ARRC | 800 MHZ

Arizona Regional Review Committee P.O. BOX 863 • PHOENIX, AZ. 85001

91-143

June 8, 1998

Secretary Magalie Roman Salas
Federal Communications Commission
2025 M St. N.W. Room 222
Washington, D.C., 20554

Dear Secretary Salas:

The Arizona Regional Review Committee (ARRC), the Region 3 NPSPAC 800 MHZ governing entity, is proposing to revise the "Region 3 Plan." The Commission originally approved this plan on September 13, 1991 and a revision on November 8, 1995.

During the last two years, several large agencies in the Phoenix metropolitan area have asked about frequencies for potential applications. The current Region 3 Plan does not have enough frequencies assigned in the Phoenix metropolitan area to accommodate the proposed applications from Phoenix, Mesa and Maricopa County. The current Region 3 Plan has frequencies "assigned" to specific jurisdictions, many of them smaller rural communities. This "assigned" has become a problem in that some jurisdictions felt this meant these frequencies were strictly for them and only they could apply for these assigned frequencies. To eliminate this confusion and increase the number of frequencies in the metropolitan area, the ARRC proposed a revision of the frequencies. This resulted in frequency "allocation," instead of "assigned." Allocation meaning the ARRC tentatively identified them for a particular jurisdiction but if another jurisdiction without allocated frequencies applies and meets the criteria, the ARRC would approve the frequencies for the applicant.

We sent a certified letter to all county and city mangers in the state to learn if they had any plans, needs or intentions of using the frequencies assigned to their jurisdiction. If they could not provide justification to the ARRC for leaving the frequencies allocated for their jurisdiction, we reallocated the frequencies into the Phoenix metropolitan area when possible. As we are all aware, frequencies are like gold and we cannot "warehouse" frequencies for the future.

The proposed Region 3 Plan is attached for your review. Besides the frequency allocation changes, there are 12 minor non-frequency assignment changes or corrections. These changes are:

1. Page 9, paragraph 3.4 Annual System Implementation Review
2. Page 16, paragraph 4.8 Typo error
3. Page 20, paragraph 6.0 Typo error

4.	Page 22, paragraph 7.1A	PSTN interconnect, not cellular
5.	Page 29, paragraph 8.0	Double space prior to 8.1
6.	Page 34, paragraph 9.1	"estended" should be "extended", page number omitted
7.	Page 32, paragraph 9.4	Responsibility for calculations help expired Sept. 12, 1996
8.	Page 39, paragraph 9.14	Change heading to "PSTN-Interconnect"
9.	Appendices	Start at 41, all appendices numbered continuous throughout the Plan
10.	Appendix II	By-laws, Article VI,C..."Appli-cations" not hyphenated
11.	Appendix II	By-laws, Article VI, C-2...change "an" to "and"
12.		Add revision letter and date to revised pages

Please give these changes your earliest possible consideration and approve as soon as possible since we have just received one application and are anticipating two additional applications in July. Please call me at (602) 256-1029 if you have any questions.

Sincerely,

Deborah L Overton

Deborah L. Overton, Chair
Region 3, Arizona Regional Review Committee (ARRC)

attachments: Region 3 Plan
Form letter to city/county managers
Mailing list

cc: Ms. Kathryn Hosford
Public Safety Liaison Officer
Federal Communications Commission
Wireless Bureau
2025 M St. N.W.
Washington, D.C. 20554

REGION 3

THE ARIZONA PUBLIC SAFETY RADIO SPECTRUM PLANNING COMMITTEE REGIONAL PLAN

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1.0 INTRODUCTION

In December 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a plan to ensure that the communications needs of state and local public safety authorities would be met. The Commission issued a Notice of Inquiry on March 7, 1984 and over 300 comments from the public safety community and other interested parties were evaluated by the FCC staff.

These comments formed the basis for a Staff Report issued by the Commission's Private Radio Bureau on August 1, 1985. This report suggested various methods of meeting the communications needs of public safety. One option included the allocation of additional frequencies at 821-825 MHZ and 866-870 MHZ.

The Commission issued an allocation order on September 19, 1986. Six megahertz of spectrum were selected in the 821-824 MHZ and 866-869 MHZ bands since they were adjacent to frequencies already being used for public safety purposes. However, while the Commission made this allocation for this additional 6 MHZ of spectrum for public safety use nationwide, they also recognized the necessity of developing a National Plan to promote interoperability among public safety providers and to insure an efficient use of the newly allocated spectrum.

Recognizing the importance of public safety participation in the development of the National Plan, the FCC established the National Public Safety Planning Advisory Committee (NPSPAC) in December, 1986. With an open membership, NPSPAC provided the opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach. The Commission charged NPSPAC with the following tasks: (1) identify communications requirements of public safety agencies; (2) develop a scheme for efficient use of the new frequencies; (3) develop a scheme to increase the utility of existing public safety frequencies; (4) recommend the manner in which new technologies can be applied to the public safety frequencies; and (5) recommend guidelines to ensure compliance with the National Plan.

NPSPAC submitted its Initial Report to the Commission in March, 1987. On May 15, 1987, the Commission issued a Notice of Proposed

Rule Making which proposed policies and rules for the National Plan. NPSPAC issued its Final Report in September, 1987. On December 18, 1987, the Commission released a report and order regarding the development and implementation of a Public Safety National Plan: General Docket No. 87-112.

The National Plan consists of guidelines for the development of regional plans. The National Plan reflects the FCC's regulatory objective of maximizing spectrum efficiency and ensuring sufficient flexibility to accommodate specific communications requirements in different areas of the United States. Thus the United States was divided into Regions, primarily along state boundaries. A few large metropolitan areas were designated as independent Planning Regions.

Prior to the Report and Order, NPSPAC's Final Report had recommended a total of fifty-four (54) Planning Regions. However, when the Report and Order was released, the Commission had established only forty-eight (48) Planning Regions. A Petition for Limited Reconsideration was filed by NPSPAC on February 12, 1988, asking that additional planning regions be established due to densely populated metropolitan areas which were regions in themselves. The Commission granted this Petition and established fifty-five (55) regions with Arizona as Region 3. The National Plan will serve as an umbrella under which regional plans such as this can be developed and implemented.

The National Plan provides guidelines for the development of regional plans, with as much regional self governing as possible, to ensure that the needs of all eligibles are considered in the planning process.

2.0 REGIONAL PROFILE

The state of Arizona encompasses almost 114,000 square miles and makes up Region 3. Much of the state is sparsely populated Federal and Native American Reservation land. There are two major population centers, Phoenix and Tucson. The State currently has over 3.5 million residents with population projections indicating an increase to 6.5 million people by the year 2000.

Geographically, Arizona is a complex mixture of environments varying from desert scrub plants near sea level to barren mountain peaks at over 12,670 feet elevation. An example of the extreme desert to mountain change occurs in the Tucson area where the Sonoran Desert basin changes to a pine forest in the Coronado National Forest, an almost 7000 foot change occurring in about 15 miles. Besides the Grand Canyon, another major geographic feature is the Mogollon Rim, a 200 mile long geographic barrier which separates the northern and southern portions of the State. The top of the Rim plateau contains the world's largest standing Ponderosa pine forest. The high mountains provide both the best and worst of radio communications and the ensuing interference and spectrum planning problems.

3.0 AUTHORITY

This plan has been developed by a representative group of Public Safety Services eligible for licensing in the 6 MHZ of the 800 MHZ spectrum. Authority for the Regional Planning Committee to carry out its assigned tasks is derived from the Federal Communications Commission (FCC Report and Order, Docket 87-112).

3.1 Regional Planning Committee

A Convener was selected and public notification pursuant to the National Plan was initiated. Since the state of Arizona has two large populated metropolitan centers and the majority of the state is rural areas, three (3) public meetings were held in order to accommodate the rural areas. See Appendix III for the meeting minutes and names of those in attendance.

The membership of the Arizona Regional Planning Committee is open to representatives from all eligible user groups pursuant to FCC Report and Order, Docket 87-112, Section IV, Subsection B, Paragraph 46. Interested parties became participants in the formation of the Regional Planning Committee and represent both the Public Safety and Special Emergency Radio Services. A total of 105 individuals have participated in the Plan's developmental process. Appendix I lists names, organizational affiliations, and mailing addresses of all participants in the Regional Planning Committee formation.

Prior to working on the plan, the working committee sent two questionnaires to all Public Safety and Special Emergency Radio Service users for input concerning present and future communications needs (See Appendix IV for results). After compiling the received data from responding agencies, the Regional Planning Committee drafted the Plan.

3.2 Working Committee

A working committee was established to facilitate the development of the Regional Plan. Their main function was to receive input from local, state and federal representatives, as well as vendors and suppliers to be used in the formation of the Regional Plan. Members of this committee are as follows:

Chairman	Anthony J. Tricoci City of Mesa Communications Division P.O. Box 1466 Mesa, AZ.. 85211-1466 Tel. (602)644-2802
Member	Debbie Overton Maricopa County Sheriff's Office 102 West Madison Phoenix, Az.. 85003 Tel. (602)256-1026
Member	Brent Ackzen City of Glendale Department of Police 7119 N. 57th Drive Glendale, Az.. 85301 Tel. (602)931-5518
Member	Rick Tannehill Arizona Department of Public Safety Technical Communications Division P.O. Box 6638 Phoenix, Az.. 85005 Tel. (602)223-2295
Member	Bob Gates Salt River Project P.O. Box 52025 Phoenix, Az.. 85072-2025
Member	Peter Meeks City of Phoenix Communications Section 2441 S. 22nd Avenue Phoenix, Az.. 85009-6917 Tel. (602)262-7034

3.3 Approval of Regional Plan

Prior to submitting the plan for FCC approval, an announcement was

made that a draft of the Plan was available for review, and copies were sent to any requesting party. All adjacent regions (Region 5 - Southern California, Region 7 - Colorado, Region 27 - Nevada, Region 29 - New Mexico, and Region 41 - Utah) received copies for review and comments. (See Appendix VI for concurrence)

All comments were to be received by February 1, 1991. A public meeting was held on February 7, 1991 @0930 hrs at the City of Glendale Council Chambers Building, as a means for those interested parties to make their comments known before the Working Committee. Following receipt of all comments, the Working Committee made modifications to the Plan by the opinion of the majority. Copies of the modified sections of the Plan were sent to those parties who had submitted comments. Upon approval of the changes, the final plan was formulated.

3.4 Regional Review Committee

Upon FCC approval of this plan, a Regional Review Committee will be established for the review of new applications and for conducting an annual system implementation review. Since modifications to the Plan may be necessary because of changing requirements, the committee will also recommend changes and/or modifications of the Regional Plan to be submitted to the FCC. The committee will also provide a mechanism for resolution of inter- and intra- regional disputes and for exercising general oversight of the Plan.

The Arizona Regional Review Committee (ARRC) shall be comprised of eleven members with no more than one committee member from a single political jurisdiction. Nominations to the committee shall be made as part of an open, general meeting.

Semi-annual open, public meetings shall be held concurrent with Arizona APCO chapter meetings. Each attending political jurisdiction shall be apportioned one vote at each meeting. Designated representatives and alternates shall be identified prior to the meetings.

Voting on vacancies shall take place at the general meeting of the ARRC after publication of all nominations to the entire APCO chapter membership. Members to this committee must be elected by a majority vote of all designated representatives present at the semi-annual meeting, as per Robert's Rules of order, and who are

current employees of an Arizona political jurisdiction. The chairperson of this committee shall be chosen by the committee.

There shall be no time limit for serving on the ARRC, but a member may be removed from this Committee by resignation or by a vote of the quorum of an open, general meeting. Such removal may take place only after a thirty day written notice has been made to the entire authorized voting representatives.

No changes, modifications, or amendments can be made to the approved Plan unless agreed to by at least a two-thirds majority of the quorum of the ARRC members.

No change in a position on the priority list for assignment of a frequency in either the 800 MHz spectrum or in reallocation of lower frequencies that may be given up to receive 800 MHz assignments can be made unless approved by at least a two-thirds majority of the ARRC.

Minutes of all meetings of the ARRC must be taken and mailed to the appropriate agencies.

3.5 Conclusion

This Plan, when approved and implemented, will ensure the best possible use of this new portion of the spectrum and will also ensure an orderly transition from existing frequencies/systems to this new portion of the spectrum. It will also serve as a guide in the reassignment of vacated channels, and provide, through the Regional Review Committee, an ongoing method of ensuring fair and equitable recommendations of channels and usage to all Public Safety Services and users. Resolution of any arising conflict is left to the judgement of the Commission.

4.0 COMMUNICATIONS REQUIREMENTS - REGIONAL INTEROPERABILITY

4.1 General

This part of the Arizona Regional Plan deals with the requirement for coordinated communications between various jurisdictions and functional entities within the Region. The intent is to ensure compatibility in the assignment of frequencies, especially calling and interoperability channels. The purpose of this plan is not to replace existing intercommunications plans or channels, but to supplement them at 800 MHZ with a more detailed plan. In fact, the Regional Plan encourages continued use of VHF and UHF intercommunications presently in use for Police and Fire, including 155.475 MHZ, 460.375 MHZ, and 154.280 MHZ. The plan also encourages cross patching these channels to the 800 MHZ Common Calling Channels, and others as appropriate, at the dispatch console level within regional operating subsystems.

4.2 Regional Calling and Interoperability Channels Authority

The Federal Communications Commission (FCC), in Docket 87-112, Sec. IV.C.50-52, released Dec. 18, 1987, mandated the use of a single, conventional, common-calling channel and four (4) tactical channels on a nationwide basis in the new 800 MHZ Public Safety allocations. The FCC also strongly recommended the use of CTCSS tone squelch nationally on a frequency of 156.7 Hz.

The Arizona Regional Planning Committee has reviewed and implemented the five (5) national channels, and added one (1) additional 800 MHZ channel for interoperability strictly within the Arizona Region. The Arizona Plan also adopts the use of 156.7 Hz tone squelch as mandatory on all voice radio systems on the common calling and interoperability channels.

4.3 Eligibility

Primary eligible users include Police, Fire, Local Govt., Highway Maintenance, Forestry Conservation, and providers of Basic and Advanced Life Support Services in Special Emergency Services, as defined in the FCC Rules and Regulations, and licensed to use the spectrum. These users are eligible to operate base stations on the five (5) National and two (2) Statewide interoperability channels. In addition, Federal agencies may become eligibles through the use

of public safety agreements, whereby a licensee may permit federal use of a non-federal communications system. Such use, other than the five common calling channels is to be in full compliance with the FCC's requirements for federal government use on state and local government frequencies (Title 47 CFR, Sec. 2.103).

Also, other eligibles such as school buses, volunteer emergency corps, Red Cross, Radio Amateur Civil Emergency Services (RACES), Amateur Radio Emergency Services (ARES), Salvation Army, etc., under the National Plan may also participate on a secondary basis in the support of the preservation of life and property during an emergency.

4.4 Application Procedures

All interoperability channel licensees for Mobile Relay (FB2), or Fixed Stations (FB) shall be obtained by and in the name of the entity authorized by the Arizona Regional Review Committee. Other base radios shall be licensed in the name of the applicant agency. In accordance with FCC Report and Order General Docket 87-112, vehicular, portable, and aircraft stations using either the five National channels or the Statewide interoperability channel (Channel 6) may operate without further FCC authorization. However, the prospective vehicular/portable/aircraft user must comply with 4.5.4 of this section.

4.5 Allocated Common Calling/Interoperability Channels

The use and allocation of the calling and interoperability channels is broken down as follows:

Channel 1 (821/866.0125 MHZ) - National Public Safety Calling and Rural Tactical Operations Interoperability.

Channel 2 (821/866.5125 MHZ) - Primary Fire and Emergency Medical Service In Maricopa County; Secondary in Pima County.

Channel 3 (822/867.0125 MHZ) - Primary Police in Maricopa County; Secondary in Pima County.

Channel 4 (822/867.5125 MHZ) - Primary Fire and Emergency Medical Service in Pima County; Secondary in Maricopa County; Federal Govt.

Channel 5 (823/868.0125 MHZ) - Primary Police in Pima County; Secondary in Maricopa County; Federal Govt.

Channel 6 (821/866.0500 MHZ) - Primary Statewide for all Other Public Safety, including Highway/Forestry/Local Govt./Search & Rescue.

