

## **Region 4, Arkansas 700 MHz Regional Planning Committee**

J.M. Rowe, Acting Chair  
128 Carnation Place  
Hot Springs AR 71913

1-30-2010

Federal Communications Commission  
Wireless Telecommunications Bureau  
Chief, Public Safety and Private Wireless Division  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Reference: WTB Docket No. 02-378, Region 4 700 MHz Regional Plan

Dear Sirs:

You will find attached the Region 4 700 MHz Plan for your consideration. This document is the culmination of several years of work by the Region 4 700 MHz Regional Planning Committee. We feel this Plan best address the needs and concerns of the public safety entities in and around the State of Arkansas.

I wish to thank the members of the Committee for their hard work and due diligence. In addition, several individuals outside the state deserve recognition, namely; John Johnson of Tennessee and Steve Devine of Missouri. Their guidance has been invaluable. Further, the National Law Enforcement and Correctional Technology Support Office availability and the CAPRAD training we received will certainly improve the implementation of this Plan.

It is our hope this plan meets your approval so the public safety agencies involved will have access to this resource in the near future. If you have any questions, do not hesitate to call on me.

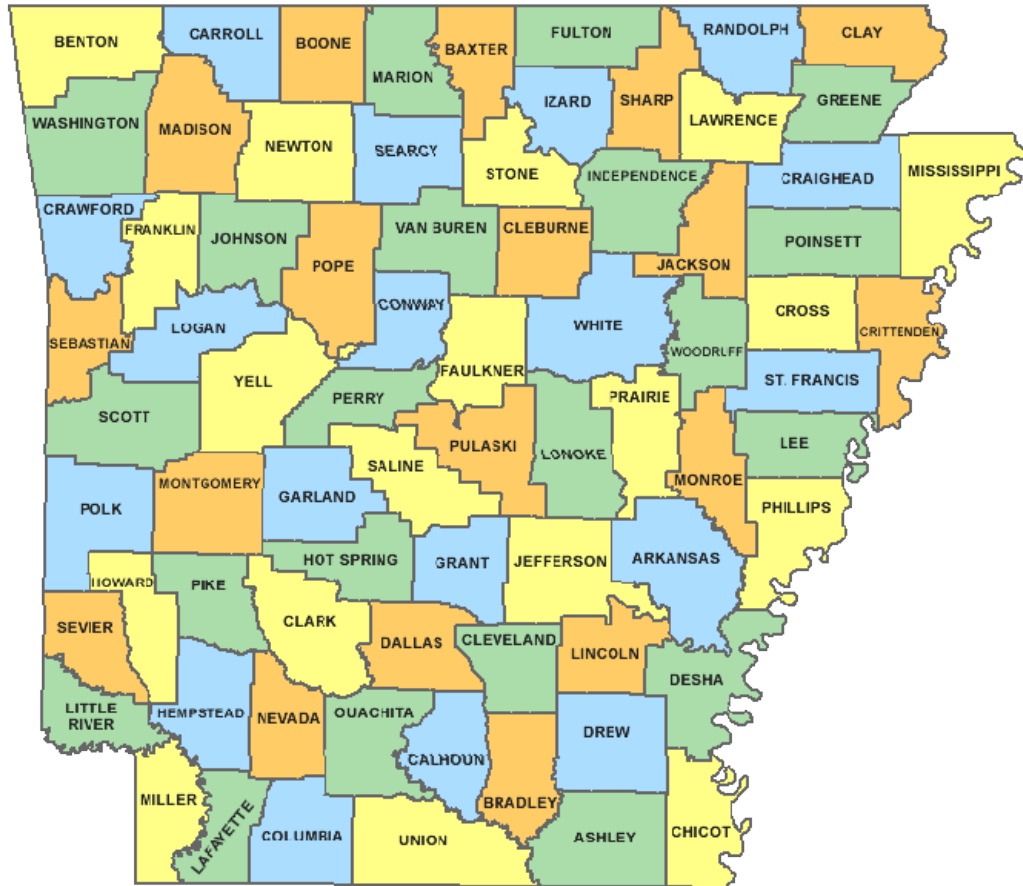
Sincerely,

A handwritten signature in black ink, appearing to read "J.M. Rowe". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

J.M. Rowe, Acting Chair  
501-767-9492

PUBLIC SAFETY 700 MHz RADIO  
COMMUNICATIONS PLAN  
FOR REGION 4

THE STATE OF ARKANSAS



763 – 775 & 793 – 805 MHz Regional Plan for Region 4 (ARKANSAS)

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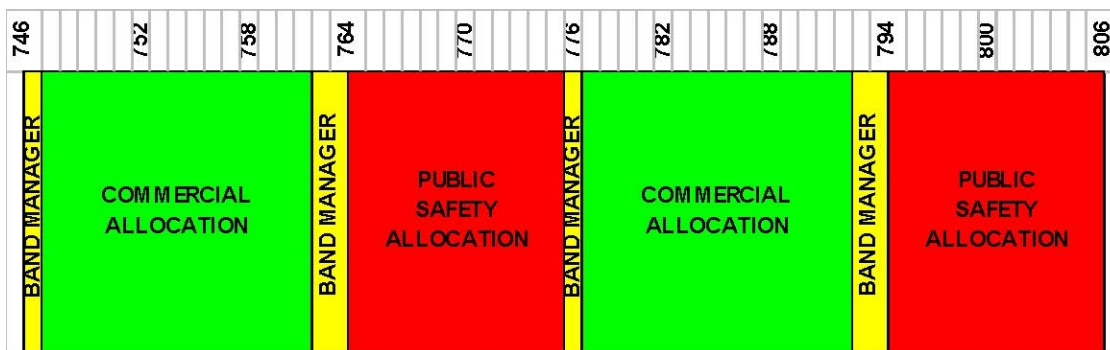
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Attachment - Signed LOC & Dispute Resolution

## 1.0 General Information

### INTRODUCTION

The Regional Committee is established under section 90.527 of the FCC's rules and regulations. Region 4 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. Twenty-four (24) MHz of the spectrum is allocated to Public Safety. The Public Safety spectrum consists of TV broadcast channel 63 & 64 paired with channels 68 & 69. This Plan deals with the 12 MHz of General Use spectrum for Public Safety.



The above table is how the 700 MHz spectrum (TV channels 60 – 69) was allocated.

### 1.1 Current Regional Chair

Carl W. Jacob  
811 Dogwood St.  
Redfield AR 72132  
Cell 501-551-3441  
Email [Jacobsc@apco911.org](mailto:Jacobsc@apco911.org)

### Current Regional Vice-Chair

J. M. Rowe  
128 Carnation Place  
Hot Springs, AR 71913  
Email [n5xfw@arrl.net](mailto:n5xfw@arrl.net)

## **1.2 Bylaws of the 700 MHz Regional Planning Committee Region 4**

**(State of Arkansas)**

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### **1.2.1 Name and purpose.**

The name of this Committee shall be Region 4-Regional Planning Committee. Its primary purpose is to foster and promote cooperation, planning, development and evolution of Regional Plans and the implementation of these plans in the 700 MHz Public Safety Band within the State of Arkansas.

### **1.2.2 Membership.**

For purposes of this document, the term “member,” unless otherwise noted refers to both voting and nonvoting members.

#### **1.2.2.1 Members, Election and Qualification.**

The Regional 4 700 MHz Regional Planning Committee shall have two classes of members, “voting members” and “non-voting members.” New members may be added at annual, special, or regular meetings. Tools to promote participation and involvement in the Region 4 700 MHz Committee in the form of a list-serve and/or regional newsletters will be researched by the committee. A newsletter may be distributed in either electronic or in print form.

##### **1.2.2.1 .1 Voting Members.**

Voting members shall consist of one (1) representative from any single agency engaged in public safety eligible to hold a license under 47 CFR 90.20, 47 CFR 90.523 or 47 CFR 2.103 and are employed or volunteer in public safety in Region 4. Except that a single agency shall be allowed no more than one vote for each distinct eligibility category (e.g. police, fire, EMS, EMA, highway) within the agency’s organization or political jurisdiction. In voting on any issue, the individual must identify himself/herself and the agency and eligibility category in which he or she represents. Voting members may not vote on issues involving their entity.

##### **1.2.2.1 .2 Non-Voting Members.**

Non-voting members are all other non-public safety personnel interested in furthering the goals of public safety communications.

#### **1.2.2.2 Dual Membership.**

A voting member may not be a voting member of another Region.

It is permissible to be a non-voting member in another region and be a voting member in Region 4 as long as the Voting Member requirements are met as set forth in section 1.2.2.1.

### **1.2.2.3 Tenure.**

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

### **1.2.2.4 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.

### **1.2.2.5 Suspensions 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. Region 4 will hold at least one (1) meeting in a calendar year. To retain consistent voting rights, members should attend one (1) meeting in a 24-month period. After the date of approval of this Regional Plan by the Federal Communications Commission, all previous attendees are voting members, with the exception of non-voting commercial members. After the acceptance of this Regional Plan, voting members that do not attend one meeting in a 24-month period that starts on the date of Plan acceptance, will lose Region 4 voting rights for either a 6 month period or when the member attends the next Regional Planning Committee meeting, whichever comes first. Attending a meeting is all that is required to immediately reinstate voting members voting rights. The loss of voting rights does not remove a member from active status; it simply requires attendance at a meeting (Special or Regular) to reinstate voting privileges. The voting limitations of an individual have no effect on the voting ability of a public safety entity. The public safety entity reserves the right to send another representative to vote on issues regarding 700 MHz implementation, or send the original voting representative to the next special or regular meeting.

A vote of the committee is the final determining factor regarding removal of a member from Region 4. A period of 6 months from the first day of removal is required before a removed member is eligible for reinstatement for membership in the Regional Planning Committee.

### **1.2.2.6 Resignation.**

A member may resign by delivering written resignation to the chairman, vice-chairman, treasurer / secretary of the Regional Committee or to a meeting of the members. A resigning member is eligible for reinstatement to the Regional Planning Committee after a period of six months has lapsed, beginning on the first day of resignation.



### **1.2.2.7 Meetings.**

The Region 4 700 MHz Planning Committee will meet no less than one (1) time per calendar year. A minimum notification of forty-five (45) days will be given. The annual meeting may be held in Little Rock, Arkansas area. This is centrally located within Region 4 and will provide the maximum opportunity for Regional participation. Any additional meetings may be located in a different city or town within the Region to attract and promote involvement in the committee. The Annual meeting should be held in the last quarter of calendar year and will be set by the Chairperson. Committee meetings will not be held on holidays or weekend days, unless called by the Region 4 Chairperson or as part of a public safety conference. At any time and when deemed necessary by the Chairperson, an additional meeting of the Region 4 Regional Planning Committee may be called. Video and/or Audio Teleconferencing may be conducted at meetings to include as many people as possible in the 700 MHz allocation process. E-mail will be utilized by members and officers of Region 4 as needed to convey Regional issues at hand. It should be noted the use of E-mail does not remove the voting eligibility requirement of the member to participate in at least one (1) of the Region 4 annual meeting.

### **1.2.2.8 Special Meetings.**

The Chairperson has the authority to call a meeting of the Region 4 Planning Committee when he deems it in the best interest of the Region and will provide notice of the special meeting to existing members of the Region (and the public) at least 5 days prior to the meeting. 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.

### **1.2.2.9 Call and Notice.**

#### **1.2.2.9.1 Annual meeting**

Reasonable notice of the time and place of scheduled meetings of the members, not being less than 45 days, shall be given to each member. Such notice may specify the purposes of a meeting, but will specify meeting content if required by law or these bylaws or unless there is to be considered at the meeting:

- (i) Amendments to these bylaws or
- (ii) Removal or suspension of a member who is an officer. Announcements of meetings, stating the time and place where the meeting is to be held, may

be published in newspapers, land mobile radio periodicals, and disseminated via E-mail and other electronic forms such as may be available. In addition, a press release may be issued; urging parties interested in public safety communications to attend. Region 4 will notify the Federal Communications Commission, Chief of the Wireless Telecommunications Bureau, when a meeting time and place has been established for the Region 4 700 MHz Regional Planning Committee at least 30 days prior to the meeting.

#### **1.2.2.9.2 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 any special meetings, addressed to such member at his 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.

#### **1.2.2.10 Quorum**

At any meeting of the members, a majority of the officers and a minimum of at least five (5) voting members shall constitute a quorum. Any meeting may be adjourned to such date or dates not more than sixty 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.

#### **1.2.2.11 Action by Vote**

Each voting member, representing a particular agency (one vote per agency) shall have one vote; nonvoting members have no voting rights. 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.

#### **1.2.2.12 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.

#### **1.2.2.13 Proxies.**

Voting members may vote either in person or by written proxy dated not more

than one week 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. A RPC member present via teleconference (audio or video) shall have voting status parallel to a member present at the meeting. If the facility is unable to accommodate teleconferencing (audio or video), or for any other reason teleconferencing cannot be accommodated in the meeting place, it is the responsibility of the member to attend the meeting in person or to vote by written proxy to have full voting rights. Unless otherwise specifically limited by their terms, such proxies shall entitle the holders thereof to vote at any adjournment of the meeting for which the proxy exists and the proxy shall terminate after the final adjournment of such meeting.

#### **1.2.2.14 Voting on One's Own Application.**

At no time can a voting member vote on his/her own application.

#### **1.2.2.15 Special Interest Voting.**

A voting member cannot have a commercial interest in any of his/her Region and/or adjacent Region's application(s) on which he/she is reviewing, approving and/or voting.

### **1.2.3 OFFICERS AND AGENTS**

#### **1.2.3.1 Number and qualification:**

The officers of the Region 4 700 MHz Regional Planning Committee shall consist of a Chairman, a Vice-Chairman and a Secretary and / or Treasurer. All officers must be voting members of the Regional Committee.

#### **1.2.3.2 Election:**

Officers shall be elected by the voting members at their first meeting and, thereafter, at a meeting determined by the membership. The terms of the officers in the Region 4 700 MHz RPC will be for two (2) years. In order to allow for consistency in the Plan creation and initialization process, the terms of elected officers will begin on the date of the FCC's approval of the Region 4 Plan.

#### **1.2.3.3 Tenure.**

The officers shall each hold office until the biannual election meeting of the members held within two years 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.

#### **1.2.3.4 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. 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.

#### **1.2.3.5 Treasurer.**

The treasurer shall be the chief financial officer and the chief accounting officer of the Regional Committee. The treasurer shall be in charge of its financial affairs, funds, and valuable papers and shall keep full and accurate records thereof. In the absence of a treasurer within the Region 4 700 MHz Planning Committee, the Chairperson shall assign Region 4 treasurer duties as deemed necessary.

#### **1.2.3.6 Secretary.**

The secretary 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 is absent from any meeting of members, a temporary secretary chosen at the meeting shall exercise the duties of the secretary at the meeting. In the absence of a secretary within the Region 4 700 MHz Planning Committee, the Chairperson shall assign Region 4 Secretary duties as deemed necessary and may appoint a non-voting member.

#### **1.2.3.7 Combining the office of Treasurer and Secretary**

If so decided by the Membership of Region 4, the duties of Treasurer and Secretary might be combined into one office.

#### **1.2.3.8 Suspensions or Removal.**

An officer of the Region 4 Regional Planning Committee may be suspended with cause by vote of a majority of the voting members in attendance.

#### **1.2.3.9 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.

#### **1.2.3.10 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 term, and in the case of the chairman, vice chairman, treasurer and / or secretary 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.

#### **1.2.4 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 of a quorum, 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.

#### **1.2.5 DISSOLUTION**

This Regional Committee may be dissolved by the consent of two-thirds plus one of an assembled quorum of the membership at a special meeting called for such purpose. The FCC shall be notified.

#### **1.2.6 RULES OF PROCEDURES**

The Conduct of Regional Meetings including debate and voting, shall be governed by *Simple Parliamentary Procedure*, Martha Nall, published by the University of Kentucky, College of Agriculture, Cooperative Extension Service, Publication # IP-15, Copyright 2000

The Regional Chairperson of Region 4 is Carl Jacobs. His information is below:

Carl W. Jacob  
811 Dogwood St.  
Redfield AR 72132  
Cell 501-551-3441  
E mail Jacobsc@apco911.org

## Other Current RPC Officers and full RPC Membership

Membership in the Region 4 Regional Planning Committee is open to any interested party as defined by FCC Part 90.523.

Committee Officer requirements, voting procedures and membership attendance requirements are listed in the Region 4 Planning Committee by-laws.

Appendix A contains the Region 4 By-laws.

Appendix B is a list of Region 4's members, their agency/affiliation and voting status. Voting and operating procedures are described in Section 2.2 of this Plan.

### **1.3.0 Region 4 Description**

Region 4 encompasses the entire state of Arkansas, consisting of 75 counties with a total landmass of 53,182 square miles and a population of 2,810,872 according to the 2005 Land Area Statistics, US Bureau of the Census.

The largest county is Union, with a total of 1,039 square miles.

Water features of significance, are the Mississippi and Arkansas Rivers.

The highest point is Mt. Magazine and the lowest point is along the Ouachita River at the Louisiana border.

An alphabetized list of counties can be found listed in Appendix C.

As shown above, the population nearly three million people are distributed across over fifty three thousand square miles of widely varying terrain. This presents some unique problems in area coverage for radio systems since the entire land area of any given jurisdiction must be covered. The population per square miles in urban areas tends to be dense and in rural areas tends to be sparse. The population distribution and the very diverse geographical features of the state must be carefully considered in communications system planning. All these items were taken under consideration in the allocation Plan.

Region 4 (State of Arkansas) has six (6) adjacent bordering Regions and three (2) non-bordering Regions within 70 miles of the State border. They are as follows:

Region 13	State of Illinois	Non Border
Region 17	State of Kentucky	Non Border
Region 18	State of Louisiana	Border
Region 23	State of Mississippi	Border
Region 24	State of Missouri	Border
Region 34	State of Oklahoma	Border
Region 39	State of Tennessee	Border
Region 40	State of Texas	Border

## **2.0 Notification and Operation**

### **2.1 Notification Process**

The 800 MHz NPSPAC Region 4 Chairperson, Carl Jacobs, acted as the 700 MHz Convener. A 700 MHz Regional Planning Committee meeting date was set for February 24, 2004. Notification to interested parties began ninety (90) days prior to the first meeting as well as follow-up reminder announcements were issued. Announcements indicating the date, time and location of the first meeting were sent by Email to the FCC Wireless Telecommunications Bureau. Every city and county Mayor in Arkansas as well as all known Public Safety and Public Service Associations were mailed or emailed an announcement of the meeting. The Associations notified were as follows: AR Association of Public-Safety Communications Officials, Emergency Management Association of AR, Native American Indian Association of AR, AR Ambulance Service Association, AR Association of Chiefs of Police, AR Association of County Executives, AR Association of Rescue Squads, AR County Highway Officials Association, AR County Service Association, AR District Attorneys Conference, AR Emergency Communications Board, AR Emergency Numbers Association, AR Fire Chief's Association, AR Hospitals Association, AR Municipal League, AR Organization of School Superintendents, AR Public Transportation Association, AR Recreation & Parks Association, AR School Boards Association, AR Sheriff's Association, State of Arkansas Emergency Services Coordinators .

This awareness allowed for the dissemination of meeting information to hundreds of law enforcement agencies, public safety and public service agencies and critical infrastructure operators throughout Arkansas. There is no Native American tribal reservation located within Region 4; however the Native American Indian Association of Arkansas was notified. Copies of the announcements sent to the FCC, any Public Notices released relating to Region 4's meeting, and emails sent to interested agencies are included in Appendix D.

The 700 MHz RPC first meeting convened on February 24, 2004, by Carl Jacobs. Carl Jacobs of Pulaski County Communications was elected the Chairperson of the Region 4 700 MHz RPC. The FCC did issue a Public notice for this meeting. At this and at all meetings, any one attending, voting or non-voting member may voice their comments on the Plan.

### **2.2 Operations of the Regional Plan Committee**

This committee will use *Simplified Parliamentary Procedures* to conduct meetings. This method allows for all members to have their voice heard. All decisions will be by clear consensus vote with each Public Safety Agency in



attendance having one (1) vote. Additional voting member considerations are listed in the Region 4 Bylaws, Appendix A. The meetings are open to all interested persons and public input time is provided for anyone to express a viewpoint or to have input to the Regional Planning process.

Subcommittees have been formed as needed to work on specific issues. For the initial planning of Region 4, three subcommittees were formed.

Technical, Interoperability, and Administrative Subcommittees: These subcommittees are intended to work on the details of specific issues and make recommendations to the full committee for the development of the Region 4 Regional Plan. Any changes to the Regional Plan must be voted and approved by the full Regional Planning Committee. Participation in subcommittees is open to any member. The Chair of the Regional Planning Committee appoints each Subcommittee Chair. The Chair of the Technical Committee is Bruce Lantz, the Chair of the Interoperability Committee is J.M. Rowe, and the Chair of the Administrative Committee is Wally Hunt.

A minimum of one (1) full committee meeting will be held per year. The Region 4 Chairperson has the authority to call an additional meeting at a time when he/she deems necessary or when he/she deems it in the best interest of the Region to convene. In an attempt to offer as many people as possible the opportunity to contribute to the Regional 700 MHz Planning Committee, a central location was chosen to host the meeting.

Beginning two years after Federal Communications Commission's approval of this Regional Plan, the Chairperson shall call a meeting of the Regional Planning Committee to elect a Chair, Vice Chair and Secretary to serve for a two-year term. There is no limit to the number of terms that may be served by officers of the 700 MHz Regional Planning Committee.

If the Chair is unable to serve a complete term, the Vice Chair will serve as Chair until the next 700 MHz Regional meeting. If both the Chair and Vice Chair are unable to serve their full terms, one or the other should make an effort to call a special meeting of the Committee to elect replacements. If for some reason, neither the Chair nor the Vice Chair can call the special meeting; the State or any County within the Region may call for a special meeting, giving at least 5 days notice, to elect replacements.

A chronological list of meetings, minutes, meeting announcements and table outlining Region 4's progress in 700 MHz developments is located in Appendix D of this document.

## **2.3 Major Elements of the Plan**

The major elements of this Plan are (1) the declaration that this is the Region 4 Plan, (2) that Region 4 encompasses the entire State of Arkansas, (3) the administration and operation of the committee, (4) 700 MHz interoperability, (5) General Use spectrum management and (6) allocation requests, (7) dispute resolution, (8) adjacent Region coordination and (9) the appendices with the channel allocation being Appendix G. The channel allocation contains both the general usage voice and data channels.

## **3.0 Regional Plan Administration**

### **3.1 Procedure for Requesting Spectrum Allotments**

#### **3.1.1 General Information**

Upon FCC approval of this Plan, Region 4 will announce to the Region that 700 MHz public safety channels are available in the Region and that channels have been assigned in pool allotments to counties within the Region for usage by Public Safety entities. The general usage spectrum may be used by all Local government entities and State agencies only if the State Channels have been depleted or not available in that county.

All available methods will be used to notify public safety entities of channel availability in the Region (see Section 2.1). All spectrum requests will be considered on a first come, first served basis. Region 4 supports the National Coordination Committee Pre-Assignment Rules and Recommendations listed in Appendix F, and will use these guidelines as a template to determine if an application submitted to the Regional Planning Committee meets Regional Planning standards. It is recommended that applicants familiarize themselves with these recommendations prior to submitting applications for Region 4 700 MHz public safety system implementation. Region 4 may develop a supplemental form for applicants to submit, along with their FCC form, to help guide them through the application process.

In general and unless otherwise noted, the Region 4 Regional Planning Committee will adhere to the published National Coordination Committee Implementation Guidelines for 700 MHz Public Safety Regional Planning Committees.

#### **3.1.2 Spectrum Re-Usage**

Region 4 utilized the CAPRAD pre-coordination database system to maximize channel re-usage in the 700 MHz band. Since the spectrum is reused, it is hoped that each system will use the minimum power necessary to meet their needs. If power and ERP seems excessive to the committee, a reduction in power or antenna gain may be requested to minimize interference and increase spectrum efficiency to other co-channel and adjacent channel users.

### **3.1.3 Application Submission**

To request channels from Region 4, a full application package must be submitted to the NLECTC Sponsored CAPRAD database at <http://caprad.nlectc.du.edu/login/home>. The application must include: the current FCC Form (currently the 601), a short description of the proposed system, a justification for the additional spectrum, an coverage prediction map using the current version of TIA/EIA TSB 88 guidelines, maps showing all interference predicted in the proposed system, documents indicating agency-funding commitments sufficient to fund the development of the proposed system(s), a list of ‘give-back’ channels, if applicable and the Region 4 supplemental form. Exceptions in accepting applications from qualified applicants will be made by the Region if applicants have demonstrated a need for 700 MHz channels and cannot access the CAPRAD database.

### **3.1.4 Application Distribution / Coordination**

The Chair will distribute the application request to all other necessary agencies with allotments in the Plan for review and approval. Absent a protest, the Regional Planning Committee will approve the application and (if applicable), submit it, through the CAPRAD database, to the applicant’s preferred FCC-certified frequency coordinator for processing. This process meets the requirements of FCC Rule 90.176 (c).

The CAPRAD database will reflect the approved application and place the channels for the proposed system in “pre-license” status.

### **3.1.5 Give Up or Give Back Spectrum**

When applying for new 700 MHz channels, the Regional Planning Committee encourages applicants to relinquish some amount of currently licensed spectrum (“give back channels”) and make that spectrum again available for use within the Region. Agencies with existing licensed 800 MHz systems that are requesting 700 MHz channels for system expansion will not fall under this requirement. An agency may retain channels that are used for paging, telemetry, microwave or other functions that the 700 MHz spectrum does not meet the agency’s need.

When an applicant submits a request for 700 MHz spectrum, a “Give Back Plan” should accompany the application. This Plan should show what frequencies would be vacated; a time line for the transition and what channels are being retained. If an existing channel is being retained for interoperability purposes, please identify that channel in the “Give Back

Plan”.

Frequency “give back” requirements shall hold true for regional systems where system constituents maintain discrete licenses for their own internal operations. In this case, constituent political subdivisions or agencies are required to participate in the “give back” plan. If a political subdivision or agency acts as a host of a regional system, both the host agency and the constituent agencies should participate in the “give back” plan.

