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Federal Communications Commission
Office of the Secretary

PR 92-167

PUBLIC SAFETY RADIO

COMMUNICATIONS PLAN

FOR

* REGION 53 *

THE STATE OF TEXAS



CITY OF SAN ANTONIO

P.O. BOX 839966

SAN ANTONIO, TEXAS 78283-3966

February 11, 1992

RECEIVED

Ms. Donna Searcy
Secretary
Federal Communications Commission
Washington, D.C. 20554

FEB 27 1992

Federal Communications Commission
Office of the Secretary

Dear Ms. Searcy:

As chairperson of the Region 53 National Public Safety Planning Advisory Committee (NPSPAC), I am proud to present for your consideration our committee's Frequency Utilization Plan for the State of Texas, Region 53, formulated in accordance with FCC Dockets 87-112 and 87-359.

As the convener for Region 53, I communicated with all of the Council of Governments with the Region 53 area, numerous Police Chiefs, Fire Chiefs, Federal Law Enforcement Officials, State Law Enforcement Officials, Probation and Parole Officials, Corrections Officials, Mental Health, Emergency Planners, Forestry, and concerned citizens. I requested their ideas, thoughts and inputs. As soon as I completed this I issued a Public Notice December 2, 1991 that the initial Region 53 Public Safety Planning meeting would be held December 4, 1991 at 2:00PM in the Alamo Area Council of Governments office, 118 Broadway San Antonio, Texas.

In addition, to this official notice, I invited each individual I spoke with (described above) to attend this meeting. This initial regional planning meeting officially established the Region 53 Planning Committee with Don Brooks elected as Chairperson by quorum. Participants in this meeting represented Public Safety Radio Services, Special Emergency Service and the Vendor community. Please note that Vendors were encouraged to attend and offer their thoughts and insights, but they were not allowed to vote.

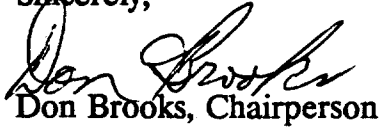
As Chairperson of Region 53, I compiled all inputs from the Regional Planning Committee members and developed a final draft. January 2, 1992 I sent copies of the Region 53 final draft to the Region 49 Chairperson Haislet; Region 50 Chairperson McDaniel; and Region 51 Chairperson Zeringue requesting their review and critique of the Region 53 Plan. I also mailed copies of the Region 53 final draft to all members of the Planning Committee and to all Council of Governments in the Region 53 area.

The final acceptance meeting was held January 15, 1992 at 10:00am in the Alamo Area Council of Government's office 118 Broadway San Antonio, Texas.

The final document is proof that a diverse group of individuals and organizations can come together and work for the good of the community and citizens they serve.

Please call me at (512)299-7022 or by fax at (512)299-7072, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Brooks", is written over the printed name.

Don Brooks, Chairperson

Region 53

City of San Antonio

P.O. Box 839966

San Antonio, Texas 78283-3966

**ITEMS TO CHECK PERTAINING TO THE
REGION 53 PLAN**

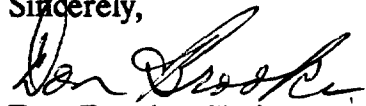
1. Cover page identifies the region.
2. Chairperson's name, address, phone number, and signature.
PAGE 106.
3. Committee members' names, organizational affiliations, addresses, and phone numbers. SEE PAGE 106, 107.
4. Summary of major elements of the plan. SEE PAGE 2
5. General description how spectrum is allotted among users
SEE PAGE 10.
6. Explanation how the plan has been coordinated with adjacent regions.
SEE PAGE 105.
7. Explanation how eligibles are prioritized in areas where not all eligibles may receive licenses. SEE PAGE 105.
8. Explanation how the plan has been coordinated with adjacent regions.
SEE PAGE 18.
9. Description how plan puts spectrum to the best possible use by
 - I. requiring system design with minimum coverage areas.
SEE PAGE 12.
 - II. assigning frequencies so that maximum frequency reuse and offset channel use may be made. SEE PAGE 16.
 - III. making use of trunking. SEE PAGE 21.
 - IV. requiring small entities with minimal requirements to join together on a single system, where possible. SEE PAGE 21.
10. Explanation how interoperability channels are managed. SEE PAGE 8.
11. Slow growth language. SEE PAGE 23.
12. Region 53's plan features "GIVE BACK" frequencies. SEE PAGE 15.
13. Use of the APCO/CET sorting program. SEE PAGE 27.
14. Does the Region 53 provide for regional mutual aid channels in addition to the five (5) common channels? **NO.**

15. Planning Committee formation

- I. Advertising, letters, TLETS bulletin. SEE APPENDIX A PAGE 108.
- II. Who could vote? Procedure used after first meeting. SEE PAGE 106.
- III. How was the Region 53 plan adopted? By vote of those in attendance.

I hope you find this check list helpful as you are reviewing the Region 53 plan.

Sincerely,

A handwritten signature in dark ink, appearing to read "Don Brooks", written over the printed name.

Don Brooks, Chairperson
Region 53

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1.0 SCOPE

1.1 Introduction

In December of 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. By their regular means of initiation, the FCC began the process of developing such a plan. Through their efforts, and the efforts of the National Public Safety Planning Advisory Committee (NPSPAC) the plan was begun.

The National Public Safety Planning Advisory Committee provided an opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach by recommending policy guidelines, technical standards, and procedures to satisfy public safety needs for the foreseeable future. After consideration of NPSPAC's Final Report and comments filed in Docket No. 87-112, a Report and Order was released by the FCC in December 1987, which established a structure for the National Plan that consists of guidelines for the development of regional plans.

The National Plan provides guidelines for the development of regional plans. The particulars of this plan are found in FCC 87-359, which contains the required steps and contents for regional plan development. It is on this document that this plan is developed.

1.2 Purpose

Public safety communications has, for many years, been inadequate throughout the United States. This is as true for Texas as it is for any other state. Many, if not all, public safety radio users are constantly bombarded with outside interference, noise, and over crowding. It is with these problems in mind that this plan was developed.

This regional plan was developed with the objective of assuring all levels of public safety/public service agencies that radio communications in the near and distant future will not suffer from the problems of the past. The allocation of frequencies was done in as equitable a way as possible. The goal was to supply a pool of frequencies for each county and a pool for state agency use with adequate reserve allocations for future needs in all areas, and a method to appeal initial allocations based on need.

1.2 Purpose, (continued)

The National Plan, as developed by NPSPAC, was followed very closely in all considerations for frequency allocation, re-use, turn back, regional interoperability, spectrum requirements and adjacent region operations.

This plan should provide the flexibility to accommodate the growth and changes which are bound to occur in public safety and public service communications operations long into the future.

2.0 AUTHORITY

2.1 Regional Planning Committee

The development of the Public-Safety Radio Communications Plan for Region 53, one of several regions in the State of Texas has followed the requirements of the FCC's Report and Order as issued in the matter of General Docket 87-112.

In accordance with the FCC's Report and Order 87-112, the Associated Public-Safety Communications Officers Inc. (APCO) recommended to the Commission the appointment of a "Convener" for Texas, Region 53. The Convener served as the coordinator for the assembly and formation of the planning committee.

Key participants in the formation of the Regional Planning Committee represent interested parties from both the Public Safety and Special Emergency Radio Services. A total of 8 individuals were primary participants in the development process. The list herein contains the names, organizational affiliations, mailing addresses and phone numbers of all participants in the Regional Planning Committee.

1. Don Brooks, Radio Services Manager
City of San Antonio
P.O. Box 839966
San Antonio, Texas 78283-3966
phone (512)299-7022
2. William Davenport, Fire Department
City of San Antonio
Fire Department Communications
P.O. Box 839966
San Antonio, Texas 78283-3966
phone (512)299-7968

3. Nolan Suarez, Community Services Manager
Alamo Area Council of Government
118 Broadway, Ste. 400
San Antonio, Texas 78218
phone (512)225-5201
4. Al Notzon, Executive Director
Alamo Area Council of Government
118 Broadway, Ste. 400
San Antonio, Texas 78218
phone (512)225-5201
5. Victor Perez, Deputy Director
Bexar County Information Services
203 W. Nueva
San Antonio, Texas 78207-4507
phone (512)978-0211
6. Gene Kilgore, Director of Communications
Coastal Bend Council of Governments
P.O. Box 9909
Corpus Christi, Texas 78469
phone (512)883-5743
7. Jay Loretta Nelson
Coastal Bend 911 Network Director
P.O. Box 9909
Corpus Christi, Texas 78469
phone (512)883-5743
8. Ken Yoder, Frequency Coordinator
Department of Public Safety
Austin, Texas 78773-0001
phone (512)465-2104
9. Bob Haider, Governmental Sales
Motorola, Communications and Electronics
7800 IH 10 West, Ste. 105
San Antonio, Texas 78230
phone (512)680-1850

10. Barbara Cross, Government Acct. Representative
GE Mobile Communications
16607 Blanco Road, Bldg. 6, #604
San Antonio, Texas 78232
phone (512)492-8281

The committee was selected by attendance at the planning meetings. Each member of the Committee representing an eligible licensee under the Public Safety Radio Services and the Special Emergency Radio Services was entitled to one vote in all Committee matters. Except as may be provided elsewhere in the Plan, the majority of those present at a scheduled meeting constituted a majority for all business. Only the final approval of the plan prior to submission to the FCC required a vote from more than would be in attendance at a regular meeting. In this case the vote was conducted by mail ballot sent to all those who had participated in the planning process. This way, the finished plan was reviewed and accepted by the widest, within reason, group of public safety/public service users.

2.2 Planning Committee Formation

The process of forming the Planning Committee was conducted in the following steps:

1. Personal interviews were held with the representatives of all major state agency radio users.
2. Presentations concerning the requirements for a regional planning committee were presented and discussed at state organization meetings. At each presentation there was an opportunity for persons to place themselves and/or their agency on the mailing list.
3. Letters of announcement were mailed to each major state agency radio users, those placed on the mailing list, as well as to state organizations composed of local government level public safety/public service users. Letters were also sent to all members of the Texas Chapter of APCO.
4. A public notice was placed in a newspaper with state wide distribution, for the first planning committee meeting. This first meeting was held at the Alamo Area Council of Governments, a public facility. (See Appendix A).
5. No organizational meetings were held before the chairperson was elected.

2.2 Planning Committee Formation, (continued)

6. Committee membership was left open to any person or agency which may not have been notified or decided to join the committee later.
7. Vendor participation was encouraged. Vendors were not allowed a vote.

2.3 National Interrelationships

The Regional Plan is in conformity with the National Plan. If there is a conflict between the two plans, the National Plan will govern. It is expected that Regional Plans for other areas of the country may differ from this plan due to the broad differences in circumstance, geography, and population density. By officially sanctioning this plan the Federal Communications Commission agrees to its conformity to the National Plan. Nothing in the Plan is to interfere with the proper functions and duties of the organizations appointed by the FCC for frequency coordination in the Private Land Mobile Radio Services, but it provides procedures that are the consensus of the Public Safety Radio Services and Special Emergency Radio Service user agencies in this Region. If there is a perceived conflict then the judgment of the FCC will prevail.

2.4 Federal Interoperability

Interoperability between the Federal, State, and Local Governments during both daily and disaster operations will primarily take place on the five common channels identified in the National Plan. Additionally, through the use of S-160 or equivalent agreements, a licensee may permit Federal use of a non-Federal communications system. Such use, on other than the five identified common channels, is to be in full compliance with FCC requirements for government use of non-government frequencies (Title 47 CFR, sec 2.103). It is permissible for a non-Federal government licensee to increase channel requirements to account for a 2 percent increase in mobile units, dependent on the amount of Federal Government Agencies involvement in its area, provided that written documentation from Federal agencies supports at least that number of increased units.

2.5 Regional Review Committee

Upon approval of this Plan by the Federal Communications Commission, a Region Review Committee will be established for the review of applications which do not fall within the stated guidelines provided for in this plan, or for the settlement of disputes concerning this plan and/or its application.

This committee shall consist of the Region 53 Chairman and representatives from each of the following agencies, State, Municipal Police, Fire, Sheriff, Emergency Medical Service, and a representation from other eligibles will also be welcome. This committee and its composition will be assured by the Texas APCO chapter and other Public Safety organizations. Membership on this committee will be solicited on an annual basis. Since this committee will probably not have regular business, it will be up to the Region 53 Chairman to notify the committee of problems, conflicts, or when it becomes apparent that spectrum demands will outpace available spectrum. Each member of the committee shall be furnished a copy of this plan upon their appointment or election to the committee.

Plan updates shall be accomplished by this committee. All changes or updates to the plan shall be first agreed upon by this committee and then submitted to the FCC for their review and consideration. When approved all changes shall be added to the plan with the appropriate documentation of approval.

This committee shall meet at least once annually to review the implementation of the plan. This review shall consist of examination of any and all license activity.

3.0 SPECTRUM UTILIZATION

This portion of the Plan provides a basis for proper spectrum utilization. Its purpose is to guide the Regional Review Committee in their task of evaluating the implementation of this plan within this Region.

3.1 Region Defined

Region 53 is within the State of Texas. This region is the result of definition by the Federal Communications Commission, as a result of recommendations made in the National Public Safety Planning Advisory Committee (NPSPAC) plan as submitted and approved and contained in Docket 87-112.

The purpose of this section is to provide the basis for the assignment of frequencies, and their re-use. Since the frequency allocation formula used is based on population within a county, it is necessary to provide this information within this plan. Below is the data used in the determination of frequency allocations.

3.2.1 Region 53 Population And Expected Growth Percentage.

The population of Region 53 divided between urban and rural residence. The urban population is 1,663,539 and the rural population is 1,475,214. The population within developed urban areas is about 53 percent.

Expected growth rate for Region 53 will be less than 1 percent annually.

3.2.2 Geographical Description

There are 47 counties in Region 53 with a total land mass of 56,023 square miles. The largest county is Webb, with a total of 3,376 square miles. Water areas of significance, are the Gulf of Mexico and the Rio Grande river.

As is shown above, the population of Region 53 is 3,138,753 distributed across the land area contained in the state of Texas. This presents some problems in area coverage for radio systems in that the entire land area of any given jurisdiction must be covered. The population per square mile is somewhat sparse which generally indicates that the concentration of radio users for public safety activities is also sparse. All of these items were taken under consideration in the allocation plan.

3.3 Usage Guidelines

All systems operating within Region 53 having five or more channels will be required to be trunked. Those systems having four or less channels may be conventional or trunked.

The FCC, in its Report and Order states, "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not meet operational requirements. Exceptions will not be granted routinely, however, and strong evidence showing why trunking is unacceptable must be presented in support of any request for exception."

3.3 Usage Guideline, (continued)

Systems of four or less channels operating in the conventional mode who do not meet FCC loading standards will be required to share the frequency on a non-exclusive basis.

Public Safety communications at the state level, as it impacts Region 53, will be reviewed by the Committee. State-wide public safety agencies will submit their communications plans for impact approval if they utilize communications systems within the Region 53 and those portions of such systems must be compatible with the Regional 53 Plan.

The next level of communication coverage will be a county/multiple municipality area. Those systems that are designed to provide area communication coverage must demonstrate their need to require such wide area coverage.

This would apply in a situation such as a city requesting coverage of an entire county. Communication coverage beyond the bounds of a jurisdictional area of concern cannot be tolerated unless it is critical to the protection of life and property. If the 800 MHz trunked radio technology is utilized, the system design must include as many county/multiple municipality government public safety and public service radio users as can be managed technically.

The county/multiple municipality agency(ies), depending upon systems loading and the need for multiple systems within an area, must provide intercommunications between area-wide systems. In a multi-agency environment, a lead agency using the 800 MHz spectrum, which may be any agency having primary response obligations in the geographic area, must implement the Common Channels in this band as mandated by the National Plan. Such implementation must be reviewed and approved by the Local APCO Frequency Advisor, and at his/her discretion, the Regional Review Committee.

Municipal terminology often differs. In order to provide a title for the next level of communications the term "CITY" is used to define the level below county-wide. CITY communications for public safety and public services purposes must provide only the communications needed within its boundaries. However, if the total number of radios in service does not reach minimum loading criteria for a trunked system, that municipality must consider utilizing the next higher system level, if 800 MHz trunked radio is available in the area. As those higher level systems reach capacity, the smaller system communicators in public safety and public service must then consider uniting

3.3 Usage Guideline, (continued)

their communications efforts to formulate one large system or forfeit use of the limited 800 MHz spectrum.

