP seeks to award funds to local governmental entities to address community child care needs.
  - #0151-H Program Development and Enhancement
    The purpose of this RFP is to increase the availability of quality child care for infants/toddlers, school age children, minorities and underserved populations.
    The closing date for the RFP is January 31, 2001.If you have questions, you may contact Sue Bacon at 777-6848.

- Legislative/State Meetings:
  Dec. 14-15, Lander, Joint Transportation and Highways Interim Committee. At 1:30 Proposed draft legislation of the Aeronautics Commission is scheduled. LSO-00599.C1, Merger of aeronautics and transportation commissions, and LSO-0060.C2, Aeronautics commission-separate operating agency will be discussed.
  Dec. 18, Casper, Joint Judiciary Interim Committee
  Dec. 18, Cheyenne, Mineral Tax Incentives Subcommittee
  Dec. 19, Cheyenne, Mineral Valuation and Taxation Committee
  Dec. 20, Cheyenne, Joint Revenue Interim Committee
  Dec. 27, Ft. Washakie, Select Committee Tribal Relations

- **February 15, 2001**, Cheyenne, initial meeting of the Wyoming Public Safety Region 46 planning committee for 700 MHz will be held at 10am at WYDOT. The FCC adopted a regional approach to spectrum management for public safety channels in the 700MHz 2-way radio band in "WT Docket No. 96-86 First Report and Order and Third Notice

of Proposed Rule Making." Adopted: Aug. 6, 1998, Released: Sept. 29, 1998. For more information, contact Bill Smith 307-777-4764 or email: bsmith1@state.wy.us.

- **WAM Office is accepting applications for the WAM-WCCA Energy Lease Program.** This program is designed to assist cities/towns and counties with energy saving projects, such as, replacement boiler, insulated windows, better insulation. These are 0% "leases" with a maximum request of $50,000. Approximately $150,000 to $200,000 is awarded each year. For more information, call Stephanie Reeves at the WAM Office, 307-632-0398. Deadline is December 31, 2000.
- **The Wyoming Business Council is accepting proposals for energy efficiency projects, utilizing Exxon funds and Stripper Well funds.** For information and a copy of the RFP, call John Nunley, Wyoming Business Council, 307-777-2804, or email John at jnunle@state.wy.us.
- **Applications seeking AML funding** are due on or before February 12, 2001.All requests, including re-submissions, must follow application procedures for AML Public Facility Funding. The application procedures and forms can be viewed and printed on the DEQ website, http://deq.state.wy.us/aml.htm.

NATIONAL INFO

- The USDA is accepting applications from educational organizations and rural health care providers for $325 million in loans and grants in 2001. Of that amount, $15 million is available in grants, $200 million in loans and $110 million in grant/loan combinations. Grants are awarded on a competitive basis and go to the most rural and most economically disadvantaged areas. For more information, check out the web site, http://www.civic.com/civic/articles/2000/1106/web-usda-11-09-00.asp
- The National League of Cities adopted the Natural Resource Policy in Boston last week. This proposal was initiated by WAM and supports concepts of multi-use and sustained yield.

AGENDA
WYOMING CHAPTER
ASSOCIATION OF PUBLIC - SAFETY COMMUNICATIONS OFFICIALS
ANNUAL MEETING
NOVEMBER 28, 2001
HOLIDAY INN – CASPER, WY

Nov.27, 2001 6:00 to 7:00PM - HOLIDAY INN Hosted Managers Reception, Pool Side

8:00AM	Continental Breakfast (Sponsored)	
8:45AM	WYAPCO Business Meeting	Dan Perko, President
	Pledge of Allegiance	
	Introductions	
	Treasurers Report	Alli Flores, Secretary/Treasurer
	Membership Dues (Tier 1 vs. Tier 2) for 2003	
	Election of 2002 Officers	Bill Morton, 2nd Vice President
	Other Issues	
9:45AM	Benefits of Membership in APCO	Patty Bauer, 1st Vice President
10:15AM	Break (Sponsored)	
10:30AM	Public Safety Mobile Radio Project Presentation	Robert Wilson, WYDOT Telecommunications
	Casper Communications Project	Lt. Bryan Sanborn, Casper PD
	Cheyenne Communication Project	Roger Allsop, Laramie Co. Sheriff
11:30AM	Discussion: Strategy for the Legislative Session	Representative Wayne Johnson, HD 9 and Dan Perko
12:30PM	Lunch (included in registration)	
1:30PM	APCO Projects Update	Bill Smith, Nat'l .Rep. and
	Project 36 – CAD Systems	Patty Bauer, 1st Vice President
	Project 38 – Wireless 911	
	Project 39 – Commercial Interference	
	Project 40 – Dispatch Center Staffing Crisis	
2:15PM	Break (Sponsored)	

Speaker Presentation Co-Sponsored by WYAPCO and SALECS Commission

2:30PM	NYC World Trade Center Rescue/Recovery Communications Challenges	Lt. Stewart Anderson, Natrona County Emergency Management Coordinator
4:00PM	700 MHz Committee Meeting	Bill Smith, Chairman

State Agency Law Enforcement Communications System Commission
SALECS

Linda Bailey
WyDOT Telecommunications Program
5300 Bishop Boulevard
Cheyenne, WY 82002

December 7, 2000

Meeting Minutes

SALECS Commission Chairman, Kelly Hamilton, called the meeting to order at 1:21 p.m. The meeting was held in Casper, Wyoming at the Game and Fish District Office.

SALECS COMMISSIONERS PRESENT:
- Chairman Kelly Hamilton, Livestock Board
- Vice Chair, Patricia Bauer, WyDOT Highway Patrol Dispatch
- Michael Conners, Sheriffs' Association
- Chief Billy Janes, Police Chiefs' Association
- Russ Pollard, Wyoming Game & Fish Department

SALECS COMMISSIONERS ABSENT:
- David Guille, Public-at-Large
- Steve Miller, Division of Criminal Investigation
- David J. Bliss, SALECS Executive Director

OTHERS PRESENT:
- Mike Birtcher, Sheridan County
- Richard Bolin, WyDOT Highway Patrol Dispatch
- Kent Drummond, A&I Information Planning & Coordination Office
- Bill Fleming, Motorola
- John Greene, WyDOT Telecommunications Program
- Bill Morton, Wyoming Emergency Management Agency
- Ron Painchard, Motorola
- Craig Post, Two-Way Radio Service
- Bryan N. Sanborn, Casper Police Department
- Bill Smith, WyDOT Telecommunications Program
- Gary Weaver, Wyoming State Parks & Historical Sites
- Linda Witko, City of Casper

APPROVAL OF SEPTEMBER 14, 2000 MEETING MINUTES:
- Commissioner Billy Janes moved, seconded by Commissioner Patty Bauer, to approve the minutes of the September 14, 2000 meeting as distributed. MINUTES APPROVED.

FREQUENCY REPORT — BILL SMITH, WYDOT TELECOMMUNICATIONS PROGRAM:
- Mr. Smith reported that, for the period beginning January 1, 2000 through December 7, 2000, 15 industrial and 35 local government/police coordinations have been completed. A COPY OF REPORT IS ATTACHED.

DISPATCH REPORT — PATRICIA BAUER:
- A copy of the Dispatch Report beginning January through November 2000 is attached. Commissioner Bauer also distributed a summary, which includes the total of number of radios for each agency along with the total number of events for the period beginning September 1999 through September 2000. This time period was used to compile the billing for the use of SALECS radio.

- After all the MOUs, as well as supporting resolutions from the various associations, have been received, they will be compiled by Mr. Drummond and Mr. Ahern. After they are compiled, Mr. Ahern will request a meeting with the Governor at which the MOUs will be presented to him and the plan will be discussed.

- Mr. Drummond participated in the video conference and attended the WCCA winter meeting. He addressed the individual and collective concerns of the county commissioners. At the WCCA meeting, the county commissioners adopted a resolution desiring to form a real strategic alliance with the State of Wyoming for the purpose of determining the need for a new wireless communications systems, as compared to replacing the existing components of the present system. A copy of the resolution is attached.

- Mr. Drummond also made a presentation to the State Emergency Management Association. The Association passed a resolution in support of the concept of the new system. The state fire wardens also passed a supporting resolution.

- Mr. Drummond recommended that the SALECS Commission wait until the A&I IPC Office compiles the MOU information.

OLD BUSINESS:

- SALECS Commission Composition Change – Draft Legislation.
  - Chairman Hamilton will follow-up with Frank Galeotos, regarding the SALECS Commission's recommendation to have legislation drafted, which would change the composition of the Commission to include State Parks.

NEW BUSINESS:

- Wyoming's 700 MHz Regional Planning – Bill Smith, Convener.
  - Mr. Smith, convener, announced that the initial meeting of the Wyoming Public Safety Region 46 planning committee for 700 MHz will be held on February 15, 2001, beginning at 10:00 a.m. The meeting will be held at the Wyoming Department of Transportation Auditorium, 5300 Bishop Boulevard, Cheyenne, Wyoming. All interested parties are invited to attend the statewide meeting. Attendees of the meeting will elect a chairperson and appoint a secretary, who will start the Regional Planning process. A copy of Mr. Smith's memorandum and the public notice is attached.

    Commissioner Janes moved, seconded by Commissioner Conners, to pay from the SALECS Commission administrative funds for the public meeting advertisements in the Casper Star Tribune. MOTION CARRIED.

- City of Casper 800 System – Linda Witko.
  - Ms. Witko advised the Commission that the City has an appeal before the Casper City Council regarding the tower for its 800 system. She requested that a representative from State appear before the council to endorse the City's efforts regarding this system and tower placement. The Council meeting will be held at 6:00 p.m. on December 19, 2000. It was suggested that John Greene, Bill Smith, Dan Perko, and/or Kent Drummond attend the meeting.

ELECTION OF SALECS COMMISSION OFFICERS:

- For the office of chairman, Commissioner Bauer nominated Kelly Hamilton. The nomination was seconded by Commissioner Janes. Kelly Hamilton was unanimously elected as chairman.

- For the office of vice chairman, Commissioner Janes nominated Patty Bauer. The nomination was seconded by Commissioner Conners. Patty Bauer was unanimously elected as vice chairman.

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Colorado

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:30 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Colorado

For our files.....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:15 PM
> To: 'Reynolds, Emery (Freq. Advisory)'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Colorado
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
>
> If questions arise, please feel free to contact me.
>
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Idaho

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:31 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Idaho

For our files.....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:17 PM
> To: 'idaho@apco911.org'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Idaho
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
>
> If questions arise, please feel free to contact me.
>
>
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Nebraska

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:32 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Nebraska

For our files....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:12 PM
> To: 'nebraska@apco911.org'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Nebraska
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
>
> If questions arise, please feel free to contact me.
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Utah

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:38 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Utah

For our files.....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:18 PM
> To: 'nmckean@vecc911.org'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Utah
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
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>
>
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Montana

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:39 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Montana

For our files.....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:17 PM
> To: 'dhawkins@state.mt.us'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to Montana
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
>
> If questions arise, please feel free to contact me.
>
>
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

Kent Drummond - FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to South Dakota

From: FLEMING BILL-C13320 <W.Fleming@motorola.com>
To: "Smith, Bill (WY Transp.)" <bsmith1@missc.state.wy.us>, "Drummond, Kent (SALECS)" <KDRUMM@state.wy.us>
Date: 12/13/01 5:40 PM
Subject: FW: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to South Dakota

For our files.....

Regards,
Wm. Fleming
ph - 970.416.0123
fax - 970.416.0044
w.fleming@motorola.com

> -----Original Message-----
> From: FLEMING BILL-C13320
> Sent: Thursday, December 13, 2001 5:16 PM
> To: 'kmcintire@minnehahacounty.org'
> Subject: Region 46, State of Wyoming 764-776/794-806 Regional Plan notification to South Dakota
>
> As required by the Regional Planning Outline Item 11, the State of Wyoming is notifying adjacent regions that Region 46 is in the process of compiling the 700 MHz regional plan. When the spectrum data base becomes available, further notices will be communicated to you regarding the State's final recommendations.
>
> If questions arise, please feel free to contact me.
>
>
>
> Regards,
> Wm. Fleming
> ph - 970.416.0123
> fax - 970.416.0044
> w.fleming@motorola.com
>

State of Wyoming
A&I
Planning & Coordination

Phone - 307/777-5492
FAX - 307/777-3696

Date: 4 November 02 **Pages:(incl. this page)** 5

This FAX is directed to: Kathy Red Cloud

Company: Fort Washakie Police Dept.

Phone: 307-332-3112

Fax number: 307-332-9542

Sent by: Kent Drummond

Phone number: 307-777-3627

Kathy,

Here are two e-mails I have sent out, announcing the 700 MHz Regional Planning Meeting. Also, there are the forms for registering for the APCO meeting and the agenda. As you can see there are going to be 700 MHz topic of discussion during both days of the APCO meeting.

I would say if you had to make a choice of any to attend, the most important would be the RPC Committee meeting on Monday night, November 18th, from 6:30 to 9:00 p.m. at the Holiday Inn in Casper. If you have any questions, please call or email me.

Kent E Drummond

Kent Drummond, Vice-Chair
Region 46 Regional Planning Committee
Cheyenne, WY
kdrumm@state.wy.us

From: Kent Drummond
To: Bill Fleming; Craig Post; Jeff Alexander; Jim Johnson; Kathy Red Cloud; Phil Dumars
Date: 10/21/02 10:49AM
Subject: 700 MHz RPC Annual Meeting

Hi all,

This is just to give you a heads-up that the 700 MHz Regional Planning Committee is still active and things are moving along. Primarily, this is a reminder to you that we agreed in our first meeting that we would hold annual meetings in conjuction with the Wyoming APCO annual meeting.

The WYAPCO meeting is scheduled for November 19-20 at the Holiday Inn in Casper. I've attached the APCO meeting information for your use. As you read through the agenda you'll see that there are going to be 700 MHz related presentations on both days, so I urge you to plan attending both days.

I have asked for time on the agenda to go over what I will have learned at the CAPRAD traing in Denver this week, and will be able to let you know when that fits into the APCO agenda as soon as they tell me. I'll be going down tonight and participating in the three day training on the 700 MHz database, so I should have some good information to impart about that.

To make participating in the APCO meeting a little easier, we are authorized to reimburse the committee members for travel expenses to meetings of this type. You'll just need to keep track of your mileage, meals, and lodging, and submit to me copies of your receipts so I can reimburses you out of the planning grant funds.

Please let me know if you will, or will not be attending.