Although primary and secondary usage is defined above, this is not to preclude use by all other eligibles when appropriate in coordinated operations. (See 4.3)

4.5.1 Common Calling Channel Monitoring Requirements

All new portable/mobile radios granted license authorizations in the 821-824 MHZ and 866-869 MHZ bands, as well as all replacement equipment in the 806-821 MHZ and 851-866 MHZ bands, shall be capable of and equipped to operate on Channels 1 - 6 calling and tactical frequencies in the conventional mode of operation. In addition, each portable/mobile radio shall have the repeater "talk-around" channel on Channel 1 (National Calling Channel) and on their primary and secondary service tactical channels. Also, a Public Safety eligible receiving a new 800 MHZ license is required to be able to monitor and communicate in the repeater and "talk-around" modes at their primary communications site.

The largest geographic Public Safety 800 MHZ new system licensee in a geographic area may be required to place in operation, a Channel 1 calling channel repeater at one or more of their existing repeater sites. If notification is made to a prospective licensee as a condition of system plan acceptance by ARRC and the FCC, the station shall be placed in service at the same time with the rest of the authorized system. A suitable Calling Channel funding plan shall be submitted as part of the authorization request.

4.5.2 Tactical Channel Requirements

4.5.2.1 Monitoring Requirements

Each new licensee in the 800 MHZ spectrum shall also have a base station radio at their primary station site, as a minimum requirement, capable of monitoring and operating on the primary and secondary tactical channels in their area, for which they are

eligible service providers. This base station radio shall include frequencies for both simplex and repeater control.

4.5.2.2 Repeater Establishment

No permanent high power repeaters shall be established on any of the tactical channels. However, low power (<20 watts ERP) transportable repeaters may be employed by any eligible service agency for establishing emergency communications over a wider area than simplex communications would allow. Such a repeater shall be turned off and removed as soon as practical after the event has passed. At no time will a tactical repeater be allowed to operate for more than a 30 day continuous period.

4.5.2.3 Voice Security/Privacy/Scrambling Equipment

Voice scrambling or encryption is NOT ALLOWED on the Common Calling Channel, except in rural areas, where the calling channel is also used for tactical operations. In rural areas, each licensee is still required to monitor the calling channel in CLEAR mode, regardless of voice encryption.

Voice scrambling or encryption IS allowed on the other voice tactical channels, either unit to unit, unit to base, or through a temporary repeater if all users of the temporary repeater also have access to the CLEAR mode, or the same encryption scrambling standard as required.

4.5.3 Attestation

Each prospective licensee shall include a standard signed statement form with their request for authorization, acknowledging they have read and are familiar with the Arizona Regional Plan and agree to abide by its conditions, especially insofar as the Common Calling and Tactical Channel operational requirements.

4.5.4 Priority Levels of Utilization

The established priority use levels for the six (6) calling/tactical channels are described below. When a higher priority of use is required, all lower priority use must cease in ANY area where interference could occur.

The four priority levels are:

PRIORITY 1: Disaster and extreme emergency operations of large scale, involving imminent safety of lives, for mutual aid and interagency communications.

PRIORITY 2: Emergency or urgent operations involving imminent safety of life or property.

PRIORITY 3: Special event control activities, generally of a preplanned nature, and generally involving joint participation of two or more agencies.

PRIORITY 4: Drill, maintenance, and test exercise of a civil defense or disaster nature.

4.5.5 Language and Radio Codes Standards

All communications on the Calling Channel will be conducted in "CLEAR TEXT", using the ENGLISH language, unless use of another language is clearly necessary to carry out emergency communications.

4.6 Federal Govt. Communications Interface Requirements

Federal Govt. agencies, operating within the borders of the Arizona region, may access the Common Calling and Tactical Channels for the purpose of coordinating with and communicating with Public Safety eligibles. Federal agencies are exempt from the monitoring requirements set forth in Sec 4.2. However, their use of the Common Calling and Tactical Channels shall otherwise be in complete conformance with the Regional Plan.

Before a federal agency is certified eligible to access the Common Calling and Tactical Channels, there shall be established a formal agreement with the Public Safety eligible with whom they desire to have communications. This agreement shall be on the standard ARRC form. Each agreement shall be mailed to the ARRC for review and to be placed on file with the committee.

4.7 Public Switched Telephone Network

The use of automatic or operator-assisted connection on the Common Calling and Tactical Channels to the public switched telephone network is strictly PROHIBITED.

4.8 Amateur Radio Intercommunications

It is the intent of the Arizona Regional Plan to encourage participation of the Amateur Radio community in public safety communications relating to emergency or disaster communications.

The following intercommunications of public safety radio communications systems are encouraged in emergency/disaster situations:

1. Loan of 800 MHZ radios to qualified amateur radio emergency coordination groups, such as RACES, AREC, etc.

2. Allow amateur radio nets to operate out of Public Safety Command Centers.

3. Allow selective amateur to Public Safety cross patching under emergency conditions, at selected public safety communication centers, under control of a governmental entity.

All Amateur/Public Safety communications shall continue to comply with applicable FCC Rules and Regulations, and rules and plans of the affected amateur group.

It is <u>strongly recommended</u> that each Public Safety entity have an agreement in place with volunteer amateur groups, defining what level of intercommunications will be allowed and provided during an emergency situation. This plan should be filed with the ARRC coordinator for approval.

4.9 Operation in Aircraft

Operation of radio equipment on the six (6) Common Calling and Tactical Channels is permitted, provided power is limited to 3 watts ERP and conforms to all applicable FCC Rules and regulations.

4.10 Grandfathered Equipment

Existing radio equipment that is currently operating in 806/866 MHZ band and was in the agency's possession or ordered on/or before September 7, 1988 may be used with notification to the ARRC. To operate on the five (5) National Mutual Aid Channels, the deviation is to be +/- 4.0 KHZ maximum.

4.11 Unit Identifiers/Automatic Station ID

Units operating on the Mutual Aid Channels are to include their agency name in their unit identification. (Example: Maricopa County, Mesa PD Unit 2 Adam 01) Automatic Station Identifiers usage is encouraged, but is not to replace the voice identification requirement.

5.0 COMMUNICATIONS REQUIREMENTS-INTERREGIONAL INTEROPERABILITY

5.1 General

This portion of the Arizona Regional Plan deals with the requirement for coordinated communications between the Arizona Region, and adjacent regions in the Southwest. This includes the Southern California Region, Nevada Region, Utah Region, Colorado Region, New Mexico Region, and the Nation of Mexico. The purpose is to insure compatibility in the assignment of frequencies, especially Common Calling and Tactical Channels. This plan does not replace any current VHF or UHF common channels in use by eligible agencies along the borders, but supplements them through designation of new Common Calling and Tactical Channels at 800 MHZ.

5.2 Interregional Calling and Tactical Channels; Authority:

The Federal Communications Commission (FCC) in General Docket 87-112, released Dec. 18, 1987, mandated the coordination of each authorized region's activities with adjacent regions.(IV.C.50-52)

The Arizona Regional Planning Committee has implemented a set of rules dictating interregional compatibility. These rules were made after contacting all adjacent regions to determine if there was any potential conflict with their plans. However, since some of the adjacent Region Plans have not yet been approved by the Commission, future changes may be required to ensure long-term compatibility.

5.3 Southern California Region Compatibility:

The common western border along the Colorado River with California, including San Bernadino, Riverside, and Imperial counties, is the area most likely to run into conflict both in operating frequency assignment, and in interoperability channel use. Southern California has previously asked for Arizona approval of their plan. This approval has been granted, after reviewing their plan. As a result, Arizona will not assign 823/868.5125 MHZ or 823/868.9875 MHZ to any agency located along the California border to avoid potential interference with their Channel 6 (Law) and Channel 7 (Fire/EMS) interoperability channels.

In a reciprocal manner, California has been asked not to assign Arizona Region interoperability Channel 6 (821/866.0500 MHZ) along the Colorado River.

Arizona licensees are encouraged to utilize the nationwide five common calling/interoperability channels to intercommunicate with California licensees when joint response is required along the Colorado River. Since this entire area is considered "Rural" in the Arizona Plan, any of the interoperability channels may be utilized for any service function with California.

5.4 Other Adjacent Region Compatibility:

Arizona rural licensees are likewise encouraged to utilize the five nationwide Common Calling/Tactical Channels along the border with any other region (Nevada, Utah, Colorado, New Mexico) as local conditions require. Any service use of the interoperability channels is permitted to achieve joint communications with other regional licensees. This plan may be amended from time to time as other regional plans continue to be developed. (Refer to Appendix V for letters of concurrence from adjacent regions.)

5.5 Communications with Mexico:

All interoperability frequencies are assumed to be usable and assignable to the Mexican Border as long as there is a mutual agreement on use within the 110 Km of the border. However, this portion of the plan is subject to automatic change depending upon FCC regulation and treaty with Mexico.

Governmental police eligibles may communicate with officials from Mexico along the border in the event of an emergency or disaster. This should be done on the Common Calling and interoperability channels, and only in conformance with Part 90.19c of the FCC Rules and Regulations. Sonoran authorities have been notified as to the Arizona Regional Plan for use of these frequencies.

6.0 APPLICATION PROCEDURES

Any request for frequencies between 821-824 and 866-869 MHZ to be used for public safety operations (as described in Part 90 of the FCC Rules and Regulations) must be submitted to the Arizona Regional Review Committee (ARRC) for review.

SEND APPLICATION TO: ARIZONA REGIONAL REVIEW COMMITTEE
P.O. Box 863
Phoenix, AZ 85001

If adequate spectrum is available, the ARRC shall review the application to determine its compliance with the Regional Plan as indicated below. If there is inadequate spectrum or the Committee anticipates a shortage, the established evaluation procedure shall be instituted. This procedure, "Evaluation Criteria", is outlined in Section 7.6.

Additionally, shared multi-agency systems will have priority consideration in accordance with the FCC Report and Order, Paragraph 37.

Also, in accordance with Paragraph 13 of the Report and Order, when it is not possible to grant requests for assignments in the new 800 MHZ spectrum to everyone who is eligible, the highest priority must be given to those organizations most fundamentally involved in protection of lives and property.

If approved by the ARRC, the request for frequencies will be returned to the applicant to be forwarded to the Associated Public Safety Communications Officers (APCO) for frequency coordination. If not approved by the ARRC, the request will be returned to the applicant for revision and correction before being resubmitted to the Committee for further consideration.

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

1. Appropriate Coordination and Licensing Application Forms.
2. System Design Information.
3. Funding Statement.
4. Proposed Implementation Schedule.
5. Justification of the Number of Channels.
6. Existing Frequency Statement.
7. Statement of Understanding on Official Letterhead.
8. Frequency Re-use form. (give backs)

Applicants for new frequencies in public safety allocations below 800 MHZ may also apply to the ARRC. Using the criteria described in Section 8.0 of the Plan, the ARRC will assign the appropriate point total to such applications and add them in order of points to any waiting list for relinquished frequencies.

7.0 APPLICATION EVALUATION PROCEDURES

The Arizona Regional Review Committee will review and evaluate each request based on the sufficiency of the information required in the following:

7.1 System Design

A brief statement of the intended use of the requested frequencies and how they will be integrated into the existing emergency and non-emergency operations will be required. The efficiency of 800 MHZ frequencies depends greatly upon the design and programming of the system itself to assist all public safety users in making all systems operate in an efficient manner. This is the reason this area is being included for review. Specific criteria regarding system parameters are in the section, "System Technical Design Requirements." (See 9.0)

Below are the different requirements for the system design. Additional detail follows, including sample calculations.

A. Listing of System Coverage and Service Area.

* Antenna height and power
* Definition of service area
* Calculation of service area
* Provide service area exhibit (map)
* Listing of control stations
* Frequency re-use
* Adjacent channel design
* Trunking requirements
* System loading requirements
* System engineering exhibit
  - Transmit output power
  - Type of intermodulation equipment and losses
  - Type of transmission lines and losses
  - Antenna model and gain
  - Ground elevation above mean sea level
  - Antenna centerline AGL
  - Height above average terrain of antenna centerline
  - Effective radiated power (ERP)
  - PSTN interconnect

7.2 Funding Statement

The applicant's commitment to implement the system ensures maintaining the efficient utilization of these 800 MHZ frequencies. The funding statement, which will be a resolution from the applicant's governing body, will include the method by which the system will be funded.

7.3 Implementation Schedule

The applicant will be requested to furnish a schedule detailing the time period required to implement the proposed communication system, from funding through turn-on and final acceptance. Also indicate if "slow growth" is required.

All agencies applying for frequencies in the 800 MHZ bands shall submit a letter of intent from the agency's Chief Administrative Officer verifying a fiscal and engineering commitment to the implementation and construction of a radio system within the parameters listed below:

* Submit to APCO/FCC coordination request and license application.

* Issuance of the RFP - 12 months after licensing.

* Award of contract - 24 months after licensing.

The Regional Review Committee anticipates that not all agencies or jurisdictions with allotted channels in the Plan will construct systems. The Regional Review Committee also recognizes that some agencies or jurisdictions may require more channels than are allotted in the Plan. The Plan envisions and the Regional Review Committee insists on a good faith showing of the intent from all agencies and jurisdictions with allotted channels. Therefore, channels will be considered available for allocation if licensing has not been initiated or specific plans have not been filed with the Regional Review Committee. The Plan has been in effect since September, 1991. The Regional Review Committee considers this sufficient time for agencies and jurisdictions to have developed a long range plan for use of these channels and to have provided notification to the Regional Review Committee.

7.4 Justify the Number of Channels

The following criteria shall be used to justify the number of channels requested:

* Population statistics that are substantial and projected trends that indicate the growth per year.

* Statistics on numbers of radio equipped personnel in the field at one time, both currently and projected, based on population growth statistics or other qualified factors such as traffic analysis.

* The applicant's request must meet FCC rules for channel loading.

7.5 Existing Frequency Statement

The applicant will provide an explanation of how existing frequencies will be used by the applicant and a listing of the frequencies (give backs) to be released for re-use. Time frames for the release of frequencies for reassignment should be included in the implementation schedule submitted with the request.

Commitments to release channels shall become part of the Regional Plan and released channels shall be assigned to qualified agencies in accordance with the National/Regional Plan commitments. Letters of commitment must be provided by the applicant giving up the frequencies to the ARRC. Reassignment to give back frequencies will be made part of the plan.

7.6 Evaluation Criteria

The criteria, when instituted, incorporates a filing window concept which will provide for the evaluation of all applications for available spectrum within a set time period. The evaluation is a sequence of events that will be followed in the allocation of the six megahertz of 800 MHZ spectrum. This process follows the guidelines established under the National Plan.

The allocation is placed in the frequency pool. If frequencies are available in the pool (a second iteration of the evaluation could occur if all frequencies are not allocated on the first iteration),

a window opening announcement is made. The first window period will be thirty days with late applications rejected. The second window will open upon completion of processing of applications received in the first window period. Applications are received and reviewed during the window period. The evaluation will result in the award of a score for each application. That score is the total of the points awarded in seven categories, with a maximum possible score of 1000 points.

The six categories are as follows:

1. Service (maximum score, 350 points). Each of the eligible services has a predetermined point value. That point value is multiplied by ten (10) to determine the score for the Service Category. An applicant with multiple services will be scored on the basis of the percentage that each service represents of his total system. That is, a system that is 50 percent police and 50 percent local government (school administration) would be awarded the total of 50 percent of the point value for police plus 50 percent of the point value for school administration.

2. Intersystem Communications (maximum score, 100 points). The application is scored on the degree of interoperability that is demonstrated, with a range of points from 0 to 100. This category does not rate the application on the inclusion of the mandated five common channels for interoperability. This category does rate the application on its proposed ability to communicate with different levels of government and services during times of emergency.

3. Loading/Geographic Efficiency (maximum score 200 points). Those applicants that have demonstrated that they are part of a cooperative, multi-organizational system and show Geographic Efficiency will be scored on a range of 0 to 150 points depending on the extent of cooperation and Geographic Efficiency; the ratio of mobiles to area covered and the channel reuse potential. The ratio of mobiles to area covered measures the level of Geographic Efficiency that a system demonstrates. The higher the ratio (mobiles divided by square miles of coverage), the more efficient the use of the frequencies. An expansion of an existing 800 MHZ system will be scored on a range of 0 to 50 points, depending upon the

degree of expansion. A system could be an expansion of an existing 800 MHZ cooperative system, and show a high ratio of Geographic Efficiency which could result in receiving the combined point value for a maximum value of 200 points.