Frequencies used for non-voice critical infrastructure support functions [Supervisory Control and Data Acquisition (SCADA) systems] as well as frequencies that are used for interoperability with other regional, state or national agencies that rely on one certain frequency band for emergency operations as well as other mutual aid or interoperable channels may be exempted by the Committee as candidates for “give back”. Frequencies used by an applicant for such purposes, as well as the specific use and a network/ system diagram, must be specified in supportive documentation supplied with the application to enable the Regional Planning Committee to consider any possible exemption.

In cases of hardship or failure to implement, the Regional Planning Committee will consider, on a case-by case basis, extensions not to exceed five years from date of license issuance, of the “give back” timetable. The dispute arbitration process in Section 3.6 of this document shall apply should there be a dispute.

### **3.1.6 Allocation Disputes:**

An agency may protest a proposed system within 30 calendar days of the original distribution. Protests will only be considered if the allocation does not conform to Plan criteria or objecting agency or the Chairperson can show harmful interference is likely based on the information submitted by the agency requesting the new allocation. If an agency with pre-licensed/Region approved co-channel or adjacent channel allocations objects to a proposed allocation due to concerns about potential interference, the objecting agency may request field tests be done to confirm or refute interference potential. The completion of these field tests and the results will be required for Regional application approval. Coverage area service/interference contours of the proposed system(s) should meet values designated in Section 6.1 of this document. Any costs associated with field tests or any other requirements to obtain Region 4 Plan approval are the responsibility of the agency submitting application to Region 4.

The parties involved must resolve the allocation dispute and notify the Region Chair within 30 calendar days. If the parties involved cannot resolve the allocation dispute within that timeframe, then a special full Committee meeting will be scheduled to consider and vote on the protest. *The burden of proof will be on the disputing party.* The protesting party may be liable for any costs associated with the protest if the complaint is unfounded. If approved, the application will be submitted through the CAPRAD database to the applicant's chosen FCC-certified frequency coordinator for processing.

### **3.1.7 Lower Power "Campus Eligible" Digital General Use Channels:**

With the implementation of 700 MHz public safety spectrum throughout Region 4, there may be opportunities for increased channel reuse when developing radio systems for "campus" type operations. Examples of those who may capitalize on this opportunity include hospitals, stadiums, parks or places of public gathering, public universities, transit systems, correctional facilities and mental health facilities. While these channels have been designated in county pool allotments with proper designation, they do not enjoy the benefits of countywide channels in that they are not cleared for usage over a wide area. In many instances, facilities require a smaller or more specific geographical coverage area than assumed in the initial channel packing plan and may be able to be reused more efficiently. These "campus" type systems also, in many cases, require in-building or confined space/ tunnel radio coverage or communications along a linear pathway, such as a maintenance or right of way. These channels may also be used for "vehicular repeater" (MO3) operation. Public safety channels can be allotted to this type operation in a Region and can lead to effective system development, along with increased spectral efficiency, if power levels and Area of Protection (AOP) of the area are taken into account in system planning. These parameters must be established appropriate to the area of coverage. These channels are NOT eligible to be utilized throughout the county they are licensed in but to a specific geographic area, unless otherwise licensed. The Low Power channel will be licensed on an as need or first come, first serve basis. The following criteria must be adhered to when requesting channels from Region 4 for operations of this type:

The 40dBu service contour of the proposed system must not exceed an area more than 5 miles or 8 Km from the proposed service area. When this 5-mile distance extends to an adjacent Region, the applicant must obtain concurrence from the adjacent Region. Reduced external antenna heights, along with reduced ERP, directional antenna, distributed antenna systems,

down tilt, radiating “leaky coax,” are all tools that should be utilized in the development of these type systems. Region 4 will ensure the development of these types of systems will in no way interfere with co-channel or adjacent channel users within Region 4 or Region 4's adjacent Regions. The Chairperson, or a majority of the members of the Region, has the authority to request and require engineering studies from the applicant that indicate no harmful interference will be introduced to any co-channel or adjacent channel existing user prior to application approval. For 25 kHz co-channel assignments, the 50dBu service contour of the proposed stations will be allowed to extend beyond the defined service area for a distance no greater than 2 miles. An adjacent/alternate 25 kHz channel shall be allowed to have its 60 dB (50, 50) contour touch, but not overlap the 40dB service (50, 50) contour of an adjacent/alternate system being protected. Evaluations should be made in both directions to ensure compliance. The approval of systems utilizing county allotment channels labeled “Campus”, are subject to approval of the Regional planning committee. They are the final authority on parameters associated with “campus” type operations.

When Region 4 receives an application for low power fixed use and the proposed service contour encroaches onto an adjacent Region prior to the channel allotted to the Region being implemented in a specific system, the application must be modified so the service contour does not encroach into the adjacent Region or the applicant must supply the Region 4 700 MHz Regional Planning Committee with written concurrence from the adjacent Region permitting the original design.

### **3.2 Procedure for Frequency Coordination**

The Region 4 Planning Committee will adhere to the National Law Enforcement & Corrections Technology Center (NLECTC) 700 MHz General Use channel sort as shown on the CAPRAD database for narrowband General Use channels. Region 4 will participate in the CAPRAD database and keep the Regional Plan and current frequency allotment/allocation information on the database. The Region 4 Regional Planning Committee has both the ability to accept recommendations from the committee and, if approved, the authority to change the original frequency allotment. In order to keep the most effective frequency allotments within Region 4, an annual review of the allotments will be made at one of the scheduled meetings by the full committee and recommended changes to the Plan will be voted on. The majority of members in attendance at a meeting of the full Regional Planning Committee must approve any changes to the Regional allotments. If at any time a system is allocated channels within Region 4 and the system cannot be developed within

the agreed upon guidelines (slow growth), the channels will be returned to the county pool allotments they originated from and again be available to other agencies in the Region. If Plan modifications are approved, the Chairperson will, if necessary, obtain adjacent Region approval and file a Plan amendment indicating the approved changes with the Federal Communications Commission.

### **3.3 Allocation of Narrowband “General Use” Spectrum**

The Region 4 Technical & Implementation Subcommittee recommends that allotments be made on the basis of 12.5 KHz bandwidth. This recommendation is approved by the full Committee and is part of this Plan. Allotments will be made in 12.5 KHz contiguous pairs to allow for various digital technologies to be implemented. All agencies requesting spectrum during the initial filing window (see Section 3.1) will be allocated channels if Plan requirements are met. 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 channel pair. In most cases, this will require the geographic separation of each 12.5 KHz adjacent channel. In order to promote spectrum efficiency, Region 4 will encourage that systems allocated 25 KHz channel pairs will utilize the entire channel pair and not “orphan” any portions of a system designated channel. (See Section 6.3)

### **3.4 Low Power Analog Eligible 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 6.25 KHz channels for 12.5 kHz bandwidth.

On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) antenna height limit of 6.1 meter (20 feet) AGL (Above Ground Level). Vehicular repeater operation (MO3) is also allowed.

However, users are encouraged to operate in simplex mode with the least practical amount of power to reliably maintain communications whenever



possible. This Plan does not limit use to analog only operations and channels are intended for use in a wide variety of applications that may require digital modulation types as well. The use of EIA/ TIA-102, Project 25 Common Air Interface is required when using a digital mode of operation.

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)<sup>1</sup>, 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 as 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 (18) low power channels for which the Regional Planning Committee has responsibility:

Generic - Channel #'s 1-4 and 949-952 are set aside as generic base channels for use by public safety agencies operating within Region 4, and the complementary mobile channels # 961-964 and 1909-1912 are set aside as generic mobile channels also for use by public safety agencies likewise operating within Region 39.

Fire/ EMS/ Consequence Management - Channel #'s 5-8 are designated as Fire Protection/ Emergency Medical and Consequence Management base channels for licensing and exclusive use by the Fire/Emergency Medical disciplines, and the complementary mobile channel #'s 965-968 are set aside as Fire/Emergency Medical and Consequence Management mobile channels also for licensing and exclusive use by the Fire/Emergency Medical disciplines.

Law Enforcement/ Crisis Management - Channel #'s 953-956 are set aside as Law Enforcement/Crisis Management base channels for licensing and exclusive use by the Law Enforcement discipline, and the complementary mobile channel #'s 1913-1916 are set aside as Law Enforcement/Crisis Management mobile channels also for licensing and exclusive use by the Law Enforcement discipline.

Multidisciplinary Joint Public Safety Operations - Channel #'s 957-958 are set

aside as Multidisciplinary Joint Public Safety Operations base channels for licensing and the complementary mobile channel #'s 1917-1918 are also set aside as Multidisciplinary Joint Public Safety Operations Channels for use by political subdivisions and public safety agencies operating under a unified command at a common incident for the express mission of safety of life, property or environment.

Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on scene use among all agencies involved, particularly when the use of repeater modes is possible at or in proximity to a common incident. Users should license multiple channels and be prepared to operate on alternate channels at any given operational area. Again, Region 4 Regional Planning Committee will require All 700 MHz users to have the capability to access ALL of the NCC approved interoperability channels in both duplex and simplex modes.

<sup>1</sup> See paragraphs 35 through 39 in the FCC Third Memorandum Opinion and Order for WT Docket No. 96-86 adopted September 18, 2000.

### **3.6 Dispute Resolution – Intra-Regional**

In the event an agency disputes the implementation of this Plan or the Federal Communications Committee approval of this Plan or parts of this Plan, the agency must notify the Chair of the dispute in writing. This section does not apply to protests over new spectrum allocations (see Section 3.1). The Chair will attempt to resolve the dispute on an informal basis. If a party to the dispute employs the Chair, then the Vice Chair will attempt resolution. In such cases, the Chair shall be deemed to have a conflict of interest and will be precluded from voting on such matters. If after 30 days the dispute is not resolved, the Chair (or Vice Chair) will appoint a Dispute Resolution Committee consisting of two members from the State of Arkansas governmental agencies and at least five members from different counties in Region 4. That committee will select a Chair to head the committee and a secretary to document the proceedings.

The Regional Plan Chair (or Vice Chair) will represent the Region in presentations to the Dispute Resolution Committee. The Committee will hear input from the disputing agency, any effected agencies and the Region Chair. The Committee will then meet in executive session to prepare a recommendation to resolve the dispute. Should this recommendation not be acceptable to the disputing agency/agencies, the dispute and all written documentation from the dispute will be forwarded to the National Regional Planning Oversight Committee, a subcommittee of the National Regional Planning Council (NPRC) for review. As a last resort, the dispute will be

forwarded to the Federal Communications Commission for final resolution.

All eleven adjacent Regions have signed the Region 4 dispute resolution.

## 4.0 Priority Matrix

In the event that spectrum allocation requests conflict and cannot all be accommodated, the following matrix will be used to determine priority for allotment. This matrix will only be used if two requests are received in the same time frame for the same number of channels. Otherwise, the first come first served procedure of Section 3.1 will be used.

- Service (Maximum score 250 points) Priority is given to users fundamentally involved with the protection of Life and Property Police, fire, EMS, Rescue, EMA, combined systems, multi-jurisdictional systems, etc.
- Inter-system & 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. (See appendix F for list of possible interoperability agencies)
- The applicant shall stipulate how they will accomplish interoperability in their proposed system (gateway, switch, cross-band repeater, and console cross patch, software defined radio, or other means) for each of the priorities listed below:
  1. Disaster and 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.
  5. Routine day-to-day non-emergency operations.
- Loading (Maximum score 100 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?

- Spectrum Efficient Technology (Maximum score 200 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."
- Systems Implementation Factors (Maximum score 200 points) Applicants should submit some form of proof of financial commitment, accompanied by a RFP (Request for Proposal) outlining the design of the proposed system and detailing the development of the requested channels will be required to be submitted to the Regional Planning Committee prior to approval
- Geographic Efficient (Maximum Score 50 points) The ratio of subscriber units to area covered and the channel reuse potential are two subcategories. "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."
- Givebacks (Maximum score 100 points) Consider the number of channels given back Consider the extent of availability and usability of those channels to others.

If there are more applicants than frequencies available for a given area, the above criteria will be used to grade each application before the committee.

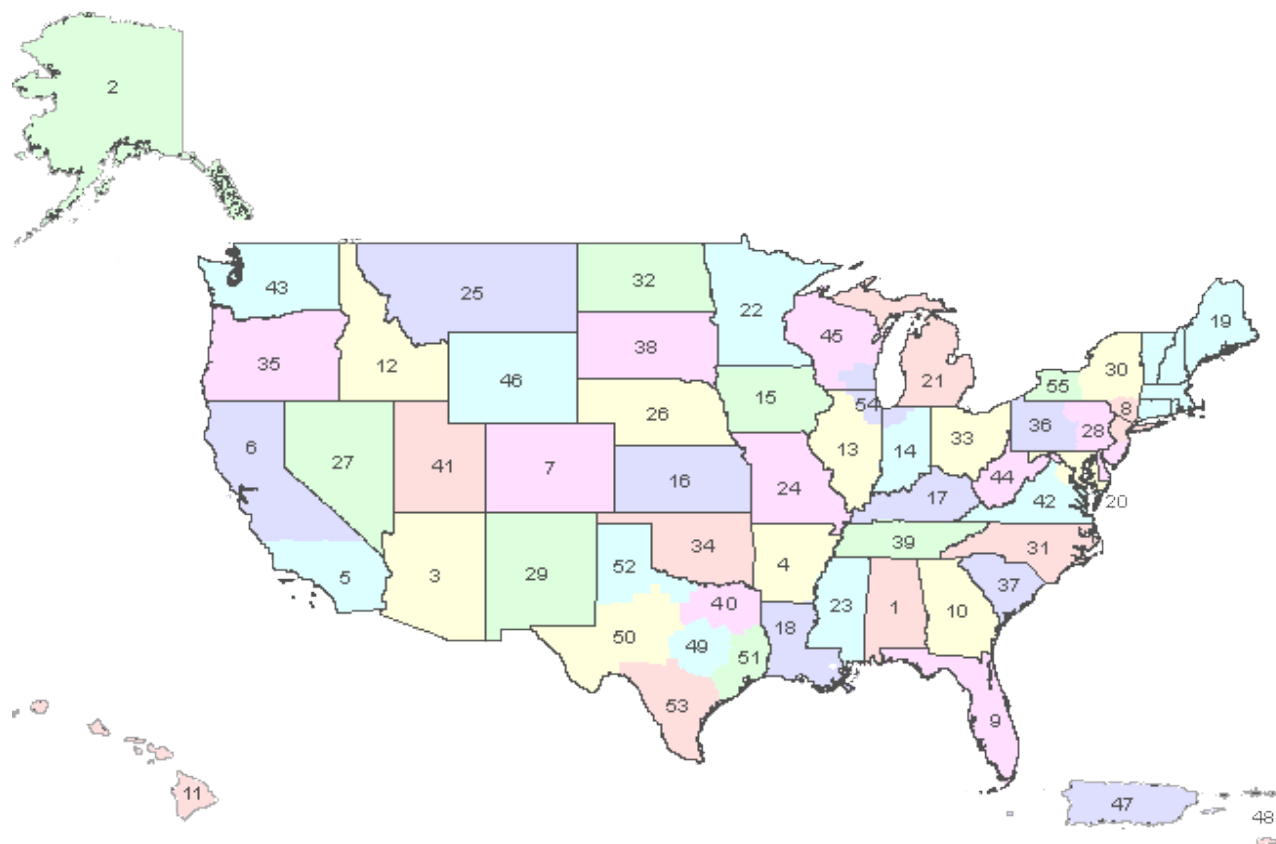
*This process, if required, will be treated as a dispute and the procedures outlined in Section*

*3.6 using the above criteria will be used to allocate the frequencies.*

## **5.0 PROCESS FOR HANDLING UNFORMED REGIONS**

There are no unformed adjacent Regions to Region 4 and Letters of Concurrence have been received from all eleven adjacent Regions.

## 6. Coordination with Adjacent Regions



The Regions that are adjacent to or within seventy (70) miles of Region 4 are listed below:

Region 13	State of Illinois	Non Border
Region 16	State of Kansas	Non Border
Region 17	State of Kentucky	Non Border
Region 18	State of Louisiana	Border
Region 23	State of Mississippi	Border
Region 24	State of Missouri	Border
Region 34	State of Oklahoma	Border
Region 39	State of Tennessee	Border
Region 40	State of Texas	Border

Region 4 has coordinated channel allocations and received concurrence with all its bordering Regions by providing copies of the Region 4 Plan (including channel allotments) to each adjacent Region using the CAPRAD database and by mailing hard copies of the Plan to the adjacent Region's Chairperson or Convener.

In seeking Regional concurrence, the Chairperson has given copies of this Plan to the Chairperson of Region 13, 17, 18, 23, 24, 34, 39, and 40. The Region 4 Plan will also be available for viewing by all Regions via the NLECTC CAPRAD 700 MHz database. The CAPRAD pre-coordination database shows those channels available that will not interfere with Region 4 allotments or systems. The CAPRAD database and its associated packing Plan provides minimum channel allotments for all of Region 4's bordering Regions. This method was recommended by the NCC Implementation Subcommittee as a way to assure that adjacent Regions, which did not enter the Regional Planning process immediately, would not find all frequencies assigned in their borders.

Therefore, adjacent Regions 13, 17, 18, 23, 24, 34, 39, and 40 should all be able to satisfy voice and narrowband data requests along their border areas with Region 4. However, if an adjacent Region has difficulties satisfying intra-regional requests due to channel allocation within Arkansas, this committee pledges to work with that adjacent Region to resolve any issues that might hinder interoperability or reduce any benefit to public safety communications.



## 7.0 System Design/Efficiency Requirements

### 7.1 Interference Protection

The frequency allotment list will be based on an assumption that 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 cochannel users. Coverage area is normally the geographical boundaries of the Agency(s) served plus five miles area beyond.

Systems should be designed for minimum signal strength of 40 dB $\mu$  in the system coverage area while minimizing signal power out of the coverage area. TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference assuming 40 dB $\mu$ , 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. Region 4 complies with National Coordination Committee recommendations listed in Appendix K of the Regional Planning Committee Guidelines published by the National Coordination Committee (NCC).

### 7.2 Spectrum Efficiency Standards

Initial allotments will be made on the basis of 12.5 KHz channels. To maximize spectrum utilization, prudent engineering practices and receivers of the highest quality must be used in all 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 are under-constructed (i.e.; areas with the established service area having minimum signal strength below 40 dB $\mu$ ), or the systems utilize low quality receivers. The applicant's implementation of best engineering practices will be encouraged by the Regional Planning Committee at all times.

It is the eventual goal of the FCC and the public safety community for radio equipment to meet the requirement of one voice channel per 6.25 KHz of spectrum. ***When applying for channels within Region 4, the applicants should acknowledge the deadline for converting all equipment to 6.25 kHz or 6.25 kHz equivalent technology is 12/31/2016.*** For narrowband mobile data requests, one mobile data channel will consist of two (2) 6.25 KHz channels/one (1) 12.5 KHz channel. Narrowband 6.25 KHz channels can be aggregated for data use to a maximum bandwidth of 25 KHz. As 6.25 KHz migration evolves, an agency that creates any "orphaned" 6.25 KHz channels should realize that these channels could be allocated to nearby agencies

requesting channels to maintain consistent grouping and utilization of 25 KHz blocks within the Region. (See Section 6.3)

Region 4 encourages small agencies to partner with other agencies in multi-agency or regional systems as they promote spectrum efficiency and both small and large agency capacity needs can be met. Loading criteria can also be achieved in multi-agency systems that will allow greater throughput for all agencies involved than that which could be achieved individually.

### **7.3 Orphaned Channels**

The narrowband pool allotments within Region 4 will have a channel bandwidth of 12.5 kHz. These 12.5 kHz allotments have been characterized as “Technology Neutral” and flexible enough to accommodate multiple technologies utilizing multiple bandwidths. If agencies choose a technology that requires less than 12.5 kHz channel bandwidth for their system, there is the potential for residual, “orphaned channels” of 6.25 kHz or

12.5 KHz bandwidth immediately adjacent to the assigned channel within a given county area.

An orphan channel may (if possible) be used at another location within the county area where it was originally approved, if it meets co- and adjacent channel interference criteria. Region 4 will utilize “county areas” as guidelines for channel implementation with the area of Region 4. The definition of “county area” in this Plan is the geographical/political boundaries of a given county, plus a distance of up to 5 miles outside of the county or jurisdictional boundary.

If the channel, or a portion of a channel, is being moved into a “county area” that is within 70 miles of an adjacent Region, Region 4 will receive concurrence from the affected Region. By extending the “county area” by a designated distance, it is anticipated this will increase the possibility that orphaned channel remainders will still be able to be utilized within the “county area”, and reduce the potential for channel remainders to be forced to lay dormant and used with a county channel allotment. These movements will be documented on the National Law Enforcement & Corrections Technology Center CAPRAD database.

If the “orphaned channel” remainder does not meet co-channel and adjacent channel interference criteria by moving it within the “county area” as listed above, and it is determined by the Region that the “orphaned channel” cannot be utilized in the Region without exceeding the distance described in the

“county area” listed above, Region 4 will submit a Plan amendment to the FCC to repack the channel to a location where its potential use will maintain maximum spectral efficiency. This FCC Plan amendment will require affected Region concurrence.

When in the best interest of public safety communications and efficient spectrum use within the Region, the Region 4 Regional Planning Committee shall have the authority to move orphan channel allotments, and/or co-/adjacent-channel allotments affected by the movement of orphan channels, within its “county areas”, which are defined above. This is to retain spectrum efficiency and/or minimize co-channel or adjacent channel interference between existing allotments within the Region utilizing disparate bandwidths and technologies.

#### **7.4 System Implementation:**

There are no incumbent high power broadcast TV stations in Arkansas; however there are several low power or translator TV stations across Arkansas.

Agencies requesting additional frequencies must show loading of 100 percent or greater on their existing system. Should a demand for frequencies exist after assignable frequencies become exhausted, any system having frequencies assigned under this Plan four or more years previously and not loaded to at least seventy percent will lose operating authority on several frequencies to bring the system into compliance with the 70 percent loading standard. Frequencies lost in this manner will be reallocated to other agencies to help satisfy the demand for additional frequencies.

#### **7.5 Expansion of Existing 800 MHz Systems**

Existing 800 MHz systems that are to be expanded to include the 700 MHz frequency spectrum will have to meet the requirements of the FCC and both 800 MHz NPSPAC Region 4 Plan and the Region 4 700 MHz Plan. If the two Region 4 Plans are in conflict, the Plan that gives the applicant the greater flexibility will govern.

## **8. Interoperability Channels**

### **8.1 Introduction**

#### **Interoperability FCC Definition of Interoperability (Taken from 98-191 paragraph 76)**

Interoperability – An essential communications link within public safety and public service wireless communications systems which permits units from two or more different entities to interact with one another and to exchange information according to a prescribed method in order to achieve predictable results.

The ability for agencies to effectively respond to mutual aid requests directly depends on their ability to communicate with each other. Arkansas is subject to many natural disasters and contains regions and facilities, which may be susceptible to a man-made disaster or weapons of mass destruction attack. Mutual aid should be encouraged among agencies. This Plan seeks to facilitate the communications necessary for effective mutual aid.

### **8.2 Tactical Channels**

Due to the immediate availability of 700 MHz public safety channels in Arkansas, Region 4 will not set aside additional channels for interoperability use within the Region. It is anticipated the sixty-four FCC designated interoperability channels (6.25 KHz) will be sufficient to provide interoperability (voice and data) within Region 4.

All mobile and portable units operating under this Plan and utilizing 700 MHz channels must be programmed with the minimum number of channels called for as specified in the Arkansas SCIP as determined by the Arkansas Interoperable Communications Executive Committee (AICEC).

### **8.3 Deployable Systems**

In this Plan, Region 4 strongly supports use of deployable systems, both conventional and trunked. Deployable systems are prepackaged systems that can deploy by ground or air to an incident to provide additional coverage and capacity on designated 700 MHz interoperability channels and/or agency specific General Use Channels. This will minimize the expense of installing extensive fixed infrastructure in areas while still providing mission critical functionalities as the Region recognizes the difficulty of providing complete

coverage in all areas due to financial, demographic and geographical constraints.

Agencies should have conventional deployable systems capable of being tuned to any of the FCC designated / NCC recommended interoperability tactical channels. Those agencies that are part of a multi-agency trunked system and commonly provide mutual aid to each other are encouraged to have trunked deployable systems that operate on the tactical channels designated by the FCC for this use. The AICEC will develop the operational details for deploying these systems.

It is expected that the tactical channels set aside for trunked operation will be heavily used by deployable systems. Therefore, the tactical channels cannot be assigned to augment general use trunked systems.

#### **8.4 Monitoring of Calling Channels**

700 MHz licensees will be responsible for monitoring interoperable calling channels. The AICEC will develop operational guidelines for this function. Appendix E will include NCC documents that display required Interoperability guidelines.

#### **8.5 Incident Command System Standard**

Region 4 supports the NCC recommendations regarding the National Incident Management System (NIMS) and ICS.

## **9.0 Future Planning**

### **9.1 Database Maintenance**

The CAPRAD pre-coordination database has developed channel allotments in each county area within Arkansas utilizing the U. S. Census Date, 2000, height above average terrain (HAAT) and public safety use curves generated by the Public Safety Wireless Advisory Committee (PSWAC) to provide spectrally efficient frequency allotments. Region 4 will continue to use the CAPRAD pre-coordination database for other 700 MHz spectrum as it becomes available.

### **9.2 Inter-Regional Dispute Resolution Process**

In the event that a dispute arises between Region 4 and an adjacent Region or Regions, regarding spectrum allocations or implementation, which cannot be resolved within 60 days, the parties to the dispute will request a hearing by the National Regional Planning Oversight Committee.

See Appendix H for details and Inter-Regional Dispute Resolution Agreements signed by adjacent Regions 13, 17, 18, 23, 24, 34, 39, and 40.

### **9.3 Amendment Process**

Amendments to the Region 4 Plan will be made at Region 4 RPC meetings. All amendments will be voted on and passed or rejected by a simple majority vote. The Chairman or his designee will make the appropriate changes to the Plan and notify the adjacent Regions for their concurrence. Once the concurrences are received from the adjacent Regions, the Plan will be certified and filed, by the Chairperson, with the FCC for approval. Electronic filing will be the preferred method.