Kent

From: Kent Drummond
To: Bob Speidel; Craig Post; Jeff Alexander; Jim Johnson; Jim Prindel; Kathy Red Cloud; Phil Dumars; Steve Howard
Date: 11/4/02 9:59AM
Subject: 700 MHz Regional Planning Meeting

Good morning all,

Just a follow up. After speaking with Dan Perko on Friday, we've decided that the best time to have the 700 MHz Regional Planning Meeting will be Monday evening from 7:00 - 9:00 at the Holiday Inn, prior to the start of the APCO Annual meeting on Tuesday morning. The dates of the APCO meeting are Nov 19-20, so this means the 700 MHz RPC meeting will be the evening of the 18th.

This will be an important meeting. We need to elect a new chairman, since Bill Smith has retired and is no longer active with the radio activities of the state. I also want to go over the procedures of the development of the regional plan with everyone. As I said earlier, we're on the right start with it, but there's an awful lot of work to do, and I'm going to need input from all of you.

Those of you on the committee, please be kind enough to let me know whether or not you're going go to attend, so I have some idea of how many will be there. I urge you to also consider staying for the APCO meeting because there will be discussions about new 700 MHz wireless data services by Motorola, and a presentation about the program by Gene McGahey from the National Law Enforcement and Corrections Technology Center.

As you can see from the attachment, this is the last day to get the APCO room rate at the Holiday, so call and make your reservation right away.

Kent

CC: Dan Perko; Kelly Hamilton; Robert Wilson

APPENDIX J - INCIDENT COMMAND SYSTEM RECOMMENDATION

Public Safety National Coordination Committee
Interoperability Subcommittee

Recommendation to the NCC Steering Committee concerning the use of the Incident Command System (ICS)

The Incident Command System (ICS), also increasingly known as the Incident Management System (IMS) has been implemented throughout the U.S. and Canadian public safety communities at all levels of government, as well as increasingly among private–sector participants. ICS is an overall incident management program designed for universal application by any public safety entitiy or group of entities. The objective of this paper is to provide an overview of the basic ICS structure with a focus on communications operations specifically, and to provide recommendations for the implementation of ICS to manage priority access to the 700 MHz band public safety interoperability spectrum. More specific guidelines will need to be addressed as part of the Regional Planning Process.

I. Background

ICS is a comprehensive, modular system designed to provide a systematic, flexible approach to coordinating resources and response to incidents of any size, type, or duration. Although now a comprehensive series of management guidelines designed for a variety of incidents requiring public safety involvement, ICS has its origination in the area of wildfire suppression, prompted by a disastrous series of fires in Southern California in 1970. The U. S. Forest Service thereafter undertook a five–year development effort that led to the design of the Fire–Fighting Resources of Southern California Organized for Potential Emergencies (FIRESCOPE) system. ICS applications and users have proliferated since then. In 1980, the FIRESCOPE plan made the transition into a national program called the National Interagency Incident Management System (NIIMS)[1]. At that time ICS became the backbone of a wider–based system for all federal

[1] The FIRESCOPE (NIIMS) ICS protocol and terminology became and effectively remain the baseline for all ICS programs. Virtually all ICS programs of any type or scope, and regardless of the size or function of the developing agency, incorporate NIIMS to some extent, and virtually all are consistent with NIIMS. Such programs either cite NIIMS directly, or else incorporate language taken directly from NIIMS. Specifically, the *Communications Unit*

agencies with wildland fire management responsibilities. Over the past 20 years ICS has been incorporated into the emergency management plans of numerous other public safety agencies, at all levels of government, throughout North America.

In its 1996 Final Report to the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration addressing public safety requirements before 2010, the Public Safety Wireless Advisory Committee (PSWAC) Interoperability Subcommittee developed its communications needs assessment under the context of ICS. Specifically, the PSWAC determined that ICS was an efficient method of incident command organization and therefore developed its communications recommendations with the expectation that ICS would be implemented by all public safety organizations.

II. Definitions

The ICS system has been incorporated into a growing number of operational variants or combinations based upon the specific mission or regional focus of the participating entities (e.g. seismic activity, wildfires, large crowds or demonstrations). Such variants include, but are by no means limited to, those developed and/or currently employed by the California Office of Emergency Services (OES), The University of Michigan at Flint (UM–Flint), National Interagency Fire Center (NIFC), the National Wildfire Coordinating Group (NWCG), Federal Emergency Management Agency (FEMA), and Search and Rescue of British Columbia (SARBC). Accordingly, several different ICS training programs have been developed, such as those currently offered by the National Fire Academy (NFA), Emergency Management Institute (EMI) the Standardized Emergency Management System (SEMS), and the NIIMS. In developing these recommendations, ICS publications either contained in or referenced by the NFA training curriculum were employed as a "baseline" reference. However, in regard to the basic structure and terminology, all ICS/IMS programs, including the NFA curriculum, are essentially derived from the original FIRESCOPE model, and thus are substantially consistent.

For the purposes of developing these recommendations, with the exception of the specific communications protocols addressed herein, "ICS" will therefore be used to apply to a generic version of the ICS/IMS management structure, which is generally applicable to all agencies currently employing ICS without regard to specifics developed for a particular purpose, location or focus.

III. Overview

The complexity of incident management, coupled with the growing need for multi–agency and multifunctional involvement on incidents, has increased the need for a single standard incident management system that can be used by all emergency response disciplines.

ICS serves as a management system designed to help mitigate incident risks by providing clear lines of authority, accurate information, strict accountability, planning, and cost–effective operations and logistical support for any incident. An ICS plan can focus on law enforcement, fire suppression, emergency medical services (EMS), or any combination thereof to whatever

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Leader Position Manual, ICS-223-5, September 1, 1982, is the primary ICS communications document, and is incorporated by reference in the NIFC, NFA, EMI and other major ICS training curricula.

degree is required. Either individual or multiple agencies can use ICS—and participating entities or assets can be added, augmented, scaled back or dropped entirely at any time prior to or during the incident—either within an individual jurisdiction, or across multiple jurisdictions or regions. This internal flexibility affords both immediate and long–term efficiencies.

ICS can be applied to a wide variety of emergency and non-emergency situations. Some examples of incidents and events that can use ICS include:

- Fires, HAZMAT, and multicasualty incidents
- Multijurisdiction and multi–agency disasters
- Wide–area search and rescue missions
- Planned events; e.g., celebrations, parades, concerts

The key element of ICS is that only one individual will be vested with a particular command and control action, and all command and control functions will ultimately be derived from one central authority.

ICS is organized around five major management activities. *Command* has overall responsibility at the incident or event. It determines objectives and establishes priorities based on the nature of the incident, available resources and agency policy. *Operations* develops the tactical organization and directs all resources to carry out the Incident Action Plan. *Planning* develops the Incident Action Plan to accomplish the objectives. It also collects and evaluates information and maintains status of assigned resources and functions. *Logistics* provides resources and all other services needed to support the organization, to include the coordination and implementation of communications functions. *Finance/Administration* monitors costs related to the incident, provides accounting, procurement, time recording, cost analysis, and overall fiscal guidance. These five major management activities are the foundation upon which the ICS organization is based, and are applicable to any ICS program or incident regardless of size or type.

The person designated with overall management authority is the Incident Commander (IC). The IC may manage all or part of the five major activities directly, or may opt to delegate such functions as required along the same lines of authority. A basic ICS operating guideline is that the IC is responsible until specific authority is transferred or delegated to another person. Large incidents usually require each of these activities to be established as separate sections within the organization, with appropriate delegation of authority from the IC to specific subordinate positions. Each of the primary ICS sections may be further sub–divided within their original structure as needed, again, while maintaining a clear flow of authorization directly to and from the IC. The IC will thereby determine if the specific incident requires the use of all sections and the staffing and resources to be allocated to a particular section. Regardless of the number of additional subordinate "layers," as with the IC, responsibility is passed to and held by the designated individual(s) until either transferred to a relief, delegated to a subordinate, or until the incident is concluded altogether.

Facilities will be established depending on the kind and complexity of the incident or event, with standard terminology applied to the principal ICS facilities. These include *Incident Command Post (ICP),* which serves as the "hub" of all command and control functions, to include communications, and from which the IC normally oversees all incident operations. There is only

one ICP for each incident and every incident must have some form of an ICP. Other locations are established according to need: *Staging Areas* are locations at which resources are kept while awaiting incident assignment. Most large incidents will have a staging area, and some incidents may have several. The *Base* is a location at the incident at which primary service and support activities are performed. *Camps* are incident locations where resources may be kept to support incident operations. Camps differ from Staging Areas in that essential support operations are done at Camps, and resources at Camps are not always immediately available for use. The *Helibase* is a location in and around an incident area at which helicopters may be parked, maintained, fueled, and equipped for incident operations. *Helispots* are temporary locations where helicopters can land and load and off–load personnel, equipment, and supplies. Any number of additional or alternative sites (e.g. medical support, dining and sanitary facilities) may be designated in accordance with a predetermined ICS plan, or as determined by the IC.

Each incident will also have an oral or written Incident Action Plan. The purpose of the plan is to provide all incident supervisory personnel with direction for future actions. Action plans that include the measurable tactical operations to be achieved are always prepared around a time frame called an Operational Period.

Operational Periods can be of various lengths, but should be no longer than twenty–four hours. The planning for an operational period must be done far enough in advance to ensure those registered resources are available when the Operational Period begins.

IV. ICS Communications Infrastructure

Centrally managed, interoperable communications are essential for virtually every aspect of the ICS structure to function. Communications to be used at the incident site require advance planning, to include the development of frequency inventories, frequency sharing agreements, use of synthesized mobile / portable radio equipment, and the use of available local, state and federal communications equipment, all of which will be combined as part of the available ICS infrastructure. It is anticipated that the RPCs, with the advice and support of the State Interoperability Executive Committees (SIEC), will be pivotal in addressing these areas as part of an overall ICS communications plan.

Communications during ICS incidents of any size are managed through the use of an incident communications center and a communications plan established for the use of command as well as tactical and support resources assigned to the incident.

Many local governments, whether participating in ICS plans or not, have established Emergency Operations Centers (EOCs), which can be activated quickly to facilitate centralized command and control during incident response. When a local government EOC is activated, SEMS regulations require the establishment of communication and coordination between the IC and the department operations center of the EOC, or the EOC itself, and also between the EOC and any state or local jurisdiction(s) having authority within the incident's boundaries.

ICS field response organizations will normally communicate with the local government level (either department operating centers or EOCs) through dispatch centers. Dispatch centers will not have command authority over incidents, but will act as directed by the IC or other designated authority in accordance with agency or jurisdiction policy, or as specifically delineated within the applicable ICS plan. Because of the potential number and diversity of communications

systems involved, agency dispatch centers will often function in an intermediate role between IC, personnel in the field, and department operations centers or EOCs. Also, in some cases under heavy load conditions, agencies may elect to move into an "expanded dispatch" mode, which may involve the delegation of a higher level of authority at the agency dispatch facility.

Dispatch centers may be departmental or may be centralized within the jurisdiction. Some jurisdictions have the capability to go from departmental dispatching to centralized dispatching when the local government EOC is activated. The jurisdiction's dispatching arrangements and communication capability along with local policy will affect how operations are linked to the local government level.

In many jurisdictions, the ICS field response organizations will be primarily linked via the dispatch center(s) to the department operations center (DOC) of the agency that has jurisdiction over the incident. In these cases, DOCs have agency level authority over the assigned IC. The DOC is responsible for coordinating with the local government EOC. Alternatively, in some jurisdictions, ICS field response organizations may have direct communications with and/or receive policy direction from the local government EOC when it is activated. Whether this occurs, along with other possible operational variations consistent with the overall ICS management scheme, will depend on the size and policy of the jurisdiction, and the lines of communications that are available.

V. Plain Language Usage

It should be emphasized that, under ICS communications guidelines, plain language is to be used at all times.

VI. ICS Communications Management

As noted above, ICS Communications are organized as a component of the Logistics branch. The Communications Unit Leader, as detailed in the Communications Unit Leader Position Manual (ICS 223–5, originally developed by FIRESCOPE) is therefore under the direction of the Service Branch Director or Logistics Section Chief, who in turn report directly to the IC. The Communications Unit Leader is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the incident communications center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.

The Communications Unit Leader's specific responsibilities include, but are not necessarily limited to:

- Obtain a briefing from the Service Branch OIC or Logistics OIC
- Determine Communications unit personnel needs
- Advise on communication capabilities and limitations
- Prepare and implement the Incident Radio Communications Plan
- Ensure that the Incident Communications Center and Message Center are established as necessary
- Set up LMR/CMR, telephone and public address systems as necessary

- Establish appropriate communications distribution and maintenance locations within or adjacent to the ICP, at the base(s) or in remote locations (e.g. camps, helispots)
- Ensure communications systems are installed, tested, and repaired as necessary
- Ensure an equipment accountability system is established and maintained
- Ensure personal portable radio equipment is distributed per the Incident Control Radio Plan with consideration to battery replacement or recharging
- Provide technical information as required concerning:
  - Adequacy of communications systems currently in operation
  - Geographic limitation on communications systems
  - Equipment capabilities
  - Amount and type of equipment available
  - Anticipated problems and shortfalls concerning the use of communications equipment
- Supervise all Communication Unit activities
- Maintain records relating to the communications equipment as appropriate, to include channel settings on programmable radios
- Receive equipment from relieved or released units and reassign as necessary
- Maintain the Communications Unit Log

As with every other aspect of ICS, the Communications Unit Leader is allowed a considerable amount of discretion regarding the set-up and utilization of the specific communications network and individual elements within it. However, on some basis, the Communications Unit Leader, either directly or through the Head Dispatcher (if multiple dispatchers are used), or Incident Dispatcher (if a single dispatcher is used), will directly manage the use and prioritization of communications channels. This individual's specific duties include, but are not necessarily limited to:

- Obtain a briefing from the Communications Unit Leader
- Determine
  - Location of assignment
  - Communications procedures
  - Frequencies in use
  - Nets established or to be established
  - Equipment status
  - Capabilities, limitation and restrictions
  - Location of repeaters
  - Message center problems
- Ensure adequate communications center staffing levels as appropriate
- Obtain and review the Incident Action Plan to determine the incident organization and Communications Plan

- Set up the Communications Center, check out and test equipment
- Request servicing or replacement of any inoperative or marginal equipment
- Set up message center location as required
- Receive and transmit messages within and external to the incident
- Maintain files or Status Changes and General Messages
- Maintain a record of unusual incident occurrences affecting or potentially affecting communications
- Provide a briefing to relief on
  - Current activities
  - Equipment status
  - Any unusual communications situations
- Turn in appropriate documents to Communications Unit Leader
- Stand down / demobilize the Communications Center in accordance with the ICS Incident Demobilization Plan
- Maintain radio traffic logs

In addition to, or as a component of, the previously described positions, the Emergency Communications Coordinator (ECC) is responsible for emergency warnings and communications. Dispatcher(s) shall perform this function at the direction of the IC or the Communications Unit Leader, if applicable. The primary responsibilities of the ECC include:

- Activating the on site warning and instructional systems as directed by the IC
- Establishing communication links between the ICP and public news and information agencies
- Establishing a message control system for logging messages received by and dispatched from the IC and/or the ICP
- Maintaining primary and backup communications systems between the IC, the ICP, various responding personnel, departments on site and the local emergency management agencies, as directed by the IC or appropriate authority
- Receiving and disseminating information to appropriate individuals

As a component of directly overseeing the operation of the communications network, the Communications Unit Leader directly, or through the ECC, Lead or Incident Dispatcher(s), or some other position within the Communications Unit specifically delegated as such will be tasked with monitoring, assigning, and prioritizing the use of all radio communications channels, to include interoperability channels, in accordance with the Priority Access Levels discussed below. As with every other ICS position, the person tasked with channel management ("Channel Manager") would have sole discretionary authority delegated through as many steps as necessary, but deriving directly from the IC.