Where smaller conventional 800 MHz needs are requested, those frequencies to be utilized must not interfere with the region's trunked systems. The 800 MHz trunked radio system is to be considered the higher technology at this time and in greater compliance with FCC guidelines. The amount of interference that can be tolerated depends on the service affected. Personal life and property protection shall receive the highest priority and disruptive interference with communications involved in these services in an area shall not be tolerated. Any co-channel interference within an authorized area of coverage will be examined on a case by case basis by the Regional Review Committee.

3.4 Technical Design Requirements For Licensing

3.4.1 Definition of Coverage Area or Area of Jurisdiction

The coverage area shall be that area for which a system is intended to cover with a received signal strength of greater than 40 dBu. This area shall normally represent the boundaries of the County or the incorporated municipality which is applying for license. In the case of regional or area-wide, multi-jurisdictional systems, the coverage shall be that area of all jurisdictions participating in the system combined.

3.4.2 System Coverage Limitations

System coverage shall be limited to the coverage area defined as listed above plus no more than five (5) additional miles in all directions extending from said boundaries of definition. This limitation shall assure maximum frequency reuse. The only exception to this rule shall be those applicants wishing to offer service or system use to areas outside of their jurisdictional boundaries. In these situations the applicant shall provide a proposal of said service to the Region 53 Chairman. The Region 53 Chairman may request Regional Review committee consider the application.

Systems not located within the geographical center of the jurisdiction(s) for which they cover shall utilize either directional antenna or antenna/tower relationship techniques to achieve the coverage required by this plan.

3.4.3 Determination Of Coverage

There are four variables used in determining the area of coverage of a proposed system. These variables are (1) the required strength of the received signal, (2) antenna height above average terrain (HAAT), (3) the effective radiated power (ERP) of the system, and (4) the type of environment.

Received Signal Strength:

For purposes of this plan, received signal strength shall be the determining factor which defines the actual boundary of a system. The minimum signal level which marks the outer boundary of a system shall be 40 dBu.

Antenna Height:

Shall be the height of the antenna above the average terrain surrounding the tower site.

Effective Radiated Power (ERP):

The ERP is the transmitter output power times the net gain of the antenna system. The actual formula is: $ERP (w) = Power(w) \times \text{Antilog}(\text{net gain in dB} / 10)$.

Environment Type:

OKUMURA/HATA METHOD - The Okumura method uses four different classifications to describe the average terrain around a transmitter site or area. The classifications are:

1-URBAN; Which is built-up city-crowded with large buildings or closely interspersed with houses and thickly-grown trees. This would include the downtown area of a major city.

2-SUBURBAN; Which is a city of highway scattered with trees, houses and buildings. This would include the downtown area of a large city.

3-QUASI-OPEN; Is an area between suburban and open areas. This includes areas outside of city limits that have few buildings and houses.

3.4.3 Determination Of Coverage (continued)

4-OPEN; Is and area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300 to 400 meters ahead. This would include farm land, open fields, etc.

The Okumura/Hata method is the method resident in the computer packing program to develop this plan. A minimum system shall be permitted without special consideration when it is limited to an HAAT of 100 feet and the transmitter is centrally located within the jurisdiction or jurisdictions participating in a system. In all jurisdictions, regardless of size, a maximum boundary radius of 8 miles shall be allowed provided adequate measures have been taken to assure that interference of existing co-channel and adjacent channel systems will not occur. Preparation of these requirements shall be the responsibility of the applicant. The Federal Communications Commission provides, in part 90.309(a)(4) of the Rules and Regulations, some additional guidance for these calculations.

3.4.4 Annexations And Other Expansions

As cities grow, annexations occur. When an expansion of the present city limits of any city currently using an 800 megahertz system within the spectrum as herein specified occurs, it is understood that the existing system may have to be expanded and its range increased. This is a modification and may be permitted. The increased range of the system will have to be determined at the time of modification to assure non-interference with any other existing system. Where interference is likely, the use of alternate methods of expansion, such as satellite systems may be necessary.

Should the annexation or expansion of a city effectively take in all or most of a county, the allocation for that county may be given to the city if required by said city and not in use or planned to be used by the county. Where more spectrum is not available from the initial allocation, the rules for expansion of initial allocation, as contained in this plan, shall apply.

3.4.5 Coverage Area Description

All applicants shall provide with their applications, a map showing the jurisdictional boundaries to be covered by the system, and the calculated system coverage. This map shall display the location of the system transmitter(s), including control stations. It is recommended that a U.S. Geological Survey (USGS) Quad topographical map be used for this purpose. If not available, a high quality locally produced map or a highway map may be substituted. Regardless of the type map used, the name of the applicant and the scale of the map shall be displayed on the map.

3.4.6 Give Back Frequencies

All agencies participating in the use of the new 800 megahertz spectrum shall prepare and submit a plan for the abandonment of their currently licensed frequencies in the lower bands. The Region 53 Planning Committee has the freedom to consider below-800 MHz public safety bands in developing their regional plans, but the licensing of channels in these bands will continue to be conducted through existing frequency coordination procedures.

Frequencies which are to be abandoned by an agency shall not be handed down to another agency within the respective jurisdiction. It is recommended that any jurisdiction wishing to "hand down" frequencies to another agency submit the proper coordination and application forms with the document of release.

The time frame allowed for phasing into 800 MHz and out of the lower currently licensed bands will be considered on a case by case basis by the review committee. Generally, one year will be considered acceptable in most cases, with two years as a maximum. Any agency requiring more than two years shall provide documents stating the reasons for the delay, and give the estimated time of turn-back.

3.4.7 Unused Spectrum

Due to the fact that all of the frequency spectrum is not needed at this time, the excess channel pairs will be returned to a reserve pool. These channels may be used for conflict with adjacent Region allocations or may simply remain within this Region until needed. This does not imply that these frequencies are unavailable, only that before they can be utilized within the Region they must be coordinated via the regular APCO coordination process and within the guidelines set forth in this plan. Where possible, the channels designated for a jurisdiction in this plan shall be used.

3.4.8 Adjacent Region Coordination

Coordination with adjacent regions shall be an on-going process until all region plans have been finalized. At present, all adjacent regions have been coordinated with and no conflicts have been identified. The adjacent regions with which coordination has been conducted are: Region 49; Region 50; and Region 51.

(SEE APPENDIX B)

As the use of the five National channels is not considered a day-to-day function, the "hard" coordination for the use of these channels is not considered to be necessary or advisable. The use of these channels will always be on a non-interference basis, with on-the-air coordination at the time of use when required. Any user found to be operating in any manner other than this shall be considered to be operating improperly and subject to the existing Federal Communications Commission rules for willful interference with the communications of other users.

3.5 Initial Spectrum Allocation

3.5.1 Frequency Sorting Methodology

The initial spectrum allocation for the Region was determined by a computerized frequency sorting process performed by APCO/CET. The purpose of the computer program which assigns frequencies to specific eligibles and to pools for future assignments is two-fold:

- A) The assignments must result in a high degree of spectrum efficiency, and
- B) The assignments must result in a low probability of co-channel and adjacent channel interference.

Since the desired output is a geographic sorting of frequencies, a method of defining geography must be part of the input. A list of the number of channels to be assigned in each geographic area is also required, along with the name of the eligible or pool.

Acceptable interference probabilities are determined for the Region. Frequency assignments are then made using a computer program which satisfies the goals of spectrum efficiency and interference protection. The following narrative describes the factors and process used by the computer program.

3.5.2 Geographic Area

For the purpose of this frequency sort, a geographic area is defined as one or more circles of equal radius. To the degree practical, the circle(s) should include the entire area of the eligible's geopolitical boundary, but not exceed the boundary by more than three (3) miles. Thus, the procedure is to gather maps of sufficient detail, outline the areas to be defined, determine the coordinates and radius of the circles which define each area, and tabulate the data.

3.5.3 Define The Environment

The environment of each system is defined according to the Okumura/Hata method of classifications.

3.5.4 Blocked Channels

In the Region there are five mutual aid channels which must be blocked out to prevent the computer from making assignments on these channels. (Since the mutual aid channels are spaced at 0.5 MHz intervals, other Region-wide systems are spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.)

These Region-wide blocked channels are identified by FCC channel number, tabulated and they become input to the computer program.

3.5.5 Transmitter Combining

The computer program is designed to provide a minimum frequency separation between any two channels assigned to the same eligible at the same site. This separation is provided in order to enable more efficient combining of multiple transmitters to a single antenna. These separated blocks of frequencies also have a maximum size. That is, if the eligible has more frequencies than the maximum size of the combining block, then a second compatible block is created, and so on. Each of these parameters is adjustable in the program on a global basis. The default parameters chosen are 0.25MHz minimum spacing and five channel blocks.

3.5.6 Special Considerations

There are licensees in the 806-821/852-866 MHz spectrum who plan to expand existing systems into the 821-824/866-869 MHz bands. Some of the existing radio units are unable to operate on 12.5 KHz separated carrier frequencies. The result is that these radios can only operate on "even" FCC numbered channels in the 821-824/866-869 MHz band. The computer program is able to take this into account when making assignments.

3.5.7 Protection Ratios

There are two interference protection ratios built into the computer program. One is for the co-channel case, the other is for the adjacent channel case. The ratios provide 35 dB Desired/Undesired signal ratio for co-channel assignments, and 15 dB Desired/Undesired ratio for the adjacent channel case. These ratios provide an acceptable probability of interference for Public Safety Services.

3.5.8 Adjacent Region Considerations

The computer program requires a listing of channels to be blocked along the borderline with other regions which have pre-existing plans. If the adjacent region plan was developed using the APCO/CET packing program, this information exists in the database. If the adjacent region plan was developed by another method, then the data must be obtained from the adjacent region's plan in order to build the exclusion list.

4.0 COMMUNICATIONS REQUIREMENTS

4.1 Common Channel Implementation

The implementation of the International Common Channels must follow the guidelines as set forth by the Federal Communications Commission by the approval of the National Plan. These five common channels are accessible by all levels of government and shall be used in accordance with the provisions of the National Plan. All mobile and portable equipment must be equipped to operate in the "talkaround mode" when required on the International Channels.

The International calling channel (821/866.0125 MHz) shall be implemented as a full mobile relay. Wide area coverage transmitters will be installed where applicable within a system. Large system users (5 channels or more) of 800 MHz shall be required to monitor this channel at all times. The area of

4.1 Common Channel Implementation, (continued)

coverage for this channel shall be equal to the area covered by the licensed system. This may or may not require the use of satellite receivers within the area to meet this requirement.

The four International Tactical (ITAC) Channels will be assigned State-wide, for use as needed by all eligible licensees. These channels are to be used in accordance with the National Plan and in compliance with the regulations as set forth by the Federal Communications Commission. These channels require no special licensing, only that the users be eligible for licensing on the other Public Safety 800 MHz channels as specified in section 90.616 (a) of the FCC Rules and Regulations.

4.1.1 Areas of Operation

The common channels shall be available for use throughout the Region. No specific assignments were deemed necessary within the Region.

4.1.2 Operation on the Common Channels

Normally, the five interoperable channels are to be used only for activities requiring inter-communications between agencies not sharing any other compatible communications system. Interoperable channels are not to be used by any level agency for routine, daily operations. In major emergency situations, one or more ITAC channels may be assigned by the primary Public Safety Agency within that area of operation. The primary Public Safety agency in each county, if not defined elsewhere in the plan, shall be the County Sheriff's Department or Public Safety Department or the lead agency, which may be any agency licensed to operate in this spectrum, or "on-scene" commander. The primary Public Safety agency shall be the city level Public Safety Department in situations which occur within the corporate limits of said city. These primary agencies will assign one or more of the ITAC channels for use according to need during each special situation requiring the use of these channels.

Participants in the interoperable channels include Federal, State, and Local Disaster Management agencies. Police, Fire, and providers of Basic and Advanced Life support services will be the primary using agencies. If radio channels are available, other services provided in the Public Safety Radio Services and the Special Emergency Radio Services may also participate to the extent required to insure the safety of the public. These agencies include the Highway Department, Motor Vehicle Comptroller, Wildlife and other special service agencies not normally involved in day-to-day public safety

operations.

4.1.3 Operation Procedures

On all Common Channels, plain English will be used at all times, the use of unfamiliar terms, phrases, or codes will not be allowed.

4.1.3(I) International Calling Channel (ICALL): The ICALL channel shall be used to establish contact with other users in a particular Region that can render assistance at an incident. This channel shall not be utilized as an ongoing working channel. Once contact has been established between agencies, an agreed upon ITAC or mutual aid channel shall be used for continued communications.

4.1.3(II) International Tactical Channels (ITAC-1 - ITAC-4): These frequencies are reserved for use by those agencies involved in interagency communications. Incidents requiring multi-agency participation will utilize these frequencies as directed by the control agency assuming responsibility for an incident or area of concern. These frequencies may be subdivided according to function in an incident or by geographical location in response to an incident. It is recommended that the following assignments for ITAC-1 through ITAC-4 be used when possible.

ITAC-1	Law Enforcement
ITAC-2	Fire Services
ITAC-2	Emergency Medical Services
ITAC-4	Command and Control

4.1.4 Coded Squelch

All equipment capable of operating on the five (5) common channels shall be equipped with the National Common Tone Squelch of 156.7 Hz. Mobile relays on these channels, if authorized, may use additional tone or digital squelch codes for the purpose of selecting individual mobile relay stations, provided the National Common Tone Squelch Code is used on the output. If such an arrangement is utilized, provision must also be made for certain centralized, high level sites to be activated by the 156.7 tone to ensure emergency access by transient units.

4.2 Network Operating Methods

Communications systems on ITAC-1 through ITAC-4 will be implemented by agencies who volunteer on a distributed coordinated basis. Every primary geographic section of the Region is intended to be covered by at least one of the ITAC channels. In many areas the common channels will be utilized on a mobile to mobile talk-around basis. Mobile relays on ITAC-1 through ITAC-4 will be on a limited coverage design to permit reuse of the channel several times within the Region and in adjacent regions. Since Region 53 will probably not have a large number of stationary ITAC Channel stations, the implementation of mobile relay or repeaters is strongly encouraged. This will fill an "on-scene" requirement for most multi-agency response situations. Adjacent region coordination will be via existing mutual aid coordination procedures with the requesting region establishing the tactical frequency assignment.

4.3 Requirements For Trunking

All systems operating in the Region having five or more channels will be required to be trunked. Those systems having four or less channels may be conventional. It is strongly suggested that any entity licensing three or more repeaters use trunking.

The FCC in its Report and Order states: "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not meet operational requirements. Exceptions will not be granted routinely. Strong showings as to why trunking is unacceptable must be presented in support of any request for exception."

Systems that do not meet FCC loading standards can be required to share such frequencies on a non-exclusive basis. Those agencies requesting Data channels only can be required to share channels with adjacent agencies wherever feasible or limit coverage to their geographic area. Exceptions will be considered on a case-by-case basis by the Regional Review Committee.

Depending on systems loading and the need for multiple systems within an area, operators of wide area systems (including, but not limited to, designated "Monitoring Agencies") must provide for coordination between area-wide systems and "Monitoring Agencies". Single municipalities or agencies must restrict design and implementation of their systems(s) to provide only the communications needed within its geopolitical boundaries. The use of trunked systems is encouraged. However, if the total number of radios in service does not reach minimum loading criteria for a trunked system, that

4.3 Requirements for Trunking, (continued)

user must consider utilizing the next higher system level if 800 MHz trunked radio is available in the area. As systems reach capacity, the smaller system users must consider consolidating their communications systems to formulate one large trunked system.

A requesting applicant for radio communications in the 800 MHz public safety services in the Region will be required to conform to the FCC loading criteria for its proposed system. The provisions of this regional plan must be used as a guide for establishing any new systems. Strict adherence for limiting the area of coverage to the boundaries of the applicant agency's jurisdiction must be observed. Overlap or extended coverage must be minimized, even where systems utilizing 800 MHz trunked radio systems are proposing to intermix systems for cooperative and/or mutual aid purposes.

Antenna heights are to be limited to provide only the necessary coverage for a system. When antenna locations are restricted to only the "high-ground" transmitter outputs and special antenna patterns must be employed to produce only the necessary coverage with the proper amount of ERP. All necessary precautions are to be taken to gain maximum reuse of the limited 800 MHz spectrum.

4.4 Channel Loading Requirements

An agency/jurisdiction 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 in the event that other frequencies meeting the criteria for assignment are exhausted. Shared use of a frequency is not interference free. Users of single frequency systems may be required to provide the Regional Review Committee "confirmation of loading" for mobiles and portables as a method of validating system loading.

This exception shall apply to agencies having only one system and a single frequency. Agencies/jurisdictions requesting multiple frequencies or employing trunking technology shall comply with the loading standards as outlined below or provide a "Traffic Loading Study" that meets the criteria as outlined below.