### **9.4 Certification**

I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the public. A summary of the deliberations of the Committee pursuant to adopting this Plan can be found in Appendix D, Meeting attendance, agendas and other events.

Carl Jacobs  
November 2, 2007  
Chairman, Region 4

## List of Appendices

Appendix A	Region 4 Members, Agencies, Contact Information and Voting Status
Appendix B	Region 4 (Arkansas) Counties and Population Data
Appendix C	List of Meetings, minutes, agendas, chronology
Appendix D	700 MHz Interoperability Table and Channel Nomenclature
Appendix E	NCC 700 MHz Pre-Assignment Rules/Recommendations
Appendix F	Region 4 Channel allotments
Appendix G	Inter Regional Dispute Resolution Agreement
Appendix H	DTV Protection and Incumbency
Appendix I	DTV Transition
Appendix J	Low Power Television Stations
Attachments	Letters of Concurrence & Dispute Resolutions

# APPENDIX A

## Membership and Meeting Attendees

Initial Meeting  
700 MHz Meeting February 24, 2001

Saline Cty.  
OEM Sub 67  
#303-5049

700MHz MEETING  
DATE: 2/24/04  
SIGN-IN SHEET

David Kell  
Camp Joe T.  
Build. #5301

NAME	ORGANIZATION / POSITION	ADDRESS	CONTACT # / E-MAIL
✓ Major Greg Bolin	Jefferson Co. Sheriff	Garage + Main Suite 112	MajorGBolin@Cable.com
✓ Wally Hunt	Jefferson Co. OEM	101 W. BARRAGE ST. #21611	WALLY.HUNT@ADEM.STATE.AR.US
✓ Steve Devine	Missouri State Highway	1510 E. ELM JEFFERSON CITY	Devins@MStp.STATE.MO.US
✓ Sharon Vaughn	West ARK Planning & Dev.	2826 S. 25th Ave. Joplin	sharon@mailto.com
✓ Elvonne Offield	Perry Co. OEM	P.O. Box 281 Perryville AR	elvonne00@att.net
✓ Ann Offield	Perry Co. OEM	P.O. Box 281 Perryville AR	annoffield@att.net
✓ J. M. Rouse	GARLAND CO DEM	521 OUCHITA HOT SPRINGS	NSXFW@APRL.NET
✓ BETTE KINNEAST	MOTOROLA	28 TWIN LAKES DR. GENEVA PA	C15923@earthlink.net
✓ David Gralle	Texarkana Central Comm	1065th Texas Tr	Gralle@TXKUSA.org
✓ ERNEST KECK	TEXARKANA P.O.	100 N. STATELINE AVE	903-792-3173
✓ David Stewart		Box 15 TEXARKANA TX	75501 / KECK@TXKUSA.org
✓ David Stewart	MOTOROLA	600 Northshore Dr. #303	David.M.Stewart@motorola.com
✓ Bill Clay	MOTOROLA	1101 Anderson Dr. LR. Ar 72112	B.Clay@mot.com
✓ Larry Edmondes	Union County	101 N. Washington E. Doreas 7280	Redmondes@UnionCoAR.com
✓ Jackie Wiley	Union County	614 Washington E. Doreas 7280	Twilley@unioncountyar.com
✓ David Kell	Ark Army Natl Guard	Camp. Joe T. Robinson	501-212-5907 / william.kell@ar.army.mil
✓ Randy Presley	Ark State Police	1 State Police Plaza Dr. LR 72809	rpresley@ASP.STATE.AR.US 501-618-9105
✓ Robert Barker	Saline County OEM	102 S. MAIN LEV. 6 Benton	rebark@co.saltine.org
✓ Tim Blockson	City of Benton 911	102 S. MAIN LEV. 6 Benton	timbo@cityofbenton.org
✓ Dennis Riquie	Saline County OEM 911	102 S. MAIN LEV. 6 Benton	driquie@co.saltine.org
✓ Mike Kemp	ECID	124 W. Capital, LR 72809	MIKE.KEMP@ARL.STATE.AR.US
✓ David Bestelin	NLRPD	2525 Main NLR 72114	DavidBestelin@NLRPolice.org
✓ LEE SHAW	City of NLR	1206 Sycamore - NLR	LSHAW@NorthLittleRock.AR.US
✓ Kathy Buttsford			
✓ John Gibson			
✓ John Luther	2015 Brink Dr. Suite 101	Conville	Bob Clark

Ron SVP. mems

M.J. Conn  
Thomas  
reed



# ***Region 4 700 MHz Planning Committee***

## ***Meeting Minutes***

February 24, 2004

Call to order:

Carl Jacobs called to order the first meeting of the Region 4 700 MHz Planning Committee at 9:30 a.m., 02/24/04 at Pulaski County OEM, 3200 Brown, Little Rock, AR.

### **Opening Remarks: Opening remarks by Carl Jacobs outlining the goal, objective, and reasons for having a state plan in Arkansas.**

#### **A) Appointment of Officers:**

Recommendations were received from the floor and subsequent voting resulted in the following appointments:

Carl Jacobs - Chair

J.M. Rowe - Vice Chair

Marshal Watson - Secretary/Treasurer

#### **B) Presentation:**

Betty Rinehart from Motorola pointed out the need and objective of having state 700 MHz regional plans.

#### **C) Presentation:**

Steve Devine from the Missouri State Hwy Dept showed how plans should be developed and the formation of a regional plan.

### **Adjournment**

Carl Jacobs adjourned the meeting at 12:20 after more comments.

Minutes submitted by: Marshal Watson, Secretary/Treasurer

Minutes approved by:

## Appendix B

### List of counties areas within Region 4:

Pool channel allotments are allotted by “County Areas” in Region 4. County areas and their definitions are listed in the table below.

#### REGION 4 COUNTY DATA

County Name	County Seat	Square Miles	Founded	Population 2002
Arkansas	De Witt	988	1813	20,749
Ashley	Hamburg	921	1848	24,209
Baxter	Mountain Home	554	1873	38,386
Benton	Bentonville	843	1836	153,406
Boone	Harrison	591	1869	33,948
Bradley	Warren	651	1840	12,600
Calhoun	Hampton	628	1850	5,744
Carroll	Berryville	634	1833	25,357
Chicot	Lake Village	644	1823	14,117
Clark	Arkadelphia	866	1818	23,546
Clay	Piggott & Corning	639	1873	17,609
Cleburne	Heber Springs	553	1883	24,046
Cleveland	Rison	598	1873	8,571
Columbia	Magnolia	766	1852	25,603
Conway	Morrilton	556	1825	20,336
Craighead	Jonesboro	711	1859	82,148
Crawford	Van Buren	596	1820	53,247
Crittenden	West Memphis	610	1825	50,866
Cross	Wynne	616	1862	19,526
Desha	Dumas	765	1838	15,341
Dallas	Fordyce	668	1845	9,210
Drew	Monticello	828	1846	18,723
Faulkner	Conway	647	1873	86,014
Franklin	Ozark	610	1837	17,771
Fulton	Salem	618	1842	11,642
Garland	Hot Springs	632	1873	88,068
Grant	Sheridan	632	1869	16,464
Greene	Paragould	578	1833	37,331

County Name	County Seat	Square Miles	Founded	Population 2002
Hempstead	Hope	729	1818	23,587
Hot Spring	Malvern	615	1829	30,353
Howard	Nashville	855	1873	14,300
Independence	Batesville	765	1820	34,233
Izard	Melbourne	581	1825	13,249
Jackson	Newport	634	1829	18,418
Jefferson	Pine Bluff	885	1829	84,278
Johnson	Clarksville	662	1833	22,781
Lafayette	Lewisville	526	1827	8,559
Lawrence	Walnut Ridge	587	1815	17,774
Lee	Marianna	602	1873	12,580
Lincoln	Star City	531	1871	14,492
Little River	Ashdown	532	1867	13,628
Logan	Booneville and Paris	710	1871	22,486
Lonoke	Lonoke	766	1873	52,828
Madison	Huntsville	833	1836	14,243
Marion	Yellville	598	1835	16,140
Miller	Texarkana	624	1862	40,443
Mississippi	Blytheville and Osceola	898	1883	51,878
Monroe	Clarendon	607	1839	10,254
Montgomery	Mount Ida	781	1842	9,245
Nevada	Prescott	620	1871	9,955
Newton	Jasper	823	1847	8,608
Ouachita	Camden	732	1842	28,790
Perry	Perryville	551	1840	10,209
Phillips	Helena	693	1820	26,445
Pike	Murfreesboro	603	1833	11,303
Poinsett	Harrisburg	603	1838	25,614
Polk	Mena	860	1844	20,229
Pope	Russelville	812	1829	54,469
Praire	Des Arc	846	1846	9,539
Pulaski	Little Rock	771	1818	361,474
Randolph	Pocahontas	652	1835	18,195
St. Francis	Forrest City	634	1827	29,329
Saline	Benton	725	1835	83,529
Scott	Waldron	894	1833	10,996
Searcy	Marshall	667	1838	8,261

County Name	County Seat	Square Miles	Founded	Population 2002
Sebastain	Fort Smith	536	1851	115,071
Sevier	DeQueen	581	1827	15,757
Sharp	Ash Flat	606	1868	17,491
Stone	Mountain View	607	1873	11,499
Union	El Dorado	1,039	1829	45,629
Van Buren	Clinton	712	1833	16,192
Washington	Fayetteville	950	1828	157,715
White	Searcy	1,034	1835	67,165
Woodruff	Augusta	587	1862	8,741
Yell	Danville	928	1840	21,139
TOTAL		53,182		2,673,400

Footnotes:

1 - 1996 Land Area Statistics, U.S. Bureau of the Census.

2 - 1990, 2000, and 2002 Census of Population and Housing, U.S. Bureau of the Census

## Appendix C

Meeting minutes, agendas and other events where 700MHz information was disseminated.

December 4, 2007 700 MHz RPC

## 700MHz MEETING

**DATE 12/04/2007**

## SIGN-IN SHEET

[illegible]

# ***Region 4 700 MHz Planning Committee***

## ***Meeting Minutes***

December 4, 2007

### **I. Call to order**

Carl Jacobs called to order the regular meeting of the Region 4 700 MHz Planning Committee at 9:30 a.m., December 4, 2007 at the MAC Building, 1 Capitol Mall, Little Rock, AR.

### **Roll call**

Attendance conducted via sign in. The following personnel were present:

Carl Jacobs  
J.M. Rowe  
Wally Hunt  
Betty Rinehart - Non voting  
Bruce Lantz  
Randy Presley  
Tim Bales  
Mike Smith - Non voting  
Terry Henson  
John Nordlund  
Marshal Watson  
Rick Ezelle  
Ethan Beckcom  
Terrell Burks  
Tim Blockson  
SFC Michael Moore (212-5907)  
Dale Saffold (618-8000)

### **Approval of minutes from last meeting**

NA

### **Open issues**

NA

### **New business**

#### **A) Opening Remarks:**

Opening remarks by Carl Jacobs outlined the 6 month goal to present the state plan to the FCC.

B) Appointment of Officers:

Recommendations were received from the floor and subsequent voting resulted in the following appointments:

Carl Jacobs - Chair

J.M. Rowe - Vice Chair

Marshal Watson - Secretary/Treasurer

C) Bylaws:

Review of bylaws by Carl Jacobs. Subsequent revisions and adoption by committee following vote.

D) Sub-Committees:

Discussion resulted in the formation of three sub-committees and the appointment of sub-committee chairs.

J.M. Rowe - Interoperability Sub-Committee Chair

Bruce Lantz - Technical Sub-Committee Chair

Wally Hunt - Administrative Sub-Committee Chair

E) Presentation:

700MHZ Re-banding, Betty Rinehart, Motorola

F) Presentation:

700MHZ Regional Planning, John Johnson, TEMA

G) Meeting Dates:

January 9, 2008 10:00 a.m.

February 12, 2008 10:00 a.m.

**Adjournment**

Carl Jacobs adjourned the meeting at 12:20.

Minutes submitted by: Marshal Watson, Secretary/Treasurer

Minutes approved by:

***December 15, 2007 700 MHz Technical Sub-Committee***

## 700MHz MEETING

DATE 12/15/08

## SIGN-IN SHEET

[illegible]



# ***Region 4 700 MHz Technical Sub- Committee***

## ***Meeting Minutes***

December 15, 2007

### **II. Call to order**

Carl Jacobs called to order the regular meeting of the Region 4 700 MHz Technical Sub-Committee at 10:00 a.m., December 15, 2007 at the MAC Building, 1 Capitol Mall, Little Rock, AR.

### **Roll call**

Attendance conducted via sign in. The following personnel were present:

Kirk Miller  
Wally Hunt  
John Nordlund  
J.M. Rowe  
Joe Traylor  
Randy Presley  
Timothy Bales  
Bruce Lantz  
Carl Jacobs  
Ethan Beckcom  
Marshal Watson

### **Approval of minutes from last meeting**

NA

### **Open issues**

NA

### **New business**

#### **A) Opening Remarks:**

Opening remarks by Bruce Lantz outlined the need for the technical sub-committee to deliver a recommendation for channel utilization to the Region 4 700MHz Planning Committee.

#### **B) Discussion:**

Open discussion took place concerning the channel utilization for Region 4. This included details on channel utilization within Missouri and Tennessee, as well as the need for 6.25 KHz or 12 ½ KHz spacing for voice and channel utilization for high speed data.

C) Motion:

Motion made by Carl Jacobs for 25% 25 KHz spread, 75% 12 ½ KHz spread. Motion amended to read as follows:

1. 75% 12 ½ KHz spacing of available channels.
2. 25% 25 KHz spacing of available channels.
3. Portion of spectrum currently utilized by the State of Arkansas will be left as is.
4. Channel utilization to be managed through CAPRAD by geographic area (i.e. county).

2<sup>nd</sup> by Randy Presley.

**Adjournment**

Carl Jacobs adjourned the meeting at 11:21.

Minutes submitted by: Marshal Watson, Secretary/Treasurer

Minutes approved by:

***March 12, 2007 700 MHz Technical Sub-Committee***

700MHz MEETING  
DATE 03/12/08  
SIGN-IN SHEET

[illegible]

# ***Region 4 700 MHz Technical Sub- Committee***

## ***Meeting Minutes***

March 12, 2008

### **III. Call to order**

Carl Jacobs called to order the regular meeting of the Region 4 700 MHz Technical Sub-Committee at 10:00 a.m., March 12, 2008 in the Epidemiology Conference Room at the Arkansas Department of Health, 4815 West Markham, Little Rock, AR.

### **Roll call**

Attendance conducted via sign in. The following personnel were present:

Carl Jacobs  
Wally Hunt  
J.M. Rowe  
John Nordlund  
Joe Traylor  
Bruce Lantz  
Rick Ezell  
Gary E “Bud” Gray  
Kirk Miller

### **Approval of minutes from last meeting**

Motion to approve made by J.M. Rowe; seconded by Bruce Lantz.  
Motion passed unanimously.

### **Open issues**

Bud Gray added to Technical Sub-Committee.

### **New business**

#### **A) Opening Remarks:**

Opening remarks by Carl Jacobs outlined the need for the technical sub-committee to deliver a recommendation for channel utilization to the Region 4 700MHz Planning Committee.

#### **B) Discussion:**

Open discussion regarded the Committee funds. It was noted that all funds have been utilized for travel.

#### **C) Motion:**

Motion made by Bruce Lantz to allow Carl Jacobs to approve all travel expenses; seconded by Bud Gray. Motion was passed unanimously.

D) Discussion:

As stated Missouri and Region 39 current plan. Concurrent Agreement with Tennessee has been made.

E) Discussion:

Carl Jacobs will input data into CAPRAD.

F) Discussion:

Clarification of primary and secondary channel usage is made. Plan will be submitted with current frequency plan once all resolutions are signed.

G) Motion:

J.M. Rowe proposes Channel utilization to be managed through CAPRAD by geographic area (i.e. county). Ricky Ezell seconds the motion. Motion passed unanimously

### **Adjournment**

Carl Jacobs adjourned the meeting at 11:04 a.m.

Minutes submitted by: Ethan Beckcom as delegated by Marshal Watson, Secretary/Treasurer

Minutes approved by:

***July 31, 2008 700 MHz Technical Sub-Committee***

## 700MHz MEETING

DATE 7/31/08

## SIGN-IN SHEET

[illegible]

# ***Region 4 700 MHz Planning Committee***

## ***Meeting Minutes***

July 31, 2008

### **IV. Call to order**

J.M. Rowe called to order the regular meeting of the Region 4 700 MHz Technical Sub-Committee at 10:04 a.m., July 31, 2008 at the Arkansas Real Estate Commission Building, Little Rock, AR.

### **Roll call**

Attendance conducted via sign in. The following personnel were present:

Rick Ezelle  
John Nordlund  
Randy Presley  
Timothy Bayles  
J.M. Rowe Vice- Chairman

#### **Via teleconference:**

Carl Jacobs, Chairman  
(Note: Wally Hunt has given his proxy to Carl Jacobs)

### **Approval of minutes from last meeting**

The minutes of the last meeting were recapped, and stand approved by the members.

### **Open issues**

NA

### **New business**

A) Opening Remarks:  
NA

B) Discussion:  
Open discussion took place concerning The Region 4 Plan. Carl Jacobs updated the committee on the last necessary additions to the plan as follows:

1. Attendance rosters
2. List of invited parties
3. Minutes of meeting

4. Television Channel information.

C) Motion:

A motion by Rick Ezelle, second by John Nordlund to authorize Carl Jacobs to make the above mentioned changes, and then submit the plan as soon as practical to CAPRAD. After brief discussion the motion passed.

D) Discussion:

Carl Jacobs reported signing letters of concurrence with Missouri and Louisiana.

E) Motion:

A motion to approve the letters was made by Randy Presley and seconded by Timothy Bayles. Motion passed.

F) Meeting Dates:

No further committee meetings are scheduled. This committee will meet only as needed, or as otherwise provided for, in the Region 4 Plan.

**Adjournment**

J.M. Rowe adjourned the meeting at 10:20 a.m.

Minutes submitted by: J.M. Rowe Vice-Chairman

Minutes approved by:



## Appendix D 700 MHz Interoperability/Channel Nomenclature

NOTE: The interoperability nomenclature identified below is for reference only pending finalization of channel labeling recommendations currently before the FCC. These recommendations originated from the National Coordination Committee (NCC) Interoperability Subcommittee asking for standardized channel nomenclature and labeling. The Federal Communications Commission decisions on channel labeling can alter these values accordingly. The FCC designated 700 MHz interoperability channels will be administered by the Arkansas Interoperable Communications Executive Committee in accordance with Federal Communications Commission rules. The FCC final ruling on interoperability channel labeling and interoperability channel designations and the Arkansas Interoperable Communications Executive Committee interpretation of those rules take precedence over any Region 4 recommendation in this plan.

### For Specific Uses/Services

<b>16 CHANNEL SETS</b>	<b>DESCRIPTION</b>	<b>LABEL</b>
<i>Channel 23 &amp; 24</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC58</i>
<i>Channel 103 &amp; 104</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC62</i>
<i>Channel 183 &amp; 184</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC66</i>
<i>Channel 263 &amp; 264</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC70</i>
Channel 39 & 40	Calling Channel	7CALL1
Channel 119 & 120	General Public Safety Service	7TAC63
Channel 199 & 200	General Public Safety Service	7TAC67
Channel 279 & 280	Mobile Data	7DAT71
Channel 63 & 64	Emergency Medical Service	7EMS60
Channel 143 & 144	Fire Service	7FIR64
Channel 223 & 224	Law Enforcement Service	7LAW68
Channel 303 & 304	Mobile Repeater	7MOB68

Channel 79 & 80	Emergency Medical Service	7EMS61
Channel 159 & 160	Fire Service	7FIR65
Channel 239 & 240	Law Enforcement Service	7LAW69
Channel 319 & 320	Other Public Service	7TAC73
<i>Channel 657 &amp; 658</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC74</i>
<i>Channel 737 &amp; 738</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC78</i>
<i>Channel 817 &amp; 818</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC82</i>
<i>Channel 897 &amp; 898</i>	<i>General Public Safety Services (secondary trunked)</i>	<i>7TAC86</i>
Channel 681 & 682	Calling Channel	7CALL2
Channel 761 & 762	General Public Safety Service	7TAC79
Channel 841 & 842	General Public Safety Service	7TAC83
Channel 921 & 922	Mobile Data	7DAT87
Channel 641 & 642	Emergency Medical Service	7EMS76
Channel 721 & 742	Fire Service	7FIR80
Channel 801 & 802	Law Enforcement Service	7LAW84
Channel 881 & 882	Mobile Data	7MOB88
Channel 697 & 698	Emergency Medical Service	7EMS77
Channel 777 & 778	Fire Services	7FIR81
Channel 857 & 858	Law Enforcement Service	7LAW85
Channel 937 & 938	Other Public Services	7TAC89

Trunking is permitted on the 10 channel sets indicated in italic

## Project 25 Common Air Interface Interoperability channel parameters

Certain common P25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPAC analog Interoperability channels.

### Network Access Code

In the Project 25 Common Air Interface definition, the Network Access Code is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the pre-amble of the P25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

Use of corresponding NAC code \$293 is required for the 700 MHz Interoperability Channel NAC code.

### Talk group ID

In the Project 25 Common Air Interface definition, the Talk group ID on conventional channels is analogous to the use of talk groups in trunking. In order to ensure that all users can communicate, all units should use a common Talk group ID.

Recommendation: Use P25 default value for Talk group ID = \$0001

### Manufacturer's ID

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default value of \$00.

### Message ID

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for unencrypted messages of \$00000000000000000000.

### Encryption Algorithm ID and Key ID

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption should not be used on the Interoperability Calling Channels, all units should use the default Algorithm ID for unencrypted messages of \$80 and default Key ID for unencrypted messages 0000.

These same defaults may be used for the other Interoperability channels when encryption is not used.

Use of encryption is allowed on the other Interoperability channels. Regional Planning Committees need to define appropriate Message ID, Encryption Algorithm ID, and Encryption Key ID to be used in the encrypted mode on Interoperability channels.

## Appendix E NCC 700 MHz Pre-Assignment Rules/Recommendations

### Introduction

A process for doing the initial block assignments of 700 MHz channels before details of actual system deployments is required. In this initial phase, there is little actual knowledge of what specific equipment is to be deployed and where the sites will be. As a result, a high level simplified 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 of each applicant. For Public Safety entities this will normally be a geographically defined area such as city, county or by a data file consisting of line segments creating a polygon that encloses the defined area. TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference assuming 40 dB $\mu$ , or greater, signal in all systems coverage areas.

For co-channel assignments, the 40dB $\mu$  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 low density. The interfering co-channel 15 dB $\mu$  contour will be allowed to touch but not overlap the 40 dB $\mu$  contour of the system being evaluated. All contours are (50,50). TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference assuming 40 dB $\mu$ , or greater, signal in all systems coverage areas.

For adjacent and alternate channels, the interfering channels 60 dB $\mu$  will be allowed to touch but not overlap the 40 dB $\mu$  contour of the system being evaluated. All contours are (50,50). TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference assuming 40 dB $\mu$ , or greater, signal in all systems coverage areas.

#### 7.4.1.1 Discussion

The FCC limits the maximum field strength to 40 dB relative to 1 $\mu$ V/m (customarily denoted as 40 dB $\mu$ ). It is assumed that this limitation will be applied similarly to the way it is applied in the 821- 824/866/869 MHz band. That is, a 40 dB $\mu$  field strength can be deployed up to a defined distance from 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 as the potential for interference from CMRS infrastructure demands that public safety systems have adequate margins for reliability in the presence of interference. The value of 40 dB $\mu$  corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole ( $\lambda/2$ ) antenna. The thermal noise floor for a 6.25 kHz 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.

Allowing for a 3 dB reduction in the available margin due to CMRS OOB noise lowers the reliability and/or the channel performance of Public Safety systems. TIA TR8 made this allowance during the meetings in Mesa, AZ, January 2001. In addition, there are various channel bandwidths with different performance criteria and 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. There would be a single co-channel source, but potentially several adjacent or alternate channel sources involved.

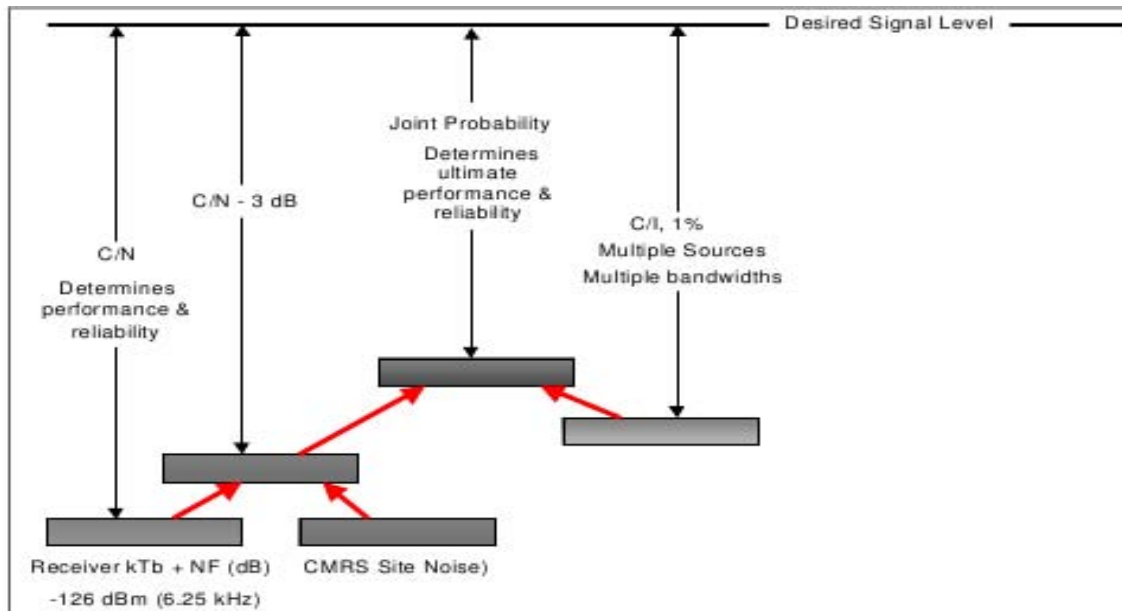


Figure 1 - Interfering Sources Create A “Noise” Level Influencing Reliability

It is recommended that co-channel assignments limit the C/I at the edge (worst case mile) be sufficient to limit that interference to <1%. A C/I ratio of 26.4 dB plus the required capture value required to achieve this goal. A 17 - 20 dB C/N is required to achieve channel performance. Table 1 shows estimated performance considering the 3 dB noise floor rise at the 40 dBμ signal level. Performance varies due to the different Cf/N requirements of the different modulations and channel bandwidths. These values are appropriate for a mobile on the street, but are considerably short to provide reliable communications to portables inside buildings.