VII. The ICS Communications Plan

The ICS Incident Radio Communications Plan is intended to provide documentation of all pertinent information concerning all radio frequency assignment, in one centralized and accessible location, for each operational period. The plan is a summary of information obtained from the Radio Requirements Worksheet (ICS Form 216), and the Radio Frequency Assignment Worksheet (ICS Form 217). Information from the Radio Communications Plan on Frequency Assignment is normally placed on the appropriate Assignment List (ICS Form 204). At a minimum, the Incident Radio Communications Plan must delineate the Basic Radio Channel Utilization System/Cache, Channel(s) utilized, function, frequency, and assignment. Detailed instructions regarding preparing the above forms may be found in ICS 223–5 discussed previously.

VIII. Calling Channel Monitoring

It is implicit in the development of an ICS plan that all participating entities will monitor the calling channels for the 700 MHz interoperability spectrum on a 24–hour basis as already recommended by the NCC for incorporation into the FCC Rules for the 700 MHz band as per the National Public Safety Planning Advisory Committee (NPSPAC) guidelines.

IX. Priority Access Levels

The NCC has recommended the FCC mandate priority access for users in critical situations only. During incidents where Priority Access has been initiated, the Channel Manager would assign channels through the calling channel based on priority. The NCC suggested the following priorities from highest to lowest:

Level 1—Disaster and extreme emergency operations for mutual aid and interagency communications

Level 2—Emergency or urgent operations involving imminent danger to life or property

Level 3—Special event control, generally preplanned (including task force operations)

Level 4—Single agency secondary communications (default priority)

In such cases where a higher priority party would require access to the channel, the Channel Manager would be authorized to restrict access to lower–priority users, or to direct any lower priority party already using the channel to cease communications to the extent necessary an until such time as that party could be reassigned subsequent to the clearing of a channel by a higher priority user. Such restrictions could be imposed at any time, and for any duration required, up until the incident is concluded and the control of the interoperable spectrum is returned to the Regional Planning Committee (RPC) or other non–emergency channel management authority.

X. Regional ICS Planning

One of the major features of ICS is its inherent flexibility to meet the needs of any size or number of organizations, and any type of incident. It is expected that each RPC, with the support

of its SIEC, will assist in the development and implementation of a specific ICS plan or plans for that region in accordance with these guidelines and within the scope of the functions already recommended by the NCC for these entities.

XI. Conclusions

1. ICS is a sound concept that has a proven track record of success over more than 30 years of development throughout North America.
2. ICS allows users to effectively manage and combat incidents by providing a simple and consistent organizational plan that is full scalable and applicable to any size or type of emergency or non–emergency incident requiring the support of public safety entities.
3. ICS is already available in a variety of regionally or functionally oriented training curriculums, and can be adapted to existing emergency management infrastructure.
4. ICS is inherently simple, and can be learned by both operational and management personnel, and implemented quickly.
5. Because of its flexibility, ICS would be effective for any public safety agency regardless of size or mission.
6. ICS can provide significant benefit when used by public safety agencies to manage priority access to the interoperability spectrum, or as a component of a new or existing Incident Radio Communications Plan.
7. In accordance with ICS guidelines, the position of Channel Manager or equivalent authority needs to be established as an individual position, or otherwise incorporated as a specifically delegated component of the Communications Unit Leader, ECC Head/Incident Dispatcher, or other clearly defined position.

XII. Recommendations

1. It is this Subcommittee's recommendation that the NCC advise the FCC to mandate the use of standard ICS nomenclature (e.g. as adopted by FEMA and others) in the use of the ICS System.
2. It is this Subcommittee's recommendation that the NCC advise the FCC to mandate the use of the standard ICS structure (e.g. as adopted by FEMA and others) in the use of the ICS System.
3. It is this Subcommittee's recommendation that the NCC advise the FCC that plain language be used at all times for ICS communications.
4. It is this Subcommittee's recommendation that the NCC advise the FCC that the Communications Unit Leader position be required when an incident is multi-jurisdictional or requires more than one working channel (i.e. in addition to the calling channel).
5. It is this Subcommittee's recommendation that the NCC advise the FCC that the use of priority access protocols be required for all ICS communications plans.

Appendix K - Simplified 700 MHz Pre-assignment Rules

Introduction

This paper describes a process for coordinating the initial block assignments of 700 MHz channels before details of actual system deployments is available. In this initial phase, there is little actual knowledge of the specific equipment to be deployed and the exact antenna sites locations. As a result, a simple, high-level method is proposed to establish guidelines for frequency coordination. When actual systems are deployed, additional details will be known and the system designers will be required to select specific sites and supporting hardware to control interference.

Overview

Assignments will be based on a defined service area for each applicant. This will normally be an area defined by geographical or political boundaries such as city, county or by a data file consisting of line segments creating a polygon that encloses the defined area. The service contour is normally allowed to extend slightly beyond the geo/political boundaries such that systems can be designed for maximum signal levels within the boundaries, or coverage area. Systems must also be designed to minimize signal levels outside their geo/political boundaries to avoid interference into the coverage area of other co-channel users.

For co-channel assignments, the 40 dB□ service contour will be allowed to extend beyond the defined service area by 3 to 5 miles, depending on the type of environment: urban, suburban or rural. The co-channel 5 dB□ interfering contour will be allowed to touch but not overlap the 40 dB□ service contour of the system being evaluated. All contours are (50,50).

For adjacent and alternate channels, the 60 dB□ interfering contour will be allowed to touch but not overlap the 40 dB service contour of the system being evaluated. All contours are (50,50).

Discussion

Based upon the ERP/HAAT limitations referenced in 47CFR ¶ 90.541(a), the maximum field strength will be limited to 40 dB relative to 1□V/m (customarily denoted as 40 dB□). It is assumed that this limitation will be applied similar to the way it is applied in the 821-824/866-869 MHz band. That is, a 40 dB field strength can be deployed up to a defined distance beyond the edge of the service area, based on the size of the service area or type of applicant, i.e. city, county or statewide system. This is important that public safety systems have adequate margins for reliability within their service area in the presence of interference, including the potential for interference from CMRS infrastructure in adjacent bands.

The value of 40 dB in the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole (λ/2) antenna. The thermal noise floor for a 6.25 kHz bandwidth receiver would be in the range of -126 dBm, so there is a margin of approximately 33 dB available for "noise limited" reliability. Figure 1 shows show the various interfering sources and how they accumulate to form a composite noise floor that can be used to determine the "reliability" or probability of achieving the desired performance in the presence of various interfering sources with differing characteristics.

If CMRS out-of-band emissions (OOBE) noise is allowed to be equal to the original thermal noise floor, there is a 3 dB reduction9 in the available margin. This lowers the reliability and/or the channel performance of Public Safety systems. The left side of Figure 1 shows that the original 33 dB margin is reduced by 3 dB to only 30 dB available to determine "noise + CMRS OOBE limited" performance and reliability.

[9] TIA TR8 made this 3 dB allowance for CMRS OOBE noise during the meetings in Mesa, AZ, January 2001.

There are also different technologies with various channel bandwidths and different performance criteria. C/N in the range of 17 – 20 dB is required to achieve channel performance.

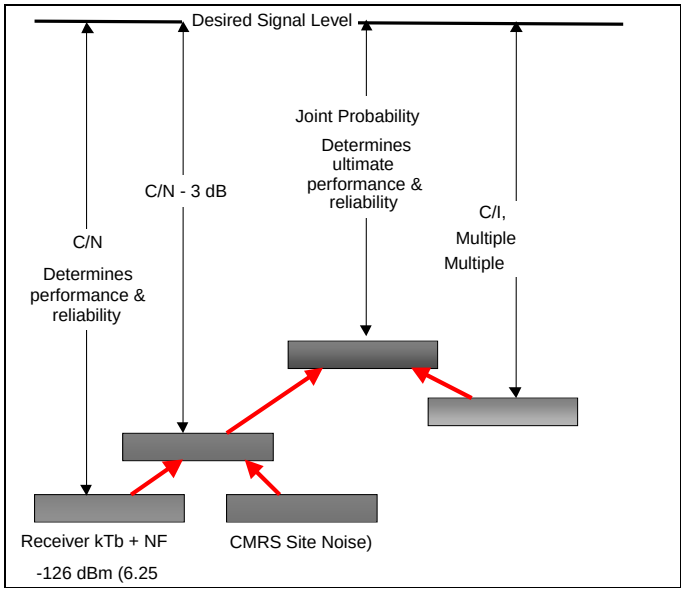


Figure 1 - Interfering Sources Create A "Noise" Level Influencing Reliability

In addition, unknown adjacent and alternate channel assignments need to be accounted for. The co-channel and adjacent/alternate sources are shown in the right hand side of Figure 1. At the edge of the service area, there would normally be only a single co-channel source, but there could potentially be several adjacent or alternate channel sources involved. It is recommended that co-channel assignments limit interference to <1% at the edge of the service area (worst case mile). A C/I ratio of 26.4 dB plus the required capture value (~10 dB) is required to achieve this goal.10.

The ultimate performance and reliability has to take into consideration both the noise sources (thermal & CMRS OOBE) and all the interference sources. The center of Figure 1 shows that the joint probability that the both performance criteria and interference criteria are met must be determined.

Table 1 shows estimated performance considering the 3 dB rise in the noise floor at the 40 dB signal level. Performance varies due to the different Cf/N requirements and noise floors of the different modulations and channel bandwidths.

Note that since little is known about the affects of terrain, an initial lognormal standard deviation of 8 dB is used.

[10] See Appendix A for an explanation of how the 1% interference value is defined and derived.

Comparison of Joint Reliability for various				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver ENBW (kHz)	6	6	9	18
Noise Figure(10 dB)	10	10	10	10
Receiver Noise Floor (dBm)	-126.22	-126.22	-124.46	-121.45
Rise in Noise Floor (dB)	3.00	3.00	3.00	3.00
New Receiver Noise Floor (dB)	-123.22	-123.22	-121.46	-118.45
40 dBu = -92.7 dBm	-92.7	-92.7	-92.7	-92.7
Receiver Capture (dB)	10.0	10.0	10.0	10.0
Noise Margin (dB)	30.52	30.52	28.76	25.75
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
C/N Margin (dB)	**13.52**	**13.52**	**10.76**	**5.75**
Standard deviation (8 dB)	8.0	8.0	8.0	8.0
Z	1.690	1.690	1.345	0.718
Noise Reliability (%)	**95.45%**	**95.45%**	**91.06%**	**76.37%**
C/I for <1% prob of capture	36.4	36.4	36.4	36.4
I (dBu)	3.7	3.7	3.7	3.7
I (dBm)	-129.0	-129.0	-129.0	-129.0
Joint Probability (C & I)	**94.7%**	**94.7%**	**90.4%**	**76.1%**
40 dBu = -92.7 dBm @ 770 MHz				

Table 1 Joint Probability For Project 25, 700 MHz Equipment Configurations.

These values are appropriate for a mobile on the street, but are considerably short to provide reliable communications to portables inside buildings.

Portable In-Building Coverage

Most Public Safety communications systems, today, are designed for portable in-building[11] coverage and the requirement for >95 % reliable coverage. To analyze the impact of requiring portable in building coverage and designing to a 40 dB service contour, several scenarios are presented. The different scenarios involve a given separation from the desired sites. Whether simulcast or multi-cast is used in wide-area systems, the antenna sites must be placed near the service area boundary and directional antennas, directed into the service area, must be used. The impact of simulcast is included to show that the 40 dB service contour must be able to fall outside the edge of the service area in order to meet coverage requirements at the edge of the service area. From the analysis, recommendations are made on how far the 40 dB service contour should extend beyond the service area.

Table 2 estimates urban coverage where simulcast is required to achieve the desired portable in building coverage. Several assumptions are required to use this estimate.

Distance from the location to each site. Equal distance is assumed.
CMRS noise is reduced when entering buildings. This is not a guarantee as the type of deployments is unknown. It is possible that CMRS units may have transmitters inside buildings. This could be potentially a large contributor unless the CMRS OOBE is suppressed to TIA's most recent recommendation and the "site isolation" is maintained at 65 dB minimum.
The 40 dB service contour is allowed to extend beyond the edge of the service area boundary.
Other configurations may be deployed utilizing additional sites, lower tower heights, lower ERP and shorter site separations.

[11] Building penetration losses typically required for urban = 20 dB, suburban = 15 dB, rural = 10 dB.

Estimated Performance at 2.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 2.5 miles (dBm)	-72.7	-72.7	-72.7	-72.7
Margin (dB)	53.50	53.50	51.80	45.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	20	20	20	20
Antenna Loss (dB)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	85.60%	85.60%	76.58%	39.17%
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 2, Estimated Performance From Site(s) 2.5 Miles From Typical Urban Buildings.

Table 2 shows for the example case of 2.5 miles a single site cannot provide >95% reliability. Either more sites must be used to reduce the distance or other system design techniques must be used to improve the reliability. For example, the table shows that simulcast can be used to achieve public safety levels of reliability at this distance. Table 2 also shows that the difference in performance margin requirements for wider bandwidth channels requires more sites and closer site-to-site separation.

Figures 2 and 3 show how the configurations would potentially be deployed for a typical site with 240 Watts ERP. This is based on:

75 Watt transmitter,	18.75 dBW
200 foot tower	
10 dBd 180 degree sector antenna	+10.0 dBd
5 dB of cable/filter loss.	- 5.0 dB
23.75 dBW ≈ 240 Watts (ERPd)	

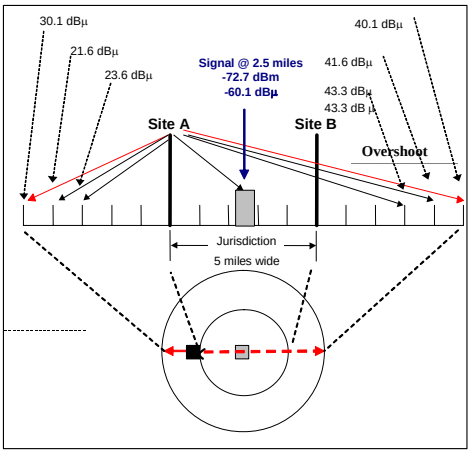


Figure 2 - Field Strength From Left Most Site.