4.4.1 Loading Tables

EMERGENCY		NON-EMERGENCY	
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

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

4.4.2 Traffic Loading Study

Justification for adding frequencies, or retaining existing frequencies, can be provided by a traffic loading study in lieu of loading by number of transmitters per channel. It will be the responsibility of the requesting agency to provide a verifiable study showing sufficient airtime usage to merit additional frequencies. A showing of airtime usage, excluding telephone interconnect air time, during the peak busy hour greater than 70 percent per channel on three consecutive days will be required to satisfy loading criteria.

4.4.3 Slow Growth

All systems in the 821-824/866-869 MHZ bands under this will be slow growth in accordance with Section 90.629 of the Federal Communications Commission's rules.

4.5 Use of Long Range Communications

During incidents of major proportions, where Public Safety requirements might include the need for long-range communications in and out of a disaster area, alternate radio communications plans are to be addressed by Primary Public Safety agencies within this sub-region. These agencies should integrate the appropriate interface to the long distance communications providers. Such long distance radio communications might be amateur radio operations, satellite communications and/or long range emergency preparedness communications systems, any of or all of which should be incorporated as part of the communications plans of those lead agencies. They then could provide the means to communicate outside the area for themselves and the smaller agencies who might need assistance. Instances as addressed in the National Public Safety Planning Advisory Committee's Plan, such as earthquakes, hurricanes, floods, widespread forest fires, or nuclear reactor problems could be a cause for such long-range communications needs.

4.6 Expansion of Existing Systems

Existing systems that are to be expanded to include the frequency bands of 821-824/866-869 MHz will have the mobile radios "grandfathered", provided that they are modified in conformance with the Memorandum Opinion and Order, FCC Docket 87-112. Primarily this involves reducing the modulation to +/- 4 KHz. Existing base stations in the frequency bands 806-821/851-866 MHz may not be used in the frequency bands 821-824/866-869 MHz.

5.0 IMPLEMENTATION AND PROCEDURES

5.1 Notification

Several methods of notification were used to invite interested parties to participate in the development of this plan. Initially, personal contact was made by the "convener" to all of the major State agency communications users in the State of Texas. Announcements were made at various group meetings such as the Combined Law Enforcement Officers Association, the International Fire Chiefs Association, the Texas Fire Fighters Association, the Texas Civil Defense Association and the Texas Sheriff's Association.

Supplemental to the personal contact, an advertisement was placed in a State-wide newspaper prior to the initial meeting. Several announcements were printed on the Texas Crime Information Teletype network. All APCO Chapter members and a large number of other interested parties who had requested notification were sent letters of invitation. SEE APPENDIX A for examples of letters and newspaper legal notifications.

5.1 Notification (continued)

During the initial meeting, names, addresses and telephone numbers of those individuals present who wished to either participate in the planning process, or who wanted to be kept informed on the progress of the planning effort were taken. These individuals or agencies were sent all announcements for meetings and bulletins of progress.

When the work on the plan was completed, a final planning committee meeting was called. This meeting was held at the Alamo Area Council Of Governments Office on January 15, 1992. Each member of the planning committee was presented with a draft copy of the plan for study. A copy of the final draft was mailed to each the committee not present at the meeting. Each plan contained a ballot for voting on the acceptance of the plan.

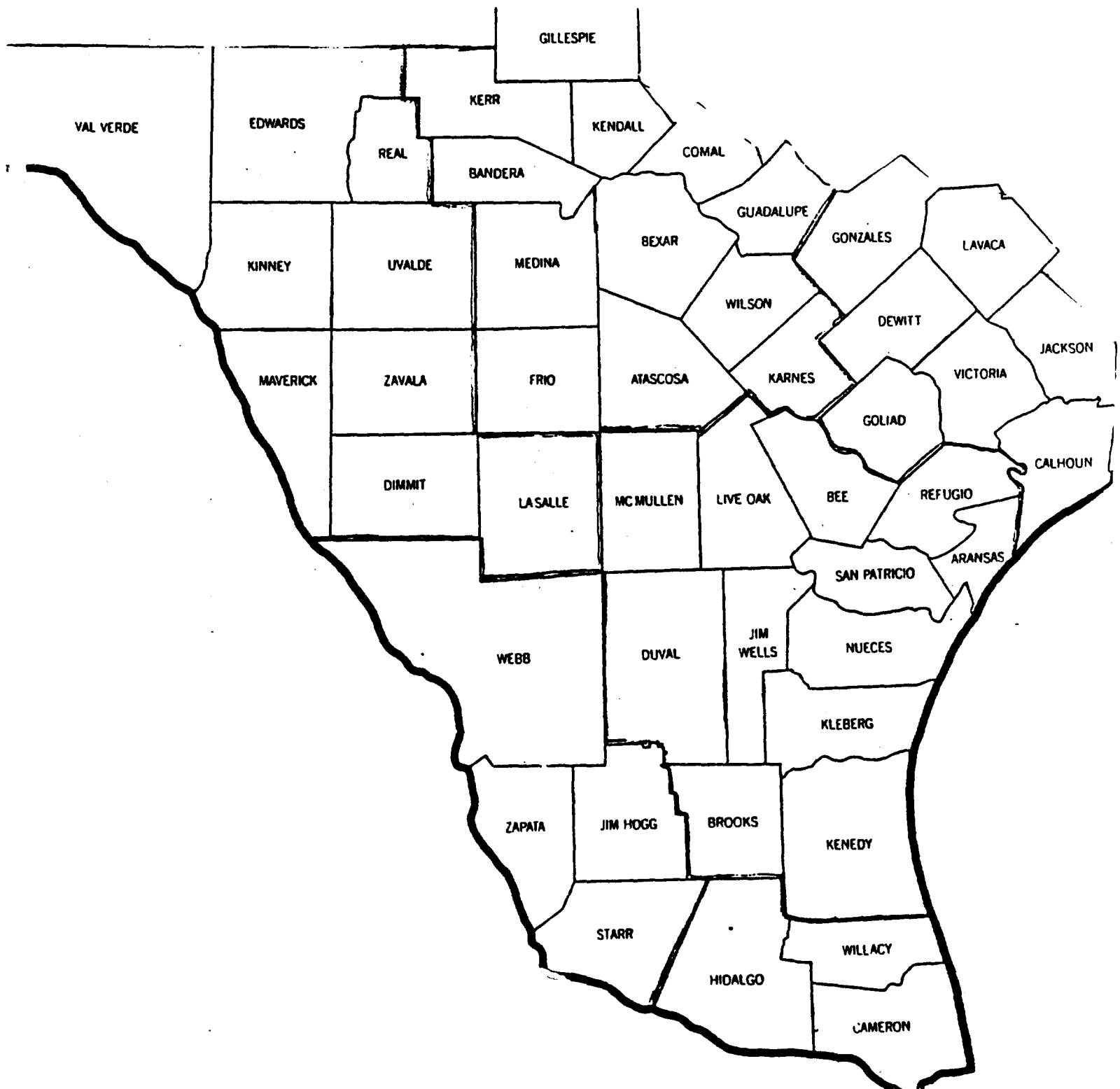
As with the formation of the committee, a public notice was placed in the San Antonio Express-News Newspaper (see APPENDIX B) announcing the completion of the plan and the intention to file with the Federal Communications Commission. This same announcement was also run over the TCIC/NCIC Computer Network.

5.2 Frequency Allocation Process

The method used for "packing" Region 53 was the APCO/CET computerized method. The approximate geographical location for the center of each county, in latitude and longitude, were provided along with the environmental type of the county and the approximate radius to cover the county lines. Along with this information, a list of frequencies to block along the adjacent region's border was included. The actual assignment of frequencies is for four (4) channel-pairs per county.

This allocation is the minimum and only applies to counties with a population of 20,000 or less. One additional channel is allocated for each additional 20,000 of population. The state of Texas has reserved 20 channels State-wide. This leaves a reserve pool of channels for future assignment.

5.3 Region 53 Map



4 Data Packing Plan for Region 53

Below is the data, or packing plan generated by APCO/CET via the computerized packing program. The first section is county by county information provided, followed by the packing plan. The plan took adjacent regions into consideration, in addition, letters of concurrence were sent.

Multiple Site Systems

Site Name		Site Latitude	Site Longitude	Number of Channels	Coverage (mi)	Environment Type
1 *	UVALDE	A 29 27 6	99 36 27	4	14.00	3
*	UVALDE	B 29 15 49	99 37 3	4	14.00	3
1 *	UVALDE	C 29 15 49	99 54 59	4	14.00	3
1 *	UVALDE	D 29 26 23	99 54 59	4	14.00	3
2 *	FRIO	A 28 56 36	99 15 12	4	12.00	3
2 *	FRIO	B 28 56 36	98 58 3	4	12.00	3
*	FRIO	C 28 47 47	98 58 3	4	12.00	3
2 *	FRIO	D 28 47 47	99 14 12	4	12.00	3
*	JACKSON	A 29 4 36	96 40 49	4	12.00	3
3 *	JACKSON	B 28 58 23	96 35 31	4	12.00	3
*	JACKSON	C 28 54 4	96 29 55	4	12.00	3
*	JACKSON	D 28 47 52	96 29 32	4	12.00	3
*	VICTORIA	A 28 57 16	96 58 14	7	10.00	2
*	VICTORIA	B 28 51 3	97 8 2	7	10.00	2
4 *	VICTORIA	C 28 37 53	97 1 26	7	10.00	2
*	VICTORIA	D 28 46 21	96 49 7	7	10.00	2
5 *	LA SALLE	A 28 29 20	98 58 38	4	12.00	4
*	LA SALLE	B 28 29 20	99 13 56	4	12.00	4
5 *	LA SALLE	C 28 11 28	99 13 56	4	12.00	4
5 *	LA SALLE	D 28 12 36	98 58 38	4	12.00	4
6 *	LAVACA	A 29 28 33	97 4 44	4	11.00	3
6 *	LAVACA	B 29 28 33	96 55 10	4	11.00	3
*	LAVACA	C 29 14 4	96 56 15	4	11.00	3
6 *	LAVACA	D 29 20 39	96 44 46	4	11.00	3
6 *	LAVACA	E 29 22 43	97 1 22	4	11.00	3

Site Name			Site Latitude			Site Longitude			Number of Coverage Channels		Coverage (mi)		Environment Type
7	*	DE WITT	A	29	14	15	97	14	57	4	9.00	3	
7	*	DE WITT	B	29	7	29	97	8	34	4	9.00	3	
	*	DE WITT	C	28	59	58	97	18	7	4	9.00	3	
7	*	DE WITT	D	28	58	5	97	35	20	4	9.00	3	
	*	DE WITT	E	29	5	59	97	26	25	4	9.00	3	
8	*	WILSON	A	29	14	49	97	55	19	4	10.00	3	
	*	WILSON	B	29	16	42	98	6	48	4	10.00	3	
8	*	WILSON	C	29	3	32	98	10	37	4	10.00	3	
8	*	WILSON	D	29	9	11	98	4	53	4	10.00	3	
	*	WILSON	E	29	7	18	98	13	35	4	10.00	3	
9	*	ARANSAS	A	28	13	38	96	53	19	4	7.00	3	
	*	ARANSAS	B	28	11	52	97	0	30	4	7.00	3	
9	*	ARANSAS	C	28	6	35	96	56	55	4	7.00	3	
9	*	ARANSAS	D	28	1	60	97	7	16	4	7.00	3	
	*	ARANSAS	E	27	57	56	97	1	49	4	7.00	3	
10	*	JIM HOGG	A	27	14	8	98	39	35	5	10.00	3	
	*	JIM HOGG	B	27	1	47	98	34	25	5	10.00	3	
10	*	JIM HOGG	C	26	54	26	98	34	25	5	10.00	3	
	*	JIM HOGG	D	26	54	26	98	48	43	5	10.00	3	
	*	JIM HOGG	E	27	7	57	98	49	3	5	10.00	3	
11	*	ZAPATA	A	26	45	39	99	6	34	4	10.00	3	
11	*	ZAPATA	B	26	57	60	99	5	34	4	10.00	3	
11	*	ZAPATA	C	27	8	34	99	5	22	4	10.00	3	
11	*	ZAPATA	D	27	10	20	99	19	54	4	10.00	3	
11	*	ZAPATA	E	26	59	24	99	16	45	4	10.00	3	
12	*	GILLESPIE	A	30	23	22	98	43	9	4	9.00	3	
12	*	GILLESPIE	B	30	14	35	98	43	9	4	9.00	3	
12	*	GILLESPIE	C	30	14	35	99	9	56	4	9.00	3	
12	*	GILLESPIE	D	30	14	35	98	56	32	4	9.00	3	
12	*	GILLESPIE	E	30	23	22	98	56	32	4	9.00	3	
12	*	GILLESPIE		30	23	22	99	9	56	4	9.00	3	

Site Name			Site Latitude			Site Longitude			Number of Coverage Channels		Coverage (mi)	Environment Type
12	*	KENDALL	A	30	2	18	98	39	20	4	8.00	3
13	*	KENDALL	B	29	57	2	98	34	13	4	8.00	3
	*	KENDALL	C	29	51	28	98	41	50	4	8.00	3
13	*	KENDALL	D	29	53	58	98	47	38	4	8.00	3
13	*	KENDALL	E	30	1	52	98	48	48	4	8.00	3
	*	KENDALL	F	29	50	9	98	47	11	4	8.00	3
	*	COMAL	A	29	55	39	98	17	47	5	7.00	2
14	*	COMAL	B	29	46	50	98	32	7	5	7.00	2
14	*	COMAL	C	29	50	22	98	23	9	5	7.00	2
	*	COMAL	D	29	50	22	98	10	36	5	7.00	2
14	*	COMAL	E	29	46	50	98	7	1	5	7.00	2
14	*	COMAL	F	29	42	5	98	16	22	5	7.00	2
15	*	BANDERA	A	29	40	19	98	55	49	4	8.00	3
	*	BANDERA	B	29	44	33	99	6	10	4	8.00	3
	*	BANDERA	C	29	44	33	99	29	28	4	8.00	3
15	*	BANDERA	D	29	44	12	99	17	44	4	8.00	3
	*	BANDERA	E	29	48	36	99	29	16	4	8.00	3
15	*	BANDERA	F	29	48	15	99	14	56	4	8.00	3
	*	ZAVALA	A	28	56	46	99	57	1	4	11.00	4
16	*	ZAVALA	B	28	56	46	99	33	43	4	11.00	4
16	*	ZAVALA	C	28	56	46	99	46	16	4	11.00	4
	*	ZAVALA	D	28	47	57	99	46	16	4	11.00	4
16	*	ZAVALA	E	28	46	54	99	57	1	4	11.00	4
16	*	ZAVALA	F	28	46	54	99	33	43	4	11.00	4
17	*	GUADALUPE	A	29	44	55	97	52	57	6	8.00	2
17	*	GUADALUPE	B	29	37	23	97	47	13	6	8.00	2
	*	GUADALUPE	C	29	28	44	97	54	13	6	8.00	2
17	*	GUADALUPE	D	29	28	44	98	1	52	6	8.00	2
17	*	GUADALUPE	E	29	34	23	98	9	31	6	8.00	2
17	*	GUADALUPE	F	29	37	12	97	58	53	6	8.00	2

Site Name			Site Latitude			Site Longitude			Number of Coverage Channels		Coverage (mi)	Environment Type
18	*	CALHOUN	A	28	31	26	96	46	28	4	9.00	3
	*	CALHOUN	B	28	34	58	96	35	42	4	9.00	3
18	*	CALHOUN	C	28	36	12	96	27	31	4	9.00	3
18	*	CALHOUN	D	28	25	48	96	30	19	4	9.00	3
	*	CALHOUN	E	28	20	30	96	41	5	4	9.00	3
18	*	CALHOUN	F	28	13	27	96	44	40	4	9.00	3
	*	MCMULLEN	A	28	31	13	98	28	2	4	10.00	4
19	*	MCMULLEN	B	28	31	13	98	39	31	4	10.00	4
19	*	MCMULLEN	C	28	19	56	98	39	31	4	10.00	4
	*	MCMULLEN	D	28	10	32	98	39	31	4	10.00	4
19	*	MCMULLEN	E	28	10	32	98	28	2	4	10.00	4
19	*	MCMULLEN	F	28	19	56	98	28	2	4	10.00	4
20	*	DIMMIT	A	28	30	28	99	33	54	4	11.00	4
20	*	DIMMIT	B	28	21	3	99	33	54	4	11.00	4
	*	DIMMIT	C	28	21	3	99	47	17	4	11.00	4
20	*	DIMMIT	D	28	30	28	99	47	17	4	11.00	4
20	*	DIMMIT	E	28	30	28	99	57	43	4	11.00	4
	*	DIMMIT	F	28	21	3	99	57	43	4	11.00	4
21	*	KENEDY	A	27	7	40	97	31	53	4	12.00	4
	*	KENEDY	B	27	6	12	97	48	19	4	12.00	4
21	*	KENEDY	C	26	45	11	97	48	49	4	12.00	4
21	*	KENEDY	D	26	44	45	97	29	23	4	12.00	4
	*	KENEDY	E	26	56	30	97	33	52	4	12.00	4
21	*	KENEDY	F	26	56	30	97	47	48	4	12.00	4
22	*	WILLACY	A	26	30	3	97	22	24	4	8.00	3
22	*	WILLACY	B	26	29	54	97	33	43	4	8.00	3
22	*	WILLACY	C	26	30	12	97	52	10	4	8.00	3
	*	WILLACY	D	26	29	28	97	43	12	4	8.00	3
22	*	WILLACY	E	26	24	46	97	32	13	4	8.00	3
22	*	WILLACY	F	26	25	12	97	44	10	4	8.00	3