4. Spectrum Efficient Technology (maximum score, 100 points). This category scores the application on the degree of spectrum efficient technology that the system demonstrates. A point value range of 0 to 100 points can be awarded for this category. A trunked system would be considered a "spectrum efficient technology" as well as any technological systems feature which is designed to enhance the efficiency of the system and provide for the efficient use of the spectrum.

5. Systems Implementation Factors (maximum score, 50 points). This category scores the application on two factors, budgetary commitment and planning completeness. The degree of budgetary commitment is scored on a range of 0 to 25 points. An application that demonstrates a high degree of commitment in funding the proposed system will receive the higher score. Each application will be scored on the degree of planning completeness with a range of scoring from 0 to 25 points. Applications must include a timetable for the implementation of the communications system or systems.

6. Give backs (maximum score, 200 points). The application is scored on two factors: the number of channels given back and the extent of availability of those channels to others. The greater the number of channels given back, the higher the score will be, with a range of 0 to 100 points. The greater the availability of the "give backs", the higher the score will be for this factor, up to a maximum of 100 points. This point system will depend on whether the "give back" frequency is a co-channel frequency or if the "give back" frequency is a single user. The applicant shall submit a letter indicating frequency(s) being given back, authorizing signature, and date that the "give back" frequency(s) will take effect.

Points are totaled for each application and the applications are prioritized by the Arizona Regional Review Committee. The frequency pool is allocated and the Arizona Regional Plan is updated to reflect the frequency assignments.

System implementation is monitored by the Arizona Regional Review Committee which determines if progress is being made. If progress is not made, the licensee is warned of the consequences of his lack of progress. If continued monitoring indicates that sufficient progress is still not being made, the Federal Communications Commission (FCC) may be notified of the non-compliance and the licensee will be notified by the FCC of pending action that may result in withdrawal of their license. The notified licensee can appeal this action or can allow the license to be withdrawn. If the allocated frequencies are withdrawn, they are added back to the frequency pool.

7.7 Appeal Process

Throughout the frequency allocation process, applicants are given the opportunity to appeal decisions which have caused rejection of their application. The appeal process has two levels: the Arizona Regional Review Committee (ARRC) and the Federal Communications Commission (FCC). An applicant who decides to appeal a rejection should file the appeal with the ARRC within 45 days from notification of rejection. If the applicant is not satisfied with the ARRC's final decision based on the appeal, the applicant may file an appeal with the FCC. The FCC's decision will be final and binding upon all parties.

7.8 Service Point Rating

	Minimum Value	Maximum Value
Local Government		
Transit Systems	5.0	30.0
Utility Operations	5.0	30.0
School Boards	0.0	20.0
Administration	0.0	25.0
Maintenance	5.0	25.0
Security	5.0	25.0
Other	0.0	25.0
Primary Police	35.0	35.0
Fire	35.0	35.0
Highway	10.0	30.0

7.8 Service Point Rating (cont.)

Forestry		
Conservation	10.0	35.0
Fire	15.0	35.0
Medical Services		
Hospitals	0.0	20.0
Invalid Coach	0.0	20.0
Physicians	0.0	10.0
Rescue - BLS & ALS	30.0	35.0
Physically Handicapped	0.0	20.0
Veterinarians	0.0	5.0
Disaster Relief Organization	5.0	20.0
School Buses		
Private Under Contract	0.0	10.0
Municipal Operated	0.0	20.0
Part of OEM EVAV	5.0	35.0
River/Lake/Beach Patrols	0.0	30.0
Isolated Areas	0.0	15.0
Communications		
Standby Facilities	0.0	25.0
Repair of Facilities	0.0	25.0

8.0 EXISTING FREQUENCIES

The Arizona Regional Plan encourages the surrendering of existing frequencies in the VHF and low UHF range by applicants for the 800 MHZ spectrum. The ARRC will prioritize applicants for surrendered VHF and low UHF frequencies. This committee will then recommend any available frequency for the use of the highest priority applicant. This recommendation must be consistent with the frequency's normal service category, the applicant's eligibility within that service, and the technical way in which the frequency will be used. The ARRC will recommend approval of the license application by the appropriate frequency coordinator.

The ARRC will evaluate applications based upon the criteria established in Part 47 CFR, Part 22.504 and Part 90 of the Federal Communications Commission Rules and Regulations.

8.1 General Re-assignment Philosophy

Because of the demographic and geographic makeup of Arizona, the Arizona Region Plan encourages the following general frequency usage:

a. 150-160 MHZ: For reassignment in rural, varied topography, wide area applications. Discourage long term usage in the Phoenix Metropolitan Statistical Area (MSA).

b. 450-470 MHZ: For reassignment primarily within the MSA and wide area systems. Usage at high elevations and high effective radiated power outside of the MSA, where there is a high potential for interference to those within the MSA is to be discouraged with the exception of wide area services.

c. 800 MHZ: It is felt that few existing frequencies at 800 MHZ will be surrendered. Also, because of propagation characteristics and the technical criteria for frequency reuse at 800 MHZ, these frequencies will be treated the same as all other 800 MHZ frequencies in their assignment.

d. Frequency usage within the MSA is to be encouraged within the 450-470 MHZ and 800 MHZ allocations.

8.2 Point System Overview

The Arizona Regional Plan establishes a system for assigning points in order to prioritize applications for reassignment of surrendered frequencies. A total of 575 points is possible. The components of the point total are dependent upon:

a. Minimum antenna height above average terrain.

b. Minimum use of effective radiated power.

c. Minimizing coverage outside the area of operation.

d. Use of patterned antennas.

e. Location of the transmitter in relation to the applicant's area of operation.

f. Frequency band in relation to the MSA.

g. The size of the area of operation.

h. Frequency usage as control, mobile, base, or mobile relay.

I. The population of the political jurisdiction making the application.

8.3 Prioritizing Point System

Criterion	Methodology	Max Points Max
Antenna Height Above Average Terrain (HAAT)	Optimum HAAT divided by design HAAT times 50. (See note 1)	50 pts.
Effective Radiated Power (ERP)	Optimum ERP divided by design ERP times 50. (See note 2)	50 pts.
Coverage	Area of Operations divided by Reliable Service Area times 100. (See note 3)	100 pts.

Radiation Pattern	Area of Operations sector width, in degrees divided by the total sector covered by the antenna system, times 75.	75 pts.
Location	Subjective evaluation of the selected site with respect to the intended operating area.	30 pts.
Loading	1 point per unit	70 pts.
Sharing	25 points per entity or service (Police, Fire, LG).	100 pts.
Band Plan	VHF outside MSA	100 pts.
	UHF inside MSA	100 pts.

8.4 Band Plan

Case 1. The frequency is within the low UHF range - if the station:

Criterion	Raw Points
a. will be used primarily or wholly within the MSA,	8
b. will be used as mobile only or mobile/control,	7
c. has an area of operation less than 500 square miles,	6
d. jurisdiction serves a population fewer than 50,000,	5
e. jurisdiction serves a population more than 50,000,	4
f. has an area of operation more than 500 sq mi.	3

g.	is used as base station or mobile relay,	2
h.	is outside of the MSA.	1

Case 2. The frequency is within the VHF band - if the station:

Criterion		Raw Points
a.	will be used primarily or wholly outside of the MSA,	8
b.	will be used as mobile only or mobile/control,	7
c.	area of operation is more than 500 square miles,	6
d.	jurisdiction serves a population of more than 50,000,	5
e.	jurisdiction serves a population of fewer than 50,000,	4
f.	area of operation is less than 500 square miles,	3
g.	is used as a base station or mobile relay,	2
h.	is used primarily or wholly within the MSA.	1

In order to accentuate band propagation characteristics in this prioritizing process, a weighted schedule will be used. The maximum number of raw points is 26 and the minimum number of raw points is 10. The weighted points are derived from the following schedule:

Raw Points	Weighted Points
26	100
25	95
24	90
23	85
22	80
21	75
20	70
19	65

Raw Points	Weighted Points
18	60
17	55
16	50
15	45
14	40
13	35
12	30
11	25
10	20

- NOTES -

Note 1: Optimum HAAT = d times d/2
Where HAAT is in feet and d is the distance in miles to the Operating Area limit. HAAT shall be computed in accordance with Part 90.309(a)(4) of the FCC rules.

Note 2: Optimum ERP will be that ERP which provides an

Alpha of 37 dBu for VHF high band or 39 dBu

for UHF at the Operating Area limit.
(Alpha = 36.6 + 20 log f + 20 log d)
Where f is the frequency in MHZ and d is the distance in miles.

Note 3: In VHF high band, 37 dBu will be used and in the 450-470 MHZ band, 39 dBu will be used for computing the Reliable Service Area. Part 22.504 of the FCC's rules applies.

9.0 SYSTEM TECHNICAL DESIGN REQUIREMENTS

9.1 Coverage Limitation - Antenna Height and Power

System coverage or service area is limited to geographical boundaries in order to maintain maximum frequency reuse within the region. The intent is to restrict the area of radio coverage to the actual jurisdictional boundaries. Agencies requesting new or additional channels will have their proposed system design evaluated by the Arizona Regional Review Committee. Any agency requesting a transmitter location not centrally located within its jurisdiction must include in their request adequate justification for such placement. Transmitter placement and antenna radiation patterns must be chosen to maintain radio system coverage within the jurisdictional boundaries of the entity making the application.

Agencies with service areas outside their political boundaries may request extended system coverage. Such requests for extended coverage must be accompanied by written justification, including an Intergovernmental Agreement covering all involved parties.

Extended coverage systems will not be authorized unless approved by the Arizona Regional Review Committee. Favorable consideration will be given to those extended coverage systems which are made available for use by eligibles other than the licensee.

A licensee may apply to utilize one of their authorized base/mobile frequencies as a point-to-point channel pair. This usage must be within the licensee's defined service area, or extended service area, if authorized. Channel loading requirements still apply to a channel used for point-to-point communications.

9.2 Definition of Service Area

Radio System Coverage for "Service Area" is defined as the boundary where predicted signal strength falls to 41 dBu. System parameters must be modified to make sure that the location where the actual service strength falls to 41 dBu is located near the actual service area boundaries, and the signal strength must fall to 40 dBu or below at a point three (3) miles beyond this point.

9.3 Calculation of Service Area

Three factors must be known to determine service area: (1) the strength of the received signal, i.e., "received signal strength," (2) antenna height above average terrain (HAAT), and (3) the effective radiated power (ERP). Received signal strength has been defined (41dBu), leaving the other two factors that can be modified to achieve the desired coverage. The resulting calculations determine the radius of coverage from the transmitting site. An example of these calculations is shown in the appendix.

It will be permissible for agencies requesting system authorization to determine the distance to the 41 dBu boundary on a radial-by-radial basis with a minimum of eight equally spaced radials at 45 degree intervals, beginning at true North, and plot the service area boundary based on these points. This plot should be submitted with the request for frequencies to show that radio coverage area outside the agencies' political boundary is being kept to a minimum. In any case, a minimum antenna height of 100 feet above ground elevation will be necessary to provide clearance with roof lines and tree tops. Any agency with its service area radius of eight (8) miles - regardless of the size of its jurisdiction - providing interference protection for existing co-channel and adjacent channel systems is sufficient.

9.4 Responsibility for Calculations

It will be the responsibility of the requesting agency to calculate the proposed radio coverage service area and to validate the accuracy of the calculation. It is the requesting agency's responsibility to provide accurate system parameters and determine "Height Above Average Terrain" radials as specified in 90.309(a)(4) of the FCC's Rules and Regulations.

9.5 Proposed Service Area Exhibit

An agency shall provide, along with its request for frequencies, an exhibit showing the calculated radio coverage service area and the agency's jurisdictional boundaries as well as adjacent city, town, county and state boundaries. The boundaries must be drawn to scale on a 1:250,000 USGS map or suitable scaled computer drawn maps, with a title block including the name of the requesting agency, and the following transmitter information: antenna height, height above

average terrain, effective radiated power, latitude, longitude, ground elevation of each transmitting site, and the distance to the service area boundary in miles, as calculated and indicated on the map.

9.6 Control Station (Limit on Effective Radiated Power)

Control/Base stations shall conform to the radio service area 41 dBu boundary requirement.

9.7 Frequency Reuse

Careful adherence to the system technical design requirements of this Plan will allow for maximum co-channel usage within this region. Because of the close proximity of adjacent channel frequencies, planning for adjacent channels must be similar to the considerations required for co-channel system design.

An agency requesting frequencies that have been previously licensed within this region or an adjacent region must demonstrate that the proposed system will provide, an "existing to proposed" signal margin of at least 25 dB at the closest point to the service area boundary of the existing system.

As part of this plan, distances between transmitter for co-channel reuse will not be held to seventy (70) mile separation. Separation of co-channel transmitters will be determined by the coverage needs of the applicant, natural barriers for separation, antenna patterning and limited ERP's where possible. System tests and/or propagation studies may be provided to establish minimum distances for separation.

9.8 Adjacent Channel Design

Proposed systems must also be designed for minimum interference operation with adjacent channel licensees. The method of determination is identical to that of co-channel design as detailed elsewhere in this Plan, with the exception of the existing to proposed signal margin criteria. In the case of adjacent channel systems, this margin will be reduced to 15 dBu, except that if all adjacent agencies are meeting the narrowband 12.5 KHZ emission mask, no adjacent channel protection will be required. All other calculations will remain the same.

It should be noted that the FCC has adopted technical standards for transmitters which will reduce adjacent channel interference and permit closer geographically adjacent channel use. However, the FCC has not adopted improved receiver technical standards. It is the position of the Commission that receivers do not cause interference, nor do they threaten effective operation of the public safety network, as would substandard transmitters.

Because of the demand for limited spectrum, it is the intent of this Plan to provide efficient spectrum utilization within current technological capabilities. Agencies are encouraged to carefully consider the receiver selectivity specifications of any equipment to be purchased for use in the 821-824/866-869 MHZ band. Poorly designed receivers may cause serious degradation of the system in areas using adjacent channels.

9.9 Absolute Mileage Separation

In any case where the radio service areas of adjacent channel systems are separated by at least 70 miles, or co-channel systems separated by 100 miles, the interference studies as set forth in this Plan are unnecessary because of free space and terrain losses.

9.10 Trunking Requirements

As referenced in the "National Plan", trunking is mandated for any new system with more than four channels in the 800 MHZ band when located at a single transmitting site. Requests for exceptions will be considered by the Arizona Regional Review Committee for mobile data use, encryption, and telemetry stations. Other requests for waiver of the trunking requirement will be considered after presentation of evidence by the requesting agency. Approval to waive the trunking requirement will be based on the individual merits of the presentation, and will be subject to FCC final approval.

9.11 System Loading Requirements

An agency requesting a single frequency to replace a frequency currently in use, that will be turned back for reassignment, will not be required to meet loading requirements in order to obtain the new frequency. However, if the single frequency is not loaded to

more than 50 units within three years after the license is granted, the frequency will be available for assignment to other agencies on a shared basis. Shared use of a frequency is not interference free. Users of single frequency systems will be required to provide the ARRC "confirmation of loading" for mobiles and portables as a method of validating system loading. This required updating shall be done annually until minimum loading has been completed.

This exception shall apply to agencies which have only one system and a single frequency. Agencies requesting additional frequencies or having multiple systems shall comply with the loading standards as outlined in the loading tables or provide a "Traffic Loading Study" that meets the criteria as listed in the loading tables.

LOADING TABLES

PUBLIC SAFETY		LOCAL GOVT./OTHER	
Channels	Units/Channel	Channels	Units/Channel
1 - 5	70	1 - 5	80
6 - 10	75	6 - 10	90
11 - 15	80	11 - 15	105
16 - 20	85	16 - 20	120

9.12 System Engineering Requirements

All requests to the ARRC for frequencies must include sufficient data for the Committee to be able to determine proposed system operating parameters and shall be considered a system engineering exhibit.

The system engineering exhibit must show:

1. Transmitter output power.

2. Type of cavities(duplexers, combiners and isolators) their insertion losses and all other associated losses.

3. Type of transmission line and associated loss (including jumpers).

4. Antenna model, gain, downtilt, pattern plots.

5. Ground Elevation Above Mean Sea Level.

6. Antenna centerline AGL.

7. Height above average terrain of antenna center line.

8. Effective Radiated Power as determined by items 1 through 4.

9. Additional "receiver only" locations.

10. CTCSS coding information on both conventional and trunked systems.

9.13 Average Elevation Exhibit

An additional exhibit showing the average elevation of the terrain of each of the eight main radials is required. If an outside source is used for the calculation of average terrain, a copy of this report may be substituted for the average elevation exhibit.