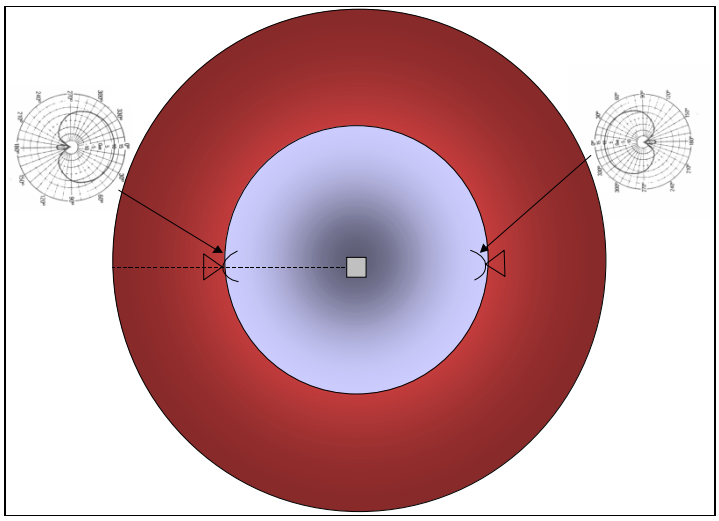


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

Figure 2 is for an urbanized area with a jurisdiction defined as a 5 mile circle. To provide the necessary coverage to portables in buildings at the center of the jurisdiction requires that the sites be placed along the edge of the service area and utilize directional antennas oriented toward the center of the service area (Figure 3). In this case, at 5 miles beyond the edge of the service area, the sites would produce a composite field strength of approximately 40 dB□. Since one site is over 10 dB dominant, the contribution from the other site is not considered. The control of the field strength behind the site relies on a 20 dB antenna with a Front to Back Ratio (F/B) specification as shown in Figure 3. This performance may be optimistic due to back scatter off local obstructions in urbanized areas. However, use of antennas on the sides of buildings can assist in achieving better F/B ratios and the initial planning is not precise enough to prohibit using the full 20 dB.

The use of a single site at the center of the service area is not normally practical. To provide the necessary signal strength at the edge of the service area would produce a field strength 5 miles beyond in excess of 44 dB□. However, if the high loss buildings were concentrated at the service area's center, then potentially a single site could be deployed, assuming that the building loss sufficiently decreases near the edge of the service area allowing a reduction in ERP to achieve the desired reliability.

Downtilting of antennas, instead of directional antennas, to control the 40 dB□ is not practical, in this scenario. For a 200 foot tall tower, the center of radiation from a 3 dB down-tilt antenna hits the ground at ~ 0.75 miles12. The difference in angular discrimination from a 200 foot tall tower at service area boundary at 5 miles and service contour at 10 miles is approximately 0.6 degrees, so ERP is basically the same as ERP toward the horizon. It would not be possible to achieve necessary signal strength at service area boundary and have 40 dB□ service contour be less than 5 miles away.

Tables 3 and 4 represent the same configuration, but for less dense buildings. In these cases, the distance to extend the 40 dB□ service contour can be determined from Table 5.

[12] Use of high gain antennas with down-tilt on low-level sites is one of the causes of far-near interference experienced in the 800 MHz band.

Estimated Performance at 3.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 3.5 miles (dBm)	-77.7	-77.7	-77.7	-77.7
Margin (dB)	48.50	48.50	46.80	40.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	15	15	15	15
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	**85.60%**	**85.60%**	**76.58%**	**39.17%**
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 3 - Lower Loss Buildings, 3.5 Mile From Site(s)

Estimated Performance at 5.0 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 5.0 miles (dBm)	-82.7	-82.7	-82.7	-82.7
Margin (dB)	43.50	43.50	41.80	35.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	10	10	10	10
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	**85.60%**	**85.60%**	**76.58%**	**39.17%**
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 4 - Low Loss Buildings, 5.0 Miles From Site(s)

Note that the receive signals were adjusted to offset the lowered building penetration loss. This produces the same numerical reliability results, but allows increasing the site to building separation and this in turn lowers the magnitude of the "overshoot" across the service area.

Table 5 shows the field strength for a direct path and for a path reduced by a 20 dB F/B antenna. This allows the analysis to be simplified for the specific example being discussed.

	Site A Direct Path	Site B Back Side of 20 dB F/B Antenna
Overshoot Distance (mi)	Field Strength (dB□)	Field Strength (dB□)
1	73.3	53.3
2	63.3	43.3
2.5	60.1	40.1
3	57.5	37.5
4	53.3	33.5
5	50.1	30.1
…	…	
10	40.1	

11	38.4	
12	37.5	
13	36.0	
14	34.5	
15	33.0	

Table 5 - Field Strength Vs. Distance From Site

For the scenarios above, the composite level at the Service Contour is the sum of the signals from the two sites. The sum can not exceed 40 dB□. Table 5 allows you to calculate the distance to Service Contour given the distance from one of the sites.

Scenario 1: Refer to Figure 3a. Site B is just inside the Service Area boundary and Service Contour must be <5 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 30.1 dB. Signal level for Site A can be up to 40 dB, since when summing two signals with >10 dB delta, the lower signal level has little effect (less than 0.4 dB in this case). Therefore, Site A can be 10 miles from the Service Contour, or 5 miles inside the Service Area boundary. The coverage performance for this scenario is shown in Table 2, above, for 20 dB building loss typical of urban areas.

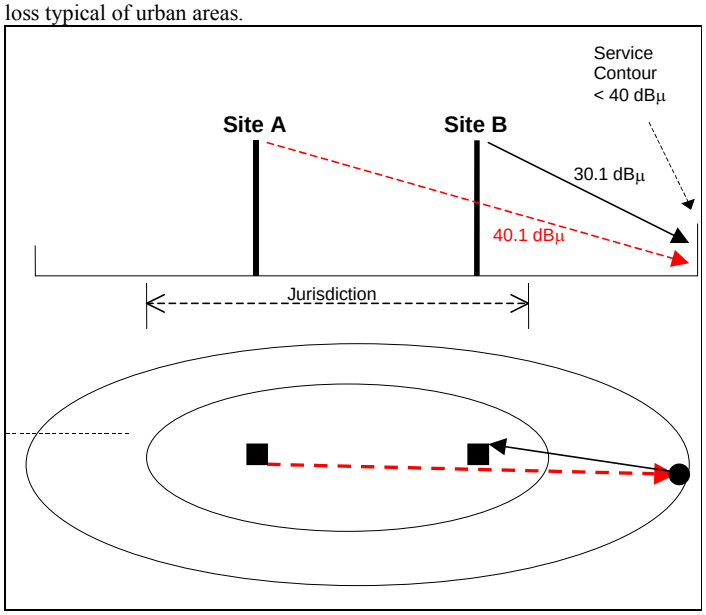


Figure 3a. Scenario 1 on of Use of Table 5

Scenario 2: Refer to bold data in Table 5. Site B is just inside the Service Area boundary and Service Contour must be <4 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 33.5 dB□. Signal level for Site A can be up to 38.4 dB□. (See Appendix B for simple method to sum the powers of signals expressed in decibels.) The composite power level is 39.7 dB□. Therefore, Site A can be slightly less than 11 miles from the Service Contour, or ~7 miles inside the Service Area boundary. The coverage performance for this example is shown in Table 3, above, for 15 dB building loss typical of suburban areas.

Scenario 3: Site B is just inside the Service Area boundary and Service Contour must be <3 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 37.5 dB□. Signal level for Site A can be up to 36.4 dB□. (See Appendix B simple method to sum signals expressed in decibels.) The composite power level is 40.0 dB. Therefore, Site A can be ~13 miles from the Service Contour, or ~10 miles inside the Service Area boundary.

The coverage performance for this example is shown in Table 4, above, for 10 dB building loss typical of rural areas.

Service Contour Extension Recommendation

The resulting recommendation for extending the 40 dB□ service contour beyond the service area boundary is:

Type of Area	Extension (mi.)
Urban (20 dB Buildings)	5
Suburban (15 dB Buildings)	4
Rural (10 dB Buildings)	3

Table 6 - Recommended Extension Distance Of 40 dB□ Field Strength

Using this recommendation the 40 dB□ service contour can then be constructed based on the defined service area without having to perform an actual prediction.

Interfering Contour

Table 1 above shows that 36.4 dB of margin is required to provide 10 dB of co-channel capture and <1% probability of interference. Since the 40 dB service contour is beyond the edge of the service area, some relaxation in the level of interference is reasonable. Therefore, a 35 dB co-channel C/I ratio is recommended and is consistent with what is currently being licensed in the 821-824/866-869 MHz Public Safety band.

Co-Channel Interfering Contour Recommendation

Allow the constructed 40 dB (50,50) service contour to extend beyond the edge of the defined service area by the distance indicated in Table 6.
Allow the 5 dB (50,50) interfering contour to intercept but not overlap the 40 dB□ service contour.

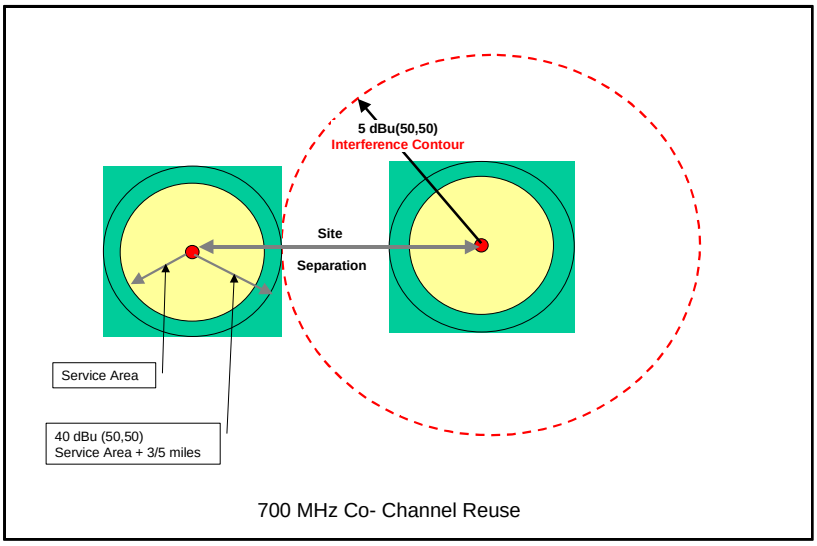


Figure 4 - Co-Channel Reuse Criterion

Adjacent and Alternate Channel Considerations

Adjacent and alternate channels are treated as being noise sources that alter the composite noise floor of a victim receiver. Using the 47 CFR § 90.543 values of ACCP can facilitate the coordination of adjacent and alternate channels. The C/I requirements for <1% interference can be reduced by the value of ACCPR. For example to achieve an X dB C/I for the adjacent channel that is -40 dB a C/I of [X-40] dB is required. Where the alternate channel ACP value is -60 dB, then the C/I = [X-60] dB is the goal for assignment(s). There is a compounding of interference energy, as there are numerous sources, i.e. co channel, adjacent channels and alternate channels plus the noise from CMRS OOBE.

There is insufficient information in 47 CFR § 90.543 to include the actual receiver performance. Receivers typically have "skirts" that allow energy outside the bandwidth of interest to be received. In addition, the FCC defines ACCP differently than does the TIA. The term used by the FCC is the same as the TIA definition of ACP. The subtle difference is that ACCP defines the energy intercepted by a defined receiver filter (e.g., 6 kHz ENBW). ACP defines the energy in a measured bandwidth that is typically wider than the receiver (e.g., 6.25 kHz channel bandwidth). As a result, the FCC values are optimistic at very close spacing and somewhat pessimistic at wider spacings, as the typical receiver filter is less than the channel bandwidth.

In addition, as channel bandwidth is increased, the total amount of noise intercepted rises compared to the level initially defined in a 6.25 kHz channel bandwidth. However, the effect is diminished at very close spacings as the slope of the noise curve falls off rapidly. At greater spacings, the slope of the noise curve is essentially flat and the receiver's filter limits the noise to a rise in the thermal noise floor.

Digital receivers tend to be less tolerant to interference than analog. Therefore, a 3 dB reduction in the C/(I+N) can reduce a DAQ = 3 to a DAQ = 2, which is threshold to complete muting in digital receivers. Therefore to maintain a DAQ = 3, at least 17 dB of fading margin plus the 26.4 dB margin for keeping the interference below 1% probability is required, for a total margin of 43.4 dB. However, this margin would be at the edge of the service area and the 40 dB□ service contour is allowed to extend past the edge of the service area.

Frequency drift is controlled by the FCC requirement for 0.4-ppm stability when locked. This equates to approximately a 1 dB standard deviation, which is negligible when associated with the recommended initial lognormal standard deviation of 8 dB and can be ignored.

Project 25 requires that a transceiver receiver have an ACIPR of 60 dB. This implies that an ACCPR ≥ 65 dB will exist for a "companion receiver". A companion receiver is one that is designed for the specific modulation. At this time the highest likelihood is that receivers will be deploying the following receiver bandwidths at the following channel bandwidths.

Estimated Receiver Parameters	
Channel Bandwidth	Receiver Bandwidth
6.25 kHz	5.5 kHz
12.5 kHz	5.5 or 9 kHz
25 kHz	18.0 kHz

Table 7 - Estimated Receiver Parameters

Based on 47 CFR ¶ 90.543 and the P25 requirement for an ACCPR ≥ 65 dB into a 6.0 kHz channel bandwidth and leaving room for a migration from Phase 1 to Phase 2, allows for making the simplifying assumption that 65 dB ACCPR is available for both adjacent 25 kHz spectrum blocks.

The assumption is that initial spectrum coordination sorts are based on 25 kHz bandwidth channels. This provides the maximum flexibility by using 65 dB ACCPR for all but one possible combination of 6.25 kHz channels within the 25 kHz allotment.