Site Name			Site Latitude			Site Longitude			Number of Coverage Channels		Coverage (mi)		Environment Type
23	*	BROOKS	A	27	9	17	98	21	31	4	9.00	4	
23	*	BROOKS	B	27	8	59	98	6	44	4	9.00	4	
23	*	BROOKS	C	26	54	17	98	6	44	4	9.00	4	
23	*	BROOKS	D	26	53	51	98	18	19	4	9.00	4	
23	*	BROOKS	E	27	1	12	98	16	50	4	9.00	4	
23	*	BROOKS	F	27	1	12	98	7	52	4	9.00	4	
24	*	HIDALGO	A	26	19	44	98	22	13	9	12.00	2	
24	*	HIDALGO	B	26	13	34	98	9	40	9	12.00	2	
24	*	HIDALGO	C	26	12	41	98	1	11	9	12.00	2	
24	*	HIDALGO	D	26	19	55	98	3	0	9	12.00	2	
24	*	HIDALGO	E	26	37	32	98	8	23	9	12.00	2	
24	*	HIDALGO	F	26	36	50	98	14	34	9	12.00	2	
25	*	KINNEY	A	29	13	21	00	37	43	4	10.00	4	
25	*	KINNEY	B	29	13	21	00	14	30	4	10.00	4	
25	*	KINNEY	C	29	13	21	00	27	0	4	10.00	4	
25	*	KINNEY	D	29	29	41	00	15	19	4	10.00	4	
25	*	KINNEY	E	29	29	41	00	33	10	4	10.00	4	
25	*	KINNEY	F	29	29	41	00	24	14	4	10.00	4	
25	*	KINNEY	G	29	20	54	00	16	19	4	10.00	4	
26	*	BEXAR	A	29	26	34	98	17	36	0	10.00	1	
26	*	BEXAR	B	29	37	9	98	28	21	0	10.00	1	
26	*	BEXAR	C	29	36	5	98	39	55	0	10.00	1	
26	*	BEXAR	D	29	20	13	98	39	55	0	10.00	1	
26	*	BEXAR	E	29	16	10	98	27	24	0	10.00	1	
26	*	BEXAR	F	29	26	55	98	29	11	0	10.00	1	
26	*	BEXAR	G	29	28	41	98	38	9	0	10.00	1	
27	*	GONZALES	A	29	39	5	97	18	43	4	9.00	3	
27	*	GONZALES	B	29	33	4	97	32	32	4	9.00	3	
27	*	GONZALES	C	29	21	47	97	42	6	4	9.00	3	
27	*	GONZALES	D	29	26	29	97	37	26	4	9.00	3	
27	*	GONZALES	E	29	15	12	97	35	32	4	9.00	3	
27	*	GONZALES	F	29	23	17	97	26	37	4	9.00	3	
27	*	GONZALES	G	29	28	56	97	20	52	4	9.00	3	

Site Name			Site Latitude	Site Longitude	Number of Coverage Channels	Coverage (mi)	Environment Type	
28	*	ATASCOSA	A	29 5 25	98 40 22	4	10.00	3
3	*	ATASCOSA	B	28 46 37	98 40 22	4	10.00	3
28	*	ATASCOSA	C	28 56 1	98 39 4	4	10.00	3
28	*	ATASCOSA	D	28 59 47	98 29 30	4	10.00	3
3	*	ATASCOSA	E	28 46 37	98 25 41	4	10.00	3
28	*	ATASCOSA	F	28 50 22	98 19 57	4	10.00	3
28	*	ATASCOSA	G	28 46 37	98 16 44	4	10.00	3
29	*	GOLIAD	A	28 45 22	97 16 17	4	8.00	4
29	*	GOLIAD	B	28 47 50	97 24 51	4	8.00	4
3	*	GOLIAD	C	28 35 8	97 17 41	4	8.00	4
29	*	GOLIAD	D	28 30 12	97 25 7	4	8.00	4
29	*	GOLIAD	E	28 37 15	97 28 56	4	8.00	4
3	*	GOLIAD	F	28 38 19	97 37 53	4	8.00	4
29	*	GOLIAD	G	28 42 22	97 31 58	4	8.00	4
30	*	BEE	A	28 21 13	97 31 58	4	8.00	3
30	*	BEE	B	28 14 52	97 36 44	4	8.00	3
3	*	BEE	C	28 16 38	97 43 55	4	8.00	3
30	*	BEE	D	28 26 20	97 50 6	4	8.00	3
30	*	BEE	E	28 36 23	97 56 16	4	8.00	3
3	*	BEE	F	28 33 23	97 50 6	4	8.00	3
30	*	BEE	G	28 25 58	97 39 57	4	8.00	3
31	*	SAN PATRICIO	A	27 55 7	97 16 22	5	8.00	3
31	*	SAN PATRICIO	B	28 1 17	97 22 9	5	8.00	3
31	*	SAN PATRICIO	C	28 3 3	97 31 7	5	8.00	3
31	*	SAN PATRICIO	D	28 3 14	97 46 51	5	8.00	3
31	*	SAN PATRICIO	E	28 1 59	97 39 41	5	8.00	3
31	*	SAN PATRICIO	F	27 58 28	97 37 53	5	8.00	3
31	*	SAN PATRICIO	G	27 56 42	97 28 55	5	8.00	3
32	*	STARR	A	26 40 22	98 30 43	5	10.00	3
32	*	STARR	B	26 38 36	98 52 14	5	10.00	3
32	*	STARR	C	26 38 36	98 41 28	5	10.00	3
32	*	STARR	D	26 31 33	98 59 24	5	10.00	3
32	*	STARR	E	26 22 44	98 39 40	5	10.00	3
32	*	STARR	F	26 31 33	98 37 53	5	10.00	3
32	*	STARR	G	26 29 47	98 50 26	5	10.00	3

Site Name			Site Latitude			Site Longitude			Number of Coverage Channels		(mi)		Environment Type
33	*	REAL	A	29	59	14	99	47	46	4	7.00	4	
33	*	REAL	B	29	59	14	99	53	43	4	7.00	4	
	*	REAL	C	29	50	27	99	55	12	4	7.00	4	
33	*	REAL	D	29	43	8	99	56	41	4	7.00	4	
33	*	REAL	E	29	43	8	99	47	46	4	7.00	4	
	*	REAL	F	29	43	8	99	41	49	4	7.00	4	
33	*	REAL	G	29	48	59	99	41	49	4	7.00	4	
33	*	REAL	H	29	51	55	99	47	46	4	7.00	4	
34	*	KARNES	A	29	6	33	97	44	52	4	7.00	3	
34	*	KARNES	B	29	0	54	97	51	4	4	7.00	3	
	*	KARNES	C	28	55	16	97	58	43	4	7.00	3	
34	*	KARNES	D	28	52	27	98	2	58	4	7.00	3	
34	*	KARNES	E	28	47	56	97	59	9	4	7.00	3	
	*	KARNES	F	28	46	37	97	48	6	4	7.00	3	
34	*	KARNES	G	28	49	15	97	41	56	4	7.00	3	
34	*	KARNES	H	28	54	19	97	48	6	4	7.00	3	
35	*	DUVAL	A	27	22	57	98	22	57	4	10.00	4	
35	*	DUVAL	B	27	34	14	98	22	57	4	10.00	4	
35	*	DUVAL	C	27	45	31	98	22	57	4	10.00	4	
35	*	DUVAL	D	27	56	3	98	22	57	4	10.00	4	
35	*	DUVAL	E	27	56	3	98	40	10	4	10.00	4	
35	*	DUVAL	F	27	42	30	98	39	18	4	10.00	4	
35	*	DUVAL	G	27	28	24	98	39	18	4	10.00	4	
35	*	DUVAL	H	27	55	6	98	31	39	4	10.00	4	
36	*	KERR	A	30	11	40	99	24	22	5	8.00	3	
36	*	KERR	B	30	10	56	99	39	55	5	8.00	3	
36	*	KERR	C	30	10	56	99	32	32	5	8.00	3	
36	*	KERR	D	30	0	7	99	35	13	5	8.00	3	
36	*	KERR	E	30	0	7	99	23	39	5	8.00	3	
36	*	KERR	F	30	1	8	99	14	37	5	8.00	3	
36	*	KERR	G	30	2	9	99	2	3	5	8.00	3	
36	*	KERR	H	30	0	42	99	9	5	5	8.00	3	
36	*	KERR	I	29	53	32	99	0	9	5	8.00	3	

Site Name		Site Latitude	Site Longitude	Number of Channels	Coverage (mi)	Environment Type
7 * MEDINA	A	29 33 37	98 55 2	4	9.00	3
37 * MEDINA	B	29 23 2	98 56 51	4	9.00	3
7 * MEDINA	C	29 12 28	98 56 51	4	9.00	3
7 * MEDINA	D	29 12 28	99 17 35	4	9.00	3
37 * MEDINA	E	29 12 28	99 7 36	4	9.00	3
' * MEDINA	F	29 30 48	99 17 12	4	9.00	3
7 * MEDINA	G	29 21 27	99 16 35	4	9.00	3
37 * MEDINA	H	29 24 59	99 5 50	4	9.00	3
' * MEDINA	I	29 30 16	99 5 50	4	9.00	3
38 * REFUGIO	A	28 24 23	96 53 38	4	7.00	4
3 * REFUGIO	B	28 27 34	97 6 11	4	7.00	4
38 * REFUGIO	C	28 23 30	97 1 11	4	7.00	4
38 * REFUGIO	D	28 22 37	97 13 21	4	7.00	4
3 * REFUGIO	E	28 20 52	97 9 46	4	7.00	4
38 * REFUGIO	F	28 11 52	97 9 55	4	7.00	4
38 * REFUGIO	G	28 10 6	97 15 18	4	7.00	4
3 * REFUGIO	H	28 12 34	97 24 28	4	7.00	4
38 * REFUGIO	I	28 18 55	97 18 5	4	7.00	4
3 * LIVE OAK	A	28 39 12	98 6 58	4	8.00	4
39 * LIVE OAK	B	28 33 54	98 12 21	4	8.00	4
3 * LIVE OAK	C	28 25 5	98 12 57	4	8.00	4
3 * LIVE OAK	D	28 15 55	98 13 21	4	8.00	4
39 * LIVE OAK	E	28 9 34	98 13 21	4	8.00	4
3 * LIVE OAK	F	28 9 24	98 0 2	4	8.00	4
39 * LIVE OAK	G	28 12 13	97 57 0	4	8.00	4
39 * LIVE OAK	H	28 21 2	98 2 23	4	8.00	4
3 * LIVE OAK	I	28 28 5	98 5 58	4	8.00	4
40 * MAVERICK	A	28 18 41	100 12 26	4	9.00	3
3 * MAVERICK	B	28 30 26	00 14 50	4	9.00	3
40 * MAVERICK	C	28 39 50	00 14 50	4	9.00	3
40 * MAVERICK	D	28 49 43	00 14 50	4	9.00	3
3 * MAVERICK	E	28 58 39	00 14 50	4	9.00	3
40 * MAVERICK	F	28 59 7	00 31 34	4	9.00	3
40 * MAVERICK	G	28 49 43	00 25 10	4	9.00	3
3 * MAVERICK	H	28 41 29	00 21 57	4	9.00	3
40 * MAVERICK	I	28 57 14	00 23 17	4	9.00	3

ite Name		Site Latitude	Site Longitude	Number of Channels	Coverage (mi)	Environment Type
1 * JIM WELLS	A	27 20 51	98 8 51	5	7.00	3
41 * JIM WELLS	B	27 30 16	98 8 51	5	7.00	3
1 * JIM WELLS	C	27 39 40	98 8 51	5	7.00	3
1 * JIM WELLS	D	27 58 7	98 8 4	5	7.00	3
41 * JIM WELLS	E	27 59 18	97 54 7	5	7.00	3
1 * JIM WELLS	F	27 57 11	98 1 1	5	7.00	3
41 * JIM WELLS	G	27 48 57	98 8 28	5	7.00	3
41 * JIM WELLS	H	27 43 26	98 1 33	5	7.00	3
1 * JIM WELLS	I	27 50 29	98 2 45	5	7.00	3
42 * CAMERON	A	26 18 46	97 18 50	3	8.00	3
2 * CAMERON	B	26 10 50	97 17 45	3	8.00	3
42 * CAMERON	C	26 2 54	97 15 38	3	8.00	3
42 * CAMERON	D	25 57 37	97 24 55	3	8.00	3
2 * CAMERON	E	26 2 38	97 32 18	3	8.00	3
42 * CAMERON	F	26 7 56	97 44 50	3	8.00	3
2 * CAMERON	G	26 14 6	97 44 50	3	8.00	3
2 * CAMERON	H	26 13 45	97 31 24	3	8.00	3
42 * CAMERON	I	26 6 42	97 25 7	3	8.00	3
3 * KLEBERG	A	27 32 38	97 57 57	5	7.00	3
43 * KLEBERG	B	27 19 3	97 57 0	5	7.00	3
3 * KLEBERG	C	27 26 27	97 56 54	5	7.00	3
3 * KLEBERG	D	27 21 0	97 45 52	5	7.00	3
43 * KLEBERG	E	27 27 60	97 48 32	5	7.00	3
3 * KLEBERG	F	27 28 12	97 39 7	5	7.00	3
43 * KLEBERG	G	27 30 16	97 19 14	5	7.00	3
43 * KLEBERG	H	27 22 2	97 25 31	5	7.00	3
3 * KLEBERG	I	27 22 2	97 33 53	5	7.00	3
43 * KLEBERG	J	27 28 12	97 29 42	5	7.00	3
4 * VAL VERDE	A	30 8 28	00 51 46	5	12.00	3
44 * VAL VERDE	B	29 53 1	00 53 33	5	12.00	3
44 * VAL VERDE	C	29 38 59	00 53 33	5	12.00	3
4 * VAL VERDE	D	29 24 25	00 50 58	5	12.00	3
44 * VAL VERDE	E	29 37 24	01 5 28	5	12.00	3
44 * VAL VERDE	F	29 47 56	01 14 23	5	12.00	3
44 * VAL VERDE	G	29 54 57	01 34 49	5	12.00	3
44 * VAL VERDE	H	30 8 60	01 34 49	5	12.00	3
44 * VAL VERDE	I	30 7 46	01 16 59	5	12.00	3
44 * VAL VERDE	J	30 7 46	01 4 29	5	12.00	3