9.14 Public Switched Telephone Network (PSTN) Interconnect Use

The applicant of a 800 MHZ trunked radio system may use an interconnect to Public Switched Telephone Network for systems implemented under this Regional Plan. However, the use of cellular telephones (or other telephone interconnect systems) for automatic interconnect to the Public Switched Telephone Network is recommended. Utilization of cellular telephone networks will not impact radio systems implemented under this plan.

9.15 Frequency Allocation List

The frequency allocations contained within this Plan are based on the current and projected needs and system loading through the year 2010. The basis for this frequency allocation listing was taken from a population growth study done by Mountain West Research, completed June 6, 1989. All cities in Arizona with a population above 10,000 in the 1980 Census were extrapolated using county population growth projections for the year 2010. Channel allocation per town is based on one channel per 25,000 population, with a minimum of two channels.(Appendix IV.)

All regional systems being installed by larger entities such as Counties or State are required to allow shared secondary use of the regional system for rural users. All large area systems are encouraged to solicit participation by the rural entities to better facilitate spectrum efficiency, and to provide better communications capability for the rural users. (Refer to Appendix IV for frequency listing.)

9.16 General Standards

All authorizations under this plan shall utilize equipment that complies with all applicable technical standards of the Federal Communications Commission.

APPENDICES
Rev. 11/97

APPENDIX I

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Karl Hartmetz
Buckskin FD
Rt. 2 Box 721
Parker 85344

Jim O'Melia
Motorola C & E
2737 W. Baseline Suite 22
Tempe 85283

John Atlee
US DEA
3150 Winsor Suite 202
Yuma 85365

Max Grigg
General Electric
3020 E. Camelback Suite 365
Phoenix 85016

Victor Ortiz
Santa Cruz Sheriff's Office
P.O. Box 1150
Nogales 85621

Lee Roberts
AT & SF Railway Police
P.O. Box 4247
Phoenix 85030

Skip Luttrell
Surprise PD
12604 Sante Fe
Surprise 85374

Judy Robertson
Mesa General Hospital
515 N. Mesa Dr.
Mesa 85201

Roy Heatherly
Mesa Lutheran hospital
525 W. Brown
Mesa 85201

Mark Kishbaugh
Picture Rocks FD
6625 N. Sandario Rd.
Tucson 85743

Robert Schmidt
Apache Junction FD
3955 E. Superstition
Apache Junction 85219

Leon D. Dame
Tucson Estates FD
3195 S. Kinney Rd.
Tucson 85713

Eddie Jenkins
San Luis DPS
P.O. Box 3740
San Luis 85349

Audrey Martin
Tri Valley Ambulance
35810 Antelope Dr.
Welton 85356

APPENDIX II

ARRC BYLAWS

Rev. 2 11/97

BYLAWS OF THE ARIZONA REGIONAL REVIEW COMMITTEE

ARTICLE I - NAME AND PURPOSE OF ORGANIZATION

The name of this organization shall be the "Arizona Regional Review Committee", abbreviated "ARRC". This committee shall exist under authority of the Arizona Regional Public Safety Plan (ARPSP), as adopted by the Federal Communications Commission (FCC) under PR Docket 91-143, on September 4, 1991.

The purpose of this committee is to function as a frequency coordinating and advisory body for 800 MHZ Public Safety channels approved by the FCC under the National Public Safety Advisory Committee, known as the NPSPAC plan. This plan was adopted by the FCC on November 24 , 1987. It shall also function as a coordinator and clearing house for reallocated channels, known as "give backs" in other Public Safety spectrum outside the NPSPAC channels. All functions of this committee shall be in accordance with the ARPSP, as amended.

ARTICLE II - COMMITTEE MEMBERSHIP

A. Composition

First election of the 11 member ARRC was conducted at an organizational meeting held on August 21, 1991. These members shall remain on the Committee until resignation, removal for cause, or the member leaves their current public safety eligible agency. Removal for cause shall require a majority vote of the quorum at an open general meeting.

B. Member Replacement

A vacancy on the Committee shall be filled through nominations at the next regular scheduled, publicized, open public meeting, and voted upon thereat. A majority of votes of the voting agencies (one vote per eligible agency) shall be required to elect to the Committee.

C. Removal for Cause

Members may be removed for cause for non-participation under the following guidelines:

1) Removal

Members will be required to attend one-half of the meetings of the Committee or their respective subcommittee through the year. Attendance at fewer than one-half of these meetings shall be cause for review of participation by the Executive Committee during its meeting prior to the July ARRC meeting.

Should the Executive Committee find that a member has not been participating at the level required the Excomm will report to the general committee at the July meeting and schedule an open public meeting to allow voting for the removal for cause of the non-participating member. Prior to this meeting the ARRC Chairperson shall correspond with the member in question, informing the member of the committee's intention to remove for cause and advising the member of the date of the meeting at which the action will take place.

2) Filling the Vacancy

The vacancy created by removal of a member for cause shall be filled, if possible, at the same open public meeting at which the removal is approved.

Nominations for the vacancy will be taken from the floor as stipulated in Article III.C.1.b.

ARTICLE III - OFFICERS OF THE ARRC

A. Composition

The officers of the ARRC shall consist of a Chairperson, Vice-Chairperson and combined Secretary/Treasurer.

B. Election of Officers

Elections shall be held annually at the regularly scheduled meeting of the ARRC in September. Nominations shall be made at the regular scheduled meeting in July.

C. Election Procedures

1. Nominations

a) Nominations Committee

A nomination sub-committee shall be appointed, with the immediate past chairperson of the ARRC as chair-person, or in the event of their unavailability, the previous past chairperson. If no past chair-person is available, the Executive Committee shall serve as the nominating subcommittee.

b) Floor nominations

Nominations may also be made from the floor at the nominations meeting. Nominees must be present at this meeting and have the commitment of their sponsor to fully participate.

2. Election Rules

The election shall be conducted openly, with a majority of ARRC quorum member votes required for election.

ARTICLE IV - OPERATING RULES OF THE ARRC

A. Meetings

Regular meetings of the ARRC shall be scheduled in coordination with the scheduled meetings of the Arizona APCO, Inc. chapter. In addition, two semi-annual meetings scheduled in conjunction with Arizona APCO shall be designated as "Open Public Meetings" with open participation from the public safety community. Each public safety entity shall be

apportioned one vote at each open, public meeting. Designated alternatives and representatives shall be identified prior to the meeting.

B. Conduct of Meetings

1. Presiding

Meetings shall be conducted at the appointed time and place by the Chairperson, or in their absence, the Vice-Chairperson, or in their absence, the Secretary/Treasurer.

2. Procedural

Meetings shall be conducted according to Robert's Rules of Order.

3. Agenda

As a minimum, a financial statement shall be read to the membership, and subcommittee reports presented. Applications for NPSPAC frequencies which have been previously reviewed and approved by the appropriate subcommittees shall be voted upon, and approved by a two-thirds vote of the quorum present.

4. Quorum

The ARRC may conduct business at any publicized, scheduled meeting, with a quorum consisting of a minimum of six members present, which shall include at least one officer. Voting by proxy, with written authorization, shall be permitted.

5. Voting via Telecommunications

In special situations relating to license applications, vote by telephone and confirmed by fax or e-mail may be made provided ALL members are contacted by voice and fax or e-mail, and given a chance to respond with a vote. A two-thirds vote of all members is required for approval of the issue. Results of the telephone/fax/e-mail vote

must be recorded in the minutes of the following meeting.

ARTICLE V - EXECUTIVE COMMITTEE

A. Composition

The Executive Committee, to be known as the "Excomm", shall consist of the current Chairperson, Vice-Chairperson, Secretary/Treasurer, and immediate past Chairperson. Subcommittee chairpersons may be asked to attend meetings of the Excomm as required.

B. Meetings

Meetings shall be called a minimum of three times annually for the purpose of conducting business of the ARRC, and for review of subcommittee operations and work. The meetings shall be called and scheduled by the ARRC chairperson.

ARTICLE VI - SUBCOMMITTEES

A. Composition of Standing Subcommittees

There shall be five (5) standing subcommittees of the ARRC. These shall include:

1. 800 MHZ NPSPAC Application Review
2. VHF/UHF/800 MHZ Frequency Reassignment
3. Bylaw Review
4. Nomination Recommendations (See Article III.D.1.a)
5. Regional/Interregional Interoperability Coordination

B. 800 MHZ NPSPAC Application Subcommittee

1. Function

The NPSPAC Application Subcommittee shall meet at least monthly if applications are pending. The subcommittee shall make recommendations on applications in a timely manner to the ARRC for voting upon at the next regularly scheduled ARRC meeting. Evaluations shall be performed

in a manner consistent with the criteria established in the Arizona Regional Public Safety Plan (ARPSP), as amended.

2. Necessary Delays

Application evaluations may be delayed if, in the subcommittee's opinion, insufficient information was provided to make a determination. In such case, the subcommittee chairperson shall draft a letter to the applicant within ten (10) days of the initial subcommittee review, of the insufficiency, and shall request specific information necessary to make a determination. If such requested information is not provided within thirty (30) days of the mailing of such letter, the application shall be deemed defective, and returned to the applicant. Approval recommendations shall require a unanimous vote of the subcommittee members present at the evaluation meeting. Rejection of an application may be appealed within forty-five (45) days as per paragraph 7.7 of the ARPSP.

3. Mixed Frequency Applications

The subcommittee shall return applications for systems requiring both NPSPAC and non-NPSPAC frequencies with the suggestion that the applicant request only NPSPAC frequencies. The subcommittee shall actively work with the applicant agency to create a system utilizing NPSPAC frequencies.

4. Conflict of Interest

Any ARRC member shall be disqualified from evaluating and/or voting on an application submitted by their sponsor political subdivision, or non-political entity. In this case, the member-applicant shall act only as an advisor, providing necessary information upon which to make a recommendation, and shall not be considered a member of the subcommittee or the ARRC for voting purposes.

4. Approval

Recommendation of the subcommittee shall be voted upon at the next regularly scheduled meeting of the ARRC, and shall be approved with a two-thirds vote of the quorum.

C. VHF/UHF/800 MHZ Frequency Reassignment Subcommittee

1. Function

This subcommittee shall meet at least monthly if applications for "give back" frequencies are pending. The subcommittee shall keep a chronological listing of agency requests for "give back" channels. Each request for channels shall be accompanied by a statement of need. a separate list shall be maintained for each primary public safety frequency band.

2. Evaluations

The subcommittee shall evaluate such applications on their merits, in conformance with the ARPSP, and make a recommendation in a timely manner to the ARRC when frequencies become available. Where there are multiple applications with relatively equal merit, the subcommittee shall give preference to the longest standing application.

3. Necessary Delays

Recommendations from the Subcommittee to the ARRC may be delayed if there is insufficient data submitted to make a determination. The same procedure shall be followed as in Article VI.B.2. If insufficient information is forthcoming, an application for a "give back" channel may be dismissed and returned to the applicant.

4. Conflict of Interest

Any ARRC member shall be disqualified from evaluating and/or voting on an application submitted by their sponsor political subdivision, or non-political entity. In this case, the member-applicant shall act only as an

advisor, providing necessary information upon which to make a recommendation, and shall not be considered a member of the subcommittee or the ARRC for voting purposes.

5. Approval

Recommendation for approval by the subcommittee shall be unanimous, and shall be voted upon at the next regularly scheduled meeting of the ARRC, and shall be approved by a two-thirds vote of the quorum.

D. Bylaw Review Subcommittee

The Bylaw Review Subcommittee shall meet at least semi-annually to review any needed changes to the Bylaws, and draft such changes for presentation to the Excomm.

E. Nominations Recommendation Subcommittee

The Nominations Recommendation Subcommittee shall meet annually prior to the nominations meeting for Excomm officers, and shall present a selected slate of candidates as nominees for Chairperson, Vice-Chairperson, and Secretary/Treasurer to the ARRC membership at the nominations meeting.

F. Regional/Interregional interoperability Subcommittee

1. Meetings

The Regional/Interregional interoperability Subcommittee shall meet monthly, if there is an application for NPSPAC channels pending.

2. Common Calling/Interoperability Recommendations

The subcommittee shall make a recommendation as to whether an applicant should be required to place in service "Common Calling" and/or "Interoperability" stations as a condition of application approval. Specific recommendations shall be made in writing to the ARRC Chairperson. Such recommendation shall be made a part of the final vote by the ARRC for approval of a NPSPAC application.

3. License Monitoring

The subcommittee shall monitor licensing activity in surrounding regions to ensure compatibility of frequency usage, and coordinate "Common Calling" and "Interoperability" installation and monitoring.

4. Border Compatibility

The subcommittee shall also monitor FCC Regulations and coordinate with the nation of Mexico to ensure compatibility of channel usage and "Common Calling" and "Interoperability" along the U.S./Arizona and Mexico border.

G. Subcommittee Chairpersons

The chairpersons of the standing subcommittees shall be appointed by the ARRC Chairperson, with concurrence of the majority of the Excomm present at a scheduled Executive Committee meeting.

H. Membership

There shall be a minimum of three (3) members on the "800 MHZ NPSPAC Application Review" and "VHF/UHF/800 MHZ Frequency Reassignment" standing subcommittees, including the chairperson. Other subcommittees shall consist of a chairperson and any other members the chairperson deems appropriate. Members of all standing committees may be chosen by the subcommittee chairperson, with the approval of the ARRC chairperson.

A minimum of two (2) members of the "800 MHZ NPSPAC Application Review" and "VHF/UHF/800 MHZ Frequency Reassignment" subcommittee, including the chairperson, are required to be in attendance at those subcommittee meetings. This shall constitute a quorum for those subcommittees.

I. Ad-Hoc Subcommittees

1. Ad-Hoc Subcommittee Creation

Ad-Hoc subcommittees may be created at any time for such purpose as the Excomm deems necessary. Ad-Hoc subcommittees

shall be appointed for a specific time period, but not to exceed one year in duration.

2. Composition

Ad-Hoc subcommittee chairpersons shall be appointed by the ARRC chairperson, with the consent of a majority of the Excomm present at a regularly scheduled meeting. An Ad-Hoc subcommittee may consist of any number of members.

ARTICLE VII - FUNDING

A. Funding Sources

The ARRC shall derive its funding indirectly from fees collected from applicants, distributed through the Arizona Chapter of APCO, Inc. In the event that such funding is not available, or is insufficient for the ARRC to carry out its assigned function, voluntary contributions may be requested from pending applications desiring assignment of frequencies.

Arizona APCO, Inc. has pledged to fund the ARRC up to $300 per fiscal year. Funds will be made available to the Secretary/Treasurer as needed by the APCO Treasurer.

B. Unavailability of Funding

Should there be an insufficiency of funds to carry out the functions of the ARRC, all applications pending shall be submitted to APCO without a recommendation, and operations of the ARRC shall cease until adequate funding becomes available.