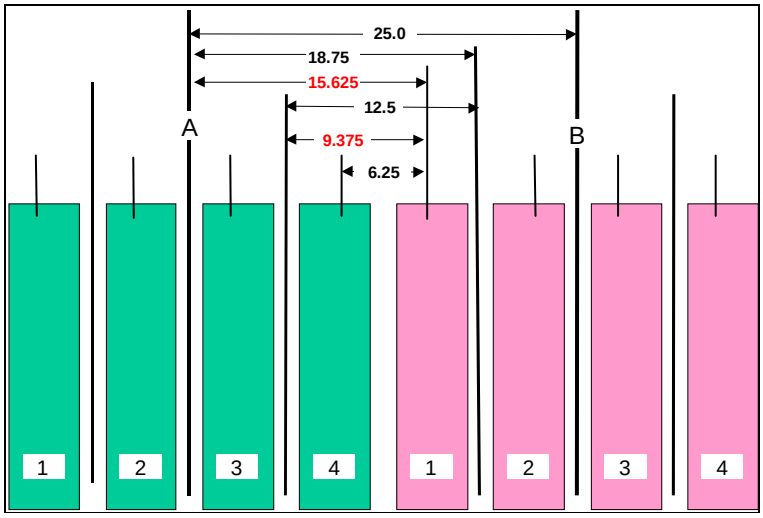


Figure 5, Potential Frequency Separations

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.750 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	>40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB
12.5 kHz to 6.25 kHz	9.375 kHz	>40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

Table 8 - ACCPR Values For Potential Frequency Separations

All cases meet or exceed the FCC requirement. The most troublesome cases occur where the wider bandwidths are working against a Project 25 Phase 2 narrowband 6.25 kHz channel. This pre-coordination based upon 25 kHz spectrum blocks still works if system designers and frequency coordinators keep this consideration in mind and move the edge 6.25 kHz channels inward away from the edge of the system. This approach allows a constant value of 65 dB ACCPR to be applied across all 25 kHz spectrum blocks regardless of what channel bandwidth is eventually deployed. There will also be additional coordination adjustments when exact system design details and antenna sites are known.

For spectrum blocks spaced farther away, it must be assumed that transmitter filtering, in addition to transmitter performance improvements due to greater frequency separation, will further reduce the ACCPR.

Therefore it is recommended that a consistent value of 65 dB ACCPR be used for the initial coordination of adjacent 25 kHz channel blocks. Rounding to be conservative due to the possibility of multiple sources allows the Adjacent Channel Interfering Contour to be approximately 20 dB above the 40 dB service contour, at 60 dB.

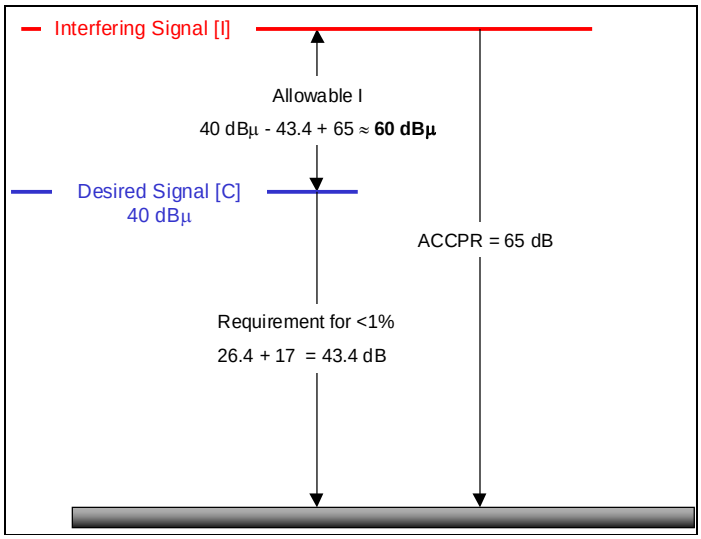


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

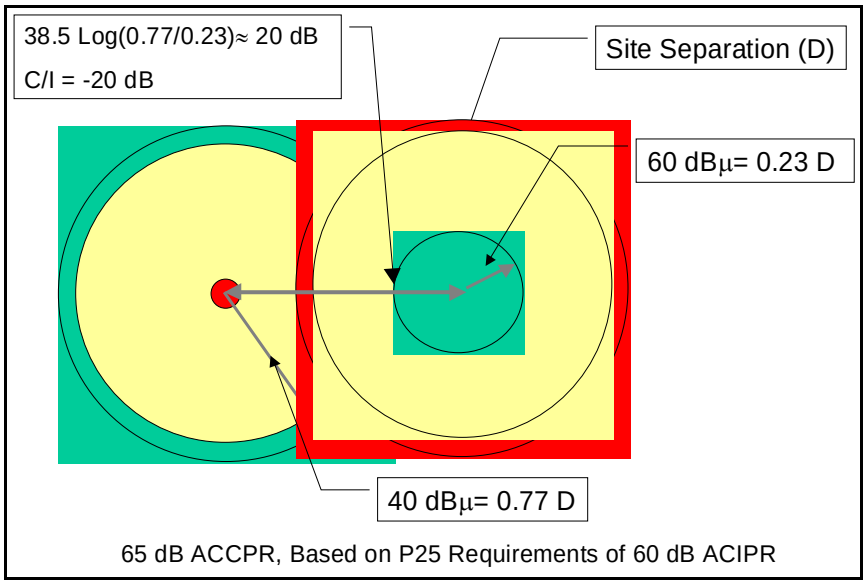


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

Adjacent Channel Interfering Contour Recommendation

An adjacent (25 kHz) channel shall be allowed to have its 60 dB (50,50) interfering contour touch but not overlap the 40 dB (50,50) service contour of a system being evaluated. Evaluations should be made in both directions.

Final Detailed Coordination

This simple method is only adequate for presorting large blocks of spectrum to potential entities. A more detailed analysis should be executed in the actual design phase to take all the issues into consideration.

Additional factors that should be considered include:

3. Degree of Service Area Overlap
4. Different size of Service Areas
5. Different ERPs and HAATs
6. Actual Terrain and Land Usage
7. Differing User Reliability Requirements
8. Migration from Project 25 Phase 1 to Phase 2
9. Actual ACCP
10. Balanced Systems
11. Mobiles vs. Portables
12. Use of voting
13. Use of simulcast
14. Radio specifications
15. Simplex Operation
16. Future unidentified requirements.

Special attention needs to be paid to the use of simplex operation. In this case, an interferer can be on an offset adjacent channel and in extremely close proximity to the victim receiver. This is especially critical in public safety where simplex operations are frequently used at a fire scene or during police operation. This type operation is also quite common in the lower frequency bands. In those cases, evaluation of base-to-base as well as mobile-to-mobile interference should be considered and evaluated.

Attachment A

Carrier to Interference Requirements

There are two different ways that Interference is considered.

- Co Channel
- Adjacent and Alternate Channels

Both involve using a C/I ratio. The C/I ratio requires a probability be assigned. For example, if 10% Interference is specified, the C/I implies 90% probability of successfully achieving the desired ratio. 1% interference means that there is a 99% probability of achieving the desired C/I.

$$\frac{C}{I}\% = \frac{1}{2} \bullet erfc\left(\frac{\frac{C}{I}\text{margin}}{2\sigma}\right) \qquad (1)$$

This can also be written in a form using the standard deviate unit (Z). In this case the Z for the desired probability of achieving the C/I is entered. For example, for a 90% probability of achieving the necessary C/I, $Z = 1.28$.

$$\frac{C}{I}\% = Z \cdot \sqrt{2} \cdot \sigma \qquad (2)$$

The most common requirements for several typical lognormal standard deviations (σ) are included in the following table based on Equation (2).

Location Standard Deviation (σ) dB	5.6	6.5	8	10
Probability %				
10%	10.14 dB	11.77 dB	14.48 dB	18.10 dB
5%	13.07 dB	15.17 dB	18.67 dB	23.33 dB
4%	13.86 dB	16.09 dB	19.81 dB	24.76 dB
3%	14.90 dB	17.29 dB	21.28 dB	26.20 dB
2%	16.27 dB	18.88 dB	23.24 dB	29.04 dB
1%	18.45 dB	21.42 dB	**26.36 dB**	32.95 dB

Table A1 - Probability Of Not Achieving C/I For Various Location Lognormal Standard Deviations

These various relationships are shown in Figure A1, a continuous plot of equation(s) 1 and 2.

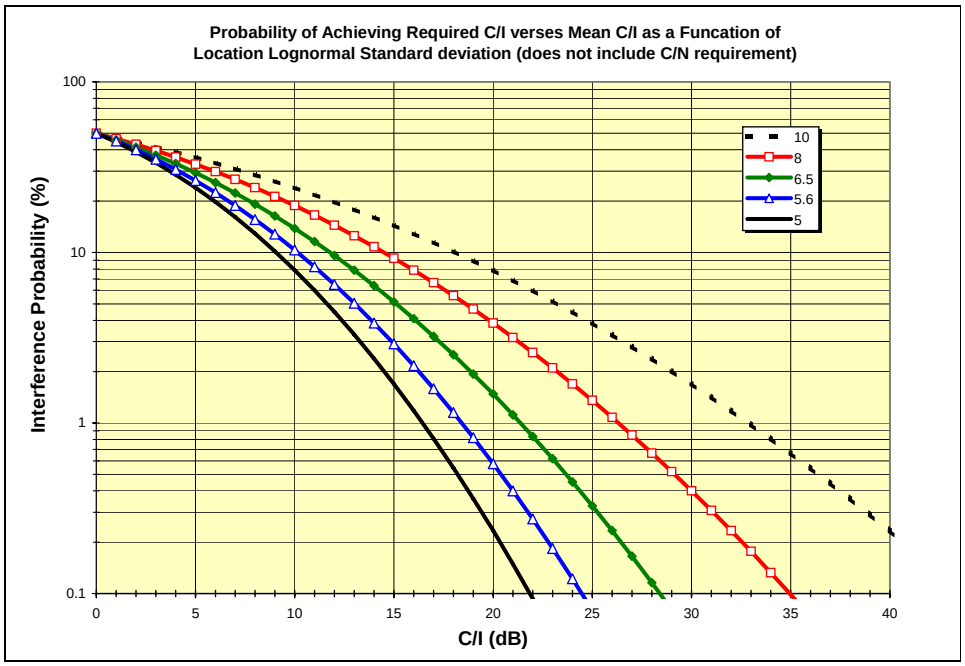


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

For co-channel the margin needs to include the "capture" requirement. When this is done, then a 1% probability of co channel interference can be rephrased to mean, there is a 99% probability that the "capture ratio" will be achieved. The capture ratio varies with the type of modulation. Older analog equipment has a capture ratio of approximately 7 dB. Project 25 FDMA is specified at 9 dB. Figure A1 shows the C/I requirement without including the capture requirement.

The 8 dB value for lognormal location standard deviation is reasonable when little information is available. Later when a detailed design is required, additional details and high-resolution terrain and land usage databases will allow a lower value to be used. The TIA recommended value is 5.6 dB. Using 8 dB initially and changing to 5.6 dB provides additional flexibility necessary to complete the final system design.

To determine the desired probability that both the C/N and C/I will be achieved requires that a joint probability be determined. Figure A2 shows the effects of a family of various levels of C/N reliability and the joint probability (Y-axis) in the presence of various probabilities of Interference. Note that at 99% reliability with 1% interference (X-axis) that the reduction is nearly the difference. This is because the very high noise reliability is degraded by the interference, as there is little probability that the noise criterion will not be satisfied. At 90%, the 1% interference has a greater likelihood that it will occur simultaneously when the noise criterion not being met, resulting in less degradation of the 90%.

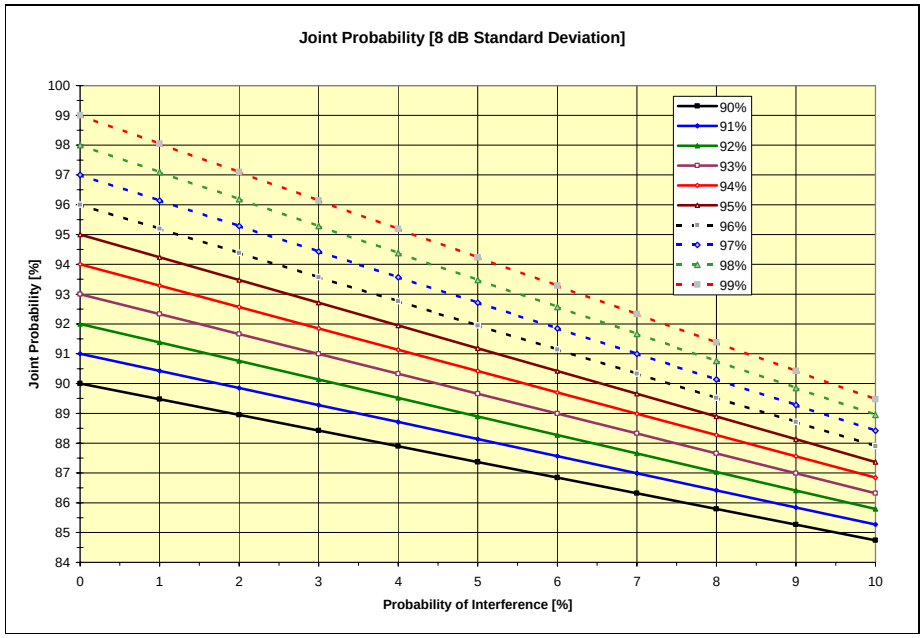
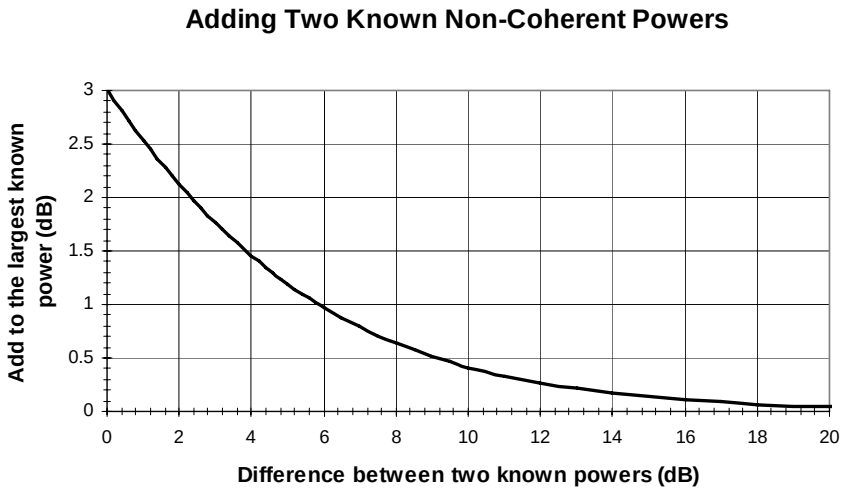


Figure A2 - Effect Of Joint Probability On The Composite Probability

For adjacent and alternate channels, the channel performance requirement must be added to the C/I ratio. When this is applied, then a 1% probability of adjacent/alternate channel interference can be rephrased to mean, there is a 99% probability that the "channel performance ratio" will be achieved.