Site Name		Site Latitude	Site Longitude	Number of Channels	Coverage (mi)	Environment Type
4 * VAL VERDE	K	29 57 14	01 15 12	5	12.00	3
5 * EDWARDS	A	30 10 56	99 52 19	4	8.00	4
5 * EDWARDS	B	30 10 56	00 2 60	4	8.00	4
45 * EDWARDS	C	30 10 56	00 15 30	4	8.00	4
5 * EDWARDS	D	30 10 56	00 35 7	4	8.00	4
45 * EDWARDS	E	30 10 56	00 26 12	4	8.00	4
45 * EDWARDS	F	30 0 24	00 35 7	4	8.00	4
5 * EDWARDS	G	29 51 37	00 35 7	4	8.00	4
45 * EDWARDS	H	29 42 51	00 35 7	4	8.00	4
45 * EDWARDS	I	29 43 43	00 21 49	4	8.00	4
5 * EDWARDS	J	29 43 12	00 8 32	4	8.00	4
45 * EDWARDS	K	29 53 1	00 7 33	4	8.00	4
45 * EDWARDS	L	30 1 48	00 5 46	4	8.00	4
5 * EDWARDS	M	30 1 27	00 20 14	4	8.00	4
45 * EDWARDS	N	29 52 40	00 16 40	4	8.00	4
45 * EDWARDS	O	29 52 40	00 25 36	4	8.00	4
46 * WEBB	A	27 55 53	98 56 29	0	10.00	2
6 * WEBB	B	27 44 8	98 56 29	0	10.00	2
6 * WEBB	C	27 22 58	98 56 29	0	10.00	2
46 * WEBB	D	27 32 22	98 56 29	0	10.00	2
6 * WEBB	E	27 22 58	99 23 35	0	10.00	2
6 * WEBB	F	27 24 9	99 10 17	0	10.00	2
46 * WEBB	G	27 35 12	99 23 3	0	10.00	2
6 * WEBB	H	27 45 18	99 35 48	0	10.00	2
46 * WEBB	I	27 52 21	99 44 3	0	10.00	2
46 * WEBB	J	28 3 52	99 50 9	0	10.00	2
6 * WEBB	K	28 6 28	00 0 0	0	10.00	2
46 * WEBB	L	28 5 3	99 33 25	0	10.00	2
46 * WEBB	M	27 54 42	99 11 54	0	10.00	2
6 * WEBB	N	27 54 42	99 25 20	0	10.00	2
46 * WEBB	O	27 39 54	99 10 27	0	10.00	2
46 * WEBB	P	27 44 36	99 20 39	0	10.00	2
47 * NUECES	A	27 51 21	97 7 0	19	6.00	2
47 * NUECES	B	27 44 3	97 13 58	19	6.00	2
47 * NUECES	C	27 38 35	97 16 41	19	6.00	2
47 * NUECES	D	27 38 23	97 24 20	19	6.00	2
47 * NUECES	E	27 38 23	97 32 42	19	6.00	2
47 * NUECES	F	27 38 23	97 47 20	19	6.00	2

Site Name		Site Latitude	Site Longitude	Number of Channels	Coverage (mi)	Environment Type
1 * NUECES	G	27 38 23	97 40 1	19	6.00	2
47 * NUECES	H	27 41 28	97 51 31	19	6.00	2
* NUECES	I	27 49 42	97 51 31	19	6.00	2
.1 * NUECES	J	27 52 47	97 49 26	19	6.00	2
47 * NUECES	K	27 49 42	97 43 9	19	6.00	2
* NUECES	L	27 47 57	97 37 14	19	6.00	2
47 * NUECES	M	27 47 57	97 26 46	19	6.00	2
47 * NUECES	N	27 47 57	97 18 24	19	6.00	2
* NUECES	O	27 43 50	97 44 33	19	6.00	2
47 * NUECES	P	27 43 44	97 27 1	19	6.00	2

5.1 Region 53 Channel Assignment, (numerical order)

Channel Number	601	Mobile Frequency	821.0125 Mz	Base Frequency	866.0125 Mz	Mutual aid
Channel Number	602	Mobile Frequency	821.0375 Mz	Base Frequency	866.0375 Mz	Reserved for TXSP
Channel Number	603	Mobile Frequency	821.0500 Mz	Base Frequency	866.0500 Mz	Reserved for GUARD
Channel Number	604	Mobile Frequency	821.0625 Mz	Base Frequency	866.0625 Mz	Reserved for TXSP
Channel Number	605	Mobile Frequency	821.0750 Mz	Base Frequency	866.0750 Mz	Reserved for GUARD
Channel Number	606	Mobile Frequency	821.0875 Mz	Base Frequency	866.0875 Mz	JIM HOGG
Channel Number	606	Mobile Frequency	821.0875 Mz	Base Frequency	866.0875 Mz	ATASCOSA
Channel Number	607	Mobile Frequency	821.1000 Mz	Base Frequency	866.1000 Mz	UVALDE
Channel Number	607	Mobile Frequency	821.1000 Mz	Base Frequency	866.1000 Mz	ARANSAS
Channel Number	607	Mobile Frequency	821.1000 Mz	Base Frequency	866.1000 Mz	KENEDY
Channel Number	608	Mobile Frequency	821.1125 Mz	Base Frequency	866.1125 Mz	ZAPATA
Channel Number	608	Mobile Frequency	821.1125 Mz	Base Frequency	866.1125 Mz	BEXAR
Channel Number	608	Mobile Frequency	821.1125 Mz	Base Frequency	866.1125 Mz	GOLIAD
Channel Number	609	Mobile Frequency	821.1250 Mz	Base Frequency	866.1250 Mz	LA SALLE
Channel Number	609	Mobile Frequency	821.1250 Mz	Base Frequency	866.1250 Mz	WILLACY
Channel Number	609	Mobile Frequency	821.1250 Mz	Base Frequency	866.1250 Mz	NUECES
Channel Number	610	Mobile Frequency	821.1375 Mz	Base Frequency	866.1375 Mz	BROOKS
Channel Number	610	Mobile Frequency	821.1375 Mz	Base Frequency	866.1375 Mz	BEXAR
Channel Number	610	Mobile Frequency	821.1375 Mz	Base Frequency	866.1375 Mz	BEE
Channel Number	610	Mobile Frequency	821.1375 Mz	Base Frequency	866.1375 Mz	REAL
Channel Number	611	Mobile Frequency	821.1500 Mz	Base Frequency	866.1500 Mz	GILLESPIE
Channel Number	611	Mobile Frequency	821.1500 Mz	Base Frequency	866.1500 Mz	ZAVALA
Channel Number	611	Mobile Frequency	821.1500 Mz	Base Frequency	866.1500 Mz	VAL VERDE
Channel Number	612	Mobile Frequency	821.1625 Mz	Base Frequency	866.1625 Mz	JACKSON
Channel Number	612	Mobile Frequency	821.1625 Mz	Base Frequency	866.1625 Mz	WILSON
Channel Number	612	Mobile Frequency	821.1625 Mz	Base Frequency	866.1625 Mz	BANDERA
Channel Number	612	Mobile Frequency	821.1625 Mz	Base Frequency	866.1625 Mz	HIDALGO
Channel Number	612	Mobile Frequency	821.1625 Mz	Base Frequency	866.1625 Mz	SAN PATRICIO
Channel Number	613	Mobile Frequency	821.1750 Mz	Base Frequency	866.1750 Mz	MCMULLEN

Channel Number	613	Mobile Frequency	821.1750 Mz	Base Frequency	866.1750 Mz	KLEBERG
Channel Number	614	Mobile Frequency	821.1875 Mz	Base Frequency	866.1875 Mz	VICTORIA
Channel Number	614	Mobile Frequency	821.1875 Mz	Base Frequency	866.1875 Mz	DIMMIT
Channel Number	614	Mobile Frequency	821.1875 Mz	Base Frequency	866.1875 Mz	HIDALGO
Channel Number	615	Mobile Frequency	821.2000 Mz	Base Frequency	866.2000 Mz	BEXAR
Channel Number	615	Mobile Frequency	821.2000 Mz	Base Frequency	866.2000 Mz	DUVAL
Channel Number	616	Mobile Frequency	821.2125 Mz	Base Frequency	866.2125 Mz	VICTORIA
Channel Number	616	Mobile Frequency	821.2125 Mz	Base Frequency	866.2125 Mz	HIDALGO
Channel Number	616	Mobile Frequency	821.2125 Mz	Base Frequency	866.2125 Mz	KINNEY
Channel Number	617	Mobile Frequency	821.2250 Mz	Base Frequency	866.2250 Mz	GUADALUPE
Channel Number	617	Mobile Frequency	821.2250 Mz	Base Frequency	866.2250 Mz	LIVE OAK
Channel Number	618	Mobile Frequency	821.2375 Mz	Base Frequency	866.2375 Mz	DE WITT
Channel Number	618	Mobile Frequency	821.2375 Mz	Base Frequency	866.2375 Mz	HIDALGO
Channel Number	618	Mobile Frequency	821.2375 Mz	Base Frequency	866.2375 Mz	MEDINA
Channel Number	618	Mobile Frequency	821.2375 Mz	Base Frequency	866.2375 Mz	MAVERICK
Channel Number	619	Mobile Frequency	821.2500 Mz	Base Frequency	866.2500 Mz	COMAL
Channel Number	619	Mobile Frequency	821.2500 Mz	Base Frequency	866.2500 Mz	JIM WELLS
Channel Number	619	Mobile Frequency	821.2500 Mz	Base Frequency	866.2500 Mz	EDWARDS
Channel Number	620	Mobile Frequency	821.2625 Mz	Base Frequency	866.2625 Mz	STARR
Channel Number	620	Mobile Frequency	821.2625 Mz	Base Frequency	866.2625 Mz	KARNES
Channel Number	620	Mobile Frequency	821.2625 Mz	Base Frequency	866.2625 Mz	CAMERON
Channel Number	621	Mobile Frequency	821.2750 Mz	Base Frequency	866.2750 Mz	LAVACA
Channel Number	621	Mobile Frequency	821.2750 Mz	Base Frequency	866.2750 Mz	BEXAR
Channel Number	621	Mobile Frequency	821.2750 Mz	Base Frequency	866.2750 Mz	WEBB
Channel Number	621	Mobile Frequency	821.2750 Mz	Base Frequency	866.2750 Mz	NUECES
Channel Number	622	Mobile Frequency	821.2875 Mz	Base Frequency	866.2875 Mz	CALHOUN
Channel Number	622	Mobile Frequency	821.2875 Mz	Base Frequency	866.2875 Mz	CAMERON
Channel Number	623	Mobile Frequency	821.3000 Mz	Base Frequency	866.3000 Mz	BEXAR
Channel Number	623	Mobile Frequency	821.3000 Mz	Base Frequency	866.3000 Mz	WEBB
Channel Number	624	Mobile Frequency	821.3125 Mz	Base Frequency	866.3125 Mz	REFUGIO
Channel Number	624	Mobile Frequency	821.3125 Mz	Base Frequency	866.3125 Mz	CAMERON
Channel Number	625	Mobile Frequency	821.3250 Mz	Base Frequency	866.3250 Mz	FRIO

Channel Number	625	Mobile Frequency	821.3250 Mz	Base Frequency	866.3250 Mz	GONZALES
Channel Number	626	Mobile Frequency	821.3375 Mz	Base Frequency	866.3375 Mz	JIM HOGG
Channel Number	627	Mobile Frequency	821.3500 Mz	Base Frequency	866.3500 Mz	UVALDE
Channel Number	627	Mobile Frequency	821.3500 Mz	Base Frequency	866.3500 Mz	ARANSAS
Channel Number	627	Mobile Frequency	821.3500 Mz	Base Frequency	866.3500 Mz	KENEDY
Channel Number	628	Mobile Frequency	821.3625 Mz	Base Frequency	866.3625 Mz	ZAPATA
Channel Number	628	Mobile Frequency	821.3625 Mz	Base Frequency	866.3625 Mz	BEXAR
Channel Number	628	Mobile Frequency	821.3625 Mz	Base Frequency	866.3625 Mz	GOLIAD
Channel Number	629	Mobile Frequency	821.3750 Mz	Base Frequency	866.3750 Mz	LA SALLE
Channel Number	629	Mobile Frequency	821.3750 Mz	Base Frequency	866.3750 Mz	WILLACY
Channel Number	629	Mobile Frequency	821.3750 Mz	Base Frequency	866.3750 Mz	NUECES
Channel Number	630	Mobile Frequency	821.3875 Mz	Base Frequency	866.3875 Mz	BEXAR
Channel Number	630	Mobile Frequency	821.3875 Mz	Base Frequency	866.3875 Mz	BEE
Channel Number	630	Mobile Frequency	821.3875 Mz	Base Frequency	866.3875 Mz	REAL
Channel Number	631	Mobile Frequency	821.4000 Mz	Base Frequency	866.4000 Mz	Unassigned
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	JACKSON
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	WILSON
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	ZAVALA
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	BROOKS
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	SAN PATRICIO
Channel Number	632	Mobile Frequency	821.4125 Mz	Base Frequency	866.4125 Mz	KERR
Channel Number	633	Mobile Frequency	821.4250 Mz	Base Frequency	866.4250 Mz	MCMULLEN
Channel Number	633	Mobile Frequency	821.4250 Mz	Base Frequency	866.4250 Mz	VAL VERDE
Channel Number	634	Mobile Frequency	821.4375 Mz	Base Frequency	866.4375 Mz	VICTORIA
Channel Number	634	Mobile Frequency	821.4375 Mz	Base Frequency	866.4375 Mz	BANDERA
Channel Number	634	Mobile Frequency	821.4375 Mz	Base Frequency	866.4375 Mz	DIMIT
Channel Number	634	Mobile Frequency	821.4375 Mz	Base Frequency	866.4375 Mz	HIDALGO
Channel Number	634	Mobile Frequency	821.4375 Mz	Base Frequency	866.4375 Mz	NUECES
Channel Number	635	Mobile Frequency	821.4500 Mz	Base Frequency	866.4500 Mz	Reserved for GUARD
Channel Number	636	Mobile Frequency	821.4625 Mz	Base Frequency	866.4625 Mz	Reserved for TXSP
Channel Number	637	Mobile Frequency	821.4750 Mz	Base Frequency	866.4750 Mz	Reserved for GUARD

Channel Number	638	Mobile Frequency	821.4875 Mz	Base Frequency	866.4875 Mz	Reserved for TXSP
Channel Number	639	Mobile Frequency	821.5125 Mz	Base Frequency	866.5125 Mz	Mutual aid
Channel Number	640	Mobile Frequency	821.5375 Mz	Base Frequency	866.5375 Mz	Reserved for TXSP
Channel Number	641	Mobile Frequency	821.5500 Mz	Base Frequency	866.5500 Mz	Reserved for GUARD
Channel Number	642	Mobile Frequency	821.5625 Mz	Base Frequency	866.5625 Mz	Reserved for TXSP
Channel Number	643	Mobile Frequency	821.5750 Mz	Base Frequency	866.5750 Mz	Reserved for GUARD
Channel Number	644	Mobile Frequency	821.5875 Mz	Base Frequency	866.5875 Mz	HIDALGO
Channel Number	644	Mobile Frequency	821.5875 Mz	Base Frequency	866.5875 Mz	KINNEY
Channel Number	644	Mobile Frequency	821.5875 Mz	Base Frequency	866.5875 Mz	KARNES
Channel Number	644	Mobile Frequency	821.5875 Mz	Base Frequency	866.5875 Mz	WEBB
Channel Number	645	Mobile Frequency	821.6000 Mz	Base Frequency	866.6000 Mz	BEXAR
Channel Number	645	Mobile Frequency	821.6000 Mz	Base Frequency	866.6000 Mz	KLEBERG
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	JIM HOGG
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	GILLESPIE
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	CALHOUN
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	LIVE OAK
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	MAVERICK
Channel Number	646	Mobile Frequency	821.6125 Mz	Base Frequency	866.6125 Mz	CAMERON
Channel Number	647	Mobile Frequency	821.6250 Mz	Base Frequency	866.6250 Mz	LAVACA
Channel Number	647	Mobile Frequency	821.6250 Mz	Base Frequency	866.6250 Mz	BEXAR
Channel Number	647	Mobile Frequency	821.6250 Mz	Base Frequency	866.6250 Mz	EDWARDS
Channel Number	648	Mobile Frequency	821.6375 Mz	Base Frequency	866.6375 Mz	HIDALGO
Channel Number	648	Mobile Frequency	821.6375 Mz	Base Frequency	866.6375 Mz	REFUGIO
Channel Number	649	Mobile Frequency	821.6500 Mz	Base Frequency	866.6500 Mz	FRIO
Channel Number	649	Mobile Frequency	821.6500 Mz	Base Frequency	866.6500 Mz	DE WITT
Channel Number	649	Mobile Frequency	821.6500 Mz	Base Frequency	866.6500 Mz	COMAL
Channel Number	649	Mobile Frequency	821.6500 Mz	Base Frequency	866.6500 Mz	DUVAL
Channel Number	650	Mobile Frequency	821.6625 Mz	Base Frequency	866.6625 Mz	HIDALGO
Channel Number	651	Mobile Frequency	821.6750 Mz	Base Frequency	866.6750 Mz	BEXAR
Channel Number	651	Mobile Frequency	821.6750 Mz	Base Frequency	866.6750 Mz	JIM WELLS

Channel Number 652 Mobile Frequency 821.6875 Mz Base Frequency 866.6875 Mz STARR
Channel Number 652 Mobile Frequency 821.6875 Mz Base Frequency 866.6875 Mz CAMERON

Channel Number 653 Mobile Frequency 821.7000 Mz Base Frequency 866.7000 Mz BEXAR
Channel Number 653 Mobile Frequency 821.7000 Mz Base Frequency 866.7000 Mz VAL VERDE
Channel Number 653 Mobile Frequency 821.7000 Mz Base Frequency 866.7000 Mz WEBB
Channel Number 653 Mobile Frequency 821.7000 Mz Base Frequency 866.7000 Mz NUECES