ARTICLE VIII - MODIFICATION OF BYLAWS

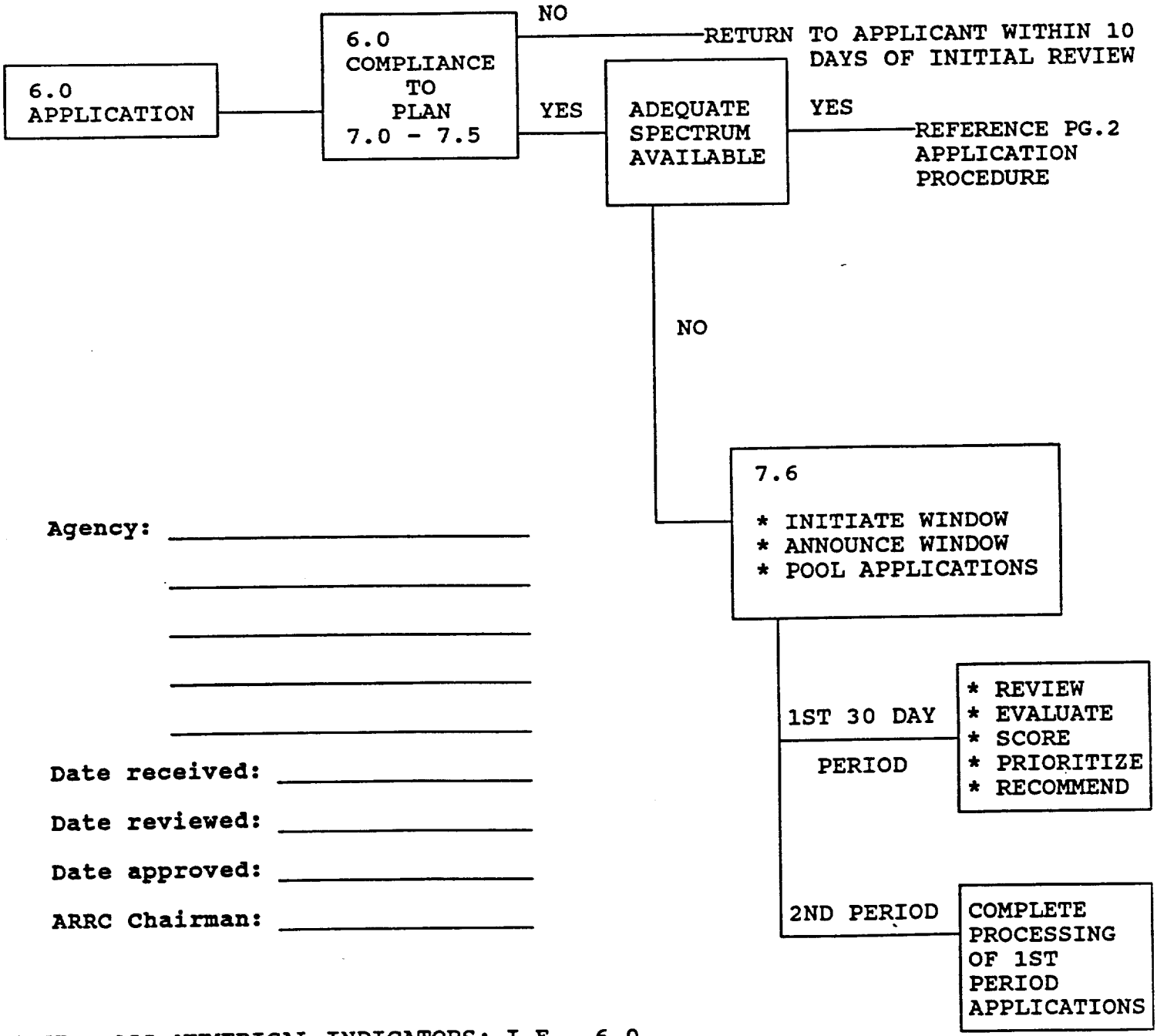
These Bylaws may be modified upon a two-thirds vote of the ARRC. Written copies of the proposed Bylaw amendment shall be presented to all ARRC members at least thirty (30) days prior to the next regularly scheduled meeting. a statement of recommendation, including both a majority and minority report if necessary, from the Excomm, shall be included with the mailing.

Voting on the proposed amendment shall take place at the next regularly scheduled meeting, provided a quorum is present. The Bylaw amendment shall become effective on the first day of the following month.

APPENDIX III

NPSPAC APPLICATION FORM

800 MHZ NPSPAC APPLICATION PROCEDURE



Agency: _____

_____

_____

_____

_____

Date received: _____

Date reviewed: _____

Date approved: _____

ARRC Chairman: _____

NOTE: ALL NUMERICAL INDICATORS; I.E., 6.0 REFER TO APPLICABLE PARAGRAPHS OF THE NPSPAC PLAN.

Max E. Grigg/01-16-92
NSPAC-2P.MAX
^Z

RECOMMEND APPROVAL TO ARRC:
___regional inter-operability concur (4.0)
___inter-regional inter-operability concur (5.0)
___applicable co-ordination forms (6.0,1)
___applicable FCC application forms (6.0,1)

SYSTEM DESIGN INFORMATION (6.0,2)
___antenna height and power (9.1)
___definition of service area (9.2)
___calculation of service area (9.3)
___service area map (9.5)
___control station requirement (9.6)
___adjacent channel design (9.8)
___trunking requirements (9.10)
___system loading requirements (9.11)

SYSTEM ENGINEERING EXHIBIT (9.12)
___transmit output power
___I/M equipment and losses
___transmission lines and losses
___antenna model and gain
___ground elevation above MSL
___antenna centerline AGL
___HAAT of antenna centerline
___effective radiated power (ERP)
___receiver only locations
___CTCSS coding information

___cellular telephone use (9.14)
___frequency allocation (9.15)
___funding statement (6.0,3)
___proposed implementation schedule (6.0,4)
___justification of number of channels (6.0,5)
___existing frequency statement (6.0,6)
___statement of understanding (NPSPAC) (6.0,7)
___frequency re-use/give-backs (6.0,8)
___co-channel interference (App II, p. 46)
___adj-channel interference (App II, p. 47)

WHEN LICENSED:
___track construction
___license date and call
___RFP deadline (12 mo)
___RFP award (24 mo)
___system turn-on
___system acceptance
___channel loading (3-5 yrs)

APPENDIX IV

FREQUENCY ALLOCATION LIST

FCC CHANNEL ALLOCATION
Revised 12/97

Channel Number	Mobile Frequency	Base Frequency	User
601	821.0125 Mz	866.0125 Mz	Mutual aid; NTL. CALLING
602	821.0375 Mz	866.0375 Mz	GUARD
603	821.0500 Mz	866.0500 Mz	Mutual Aid; TAC-6
604	821.0625 Mz	866.0625 Mz	GUARD
605	821.0750 Mz	866.0750 Mz	PIMA, PHOENIX
606	821.0875 Mz	866.0875 Mz	DOUGLAS
606	821.0875 Mz	866.0875 Mz	FLAGSTAFF
606	821.0875 Mz	866.0875 Mz	NOGALES
607	821.1000 Mz	866.1000 Mz	CAP
608	821.1125 Mz	866.1125 Mz	DOUGLAS
608	821.1125 Mz	866.1125 Mz	SIERRA VISTA
608	821.1125 Mz	866.1125 Mz	NAVAJO
609	821.1250 Mz	866.1250 Mz	MARICOPA
610	821.1375 Mz	866.1375 Mz	PRESCOTT
610	821.1375 Mz	866.1375 Mz	YUMA CITY
610	821.1375 Mz	866.1375 Mz	PIMA
611	821.1500 Mz	866.1500 Mz	COCHISE
611	821.1500 Mz	866.1500 Mz	MARICOPA*
612	821.1625 Mz	866.1625 Mz	TUCSON
612	821.1625 Mz	866.1625 Mz	MARICOPA*
612	821.1625 Mz	866.1625 Mz	COCONINO
613	821.1750 Mz	866.1750 Mz	SANTA CRUZ
613	821.1750 Mz	866.1750 Mz	MARICOPA*
613	821.1750 Mz	866.1750 Mz	LAKE HAVASU
614	821.1875 Mz	866.1875 Mz	TUCSON
614	821.1875 Mz	866.1875 Mz	MARICOPA*

Channel Number	Mobile Frequency	Base Frequency	User
615	821.2000 Mz	866.2000 Mz	MARICOPA*
616	821.2125 Mz	866.2125 Mz	TUCSON
616	821.2125 Mz	866.2125 Mz	MARICOPA*
617	821.2250 Mz	866.2250 Mz	MARICOPA*
618	821.2375 Mz	866.2375 Mz	TUCSON
618	821.2375 Mz	866.2375 Mz	MARICOPA*
619	821.2500 Mz	866.2500 Mz	MARICOPA*
620	821.2625 Mz	866.2625 Mz	GREENLEE
621	821.2750 Mz	866.2750 Mz	PHOENIX MDT
622	821.2875 Mz	866.2875 Mz	PEORIA
622	821.2875 Mz	866.2875 Mz	APACHE
623	821.3000 Mz	866.3000 Mz	PHOENIX
624	821.3125 Mz	866.3125 Mz	SCOTTSDALE
624	821.3125 Mz	866.3125 Mz	PIMA
625	821.3250 Mz	866.3250 Mz	PHOENIX*
626	821.3375 Mz	866.3375 Mz	DOUGLAS
626	821.3375 Mz	866.3375 Mz	Avail. in Maricopa Co.
627	821.3500 Mz	866.3500 Mz	PHOENIX*
628	821.3625 Mz	866.3625 Mz	DOUGLAS
628	821.3625 Mz	866.3625 Mz	Avail. In Maricopa Co.
628	821.3625 Mz	866.3625 Mz	NAVAJO
629	821.3750 Mz	866.3750 Mz	Statewide***
630	821.3875 Mz	866.3875 Mz	CAP
631	821.4000 Mz	866.4000 Mz	Statewide***
632	821.4125 Mz	866.4125 Mz	CAP

Channel Number	Mobile Frequency	Base Frequency	User
633	821.4250 Mz	866.4250 Mz	Statewide***
634	821.4375 Mz	866.4375 Mz	TUCSON
634	821.4375 Mz	866.4375 Mz	PHOENIX MDT
635	821.4500 Mz	866.4500 Mz	PRESCOTT
635	821.4500 Mz	866.4500 Mz	PHOENIX*
636	821.4625 Mz	866.4625 Mz	GUARD
637	821.4750 Mz	866.4750 Mz	STATE OF ARIZONA-STWIDE**
638	821.4875 Mz	866.4875 Mz	GUARD
639	821.5125 Mz	866.5125 Mz	Mutual aid; TAC-2
640	821.5375 Mz	866.5375 Mz	STATE OF ARIZONA-STWIDE**
641	821.5500 Mz	866.5500 Mz	GUARD
642	821.5625 Mz	866.5625 Mz	TUCSON
642	821.5625 Mz	866.5625 Mz	MARICOPA
643	821.5750 Mz	866.5750 Mz	MOHAVE
644	821.5875 Mz	866.5875 Mz	TUCSON
644	821.5875 Mz	866.5875 Mz	PHOENIX MDT*
645	821.6000 Mz	866.6000 Mz	PHOENIX*
645	821.6000 Mz	866.6000 Mz	COCONINO
646	821.6125 Mz	866.6125 Mz	PHOENIX*
646	821.6125 Mz	866.6125 Mz	TUCSON
646	821.6125 Mz	866.6125 Mz	LAKE HAVASU
647	821.6250 Mz	866.6250 Mz	SCOTTSDALE
648	821.6375 Mz	866.6375 Mz	Phoenix*
648	821.6375 Mz	866.6375 Mz	DOUGLAS
649	821.6500 Mz	866.6500 Mz	APACHE
649	821.6500 Mz	866.6500 Mz	PHOENIX*

Channel Number	Mobile Frequency	Base Frequency	User
650	821.6625 Mz	866.6625 Mz	PHOENIX*
650	821.6625 Mz	866.6625 Mz	COCHISE
651	821.6750 Mz	866.6750 Mz	NAVAJO
651	821.6750 Mz	866.6750 Mz	PIMA
651	821.6750 Mz	866.6750 Mz	PHOENIX*
652	821.6875 Mz	866.6875 Mz	PHOENIX*
653	821.7000 Mz	866.7000 Mz	GRAHAM
653	821.7000 Mz	866.7000 Mz	PHOENIX*
654	821.7125 Mz	866.7125 Mz	PHOENIX*
655	821.7250 Mz	866.7250 Mz	PHOENIX*
655	821.7250 Mz	866.7250 Mz	MOHAVE
656	821.7375 Mz	866.7375 Mz	PHOENIX*
657	821.7500 Mz	866.7500 Mz	PHOENIX*
658	821.7625 Mz	866.7625 Mz	PHOENIX*
659	821.7750 Mz	866.7750 Mz	PHOENIX*
660	821.7875 Mz	866.7875 Mz	PHOENIX*
661	821.8000 Mz	866.8000 Mz	Mesa*
662	821.8125 Mz	866.8125 Mz	TUCSON
662	821.8125 Mz	866.8125 Mz	MESA*
663	821.8250 Mz	866.8250 Mz	MESA*
664	821.8375 Mz	866.8375 Mz	MESA*
665	821.8500 Mz	866.8500 Mz	LA PAZ
666	821.8625 Mz	866.8625 Mz	TUCSON
666	821.8625 Mz	866.8625 Mz	PHOENIX MDT
667	821.8750 Mz	866.8750 Mz	Statewide***

Channel Number	Mobile Frequency	Base Frequency	User
668	821.8875 Mz	866.8875 Mz	CAP
669	821.9000 Mz	866.9000 Mz	Statewide***
670	821.9125 Mz	866.9125 Mz	PHOENIX*
671	821.9250 Mz	866.9250 Mz	PIMA
671	821.9250 Mz	866.9250 Mz	PHOENIX*
672	821.9375 Mz	866.9375 Mz	PHOENIX*
673	821.9500 Mz	866.9500 Mz	PIMA
673	821.9500 Mz	866.9500 Mz	PHOENIX*
674	821.9625 Mz	866.9625 Mz	PHOENIX*
675	821.9750 Mz	866.9750 Mz	PHOENIX*
676	821.9875 Mz	866.9875 Mz	MESA*
677	822.0125 Mz	867.0125 Mz	Mutual aid; TAC-3
678	822.0375 Mz	867.0375 Mz	MESA*
679	822.0500 Mz	867.0500 Mz	PHOENIX*
680	822.0625 Mz	867.0625 Mz	PHOENIX*
681	822.0750 Mz	867.0750 Mz	MESA*
682	822.0875 Mz	867.0875 Mz	MESA*
683	822.1000 Mz	867.1000 Mz	PIMA
683	822.1000 Mz	867.1000 Mz	MESA*
684	822.1125 Mz	867.1125 Mz	MESA*
685	822.1250 Mz	867.1250 Mz	YAVAPAI
685	822.1250 Mz	867.1250 Mz	PIMA
686	822.1375 Mz	867.1375 Mz	MARICOPA*
687	822.1500 Mz	867.1500 Mz	MARICOPA*

Channel Number	Mobile Frequency	Base Frequency	User
688	822.1625 Mz	867.1625 Mz	MARICOPA*
689	822.1750 Mz	867.1750 Mz	MARICOPA*
690	822.1875 Mz	867.1875 Mz	MARICOPA*
691	822.2000 Mz	867.2000 Mz	PIMA
692	822.2125 Mz	867.2125 Mz	MARICOPA
693	822.2250 Mz	867.2250 Mz	PIMA
694	822.2375 Mz	867.2375 Mz	MARICOPA
695	822.2500 Mz	867.2500 Mz	Statewide***
696	822.2625 Mz	867.2625 Mz	PHOENIX MDT
697	822.2750 Mz	867.2750 Mz	Statewide***
698	822.2875 Mz	867.2875 Mz	MARICOPA*
699	822.3000 Mz	867.3000 Mz	MARICOPA*
700	822.3125 Mz	867.3125 Mz	MARICOPA
701	822.3250 Mz	867.3250 Mz	Statewide***
702	822.3375 Mz	867.3375 Mz	MESA
703	822.3500 Mz	867.3500 Mz	PIMA
704	822.3625 Mz	867.3625 Mz	MARICOPA
705	822.3750 Mz	867.3750 Mz	PIMA
706	822.3875 Mz	867.3875 Mz	Avail. In Maricopa Co.
707	822.4000 Mz	867.4000 Mz	Statewide***
708	822.4125 Mz	867.4125 Mz	PHOENIX
709	822.4250 Mz	867.4250 Mz	Statewide***

Channel Number	Mobile Frequency	Base Frequency	User
710	822.4375 Mz	867.4375 Mz	MARICOPA
711	822.4500 Mz	867.4500 Mz	PIMA
712	822.4625 Mz	867.4625 Mz	GUARD
713	822.4750 Mz	867.4750 Mz	STATE OF ARIZONA-STWIDE**
714	822.4875 Mz	867.4875 Mz	GUARD
715	822.5125 Mz	867.5125 Mz	Mutual aid; TAC-4
716	822.5375 Mz	867.5375 Mz	MESA
717	822.5500 Mz	867.5500 Mz	Statewide***
718	822.5625 Mz	867.5625 Mz	CAP
719	822.5750 Mz	867.5750 Mz	Statewide***
720	822.5875 Mz	867.5875 Mz	Avail. in Maricopa Co.
721	822.6000 Mz	867.6000 Mz	Statewide***
722	822.6125 Mz	867.6125 Mz	PHOENIX MDT
723	822.6250 Mz	867.6250 Mz	PHOENIX*
724	822.6375 Mz	867.6375 Mz	PHOENIX*
725	822.6500 Mz	867.6500 Mz	PHOENIX*
726	822.6625 Mz	867.6625 Mz	Statewide***
727	822.6750 Mz	867.6750 Mz	MARICOPA
728	822.6875 Mz	867.6875 Mz	Statewide***
729	822.7000 Mz	867.7000 Mz	MESA
730	822.7125 Mz	867.7125 Mz	Statewide***
731	822.7250 Mz	867.7250 Mz	MARICOPA*

Channel Number	Mobile Frequency	Base Frequency	User
732	822.7375 Mz	867.7375 Mz	MARICOPA*
733	822.7500 Mz	867.7500 Mz	MARICOPA*
734	822.7625 Mz	867.7625 Mz	MARICOPA*
735	822.7750 Mz	867.7750 Mz	Statewide***
736	822.7875 Mz	867.7875 Mz	PHOENIX
737	822.8000 Mz	867.8000 Mz	Statewide***
738	822.8125 Mz	867.8125 Mz	MARICOPA*
739	822.8250 Mz	867.8250 Mz	MARICOPA*
740	822.8375 Mz	867.8375 Mz	MARICOPA*
741	822.8500 Mz	867.8500 Mz	PIMA
742	822.8625 Mz	867.8625 Mz	MARICOPA
743	822.8750 Mz	867.8750 Mz	PIMA
744	822.8875 Mz	867.8875 Mz	PHOENIX
745	822.9000 Mz	867.9000 Mz	Statewide***
746	822.9125 Mz	867.9125 Mz	MARICOPA
747	822.9250 Mz	867.9250 Mz	PIMA
748	822.9375 Mz	867.9375 Mz	MESA*
748	822.9375 Mz	867.9375 Mz	LA PAZ
749	822.9500 Mz	867.9500 Mz	MESA*
750	822.9625 Mz	867.9625 Mz	MOHAVE
750	822.9625 Mz	867.9625 Mz	MESA*
751	822.9750 Mz	867.9750 Mz	Avail. in Maricopa Co.