Attachment B



In order to sum the power of two or more signals expressed in dBm or dBμ, they level should be converted to a voltage level or a power level, summed (root of the sum of the squares), and then converted back to dBm or dBμ.

The chart above provides simple method to sum two power levels expressed in dBm or dBμ. First find the difference between the two signals on the horizontal axis. Go up to the curve and across to the vertical axis to find the power delta. Add the power delta to the larger of the two original signal levels.

Example 1: Signal A is 36.4 dBμ. Signal B is 37.5 dBμ. Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is 37.5 dBμ + 2.5 dB = 40 dBμ.

Example 2: Signal is –96.3 dBm. Signal B is –95.2 dBm. Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is –95.2 dBm + 2.5 dB = -92.7 dBm.

APPENDIX K – MEETING MINUTES

700 MHz REGIONAL PLANNING MEETING
February 15, 2001
WYDOT Auditorium

Bill Smith, Convener for the 700 MHz Regional Planning Project, opened the first meeting at 10 AM to hear presentations from National Institute of Justice (NIJ) and elect a chairperson for Region 46's Regional Planning Committee.

The meeting was turned over to Tom Tolman, Gene McGahey, and David Funk with the National Institute of Justice (NIJ). They discussed information available to the Regional Planning Committee though NIJ, offered technical assistance, and funding assistance for the Planning Process. They provided an overview of the National Public Safety Telecommunications Council (NPSTC), Docket 96-98, and 700 MHz Band allocations for all users.

After the presentation, Bill Smith then asked for nominations from the floor for chairman of the Regional Planning Committee. Kelly Hamilton, SALECS chairman, nominated Bill Smith and it was seconded by Phil Dumars, Coordinator for Wheatland Emergency Management.. There being no other nominations, Bill Smith was elected Chairman by a majority voice vote.

Meeting adjourned at 12 noon.

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700 MHz REGIONAL PLANNING
SIGN UP SHEET

February 15, 2001

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700 MHz REGIONAL PLANNING
SIGN UP SHEET

February 15, 2005

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700 MHz REGIONAL PLANNING
SIGN UP SHEET

February 15, 2001

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721-4420

Region 46, State of Wyoming, 764-776/794-806 Regional Plan
December 13, 2001
Committee Meeting Minutes

Review:

- Initial meeting of Region 46, 700 MHz meeting was held on February 15, 2001 at 10:00 a.m. at the Wyoming Department of Transportation Auditorium, 5300 Bishop Blvd., Cheyenne, WY
  - Bill Smith, WYDOT was elected as Chairperson of the Regional Planning Committee, (RPC).
  - Bill Fleming, Motorola Inc. was elected as the committee secretary.
  - Eight additional persons representing "General, EMS, Police, Forestry and Highway" also volunteered to participate. (Jeff Alexander, Kent Drummond, Phil Dumars, Kelly Hamilton, Jim Johnson, Dan Perko, Craig Post and Kathy Red Cloud)
  - A $2500.00 request for funding from the National Law Enforcement Institute of Justice will be filed on behalf of Region 46. The Wyoming APCO chapter will manage the funds.
  - Awaiting the database that is being developed by Dave Funk at NLECTC-Rocky Mountain and other information we can acquire.
  - A FCC application # 601 has been sent to the FCC for the channels offered to the Governors of each state.

November 27, 2001, Meeting Minutes:

- The meeting was held in Casper, WY at 4:00 p.m. – 6:30 p.m.
- Members present:
  1. Bill Smith – Chairperson
  2. Bill Fleming – Committee Secretary
  3. Jeff Alexander – General
  4. Kent Drummond – General
  5. Kelly Hamilton – Police
  6. Dan Perko – Forestry
  7. Craig Post – General
  8. Kathy Red Cloud – Police
- Kent Drummond passed out indexed books as per "NCC outline" to use as a guide thru the "planning process".
- Appendix E; Bylaws were reviewed and discussed by members.
  - Date, draft and form numbers removed from cover page
  - Article II; 2.1 re-written to clarify
  - 2.6 re-written to clarify
  - 2.9 re-written to clarify
  - 2.14 If in conflict of interest, voting member must abstain, Bill Fleming changed to a voting member.
  - Article III; 3.1 Kent Drummond was elected as Vice-chairman and changed to a voting member, (nominated by Jeff Alexander, 2nd by Craig Post)

- Treasurer and secretary duties will be combined
- Appendix H, I and M were discussed and no changes made to the outline form.
- Committee members were assigned specific sections to read and make recommendations to the Bill Smith, Chairperson no later than 12-14-2001

- Miscellaneous:
  - Kent Drummond to contact "Yellowstone Park to request representation on the Region 46 committee.
  - Secretary to notify "Adjacent Regions" of our committee's progress on the Regional Plan
    - Colorado, Nebraska, South Dakota, Montana, Idaho and Utah has been notified via email....12/13/2001
  - Next meeting pending NLECTC-Rocky Mountain spectrum data base information and other information we can acquire.

  - Meeting Adjourned

- With the withdrawal of Bill Smith from the RPC membership, Kelly Hamilton nominated Kent Drummond to become Chairman of the Region 46 committee. This nomination was seconded by Dan Perko.
- Bill Fleming then nominated Richard Freeze to replace Kent as Vice chairman of Region 46. Seconded by Dan Perko.
- Meeting Adjourned.

Region 46, State of Wyoming, 764-776/794-806 Regional Plan
November 18, 2002
Committee Meeting Minutes

Review:

- Second meeting of Region 46, 700 meeting was held on November 27, 2001 at 4:00pm – 6:30pm at the Holiday Inn in Casper Wyoming.
- Indexed books were passed out to all committee members as per the NCC outline" as a guide thru the "planning process".
- Appendix E; Bylaws were reviewed and discussed by members.
- Kent Drummond was elected as Vice-chairman and changed to a voting member.
- Treasurer and secretary duties were combined.
- Secretary was to notify "Adjacent Regions" of our committee's progress on the region plan. (Colorado, Nebraska, South Dakota, Montana, Idaho and Utah were notified via email on 12-13-2001).
- Meeting Adjourned
- Vice chairperson Kent Drummond moved to approve the November 27, 2001 minutes, seconded by Craig Post. MINUTES APPROVED

November 18, 2002, Meeting Minutes:

- Members present:
  1. Kent Drummond – Vice chairperson
  2. Bill Fleming – Committee secretary
  3. Kelly Hamilton – Police
  4. Dan Perko – Forestry
  5. Craig Post – General
  6. Gregory Ryan – New member to RPC membership. Voting, General Eligibility, PO Box 189, Saratoga, WY, 82331, 307-326-8356, gryan@union-tel.com
  7. Richard Freese – New member to RPC membership, Voting, General Eligibility, 201 N. David Street, 82601, 307-235-8250, rfreese@cityofcasperwy.com
  8. Bryan Sanborn – observing
  9. Jeff Alexander – absent
  10. Phil Dumars – absent
  11. Jim Johnson – absent
  12. Kathy Red Cloud – absent
  13. Bill Smith – withdrawn for RPC membership

- Kent Drummond will reformat indexed books as necessary upon receipt of CD from Dave Funk at NIJ.
- Kent Drummond attended a three day Computer Assisted Pre-Coordination Resource and Database, (CAPRAD) system training.
- Kent Drummond connected to the main system electronically and reviewed the training with the attending members.

- With the withdrawal of Bill Smith from the RPC membership, Kelly Hamilton nominated Kent Drummond to become Chairman of the Region 46 committee. This nomination was seconded by Dan Perko.
- Bill Fleming then nominated Richard Freeze to replace Kent as Vice chairman of Region 46. Seconded by Dan Perko.
- Meeting Adjourned.

APPENDIX L – DETAILED CHANNEL ALLOTMENT

County	Class	Band	FCC Channel Number	Base Frequency	Mobile Frequency	Co-Channel Usage	Adjacent Channels
Albany	General Use	Voice 25KHz	49-52	764.3125	794.3125	Fremont	45-48: Uinta 53-56: Campbell
	General Use	Voice 25KHz	93-96	764.5875	794.5875		89-92: Lincoln Washakie 97-100: Campbell Goshen Park Sweetwater
	General Use	Voice 25KHz	165-168	765.0375	795.0375	Campbell	161-164: Park Sweetwater 169-172: Fremont
	General Use	Voice 25KHz	205-208	765.2875	795.2875	Campbell	201-204: Goshen Sweetwater Teton Washakie 209-212: Fremont Uinta
	General Use	Voice 25KHz	357-360	766.2375	796.2375	Fremont Sheridan	353-356: Goshen
	General Use	Voice 25KHz	433-436	766.7125	796.7125	Hot Springs	429-432: Johnson 437-440: Campbell
	General Use	Voice 25KHz	493-496	773.0875	803.0875	Campbell Fremont	489-492: Lincoln 497-500: Big Horn
	General Use	Voice 25KHz	537-540	773.3625	803.3625	Sublette	533-536: Park 541-544: Big Horn Weston
	General Use	Voice 25KHz	589-592	773.6875	803.6875		585-588: Fremont Goshen 593-596: Sheridan Sublette
	General Use	Voice 25KHz	637-640	773.9875	803.9875	Fremont	633-636: Sheridan
	General Use	Voice 25KHz	701-704	774.3875	804.3875	Fremont	
	General Use	Voice 25KHz	741-744	774.6375	804.6375	Campbell Fremont	
	General Use	Voice 25KHz	829-832	775.1875	805.1875	Campbell Hot Springs	
	General Use	Voice 25KHz	917-920	775.7375	805.7375	Campbell Fremont Uinta	
Big Horn	General Use	Voice 25KHz	121-124	764.7625	794.7625	Converse	125-128: Fremont
	General Use	Voice 25KHz	289-292	765.8125	795.8125	Converse	285-288: Goshen
	General Use	Voice 25KHz	329-332	766.0625	796.0625	Converse	333-336: Crook

								Sweetwater
	General Use	Voice 25KHz	373-376	766.3375	796.3375		369-372:	Uinta
								Weston
							377-380:	Niobrara
	General Use	Voice 25KHz	421-424	766.6375	796.6375	Crook	417-420:	Platte
						Sweetwater	425-428:	Niobrara
						Teton		
	General Use	Voice 25KHz	497-500	773.1125	803.1125		493-496:	Albany
								Campbell
								Fremont
							501-504:	Laramie
								Weston
	General Use	Voice 25KHz	541-544	773.3875	803.3875	Weston	537-540:	Albany
								Sublette
							545-548:	Fremont
	General Use	Voice 25KHz	617-620	773.8625	803.8625		613-616:	Converse
							621-624:	Campbell
								Sweetwater
	General Use	Voice 25KHz	661-664	774.1375	804.1375		665-668:	Campbell
								Carbon
								Teton
	General Use	Voice 25KHz	753-756	774.7125	804.7125	Sweetwater	749-752:	Laramie
							757-760:	Natrona
								Platte
								Teton
Campbell	General Use	Voice 25KHz	13-16	764.0875	794.0875		17-20:	Park
								Platte
								Sweetwater
	General Use	Voice 25KHz	53-56	764.3375	794.3375		49-52:	Albany
								Fremont
							57-60:	Goshen
								Sweetwater
								Teton
	General Use	Voice 25KHz	97-100	764.6125	794.6125	Goshen	93-96:	Albany
						Park		
						Sweetwater		
	General Use	Voice 25KHz	165-168	765.0375	795.0375	Albany	161-164:	Park
								Sweetwater
							169-172:	Fremont
	General Use	Voice 25KHz	205-208	765.2875	795.2875	Albany	201-204:	Goshen
								Sweetwater
								Teton
								Washakie
							209-212:	Fremont
								Uinta
	General Use	Voice 25KHz	245-248	765.5375	795.5375	Park	241-244:	Goshen
						Sweetwater		
	General Use	Voice 25KHz	297-300	765.8625	795.8625	Fremont		
						Laramie		
	General Use	Voice 25KHz	341-344	766.1375	796.1375	Laramie	337-340:	Hot Springs

						Teton		Niobrara
	General Use	Voice 25KHz	389-392	766.4375	796.4375	Carbon Lincoln	385-388: 393-396:	Hot Springs Laramie
	General Use	Voice 25KHz	437-440	766.7375	796.7375		433-436: 441-444:	Albany Hot Springs Fremont Uinta
	General Use	Voice 25KHz	477-480	766.9875	796.9875	Hot Springs Platte Sweetwater		
	General Use	Voice 25KHz	493-496	773.0875	803.0875	Albany Fremont	489-492: 497-500:	Lincoln Big Horn
	General Use	Voice 25KHz	561-564	773.5125	803.5125		557-560: 565-568:	Carbon Lincoln Platte Washakie Hot Springs Uinta
	General Use	Voice 25KHz	621-624	773.8875	803.8875	Sweetwater	617-620:	Big Horn
	General Use	Voice 25KHz	665-668	774.1625	804.1625	Carbon Teton	661-664: 669-672:	Big Horn Platte Washakie
	General Use	Voice 25KHz	741-744	774.6375	804.6375	Albany Fremont		
	General Use	Voice 25KHz	781-784	774.8875	804.8875	Goshen Park	785-788:	Carbon
	General Use	Voice 25KHz	829-832	775.1875	805.1875	Albany Hot Springs		
	General Use	Voice 25KHz	877-880	775.4875	805.4875	Fremont Laramie Uinta		
	General Use	Voice 25KHz	917-920	775.7375	805.7375	Albany Fremont Uinta		
Carbon	General Use	Voice 25KHz	349-352	766.1875	796.1875	Washakie	353-356:	Goshen
	General Use	Voice 25KHz	389-392	766.4375	796.4375	Campbell Lincoln	385-388: 393-396:	Hot Springs Laramie
	General Use	Voice 25KHz	465-468	766.9125	796.9125	Crook Goshen Washakie	469-472:	Sheridan Sublette
	General Use	Voice 25KHz	481-484	773.0125	803.0125	Goshen Johnson	485-488:	Park
	General Use	Voice 25KHz	557-560	773.4875	803.4875	Lincoln Platte Washakie	553-556: 561-564:	Sheridan Campbell
	General Use	Voice 25KHz	597-600	773.7375	803.7375	Crook Washakie	593-596: 601-604:	Sheridan Sublette Lincoln Niobrara
	General Use	Voice 25KHz	665-668	774.1625	804.1625	Campbell	661-664:	Big Horn