Comparison of Joint Reliability for various configurations				
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)	94.2%	94.2%	90.4%	75.8%
40 dBu = -92.7 dBm @ 770 MHz				

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

To analyze the impact of requiring portable in building coverage, several scenarios are presented. The different scenarios involve a given separation from the desired sites. Then the impact of simulcast is included to show that the 40 dBμ must be able to fall outside the edge of the service area. From the analysis, recommendations of how far the 40 dBμ extensions should be allowed to occur are made.

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 OOB is suppressed to TIA's most recent recommendation and the "site isolation" is maintained at 65 dB minimum.
- The 40 dBμ 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.

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 (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 (%)	<b>85.60%</b>	<b>85.60%</b>	<b>76.58%</b>	<b>39.17%</b>
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 that simulcast is required to achieve public safety levels of reliability. The difference in performance margin requirements would require more sites and closer site-to-site separation for wider bandwidth channels.

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

$$23.75 \text{ dBW} \approx 240 \text{ Watts (ERPd)}$$

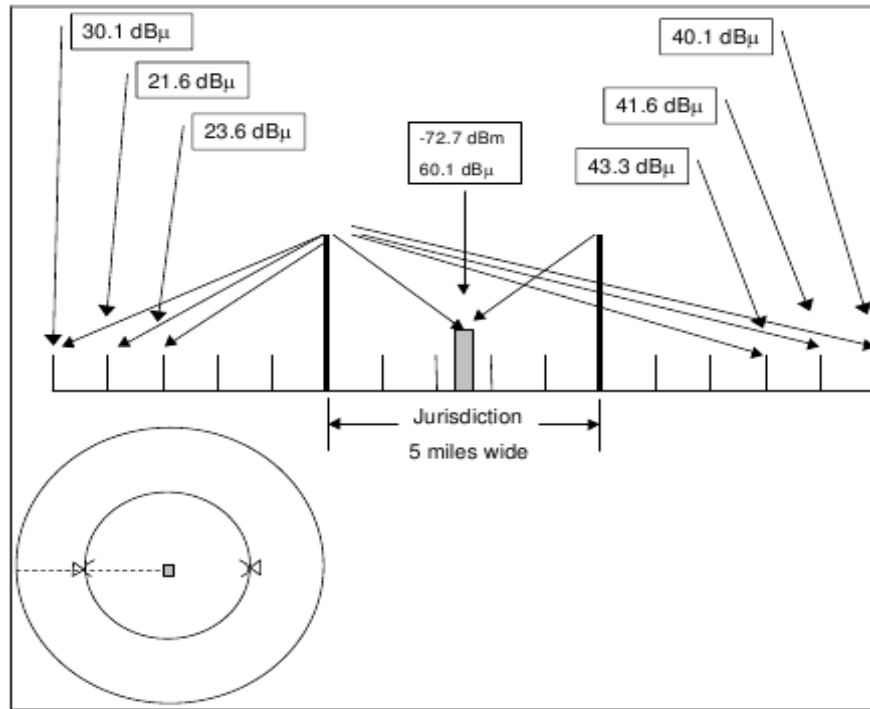


Figure 2 - Field Strength From Left Most Site.

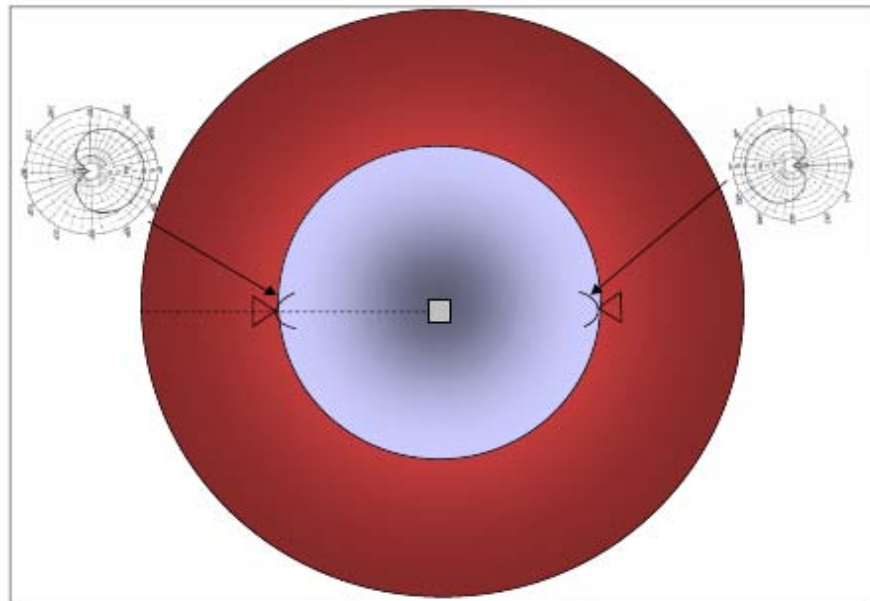


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

Figure 2 is for an urbanized area with a jurisdiction of 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 utilizing direction 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 composite field strength of approximately 40 dBμ.

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 backscatter 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 field strength 5 miles beyond in excess of 44 dBμ. 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.

The down tilting of antennas to control the 40 dBμ is not practical as the difference in angular discrimination from a 200-foot tall tower at 2.5 miles and 10 miles is approximately 0.6 degrees. Tables 3 and 4 represent the same configuration, but for less dense buildings. In these cases, the distance to extend the 40 dBm can be determined from Table Z. Recommendations are made in Table 6.

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 2.5 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 (%)	<b>85.60%</b>	<b>85.60%</b>	<b>76.58%</b>	<b>39.17%</b>
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 2.5 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 (%)	<b>85.60%</b>	<b>85.60%</b>	<b>76.58%</b>	<b>39.17%</b>
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.

Overshoot Distance (mi)	Field Strength (dBμ)	20 dB F/B (dBμ)
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

This allows the overshoot to be 11 miles so the extension of the 40 dbm can be 4 miles for suburbanized territory. For the more rural territory, the limit is the signal strength off the back of the antenna. So the result is that for various types of urbanized areas the offset of the 40 dbm should be:

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 Dbμ Field Strength

The 40 dBμ can then be constructed based on the defined service area without having to perform an actual prediction. Since the 40 dBμ is beyond the edge of the service area, some relaxation in the level of I is reasonable. Therefore a 35 dB ration is recommended and is consistent with what is currently being licensed in the 821-824/866-869 MHz Public Safety band.

#### Co-Channel Recommendation

- Allow the constructed 40 dBμ (50,50) to extend beyond the edge of the defined service area by the distance indicated in Table 6.
- Allow the Interfering 15 dBμ (50,50) to intercept but not overlap the 40 dBμ contour.

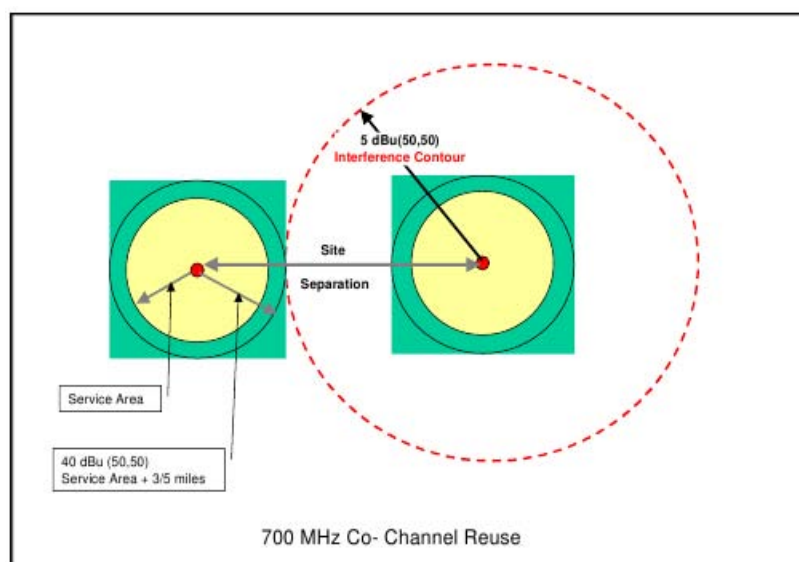


Figure 4 - Co-Channel Reuse Criterion

## 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 dBc a C/I of [X-40] dB is required. Where the alternate channel ACP value is -60 dBc, 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 OOB.

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. ACP defines the energy in a measured bandwidth that is typically wider than the receiver. As a result, the FCC values are optimistic at very close spacing and somewhat pessimistic at wider spacing, as the typical receiver filter is less than the channel bandwidth.

In addition, as a channel bandwidth is increased, the total noise is allowed to rise, as it is initially defined in a 6.25 kHz channel bandwidth. However, the effect is diminished at very close spacing as the noise is rapidly falling off. At greater spacing, the noise is essentially flat and the receiver’s filter limits the noise to the specified 3 dB 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 receiver muting. Therefore at least 17 dB plus the margin for keeping the interference below 1% probability requires a total margin of 43.4 dB. However, this margin would be at the edge of the service area and the 40 dBμ 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  $\geq 65$  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  $\geq 65$  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 block.

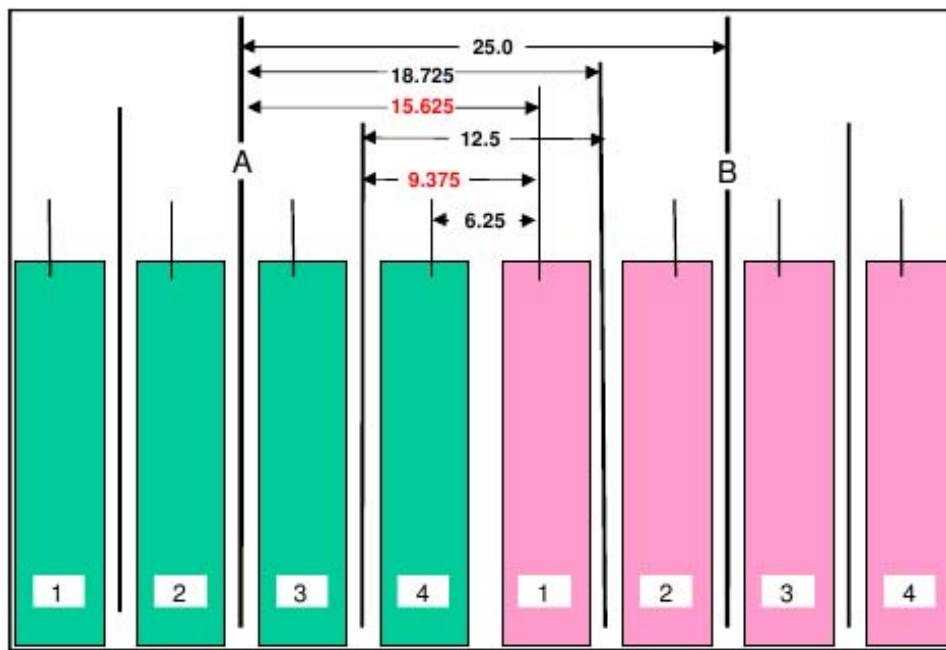


Figure 5, Potential Frequency Separations

Base initial (presorts) on 25 kHz 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.

Case	ACCPR
25 kHz	65 dB
18.725 kHz	65 dB
15.625 kHz	>40 dB
12.5 kHz	65 dB
9.375 kHz	>40 dB
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 Phase 2 narrowband 6.25 kHz channel. If system designers keep this consideration in mind and move the edge 6.25 kHz channels inward on their own systems, then a constant value of 65 dB ACCPR can be applied across all 25 kHz channels regardless of what is eventually deployed.

For other blocks, it must be assumed that transmitter filtering in addition to transmitter performance improvements with greater frequency separation will further reduce the ACCPR. Therefore it is recommended that a consistent value of 65 dB ACCPR be used for coordinating adjacent 25 kHz channel blocks. Rounding to be conservative due to the possibility of multiple sources allows the “I” contour to be approximately 20 dB above the 40 dBμ contour, 60 dBμ.

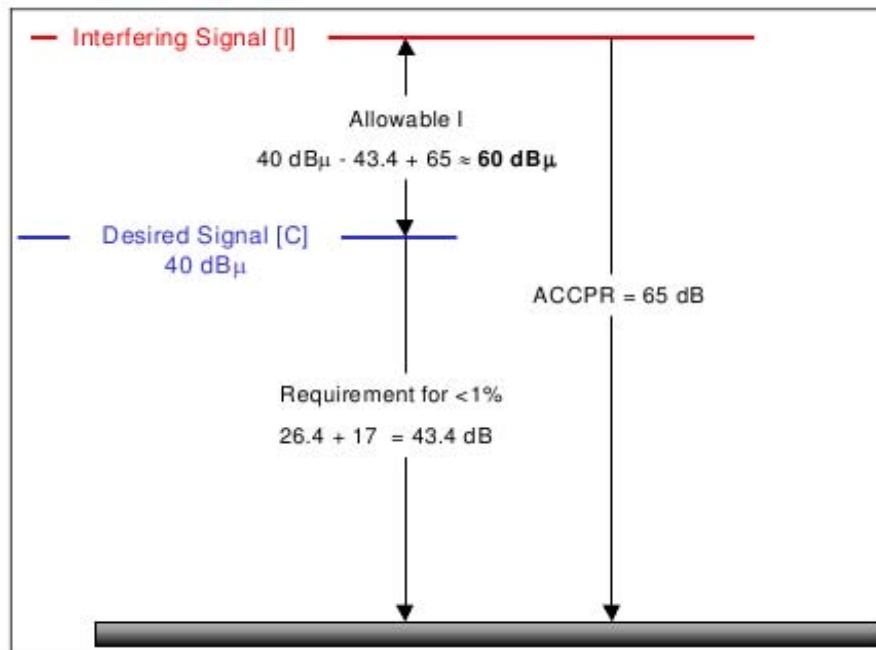


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

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

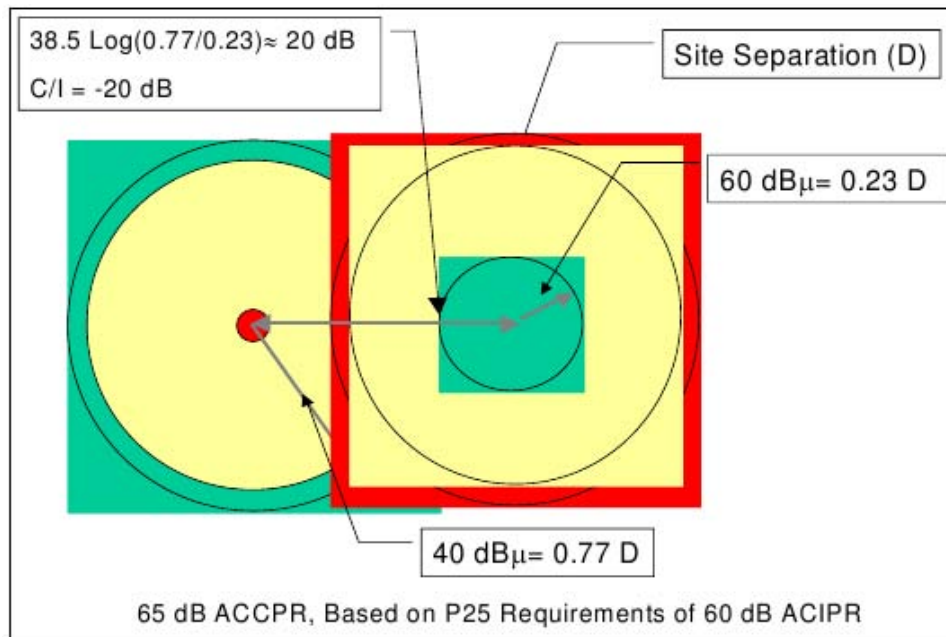


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

This simple method is only adequate for presorting large blocks 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:

- Degree of Service Area Overlap
- Different size of Service Areas
- Different ERP's and HAAT's
- Actual Terrain and Land Usage
- Differing User Reliability Requirements
- Migration from Project 25 Phase 1 to Phase 2
- Actual ACCP
- Balanced Systems
- Mobiles vs. Portables
- Use of voting
- Use of simulcast
- Radio specifications
- Simplex Operation
- 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.

## 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, a 10% Interference is specified; the C/I implies 90% probability of successfully achieving the desired ratio. At 1% interference, means that there is a 99% probability of achieving the desired C/I.

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

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.

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

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

Location Standard Deviation ( $\sigma$ ) 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

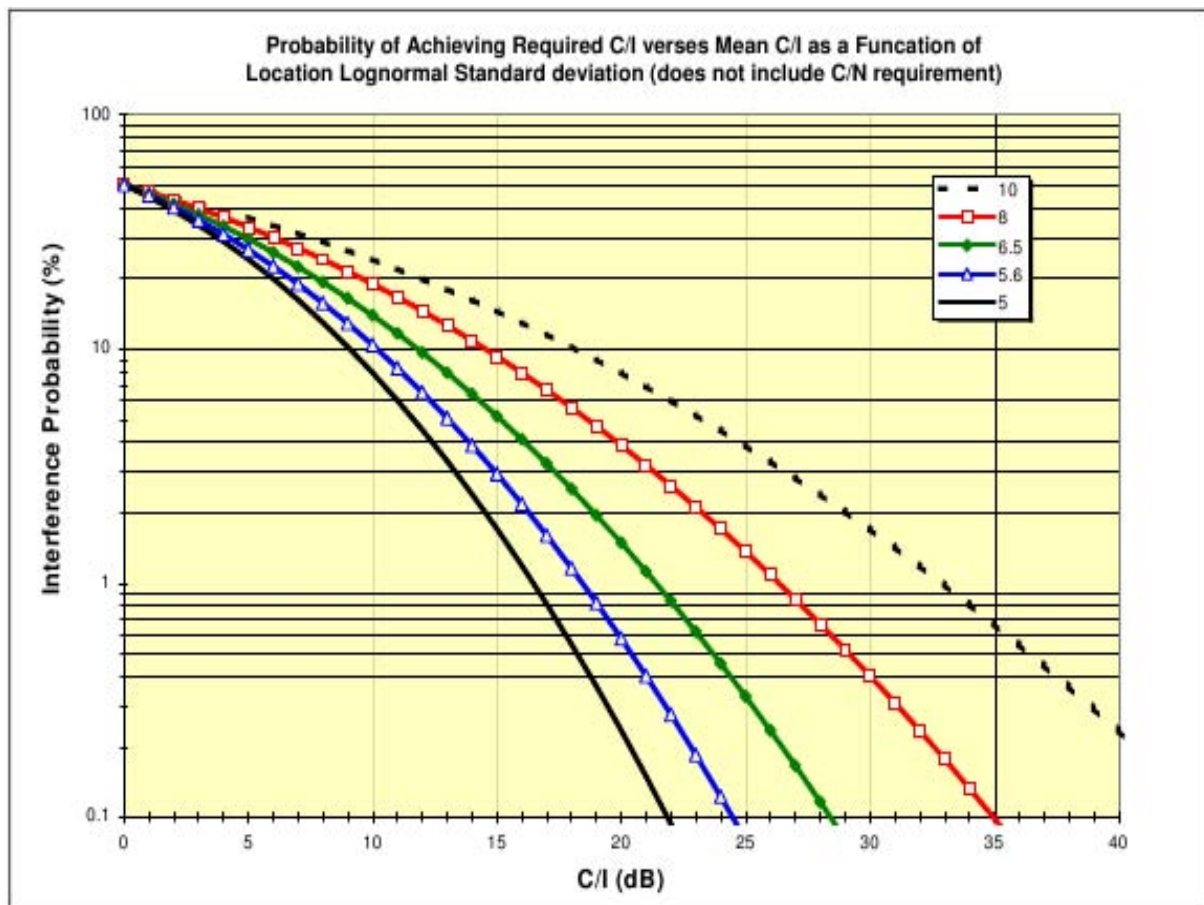


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

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 values 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. This provides the additional flexibility necessary to complete the 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 a less degradation of the 90%



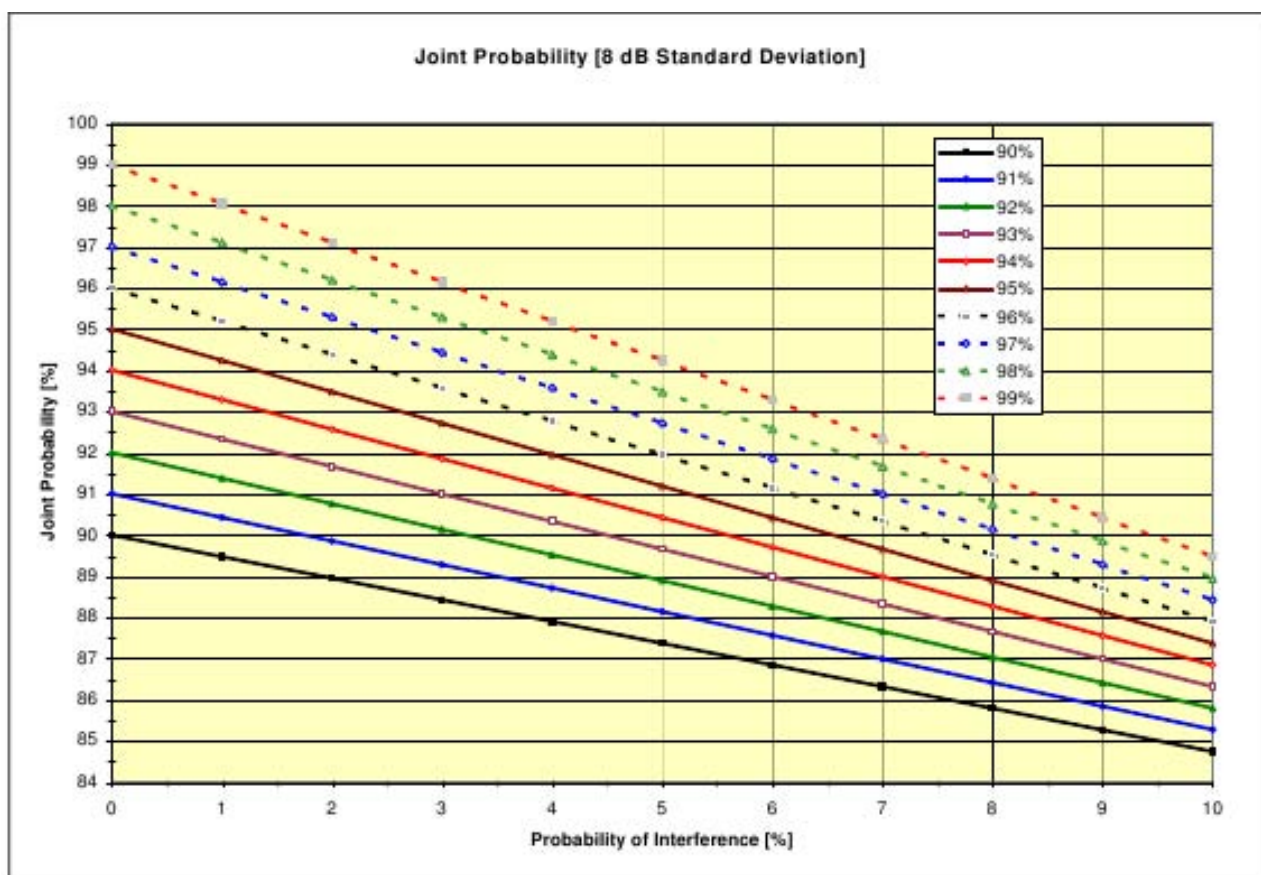


Figure A2 - Effect Of Joint Probability On The Composite Probability

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.



## Appendix F Region 4 Channel Allotments

The channel allotments in Region 4 are based on the channel assignments listed in the CAPRAD database, based on 25 KHz bandwidth channels in the General Use portions of the table. Each 25 KHz channel has been split into two 12.5 KHz channels to maximize frequency utilization. Channels have been assigned to each county in contiguous pairs to allow channel grouping to support 25 KHz data systems where required by the respective county agencies. In the event of an error in the table in Appendix F, the allotments listed in CAPRAD are declared by the Region 4 Committee to be correct and authoritative after adjusting for the bandwidth distribution noted above.