Channel Number 654 Mobile Frequency 821.7125 Mz Base Frequency 866.7125 Mz VICTORIA
Channel Number 654 Mobile Frequency 821.7125 Mz Base Frequency 866.7125 Mz CAMERON

Channel Number 655 Mobile Frequency 821.7250 Mz Base Frequency 866.7250 Mz BEXAR
Channel Number 655 Mobile Frequency 821.7250 Mz Base Frequency 866.7250 Mz NUECES

Channel Number 656 Mobile Frequency 821.7375 Mz Base Frequency 866.7375 Mz Unassigned

Channel Number 657 Mobile Frequency 821.7500 Mz Base Frequency 866.7500 Mz BEXAR
Channel Number 657 Mobile Frequency 821.7500 Mz Base Frequency 866.7500 Mz NUECES

Channel Number 658 Mobile Frequency 821.7625 Mz Base Frequency 866.7625 Mz Unassigned

Channel Number 659 Mobile Frequency 821.7750 Mz Base Frequency 866.7750 Mz BEXAR

Channel Number 660 Mobile Frequency 821.7875 Mz Base Frequency 866.7875 Mz Unassigned

Channel Number 661 Mobile Frequency 821.8000 Mz Base Frequency 866.8000 Mz BEXAR

Channel Number 662 Mobile Frequency 821.8125 Mz Base Frequency 866.8125 Mz Unassigned

Channel Number 663 Mobile Frequency 821.8250 Mz Base Frequency 866.8250 Mz KENDALL
Channel Number 663 Mobile Frequency 821.8250 Mz Base Frequency 866.8250 Mz GONZALES

Channel Number 664 Mobile Frequency 821.8375 Mz Base Frequency 866.8375 Mz HIDALGO

Channel Number 665 Mobile Frequency 821.8500 Mz Base Frequency 866.8500 Mz BEXAR

Channel Number 666 Mobile Frequency 821.8625 Mz Base Frequency 866.8625 Mz CAMERON

Channel Number 667 Mobile Frequency 821.8750 Mz Base Frequency 866.8750 Mz MEDINA

Channel Number 668 Mobile Frequency 821.8875 Mz Base Frequency 866.8875 Mz GUADALUPE

Channel Number 669 Mobile Frequency 821.9000 Mz Base Frequency 866.9000 Mz ATASCOSA
Channel Number 669 Mobile Frequency 821.9000 Mz Base Frequency 866.9000 Mz KERR

Channel Number	670	Mobile Frequency	821.9125 Mz	Base Frequency	866.9125 Mz	COMAL
Channel Number	671	Mobile Frequency	821.9250 Mz	Base Frequency	866.9250 Mz	Unassigned
Channel Number	672	Mobile Frequency	821.9375 Mz	Base Frequency	866.9375 Mz	BEXAR
Channel Number	672	Mobile Frequency	821.9375 Mz	Base Frequency	866.9375 Mz	STARR
Channel Number	673	Mobile Frequency	821.9500 Mz	Base Frequency	866.9500 Mz	Reserved for GUARD
Channel Number	674	Mobile Frequency	821.9625 Mz	Base Frequency	866.9625 Mz	Reserved for TXSP
Channel Number	675	Mobile Frequency	821.9750 Mz	Base Frequency	866.9750 Mz	Reserved for GUARD
Channel Number	676	Mobile Frequency	821.9875 Mz	Base Frequency	866.9875 Mz	Reserved for TXSP
Channel Number	677	Mobile Frequency	822.0125 Mz	Base Frequency	867.0125 Mz	Mutual aid
Channel Number	678	Mobile Frequency	822.0375 Mz	Base Frequency	867.0375 Mz	Reserved for TXSP
Channel Number	679	Mobile Frequency	822.0500 Mz	Base Frequency	867.0500 Mz	Reserved for GUARD
Channel Number	680	Mobile Frequency	822.0625 Mz	Base Frequency	867.0625 Mz	Reserved for TXSP
Channel Number	681	Mobile Frequency	822.0750 Mz	Base Frequency	867.0750 Mz	Reserved for GUARD
Channel Number	682	Mobile Frequency	822.0875 Mz	Base Frequency	867.0875 Mz	WEBB
Channel Number	682	Mobile Frequency	822.0875 Mz	Base Frequency	867.0875 Mz	NUECES
Channel Number	683	Mobile Frequency	822.1000 Mz	Base Frequency	867.1000 Mz	BEXAR
Channel Number	684	Mobile Frequency	822.1125 Mz	Base Frequency	867.1125 Mz	NUECES
Channel Number	685	Mobile Frequency	822.1250 Mz	Base Frequency	867.1250 Mz	BEXAR
Channel Number	686	Mobile Frequency	822.1375 Mz	Base Frequency	867.1375 Mz	Unassigned
Channel Number	687	Mobile Frequency	822.1500 Mz	Base Frequency	867.1500 Mz	BEXAR
Channel Number	688	Mobile Frequency	822.1625 Mz	Base Frequency	867.1625 Mz	Unassigned
Channel Number	689	Mobile Frequency	822.1750 Mz	Base Frequency	867.1750 Mz	BEXAR
Channel Number	690	Mobile Frequency	822.1875 Mz	Base Frequency	867.1875 Mz	Unassigned

Channel Number	691	Mobile Frequency	822.2000 Mz	Base Frequency	867.2000 Mz	WILSON
Channel Number	691	Mobile Frequency	822.2000 Mz	Base Frequency	867.2000 Mz	KERR
Channel Number	692	Mobile Frequency	822.2125 Mz	Base Frequency	867.2125 Mz	Unassigned
Channel Number	693	Mobile Frequency	822.2250 Mz	Base Frequency	867.2250 Mz	BEXAR
Channel Number	694	Mobile Frequency	822.2375 Mz	Base Frequency	867.2375 Mz	Unassigned
Channel Number	695	Mobile Frequency	822.2500 Mz	Base Frequency	867.2500 Mz	BEXAR
Channel Number	696	Mobile Frequency	822.2625 Mz	Base Frequency	867.2625 Mz	Unassigned
Channel Number	697	Mobile Frequency	822.2750 Mz	Base Frequency	867.2750 Mz	BEXAR
Channel Number	698	Mobile Frequency	822.2875 Mz	Base Frequency	867.2875 Mz	Unassigned
Channel Number	699	Mobile Frequency	822.3000 Mz	Base Frequency	867.3000 Mz	GUADALUPE
Channel Number	700	Mobile Frequency	822.3125 Mz	Base Frequency	867.3125 Mz	Unassigned
Channel Number	701	Mobile Frequency	822.3250 Mz	Base Frequency	867.3250 Mz	BEXAR
Channel Number	702	Mobile Frequency	822.3375 Mz	Base Frequency	867.3375 Mz	Unassigned
Channel Number	703	Mobile Frequency	822.3500 Mz	Base Frequency	867.3500 Mz	BEXAR
Channel Number	704	Mobile Frequency	822.3625 Mz	Base Frequency	867.3625 Mz	Unassigned
Channel Number	705	Mobile Frequency	822.3750 Mz	Base Frequency	867.3750 Mz	BEXAR
Channel Number	706	Mobile Frequency	822.3875 Mz	Base Frequency	867.3875 Mz	Unassigned
Channel Number	707	Mobile Frequency	822.4000 Mz	Base Frequency	867.4000 Mz	BEXAR
Channel Number	708	Mobile Frequency	822.4125 Mz	Base Frequency	867.4125 Mz	Unassigned
Channel Number	709	Mobile Frequency	822.4250 Mz	Base Frequency	867.4250 Mz	BEXAR
Channel Number	710	Mobile Frequency	822.4375 Mz	Base Frequency	867.4375 Mz	Unassigned
Channel Number	711	Mobile Frequency	822.4500 Mz	Base Frequency	867.4500 Mz	Reserved for GUARD

Channel Number	712	Mobile Frequency	822.4625 Mz	Base Frequency	867.4625 Mz	Reserved for TXSP
Channel Number	713	Mobile Frequency	822.4750 Mz	Base Frequency	867.4750 Mz	Reserved for GUARD
Channel Number	714	Mobile Frequency	822.4875 Mz	Base Frequency	867.4875 Mz	Reserved for TXSP
Channel Number	715	Mobile Frequency	822.5125 Mz	Base Frequency	867.5125 Mz	Mutual aid
Channel Number	716	Mobile Frequency	822.5375 Mz	Base Frequency	867.5375 Mz	Reserved for TXSP
Channel Number	717	Mobile Frequency	822.5500 Mz	Base Frequency	867.5500 Mz	Reserved for GUARD
Channel Number	718	Mobile Frequency	822.5625 Mz	Base Frequency	867.5625 Mz	Reserved for TXSP
Channel Number	719	Mobile Frequency	822.5750 Mz	Base Frequency	867.5750 Mz	Reserved for GUARD
Channel Number	720	Mobile Frequency	822.5875 Mz	Base Frequency	867.5875 Mz	COMAL
Channel Number	721	Mobile Frequency	822.6000 Mz	Base Frequency	867.6000 Mz	KERR
Channel Number	722	Mobile Frequency	822.6125 Mz	Base Frequency	867.6125 Mz	Unassigned
Channel Number	723	Mobile Frequency	822.6250 Mz	Base Frequency	867.6250 Mz	BEXAR
Channel Number	724	Mobile Frequency	822.6375 Mz	Base Frequency	867.6375 Mz	Unassigned
Channel Number	725	Mobile Frequency	822.6500 Mz	Base Frequency	867.6500 Mz	BEXAR
Channel Number	726	Mobile Frequency	822.6625 Mz	Base Frequency	867.6625 Mz	Unassigned
Channel Number	727	Mobile Frequency	822.6750 Mz	Base Frequency	867.6750 Mz	BEXAR
Channel Number	728	Mobile Frequency	822.6875 Mz	Base Frequency	867.6875 Mz	Unassigned
Channel Number	729	Mobile Frequency	822.7000 Mz	Base Frequency	867.7000 Mz	Unassigned
Channel Number	730	Mobile Frequency	822.7125 Mz	Base Frequency	867.7125 Mz	BEXAR
Channel Number	731	Mobile Frequency	822.7250 Mz	Base Frequency	867.7250 Mz	Unassigned
Channel Number	732	Mobile Frequency	822.7375 Mz	Base Frequency	867.7375 Mz	BEXAR
Channel Number	733	Mobile Frequency	822.7500 Mz	Base Frequency	867.7500 Mz	Unassigned

Channel Number	734	Mobile Frequency	822.7625 Mz	Base Frequency	867.7625 Mz	BEXAR
Channel Number	735	Mobile Frequency	822.7750 Mz	Base Frequency	867.7750 Mz	Unassigned
Channel Number	736	Mobile Frequency	822.7875 Mz	Base Frequency	867.7875 Mz	GUADALUPE
Channel Number	737	Mobile Frequency	822.8000 Mz	Base Frequency	867.8000 Mz	Unassigned
Channel Number	738	Mobile Frequency	822.8125 Mz	Base Frequency	867.8125 Mz	BEXAR
Channel Number	739	Mobile Frequency	822.8250 Mz	Base Frequency	867.8250 Mz	Unassigned
Channel Number	740	Mobile Frequency	822.8375 Mz	Base Frequency	867.8375 Mz	BEXAR
Channel Number	741	Mobile Frequency	822.8500 Mz	Base Frequency	867.8500 Mz	Unassigned
Channel Number	742	Mobile Frequency	822.8625 Mz	Base Frequency	867.8625 Mz	BEXAR
Channel Number	743	Mobile Frequency	822.8750 Mz	Base Frequency	867.8750 Mz	Unassigned
Channel Number	744	Mobile Frequency	822.8875 Mz	Base Frequency	867.8875 Mz	Unassigned
Channel Number	745	Mobile Frequency	822.9000 Mz	Base Frequency	867.9000 Mz	BEXAR
Channel Number	746	Mobile Frequency	822.9125 Mz	Base Frequency	867.9125 Mz	Unassigned
Channel Number	747	Mobile Frequency	822.9250 Mz	Base Frequency	867.9250 Mz	BEXAR
Channel Number	748	Mobile Frequency	822.9375 Mz	Base Frequency	867.9375 Mz	Unassigned
Channel Number	749	Mobile Frequency	822.9500 Mz	Base Frequency	867.9500 Mz	Reserved for GUARD
Channel Number	750	Mobile Frequency	822.9625 Mz	Base Frequency	867.9625 Mz	Reserved for TXSP
Channel Number	751	Mobile Frequency	822.9750 Mz	Base Frequency	867.9750 Mz	Reserved for GUARD
Channel Number	752	Mobile Frequency	822.9875 Mz	Base Frequency	867.9875 Mz	Reserved for TXSP
Channel Number	753	Mobile Frequency	823.0125 Mz	Base Frequency	868.0125 Mz	Mutual aid
Channel Number	754	Mobile Frequency	823.0375 Mz	Base Frequency	868.0375 Mz	Reserved for TXSP
Channel Number	755	Mobile Frequency	823.0500 Mz	Base Frequency	868.0500 Mz	Reserved for GUARD

Channel Number	756	Mobile Frequency	823.0625 Mz	Base Frequency	868.0625 Mz	Reserved for TXSP
Channel Number	757	Mobile Frequency	823.0750 Mz	Base Frequency	868.0750 Mz	Reserved for GUARD
Channel Number	758	Mobile Frequency	823.0875 Mz	Base Frequency	868.0875 Mz	Unassigned
Channel Number	759	Mobile Frequency	823.1000 Mz	Base Frequency	868.1000 Mz	BEXAR
Channel Number	760	Mobile Frequency	823.1125 Mz	Base Frequency	868.1125 Mz	Unassigned
Channel Number	761	Mobile Frequency	823.1250 Mz	Base Frequency	868.1250 Mz	COMAL
Channel Number	762	Mobile Frequency	823.1375 Mz	Base Frequency	868.1375 Mz	Unassigned
Channel Number	763	Mobile Frequency	823.1500 Mz	Base Frequency	868.1500 Mz	NUECES
Channel Number	764	Mobile Frequency	823.1625 Mz	Base Frequency	868.1625 Mz	BEXAR
Channel Number	765	Mobile Frequency	823.1750 Mz	Base Frequency	868.1750 Mz	Unassigned
Channel Number	766	Mobile Frequency	823.1875 Mz	Base Frequency	868.1875 Mz	BEXAR
Channel Number	767	Mobile Frequency	823.2000 Mz	Base Frequency	868.2000 Mz	KLEBERG
Channel Number	768	Mobile Frequency	823.2125 Mz	Base Frequency	868.2125 Mz	GUADALUPE
Channel Number	768	Mobile Frequency	823.2125 Mz	Base Frequency	868.2125 Mz	CAMERON
Channel Number	769	Mobile Frequency	823.2250 Mz	Base Frequency	868.2250 Mz	KENDALL
Channel Number	769	Mobile Frequency	823.2250 Mz	Base Frequency	868.2250 Mz	JIM WELLS
Channel Number	770	Mobile Frequency	823.2375 Mz	Base Frequency	868.2375 Mz	Unassigned
Channel Number	771	Mobile Frequency	823.2500 Mz	Base Frequency	868.2500 Mz	BEXAR
Channel Number	772	Mobile Frequency	823.2625 Mz	Base Frequency	868.2625 Mz	HIDALGO
Channel Number	773	Mobile Frequency	823.2750 Mz	Base Frequency	868.2750 Mz	BEXAR
Channel Number	774	Mobile Frequency	823.2875 Mz	Base Frequency	868.2875 Mz	Unassigned
Channel Number	775	Mobile Frequency	823.3000 Mz	Base Frequency	868.3000 Mz	BEXAR
Channel Number	776	Mobile Frequency	823.3125 Mz	Base Frequency	868.3125 Mz	HIDALGO
Channel Number	776	Mobile Frequency	823.3125 Mz	Base Frequency	868.3125 Mz	NUECES