Channel Number	Mobile Frequency	Base Frequency	User
752	822.9875 Mz	867.9875 Mz	MESA
753	823.0125 Mz	868.0125 Mz	Mutual aid; TAC-5
754	823.0375 Mz	868.0375 Mz	MARICOPA
755	823.0500 Mz	868.0500 Mz	Statewide***
756	823.0625 Mz	868.0625 Mz	PHOENIX
757	823.0750 Mz	868.0750 Mz	PHOENIX*
758	823.0875 Mz	868.0875 Mz	PHOENIX*
759	823.1000 Mz	868.1000 Mz	Statewide***
760	823.1125 Mz	868.1125 Mz	CAP
761	823.1250 Mz	868.1250 Mz	Statewide ***
762	823.1375 Mz	868.1375 Mz	MARICOPA
763	823.1500 Mz	868.1500 Mz	PIMA
764	823.1625 Mz	868.1625 Mz	PHOENIX*
765	823.1750 Mz	868.1750 Mz	PHOENIX*
765	823.1750 Mz	868.1750 Mz	PIMA
766	823.1875 Mz	868.1875 Mz	PHOENIX*
767	823.2000 Mz	868.2000 Mz	SCOTTSDALE
767	823.2000 Mz	868.2000 Mz	PIMA
768	823.2125 Mz	868.2125 Mz	PHOENIX*
769	823.2250 Mz	868.2250 Mz	MESA*
770	823.2375 Mz	868.2375 Mz	MESA*
771	823.2500 Mz	868.2500 Mz	PHOENIX*
771	823.2500 Mz	868.2500 Mz	COCHISE

Channel Number	Mobile Frequency	Base Frequency	User
772	823.2625 Mz	868.2625 Mz	MESA*
773	823.2750 Mz	868.2750 Mz	MESA*
773	823.2750 Mz	868.2750 Mz	MOHAVE
774	823.2875 Mz	868.2875 Mz	PIMA
774	823.2875 Mz	868.2875 Mz	MESA*
775	823.3000 Mz	868.3000 Mz	PHOENIX*
776	823.3125 Mz	868.3125 Mz	PIMA
776	823.3125 Mz	868.3125 Mz	PHOENIX*
777	823.3250 Mz	868.3250 Mz	PHOENIX*
778	823.3375 Mz	868.3375 Mz	APACHE
778	823.3375 Mz	868.3375 Mz	PHOENIX*
779	823.3500 Mz	868.3500 Mz	PHOENIX*
780	823.3625 Mz	868.3625 Mz	COCONINO
780	823.3625 Mz	868.3625 Mz	PHOENIX*
781	823.3750 Mz	868.3750 Mz	PHOENIX*
781	823.3750 Mz	868.3750 Mz	TUCSON
782	823.3875 Mz	868.3875 Mz	PHOENIX*
783	823.4000 Mz	868.4000 Mz	PHOENIX*
783	823.4000 Mz	868.4000 Mz	NAVAJO
784	823.4125 Mz	868.4125 Mz	PHOENIX*
785	823.4250 Mz	868.4250 Mz	TUCSON
785	823.4250 Mz	868.4250 Mz	DOUGLAS
785	823.4250 Mz	868.4250 Mz	PHOENIX*
786	823.4375 Mz	868.4375 Mz	PHOENIX*
787	823.4500 Mz	868.4500 Mz	SCOTTSDALE
787	823.4500 Mz	868.4500 Mz	PIMA
788	823.4625 Mz	868.4625 Mz	PHOENIX*

Channel Number	Mobile Frequency	Base Frequency	User
789	823.4750 Mz	868.4750 Mz	PHOENIX*
790	823.4875 Mz	868.4875 Mz	PHOENIX*
791	823.5000 Mz	868.5000 Mz	PHOENIX*
791	823.5000 Mz	868.5000 Mz	COCHISE
792	823.5125 Mz	868.5125 Mz	PHOENIX*
793	823.5250 Mz	868.5250 Mz	FLORENCE
794	823.5375 Mz	868.5375 Mz	TUCSON
794	823.5375 Mz	868.5375 Mz	MARICOPA
795	823.5500 Mz	868.5500 Mz	Statewide***
796	823.5625 Mz	868.5625 Mz	CAP
797	823.5750 Mz	868.5750 Mz	Statewide***
798	823.5875 Mz	868.5875 Mz	APACHE
798	823.5875 Mz	868.5875 Mz	LAKE HAVASU
799	823.6000 Mz	868.6000 Mz	CAP
800	823.6125 Mz	868.6125 Mz	Statewide***
801	823.6250 Mz	868.6250 Mz	PHOENIX
801	823.6250 Mz	868.6250 Mz	TUCSON
802	823.6375 Mz	868.6375 Mz	FLORENCE
803	823.6500 Mz	868.6500 Mz	TUCSON
803	823.6500 Mz	868.6500 Mz	DOUGLAS
803	823.6500 Mz	868.6500 Mz	YUMA CITY
803	823.6500 Mz	868.6500 Mz	MARICOPA*
804	823.6625 Mz	868.6625 Mz	MARICOPA*
805	823.6750 Mz	868.6750 Mz	TUCSON
805	823.6750 Mz	868.6750 Mz	DOUGLAS
805	823.6750 Mz	868.6750 Mz	FLAGSTAFF
805	823.6750 Mz	868.6750 Mz	YUMA CITY

Channel Number	Mobile Frequency	Base Frequency	User
805	823.6750 Mz	868.6750 Mz	MARICOPA*
806	823.6875 Mz	868.6875 Mz	NAVAJO
807	823.7000 Mz	868.7000 Mz	PHOENIX
808	823.7125 Mz	868.7125 Mz	SCOTTSDALE
808	823.7125 Mz	868.7125 Mz	PIMA
809	823.7250 Mz	868.7250 Mz	PHOENIX
810	823.7375 Mz	868.7375 Mz	PEORIA
810	823.7375 Mz	868.7375 Mz	PIMA
811	823.7500 Mz	868.7500 Mz	PHOENIX
812	823.7625 Mz	868.7625 Mz	MOHAVE
813	823.7750 Mz	868.7750 Mz	MARICOPA*
814	823.7875 Mz	868.7875 Mz	MARICOPA*
814	823.7875 Mz	868.7875 Mz	PIMA
815	823.8000 Mz	868.8000 Mz	MARICOPA*
816	823.8125 Mz	868.8125 Mz	Maricopa*
817	823.8250 Mz	868.8250 Mz	COCHISE
817	823.8250 Mz	868.8250 Mz	MARICOPA*
818	823.8375 Mz	868.8375 Mz	APACHE
818	823.8375 Mz	868.8375 Mz	MARICOPA*
819	823.8500 Mz	868.8500 Mz	TUCSON
819	823.8500 Mz	868.8500 Mz	MARICOPA*
820	823.8625 Mz	868.8625 Mz	MARICOPA*
821	823.8750 Mz	868.8750 Mz	TUCSON
821	823.8750 Mz	868.8750 Mz	YUMA CITY
821	823.8750 Mz	868.8750 Mz	MARICOPA*
822	823.8875 Mz	868.8875 Mz	MARICOPA*

Channel Number	Mobile Frequency	Base Frequency	User
823	823.9000 Mz	868.9000 Mz	TUCSON
823	823.9000 Mz	868.9000 Mz	DOUGLAS
823	823.9000 Mz	868.9000 Mz	YUMA CITY
823	823.9000 Mz	868.9000 Mz	MARICOPA*
824	823.9125 Mz	868.9125 Mz	MARICOPA
824	823.9125 Mz	868.9125 Mz	SIERRA VISTA
825	823.9250 Mz	868.9250 Mz	TUCSON
825	823.9250 Mz	868.9250 Mz	DOUGLAS
825	823.9250 Mz	868.9250 Mz	FLAGSTAFF
825	823.9250 Mz	868.9250 Mz	LAKE HAVASU
825	823.9250 Mz	868.9250 Mz	NOGALES
825	823.9250 Mz	868.9250 Mz	GREENLEE
825	823.9250 Mz	868.9250 Mz	MARICOPA*
826	823.9375 Mz	868.9375 Mz	MARICOPA*
827	823.9500 Mz	868.9500 Mz	MARICOPA*
828	823.9625 Mz	868.9625 Mz	GUARD
829	823.9750 Mz	868.9750 Mz	STATE OF ARIZONA-STWIDE*
830	823.9875 Mz	868.9875 Mz	GUARD

* Allocated to entities as adjacent channel; protection by internal design only
** Adjacent channels to be protected Statewide for State of Arizona System use
*** "Statewide" assignable to any eligible entity in the State where no co-channel or adjacent channel interference would exist.
"Avail. in Maricopa Co." are single-channel assignables to entities within Maricopa County only.

Allocated Channels by User

PHOENIX	621	623	625	627	646	648	650	652	654
	656	658	660	670	672	674	678	679	680
	696	736	744	756	758	764	766	771	775
	777	779	781	784	786	788	791	801	807
	809	811	708						
	605			634	635	644	645	649	651
	653	655	657	659	666	671	673	675	722
	723	724	725	757	765	768	776	778	780
	782	783	785	789	790	792			
TUCSON	612	614	616	618	634	642	644	646	662
	666	781	785	794	801	803	805	819	821
	823	825							
CASA GRAND	824								
DOUGLAS	606	608	626	628	648	785	803	805	823
	825								
FLAGSTAFF	606	805	825						
LAKE HAVASU	613	646	798	825					
MESA	661	662	663	664	676	678	681	682	683
	684	702	716	729	748	749	750	751	752
	769	770	772	773	774				
NOGALES	606	825							
PEORIA	622	810							
PRESCOTT	610	635	824						
SCOTTSDALE	624	647	767	787	808				
SIERRA VISTA	608	824							
YUMA CITY	803	805	610	626	821	823			
FLORENCE	793	802							
SANTA CRUZ	613								

Allocated Channels by User (Cont.)

GREENLEE	620	825							
APACHE	622	649	778	798	818				
NAVAJO	608	628	651	783	806				
GRAHAM	653	816							
MOHAVE	643	655	750	773	812				
LA PAZ	665	748							
GILA	626								
YUMA	818								
PINAL	None								
COCHISE	611	650	771	791	817				
COCONINO	612	645	780						
YAVAPAI	685								
MARICOPA	609	611	612	613	614	615	616	617	618
	619	642	687	689	699	731	733		
	686	688	690	692	694	698	700	704	739
		710		727	732	734	738	740	742
	746	754	762	794	803	804	805	813	814
	815	816	817	818	819	820	821	822	823
	824	825	826	827					
PIMA	605	610	624	651	671	673	683	685	691
	693	703	705	711	741	743	747	763	765
	767	774	776	787	808	810	814		
CAWCD	632	718	760	796	607	630	668	799	
STATE OF ARIZONA**	637	640	713	829					
Statewide***	629	631	633	667	669	695	697	701	707

Allocated Channels by User (Cont.)

	709	717	719	721	726	728	730	735	737
	745	751	755	759	761	795	797	800	
NOT ASSIGNABLE	602	603	604	636	638	641	712	714	828
	830	677	715	601	753				

* Allocated but not protected from adjacent channels; internal system design protection only

** Reserved for State of Arizona use; Adjacent channels to be protected

*** Reserved for assignment statewide, where usable

Channels Involved in Repack:	603	612	614	616	618	626	628	633
	635	645	649	651	653	655	657	659
	661	663	671	673	675	676	678	679
	681	683	689	716	723	725	748	750
	751	757	765	768	770	772	774	776
	778	780	782	783	785	789	790	792
	804	814	816	818	820	822	824	826
	706	720						

APPENDIX V

PROCEDURE FOR DETERMINING SERVICE AREA

RECOMMENDED PROCEDURE FOR DETERMINING SERVICE AREA

1. Convert proposed BASE STATION power ERP to dB below 1 KW ERP.

2. Subtract value in step 1 from 41 dBu.

3. In look-up table 1 determine the two (2) height columns that correspond most closely to proposed BASE STATION H.A.A.T.

4. Interpolate between the listings under the two (2) columns to determine where the value in step 2 falls.

5. Read the mileage from the "MILES" column. This is the radius of the proposed service area.

EXAMPLE

The service area of a 100 watt ERP station with an antenna height above average terrain of 450 feet would be calculated as follows:

P(dBk) = 10 X log (100) -30
= 10 x 2 -30
= -10

F(DbU) = 41 - (-10)
= 51 DbU

From the look-up tables, 51 falls between 50.5 in the 400 ft. column and 52.9 in the 500 ft. column. The corresponding mileage would be 12.

INTERFERENCE PROTECTION

1. Convert proposed BASE STATION ERP to DB below 1 KW ERP.

2. Subtract value in step 1 from 16 dBu.

INTERFERENCE PROTECTION (Cont)

3. In look-up table 2 determine the two (2) height columns that correspond most closely to the proposed BASE STATION H.A.A.T.

4. Interpolate between the listings under the two (2) columns to determine where the value in step 2 falls.

5. Read the mileage from the column "MILES". This value is the minimum distance between the proposed BASE STATION and the nearest point of another co-channel service area. (Service area may be obtained from the co-channel user or by calculations used in "PROCEDURE FOR DETERMINING SERVICE AREA".)

ADJACENT CHANNEL INTERFERENCE PROTECTION

1. Convert proposed BASE STATION ERP to DB below 1 KW ERP.

2. Subtract value in step 1 from 26 dBu.

3. In look-up table 2 determine the two (2) height columns that correspond most closely to the proposed BASE STATION H.A.A.T.

4. Interpolate between the two listings to determine where the value in step 2 falls.

5. Read the mileage from the "MILES" column. This value is the minimum distance between the proposed BASE STATION and the nearest point of the adjacent channel service area.

LOOK UP TABLE 1 (Cont.)