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Arkansas	General Use	Voice 12.5KHz	49-50	769.30625	799.31875
Arkansas	General Use	Voice 12.5KHz	51-52	769.31875	799.33125
Arkansas	General Use	Voice 12.5KHz	213-214	770.33125	800.34375
Arkansas	General Use	Voice 12.5KHz	215-216	770.34375	800.35625
Arkansas	General Use	Voice 12.5KHz	325-326	771.03125	801.04375
Arkansas	General Use	Voice 12.5KHz	327-328	771.04375	801.05625
Arkansas	General Use	Voice 12.5KHz	417-418	771.60625	801.61875
Arkansas	General Use	Voice 12.5KHz	419-420	771.61875	801.63125
Arkansas	General Use	Voice 12.5KHz	497-498	772.10625	802.11875
Arkansas	General Use	Voice 12.5KHz	499-500	772.11875	802.13125
Arkansas	General Use	Voice 12.5KHz	637-638	772.98125	802.99375
Arkansas	General Use	Voice 12.5KHz	639-640	772.99375	803.00625
Arkansas	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Arkansas	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Arkansas	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Arkansas	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Arkansas	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Arkansas	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Ashley	General Use	Voice 12.5KHz	17-18	769.10625	799.11875
Ashley	General Use	Voice 12.5KHz	19-20	769.11875	799.13125
Ashley	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Ashley	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Ashley	General Use	Voice 12.5KHz	161-162	770.00625	800.01875
Ashley	General Use	Voice 12.5KHz	163-164	770.01875	800.03125
Ashley	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Ashley	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Ashley	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Ashley	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Ashley	General Use	Voice 12.5KHz	417-418	771.60625	801.61875
Ashley	General Use	Voice 12.5KHz	419-420	771.61875	801.63125
Ashley	General Use	Voice 12.5KHz	473-474	771.95625	801.96875
Ashley	General Use	Voice 12.5KHz	475-476	771.96875	801.98125
Ashley	General Use	Voice 12.5KHz	537-538	772.35625	802.36875
Ashley	General Use	Voice 12.5KHz	539-540	772.36875	802.38125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Ashley	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Ashley	General Use	Voice 12.5KHz	679-680	773.24375	803.25625
Ashley	General Use	Voice 12.5KHz	873-874	774.45625	804.46875
Ashley	General Use	Voice 12.5KHz	875-876	774.46875	804.48125
Baxter	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Baxter	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Baxter	General Use	Voice 12.5KHz	133-134	769.83125	799.84375
Baxter	General Use	Voice 12.5KHz	135-136	769.84375	799.85625
Baxter	General Use	Voice 12.5KHz	177-178	770.10625	800.11875
Baxter	General Use	Voice 12.5KHz	179-180	770.11875	800.13125
Baxter	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Baxter	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Baxter	General Use	Voice 12.5KHz	357-358	771.23125	801.24375
Baxter	General Use	Voice 12.5KHz	359-360	771.24375	801.25625
Baxter	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Baxter	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Baxter	General Use	Voice 12.5KHz	489-490	772.05625	802.06875
Baxter	General Use	Voice 12.5KHz	491-492	772.06875	802.08125
Baxter	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
Baxter	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
Baxter	General Use	Voice 12.5KHz	581-582	772.63125	802.64375
Baxter	General Use	Voice 12.5KHz	583-584	772.64375	802.65625
Baxter	General Use	Voice 12.5KHz	633-634	772.95625	802.96875
Baxter	General Use	Voice 12.5KHz	635-636	772.96875	802.98125
Baxter	General Use	Voice 12.5KHz	745-746	773.65625	803.66875
Baxter	General Use	Voice 12.5KHz	747-748	773.66875	803.68125
Baxter	General Use	Voice 12.5KHz	869-870	774.43125	804.44375
Baxter	General Use	Voice 12.5KHz	871-872	774.44375	804.45625
Baxter	General Use	Voice 12.5KHz	913-914	774.70625	804.71875
Baxter	General Use	Voice 12.5KHz	915-916	774.71875	804.73125
Benton	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Benton	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Benton	General Use	Voice 12.5KHz	93-94	769.58125	799.59375
Benton	General Use	Voice 12.5KHz	95-96	769.59375	799.60625
Benton	General Use	Voice 12.5KHz	133-134	769.83125	799.84375
Benton	General Use	Voice 12.5KHz	135-136	769.84375	799.85625
Benton	General Use	Voice 12.5KHz	213-214	770.33125	800.34375
Benton	General Use	Voice 12.5KHz	215-216	770.34375	800.35625
Benton	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Benton	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Benton	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Benton	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Benton	General Use	Voice 12.5KHz	373-374	771.33125	801.34375
Benton	General Use	Voice 12.5KHz	375-376	771.34375	801.35625

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Benton	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Benton	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Benton	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
Benton	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
Benton	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Benton	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Benton	General Use	Voice 12.5KHz	549-550	772.43125	802.44375
Benton	General Use	Voice 12.5KHz	551-552	772.44375	802.45625
Benton	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
Benton	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
Benton	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Benton	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Benton	General Use	Voice 12.5KHz	709-710	773.43125	803.44375
Benton	General Use	Voice 12.5KHz	711-712	773.44375	803.45625
Benton	General Use	Voice 12.5KHz	749-750	773.68125	803.69375
Benton	General Use	Voice 12.5KHz	751-752	773.69375	803.70625
Benton	General Use	Voice 12.5KHz	865-866	774.40625	804.41875
Benton	General Use	Voice 12.5KHz	867-868	774.41875	804.43125
Benton	General Use	Voice 12.5KHz	917-918	774.73125	804.74375
Benton	General Use	Voice 12.5KHz	919-920	774.74375	804.75625
Boone	General Use	Voice 12.5KHz	17-18	769.10625	799.11875
Boone	General Use	Voice 12.5KHz	19-20	769.11875	799.13125
Boone	General Use	Voice 12.5KHz	217-218	770.35625	800.36875
Boone	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
Boone	General Use	Voice 12.5KHz	293-294	770.83125	800.84375
Boone	General Use	Voice 12.5KHz	295-296	770.84375	800.85625
Boone	General Use	Voice 12.5KHz	381-382	771.38125	801.39375
Boone	General Use	Voice 12.5KHz	383-384	771.39375	801.40625
Boone	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Boone	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Boone	General Use	Voice 12.5KHz	545-546	772.40625	802.41875
Boone	General Use	Voice 12.5KHz	547-548	772.41875	802.43125
Boone	General Use	Voice 12.5KHz	585-586	772.65625	802.66875
Boone	General Use	Voice 12.5KHz	587-588	772.66875	802.68125
Boone	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Boone	General Use	Voice 12.5KHz	667-668	773.16875	803.18125
Boone	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Boone	General Use	Voice 12.5KHz	755-756	773.71875	803.73125
Boone	General Use	Voice 12.5KHz	833-834	774.20625	804.21875
Boone	General Use	Voice 12.5KHz	835-836	774.21875	804.23125
Bradley	General Use	Voice 12.5KHz	41-42	769.25625	799.26875
Bradley	General Use	Voice 12.5KHz	43-44	769.26875	799.28125
Bradley	General Use	Voice 12.5KHz	201-202	770.25625	800.26875
Bradley	General Use	Voice 12.5KHz	203-204	770.26875	800.28125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Bradley	General Use	Voice 12.5KHz	357-358	771.23125	801.24375
Bradley	General Use	Voice 12.5KHz	359-360	771.24375	801.25625
Bradley	General Use	Voice 12.5KHz	449-450	771.80625	801.81875
Bradley	General Use	Voice 12.5KHz	451-452	771.81875	801.83125
Bradley	General Use	Voice 12.5KHz	489-490	772.05625	802.06875
Bradley	General Use	Voice 12.5KHz	491-492	772.06875	802.08125
Bradley	General Use	Voice 12.5KHz	617-618	772.85625	802.86875
Bradley	General Use	Voice 12.5KHz	619-620	772.86875	802.88125
Bradley	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Bradley	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Calhoun	General Use	Voice 12.5KHz	129-130	769.80625	799.81875
Calhoun	General Use	Voice 12.5KHz	131-132	769.81875	799.83125
Calhoun	General Use	Voice 12.5KHz	217-218	770.35625	800.36875
Calhoun	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
Calhoun	General Use	Voice 12.5KHz	329-330	771.05625	801.06875
Calhoun	General Use	Voice 12.5KHz	331-332	771.06875	801.08125
Calhoun	General Use	Voice 12.5KHz	373-374	771.33125	801.34375
Calhoun	General Use	Voice 12.5KHz	375-376	771.34375	801.35625
Calhoun	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Calhoun	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Calhoun	General Use	Voice 12.5KHz	469-470	771.93125	801.94375
Calhoun	General Use	Voice 12.5KHz	471-472	771.94375	801.95625
Calhoun	General Use	Voice 12.5KHz	593-594	772.70625	802.71875
Calhoun	General Use	Voice 12.5KHz	595-596	772.71875	802.73125
Calhoun	General Use	Voice 12.5KHz	829-830	774.18125	804.19375
Calhoun	General Use	Voice 12.5KHz	831-832	774.19375	804.20625
Carroll	General Use	Voice 12.5KHz	41-42	769.25625	799.26875
Carroll	General Use	Voice 12.5KHz	43-44	769.26875	799.28125
Carroll	General Use	Voice 12.5KHz	201-202	770.25625	800.26875
Carroll	General Use	Voice 12.5KHz	203-204	770.26875	800.28125
Carroll	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Carroll	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Carroll	General Use	Voice 12.5KHz	389-390	771.43125	801.44375
Carroll	General Use	Voice 12.5KHz	391-392	771.44375	801.45625
Carroll	General Use	Voice 12.5KHz	445-446	771.78125	801.79375
Carroll	General Use	Voice 12.5KHz	447-448	771.79375	801.80625
Carroll	General Use	Voice 12.5KHz	501-502	772.13125	802.14375
Carroll	General Use	Voice 12.5KHz	503-504	772.14375	802.15625
Carroll	General Use	Voice 12.5KHz	569-570	772.55625	802.56875
Carroll	General Use	Voice 12.5KHz	571-572	772.56875	802.58125
Carroll	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Carroll	General Use	Voice 12.5KHz	617-618	772.85625	802.86875
Carroll	General Use	Voice 12.5KHz	619-620	772.86875	802.88125
Carroll	General Use	Voice 12.5KHz	679-680	773.24375	803.25625

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Chicot	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Chicot	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Chicot	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Chicot	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Chicot	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Chicot	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Chicot	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
Chicot	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
Chicot	General Use	Voice 12.5KHz	549-550	772.43125	802.44375
Chicot	General Use	Voice 12.5KHz	551-552	772.44375	802.45625
Chicot	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Chicot	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Chicot	General Use	Voice 12.5KHz	905-906	774.65625	804.66875
Chicot	General Use	Voice 12.5KHz	907-908	774.66875	804.68125
Clark	General Use	Voice 12.5KHz	45-46	769.28125	799.29375
Clark	General Use	Voice 12.5KHz	47-48	769.29375	799.30625
Clark	General Use	Voice 12.5KHz	213-214	770.33125	800.34375
Clark	General Use	Voice 12.5KHz	215-216	770.34375	800.35625
Clark	General Use	Voice 12.5KHz	285-286	770.78125	800.79375
Clark	General Use	Voice 12.5KHz	287-288	770.79375	800.80625
Clark	General Use	Voice 12.5KHz	381-382	771.38125	801.39375
Clark	General Use	Voice 12.5KHz	383-384	771.39375	801.40625
Clark	General Use	Voice 12.5KHz	425-426	771.65625	801.66875
Clark	General Use	Voice 12.5KHz	427-428	771.66875	801.68125
Clark	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Clark	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Clark	General Use	Voice 12.5KHz	605-606	772.78125	802.79375
Clark	General Use	Voice 12.5KHz	607-608	772.79375	802.80625
Clark	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Clark	General Use	Voice 12.5KHz	679-680	773.24375	803.25625
Clark	General Use	Voice 12.5KHz	741-742	773.63125	803.64375
Clark	General Use	Voice 12.5KHz	743-744	773.64375	803.65625
Clark	General Use	Voice 12.5KHz	825-826	774.15625	804.16875
Clark	General Use	Voice 12.5KHz	827-828	774.16875	804.18125
Clay	General Use	Voice 12.5KHz	85-86	769.53125	799.54375
Clay	General Use	Voice 12.5KHz	87-88	769.54375	799.55625
Clay	General Use	Voice 12.5KHz	353-354	771.20625	801.21875
Clay	General Use	Voice 12.5KHz	355-356	771.21875	801.23125
Clay	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Clay	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Clay	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
Clay	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
Clay	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Clay	General Use	Voice 12.5KHz	667-668	773.16875	803.18125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Clay	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Clay	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Clay	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Clay	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
Cleburne	General Use	Voice 12.5KHz	125-126	769.78125	799.79375
Cleburne	General Use	Voice 12.5KHz	127-128	769.79375	799.80625
Cleburne	General Use	Voice 12.5KHz	333-334	771.08125	801.09375
Cleburne	General Use	Voice 12.5KHz	335-336	771.09375	801.10625
Cleburne	General Use	Voice 12.5KHz	373-374	771.33125	801.34375
Cleburne	General Use	Voice 12.5KHz	375-376	771.34375	801.35625
Cleburne	General Use	Voice 12.5KHz	465-466	771.90625	801.91875
Cleburne	General Use	Voice 12.5KHz	467-468	771.91875	801.93125
Cleburne	General Use	Voice 12.5KHz	505-506	772.15625	802.16875
Cleburne	General Use	Voice 12.5KHz	507-508	772.16875	802.18125
Cleburne	General Use	Voice 12.5KHz	561-562	772.50625	802.51875
Cleburne	General Use	Voice 12.5KHz	563-564	772.51875	802.53125
Cleburne	General Use	Voice 12.5KHz	601-602	772.75625	802.76875
Cleburne	General Use	Voice 12.5KHz	603-604	772.76875	802.78125
Cleburne	General Use	Voice 12.5KHz	793-794	773.95625	803.96875
Cleburne	General Use	Voice 12.5KHz	795-796	773.96875	803.98125
Cleburne	General Use	Voice 12.5KHz	909-910	774.68125	804.69375
Cleburne	General Use	Voice 12.5KHz	911-912	774.69375	804.70625
Cleveland	General Use	Voice 12.5KHz	81-82	769.50625	799.51875
Cleveland	General Use	Voice 12.5KHz	83-84	769.51875	799.53125
Cleveland	General Use	Voice 12.5KHz	349-350	771.18125	801.19375
Cleveland	General Use	Voice 12.5KHz	351-352	771.19375	801.20625
Cleveland	General Use	Voice 12.5KHz	401-402	771.50625	801.51875
Cleveland	General Use	Voice 12.5KHz	403-404	771.51875	801.53125
Cleveland	General Use	Voice 12.5KHz	441-442	771.75625	801.76875
Cleveland	General Use	Voice 12.5KHz	443-444	771.76875	801.78125
Cleveland	General Use	Voice 12.5KHz	501-502	772.13125	802.14375
Cleveland	General Use	Voice 12.5KHz	503-504	772.14375	802.15625
Cleveland	General Use	Voice 12.5KHz	705-706	773.40625	803.41875
Cleveland	General Use	Voice 12.5KHz	707-708	773.41875	803.43125
Columbia	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Columbia	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Columbia	General Use	Voice 12.5KHz	325-326	771.03125	801.04375
Columbia	General Use	Voice 12.5KHz	327-328	771.04375	801.05625
Columbia	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Columbia	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Columbia	General Use	Voice 12.5KHz	417-418	771.60625	801.61875
Columbia	General Use	Voice 12.5KHz	419-420	771.61875	801.63125
Columbia	General Use	Voice 12.5KHz	493-494	772.08125	802.09375
Columbia	General Use	Voice 12.5KHz	495-496	772.09375	802.10625

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Columbia	General Use	Voice 12.5KHz	545-546	772.40625	802.41875
Columbia	General Use	Voice 12.5KHz	547-548	772.41875	802.43125
Columbia	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Columbia	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Columbia	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Columbia	General Use	Voice 12.5KHz	667-668	773.16875	803.18125
Columbia	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Columbia	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Conway	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Conway	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Conway	General Use	Voice 12.5KHz	417-418	771.60625	801.61875
Conway	General Use	Voice 12.5KHz	419-420	771.61875	801.63125
Conway	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Conway	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Conway	General Use	Voice 12.5KHz	557-558	772.48125	802.49375
Conway	General Use	Voice 12.5KHz	559-560	772.49375	802.50625
Conway	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Conway	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Conway	General Use	Voice 12.5KHz	789-790	773.93125	803.94375
Conway	General Use	Voice 12.5KHz	791-792	773.94375	803.95625
Conway	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Conway	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Craighead	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Craighead	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Craighead	General Use	Voice 12.5KHz	93-94	769.58125	799.59375
Craighead	General Use	Voice 12.5KHz	95-96	769.59375	799.60625
Craighead	General Use	Voice 12.5KHz	165-166	770.03125	800.04375
Craighead	General Use	Voice 12.5KHz	167-168	770.04375	800.05625
Craighead	General Use	Voice 12.5KHz	213-214	770.33125	800.34375
Craighead	General Use	Voice 12.5KHz	215-216	770.34375	800.35625
Craighead	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Craighead	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Craighead	General Use	Voice 12.5KHz	341-342	771.13125	801.14375
Craighead	General Use	Voice 12.5KHz	343-344	771.14375	801.15625
Craighead	General Use	Voice 12.5KHz	381-382	771.38125	801.39375
Craighead	General Use	Voice 12.5KHz	383-384	771.39375	801.40625
Craighead	General Use	Voice 12.5KHz	421-422	771.63125	801.64375
Craighead	General Use	Voice 12.5KHz	423-424	771.64375	801.65625
Craighead	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Craighead	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Craighead	General Use	Voice 12.5KHz	537-538	772.35625	802.36875
Craighead	General Use	Voice 12.5KHz	539-540	772.36875	802.38125
Craighead	General Use	Voice 12.5KHz	585-586	772.65625	802.66875
Craighead	General Use	Voice 12.5KHz	587-588	772.66875	802.68125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Craighead	General Use	Voice 12.5KHz	629-630	772.93125	802.94375
Craighead	General Use	Voice 12.5KHz	631-632	772.94375	802.95625
Craighead	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Craighead	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Craighead	General Use	Voice 12.5KHz	709-710	773.43125	803.44375
Craighead	General Use	Voice 12.5KHz	711-712	773.44375	803.45625
Craighead	General Use	Voice 12.5KHz	789-790	773.93125	803.94375
Craighead	General Use	Voice 12.5KHz	791-792	773.94375	803.95625
Craighead	General Use	Voice 12.5KHz	837-838	774.23125	804.24375
Craighead	General Use	Voice 12.5KHz	839-840	774.24375	804.25625
Craighead	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Craighead	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Craighead	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Craighead	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Crawford	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Crawford	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Crawford	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
Crawford	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
Crawford	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Crawford	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Crawford	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Crawford	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Crawford	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Crawford	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Crawford	General Use	Voice 12.5KHz	517-518	772.23125	802.24375
Crawford	General Use	Voice 12.5KHz	519-520	772.24375	802.25625
Crawford	General Use	Voice 12.5KHz	557-558	772.48125	802.49375
Crawford	General Use	Voice 12.5KHz	559-560	772.49375	802.50625
Crawford	General Use	Voice 12.5KHz	609-610	772.80625	802.81875
Crawford	General Use	Voice 12.5KHz	611-612	772.81875	802.83125
Crawford	General Use	Voice 12.5KHz	789-790	773.93125	803.94375
Crawford	General Use	Voice 12.5KHz	791-792	773.94375	803.95625
Crawford	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Crawford	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Crawford	General Use	Voice 12.5KHz	913-914	774.70625	804.71875
Crawford	General Use	Voice 12.5KHz	915-916	774.71875	804.73125
Crittenden	General Use	Voice 12.5KHz	41-42	769.25625	799.26875
Crittenden	General Use	Voice 12.5KHz	43-44	769.26875	799.28125
Crittenden	General Use	Voice 12.5KHz	177-178	770.10625	800.11875
Crittenden	General Use	Voice 12.5KHz	179-180	770.11875	800.13125
Crittenden	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Crittenden	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Crittenden	General Use	Voice 12.5KHz	369-370	771.30625	801.31875
Crittenden	General Use	Voice 12.5KHz	371-372	771.31875	801.33125



<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Crittenden	General Use	Voice 12.5KHz	445-446	771.78125	801.79375
Crittenden	General Use	Voice 12.5KHz	447-448	771.79375	801.80625
Crittenden	General Use	Voice 12.5KHz	489-490	772.05625	802.06875
Crittenden	General Use	Voice 12.5KHz	491-492	772.06875	802.08125
Crittenden	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Crittenden	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Crittenden	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Crittenden	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Crittenden	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
Crittenden	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
Crittenden	General Use	Voice 12.5KHz	745-746	773.65625	803.66875
Crittenden	General Use	Voice 12.5KHz	747-748	773.66875	803.68125
Crittenden	General Use	Voice 12.5KHz	917-918	774.73125	804.74375
Crittenden	General Use	Voice 12.5KHz	919-920	774.74375	804.75625
Cross	General Use	Voice 12.5KHz	85-86	769.53125	799.54375
Cross	General Use	Voice 12.5KHz	87-88	769.54375	799.55625
Cross	General Use	Voice 12.5KHz	285-286	770.78125	800.79375
Cross	General Use	Voice 12.5KHz	287-288	770.79375	800.80625
Cross	General Use	Voice 12.5KHz	385-386	771.40625	801.41875
Cross	General Use	Voice 12.5KHz	387-388	771.41875	801.43125
Cross	General Use	Voice 12.5KHz	425-426	771.65625	801.66875
Cross	General Use	Voice 12.5KHz	427-428	771.66875	801.68125
Cross	General Use	Voice 12.5KHz	481-482	772.00625	802.01875
Cross	General Use	Voice 12.5KHz	483-484	772.01875	802.03125
Cross	General Use	Voice 12.5KHz	529-530	772.30625	802.31875
Cross	General Use	Voice 12.5KHz	531-532	772.31875	802.33125
Cross	General Use	Voice 12.5KHz	609-610	772.80625	802.81875
Cross	General Use	Voice 12.5KHz	611-612	772.81875	802.83125
Cross	General Use	Voice 12.5KHz	869-870	774.43125	804.44375
Cross	General Use	Voice 12.5KHz	871-872	774.44375	804.45625
Dallas	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
Dallas	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
Dallas	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Dallas	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Dallas	General Use	Voice 12.5KHz	389-390	771.43125	801.44375
Dallas	General Use	Voice 12.5KHz	391-392	771.44375	801.45625
Dallas	General Use	Voice 12.5KHz	525-526	772.28125	802.29375
Dallas	General Use	Voice 12.5KHz	527-528	772.29375	802.30625
Dallas	General Use	Voice 12.5KHz	749-750	773.68125	803.69375
Dallas	General Use	Voice 12.5KHz	751-752	773.69375	803.70625
Dallas	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Dallas	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Desha	General Use	Voice 12.5KHz	433-434	771.70625	801.71875
Desha	General Use	Voice 12.5KHz	435-436	771.71875	801.73125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Desha	General Use	Voice 12.5KHz	513-514	772.20625	802.21875
Desha	General Use	Voice 12.5KHz	515-516	772.21875	802.23125
Desha	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Desha	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Desha	General Use	Voice 12.5KHz	613-614	772.83125	802.84375
Desha	General Use	Voice 12.5KHz	615-616	772.84375	802.85625
Desha	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
Desha	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
Desha	General Use	Voice 12.5KHz	785-786	773.90625	803.91875
Desha	General Use	Voice 12.5KHz	787-788	773.91875	803.93125
Desha	General Use	Voice 12.5KHz	913-914	774.70625	804.71875
Desha	General Use	Voice 12.5KHz	915-916	774.71875	804.73125
Drew	General Use	Voice 12.5KHz	133-134	769.83125	799.84375
Drew	General Use	Voice 12.5KHz	135-136	769.84375	799.85625
Drew	General Use	Voice 12.5KHz	289-290	770.80625	800.81875
Drew	General Use	Voice 12.5KHz	291-292	770.81875	800.83125
Drew	General Use	Voice 12.5KHz	333-334	771.08125	801.09375
Drew	General Use	Voice 12.5KHz	335-336	771.09375	801.10625
Drew	General Use	Voice 12.5KHz	481-482	772.00625	802.01875
Drew	General Use	Voice 12.5KHz	483-484	772.01875	802.03125
Drew	General Use	Voice 12.5KHz	529-530	772.30625	802.31875
Drew	General Use	Voice 12.5KHz	531-532	772.31875	802.33125
Drew	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
Drew	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
Drew	General Use	Voice 12.5KHz	629-630	772.93125	802.94375
Drew	General Use	Voice 12.5KHz	631-632	772.94375	802.95625
Drew	General Use	Voice 12.5KHz	717-718	773.48125	803.49375
Drew	General Use	Voice 12.5KHz	719-720	773.49375	803.50625
Drew	General Use	Voice 12.5KHz	757-758	773.73125	803.74375
Drew	General Use	Voice 12.5KHz	759-760	773.74375	803.75625
Drew	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Drew	General Use	Voice 12.5KHz	799-800	773.99375	804.00625
Drew	General Use	Voice 12.5KHz	865-866	774.40625	804.41875
Drew	General Use	Voice 12.5KHz	867-868	774.41875	804.43125
Faulkner	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Faulkner	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Faulkner	General Use	Voice 12.5KHz	81-82	769.50625	799.51875
Faulkner	General Use	Voice 12.5KHz	83-84	769.51875	799.53125
Faulkner	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
Faulkner	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
Faulkner	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Faulkner	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Faulkner	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Faulkner	General Use	Voice 12.5KHz	299-300	770.86875	800.88125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Faulkner	General Use	Voice 12.5KHz	353-354	771.20625	801.21875
Faulkner	General Use	Voice 12.5KHz	355-356	771.21875	801.23125
Faulkner	General Use	Voice 12.5KHz	429-430	771.68125	801.69375
Faulkner	General Use	Voice 12.5KHz	431-432	771.69375	801.70625
Faulkner	General Use	Voice 12.5KHz	513-514	772.20625	802.21875
Faulkner	General Use	Voice 12.5KHz	515-516	772.21875	802.23125
Faulkner	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Faulkner	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Faulkner	General Use	Voice 12.5KHz	613-614	772.83125	802.84375
Faulkner	General Use	Voice 12.5KHz	615-616	772.84375	802.85625
Faulkner	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Faulkner	General Use	Voice 12.5KHz	679-680	773.24375	803.25625
Faulkner	General Use	Voice 12.5KHz	741-742	773.63125	803.64375
Faulkner	General Use	Voice 12.5KHz	743-744	773.64375	803.65625
Faulkner	General Use	Voice 12.5KHz	833-834	774.20625	804.21875
Faulkner	General Use	Voice 12.5KHz	835-836	774.21875	804.23125
Faulkner	General Use	Voice 12.5KHz	873-874	774.45625	804.46875
Faulkner	General Use	Voice 12.5KHz	875-876	774.46875	804.48125
Franklin	General Use	Voice 12.5KHz	45-46	769.28125	799.29375
Franklin	General Use	Voice 12.5KHz	47-48	769.29375	799.30625
Franklin	General Use	Voice 12.5KHz	253-254	770.58125	800.59375
Franklin	General Use	Voice 12.5KHz	255-256	770.59375	800.60625
Franklin	General Use	Voice 12.5KHz	349-350	771.18125	801.19375
Franklin	General Use	Voice 12.5KHz	351-352	771.19375	801.20625
Franklin	General Use	Voice 12.5KHz	401-402	771.50625	801.51875
Franklin	General Use	Voice 12.5KHz	403-404	771.51875	801.53125
Franklin	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Franklin	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Franklin	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Franklin	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Franklin	General Use	Voice 12.5KHz	713-714	773.45625	803.46875
Franklin	General Use	Voice 12.5KHz	715-716	773.46875	803.48125
Fulton	General Use	Voice 12.5KHz	241-242	770.50625	800.51875
Fulton	General Use	Voice 12.5KHz	243-244	770.51875	800.53125
Fulton	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Fulton	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Fulton	General Use	Voice 12.5KHz	521-522	772.25625	802.26875
Fulton	General Use	Voice 12.5KHz	523-524	772.26875	802.28125
Fulton	General Use	Voice 12.5KHz	617-618	772.85625	802.86875
Fulton	General Use	Voice 12.5KHz	619-620	772.86875	802.88125
Fulton	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Fulton	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Fulton	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Fulton	General Use	Voice 12.5KHz	755-756	773.71875	803.73125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Fulton	General Use	Voice 12.5KHz	833-834	774.20625	804.21875
Fulton	General Use	Voice 12.5KHz	835-836	774.21875	804.23125
Fulton	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Fulton	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Garland	General Use	Voice 12.5KHz	53-54	769.33125	799.34375
Garland	General Use	Voice 12.5KHz	55-56	769.34375	799.35625
Garland	General Use	Voice 12.5KHz	93-94	769.58125	799.59375
Garland	General Use	Voice 12.5KHz	95-96	769.59375	799.60625
Garland	General Use	Voice 12.5KHz	133-134	769.83125	799.84375
Garland	General Use	Voice 12.5KHz	135-136	769.84375	799.85625
Garland	General Use	Voice 12.5KHz	173-174	770.08125	800.09375
Garland	General Use	Voice 12.5KHz	175-176	770.09375	800.10625
Garland	General Use	Voice 12.5KHz	253-254	770.58125	800.59375
Garland	General Use	Voice 12.5KHz	255-256	770.59375	800.60625
Garland	General Use	Voice 12.5KHz	293-294	770.83125	800.84375
Garland	General Use	Voice 12.5KHz	295-296	770.84375	800.85625
Garland	General Use	Voice 12.5KHz	333-334	771.08125	801.09375
Garland	General Use	Voice 12.5KHz	335-336	771.09375	801.10625
Garland	General Use	Voice 12.5KHz	373-374	771.33125	801.34375
Garland	General Use	Voice 12.5KHz	375-376	771.34375	801.35625
Garland	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Garland	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Garland	General Use	Voice 12.5KHz	457-458	771.85625	801.86875
Garland	General Use	Voice 12.5KHz	459-460	771.86875	801.88125
Garland	General Use	Voice 12.5KHz	529-530	772.30625	802.31875
Garland	General Use	Voice 12.5KHz	531-532	772.31875	802.33125
Garland	General Use	Voice 12.5KHz	577-578	772.60625	802.61875
Garland	General Use	Voice 12.5KHz	579-580	772.61875	802.63125
Garland	General Use	Voice 12.5KHz	637-638	772.98125	802.99375
Garland	General Use	Voice 12.5KHz	639-640	772.99375	803.00625
Garland	General Use	Voice 12.5KHz	713-714	773.45625	803.46875
Garland	General Use	Voice 12.5KHz	715-716	773.46875	803.48125
Garland	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Garland	General Use	Voice 12.5KHz	755-756	773.71875	803.73125
Garland	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Garland	General Use	Voice 12.5KHz	799-800	773.99375	804.00625
Garland	General Use	Voice 12.5KHz	869-870	774.43125	804.44375
Garland	General Use	Voice 12.5KHz	871-872	774.44375	804.45625
Grant	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Grant	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Grant	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Grant	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Grant	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Grant	General Use	Voice 12.5KHz	511-512	772.19375	802.20625