Channel Number	777	Mobile Frequency	823.3250 Mz	Base Frequency	868.3250 Mz	BEXAR
Channel Number	778	Mobile Frequency	823.3375 Mz	Base Frequency	868.3375 Mz	NUECES
Channel Number	779	Mobile Frequency	823.3500 Mz	Base Frequency	868.3500 Mz	KERR
Channel Number	779	Mobile Frequency	823.3500 Mz	Base Frequency	868.3500 Mz	WEBB
Channel Number	780	Mobile Frequency	823.3625 Mz	Base Frequency	868.3625 Mz	FRIO
Channel Number	781	Mobile Frequency	823.3750 Mz	Base Frequency	868.3750 Mz	SAN PATRICIO
Channel Number	782	Mobile Frequency	823.3875 Mz	Base Frequency	868.3875 Mz	BEXAR
Channel Number	783	Mobile Frequency	823.4000 Mz	Base Frequency	868.4000 Mz	NUECES
Channel Number	784	Mobile Frequency	823.4125 Mz	Base Frequency	868.4125 Mz	BEXAR
Channel Number	785	Mobile Frequency	823.4250 Mz	Base Frequency	868.4250 Mz	NUECES
Channel Number	786	Mobile Frequency	823.4375 Mz	Base Frequency	868.4375 Mz	GILLESPIE
Channel Number	786	Mobile Frequency	823.4375 Mz	Base Frequency	868.4375 Mz	GONZALES
Channel Number	787	Mobile Frequency	823.4500 Mz	Base Frequency	868.4500 Mz	BEXAR
Channel Number	787	Mobile Frequency	823.4500 Mz	Base Frequency	868.4500 Mz	KLEBERG
Channel Number	787	Mobile Frequency	823.4500 Mz	Base Frequency	868.4500 Mz	WEBB
Channel Number	788	Mobile Frequency	823.4625 Mz	Base Frequency	868.4625 Mz	STARR
Channel Number	788	Mobile Frequency	823.4625 Mz	Base Frequency	868.4625 Mz	KARNES
Channel Number	788	Mobile Frequency	823.4625 Mz	Base Frequency	868.4625 Mz	CAMERON
Channel Number	789	Mobile Frequency	823.4750 Mz	Base Frequency	868.4750 Mz	BEXAR
Channel Number	789	Mobile Frequency	823.4750 Mz	Base Frequency	868.4750 Mz	JIM WELLS
Channel Number	790	Mobile Frequency	823.4875 Mz	Base Frequency	868.4875 Mz	HIDALGO
Channel Number	790	Mobile Frequency	823.4875 Mz	Base Frequency	868.4875 Mz	REFUGIO
Channel Number	791	Mobile Frequency	823.5000 Mz	Base Frequency	868.5000 Mz	DE WITT
Channel Number	791	Mobile Frequency	823.5000 Mz	Base Frequency	868.5000 Mz	DUVAL
Channel Number	791	Mobile Frequency	823.5000 Mz	Base Frequency	868.5000 Mz	EDWARDS
Channel Number	792	Mobile Frequency	823.5125 Mz	Base Frequency	868.5125 Mz	CALHOUN
Channel Number	792	Mobile Frequency	823.5125 Mz	Base Frequency	868.5125 Mz	HIDALGO
Channel Number	792	Mobile Frequency	823.5125 Mz	Base Frequency	868.5125 Mz	BEXAR

Channel Number	793 Mobile Frequency 823.5250 Mz	Base Frequency 868.5250 Mz	UVALDE
Channel Number	793 Mobile Frequency 823.5250 Mz	Base Frequency 868.5250 Mz	LAVACA
Channel Number	793 Mobile Frequency 823.5250 Mz	Base Frequency 868.5250 Mz	LIVE OAK

Channel Number	794 Mobile Frequency 823.5375 Mz	Base Frequency 868.5375 Mz	KENDALL
Channel Number	794 Mobile Frequency 823.5375 Mz	Base Frequency 868.5375 Mz	HIDALGO

Channel Number	795 Mobile Frequency 823.5500 Mz	Base Frequency 868.5500 Mz	LA SALLE
Channel Number	795 Mobile Frequency 823.5500 Mz	Base Frequency 868.5500 Mz	WILSON
Channel Number	795 Mobile Frequency 823.5500 Mz	Base Frequency 868.5500 Mz	REAL

Channel Number	796 Mobile Frequency 823.5625 Mz	Base Frequency 868.5625 Mz	HIDALGO
Channel Number	796 Mobile Frequency 823.5625 Mz	Base Frequency 868.5625 Mz	MEDINA
Channel Number	796 Mobile Frequency 823.5625 Mz	Base Frequency 868.5625 Mz	MAVERICK
Channel Number	796 Mobile Frequency 823.5625 Mz	Base Frequency 868.5625 Mz	NUECES

Channel Number	797 Mobile Frequency 823.5750 Mz	Base Frequency 868.5750 Mz	Unassigned
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Channel Number	798 Mobile Frequency 823.5875 Mz	Base Frequency 868.5875 Mz	BANDERA
Channel Number	798 Mobile Frequency 823.5875 Mz	Base Frequency 868.5875 Mz	GOLIAD
Channel Number	798 Mobile Frequency 823.5875 Mz	Base Frequency 868.5875 Mz	NUECES

Channel Number	799 Mobile Frequency 823.6000 Mz	Base Frequency 868.6000 Mz	BROOKS
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Channel Number	800 Mobile Frequency 823.6125 Mz	Base Frequency 868.6125 Mz	VICTORIA
Channel Number	800 Mobile Frequency 823.6125 Mz	Base Frequency 868.6125 Mz	WILLACY
Channel Number	800 Mobile Frequency 823.6125 Mz	Base Frequency 868.6125 Mz	KINNEY
Channel Number	800 Mobile Frequency 823.6125 Mz	Base Frequency 868.6125 Mz	ATASCOSA
Channel Number	800 Mobile Frequency 823.6125 Mz	Base Frequency 868.6125 Mz	WEBB

Channel Number	801 Mobile Frequency 823.6250 Mz	Base Frequency 868.6250 Mz	SAN PATRICIO
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Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	JACKSON
Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	ZAPATA
Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	DIMMIT
Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	KENEDY
Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	BEXAR
Channel Number	802 Mobile Frequency 823.6375 Mz	Base Frequency 868.6375 Mz	VAL VERDE

Channel Number	803 Mobile Frequency 823.6500 Mz	Base Frequency 868.6500 Mz	ARANSAS
Channel Number	803 Mobile Frequency 823.6500 Mz	Base Frequency 868.6500 Mz	MCMULLEN

Channel Number	804 Mobile Frequency 823.6625 Mz	Base Frequency 868.6625 Mz	JIM HOGG
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Channel Number	804	Mobile Frequency	823.6625 Mz	Base Frequency	868.6625 Mz	ZAVALA
Channel Number	804	Mobile Frequency	823.6625 Mz	Base Frequency	868.6625 Mz	BEXAR
Channel Number	804	Mobile Frequency	823.6625 Mz	Base Frequency	868.6625 Mz	BEE
Channel Number	804	Mobile Frequency	823.6625 Mz	Base Frequency	868.6625 Mz	CAMERON

Channel Number	805	Mobile Frequency	823.6750 Mz	Base Frequency	868.6750 Mz	Unassigned
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Channel Number	806	Mobile Frequency	823.6875 Mz	Base Frequency	868.6875 Mz	NUECES
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Channel Number	807	Mobile Frequency	823.7000 Mz	Base Frequency	868.7000 Mz	BEXAR
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Channel Number	807	Mobile Frequency	823.7000 Mz	Base Frequency	868.7000 Mz	CAMERON
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Channel Number	808	Mobile Frequency	823.7125 Mz	Base Frequency	868.7125 Mz	NUECES
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Channel Number	809	Mobile Frequency	823.7250 Mz	Base Frequency	868.7250 Mz	GILLESPIE
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Channel Number	809	Mobile Frequency	823.7250 Mz	Base Frequency	868.7250 Mz	GONZALES
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Channel Number	809	Mobile Frequency	823.7250 Mz	Base Frequency	868.7250 Mz	STARR
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Channel Number	809	Mobile Frequency	823.7250 Mz	Base Frequency	868.7250 Mz	CAMERON
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Channel Number	810	Mobile Frequency	823.7375 Mz	Base Frequency	868.7375 Mz	BEXAR
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Channel Number	810	Mobile Frequency	823.7375 Mz	Base Frequency	868.7375 Mz	REFUGIO
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Channel Number	810	Mobile Frequency	823.7375 Mz	Base Frequency	868.7375 Mz	KLEBERG
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Channel Number	810	Mobile Frequency	823.7375 Mz	Base Frequency	868.7375 Mz	WEBB
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Channel Number	811	Mobile Frequency	823.7500 Mz	Base Frequency	868.7500 Mz	DE WITT
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Channel Number	811	Mobile Frequency	823.7500 Mz	Base Frequency	868.7500 Mz	HIDALGO
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Channel Number	812	Mobile Frequency	823.7625 Mz	Base Frequency	868.7625 Mz	CALHOUN
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Channel Number	812	Mobile Frequency	823.7625 Mz	Base Frequency	868.7625 Mz	BEXAR
----------------	-----	------------------	-------------	----------------	-------------	-------

Channel Number	812	Mobile Frequency	823.7625 Mz	Base Frequency	868.7625 Mz	DUVAL
----------------	-----	------------------	-------------	----------------	-------------	-------

Channel Number	813	Mobile Frequency	823.7750 Mz	Base Frequency	868.7750 Mz	UVALDE
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Channel Number	813	Mobile Frequency	823.7750 Mz	Base Frequency	868.7750 Mz	LAVACA
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Channel Number	813	Mobile Frequency	823.7750 Mz	Base Frequency	868.7750 Mz	HIDALGO
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Channel Number	814	Mobile Frequency	823.7875 Mz	Base Frequency	868.7875 Mz	KENDALL
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Channel Number	814	Mobile Frequency	823.7875 Mz	Base Frequency	868.7875 Mz	LIVE OAK
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Channel Number	815	Mobile Frequency	823.8000 Mz	Base Frequency	868.8000 Mz	VICTORIA
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Channel Number	815	Mobile Frequency	823.8000 Mz	Base Frequency	868.8000 Mz	LA SALLE
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Channel Number	815	Mobile Frequency	823.8000 Mz	Base Frequency	868.8000 Mz	GUADALUPE
----------------	-----	------------------	-------------	----------------	-------------	-----------

Channel Number	815	Mobile Frequency	823.8000 Mz	Base Frequency	868.8000 Mz	HIDALGO
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Channel Number	815	Mobile Frequency	823.8000 Mz	Base Frequency	868.8000 Mz	EDWARDS
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Channel Number	816	Mobile Frequency	823.8125 Mz	Base Frequency	868.8125 Mz	KARNES
Channel Number	816	Mobile Frequency	823.8125 Mz	Base Frequency	868.8125 Mz	MEDINA
Channel Number	816	Mobile Frequency	823.8125 Mz	Base Frequency	868.8125 Mz	JIM WELLS

Channel Number	817	Mobile Frequency	823.8250 Mz	Base Frequency	868.8250 Mz	HIDALGO
Channel Number	817	Mobile Frequency	823.8250 Mz	Base Frequency	868.8250 Mz	REAL
Channel Number	817	Mobile Frequency	823.8250 Mz	Base Frequency	868.8250 Mz	MAVERICK

Channel Number	818	Mobile Frequency	823.8375 Mz	Base Frequency	868.8375 Mz	FRIO
Channel Number	818	Mobile Frequency	823.8375 Mz	Base Frequency	868.8375 Mz	GOLIAD
Channel Number	818	Mobile Frequency	823.8375 Mz	Base Frequency	868.8375 Mz	NUECES

Channel Number	819	Mobile Frequency	823.8500 Mz	Base Frequency	868.8500 Mz	BANDERA
Channel Number	819	Mobile Frequency	823.8500 Mz	Base Frequency	868.8500 Mz	BROOKS

Channel Number	820	Mobile Frequency	823.8625 Mz	Base Frequency	868.8625 Mz	VICTORIA
Channel Number	820	Mobile Frequency	823.8625 Mz	Base Frequency	868.8625 Mz	WILLACY
Channel Number	820	Mobile Frequency	823.8625 Mz	Base Frequency	868.8625 Mz	KINNEY
Channel Number	820	Mobile Frequency	823.8625 Mz	Base Frequency	868.8625 Mz	ATASCOSA

Channel Number	820	Mobile Frequency	823.8625 Mz	Base Frequency	868.8625 Mz	WEBB
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Channel Number	821	Mobile Frequency	823.8750 Mz	Base Frequency	868.8750 Mz	SAN PATRICIO
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Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	JACKSON
Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	ZAPATA
Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	DIMIT
Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	KENEDY
Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	BEXAR
Channel Number	822	Mobile Frequency	823.8875 Mz	Base Frequency	868.8875 Mz	VAL VERDE

Channel Number	823	Mobile Frequency	823.9000 Mz	Base Frequency	868.9000 Mz	ARANSAS
Channel Number	823	Mobile Frequency	823.9000 Mz	Base Frequency	868.9000 Mz	MCMULLEN

Channel Number	824	Mobile Frequency	823.9125 Mz	Base Frequency	868.9125 Mz	JIM HOGG
Channel Number	824	Mobile Frequency	823.9125 Mz	Base Frequency	868.9125 Mz	ZAVALA
Channel Number	824	Mobile Frequency	823.9125 Mz	Base Frequency	868.9125 Mz	BEXAR
Channel Number	824	Mobile Frequency	823.9125 Mz	Base Frequency	868.9125 Mz	BEE
Channel Number	824	Mobile Frequency	823.9125 Mz	Base Frequency	868.9125 Mz	CAMERON

Channel Number	825	Mobile Frequency	823.9250 Mz	Base Frequency	868.9250 Mz	Reserved for GUARD
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Channel Number	826	Mobile Frequency	823.9375 Mz	Base Frequency	868.9375 Mz	Reserved for TXSP
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Channel Number	827	Mobile Frequency	823.9500 Mz	Base Frequency	868.9500 Mz	Reserved for	GUARD
Channel Number	828	Mobile Frequency	823.9625 Mz	Base Frequency	868.9625 Mz	Reserved for	TXSP
Channel Number	829	Mobile Frequency	823.9750 Mz	Base Frequency	868.9750 Mz	Reserved for	GUARD
Channel Number	830	Mobile Frequency	823.9875 Mz	Base Frequency	868.9875 Mz	Unassigned	

5.2 Region 53 Channel Assignments by County

UVALDE	607 627 793 813
FRIO	625 649 780 818
JACKSON	612 632 802 822
VICTORIA	614 616 634 654 800 815 820
LA SALLE	609 629 795 815
LAVACA	621 647 793 813
DE WITT	618 649 791 811
WILSON	612 632 691 795
ARANSAS	607 627 803 823
JIM HOGG	606 626 646 804 824
ZAPATA	608 628 802 822
GILLESPIE	611 646 786 809
KENDALL	663 769 794 814
COMAL	619 649 670 720 761
BANDERA	612 634 798 819
ZAVALA	611 632 804 824
GUADALUPE	617 668 699 736 768 815
CALHOUN	622 646 792 812
MCMULLEN	613 633 803 823
DIMMIT	614 634 802 822
KENEDY	607 627 802 822

WILLACY	609 629 800 820
BROOKS	610 632 799 819
HIDALGO	612 614 616 618 634 644 648 650 664 772 776 790 792 794 796 811 813 815 817
KINNEY	616 644 800 820
BEXAR	602 608 610 615 621 623 628 630 645 647 651 653 655 657 659 661 665 672 683 685 687 689 693 695 697 701 703 705 707 709 723 725 727 730 732 734 738 740 742 745 747 759 764 766 771 773 775 777 782 784 787 789 792 802 804 807 810 812 822 824
GONZALES	625 663 786 809
ATASCOSA	606 669 800 820
GOLIAD	608 628 798 818
BEE	610 630 804 824
SAN PATRICIO	612 632 781 801 821
STARR	620 652 672 788 809
REAL	610 630 795 817
KARNES	620 644 788 816
DUVAL	615 649 791 812
KERR	632 669 691 721 779
MEDINA	618 667 796 816
REFUGIO	624 648 790 810
LIVE OAK	617 646 793 814

MAVERICK	618 646 796 817
JIM WELLS	619 651 769 789 816
CAMERON	620 622 624 646 652 654 666 768 788 804 807 809 824
KLEBERG	613 645 767 787 810
VAL VERDE	611 633 653 802 822
EDWARDS	619 647 791 815
WEBB	621 623 644 653 682 779 787 800 810 820
NUECES	609 621 629 634 653 655 657 682 684 763 776 778 783 785 796 798 806 808 818

5.3 Region 53, Sites and Excluded Channels

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*****
*
*           Sites and Excluded Channels           *
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*****
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UVALDE	609	613	615	631	643	669	675	681
	689	707	713	719	727	745	751	766
	782	789	797	799	821	823	829	

FRIO	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

JACKSON	606	607	608	609	610	611	614	616
	618	619	620	624	626	627	629	631
	644	645	653	654	663	664	671	672
	682	683	684	685	686	691	692	694
	695	696	701	704	705	706	709	710
	720	721	729	739	747	748	758	759
	764	767	774	777	784	786	787	788
	794	796	797	798	801	803	804	806
	807	808	814	816	817	818	821	823
	824							

VICTORIA	606	607	608	609	610	618	619	620
	627	629	644	645	671	672	682	683
	685	695	705	709	710	720	721	747
	748	758	759	786	787	788	796	797
	798	801	803	806	807	808	816	817
	818	821	823	824				