						Teton	669-672:	Platte Washakie
	General Use	Voice 25KHz	785-788	774.9125	804.9125		781-784:	Campbell Goshen Park
							789-792:	Laramie Sublette Washakie
Converse	General Use	Voice 25KHz	121-124	764.7625	794.7625	Big Horn	125-128:	Fremont
	General Use	Voice 25KHz	289-292	765.8125	795.8125	Big Horn	285-288:	Goshen
	General Use	Voice 25KHz	329-332	766.0625	796.0625	Big Horn	333-336:	Crook Sweetwater
	General Use	Voice 25KHz	397-400	766.4875	796.4875	Fremont Sheridan	393-396:	Laramie
	General Use	Voice 25KHz	517-520	773.2375	803.2375	Uinta Washakie		
	General Use	Voice 25KHz	569-572	773.5625	803.5625		565-568:	Hot Springs Uinta
							573-576:	Sweetwater
	General Use	Voice 25KHz	613-616	773.8375	803.8375		609-612:	Teton
							617-620:	Big Horn
	General Use	Voice 25KHz	709-712	774.4375	804.4375	Park	713-716:	Crook
	General Use	Voice 25KHz	793-796	774.9625	804.9625		789-792:	Laramie Sublette Washakie
							797-800:	Fremont Sheridan
Crook	General Use	Voice 25KHz	333-336	766.0875	796.0875	Sweetwater	329-332:	Big Horn Converse
							337-340:	Hot Springs Niobrara
	General Use	Voice 25KHz	381-384	766.3875	796.3875	Johnson Sweetwater Teton	377-380: 385-388:	Niobrara Hot Springs
	General Use	Voice 25KHz	421-424	766.6375	796.6375	Big Horn Sweetwater Teton	417-420: 425-428:	Platte Niobrara
	General Use	Voice 25KHz	465-468	766.9125	796.9125	Carbon Goshen Washakie	469-472:	Sheridan Sublette
	General Use	Voice 25KHz	509-512	773.1875	803.1875	Sweetwater	505-508:	Natrona Sheridan Teton
	General Use	Voice 25KHz	597-600	773.7375	803.7375	Carbon Washakie	593-596:	Sheridan Sublette
							601-604:	Lincoln Niobrara
	General Use	Voice 25KHz	713-716	774.4625	804.4625		709-712:	Converse Park
							717-720:	Goshen

								Natrona Sheridan Sublette
Fremont	General Use	Voice 25KHz	49-52	764.3125	794.3125	Albany	45-48: 53-56:	Uinta Campbell
	General Use	Voice 25KHz	125-128	764.7875	794.7875		121-124: 129-132:	Big Horn Converse Johnson Laramie Lincoln
	General Use	Voice 25KHz	169-172	765.0625	795.0625		165-168: 173-176:	Albany Campbell Lincoln Sheridan
	General Use	Voice 25KHz	209-212	765.3125	795.3125	Uinta	205-208: 213-216:	Albany Campbell Platte Weston
	General Use	Voice 25KHz	297-300	765.8625	795.8625	Campbell Laramie		
	General Use	Voice 25KHz	357-360	766.2375	796.2375	Albany Sheridan	353-356:	Goshen
	General Use	Voice 25KHz	397-400	766.4875	796.4875	Converse Sheridan	393-396:	Laramie
	General Use	Voice 25KHz	441-444	766.7625	796.7625	Uinta	437-440: 445-448:	Campbell Laramie
	General Use	Voice 25KHz	493-496	773.0875	803.0875	Albany Campbell	489-492: 497-500:	Lincoln Big Horn
	General Use	Voice 25KHz	545-548	773.4125	803.4125		541-544: 549-552:	Big Horn Weston Laramie Niobrara
	General Use	Voice 25KHz	585-588	773.6625	803.6625	Goshen	581-584: 589-592:	Weston Albany
	General Use	Voice 25KHz	637-640	773.9875	803.9875	Albany	633-636:	Sheridan
	General Use	Voice 25KHz	701-704	774.3875	804.3875	Albany		
	General Use	Voice 25KHz	741-744	774.6375	804.6375	Albany Campbell		
	General Use	Voice 25KHz	797-800	774.9875	804.9875	Sheridan	793-796:	Converse
	General Use	Voice 25KHz	837-840	775.2375	805.2375	Laramie Niobrara Sheridan Uinta		
	General Use	Voice 25KHz	877-880	775.4875	805.4875	Campbell Laramie Uinta		
	General Use	Voice 25KHz	917-920	775.7375	805.7375	Albany Campbell Uinta		
Goshen	General Use	Voice 25KHz	57-60	764.3625	794.3625	Sweetwater	53-56:	Campbell

						Teton		
	General Use	Voice 25KHz	97-100	764.6125	794.6125	Campbell Park Sweetwater	93-96:	Albany
	General Use	Voice 25KHz	137-140	764.8625	794.8625	Natrona Teton		
	General Use	Voice 25KHz	201-204	765.2625	795.2625	Sweetwater Teton Washakie	205-208:	Albany Campbell
	General Use	Voice 25KHz	241-244	765.5125	795.5125		245-248:	Campbell Park Sweetwater
	General Use	Voice 25KHz	285-288	765.7875	795.7875		281-284:	Johnson Teton Uinta
							289-292:	Big Horn Converse
	General Use	Voice 25KHz	353-356	766.2125	796.2125		349-352:	Carbon Washakie
							357-360:	Albany Fremont Sheridan
	General Use	Voice 25KHz	409-412	766.5625	796.5625	Sublette	405-408:	Natrona Park
							413-416:	Washakie Weston
	General Use	Voice 25KHz	465-468	766.9125	796.9125	Carbon Crook Washakie	469-472:	Sheridan Sublette
	General Use	Voice 25KHz	481-484	773.0125	803.0125	Carbon Johnson	485-488:	Park
	General Use	Voice 25KHz	525-528	773.2875	803.2875	Hot Springs	529-532:	Johnson
	General Use	Voice 25KHz	585-588	773.6625	803.6625	Fremont	581-584:	Weston
							589-592:	Albany
	General Use	Voice 25KHz	629-632	773.9375	803.9375	Natrona Park Weston	633-636:	Sheridan
	General Use	Voice 25KHz	717-720	774.4875	804.4875	Natrona Sheridan Sublette	713-716:	Crook
	General Use	Voice 25KHz	781-784	774.8875	804.8875	Campbell Park	785-788:	Carbon
	General Use	Voice 25KHz	869-872	775.4375	805.4375	Weston	865-868:	Natrona
Hot Springs	General Use	Voice 25KHz	337-340	766.1125	796.1125	Niobrara	333-336:	Crook Sweetwater
							341-344:	Campbell Laramie Teton
	General Use	Voice 25KHz	385-388	766.4125	796.4125		381-384:	Crook Johnson

								Sweetwater
								Teton
							389-392:	Campbell
								Carbon
								Lincoln
	General Use	Voice 25KHz	433-436	766.7125	796.7125	Albany	429-432:	Johnson
							437-440:	Campbell
	General Use	Voice 25KHz	477-480	766.9875	796.9875	Campbell		
						Platte		
						Sweetwater		
	General Use	Voice 25KHz	525-528	773.2875	803.2875	Goshen	529-532:	Johnson
	General Use	Voice 25KHz	565-568	773.5375	803.5375	Uinta	561-564:	Campbell
							569-572:	Converse
	General Use	Voice 25KHz	829-832	775.1875	805.1875	Albany		
						Campbell		
Johnson	General Use	Voice 25KHz	129-132	764.8125	794.8125	Laramie	125-128:	Fremont
						Lincoln		
	General Use	Voice 25KHz	281-284	765.7625	795.7625	Teton	285-288:	Goshen
						Uinta		
	General Use	Voice 25KHz	381-384	766.3875	796.3875	Crook	377-380:	Niobrara
						Sweetwater	385-388:	Hot Springs
						Teton		
	General Use	Voice 25KHz	429-432	766.6875	796.6875		425-428:	Niobrara
							433-436:	Albany
								Hot Springs
	General Use	Voice 25KHz	481-484	773.0125	803.0125	Carbon	485-488:	Park
						Goshen		
	General Use	Voice 25KHz	529-532	773.3125	803.3125		525-528:	Goshen
								Hot Springs
							533-536:	Park
	General Use	Voice 25KHz	605-608	773.7875	803.7875	Laramie	601-604:	Lincoln
								Niobrara
							609-612:	Teton
Laramie	General Use	Voice 25KHz	41-44	764.2625	794.2625	Natrona	45-48:	Uinta
						Sheridan		
	General Use	Voice 25KHz	81-84	764.5125	794.5125	Natrona	85-88:	Sheridan
	General Use	Voice 25KHz	129-132	764.8125	794.8125	Johnson	125-128:	Fremont
						Lincoln		
	General Use	Voice 25KHz	177-180	765.1125	795.1125	Natrona	173-176:	Lincoln
								Sheridan
	General Use	Voice 25KHz	253-256	765.5875	795.5875	Niobrara	257-260:	Natrona
								Sheridan
								Sublette
	General Use	Voice 25KHz	297-300	765.8625	795.8625	Campbell		
						Fremont		
	General Use	Voice 25KHz	341-344	766.1375	796.1375	Campbell	337-340:	Hot Springs
						Teton		Niobrara
	General Use	Voice 25KHz	393-396	766.4625	796.4625		389-392:	Campbell
								Carbon
								Lincoln

							397-400:	Converse
								Fremont
								Sheridan
	General Use	Voice 25KHz	445-448	766.7875	796.7875		441-444:	Fremont
								Uinta
							449-452:	Lincoln
								Park
	General Use	Voice 25KHz	501-504	773.1375	803.1375	Weston	497-500:	Big Horn
							505-508:	Natrona
								Sheridan
								Teton
	General Use	Voice 25KHz	549-552	773.4375	803.4375	Niobrara	545-548:	Fremont
							553-556:	Sheridan
	General Use	Voice 25KHz	605-608	773.7875	803.7875	Johnson	601-604:	Lincoln
								Niobrara
							609-612:	Teton
	General Use	Voice 25KHz	677-680	774.2375	804.2375	Natrona	673-676:	Sweetwater
						Sheridan		
	General Use	Voice 25KHz	749-752	774.6875	804.6875		753-756:	Big Horn
								Sweetwater
	General Use	Voice 25KHz	789-792	774.9375	804.9375	Sublette	785-788:	Carbon
						Washakie	793-796:	Converse
	General Use	Voice 25KHz	837-840	775.2375	805.2375	Fremont		
						Niobrara		
						Sheridan		
						Uinta		
	General Use	Voice 25KHz	877-880	775.4875	805.4875	Campbell		
						Fremont		
						Uinta		
	General Use	Voice 25KHz	945-948	775.9125	805.9125	Natrona	941-944:	Park
								Sweetwater
Lincoln	General Use	Voice 25KHz	89-92	764.5625	794.5625	Washakie	85-88:	Sheridan
							93-96:	Albany
	General Use	Voice 25KHz	129-132	764.8125	794.8125	Johnson	125-128:	Fremont
						Laramie		
	General Use	Voice 25KHz	173-176	765.0875	795.0875	Sheridan	169-172:	Fremont
							177-180:	Laramie
								Natrona
	General Use	Voice 25KHz	321-324	766.0125	796.0125	Natrona		
						Park		
						Platte		
	General Use	Voice 25KHz	389-392	766.4375	796.4375	Campbell	385-388:	Hot Springs
						Carbon	393-396:	Laramie
	General Use	Voice 25KHz	449-452	766.8125	796.8125	Park	445-448:	Laramie
							453-456:	Natrona
	General Use	Voice 25KHz	489-492	773.0625	803.0625		485-488:	Park
							493-496:	Albany
								Campbell
								Fremont
	General Use	Voice 25KHz	557-560	773.4875	803.4875	Carbon	553-556:	Sheridan

						Platte Washakie	561-564:	Campbell
	General Use	Voice 25KHz	601-604	773.7625	803.7625	Niobrara	597-600: 605-608:	Carbon Crook Washakie Johnson Laramie
Natrona	General Use	Voice 25KHz	41-44	764.2625	794.2625	Laramie Sheridan	45-48:	Uinta
	General Use	Voice 25KHz	81-84	764.5125	794.5125	Laramie	85-88:	Sheridan
	General Use	Voice 25KHz	137-140	764.8625	794.8625	Goshen Teton		
	General Use	Voice 25KHz	177-180	765.1125	795.1125	Laramie	173-176:	Lincoln Sheridan
	General Use	Voice 25KHz	217-220	765.3625	795.3625	Sheridan Sublette	213-216:	Platte Weston
	General Use	Voice 25KHz	257-260	765.6125	795.6125	Sheridan Sublette	253-256:	Laramie Niobrara
	General Use	Voice 25KHz	321-324	766.0125	796.0125	Lincoln Park Platte		
	General Use	Voice 25KHz	365-368	766.2875	796.2875	Park Platte	369-372:	Uinta Weston
	General Use	Voice 25KHz	405-408	766.5375	796.5375	Park	409-412:	Goshen Sublette
	General Use	Voice 25KHz	453-456	766.8375	796.8375		449-452:	Lincoln Park
	General Use	Voice 25KHz	505-508	773.1625	803.1625	Sheridan Teton	501-504: 509-512:	Laramie Weston Crook Sweetwater
	General Use	Voice 25KHz	577-580	773.6125	803.6125	Park	573-576: 581-584:	Sweetwater Weston
	General Use	Voice 25KHz	629-632	773.9375	803.9375	Goshen Park Weston	633-636:	Sheridan
	General Use	Voice 25KHz	677-680	774.2375	804.2375	Laramie Sheridan	673-676:	Sweetwater
	General Use	Voice 25KHz	717-720	774.4875	804.4875	Goshen Sheridan Sublette	713-716:	Crook
	General Use	Voice 25KHz	757-760	774.7375	804.7375	Platte Teton	753-756:	Big Horn Sweetwater
	General Use	Voice 25KHz	821-824	775.1375	805.1375	Park Platte		
	General Use	Voice 25KHz	865-868	775.4125	805.4125		861-864: 869-872:	Platte Sweetwater Teton Goshen Weston

	General Use	Voice 25KHz	905-908	775.6625	805.6625		901-904:	Park Sweetwater
							909-912:	Platte Sheridan Sublette
	General Use	Voice 25KHz	945-948	775.9125	805.9125	Laramie	941-944:	Park Sweetwater
Niobrara	General Use	Voice 25KHz	253-256	765.5875	795.5875	Laramie	257-260:	Natrona Sheridan Sublette
	General Use	Voice 25KHz	337-340	766.1125	796.1125	Hot Springs	333-336:	Crook Sweetwater
							341-344:	Campbell Laramie Teton
	General Use	Voice 25KHz	377-380	766.3625	796.3625		373-376:	Big Horn
							381-384:	Crook Johnson Sweetwater Teton
	General Use	Voice 25KHz	425-428	766.6625	796.6625		421-424:	Big Horn Crook Sweetwater Teton
							429-432:	Johnson
	General Use	Voice 25KHz	549-552	773.4375	803.4375	Laramie	545-548:	Fremont
							553-556:	Sheridan
	General Use	Voice 25KHz	601-604	773.7625	803.7625	Lincoln	597-600:	Carbon Crook Washakie
							605-608:	Johnson Laramie
	General Use	Voice 25KHz	837-840	775.2375	805.2375	Fremont Laramie Sheridan Uinta		
Park	General Use	Voice 25KHz	17-20	764.1125	794.1125	Platte Sweetwater	13-16:	Campbell
	General Use	Voice 25KHz	97-100	764.6125	794.6125	Campbell Goshen Sweetwater	93-96:	Albany
	General Use	Voice 25KHz	161-164	765.0125	795.0125	Sweetwater	165-168:	Albany Campbell
	General Use	Voice 25KHz	245-248	765.5375	795.5375	Campbell Sweetwater	241-244:	Goshen
	General Use	Voice 25KHz	321-324	766.0125	796.0125	Lincoln Natrona Platte		
	General Use	Voice 25KHz	365-368	766.2875	796.2875	Natrona Platte	369-372:	Uinta Weston