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Grant	General Use	Voice 12.5KHz	561-562	772.50625	802.51875
Grant	General Use	Voice 12.5KHz	563-564	772.51875	802.53125
Grant	General Use	Voice 12.5KHz	609-610	772.80625	802.81875
Grant	General Use	Voice 12.5KHz	611-612	772.81875	802.83125
Greene	General Use	Voice 12.5KHz	49-50	769.30625	799.31875
Greene	General Use	Voice 12.5KHz	51-52	769.31875	799.33125
Greene	General Use	Voice 12.5KHz	129-130	769.80625	799.81875
Greene	General Use	Voice 12.5KHz	131-132	769.81875	799.83125
Greene	General Use	Voice 12.5KHz	289-290	770.80625	800.81875
Greene	General Use	Voice 12.5KHz	291-292	770.81875	800.83125
Greene	General Use	Voice 12.5KHz	333-334	771.08125	801.09375
Greene	General Use	Voice 12.5KHz	335-336	771.09375	801.10625
Greene	General Use	Voice 12.5KHz	397-398	771.48125	801.49375
Greene	General Use	Voice 12.5KHz	399-400	771.49375	801.50625
Greene	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Greene	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Greene	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Greene	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Greene	General Use	Voice 12.5KHz	569-570	772.55625	802.56875
Greene	General Use	Voice 12.5KHz	571-572	772.56875	802.58125
Greene	General Use	Voice 12.5KHz	613-614	772.83125	802.84375
Greene	General Use	Voice 12.5KHz	615-616	772.84375	802.85625
Greene	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Greene	General Use	Voice 12.5KHz	679-680	773.24375	803.25625
Greene	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Greene	General Use	Voice 12.5KHz	755-756	773.71875	803.73125
Greene	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Greene	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Hempstead	General Use	Voice 12.5KHz	361-362	771.25625	801.26875
Hempstead	General Use	Voice 12.5KHz	363-364	771.26875	801.28125
Hempstead	General Use	Voice 12.5KHz	401-402	771.50625	801.51875
Hempstead	General Use	Voice 12.5KHz	403-404	771.51875	801.53125
Hempstead	General Use	Voice 12.5KHz	469-470	771.93125	801.94375
Hempstead	General Use	Voice 12.5KHz	471-472	771.94375	801.95625
Hempstead	General Use	Voice 12.5KHz	517-518	772.23125	802.24375
Hempstead	General Use	Voice 12.5KHz	519-520	772.24375	802.25625
Hempstead	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
Hempstead	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
Hempstead	General Use	Voice 12.5KHz	705-706	773.40625	803.41875
Hempstead	General Use	Voice 12.5KHz	707-708	773.41875	803.43125
Hempstead	General Use	Voice 12.5KHz	789-790	773.93125	803.94375
Hempstead	General Use	Voice 12.5KHz	791-792	773.94375	803.95625
Hempstead	General Use	Voice 12.5KHz	833-834	774.20625	804.21875
Hempstead	General Use	Voice 12.5KHz	835-836	774.21875	804.23125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Hempstead	General Use	Voice 12.5KHz	913-914	774.70625	804.71875
Hempstead	General Use	Voice 12.5KHz	915-916	774.71875	804.73125
Hot Spring	General Use	Voice 12.5KHz	85-86	769.53125	799.54375
Hot Spring	General Use	Voice 12.5KHz	87-88	769.54375	799.55625
Hot Spring	General Use	Voice 12.5KHz	125-126	769.78125	799.79375
Hot Spring	General Use	Voice 12.5KHz	127-128	769.79375	799.80625
Hot Spring	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Hot Spring	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Hot Spring	General Use	Voice 12.5KHz	341-342	771.13125	801.14375
Hot Spring	General Use	Voice 12.5KHz	343-344	771.14375	801.15625
Hot Spring	General Use	Voice 12.5KHz	433-434	771.70625	801.71875
Hot Spring	General Use	Voice 12.5KHz	435-436	771.71875	801.73125
Hot Spring	General Use	Voice 12.5KHz	497-498	772.10625	802.11875
Hot Spring	General Use	Voice 12.5KHz	499-500	772.11875	802.13125
Hot Spring	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Hot Spring	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Hot Spring	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Hot Spring	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Hot Spring	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
Hot Spring	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
Hot Spring	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Hot Spring	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Hot Spring	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Hot Spring	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Howard	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
Howard	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
Howard	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Howard	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Howard	General Use	Voice 12.5KHz	421-422	771.63125	801.64375
Howard	General Use	Voice 12.5KHz	423-424	771.64375	801.65625
Howard	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Howard	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Howard	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
Howard	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
Howard	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Howard	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Howard	General Use	Voice 12.5KHz	673-674	773.20625	803.21875
Howard	General Use	Voice 12.5KHz	675-676	773.21875	803.23125
Howard	General Use	Voice 12.5KHz	745-746	773.65625	803.66875
Howard	General Use	Voice 12.5KHz	747-748	773.66875	803.68125
Independence	General Use	Voice 12.5KHz	45-46	769.28125	799.29375
Independence	General Use	Voice 12.5KHz	47-48	769.29375	799.30625
Independence	General Use	Voice 12.5KHz	89-90	769.55625	799.56875
Independence	General Use	Voice 12.5KHz	91-92	769.56875	799.58125

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Independence	General Use	Voice 12.5KHz	161-162	770.00625	800.01875
Independence	General Use	Voice 12.5KHz	163-164	770.01875	800.03125
Independence	General Use	Voice 12.5KHz	209-210	770.30625	800.31875
Independence	General Use	Voice 12.5KHz	211-212	770.31875	800.33125
Independence	General Use	Voice 12.5KHz	249-250	770.55625	800.56875
Independence	General Use	Voice 12.5KHz	251-252	770.56875	800.58125
Independence	General Use	Voice 12.5KHz	345-346	771.15625	801.16875
Independence	General Use	Voice 12.5KHz	347-348	771.16875	801.18125
Independence	General Use	Voice 12.5KHz	393-394	771.45625	801.46875
Independence	General Use	Voice 12.5KHz	395-396	771.46875	801.48125
Independence	General Use	Voice 12.5KHz	433-434	771.70625	801.71875
Independence	General Use	Voice 12.5KHz	435-436	771.71875	801.73125
Independence	General Use	Voice 12.5KHz	473-474	771.95625	801.96875
Independence	General Use	Voice 12.5KHz	475-476	771.96875	801.98125
Independence	General Use	Voice 12.5KHz	553-554	772.45625	802.46875
Independence	General Use	Voice 12.5KHz	555-556	772.46875	802.48125
Independence	General Use	Voice 12.5KHz	637-638	772.98125	802.99375
Independence	General Use	Voice 12.5KHz	639-640	772.99375	803.00625
Independence	General Use	Voice 12.5KHz	829-830	774.18125	804.19375
Independence	General Use	Voice 12.5KHz	831-832	774.19375	804.20625
Izard	General Use	Voice 12.5KHz	81-82	769.50625	799.51875
Izard	General Use	Voice 12.5KHz	83-84	769.51875	799.53125
Izard	General Use	Voice 12.5KHz	201-202	770.25625	800.26875
Izard	General Use	Voice 12.5KHz	203-204	770.26875	800.28125
Izard	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Izard	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Izard	General Use	Voice 12.5KHz	329-330	771.05625	801.06875
Izard	General Use	Voice 12.5KHz	331-332	771.06875	801.08125
Izard	General Use	Voice 12.5KHz	445-446	771.78125	801.79375
Izard	General Use	Voice 12.5KHz	447-448	771.79375	801.80625
Izard	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Izard	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Izard	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Izard	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Izard	General Use	Voice 12.5KHz	705-706	773.40625	803.41875
Izard	General Use	Voice 12.5KHz	707-708	773.41875	803.43125
Izard	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Izard	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Izard	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Izard	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Izard	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Izard	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Jackson	General Use	Voice 12.5KHz	293-294	770.83125	800.84375
Jackson	General Use	Voice 12.5KHz	295-296	770.84375	800.85625

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Jackson	General Use	Voice 12.5KHz	357-358	771.23125	801.24375
Jackson	General Use	Voice 12.5KHz	359-360	771.24375	801.25625
Jackson	General Use	Voice 12.5KHz	441-442	771.75625	801.76875
Jackson	General Use	Voice 12.5KHz	443-444	771.76875	801.78125
Jackson	General Use	Voice 12.5KHz	501-502	772.13125	802.14375
Jackson	General Use	Voice 12.5KHz	503-504	772.14375	802.15625
Jackson	General Use	Voice 12.5KHz	545-546	772.40625	802.41875
Jackson	General Use	Voice 12.5KHz	547-548	772.41875	802.43125
Jackson	General Use	Voice 12.5KHz	593-594	772.70625	802.71875
Jackson	General Use	Voice 12.5KHz	595-596	772.71875	802.73125
Jackson	General Use	Voice 12.5KHz	661-662	773.13125	803.14375
Jackson	General Use	Voice 12.5KHz	663-664	773.14375	803.15625
Jackson	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Jackson	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Jefferson	General Use	Voice 12.5KHz	17-18	769.10625	799.11875
Jefferson	General Use	Voice 12.5KHz	19-20	769.11875	799.13125
Jefferson	General Use	Voice 12.5KHz	57-58	769.35625	799.36875
Jefferson	General Use	Voice 12.5KHz	59-60	769.36875	799.38125
Jefferson	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Jefferson	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Jefferson	General Use	Voice 12.5KHz	177-178	770.10625	800.11875
Jefferson	General Use	Voice 12.5KHz	179-180	770.11875	800.13125
Jefferson	General Use	Voice 12.5KHz	241-242	770.50625	800.51875
Jefferson	General Use	Voice 12.5KHz	243-244	770.51875	800.53125
Jefferson	General Use	Voice 12.5KHz	369-370	771.30625	801.31875
Jefferson	General Use	Voice 12.5KHz	371-372	771.31875	801.33125
Jefferson	General Use	Voice 12.5KHz	409-410	771.55625	801.56875
Jefferson	General Use	Voice 12.5KHz	411-412	771.56875	801.58125
Jefferson	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
Jefferson	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
Jefferson	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
Jefferson	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
Jefferson	General Use	Voice 12.5KHz	585-586	772.65625	802.66875
Jefferson	General Use	Voice 12.5KHz	587-588	772.66875	802.68125
Jefferson	General Use	Voice 12.5KHz	625-626	772.90625	802.91875
Jefferson	General Use	Voice 12.5KHz	627-628	772.91875	802.93125
Jefferson	General Use	Voice 12.5KHz	673-674	773.20625	803.21875
Jefferson	General Use	Voice 12.5KHz	675-676	773.21875	803.23125
Jefferson	General Use	Voice 12.5KHz	793-794	773.95625	803.96875
Jefferson	General Use	Voice 12.5KHz	795-796	773.96875	803.98125
Jefferson	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Jefferson	General Use	Voice 12.5KHz	837-838	774.23125	804.24375
Jefferson	General Use	Voice 12.5KHz	839-840	774.24375	804.25625
Jefferson	General Use	Voice 12.5KHz	877-878	774.48125	804.49375