UHF F(50,50) dBu/KW ERP

MILES	100'	200'	300'	400'	500'	600'	700'	800'	900'	1000'
5	60.8	66.0	68.3	70.6	72.9	74.1	75.3	76.6	77.8	79.0
6	56.9	61.7	64.0	66.4	68.7	69.9	71.1	72.2	73.4	74.6
7	53.4	58.2	60.5	62.8	65.1	66.3	67.5	68.6	69.8	71.0
8	50.2	55.1	57.4	59.7	62.0	63.2	64.4	65.6	66.8	68.0
9	47.4	52.4	54.7	57.1	59.4	60.9	61.8	63.0	64.2	65.4
10	44.8	49.9	52.3	54.6	57.0	58.2	59.4	60.7	61.9	63.1
11	42.4	47.7	50.1	52.5	54.9	56.1	57.3	58.5	59.7	60.9
12	40.2	45.6	48.0	50.5	52.9	54.1	55.3	56.6	57.8	59.0
13	38.2	43.7	46.2	48.6	51.1	52.3	53.5	54.8	56.0	57.2
14	36.2	41.9	44.4	47.0	49.5	50.7	51.9	53.0	54.2	55.4
15	34.6	40.1	42.7	45.3	47.9	49.1	50.3	51.4	52.6	53.8
16	33.0	38.5	41.1	43.7	46.3	47.5	48.7	49.8	51.0	52.2
17	31.5	37.0	39.6	42.3	44.9	46.1	47.2	48.4	49.5	50.7
18	30.0	35.6	38.2	40.9	43.5	44.6	45.8	46.9	48.1	49.2
19	28.7	34.3	36.9	39.5	42.1	43.3	44.4	45.6	46.7	47.9
20	27.5	33.0	35.6	38.2	40.8	41.9	43.1	44.2	45.4	46.5
21	26.4	31.7	34.3	36.9	39.5	40.7	41.8	43.0	44.1	45.3
22	25.3	30.6	33.2	35.7	38.3	39.5	40.6	41.8	42.9	44.1
23	24.3	29.5	32.0	34.6	37.1	38.3	39.4	40.6	41.7	42.9
24	23.3	28.4	30.9	33.4	35.9	37.1	38.3	39.4	40.6	41.8
25	22.4	27.4	29.9	32.3	34.8	36.0	37.2	38.3	39.5	40.7
26	21.5	26.4	28.9	31.3	33.8	35.0	36.2	37.3	38.5	39.7
27	20.7	25.4	27.8	30.3	32.7	33.9	35.1	36.3	37.5	38.7
28	19.9	24.5	26.9	29.3	31.7	32.9	34.1	35.3	36.5	37.7
29	19.1	23.6	26.0	28.3	30.7	31.9	33.1	34.4	35.6	36.8
30	18.4	22.7	25.1	27.4	29.8	31.0	32.2	33.5	34.7	35.9

REFERENCE:

BASED ON 50% OF THE SIGNALS FALLING INTO THE CHARTED SIGNAL LEVELS, 50% OF THE TIME AT THE DISTANCES LISTED.

HARMFUL INTERFERENCE

LOOK UP TABLE II

UHF F(50,10) DBu/KW ERP

MILES	100'	200'	300'	400'	500'	600'	700'	800'	900'	1000'
10	43.8	50.1	52.5	54.9	57.4	58.6	59.8	61.0	62.2	63.3
11	41.7	47.6	50.1	52.5	54.9	56.2	57.5	58.7	60.0	61.2
12	39.6	45.8	48.4	51.0	53.6	54.7	55.8	56.9	58.0	59.2
13	37.4	43.4	46.2	49.0	51.8	52.9	54.0	55.2	56.3	57.4
14	35.7	42.0	44.7	47.4	50.1	51.2	52.4	53.6	54.8	56.0
15	33.9	40.3	42.8	45.4	47.9	49.2	50.5	51.7	53.0	54.3
16	32.2	38.5	41.2	43.9	46.6	47.7	48.9	50.1	51.3	52.5
17	31.2	37.1	39.8	42.5	45.2	46.3	47.5	48.7	49.9	51.1
18	29.7	35.7	38.3	40.8	43.4	44.7	46.1	47.4	48.7	50.1
19	28.7	34.7	37.2	39.8	42.3	43.6	44.9	46.1	47.4	48.7
20	27.7	33.3	35.7	38.2	40.6	41.9	43.3	44.6	45.9	47.3
21	27.0	32.2	34.5	36.9	39.2	40.5	41.9	43.2	44.5	45.8
22	25.9	30.8	33.3	35.7	38.2	39.4	40.7	41.9	43.2	44.4
23	25.2	29.7	32.1	34.4	36.8	38.1	39.4	40.7	42.1	43.4
24	24.5	29.0	31.3	33.5	35.7	37.0	38.4	39.7	41.0	42.3
25	23.8	28.0	30.2	32.4	34.7	36.0	37.3	38.6	40.0	41.3
26	23.1	27.3	29.4	31.5	33.6	34.9	36.3	37.6	38.9	40.3
27	22.4	26.3	28.5	30.7	32.9	34.2	35.4	36.7	37.9	39.2
28	21.7	25.5	27.5	29.5	31.5	32.8	34.2	35.5	36.8	38.2
29	21.0	24.8	26.8	28.8	30.8	32.1	33.3	34.6	35.8	37.1
30	20.3	24.2	26.0	27.9	29.7	31.0	32.3	33.5	34.8	36.1
31	19.6	23.5	25.3	27.2	29.0	30.3	31.6	32.8	34.1	35.3
32	19.1	22.8	24.6	26.5	28.3	29.5	30.7	31.9	33.1	34.1
33	18.5	22.6	24.3	26.0	27.7	28.8	29.9	31.0	32.1	33.3
34	18.0	21.7	23.5	25.2	27.0	28.1	29.2	30.3	31.4	32.6
35	17.5	21.2	22.9	24.6	26.3	27.4	28.5	29.6	30.7	31.8
36	17.2	20.7	22.3	23.9	25.5	26.7	27.8	28.9	30.0	31.2
37	16.8	20.3	21.9	23.6	25.2	26.3	27.3	28.3	29.4	30.5
38	16.5	19.6	21.2	22.9	24.5	25.6	26.6	27.7	28.7	29.7
39	16.1	19.3	20.7	22.0	23.5	24.5	25.6	26.6	27.7	28.7
40	15.7	18.9	20.3	21.7	23.1	24.2	25.2	26.2	27.3	28.3
41	15.4	18.2	19.7	21.2	22.8	23.7	24.7	25.7	26.7	27.7
42	15.0	17.8	19.3	20.7	22.0	23.0	24.0	25.0	26.0	27.0
43	14.7	17.5	18.9	20.3	21.7	22.6	23.5	24.4	25.3	26.3

HARMFUL INTERFERENCE

LOOK UP TABLE II

MILES	100'	200'	300'	400'	500'	600'	700'	800'	900'	1000'
44	14.4	17.2	18.4	19.7	21.0	21.9	22.8	23.7	24.6	25.5
45	14.0	16.8	18.1	19.4	20.7	21.6	22.5	23.4	24.3	25.2
46	13.6	16.1	17.4	18.7	20.0	20.9	21.8	22.7	23.6	24.5
47	13.3	15.4	16.6	17.7	18.9	19.8	20.7	21.6	22.5	23.5
48	13.0	15.4	16.6	17.7	18.9	19.8	20.7	21.6	22.5	23.5
49	12.6	15.0	16.3	17.5	18.7	19.5	20.3	21.1	21.9	22.8
50	12.3	14.7	15.9	17.0	18.2	19.0	19.9	20.7	21.6	22.4
51	11.9	14.4	15.5	16.7	17.8	18.6	19.4	20.2	20.9	21.7
52	11.5	14.0	15.0	16.1	17.2	18.0	18.8	19.7	20.5	21.3
53	11.2	13.5	14.6	15.7	16.8	17.6	18.5	19.3	20.2	21.0
54	10.9	13.0	14.1	15.3	16.5	17.2	18.0	18.8	19.5	20.3
55	10.5	12.6	13.6	14.7	15.7	16.6	17.4	18.3	19.1	20.0
56	10.1	12.4	13.4	14.4	15.4	16.2	17.0	17.8	18.6	19.4
57	9.8	11.9	13.0	14.0	15.0	15.8	16.6	17.4	18.1	18.9
58	9.5	11.5	12.6	13.6	14.7	15.5	16.2	17.0	17.8	18.5
59	9.1	11.2	12.3	13.3	14.4	15.1	15.9	16.7	17.4	18.2
60	8.8	10.9	11.9	13.0	14.0	14.8	15.5	16.3	17.1	17.8
61	8.4	10.5	11.4	12.4	13.3	14.1	14.8	15.6	16.4	17.2
62	8.0	10.1	11.1	12.0	13.0	13.6	14.4	15.0	15.8	16.5
63	7.7	9.8	10.7	11.7	12.6	13.3	14.0	14.7	15.4	16.1
64	7.4	9.5	10.4	11.3	12.3	13.0	13.6	14.4	15.0	15.7
65	7.0	9.1	10.0	11.0	11.9	12.6	13.3	14.0	14.7	15.4
66	6.6	8.8	9.7	10.6	11.5	12.2	13.0	13.6	14.4	15.0
67	6.3	8.4	9.3	10.3	11.2	11.9	12.6	13.3	14.0	14.7
68	5.9	8.0	9.0	9.9	10.9	11.5	12.3	13.0	13.7	14.4
69	5.6	7.7	8.6	9.6	10.5	11.2	11.9	12.6	13.3	14.0
70	5.3	7.4	8.3	9.2	10.1	10.8	11.5	12.2	13.0	13.6

REFERENCE:

Based on 50% of the signals falling into the charted signal levels, 10% of the time at the distances listed.

APPENDIX VI

ADJACENT REGION CONCURRENCE

CALIFORNIA PUBLIC-SAFETY RADIO ASSOCIATION, INC.

P.O. BOX 39100 DOWNEY, CA 90239-0100 (562) 868-9896 (MESSAGE/FAX)
A CHAPTER OF THE ASSOCIATION OF PUBLIC - SAFETY COMMUNICATION OFFICIALS-INT'L., INC.
www.cpra.org

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March 9, 1998

Debbie Overton
Region 3 Review Committee
(ARRC)
P.O. Box 863
Phoenix, AZ 85001

Dear Debbie Overton ,

The Region 5 review committee has reviewed your Region's proposed plan changes as described in your letter of January 29,1998. Region 5 concurs with those changes.

Sincerely,

David Buchanan
Vice Chair, Region 5

March 17, 1998

Debbie Overton, Chair
Region 3 Review Committee (ARCC)
PO Box 863
Phoenix Arizona, 85001

Dear Debbie

The Region 7 review committee has reviewed your proposed modifications to the Region 3 Plan and concurs with all changes. We appreciate the opportunity to review the plan and agree that your changes will provide additional use of the channels along our adjoining border. I apologize for the delay in getting our response to you.

Please note that the region 7 chairman is now Emery Reynolds.

Sincerely,

Mike Borrego

Mike Borrego
Telecommunications Manager

cc: Emery Reynolds

ARRC 800 MHZ
Arizona Regional Review Committee
P.O. BOX 883 • PHOENIX, AZ. 85001

May 6, 1998

Mr. Jim Wilson
Region 27
Clark County Fire Department
575 E. Flamingo
Las Vegas, NV 89119
FAX (702) 734-6111

The Arizona Regional Review Committee (ARRC) for Region 3 (State of Arizona) has proposed modifications to our FCC approved Plan for the NPSPAC frequencies. I mailed Ralph Thornburg a copy of the proposed Region 3 Plan in January for review of the proposed modifications, in particular the frequency repack. The number of frequencies available in the Phoenix metropolitan area increased significantly through reallocation from the rural areas.

Ralph advised me during our telephone conversation in March 1998 that there did not appear to be any problems and a concurrence letter would be forthcoming from you. To expedite this matter, I have included a signature block below for concurrence or nonconcurrence that you can easily fax back to me. If you concur with our proposed Region 3 Plan revision and repack, please complete the concurrence block. If you do not concur, please complete the nonconcurrence block.

Concurrence Block

Region 27 concurs with the proposed revisions for the Region 3 Plan.

James A. Wilson — Signature
Chairperson — Title
6-1-98 — Date

Nonconcurrence Block

Region 27 does not concur with the proposed revisions for the Region 3 Plan.

_____ Signature
_____ Title
_____ Date

Sincerely,

Debbie Overton

Debbie Overton, Region 3 Chair
FAX (602) 253-2672

ARRC 800 MHZ
Arizona Regional Review Committee
P.O. BOX 863 • PHOENIX, AZ. 85001

May 6, 1998

Mr. Jim Gordon
Region 20
State of New Mexico
PO Box 5393, Coronado Station
Santa Fe, NM 87502-5393
FAX (505) 827-9368

The Arizona Regional Review Committee (ARRC) for Region 3 (State of Arizona) has proposed modifications to our FCC approved Plan for the NPSPAC frequencies. I mailed you a copy of the proposed Region 3 Plan in January for review of the proposed modifications, in particular the frequency repack. The number of frequencies available in the Phoenix metropolitan area increased significantly through reallocation from the rural areas.

You advised me during our telephone conversation in March 1998 that there did not appear to be any problems and a concurrance letter would be forthcoming. To expedite this matter, I have included a signature block below for concurrence or nonconcurrence that you can easily fax back to me. If you concur with our proposed Region 3 Plan revision and repack, please complete the concurrence block. If you do not concur, please complete the nonconcurrence block.

Concurrence Block

Region 29 concurs with the proposed revisions for the Region 3 Plan.

Jim Gordon — Signature
IS Telecom Tech 2 — Title
5/11/98 — Date

Nonconcurrence Block

Region 29 does not concur with the proposed revisions for the Region 3 Plan.

_____ Signature
_____ Title
_____ Date

Sincerely,

Debbie Overton

Debbie Overton, Region 3Chair
FAX (602) 253-2672

ARRC

800 MHZ

Arizona Regional Review Committee

P.O. BOX 863 • PHOENIX, AZ. 85001

May 6. 1998

Mr. Steven Proctor
Region 41
Telecommunications Division
4501 S. 2700 W.
Salt Lake City, UT 84119-5998
FAX (801) 538-3525

The Arizona Regional Review Committee (ARRC) for Region 3 (State of Arizona) has proposed modifications to our FCC approved Plan for the NPSPAC frequencies. I mailed you a copy of the proposed Region 3 Plan in January for review of the proposed modifications, in particular the frequency repack. The number of frequencies available in the Phoenix metropolitan area increased significantly through reallocation from the rural areas.

To expedite this matter, I have included a signature block below for concurrence or nonconcurrence that you can easily fax back to me. If you concur with our proposed Region 3 Plan revision and repack, please complete the concurrence block. If you do not concur, please complete the nonconcurrence block.

Concurrence Block

Region 41 concurs with the proposed revisions for the Region 3 Plan.

Signature _____ Title Chair Regional Pl Date 5-8-98

Nonconcurrence Block

Region 41 does not concur with the proposed revisions for the Region 3 Plan.

Signature _____ Title _____ Date _____

Sincerely,

Debbie Overton

Debbie Overton, Region 3 Chair
FAX (602) 253-2672

Chairperson: Debbie Overton Vice-Chairperson: Joe Jakoby Sec./Treas.: Sheila Pattee

APPENDIX VII

CELLULAR NOTIFICATIONS

APPENDIX VIII

INTERAGENCY RADIO SYSTEM PLAN

ARIZONA PUBLIC SAFETY STATEWIDE NETWORK
INTER-AGENCY RADIO SYSTEM
STATE PLAN

January 1996

A. PURPOSE

The Arizona Inter-Agency Radio System (IARS) is designed to provide a supplemental communications capability to police, and other personnel of municipal, county, state, or federal agencies performing public safety activities. The system assists agencies requiring a radio contact with another agency's unit concerning a public safety activity in which the nature of the emergency or activity dictates that the use of regular radio channels would not adequately provide the communications capability necessary to successfully complete the operation. Matters relating to life threatening situations will have priority in the use of this system. Agencies participating in IARS shall render a communications service to itinerant law enforcement vehicles and other public safety users having emergency communications needs. This system operates on designated Police Channel frequencies.

The Arizona Chapter of the Associated Public Safety Communications Officers (A.P.C.O.) shall serve as the state plan governing entity.

B. ELIGIBILITY FOR PARTICIPATION

1. Public Safety Emergency response agencies, utilizing mobile and portable two-way radios, operated by personnel actively engaged in these related activities, are eligible to apply for operating authority.

2. Requests for permission to utilize the frequency shall be submitted in writing to the AZ APCO IARS Committee. Only police agencies are permitted to license and operate base/mobile relay stations on the IARS frequency.

3. Non-police public safety agencies may also apply to the AZ APCO IARS committee for operating permission. The application shall include justification for use of the frequency and a letter from a sponsoring police agency, that is authorizing the applicant to operate under that (sponsoring) agency's police mobile license.