	General Use	Voice 25KHz	405-408	766.5375	796.5375	Natrona	409-412:	Goshen Sublette
	General Use	Voice 25KHz	449-452	766.8125	796.8125	Lincoln	445-448: 453-456:	Laramie Natrona
	General Use	Voice 25KHz	485-488	773.0375	803.0375		481-484: 489-492:	Carbon Goshen Johnson Lincoln
	General Use	Voice 25KHz	533-536	773.3375	803.3375		529-532: 537-540:	Johnson Albany Sublette
	General Use	Voice 25KHz	577-580	773.6125	803.6125	Natrona	573-576: 581-584:	Sweetwater Weston
	General Use	Voice 25KHz	629-632	773.9375	803.9375	Goshen Natrona Weston	633-636:	Sheridan
	General Use	Voice 25KHz	709-712	774.4375	804.4375	Converse	713-716:	Crook
	General Use	Voice 25KHz	781-784	774.8875	804.8875	Campbell Goshen	785-788:	Carbon
	General Use	Voice 25KHz	821-824	775.1375	805.1375	Natrona Platte		
	General Use	Voice 25KHz	901-904	775.6375	805.6375	Sweetwater	905-908:	Natrona
	General Use	Voice 25KHz	941-944	775.8875	805.8875	Sweetwater	945-948:	Laramie Natrona
Platte	General Use	Voice 25KHz	17-20	764.1125	794.1125	Park Sweetwater	13-16:	Campbell
	General Use	Voice 25KHz	213-216	765.3375	795.3375	Weston	209-212: 217-220:	Fremont Uinta Natrona Sheridan Sublette
	General Use	Voice 25KHz	321-324	766.0125	796.0125	Lincoln Natrona Park		
	General Use	Voice 25KHz	365-368	766.2875	796.2875	Natrona Park	369-372:	Uinta Weston
	General Use	Voice 25KHz	417-420	766.6125	796.6125		413-416: 421-424:	Washakie Weston Big Horn Crook Sweetwater Teton
	General Use	Voice 25KHz	477-480	766.9875	796.9875	Campbell Hot Springs Sweetwater		
	General Use	Voice 25KHz	557-560	773.4875	803.4875	Carbon Lincoln Washakie	553-556: 561-564:	Sheridan Campbell
	General Use	Voice 25KHz	669-672	774.1875	804.1875	Washakie	665-668:	Campbell Carbon

								Teton
							673-676:	Sweetwater
	General Use	Voice 25KHz	757-760	774.7375	804.7375	Natrona Teton	753-756:	Big Horn Sweetwater
	General Use	Voice 25KHz	821-824	775.1375	805.1375	Natrona Park		
	General Use	Voice 25KHz	861-864	775.3875	805.3875	Sweetwater Teton	865-868:	Natrona
	General Use	Voice 25KHz	909-912	775.6875	805.6875	Sheridan Sublette	905-908:	Natrona
Sheridan	General Use	Voice 25KHz	41-44	764.2625	794.2625	Laramie Natrona	45-48:	Uinta
	General Use	Voice 25KHz	85-88	764.5375	794.5375		81-84:	Laramie Natrona
							89-92:	Lincoln Washakie
	General Use	Voice 25KHz	173-176	765.0875	795.0875	Lincoln	169-172:	Fremont
							177-180:	Laramie Natrona
	General Use	Voice 25KHz	217-220	765.3625	795.3625	Natrona Sublette	213-216:	Platte Weston
	General Use	Voice 25KHz	257-260	765.6125	795.6125	Natrona Sublette	253-256:	Laramie Niobrara
	General Use	Voice 25KHz	357-360	766.2375	796.2375	Albany Fremont	353-356:	Goshen
	General Use	Voice 25KHz	397-400	766.4875	796.4875	Converse Fremont	393-396:	Laramie
	General Use	Voice 25KHz	469-472	766.9375	796.9375	Sublette	465-468:	Carbon Crook Goshen Washakie
	General Use	Voice 25KHz	505-508	773.1625	803.1625	Natrona Teton	501-504:	Laramie Weston
							509-512:	Crook Sweetwater
	General Use	Voice 25KHz	553-556	773.4625	803.4625		549-552:	Laramie Niobrara
							557-560:	Carbon Lincoln Platte Washakie
	General Use	Voice 25KHz	593-596	773.7125	803.7125	Sublette	589-592:	Albany
							597-600:	Carbon Crook Washakie
	General Use	Voice 25KHz	633-636	773.9625	803.9625		629-632:	Goshen Natrona Park Weston
							637-640:	Albany

								Fremont
	General Use	Voice 25KHz	677-680	774.2375	804.2375	Laramie Natrona	673-676:	Sweetwater
	General Use	Voice 25KHz	717-720	774.4875	804.4875	Goshen Natrona Sublette	713-716:	Crook
	General Use	Voice 25KHz	797-800	774.9875	804.9875	Fremont	793-796:	Converse
	General Use	Voice 25KHz	837-840	775.2375	805.2375	Fremont Laramie Niobrara Uinta		
	General Use	Voice 25KHz	909-912	775.6875	805.6875	Platte Sublette	905-908:	Natrona
Sublette	General Use	Voice 25KHz	217-220	765.3625	795.3625	Natrona Sheridan	213-216:	Platte Weston
	General Use	Voice 25KHz	257-260	765.6125	795.6125	Natrona Sheridan	253-256:	Laramie Niobrara
	General Use	Voice 25KHz	409-412	766.5625	796.5625	Goshen	405-408: 413-416:	Natrona Park Washakie Weston
	General Use	Voice 25KHz	469-472	766.9375	796.9375	Sheridan	465-468:	Carbon Crook Goshen Washakie
	General Use	Voice 25KHz	537-540	773.3625	803.3625	Albany	533-536: 541-544:	Park Big Horn Weston
	General Use	Voice 25KHz	593-596	773.7125	803.7125	Sheridan	589-592: 597-600:	Albany Carbon Crook Washakie
	General Use	Voice 25KHz	717-720	774.4875	804.4875	Goshen Natrona Sheridan	713-716:	Crook
	General Use	Voice 25KHz	789-792	774.9375	804.9375	Laramie Washakie	785-788: 793-796:	Carbon Converse
	General Use	Voice 25KHz	909-912	775.6875	805.6875	Platte Sheridan	905-908:	Natrona
Sweetwater	General Use	Voice 25KHz	17-20	764.1125	794.1125	Park Platte	13-16:	Campbell
	General Use	Voice 25KHz	57-60	764.3625	794.3625	Goshen Teton	53-56:	Campbell
	General Use	Voice 25KHz	97-100	764.6125	794.6125	Campbell Goshen Park	93-96:	Albany
	General Use	Voice 25KHz	161-164	765.0125	795.0125	Park	165-168:	Albany Campbell
	General Use	Voice 25KHz	201-204	765.2625	795.2625	Goshen Teton	205-208:	Albany Campbell

						Washakie		
	General Use	Voice 25KHz	245-248	765.5375	795.5375	Campbell Park	241-244:	Goshen
	General Use	Voice 25KHz	333-336	766.0875	796.0875	Crook	329-332: 337-340:	Big Horn Converse Hot Springs Niobrara
	General Use	Voice 25KHz	381-384	766.3875	796.3875	Crook Johnson Teton	377-380: 385-388:	Niobrara Hot Springs
	General Use	Voice 25KHz	421-424	766.6375	796.6375	Big Horn Crook Teton	417-420: 425-428:	Platte Niobrara
	General Use	Voice 25KHz	477-480	766.9875	796.9875	Campbell Hot Springs Platte		
	General Use	Voice 25KHz	509-512	773.1875	803.1875	Crook	505-508: 569-572: 577-580:	Natrona Sheridan Teton Converse Natrona Park
	General Use	Voice 25KHz	573-576	773.5875	803.5875			
	General Use	Voice 25KHz	621-624	773.8875	803.8875	Campbell	617-620:	Big Horn
	General Use	Voice 25KHz	673-676	774.2125	804.2125		669-672: 677-680:	Platte Washakie Laramie Natrona Sheridan
	General Use	Voice 25KHz	753-756	774.7125	804.7125	Big Horn	749-752: 757-760:	Laramie Natrona Platte Teton
	General Use	Voice 25KHz	861-864	775.3875	805.3875	Platte Teton	865-868:	Natrona
	General Use	Voice 25KHz	901-904	775.6375	805.6375	Park	905-908:	Natrona
	General Use	Voice 25KHz	941-944	775.8875	805.8875	Park	945-948:	Laramie Natrona
Teton	General Use	Voice 25KHz	57-60	764.3625	794.3625	Goshen Sweetwater	53-56:	Campbell
	General Use	Voice 25KHz	137-140	764.8625	794.8625	Goshen Natrona		
	General Use	Voice 25KHz	201-204	765.2625	795.2625	Goshen Sweetwater Washakie	205-208:	Albany Campbell
	General Use	Voice 25KHz	281-284	765.7625	795.7625	Johnson Uinta	285-288:	Goshen
	General Use	Voice 25KHz	341-344	766.1375	796.1375	Campbell Laramie	337-340:	Hot Springs Niobrara
	General Use	Voice 25KHz	381-384	766.3875	796.3875	Crook Johnson	377-380: 385-388:	Niobrara Hot Springs

						Sweetwater		
	General Use	Voice 25KHz	421-424	766.6375	796.6375	Big Horn Crook Sweetwater	417-420: 425-428:	Platte Niobrara
	General Use	Voice 25KHz	505-508	773.1625	803.1625	Natrona Sheridan	501-504: 509-512:	Laramie Weston Crook Sweetwater
	General Use	Voice 25KHz	609-612	773.8125	803.8125		605-608: 613-616:	Johnson Laramie Converse
	General Use	Voice 25KHz	665-668	774.1625	804.1625	Campbell Carbon	661-664: 669-672:	Big Horn Platte Washakie
	General Use	Voice 25KHz	757-760	774.7375	804.7375	Natrona Platte	753-756:	Big Horn Sweetwater
	General Use	Voice 25KHz	861-864	775.3875	805.3875	Platte Sweetwater	865-868:	Natrona
Uinta	General Use	Voice 25KHz	45-48	764.2875	794.2875		41-44: 49-52:	Laramie Natrona Sheridan Albany Fremont
	General Use	Voice 25KHz	209-212	765.3125	795.3125	Fremont	205-208: 213-216:	Albany Campbell Platte Weston
	General Use	Voice 25KHz	281-284	765.7625	795.7625	Johnson Teton	285-288:	Goshen
	General Use	Voice 25KHz	369-372	766.3125	796.3125	Weston	365-368: 373-376:	Natrona Park Platte Big Horn
	General Use	Voice 25KHz	441-444	766.7625	796.7625	Fremont	437-440: 445-448:	Campbell Laramie
	General Use	Voice 25KHz	517-520	773.2375	803.2375	Converse Washakie		
	General Use	Voice 25KHz	565-568	773.5375	803.5375	Hot Springs	561-564: 569-572:	Campbell Converse
	General Use	Voice 25KHz	837-840	775.2375	805.2375	Fremont Laramie Niobrara Sheridan		
	General Use	Voice 25KHz	877-880	775.4875	805.4875	Campbell Fremont Laramie		
	General Use	Voice 25KHz	917-920	775.7375	805.7375	Albany Campbell Fremont		
Washakie	General Use	Voice 25KHz	89-92	764.5625	794.5625	Lincoln	85-88:	Sheridan

							93-96:	Albany
	General Use	Voice 25KHz	201-204	765.2625	795.2625	Goshen Sweetwater Teton	205-208:	Albany Campbell
	General Use	Voice 25KHz	349-352	766.1875	796.1875	Carbon	353-356:	Goshen
	General Use	Voice 25KHz	413-416	766.5875	796.5875	Weston	409-412: 417-420:	Goshen Sublette Platte
	General Use	Voice 25KHz	465-468	766.9125	796.9125	Carbon Crook Goshen	469-472:	Sheridan Sublette
	General Use	Voice 25KHz	517-520	773.2375	803.2375	Converse Uinta		
	General Use	Voice 25KHz	557-560	773.4875	803.4875	Carbon Lincoln Platte	553-556: 561-564:	Sheridan Campbell
	General Use	Voice 25KHz	597-600	773.7375	803.7375	Carbon Crook	593-596: 601-604:	Sheridan Sublette Lincoln Niobrara
	General Use	Voice 25KHz	669-672	774.1875	804.1875	Platte	665-668: 673-676:	Campbell Carbon Teton Sweetwater
	General Use	Voice 25KHz	789-792	774.9375	804.9375	Laramie Sublette	785-788: 793-796:	Carbon Converse
Weston	General Use	Voice 25KHz	213-216	765.3375	795.3375	Platte	209-212: 217-220:	Fremont Uinta Natrona Sheridan Sublette
	General Use	Voice 25KHz	369-372	766.3125	796.3125	Uinta	365-368: 373-376:	Natrona Park Platte Big Horn
	General Use	Voice 25KHz	413-416	766.5875	796.5875	Washakie	409-412: 417-420:	Goshen Sublette Platte
	General Use	Voice 25KHz	501-504	773.1375	803.1375	Laramie	497-500: 505-508:	Big Horn Natrona Sheridan Teton
	General Use	Voice 25KHz	541-544	773.3875	803.3875	Big Horn	537-540: 545-548:	Albany Sublette Fremont
	General Use	Voice 25KHz	581-584	773.6375	803.6375		577-580: 585-588:	Natrona Park Fremont Goshen

	General Use	Voice 25KHz	629-632	773.9375	803.9375	Goshen Natrona Park	633-636:	Sheridan
	General Use	Voice 25KHz	869-872	775.4375	805.4375	Goshen	865-868:	Natrona

APPENDIX M – TRIBAL CORRSPONDENCE