<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Jefferson	General Use	Voice 12.5KHz	879-880	774.49375	804.50625
Johnson	General Use	Voice 12.5KHz	57-58	769.35625	799.36875
Johnson	General Use	Voice 12.5KHz	59-60	769.36875	799.38125
Johnson	General Use	Voice 12.5KHz	177-178	770.10625	800.11875
Johnson	General Use	Voice 12.5KHz	179-180	770.11875	800.13125
Johnson	General Use	Voice 12.5KHz	433-434	771.70625	801.71875
Johnson	General Use	Voice 12.5KHz	435-436	771.71875	801.73125
Johnson	General Use	Voice 12.5KHz	481-482	772.00625	802.01875
Johnson	General Use	Voice 12.5KHz	483-484	772.01875	802.03125
Johnson	General Use	Voice 12.5KHz	561-562	772.50625	802.51875
Johnson	General Use	Voice 12.5KHz	563-564	772.51875	802.53125
Johnson	General Use	Voice 12.5KHz	793-794	773.95625	803.96875
Johnson	General Use	Voice 12.5KHz	795-796	773.96875	803.98125
Johnson	General Use	Voice 12.5KHz	837-838	774.23125	804.24375
Johnson	General Use	Voice 12.5KHz	839-840	774.24375	804.25625
Johnson	General Use	Voice 12.5KHz	877-878	774.48125	804.49375
Johnson	General Use	Voice 12.5KHz	879-880	774.49375	804.50625
Lafayette	General Use	Voice 12.5KHz	85-86	769.53125	799.54375
Lafayette	General Use	Voice 12.5KHz	87-88	769.54375	799.55625
Lafayette	General Use	Voice 12.5KHz	209-210	770.30625	800.31875
Lafayette	General Use	Voice 12.5KHz	211-212	770.31875	800.33125
Lafayette	General Use	Voice 12.5KHz	429-430	771.68125	801.69375
Lafayette	General Use	Voice 12.5KHz	431-432	771.69375	801.70625
Lafayette	General Use	Voice 12.5KHz	565-566	772.53125	802.54375
Lafayette	General Use	Voice 12.5KHz	567-568	772.54375	802.55625
Lafayette	General Use	Voice 12.5KHz	609-610	772.80625	802.81875
Lafayette	General Use	Voice 12.5KHz	611-612	772.81875	802.83125
Lawrence	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
Lawrence	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
Lawrence	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Lawrence	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Lawrence	General Use	Voice 12.5KHz	369-370	771.30625	801.31875
Lawrence	General Use	Voice 12.5KHz	371-372	771.31875	801.33125
Lawrence	General Use	Voice 12.5KHz	449-450	771.80625	801.81875
Lawrence	General Use	Voice 12.5KHz	451-452	771.81875	801.83125
Lawrence	General Use	Voice 12.5KHz	45-46	772.28125	802.29375
Lawrence	General Use	Voice 12.5KHz	527-528	772.29375	802.30625
Lawrence	General Use	Voice 12.5KHz	745-746	773.65625	803.66875
Lawrence	General Use	Voice 12.5KHz	747-748	773.66875	803.68125
Lawrence	General Use	Voice 12.5KHz	877-878	774.48125	804.49375
Lawrence	General Use	Voice 12.5KHz	879-880	774.49375	804.50625
Lawrence	General Use	Voice 12.5KHz	917-918	774.73125	804.74375
Lawrence	General Use	Voice 12.5KHz	919-920	774.74375	804.75625
Lee	General Use	Voice 12.5KHz	93-94	769.58125	799.59375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Lee	General Use	Voice 12.5KHz	95-96	769.59375	799.60625
Lee	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Lee	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Lee	General Use	Voice 12.5KHz	389-390	771.43125	801.44375
Lee	General Use	Voice 12.5KHz	391-392	771.44375	801.45625
Lee	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Lee	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Lee	General Use	Voice 12.5KHz	517-518	772.23125	802.24375
Lee	General Use	Voice 12.5KHz	519-520	772.24375	802.25625
Lee	General Use	Voice 12.5KHz	837-838	774.23125	804.24375
Lee	General Use	Voice 12.5KHz	839-840	774.24375	804.25625
Lincoln	General Use	Voice 12.5KHz	125-126	769.78125	799.79375
Lincoln	General Use	Voice 12.5KHz	127-128	769.79375	799.80625
Lincoln	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Lincoln	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Lincoln	General Use	Voice 12.5KHz	341-342	771.13125	801.14375
Lincoln	General Use	Voice 12.5KHz	343-344	771.14375	801.15625
Lincoln	General Use	Voice 12.5KHz	385-386	771.40625	801.41875
Lincoln	General Use	Voice 12.5KHz	387-388	771.41875	801.43125
Lincoln	General Use	Voice 12.5KHz	465-466	771.90625	801.91875
Lincoln	General Use	Voice 12.5KHz	467-468	771.91875	801.93125
Lincoln	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Lincoln	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Lincoln	General Use	Voice 12.5KHz	601-602	772.75625	802.76875
Lincoln	General Use	Voice 12.5KHz	603-604	772.76875	802.78125
Lincoln	General Use	Voice 12.5KHz	741-742	773.63125	803.64375
Lincoln	General Use	Voice 12.5KHz	743-744	773.64375	803.65625
Little River	General Use	Voice 12.5KHz	53-54	769.33125	799.34375
Little River	General Use	Voice 12.5KHz	55-56	769.34375	799.35625
Little River	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Little River	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Little River	General Use	Voice 12.5KHz	345-346	771.15625	801.16875
Little River	General Use	Voice 12.5KHz	347-348	771.16875	801.18125
Little River	General Use	Voice 12.5KHz	385-386	771.40625	801.41875
Little River	General Use	Voice 12.5KHz	387-388	771.41875	801.43125
Little River	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Little River	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Little River	General Use	Voice 12.5KHz	481-482	772.00625	802.01875
Little River	General Use	Voice 12.5KHz	483-484	772.01875	802.03125
Little River	General Use	Voice 12.5KHz	617-618	772.85625	802.86875
Little River	General Use	Voice 12.5KHz	619-620	772.86875	802.88125
Little River	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Little River	General Use	Voice 12.5KHz	799-800	773.99375	804.00625
Logan	General Use	Voice 12.5KHz	357-358	771.23125	801.24375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Logan	General Use	Voice 12.5KHz	359-360	771.24375	801.25625
Logan	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
Logan	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
Logan	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Logan	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Logan	General Use	Voice 12.5KHz	601-602	772.75625	802.76875
Logan	General Use	Voice 12.5KHz	603-604	772.76875	802.78125
Logan	General Use	Voice 12.5KHz	673-674	773.20625	803.21875
Logan	General Use	Voice 12.5KHz	675-676	773.21875	803.23125
Logan	General Use	Voice 12.5KHz	785-786	773.90625	803.91875
Logan	General Use	Voice 12.5KHz	787-788	773.91875	803.93125
Logan	General Use	Voice 12.5KHz	917-918	774.73125	804.74375
Logan	General Use	Voice 12.5KHz	919-920	774.74375	804.75625
Lonoke	General Use	Voice 12.5KHz	201-202	770.25625	800.26875
Lonoke	General Use	Voice 12.5KHz	203-204	770.26875	800.28125
Lonoke	General Use	Voice 12.5KHz	337-338	771.10625	801.11875
Lonoke	General Use	Voice 12.5KHz	339-340	771.11875	801.13125
Lonoke	General Use	Voice 12.5KHz	381-382	771.38125	801.39375
Lonoke	General Use	Voice 12.5KHz	383-384	771.39375	801.40625
Lonoke	General Use	Voice 12.5KHz	445-446	771.78125	801.79375
Lonoke	General Use	Voice 12.5KHz	447-448	771.79375	801.80625
Lonoke	General Use	Voice 12.5KHz	521-522	772.25625	802.26875
Lonoke	General Use	Voice 12.5KHz	523-524	772.26875	802.28125
Lonoke	General Use	Voice 12.5KHz	565-566	772.53125	802.54375
Lonoke	General Use	Voice 12.5KHz	567-568	772.54375	802.55625
Lonoke	General Use	Voice 12.5KHz	605-606	772.78125	802.79375
Lonoke	General Use	Voice 12.5KHz	607-608	772.79375	802.80625
Lonoke	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Lonoke	General Use	Voice 12.5KHz	667-668	773.16875	803.18125
Lonoke	General Use	Voice 12.5KHz	717-718	773.48125	803.49375
Lonoke	General Use	Voice 12.5KHz	719-720	773.49375	803.50625
Lonoke	General Use	Voice 12.5KHz	757-758	773.73125	803.74375
Lonoke	General Use	Voice 12.5KHz	759-760	773.74375	803.75625
Lonoke	General Use	Voice 12.5KHz	917-918	774.73125	804.74375
Lonoke	General Use	Voice 12.5KHz	919-920	774.74375	804.75625
Madison	General Use	Voice 12.5KHz	81-82	769.50625	799.51875
Madison	General Use	Voice 12.5KHz	83-84	769.51875	799.53125
Madison	General Use	Voice 12.5KHz	161-162	770.00625	800.01875
Madison	General Use	Voice 12.5KHz	163-164	770.01875	800.03125
Madison	General Use	Voice 12.5KHz	337-338	771.10625	801.11875
Madison	General Use	Voice 12.5KHz	339-340	771.11875	801.13125
Madison	General Use	Voice 12.5KHz	421-422	771.63125	801.64375
Madison	General Use	Voice 12.5KHz	423-424	771.64375	801.65625
Madison	General Use	Voice 12.5KHz	493-494	772.08125	802.09375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Madison	General Use	Voice 12.5KHz	495-496	772.09375	802.10625
Madison	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
Madison	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
Marion	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Marion	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Marion	General Use	Voice 12.5KHz	349-350	771.18125	801.19375
Marion	General Use	Voice 12.5KHz	351-352	771.19375	801.20625
Marion	General Use	Voice 12.5KHz	397-398	771.48125	801.49375
Marion	General Use	Voice 12.5KHz	399-400	771.49375	801.50625
Marion	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Marion	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Marion	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Marion	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Marion	General Use	Voice 12.5KHz	625-626	772.90625	802.91875
Marion	General Use	Voice 12.5KHz	627-628	772.91875	802.93125
Marion	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Marion	General Use	Voice 12.5KHz	799-800	773.99375	804.00625
Marion	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Marion	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
Miller	General Use	Voice 12.5KHz	93-94	769.58125	799.59375
Miller	General Use	Voice 12.5KHz	95-96	769.59375	799.60625
Miller	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Miller	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Miller	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Miller	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Miller	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
Miller	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
Miller	General Use	Voice 12.5KHz	497-498	772.10625	802.11875
Miller	General Use	Voice 12.5KHz	499-500	772.11875	802.13125
Miller	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Miller	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Miller	General Use	Voice 12.5KHz	601-602	772.75625	802.76875
Miller	General Use	Voice 12.5KHz	603-604	772.76875	802.78125
Miller	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Miller	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Miller	General Use	Voice 12.5KHz	717-718	773.48125	803.49375
Miller	General Use	Voice 12.5KHz	719-720	773.49375	803.50625
Mississippi	General Use	Voice 12.5KHz	81-82	769.50625	799.51875
Mississippi	General Use	Voice 12.5KHz	83-84	769.51875	799.53125
Mississippi	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Mississippi	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Mississippi	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Mississippi	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Mississippi	General Use	Voice 12.5KHz	469-470	771.93125	801.94375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Mississippi	General Use	Voice 12.5KHz	357-358	771.23125	801.24375
Mississippi	General Use	Voice 12.5KHz	359-360	771.24375	801.25625
Mississippi	General Use	Voice 12.5KHz	471-472	771.94375	801.95625
Mississippi	General Use	Voice 12.5KHz	521-522	772.25625	802.26875
Mississippi	General Use	Voice 12.5KHz	523-524	772.26875	802.28125
Mississippi	General Use	Voice 12.5KHz	561-562	772.50625	802.51875
Mississippi	General Use	Voice 12.5KHz	563-564	772.51875	802.53125
Mississippi	General Use	Voice 12.5KHz	605-606	772.78125	802.79375
Mississippi	General Use	Voice 12.5KHz	607-608	772.79375	802.80625
Mississippi	General Use	Voice 12.5KHz	661-662	773.13125	803.14375
Mississippi	General Use	Voice 12.5KHz	663-664	773.14375	803.15625
Mississippi	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Mississippi	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Mississippi	General Use	Voice 12.5KHz	873-874	774.45625	804.46875
Mississippi	General Use	Voice 12.5KHz	875-876	774.46875	804.48125
Monroe	General Use	Voice 12.5KHz	173-174	770.08125	800.09375
Monroe	General Use	Voice 12.5KHz	175-176	770.09375	800.10625
Monroe	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Monroe	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Monroe	General Use	Voice 12.5KHz	429-430	771.68125	801.69375
Monroe	General Use	Voice 12.5KHz	431-432	771.69375	801.70625
Monroe	General Use	Voice 12.5KHz	489-490	772.05625	802.06875
Monroe	General Use	Voice 12.5KHz	491-492	772.06875	802.08125
Monroe	General Use	Voice 12.5KHz	537-538	772.35625	802.36875
Monroe	General Use	Voice 12.5KHz	539-540	772.36875	802.38125
Monroe	General Use	Voice 12.5KHz	629-630	772.93125	802.94375
Monroe	General Use	Voice 12.5KHz	631-632	772.94375	802.95625
Monroe	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Monroe	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Monroe	General Use	Voice 12.5KHz	789-790	773.93125	803.94375
Monroe	General Use	Voice 12.5KHz	791-792	773.94375	803.95625
Montgomery	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Montgomery	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Montgomery	General Use	Voice 12.5KHz	365-366	771.28125	801.29375
Montgomery	General Use	Voice 12.5KHz	367-368	771.29375	801.30625
Montgomery	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
Montgomery	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
Montgomery	General Use	Voice 12.5KHz	513-514	772.20625	802.21875
Montgomery	General Use	Voice 12.5KHz	515-516	772.21875	802.23125
Montgomery	General Use	Voice 12.5KHz	553-554	772.45625	802.46875
Montgomery	General Use	Voice 12.5KHz	555-556	772.46875	802.48125
Montgomery	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Montgomery	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
Nevada	General Use	Voice 12.5KHz	161-162	770.00625	800.01875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Nevada	General Use	Voice 12.5KHz	163-164	770.01875	800.03125
Nevada	General Use	Voice 12.5KHz	241-242	770.50625	800.51875
Nevada	General Use	Voice 12.5KHz	243-244	770.51875	800.53125
Nevada	General Use	Voice 12.5KHz	337-338	771.10625	801.11875
Nevada	General Use	Voice 12.5KHz	339-340	771.11875	801.13125
Nevada	General Use	Voice 12.5KHz	501-502	772.13125	802.14375
Nevada	General Use	Voice 12.5KHz	503-504	772.14375	802.15625
Nevada	General Use	Voice 12.5KHz	621-622	772.88125	802.89375
Nevada	General Use	Voice 12.5KHz	623-624	772.89375	802.90625
Newton	General Use	Voice 12.5KHz	241-242	770.50625	800.51875
Newton	General Use	Voice 12.5KHz	243-244	770.51875	800.53125
Newton	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
Newton	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
Newton	General Use	Voice 12.5KHz	513-514	772.20625	802.21875
Newton	General Use	Voice 12.5KHz	515-516	772.21875	802.23125
Newton	General Use	Voice 12.5KHz	553-554	772.45625	802.46875
Newton	General Use	Voice 12.5KHz	555-556	772.46875	802.48125
Newton	General Use	Voice 12.5KHz	605-606	772.78125	802.79375
Newton	General Use	Voice 12.5KHz	607-608	772.79375	802.80625
Ouachita	General Use	Voice 12.5KHz	13-14	769.08125	799.09375
Ouachita	General Use	Voice 12.5KHz	15-16	769.09375	799.10625
Ouachita	General Use	Voice 12.5KHz	53-54	769.33125	799.34375
Ouachita	General Use	Voice 12.5KHz	55-56	769.34375	799.35625
Ouachita	General Use	Voice 12.5KHz	121-122	769.75625	799.76875
Ouachita	General Use	Voice 12.5KHz	123-124	769.76875	799.78125
Ouachita	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Ouachita	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Ouachita	General Use	Voice 12.5KHz	249-250	770.55625	800.56875
Ouachita	General Use	Voice 12.5KHz	251-252	770.56875	800.58125
Ouachita	General Use	Voice 12.5KHz	365-366	771.28125	801.29375
Ouachita	General Use	Voice 12.5KHz	367-368	771.29375	801.30625
Ouachita	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
Ouachita	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
Ouachita	General Use	Voice 12.5KHz	445-446	771.78125	801.79375
Ouachita	General Use	Voice 12.5KHz	447-448	771.79375	801.80625
Ouachita	General Use	Voice 12.5KHz	553-554	772.45625	802.46875
Ouachita	General Use	Voice 12.5KHz	555-556	772.46875	802.48125
Ouachita	General Use	Voice 12.5KHz	613-614	772.83125	802.84375
Ouachita	General Use	Voice 12.5KHz	615-616	772.84375	802.85625
Ouachita	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Ouachita	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Ouachita	General Use	Voice 12.5KHz	869-870	774.43125	804.44375
Ouachita	General Use	Voice 12.5KHz	871-872	774.44375	804.45625
Ouachita	General Use	Voice 12.5KHz	909-910	774.68125	804.69375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Ouachita	General Use	Voice 12.5KHz	911-912	774.69375	804.70625
Perry	General Use	Voice 12.5KHz	121-122	769.75625	799.76875
Perry	General Use	Voice 12.5KHz	123-124	769.76875	799.78125
Perry	General Use	Voice 12.5KHz	345-346	771.15625	801.16875
Perry	General Use	Voice 12.5KHz	347-348	771.16875	801.18125
Perry	General Use	Voice 12.5KHz	385-386	771.40625	801.41875
Perry	General Use	Voice 12.5KHz	387-388	771.41875	801.43125
Perry	General Use	Voice 12.5KHz	489-490	772.05625	802.06875
Perry	General Use	Voice 12.5KHz	491-492	772.06875	802.08125
Perry	General Use	Voice 12.5KHz	537-538	772.35625	802.36875
Perry	General Use	Voice 12.5KHz	539-540	772.36875	802.38125
Perry	General Use	Voice 12.5KHz	669-670	773.18125	803.19375
Perry	General Use	Voice 12.5KHz	671-672	773.19375	803.20625
Phillips	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Phillips	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Phillips	General Use	Voice 12.5KHz	253-254	770.58125	800.59375
Phillips	General Use	Voice 12.5KHz	255-256	770.59375	800.60625
Phillips	General Use	Voice 12.5KHz	365-366	771.28125	801.29375
Phillips	General Use	Voice 12.5KHz	367-368	771.29375	801.30625
Phillips	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
Phillips	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
Phillips	General Use	Voice 12.5KHz	461-462	771.88125	801.89375
Phillips	General Use	Voice 12.5KHz	463-464	771.89375	801.90625
Phillips	General Use	Voice 12.5KHz	505-506	772.15625	802.16875
Phillips	General Use	Voice 12.5KHz	507-508	772.16875	802.18125
Phillips	General Use	Voice 12.5KHz	545-546	772.40625	802.41875
Phillips	General Use	Voice 12.5KHz	547-548	772.41875	802.43125
Phillips	General Use	Voice 12.5KHz	593-594	772.70625	802.71875
Phillips	General Use	Voice 12.5KHz	595-596	772.71875	802.73125
Phillips	General Use	Voice 12.5KHz	709-710	773.43125	803.44375
Phillips	General Use	Voice 12.5KHz	711-712	773.44375	803.45625
Phillips	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Phillips	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Pike	General Use	Voice 12.5KHz	349-350	771.18125	801.19375
Pike	General Use	Voice 12.5KHz	351-352	771.19375	801.20625
Pike	General Use	Voice 12.5KHz	393-394	771.45625	801.46875
Pike	General Use	Voice 12.5KHz	395-396	771.46875	801.48125
Pike	General Use	Voice 12.5KHz	485-486	772.03125	802.04375
Pike	General Use	Voice 12.5KHz	487-488	772.04375	802.05625
Pike	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Pike	General Use	Voice 12.5KHz	667-668	773.16875	803.18125
Pike	General Use	Voice 12.5KHz	877-878	774.48125	804.49375
Pike	General Use	Voice 12.5KHz	879-880	774.49375	804.50625
Poinsett	General Use	Voice 12.5KHz	125-126	769.78125	799.79375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Poinsett	General Use	Voice 12.5KHz	127-128	769.79375	799.80625
Poinsett	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Poinsett	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Poinsett	General Use	Voice 12.5KHz	349-350	771.18125	801.19375
Poinsett	General Use	Voice 12.5KHz	351-352	771.19375	801.20625
Poinsett	General Use	Voice 12.5KHz	409-410	771.55625	801.56875
Poinsett	General Use	Voice 12.5KHz	411-412	771.56875	801.58125
Poinsett	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Poinsett	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Poinsett	General Use	Voice 12.5KHz	577-578	772.60625	802.61875
Poinsett	General Use	Voice 12.5KHz	579-580	772.61875	802.63125
Poinsett	General Use	Voice 12.5KHz	621-622	772.88125	802.89375
Poinsett	General Use	Voice 12.5KHz	623-624	772.89375	802.90625
Poinsett	General Use	Voice 12.5KHz	717-718	773.48125	803.49375
Poinsett	General Use	Voice 12.5KHz	719-720	773.49375	803.50625
Poinsett	General Use	Voice 12.5KHz	909-910	774.68125	804.69375
Poinsett	General Use	Voice 12.5KHz	911-912	774.69375	804.70625
Polk	General Use	Voice 12.5KHz	165-166	770.03125	800.04375
Polk	General Use	Voice 12.5KHz	167-168	770.04375	800.05625
Polk	General Use	Voice 12.5KHz	325-326	771.03125	801.04375
Polk	General Use	Voice 12.5KHz	327-328	771.04375	801.05625
Polk	General Use	Voice 12.5KHz	449-450	771.80625	801.81875
Polk	General Use	Voice 12.5KHz	451-452	771.81875	801.83125
Polk	General Use	Voice 12.5KHz	493-494	772.08125	802.09375
Polk	General Use	Voice 12.5KHz	495-496	772.09375	802.10625
Polk	General Use	Voice 12.5KHz	621-622	772.88125	802.89375
Polk	General Use	Voice 12.5KHz	623-624	772.89375	802.90625
Polk	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Polk	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Polk	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Polk	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Polk	General Use	Voice 12.5KHz	909-910	774.68125	804.69375
Polk	General Use	Voice 12.5KHz	911-912	774.69375	804.70625
Pope	General Use	Voice 12.5KHz	49-50	769.30625	799.31875
Pope	General Use	Voice 12.5KHz	51-52	769.31875	799.33125
Pope	General Use	Voice 12.5KHz	165-166	770.03125	800.04375
Pope	General Use	Voice 12.5KHz	167-168	770.04375	800.05625
Pope	General Use	Voice 12.5KHz	213-214	770.33125	800.34375
Pope	General Use	Voice 12.5KHz	215-216	770.34375	800.35625
Pope	General Use	Voice 12.5KHz	285-286	770.78125	800.79375
Pope	General Use	Voice 12.5KHz	287-288	770.79375	800.80625
Pope	General Use	Voice 12.5KHz	325-326	771.03125	801.04375
Pope	General Use	Voice 12.5KHz	327-328	771.04375	801.05625
Pope	General Use	Voice 12.5KHz	369-370	771.30625	801.31875



<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Pope	General Use	Voice 12.5KHz	371-372	771.31875	801.33125
Pope	General Use	Voice 12.5KHz	425-426	771.65625	801.66875
Pope	General Use	Voice 12.5KHz	427-428	771.66875	801.68125
Pope	General Use	Voice 12.5KHz	473-474	771.95625	801.96875
Pope	General Use	Voice 12.5KHz	475-476	771.96875	801.98125
Pope	General Use	Voice 12.5KHz	525-526	772.28125	802.29375
Pope	General Use	Voice 12.5KHz	527-528	772.29375	802.30625
Pope	General Use	Voice 12.5KHz	621-622	772.88125	802.89375
Pope	General Use	Voice 12.5KHz	623-624	772.89375	802.90625
Pope	General Use	Voice 12.5KHz	705-706	773.40625	803.41875
Pope	General Use	Voice 12.5KHz	707-708	773.41875	803.43125
Pope	General Use	Voice 12.5KHz	825-826	774.15625	804.16875
Pope	General Use	Voice 12.5KHz	827-828	774.16875	804.18125
Pope	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Pope	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Pope	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Pope	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Prairie	General Use	Voice 12.5KHz	41-42	769.25625	799.26875
Prairie	General Use	Voice 12.5KHz	43-44	769.26875	799.28125
Prairie	General Use	Voice 12.5KHz	121-122	769.75625	799.76875
Prairie	General Use	Voice 12.5KHz	123-124	769.76875	799.78125
Prairie	General Use	Voice 12.5KHz	165-166	770.03125	800.04375
Prairie	General Use	Voice 12.5KHz	167-168	770.04375	800.05625
Prairie	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Prairie	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Prairie	General Use	Voice 12.5KHz	825-826	774.15625	804.16875
Prairie	General Use	Voice 12.5KHz	827-828	774.16875	804.18125
Pulaski	General Use	Voice 12.5KHz	45-46	769.28125	799.29375
Pulaski	General Use	Voice 12.5KHz	47-48	769.29375	799.30625
Pulaski	General Use	Voice 12.5KHz	89-90	769.55625	799.56875
Pulaski	General Use	Voice 12.5KHz	91-92	769.56875	799.58125
Pulaski	General Use	Voice 12.5KHz	129-130	769.80625	799.81875
Pulaski	General Use	Voice 12.5KHz	131-132	769.81875	799.83125
Pulaski	General Use	Voice 12.5KHz	169-170	770.05625	800.06875
Pulaski	General Use	Voice 12.5KHz	171-172	770.06875	800.08125
Pulaski	General Use	Voice 12.5KHz	209-210	770.30625	800.31875
Pulaski	General Use	Voice 12.5KHz	211-212	770.31875	800.33125
Pulaski	General Use	Voice 12.5KHz	249-250	770.55625	800.56875
Pulaski	General Use	Voice 12.5KHz	251-252	770.56875	800.58125
Pulaski	General Use	Voice 12.5KHz	289-290	770.80625	800.81875
Pulaski	General Use	Voice 12.5KHz	291-292	770.81875	800.83125
Pulaski	General Use	Voice 12.5KHz	329-330	771.05625	801.06875
Pulaski	General Use	Voice 12.5KHz	331-332	771.06875	801.08125
Pulaski	General Use	Voice 12.5KHz	393-394	771.45625	801.46875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Pulaski	General Use	Voice 12.5KHz	395-396	771.46875	801.48125
Pulaski	General Use	Voice 12.5KHz	437-438	771.73125	801.74375
Pulaski	General Use	Voice 12.5KHz	439-440	771.74375	801.75625
Pulaski	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Pulaski	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Pulaski	General Use	Voice 12.5KHz	553-554	772.45625	802.46875
Pulaski	General Use	Voice 12.5KHz	555-556	772.46875	802.48125
Pulaski	General Use	Voice 12.5KHz	593-594	772.70625	802.71875
Pulaski	General Use	Voice 12.5KHz	595-596	772.71875	802.73125
Pulaski	General Use	Voice 12.5KHz	633-634	772.95625	802.96875
Pulaski	General Use	Voice 12.5KHz	635-636	772.96875	802.98125
Pulaski	General Use	Voice 12.5KHz	709-710	773.43125	803.44375
Pulaski	General Use	Voice 12.5KHz	711-712	773.44375	803.45625
Pulaski	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Pulaski	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Pulaski	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Pulaski	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Pulaski	General Use	Voice 12.5KHz	865-866	774.40625	804.41875
Pulaski	General Use	Voice 12.5KHz	867-868	774.41875	804.43125
Pulaski	General Use	Voice 12.5KHz	905-906	774.65625	804.66875
Pulaski	General Use	Voice 12.5KHz	907-908	774.66875	804.68125
Pulaski	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Pulaski	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
Randolph	General Use	Voice 12.5KHz	57-58	769.35625	799.36875
Randolph	General Use	Voice 12.5KHz	59-60	769.36875	799.38125
Randolph	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
Randolph	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
Randolph	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Randolph	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Randolph	General Use	Voice 12.5KHz	253-254	770.58125	800.59375
Randolph	General Use	Voice 12.5KHz	255-256	770.59375	800.60625
Randolph	General Use	Voice 12.5KHz	377-378	771.35625	801.36875
Randolph	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Randolph	General Use	Voice 12.5KHz	465-466	771.90625	801.91875
Randolph	General Use	Voice 12.5KHz	467-468	771.91875	801.93125
Randolph	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
Randolph	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
Randolph	General Use	Voice 12.5KHz	581-582	772.63125	802.64375
Randolph	General Use	Voice 12.5KHz	583-584	772.64375	802.65625
Randolph	General Use	Voice 12.5KHz	633-634	772.95625	802.96875
Randolph	General Use	Voice 12.5KHz	635-636	772.96875	802.98125
Randolph	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
Randolph	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
Randolph	General Use	Voice 12.5KHz	869-870	774.43125	804.44375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Randolph	General Use	Voice 12.5KHz	871-872	774.44375	804.45625
Saline	General Use	Voice 12.5KHz	161-162	770.00625	800.01875
Saline	General Use	Voice 12.5KHz	163-164	770.01875	800.03125
Saline	General Use	Voice 12.5KHz	217-218	770.35625	800.36875
Saline	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
Saline	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Saline	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Saline	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Saline	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Saline	General Use	Voice 12.5KHz	361-362	771.25625	801.26875
Saline	General Use	Voice 12.5KHz	363-364	771.26875	801.28125
Saline	General Use	Voice 12.5KHz	421-422	771.63125	801.64375
Saline	General Use	Voice 12.5KHz	423-424	771.64375	801.65625
Saline	General Use	Voice 12.5KHz	469-470	771.93125	801.94375
Saline	General Use	Voice 12.5KHz	471-472	771.94375	801.95625
Saline	General Use	Voice 12.5KHz	517-518	772.23125	802.24375
Saline	General Use	Voice 12.5KHz	519-520	772.24375	802.25625
Saline	General Use	Voice 12.5KHz	569-570	772.55625	802.56875
Saline	General Use	Voice 12.5KHz	571-572	772.56875	802.58125
Saline	General Use	Voice 12.5KHz	617-618	772.85625	802.86875
Saline	General Use	Voice 12.5KHz	619-620	772.86875	802.88125
Saline	General Use	Voice 12.5KHz	661-662	773.13125	803.14375
Saline	General Use	Voice 12.5KHz	663-664	773.14375	803.15625
Saline	General Use	Voice 12.5KHz	745-746	773.65625	803.66875
Saline	General Use	Voice 12.5KHz	747-748	773.66875	803.68125
Saline	General Use	Voice 12.5KHz	829-830	774.18125	804.19375
Saline	General Use	Voice 12.5KHz	831-832	774.19375	804.20625
Saline	General Use	Voice 12.5KHz	913-914	774.70625	804.71875
Saline	General Use	Voice 12.5KHz	915-916	774.71875	804.73125
Scott	General Use	Voice 12.5KHz	201-202	770.25625	800.26875
Scott	General Use	Voice 12.5KHz	203-204	770.26875	800.28125
Scott	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Scott	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Scott	General Use	Voice 12.5KHz	389-390	771.43125	801.44375
Scott	General Use	Voice 12.5KHz	391-392	771.44375	801.45625
Scott	General Use	Voice 12.5KHz	521-522	772.25625	802.26875
Scott	General Use	Voice 12.5KHz	523-524	772.26875	802.28125
Scott	General Use	Voice 12.5KHz	565-566	772.53125	802.54375
Scott	General Use	Voice 12.5KHz	567-568	772.54375	802.55625
Scott	General Use	Voice 12.5KHz	613-614	772.83125	802.84375
Scott	General Use	Voice 12.5KHz	615-616	772.84375	802.85625
Searcy	General Use	Voice 12.5KHz	121-122	769.75625	799.76875
Searcy	General Use	Voice 12.5KHz	123-124	769.76875	799.78125
Searcy	General Use	Voice 12.5KHz	253-254	770.58125	800.59375