4. Each participating police agency shall be responsible for maintaining the mobile radio FCC license for operation on the appropriate IARS frequency. Each sponsoring police agency also shall maintain current records of other public safety agencies authorized to operate under that sponsoring agency's FCC mobile license.

5. By federal statute, Federal agencies are required to obtain permission to use the IARS frequencies through the National Telecommunication and Information Administration, unless a supporting agency provides all the mobile radios for the federal agency's use.

6. In any instance where eligibility is questioned, the AZ APCO IARS Committee shall make the final determination.

C. TERMINATION

1. Any participant desiring to withdraw from the IARS operation is requested to notify the AZ APCO IARS Committee.

2. The expiration of the participants FCC license for the frequency will automatically revoke operating permission.

3. Any negligent, willful, or continued misuse of the emergency frequency will result in a recommendation from the AZ APCO IARS Committee for revocation of the operating authority granted by the FCC, or the sponsoring police agency.

D. DEFINITIONS

AZ APCO	AZ Chapter of the Associated Public-Safety Communications Officers, Inc.
CTCSS	Continuous Tone Coded Sub-audible Squelch: PL, CG, Etc.
FCC	Federal Communications Commission
IARS	Inter-Agency Radio System
IARS UHF	Mobile receive 460.375 MHZ 100 Hz currently supported. Mobile transmit 465.375 MHZ 100 Hz currently supported. This police frequency chosen in Arizona for system use. ** CTCSS requirements see below.

IARS VHF Mobile receive 155.475 MHZ no PL required.
Mobile transmit 155.475 MHz no PI required **
This frequency is designated by the FCC as the National Police Emergency Channel.

** CTCSS will be added to protect base stations from interference. A tone frequency of 156.7 Hz (as used in the 800 MHZ national plan) is the currently chosen tone frequency for VHF, the UHF channel will continue to utilize the current 100 Hz tone frequency. A second CTCSS tone may be added for system/site selection. Mobiles will be required to transmit the CTCSS but will operate carrier squelch on receive. VHF base stations will then no longer transmit a CTCSS to protect other base stations from interference.

Simplex: Transmit and receive on the same frequency, ie., 155.475 MHZ.

Duplex: Allow for repeater operation, i.e., 465.375/460.375 MHZ.

Operation Control: Mobile unit requesting interagency radio operation.

Sponsoring Agency: A police agency which authorizes another public safety agency to operate under their FCC police mobile radio license for the purposes of emergency communications on the IARS channels.

Support Control: Designated agency controlling a system base/mobile relay station. Usually the County's Sheriffs Office, or, in special cases, the largest participating law enforcement agency in the area.

Base Station: A fixed station which communicates with mobile units on IARS channels, usually with high power and high elevation for wide area coverage.

Mobile Relay Station: A base station authorized to retransmit automatically on the IARS channels.

Control Station: A fixed station whose transmissions are used to control the emissions or operation of an IARS base/mobile relay station.

E. MONITORING

Each support control agency shall monitor the IARS channel(s) at all times. The monitoring system should have a range comparable to that of the agency's own mobile-to-base radio receiver.

F. DISCIPLINE

In order to assure the availability of the channel in times of emergency, strict discipline MUST BE MAINTAINED. This can be accomplished by: 1) good operating procedures, and 2) adherence to FCC rules and the rules of the IARS Committee as herein stated or hereafter amended.

G. CHANNEL USE

1. Channel Use Priorities

The established priority use levels for the system are described below. When a higher priority of use is required, all lower priority use must cease in ANY area where interference could occur.

The four priority levels are:

PRIORITY 1:	Disaster and extreme emergency operations of large scale; for mutual aid and interagency communications.
PRIORITY 2:	Emergency or urgent operations involving imminent safety of life or property.
PRIORITY 3:	Special event control activities, generally of a pre-planned nature, and generally involving joint participation of two or more agencies.
PRIORITY 4:	Drill, maintenance, and test exercises of a civil defense or disaster nature.

2. SUMMARY

Generally, any action requiring **emergency** communications coordination between mobile units that the individual agency's regular radio facilities could

not adequately provide is acceptable traffic. SELF-DISCIPLINE AND SELF-POLICING BY THE PARTICIPANTS SHOULD SUFFICIENTLY CONTROL THE SYSTEM SO THAT IT WILL BE AVAILABLE IN TIMES OF EMERGENCY.

3. CALLING/NOTIFICATION PROCEDURES

a. The call-up message should contain sufficient information to enable the monitoring unit or agency, that is in the best position to provide assistance, to respond.

b. Use plain language on the IARS channel(s).

c. If a response is not immediately received to the initial call, repeat the message. This would allow a monitoring agency to alert one of its units that may be in a near-by location. Also, if the call-up was by an itinerant reporting an accident, or other incident requiring action by the local agency, the monitoring agency would dispatch the necessary assistance.

d. Methods of notification and coordination between agencies may be accomplished by the use of any of the following methods:

I. Direct telephone "hotline" between agencies.

II. Public Telephone Switched Network.

III. Arizona Law Enforcement Telecommunications System.

Under normal conditions, the unit initiating the request for interagency assistance shall assume operational control at the scene, and the local support control agency shall assume support control. Should the initial unit become unable to continue operational control, the control will then pass to the support control agency who will designate the new operational control unit.

e. When all communications relative to the particular operation have been completed, the station call sign and time of day shall be announced. This identifies the licensee, as required by FCC rules, and also indicates end of transmission.

APPENDIX A

OPERATIONAL GUIDELINES

FREQUENCIES

IARS operates on VHF, 155.475 MHZ, as designated by the FCC as the Nationwide Police Emergency frequency. UHF operation is on 460.375/465.375 MHZ, the frequency pair designated by the AZ IARS Committee and the Arizona APCO Frequency Advisory Committee, and licensed by FCC, assigned in Arizona for that use. Most of the transmitter sites have the provision to cross-patch the VHF and UHF radios for cross-band operation. The UHF mobile relay station also supports car-to-car repeat through the selected site. In general, this cross-patch and repeat function is automatic upon receipt of a signal from a mobile or control station. Operation on VHF and UHF is complemented by the Inter-Agency channel operation designated in the Arizona Regional 800 MHZ Plan. Agencies with 800 MHZ systems may support cross-band operation through console cross-patch options.

OPERATIONS

A mobile unit calling with emergency traffic should use one of the following sequence examples. NOTE: All broadcasts will be in plain language only. (No Ten codes etc, ie. DCSO is CODE 10-23 ?).

a. Mobile-to-mobile: Any M.C.S.O. unit, El Mirage 4, in pursuit northbound on U.S. 60, approaching the Morristown overpass, armed robbery suspects, white over blue '75 Chevy, 3 occupants, shots fired.

b. Mobile-to-base station: M.C.S.O. radio, Buckeye 12 (wait for acknowledgment) 2-vehicle accident with injuries, need DPS, an ambulance and traffic control.

c. Mobile-to-base station: Roswell, New Mexico P.D. 6, (wait for acknowledgment), we are westbound on I-10 at the county line, en route to M.C.S.O. jail with three prisoners, will advise when clear.

APPENDIX B

OPERATIONAL FACILITIES
April 1993

COUNTY	SITE	MONITORED BY	COMMENTS
Apache	Greens Peak	Navajo S.O.	
Cochise	Mule Mtn.	Cochise S.O.	backup at Tucson DPS
Coconino	Mt. Elden	Coconino S.O.	
	Bill Williams Mtn.	Coconino S.O.	
Gila	none		
Graham	Heliograph Peak		backup at UofA P.D.
Greenlee	Guthrie Peak		backup at Tucson DPS
La Paz	none		
Maricopa	South Mountain	Maricopa S.O.	part of MCSO system
	White Tanks Mtn	Maricopa S.O.	part of MCSO system
	Thompson Peak	Maricopa S.O.	part of MCSO system
	Towers Mtn	Maricopa S.O.	part of MCSO system
Mohave	Hualapai Mtn	Mohave S.O.	
Navajo	Greens Peak	Navajo S.O.	
Pima	none		
Pinal	none		
Santa Cruz	Nogales Hill	Santa Cruz S.O.	backup at Tucson DPS
Yavapai	Towers Mtn	Maricopa S.O.	part of MCSO system
Yuma	Telegraph Pass	Yuma S.O.	
	Oatman Mtn.	Yuma S.O.	
	Childs Mtn.	Yuma S.O.	

ARRC 800 MHZ

A. ona Regional Review Committee P.O. BOX 863 • PHOENIX, AZ. 85001

January 29, 1998

Mr. Steve Proctor, Chair
NPSPAC Region 41
Utah Department of Public Safety
Telecommunications Division
4501 S. 2700 W.
Salt Lake City, UT 84119-5998

SUBJECT: Revision of Arizona - Region 3 "Plan"

Dear Steve,

The Arizona Regional Review Committee (ARRC Region 3) has made major revisions to its "Plan" on file with the FCC. These changes include major revisions to the frequency allocation "Pack" and minor administrative changes to the text of the "Plan." The changes to the frequency allocation charts are being done primarily to make more channels available to large entities in central Arizona, primarily the Maricopa County/Phoenix Metropolitan area.

We have reallocated some channels from rural towns and counties, some bordering your state/region, to Phoenix, Mesa, and Maricopa County. These changes enabled more frequencies for use in parts of your Region adjoining our border. We propose the following channels for reallocation in Region 3:

603	612	614	616	618	626	628	633
635	645	649	651	653	655	657	659
661	663	671	673	675	676	678	679
681	683	689	716	723	725	748	750
751	757	765	768	770	772	774	776
778	780	782	783	785	789	790	792
804	814	816	818	820	822	824	826
706	720						

Please review this Plan revision, and forward your comments of concurrence or objection to me by February 27, 1998. Thank you for your assistance. I can be contacted at (602) 256-1029.

Sincerely,

Debbie Overton

Debbie Overton, Chair
Region 3 Review Committee (ARRC)

cc: Rick Tannehill

City of Phoenix City Manager Frank Fairbanks
200 W. Washington
Phoenix, AZ 85003

City of Tucson City Manager Luis G. Gutierrez
255 W. Alameda
Tucson, AZ 85701

City of Casa Grande City Manager Ken Buchanan
300 E. 4th St.
Casa Grande, AZ 85222

City of Douglas City Manager Mike Ortega
425 10th St.
Douglas, AZ 85607

City of Flagstaff City Manager Dave Wilcox
211 W. Aspen St.
Flagstaff, AZ 86001

City of Lake Havasu City Manager Bruce Williams
1795 Civic Center Blvd.
Lake Havasu, AZ 86403-6524

City of Mesa City Manager C.K. Luster
20 E. Main
Mesa, Az 85201

City of Nogales City Manager Ignacio Barraza
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Prescott Valley, AZ 86312

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Mohave County Manager Richard Skalicky
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La Paz County Manager Larry Layton
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Gila County Manager Steve Besich
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Globe, AZ 85501

Yuma County Manager Wally Hill
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Pinal County Manager Stan Griffis
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Cochise County Manager Jody Klein
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Bisbee, AZ 85603

Coconino County Acting Manager Steve Peru
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Yavapai County Manager Jim Holst
1015 Fair Street
Prescott, AZ 86301

City of Florence City Manager John Geib
PO Box 490
Florence, AZ 85232

CAWCD Asst. GM Larry Dozier
23636 N. 7th St.
Phoenix, AZ 85024

AZ DPS Director Joe Albo
2102 W. Encanto
Phoenix, AZ 85005

Maricopa County Administrative Officer David Smith
301 W. Jefferson 10th floor
Phoenix, AZ 85003

Pima County Administrator C.H. Huckelberry
130 W. Congress 10th floor
Tucson, AZ 85701

Responses

Received as of 7/28/97

City of Peoria

Plans to use the two assigned frequencies by FY 2000/2001 with funding from either general or GO Bond.

City of Phoenix

Plans to use the assigned frequencies by year 2000, requesting additional for growth to year 2010 with funding plan under development for presentation fall of 1997.

Mohave County

Plans to request technology upgrade plans for the assigned frequencies in the next two fiscal years to move to 800MHZz, with funding from the general fund.

Lake Havasu City

Plans to use assigned frequencies within four years and is actively seeking funds through grants.

City of Tucson

Plans to use the assigned frequencies with slow growth beginning 2001, requesting additional frequencies for future growth. Funding is under study for a bond proposal.

City of Mesa

Plans to use the assigned frequencies with slow growth beginning 1999, requesting additional frequencies for projected growth by 2015 and funding from bond, financing sources and general budget.

City of Yuma

Relinquishes the eight assigned frequencies since they are licenses on ten border channels and building a trunked radio system, scheduled for completion December 2000, with funding that has already been secured. However, adjacent jurisdictions have been offered to build out the backbone if frequencies can be secured.

Pinal County

Will move to 800MHZz if they cannot secure additional VHF frequencies through the giveback process.

CAP

Currently using all assigned frequencies and plan no changes.

Gila County

Forego assigned frequencies with the stipulation that givebacks from the metropolitan area be made available for access and assignment to Gila County and other rural areas.

Pima County

Plan to use assigned frequencies and if funding is available, plan to complete within four years.

Town of Florence

No plans now or in the future for use of the assigned frequencies.

City of Scottsdale

Plans to use the assigned frequencies within the next two to twelve months, with funding secured.

Navajo County

No plans to use the assigned frequencies but want to trade them for VHF frequencies.

Cochise County

No plans to use the assigned frequencies but request UHF giveback frequencies.

Maricopa County

Plans to use the assigned frequencies and funding has been approved.

ARRC 800 MHZ
:ona Regional Review Committee P.O. BOX 863 • PHOENIX, AZ. 85001

June 16, 1997

County Administrator C. H. Huckelberry
Pima County
130 W. Congress 10th floor
Tucson, AZ 85701

RE: POTENTIAL LOSS OF ASSIGNED RADIO FREQUENCIES

Dear Mr. Huckelberry:

The Federal Communications Commission (FCC) released a report and order regarding the development and implementation of a Public Safety National Plan (General Docket 87-112) on December 18, 1987. The Plan was to promote interoperability among public safety providers and to insure efficient use of the newly allocated 800 MHz spectrum. The Arizona Regional Plan (the Plan) and the subsequent formation and authority of the Arizona Regional Review Committee (ARRC) in 1991 were a direct result from the FCC report and order.

The ARRC consists of eleven (11) members with no more than one committee member from a single political jurisdiction. The ARRC is responsible for administering the elements of the Arizona Regional Plan that are: ensuring the best possible use of this new portion of the spectrum, ensuring an orderly transition from existing frequencies/systems to this new portion of the spectrum, guide in the reassignment of vacated channels, and ensuring fair and equitable recommendations of channels and usage to all Public Safety Services and users.

The ARRC has identified several issues for review that could result in permanent modifications to the Plan and it's frequency assignments. These permanent modifications, if approved will affect the assigned frequencies for your jurisdiction. The issues being explored by the committee are:

1. Does the current frequency assignment pack need to be modified to better accommodate those users with the greatest actual channel need, in particular those in the metropolitan Maricopa County area?

2. Determination if time deadlines should be established to license systems using these assigned frequencies. Should actual drop dead dates be established?

3. Determination if there should be "open windows" or other mechanisms offered to license the channels?

Prior to further exploration and possible implementation of these modifications, we need to be aware of and consider your communication needs and plans for the assigned frequencies. A copy of the 800 MHz frequency assignments approved in the Plan is attached.

We need to know the following information regarding your governmental entity.

Your governmental entity's four (4) year plan to implement an 800 MHz radio system that will use all of your current assigned frequencies.

Has funding for your projected radio system been identified? If yes, has the funding been approved?

When do you anticipate applying for licensing on the frequencies?

What is your time line for your radio system project?

Who is the contact person and their phone number for your project?

If you have any questions, please contact either ARRC Chair Debbie Overton at (602) 256-1029 or Vice Chair Joe Jakoby at (520) 791-4950. **Failure to respond will indicate your governmental entity has no plans for the assigned frequencies nor any objections with the modifications to the Plan.** This could result in the frequencies being reassigned to the Maricopa County metropolitan area. Please send your responses by July 28, 1997 to:

ARRC
PO Box 863
Phoenix, AZ 85001

Sincerely,

Debbie Overton

Debbie Overton, Chair
Arizona Regional Review Committee
Region 3

attachment