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Searcy	General Use	Voice 12.5KHz	255-256	770.59375	800.60625
Searcy	General Use	Voice 12.5KHz	413-414	771.58125	801.59375
Searcy	General Use	Voice 12.5KHz	415-416	771.59375	801.60625
Searcy	General Use	Voice 12.5KHz	497-498	772.10625	802.11875
Searcy	General Use	Voice 12.5KHz	499-500	772.11875	802.13125
Searcy	General Use	Voice 12.5KHz	565-566	772.53125	802.54375
Searcy	General Use	Voice 12.5KHz	567-568	772.54375	802.55625
Searcy	General Use	Voice 12.5KHz	713-714	773.45625	803.46875
Searcy	General Use	Voice 12.5KHz	715-716	773.46875	803.48125
Sebastian	General Use	Voice 12.5KHz	17-18	769.10625	799.11875
Sebastian	General Use	Voice 12.5KHz	19-20	769.11875	799.13125
Sebastian	General Use	Voice 12.5KHz	85-86	769.53125	799.54375
Sebastian	General Use	Voice 12.5KHz	87-88	769.54375	799.55625
Sebastian	General Use	Voice 12.5KHz	129-130	769.80625	799.81875
Sebastian	General Use	Voice 12.5KHz	131-132	769.81875	799.83125
Sebastian	General Use	Voice 12.5KHz	169-170	770.05625	800.06875
Sebastian	General Use	Voice 12.5KHz	171-172	770.06875	800.08125
Sebastian	General Use	Voice 12.5KHz	217-218	770.35625	800.36875
Sebastian	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
Sebastian	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Sebastian	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Sebastian	General Use	Voice 12.5KHz	321-322	771.00625	801.01875
Sebastian	General Use	Voice 12.5KHz	323-324	771.01875	801.03125
Sebastian	General Use	Voice 12.5KHz	369-370	771.30625	801.31875
Sebastian	General Use	Voice 12.5KHz	371-372	771.31875	801.33125
Sebastian	General Use	Voice 12.5KHz	409-410	771.55625	801.56875
Sebastian	General Use	Voice 12.5KHz	411-412	771.56875	801.58125
Sebastian	General Use	Voice 12.5KHz	477-478	771.98125	801.99375
Sebastian	General Use	Voice 12.5KHz	479-480	771.99375	802.00625
Sebastian	General Use	Voice 12.5KHz	549-550	772.43125	802.44375
Sebastian	General Use	Voice 12.5KHz	551-552	772.44375	802.45625
Sebastian	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
Sebastian	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
Sebastian	General Use	Voice 12.5KHz	665-666	773.15625	803.16875
Sebastian	General Use	Voice 12.5KHz	667-668	773.16875	803.18125
Sebastian	General Use	Voice 12.5KHz	705-706	773.40625	803.41875
Sebastian	General Use	Voice 12.5KHz	707-708	773.41875	803.43125
Sebastian	General Use	Voice 12.5KHz	757-758	773.73125	803.74375
Sebastian	General Use	Voice 12.5KHz	759-760	773.74375	803.75625
Sebastian	General Use	Voice 12.5KHz	825-826	774.15625	804.16875
Sebastian	General Use	Voice 12.5KHz	827-828	774.16875	804.18125
Sebastian	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Sebastian	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Sevier	General Use	Voice 12.5KHz	217-218	770.35625	800.36875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Sevier	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
Sevier	General Use	Voice 12.5KHz	281-282	770.75625	800.76875
Sevier	General Use	Voice 12.5KHz	283-284	770.76875	800.78125
Sevier	General Use	Voice 12.5KHz	369-370	771.30625	801.31875
Sevier	General Use	Voice 12.5KHz	371-372	771.31875	801.33125
Sevier	General Use	Voice 12.5KHz	409-410	771.55625	801.56875
Sevier	General Use	Voice 12.5KHz	411-412	771.56875	801.58125
Sevier	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Sevier	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Sevier	General Use	Voice 12.5KHz	597-598	772.73125	802.74375
Sevier	General Use	Voice 12.5KHz	599-600	772.74375	802.75625
Sevier	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Sevier	General Use	Voice 12.5KHz	755-756	773.71875	803.73125
Sevier	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Sevier	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Sevier	General Use	Voice 12.5KHz	901-902	774.63125	804.64375
Sevier	General Use	Voice 12.5KHz	903-904	774.64375	804.65625
Sevier	General Use	Voice 12.5KHz	941-942	774.88125	804.89375
Sevier	General Use	Voice 12.5KHz	943-944	774.89375	804.90625
Sharp	General Use	Voice 12.5KHz	121-122	769.75625	799.76875
Sharp	General Use	Voice 12.5KHz	123-124	769.76875	799.78125
Sharp	General Use	Voice 12.5KHz	173-174	770.08125	800.09375
Sharp	General Use	Voice 12.5KHz	175-176	770.09375	800.10625
Sharp	General Use	Voice 12.5KHz	337-338	771.10625	801.11875
Sharp	General Use	Voice 12.5KHz	339-340	771.11875	801.13125
Sharp	General Use	Voice 12.5KHz	385-386	771.40625	801.41875
Sharp	General Use	Voice 12.5KHz	387-388	771.41875	801.43125
Sharp	General Use	Voice 12.5KHz	425-426	771.65625	801.66875
Sharp	General Use	Voice 12.5KHz	427-428	771.66875	801.68125
Sharp	General Use	Voice 12.5KHz	485-486	772.03125	802.04375
Sharp	General Use	Voice 12.5KHz	487-488	772.04375	802.05625
Sharp	General Use	Voice 12.5KHz	565-566	772.53125	802.54375
Sharp	General Use	Voice 12.5KHz	567-568	772.54375	802.55625
Sharp	General Use	Voice 12.5KHz	605-606	772.78125	802.79375
Sharp	General Use	Voice 12.5KHz	607-608	772.79375	802.80625
Sharp	General Use	Voice 12.5KHz	713-714	773.45625	803.46875
Sharp	General Use	Voice 12.5KHz	715-716	773.46875	803.48125
Sharp	General Use	Voice 12.5KHz	797-798	773.98125	803.99375
Sharp	General Use	Voice 12.5KHz	799-800	773.99375	804.00625
St. Francis	General Use	Voice 12.5KHz	53-54	769.33125	799.34375
St. Francis	General Use	Voice 12.5KHz	55-56	769.34375	799.35625
St. Francis	General Use	Voice 12.5KHz	137-138	769.85625	799.86875
St. Francis	General Use	Voice 12.5KHz	139-140	769.86875	799.88125
St. Francis	General Use	Voice 12.5KHz	217-218	770.35625	800.36875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
St. Francis	General Use	Voice 12.5KHz	219-220	770.36875	800.38125
St. Francis	General Use	Voice 12.5KHz	353-354	771.20625	801.21875
St. Francis	General Use	Voice 12.5KHz	355-356	771.21875	801.23125
St. Francis	General Use	Voice 12.5KHz	401-402	771.50625	801.51875
St. Francis	General Use	Voice 12.5KHz	403-404	771.51875	801.53125
St. Francis	General Use	Voice 12.5KHz	465-466	771.90625	801.91875
St. Francis	General Use	Voice 12.5KHz	467-468	771.91875	801.93125
St. Francis	General Use	Voice 12.5KHz	549-550	772.43125	802.44375
St. Francis	General Use	Voice 12.5KHz	551-552	772.44375	802.45625
St. Francis	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
St. Francis	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
St. Francis	General Use	Voice 12.5KHz	877-878	774.48125	804.49375
St. Francis	General Use	Voice 12.5KHz	879-880	774.49375	804.50625
Stone	General Use	Voice 12.5KHz	289-290	770.80625	800.81875
Stone	General Use	Voice 12.5KHz	291-292	770.81875	800.83125
Stone	General Use	Voice 12.5KHz	421-422	771.63125	801.64375
Stone	General Use	Voice 12.5KHz	423-424	771.64375	801.65625
Stone	General Use	Voice 12.5KHz	517-518	772.23125	802.24375
Stone	General Use	Voice 12.5KHz	519-520	772.24375	802.25625
Stone	General Use	Voice 12.5KHz	673-674	773.20625	803.21875
Stone	General Use	Voice 12.5KHz	675-676	773.21875	803.23125
Stone	General Use	Voice 12.5KHz	757-758	773.73125	803.74375
Stone	General Use	Voice 12.5KHz	759-760	773.74375	803.75625
Stone	General Use	Voice 12.5KHz	837-838	774.23125	804.24375
Stone	General Use	Voice 12.5KHz	839-840	774.24375	804.25625
Union	General Use	Voice 12.5KHz	89-90	769.55625	799.56875
Union	General Use	Voice 12.5KHz	91-92	769.56875	799.58125
Union	General Use	Voice 12.5KHz	169-170	770.05625	800.06875
Union	General Use	Voice 12.5KHz	171-172	770.06875	800.08125
Union	General Use	Voice 12.5KHz	293-294	770.83125	800.84375
Union	General Use	Voice 12.5KHz	295-296	770.84375	800.85625
Union	General Use	Voice 12.5KHz	345-346	771.15625	801.16875
Union	General Use	Voice 12.5KHz	347-348	771.16875	801.18125
Union	General Use	Voice 12.5KHz	393-394	771.45625	801.46875
Union	General Use	Voice 12.5KHz	395-396	771.46875	801.48125
Union	General Use	Voice 12.5KHz	457-458	771.85625	801.86875
Union	General Use	Voice 12.5KHz	459-460	771.86875	801.88125
Union	General Use	Voice 12.5KHz	509-510	772.18125	802.19375
Union	General Use	Voice 12.5KHz	511-512	772.19375	802.20625
Union	General Use	Voice 12.5KHz	573-574	772.58125	802.59375
Union	General Use	Voice 12.5KHz	575-576	772.59375	802.60625
Union	General Use	Voice 12.5KHz	633-634	772.95625	802.96875
Union	General Use	Voice 12.5KHz	635-636	772.96875	802.98125
Union	General Use	Voice 12.5KHz	713-714	773.45625	803.46875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Union	General Use	Voice 12.5KHz	715-716	773.46875	803.48125
Union	General Use	Voice 12.5KHz	753-754	773.70625	803.71875
Union	General Use	Voice 12.5KHz	755-756	773.71875	803.73125
Union	General Use	Voice 12.5KHz	793-794	773.95625	803.96875
Union	General Use	Voice 12.5KHz	795-796	773.96875	803.98125
Union	General Use	Voice 12.5KHz	861-862	774.38125	804.39375
Union	General Use	Voice 12.5KHz	863-864	774.39375	804.40625
Union	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Union	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
Van Buren	General Use	Voice 12.5KHz	205-206	770.28125	800.29375
Van Buren	General Use	Voice 12.5KHz	207-208	770.29375	800.30625
Van Buren	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Van Buren	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Van Buren	General Use	Voice 12.5KHz	341-342	771.13125	801.14375
Van Buren	General Use	Voice 12.5KHz	343-344	771.14375	801.15625
Van Buren	General Use	Voice 12.5KHz	401-402	771.50625	801.51875
Van Buren	General Use	Voice 12.5KHz	403-404	771.51875	801.53125
Van Buren	General Use	Voice 12.5KHz	449-450	771.80625	801.81875
Van Buren	General Use	Voice 12.5KHz	451-452	771.81875	801.83125
Van Buren	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Van Buren	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Van Buren	General Use	Voice 12.5KHz	589-590	772.68125	802.69375
Van Buren	General Use	Voice 12.5KHz	591-592	772.69375	802.70625
Washington	General Use	Voice 12.5KHz	53-54	769.33125	799.34375
Washington	General Use	Voice 12.5KHz	55-56	769.34375	799.35625
Washington	General Use	Voice 12.5KHz	125-126	769.78125	799.79375
Washington	General Use	Voice 12.5KHz	127-128	769.79375	799.80625
Washington	General Use	Voice 12.5KHz	173-174	770.08125	800.09375
Washington	General Use	Voice 12.5KHz	175-176	770.09375	800.10625
Washington	General Use	Voice 12.5KHz	245-246	770.53125	800.54375
Washington	General Use	Voice 12.5KHz	247-248	770.54375	800.55625
Washington	General Use	Voice 12.5KHz	297-298	770.85625	800.86875
Washington	General Use	Voice 12.5KHz	299-300	770.86875	800.88125
Washington	General Use	Voice 12.5KHz	365-366	771.28125	801.29375
Washington	General Use	Voice 12.5KHz	367-368	771.29375	801.30625
Washington	General Use	Voice 12.5KHz	429-430	771.68125	801.69375
Washington	General Use	Voice 12.5KHz	431-432	771.69375	801.70625
Washington	General Use	Voice 12.5KHz	469-470	771.93125	801.94375
Washington	General Use	Voice 12.5KHz	471-472	771.94375	801.95625
Washington	General Use	Voice 12.5KHz	541-542	772.38125	802.39375
Washington	General Use	Voice 12.5KHz	543-544	772.39375	802.40625
Washington	General Use	Voice 12.5KHz	581-582	772.63125	802.64375
Washington	General Use	Voice 12.5KHz	583-584	772.64375	802.65625
Washington	General Use	Voice 12.5KHz	633-634	772.95625	802.96875

<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Washington	General Use	Voice 12.5KHz	635-636	772.96875	802.98125
Washington	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
Washington	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
Washington	General Use	Voice 12.5KHz	741-742	773.63125	803.64375
Washington	General Use	Voice 12.5KHz	743-744	773.64375	803.65625
Washington	General Use	Voice 12.5KHz	781-782	773.88125	803.89375
Washington	General Use	Voice 12.5KHz	783-784	773.89375	803.90625
Washington	General Use	Voice 12.5KHz	821-822	774.13125	804.14375
Washington	General Use	Voice 12.5KHz	823-824	774.14375	804.15625
Washington	General Use	Voice 12.5KHz	905-906	774.65625	804.66875
Washington	General Use	Voice 12.5KHz	907-908	774.66875	804.68125
Washington	General Use	Voice 12.5KHz	945-946	774.90625	804.91875
Washington	General Use	Voice 12.5KHz	947-948	774.91875	804.93125
White	General Use	Voice 12.5KHz	57-58	769.35625	799.36875
White	General Use	Voice 12.5KHz	59-60	769.36875	799.38125
White	General Use	Voice 12.5KHz	97-98	769.60625	799.61875
White	General Use	Voice 12.5KHz	99-100	769.61875	799.63125
White	General Use	Voice 12.5KHz	177-178	770.10625	800.11875
White	General Use	Voice 12.5KHz	179-180	770.11875	800.13125
White	General Use	Voice 12.5KHz	241-242	770.50625	800.51875
White	General Use	Voice 12.5KHz	243-244	770.51875	800.53125
White	General Use	Voice 12.5KHz	365-366	771.28125	801.29375
White	General Use	Voice 12.5KHz	367-368	771.29375	801.30625
White	General Use	Voice 12.5KHz	405-406	771.53125	801.54375
White	General Use	Voice 12.5KHz	407-408	771.54375	801.55625
White	General Use	Voice 12.5KHz	453-454	771.83125	801.84375
White	General Use	Voice 12.5KHz	455-456	771.84375	801.85625
White	General Use	Voice 12.5KHz	493-494	772.08125	802.09375
White	General Use	Voice 12.5KHz	495-496	772.09375	802.10625
White	General Use	Voice 12.5KHz	533-534	772.33125	802.34375
White	General Use	Voice 12.5KHz	535-536	772.34375	802.35625
White	General Use	Voice 12.5KHz	581-582	772.63125	802.64375
White	General Use	Voice 12.5KHz	583-584	772.64375	802.65625
White	General Use	Voice 12.5KHz	625-626	772.90625	802.91875
White	General Use	Voice 12.5KHz	627-628	772.91875	802.93125
White	General Use	Voice 12.5KHz	701-702	773.38125	803.39375
White	General Use	Voice 12.5KHz	703-704	773.39375	803.40625
White	General Use	Voice 12.5KHz	749-750	773.68125	803.69375
White	General Use	Voice 12.5KHz	751-752	773.69375	803.70625
Woodruff	General Use	Voice 12.5KHz	17-18	769.10625	799.11875
Woodruff	General Use	Voice 12.5KHz	19-20	769.11875	799.13125
Woodruff	General Use	Voice 12.5KHz	257-258	770.60625	800.61875
Woodruff	General Use	Voice 12.5KHz	259-260	770.61875	800.63125
Woodruff	General Use	Voice 12.5KHz	377-378	771.35625	801.36875



<b>County Area</b>	<b>Class</b>	<b>Band Width</b>	<b>Channel</b>	<b>Base Frequency</b>	<b>Mobile Frequency</b>
Woodruff	General Use	Voice 12.5KHz	379-380	771.36875	801.38125
Woodruff	General Use	Voice 12.5KHz	569-570	772.55625	802.56875
Woodruff	General Use	Voice 12.5KHz	571-572	772.56875	802.58125
Woodruff	General Use	Voice 12.5KHz	677-678	773.23125	803.24375
Woodruff	General Use	Voice 12.5KHz	679-680	773.24375	803.25625
Woodruff	General Use	Voice 12.5KHz	741-742	773.63125	803.64375
Woodruff	General Use	Voice 12.5KHz	743-744	773.64375	803.65625
Yell	General Use	Voice 12.5KHz	41-42	769.25625	799.26875
Yell	General Use	Voice 12.5KHz	43-44	769.26875	799.28125
Yell	General Use	Voice 12.5KHz	397-398	771.48125	801.49375
Yell	General Use	Voice 12.5KHz	399-400	771.49375	801.50625
Yell	General Use	Voice 12.5KHz	441-442	771.75625	801.76875
Yell	General Use	Voice 12.5KHz	443-444	771.76875	801.78125
Yell	General Use	Voice 12.5KHz	501-502	772.13125	802.14375
Yell	General Use	Voice 12.5KHz	503-504	772.14375	802.15625
Yell	General Use	Voice 12.5KHz	545-546	772.40625	802.41875
Yell	General Use	Voice 12.5KHz	547-548	772.41875	802.43125
Yell	General Use	Voice 12.5KHz	585-586	772.65625	802.66875
Yell	General Use	Voice 12.5KHz	587-588	772.66875	802.68125
Yell	General Use	Voice 12.5KHz	629-630	772.93125	802.94375
Yell	General Use	Voice 12.5KHz	631-632	772.94375	802.95625

## Appendix G Inter-Regional Dispute Resolution

The procedure will consist of the following steps should a dispute occur:

If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within ten (10) calendar days via mail, email or fax. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons via email, mail or fax. Findings may include, but not be limited to unconditional concurrence; conditional concurrence contingent upon modification of applicant's technical parameters; or partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.

If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC), of the National Regional Planning Council (NRPC). Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

### CONCLUSION

In agreement hereto, Regions 4 and Region \_\_\_\_\_ do by the signing of the document pledge to abide by this Agreement.

Respectfully, [all signatories to agreement]

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Date: \_\_\_\_\_

## Appendix H DTV Protection and Incumbency Conclusion

### DTV Emission Mask vs. 700 MHz Public Safety Assignments

It may only take one TV/DTV station to block operations on one, the other, or both public safety channel pairs. For a public safety system at 500 watts ERP and 500 ft HAAT, co-channel TV stations can block a 120 mile radius and adjacent channel TV/DTV stations can block a 90 mile radius.

Since base stations transmitters are located only on channels 63 and 64, LMR mobile only TV/DTV protection spacing on channels 68 and 69 may be shorter than LMR base TV/DTV protection on channels 63 & 64.

#### TV/DTV Protection Criteria

Public safety applicants can select one of three ways to meet the TV/DTV protection requirements: (1) utilize the geographic separation specified in the 40 dB Tables of 90.309;

- (2) submit an engineering study to justify other separations which the Commission approves; or
- (3) obtain concurrence from the applicable TV/DTV station(s).

#### 90.309 40 dB D/U Tables

The FCC adopted a 40 dB desired (TV/DTV) to undesired (LMR) signal ratio for co-channel operations and a 0 dB desired/undesired (D/U) signal ratio for adjacent channel operations. The D/U ratio is used to determine the geographic separation needed between public safety base stations and the Grade B service contours of co-channel and adjacent channel TV/DTV stations.<sup>1</sup> The D/U signal ratio is used to determine the level of land mobile signals that can be permitted at protected fringe area TV receiver locations without degrading the TV picture to less than a defined picture quality. In other words, the D/U signal ratio indicates what relative levels of TV and land mobile signals can be tolerated without causing excessive interference to TV reception at the fringe of the TV service area.

Desired and undesired contours are not quite the same thing. Desired analog TV contours are defined as F(50,50), meaning coverage is 50% of the places and 50% of

the time. Undesired land mobile or interference contours are defined as F(50,10). For Digital TV, the desired contours are defined as F(50,90), while the undesired land mobile contour are still F(50,10).

Land mobile and analog TV services have successfully shared the 470-512 MHz band (TV Channels 14-20) within a 50 mile radius of eleven major cities since the early 1970's based upon providing a signal ratio of at least 50 dB<sup>2</sup> between the desired TV signal and undesired co-channel land mobile signal (D/U signal ratio) at a hypothetical 88.5 km (55 mi) Grade B service contour and an adjacent channel D/U signal ratio of 0 dB at the same hypothetical Grade B service contour. These separation distances also protected the land mobile systems from interference from the TV stations. In 1985, recognizing that 50 dB D/U was too conservative, the FCC proposed to expand land mobile/TV sharing to other TV channels and proposed that the geographic separation requirements for co-channel operations be based on a D/U signal ratio of 40 dB rather than 50 dB.<sup>1</sup> That proceeding was put on hold pending completion of the DTV proceeding, which has now been completed. In the 470-512 MHz band, the FCC also relied on minimum separation distances based on the various heights and powers of the land mobile stations (HAAT/ERP separation tables) to prevent harmful interference.

Since this simple, yet conservative, method was successful, the FCC decided to use this same method, the 90.309 HAAT/ERP Separation Tables, to administer LMR to TV/DTV receiver protection criteria for the services in the 700 MHz band.

Co-channel land mobile base station transmitters are limited to a maximum signal strength at the hypothetical TV Grade B contour 40 dB D/U below desired 64 dBu F(50,50) analog TV signal level, or 24 dBu F(50,10).<sup>2</sup> The FCC adopted a 0 dB D/U signal ratio for adjacent channel operations. Adjacent channel land mobile transmitters will be limited to a maximum signal of 64 dBu F(50,10) which is 0 dB D/U below the TV Grade B signal of 64 dBu F(50,50) at the TV station Grade B contour of 88.5 km (55 miles). A typical TV receiver's adjacent channel rejection is at least 10-20 dB greater than this level which will further safeguards TV receivers from land mobile interference.

<sup>1</sup>See *Second Notice*, 12 FCC Rcd 17,803.

<sup>2</sup>For TV Channel 15 in New York City, a 40 dB D/U signal ratio is used. See 47 C.F.R. §§ 90.307(b) and 90.309 (Table B). A 50 dB protection ratio means that the amplitude of the desired TV signal is more than 300 times greater than the amplitude of the undesired signal at the Grade B service contour. A 40 dB protection ratio means the desired TV signal is 100 times greater.

## Appendix I DTV Transition

### Frequency Availability through the DTV Transition

On August 14, 1996, the FCC released a *Sixth Further Notice of Proposed Rule Making* in the digital television (DTV) proceeding. A portion of the spectrum recovered from TV channels 60-69 when DTV is fully deployed "could be used to meet public safety needs."<sup>1</sup> By Congressional direction in the Balanced Budget Act of 1997, the FCC reallocated 24 MHz of spectrum to Public Safety services in the 764-776 MHz and 794-806 MHz bands. The statute required the FCC to establish service rules, by September 30, 1998, in order to start the process of assigning licenses. The rules that the FCC established by September 30, 1998, "provided the minimum technical framework necessary to standardize operations in this spectrum band, including, but not limited to: (a) establishing interference limits at the boundaries of the spectrum block and service areas; (b) establishing technical restrictions necessary to protect full-service analog and digital television service during the transition to digital television services; (c) permitting public safety licensees the flexibility to aggregate multiple licenses to create larger spectrum blocks and service areas, and to disaggregate or partition licenses to create smaller spectrum blocks or service areas; and (d) ensuring that the new spectrum will not be subject to harmful interference from television broadcast licensees"<sup>2</sup>.

In April 1997, the FCC assigned a second 6 MHz block of spectrum to each license (or permit to construct) holders of full power, analog, television broadcast station (NTSC) in order to construct a digital television station (DTV). Secondary low power television stations (LPTV), secondary translators and boosters (TX), mutually exclusive applications for new stations, and application filed after a cut-off date did not receive a second 6 MHz allotment for DTV. The FCC established about a 10 year timeline for those stations with a DTV assignment to construct a DTV station, cease NTSC transmissions, and return one of the two 6 MHz blocks of spectrum to the FCC. Target date for the end of analog television (NTSC) transmission was set for December 31, 2006.

Congress provided several market penetration loopholes (>85% households served, all 4 major networks converted, etc) allowing NTSC operations to continue past the December 31, 2006 date. While there are over 100 NTSC full power stations in this band, there are also about 12 DTV assignments. The DTV assignments might continue operations past the December 31, 2006 date for two reasons. 1) They must find a suitable channel below channel 60 to move to, which may be their own NTSC assignment. They may not be able to find another allocation until other NTSC stations have ceased operations and returned a channel below 60 to the FCC. Or, 2)

their license does not expire until after 2006 (most are licensed into 2007 or 2008).

### Protection of Public Safety from future TV/DTV Stations

Public safety base and mobile operations must have a safe distance between the co-channel or adjacent TV and DTV systems. This typically means that a co-channel and adjacent channel base and mobile system cannot operate in areas where TV stations already exist. The public safety systems that will operate in the 700 MHz band for some locations in the U.S. and its possessions must wait until the

transition period is over and the TV/DTV stations have moved to other channels before beginning operations. In other areas, channels will be available for public safety operations. During the transition period, public safety stations must be acutely aware of the TV allocations for both TV and DTV stations. The FCC wants the number of situations where the public safety licensee has to coordinate its station with the existing TV stations kept to a minimum. The Commission's decisions in the reallocation of spectrum to DTV implemented two requirements that will help public safety systems to protect TV/DTV stations and reduce the number of coordinations. The first requirement is that full power UHF-TV stations can no longer apply for channels 60-69 or modifications in channels 60-69 that would increase the stations' service areas, which creates a known environment for public safety licensees.<sup>3</sup> The second requirement is that since only existing TV station licensees can apply for DTV channels, the applicants and their proposed locations are already known.<sup>4</sup>

Also, the low power TV stations and translators already on channels 60-69 are secondary and must cease operations if they cause harmful interference when a primary service, like land mobile, comes into operation. The secondary Low Power TV stations already on channels 60-69 cannot apply for the new Class A protection status.

<sup>1</sup> Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, MM Docket No. 87-268, *Sixth Further Notice of Proposed Rule Making*, 11 FCC Rcd 10,968, 10,980 (1996) (*DTV Sixth Notice*).

<sup>2</sup> FCC 98-191, 1st R&O and 3rd NPRM on WT Docket No. 96-86 Operational & Technical Requirements or the 700 MHz Public Safety Band, para.4.

<sup>3</sup> See *Reallocation Report and Order*, 12 FCC Rcd 22,969-22,970. Stations with existing channel 60-69 TV construction permits must complete their stations and file for a license by January 2, 2001.

<sup>4</sup> See *DTV Sixth Report and Order*, 12 FCC Rcd 14,739-14,754; See also In the Matter of Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* in MM Docket No. 87-268, 13 FCC Rcd 7418 (1998).

The 11 DTV allotments are:

The FCC designated 764-776 MHz (TV Channels 63 and 64) for base-to-mobile transmissions and 794-806 MHz (TV Channels 68 and 69) for mobile-to-base communications. In addition, base transmit channels in TV Channel 63 are paired with mobile channels in TV Channel 68 and likewise that base channels in TV Channel 64 are paired with mobile channels in TV Channel 69. This provides 30 MHz separation between base and mobile transmit channel center frequencies. This band plan was suggested because of the close proximity of TV Channels 68 and 69 to the 806-824 MHz band, which already contains the transmit channels for mobile and portable radios (base receive).

Mobile transmissions are allowed on any part of the 700 MHz band, not just the upper 12 MHz. This will facilitate direct mobile-to-mobile communications (i.e., not through a repeater) that are often employed at the site of an incident, where wide area communications facilities are not available or desired. Allowing mobile transmissions on both halves of a paired channel is generally consistent with FCC rules governing use of other public safety bands.

#### Non-uniform TV Channel Pairing

There are currently geographical areas where, either licensed or otherwise protected full-service analog or new digital, television stations are currently authorized to operate on TV Channels 62, 63, 64, 65, 67, 68, and 69. During the DTV transition period, an incumbent TV station occupying one or more of the four Public Safety channels (63, 64, 68, 69) or the three adjacent channels (62, 65, 67) may preclude pairing of the channels in accordance with the band Plan defined above. Therefore, to provide for cases where standard pairing is not practicable during the DTV transition period, the FCC will allow the RPCs to consider pairing base-to-mobile channels in TV Channel 63 with mobile-to-base channels in TV Channel 69 and/or base-to-mobile channels in TV Channel 64 with mobile-to-base channels in TV Channel 68. Because such non-standard channel pairing may cause problems when the band becomes more fully occupied, the FCC expects the RPCs to permit such non-standard channel pairing only when absolutely necessary, and the FCC may require stations to return to standard channel pairing after the DTV transition period is over. However, the FCC will not permit non-standard channel pairing on the nationwide interoperability channels in the 700 MHz band because of the need for nationwide uniformity of these channels.

At least three issues must be considered before deciding upon non-uniform channel pairing:

- 1) Preliminary analysis, looking at current incumbent TV stations, shows few geographic areas where non-uniform pairing allows early implementation of 700

MHz systems. As DTV Transition progresses, and TV stations vacate the band, this situation might change.

2) If interoperability channels must be uniform, operation on I/O channels will be blocked until all incumbent TV stations are cleared, even though General Use channels may be implemented earlier.

3) If I/O channels must follow uniform pairing, and general use & reserve channels can be implemented using non-uniform pairing, narrowband voice subscriber equipment must operate on 3 different channel pairings - 39 MHz (764-767 paired with 803-806 MHz), 30 MHz, and 21 MHz (773-776 paired with 794-797 MHz). Likewise, there will be 3 different channel pairings for channels. No vendors have volunteered to build equipment & systems for non-uniform pairing, yet.

#### TV/DTV Protection

During the DTV Transition period, public safety must consider all co-channel and adjacent channel TV and DTV stations within about a 160 mile radius.

For public safety channel pair 63/68, public safety must consider six TV/DTV channels - cochannels 63 and 68, as well as, adjacent channels 62, 64, 67, and 69.



## Appendix J Low Power Television Stations

The CAPRAD database for Region 4 lists three (3) low power television assignments.

Deeper investigation shows that the three listings are in fact the same single assignment as shown below, with slight differences in latitude and longitude or other similar clerical variations. The FCC - FRN of all three listings is identical.

FRN – 16305096

Located at Latitude: N 36° 24' 41" Longitude: W 93° 57' 14"

And a published ERP of 15 KW

Call Sign: KEGW-LP  
Facility Id: 48534  
Community of License: FAYETTEVILLE, AR  
Service: TX  
Fac Type: UHF TRANSLATOR LOW POWER  
Status: LICENSED  
Status Date: 09/12/2000  
Frequency:  
Channel: 64  
Digital Status:  
Lic Expir: 06/01/2013  
Licensee: FORT SMITH 46, INC.  
Address: #1 SHACKLEFORD DRIVE  
Address 2: SUITE 400  
City: LITTLE ROCK  
State: AR  
Zip Code: 72211 -  
Phone Number: (501) 219-2400

## ATTACHMENTS