LA SALLE	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

LAVACA

606 607 608 609 610 611 612 613
 614 615 616 618 619 620 622 624
 626 627 628 629 630 631 632 633
 644 645 646 648 649 650 651 652
 653 654 656 658 660 662 663 664
 666 668 670 671 672 682 683 684
 685 686 688 690 691 692 694 695
 696 698 701 702 704 705 706 708
 709 710 720 721 722 724 726 728
 729 730 732 734 736 739 742 743
 744 746 747 748 758 759 760 762
 763 764 767 768 770 772 774 776
 777 778 780 782 783 784 786 787
 788 790 792 794 795 796 797 798
 799 800 801 802 803 804 806 807
 808 810 811 812 814 816 817 818
 819 820 821 822 823 824

DE WITT

606 607 608 609 610 611 613 619
 627 628 629 630 631 633 644 672
 682 685 695 705 710 720 748 758
 780 787 797 798 800 801 802 803
 807 817 818 820 821 822 823 824

WILSON

606 607 609 611 613 622 624 626
 627 629 631 633 652 654 656 658
 660 662 682 684 686 688 690 706
 710 728 743 746 748 758 763 770
 772 774 776 778 780 783 788 790
 797 798 800 801 803 808 811 817
 818 820 821 823

ARANSAS

606 609 619 644 672 682 710 720
 748 758 817 824

JIM HOGG

613 631 643 669 675 681 689 707
 713 719 727 745 751 766 782 789
 797 823 829

ZAPATA

613 631 643 669 675 681 689 707
 713 719 727 745 751 766 782 789
 797 823 829

GILLESPIE

606 607 608 609 610 612 613 614
615 616 617 618 619 620 622 624
625 626 627 632 633 634 644 645
647 648 652 654 656 658 660 662
665 666 667 668 682 684 686 688
690 691 692 693 706 710 728 740
741 742 743 746 748 758 763 766
767 768 770 772 774 776 778 779
780 781 783 785 788 790 792 795
796 797 798 799 800 801 802 803
804 805 808 811 813 815 816 817
818 819 820 821 822 823 824

KENDALL

606 607 611 612 613 614 615 617
618 620 622 624 625 626 627 631
632 633 634 644 645 647 652 654
656 658 660 662 665 667 682 684
686 688 690 692 706 710 728 741
743 746 748 758 763 767 770 772
774 776 778 779 780 781 783 785
788 790 792 796 797 798 799 800
801 803 805 808 811 813 816 817
818 819 820 821 823

COMAL

606 607 608 609 611 612 613 614
617 618 620 621 622 623 624 625
626 627 628 629 631 632 633 634
644 645 647 651 652 653 654 655
656 657 658 659 660 661 662 663
665 667 682 683 684 685 686 687
688 689 690 691 692 705 706 707
709 710 727 728 729 741 742 743
744 745 746 747 748 758 759 762
763 764 767 769 770 771 772 773
774 775 776 777 778 779 780 781
782 783 784 785 787 788 789 790
791 792 796 797 798 799 800 801
802 803 804 805 807 808 809 810
811 812 813 816 817 818 819 820
821 822 823 824

BANDERA	606	607	609	613	615	617	626	633
	644	780	797	799	800	803	817	820
	821	823						

ZAVALA	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

GUADALUPE	606	607	608	609	610	611	612	613
	614	615	618	620	621	622	623	624
	625	626	627	628	629	630	631	632
	633	634	644	645	647	649	651	652
	653	654	655	656	657	658	659	660
	661	662	663	665	667	672	682	683
	684	685	686	687	688	689	690	691
	692	695	705	706	707	709	710	720
	727	728	729	741	742	743	744	745
	746	747	748	758	759	762	763	764
	767	769	770	771	772	773	774	775
	776	777	778	779	780	781	782	783
	784	785	787	788	789	790	791	792
	795	797	798	799	800	801	802	803
	804	805	807	808	809	810	811	812
	813	816	817	818	819	820	821	822
	823	824						

CALHOUN	606	607	608	609	610	614	618	619
	620	624	644	645	653	663	671	672
	682	683	685	691	695	701	705	709
	710	720	721	729	739	747	748	758
	759	764	767	774	777	784	786	787
	788	794	796	797	798	804	806	807
	808	814	816	817	818	823	824	

MCMULLEN	none
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DIMMIT	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

KENEDY	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

WILLACY	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

BROOKS	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

HIDALGO	613	631	643	669	675	681	689	707
	713	719	727	745	751	766	782	789
	797	823	829					

KINNEY	609	613	615	631	643	669	675	681
	689	707	713	719	727	745	751	766
	782	789	797	799	821	823	829	

BEXAR	606	607	611	612	613	614	617	622
	624	625	626	627	631	632	633	634
	644	652	654	656	658	660	662	667
	682	684	686	688	690	692	706	710
	728	741	743	746	748	758	763	767
	770	772	774	776	778	779	780	781
	783	788	790	796	797	798	799	800
	801	803	808	811	816	817	818	819
	820	821	823					

GONZALES	606	607	608	609	610	611	612	613
	614	615	618	620	622	624	626	627
	628	629	630	631	632	633	634	644
	645	647	649	651	652	654	656	658
	660	661	662	664	665	671	672	682
	683	684	685	686	687	688	690	692
	694	695	696	702	704	705	706	709
	710	720	721	728	730	743	746	747
	748	758	759	762	763	768	770	772
	774	776	778	779	780	781	782	783

GONZALES	785	787	788	790	792	795	797	798
	799	800	801	802	803	804	805	806
	807	808	811	813	816	817	818	819
	820	821	822	823	824			

ATASCOSA	none
GOLIAD	606 609 619 644 672 682 685 695 705 710 720 748 758 787 797 807 817 824
BEE	none
SAN PATRICIO	none
STARR	613 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 823 829
REAL	606 607 609 613 614 615 616 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 799 818 820 821 822 823 824 829
KARNES	607 609 611 613 627 629 631 633 780 798 800 801 803 818 820 821 823
DUVAL	613 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 823 829
KERR	606 607 608 609 610 613 614 615 616 617 619 622 624 625 626 627 633 644 648 652 654 656 658 660 662 667 682 684 686 688 690 692 706 710 728 741 743 746 748 758 763 767 770 772 774 776 778 780 783 788 790 796 797 798 799 800 801 803 808 811 816 817 818 820 821 822 823 824
MEDINA	606 613 615 626 633 780 797 800 817 820 821
REFUGIO	606 609 619 644 672 682 710 720 748 758 787 797 807 817 824

LIVE OAK	none
MAVERICK	613 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 823 829
JIM WELLS	none
CAMERON	613 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 823 829
KLEBERG	none
VAL VERDE	606 607 608 609 610 612 613 614 615 631 632 643 644 669 675 681 689 707 713 719 727 745 751 766 782 789 790 792 797 798 799 800 816 817 818 821 823 824 829
EDWARDS	606 607 608 609 610 612 613 614 615 616 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 798 799 800 816 817 818 820 821 822 823 824 829
WEBB	613 631 643 669 675 681 689 707 713 719 727 745 751 766 782 789 797 823 829

5.5.4 Region 53 Sites, Co-Channel and Adjacent Channel Users

Site : UVALDE

Co-channel Users

ARANSAS	173.52 miles
KENEDY	185.54 miles
LAVACA	152.05 miles
LIVE OAK	98.03 miles
HIDALGO	201.29 miles

Adjacent channel

JIM HOGG	151.69 miles
ATASCOSA	58.21 miles
ZAPATA	145.48 miles
BEXAR	57.24 miles
GOLIAD	127.54 miles
CALHOUN	179.33 miles
HIDALGO	201.29 miles
KENDALL	55.97 miles
DUVAL	108.32 miles
LIVE OAK	98.03 miles

Site : FRIO

Co-channel Users

GONZALES	81.66 miles
DE WITT	83.32 miles
COMAL	63.40 miles
DUVAL	62.24 miles
GOLIAD	81.65 miles
NUECES	94.02 miles

Adjacent channel Users

REFUGIO	102.97 miles
CAMERON	192.03 miles
JIM HOGG	109.41 miles
HIDALGO	157.10 miles
KERR	65.56 miles
WEBB	52.89 miles
SAN PATRICIO	88.45 miles
REAL	59.85 miles
MAVERICK	60.10 miles
BANDERA	50.37 miles
BROOKS	119.30 miles

Site : JACKSON

Co-channel Users

WILSON	75.80 miles
BANDERA	141.51 miles
HIDALGO	180.69 miles
SAN PATRICIO	75.58 miles
ZAVALA	174.27 miles
BROOKS	150.72 miles
KERR	150.54 miles
ZAPATA	195.33 miles
DIMMIT	178.95 miles
KENEDY	131.60 miles
BEXAR	100.42 miles
VAL VERDE	252.26 miles

Adjacent channel Users

GILLESPIE	146.49 miles
ZAVALA	174.27 miles
VAL VERDE	252.26 miles
MCMULLEN	114.77 miles
KLEBERG	102.58 miles
SAN PATRICIO	75.58 miles
ARANSAS	46.16 miles

Site : VICTORIA

Co-channel Users

DIMMIT	149.19 miles
HIDALGO	154.43 miles
KINNEY	189.39 miles
BANDERA	122.18 miles
NUECES	53.86 miles
CAMERON	161.11 miles
WILLACY	148.69 miles
ATASCOSA	69.47 miles
WEBB	126.24 miles
LA SALLE	114.46 miles
GUADALUPE	63.53 miles
EDWARDS	188.49 miles

Adjacent channel Users

MCMULLEN	83.94 miles
KLEBERG	79.90 miles
BEXAR	81.00 miles
DUVAL	95.63 miles
GUADALUPE	63.53 miles
LIVE OAK	61.01 miles
VAL VERDE	227.40 miles
WEBB	126.24 miles
NUECES	53.86 miles
BROOKS	122.00 miles
SAN PATRICIO	47.07 miles
KENDALL	115.05 miles
KARNES	34.24 miles
MEDINA	112.25 miles
JIM WELLS	69.44 miles
BANDERA	122.18 miles

ite : LA SALLE
Co-channel Users

WILLACY	136.05 miles
NUECES	73.11 miles
WILSON	62.42 miles
REAL	89.45 miles
VICTORIA	114.46 miles
GUADALUPE	89.11 miles
HIDALGO	119.07 miles
EDWARDS	101.21 miles

Adjacent channel Users

ZAPATA	70.63 miles
BEXAR	61.53 miles
GOLIAD	82.28 miles
BROOKS	82.11 miles
BEE	63.58 miles
REAL	89.45 miles
KENDALL	93.73 miles
HIDALGO	119.07 miles
MEDINA	49.68 miles
MAVERICK	59.89 miles
NUECES	73.11 miles
LIVE OAK	46.07 miles
KARNES	62.19 miles
JIM WELLS	53.99 miles

Site : LAVACA

Co-channel Users

BEXAR	73.06 miles
WEBB	151.21 miles
NUECES	95.83 miles
EDWARDS	174.30 miles
UVALDE	152.05 miles
LIVE OAK	81.76 miles
HIDALGO	194.53 miles

Site: LAVACA, Adjacent channel Users,

STARR	201.30 miles
KARNES	47.48 miles
CAMERON	203.08 miles
CALHOUN	49.54 miles
JIM HOGG	173.30 miles
GILLESPIE	111.62 miles
LIVE OAK	81.76 miles
MAVERICK	194.02 miles
HIDALGO	194.53 miles
REFUGIO	54.45 miles
BEXAR	73.06 miles
KENDALL	95.27 miles
DUVAL	125.47 miles

Site : DE WITT

Co-channel Users

HIDALGO	165.24 miles
MEDINA	83.65 miles
MAVERICK	160.61 miles
FRIO	83.32 miles
COMAL	62.18 miles
DUVAL	86.14 miles
EDWARDS	160.73 miles

Adjacent channel Users

GUADALUPE	38.27 miles
LIVE OAK	38.60 miles
COMAL	62.18 miles
JIM WELLS	70.28 miles
EDWARDS	160.73 miles
HIDALGO	165.24 miles
REFUGIO	39.19 miles
CALHOUN	45.81 miles
BEXAR	53.65 miles
KLEBERG	100.99 miles
WEBB	108.95 miles
DUVAL	86.14 miles

Site : WILSON

Co-channel Users

JACKSON	75.80 miles
BANDERA	56.14 miles
HIDALGO	168.06 miles
SAN PATRICIO	73.45 miles
ZAVALA	81.55 miles
BROOKS	131.91 miles
KERR	68.18 miles
LA SALLE	62.42 miles
REAL	97.60 miles

Adjacent channel Users

GILLESPIE	75.88 miles
ZAVALA	81.55 miles
VAL VERDE	159.25 miles
MCMULLEN	41.14 miles
KLEBERG	105.41 miles
KENDALL	53.21 miles
HIDALGO	168.06 miles
MEDINA	43.89 miles
MAVERICK	122.41 miles
NUECES	84.21 miles

Site : ARANSAS

Co-channel Users

UVALDE	173.52 miles
KENEDY	65.49 miles
MCMULLEN	82.59 miles

Adjacent channel Users

JIM HOGG	109.07 miles
ATASCOSA	86.88 miles
ZAPATA	135.27 miles
BEXAR	114.76 miles
GOLIAD	31.94 miles
JACKSON	46.16 miles
DIMMIT	150.36 miles
KENEDY	65.49 miles
VAL VERDE	244.91 miles
ZAVALA	157.01 miles
BEE	33.37 miles
CAMERON	115.47 miles

Site : JIM HOGG

Co-channel Users

ATASCOSA	106.45 miles
GILLESPIE	207.73 miles
CALHOUN	135.53 miles
LIVE OAK	69.18 miles
MAVERICK	117.67 miles
CAMERON	69.00 miles
ZAVALA	120.11 miles
BEXAR	141.00 miles
BEE	91.60 miles

Adjacent channel Users

UVALDE	151.69 miles
ARANSAS	109.07 miles
KENEDY	47.52 miles
FRIO	109.41 miles
GONZALES	153.74 miles

te: JIM HOGG, continued

BEXAR	141.00 miles
KLEBERG	43.16 miles
LAVACA	173.30 miles
EDWARDS	193.74 miles
MCMULLEN	64.92 miles

Site : ZAPATA

Co-channel Users

BEXAR	151.83 miles
GOLIAD	136.35 miles
JACKSON	195.33 miles
DIMMIT	82.64 miles
KENEDY	78.98 miles
VAL VERDE	179.82 miles

Adjacent channel Users

UVALDE	145.48 miles
ARANSAS	135.27 miles
KENEDY	78.98 miles
LA SALLE	70.63 miles
WILLACY	78.59 miles
NUECES	84.42 miles
SAN PATRICIO	101.85 miles
MCMULLEN	76.04 miles

Site : GILLESPIE

Co-channel Users

ZAVALA	92.68 miles
VAL VERDE	101.56 miles
JIM HOGG	207.73 miles
CALHOUN	166.70 miles
LIVE OAK	115.62 miles
MAVERICK	108.89 miles
CAMERON	283.04 miles
GONZALES	85.14 miles
STARR	246.89 miles

Adjacent channel Users

BROOKS	214.40 miles
BEXAR	44.43 miles
BEE	122.41 miles
REAL	41.61 miles
JACKSON	146.49 miles
WILSON	75.88 miles
BANDERA	30.72 miles
HIDALGO	252.29 miles
SAN PATRICIO	161.43 miles
KLEBERG	191.89 miles
LAVACA	111.62 miles
EDWARDS	42.37 miles
NUECES	171.93 miles
WEBB	150.95 miles
REFUGIO	156.96 miles

Site : KENDALL

Co-channel Users

GONZALES	66.06 miles
JIM WELLS	134.83 miles
HIDALGO	224.96 miles
LIVE OAK	90.25 miles

Adjacent channel Users

HIDALGO	224.96 miles
GUADALUPE	35.90 miles
CAMERON	256.62 miles
UVALDE	55.97 miles
LAVACA	95.27 miles
LIVE OAK	90.25 miles
LA SALLE	93.73 miles
WILSON	53.21 miles
REAL	54.39 miles
VICTORIA	115.05 miles
EDWARDS	64.10 miles

Site : COMAL

Co-channel Users

JIM WELLS	119.96 miles
EDWARDS	84.63 miles
FRIO	63.40 miles
DE WITT	62.18 miles
DUVAL	122.23 miles

Adjacent channel Users

DE WITT	62.18 miles
HIDALGO	212.58 miles
MEDINA	27.51 miles
MAVERICK	117.00 miles
STARR	209.67 miles
KARNES	51.41 miles
CAMERON	241.21 miles
REFUGIO	109.84 miles
ATASCOSA	48.38 miles
KERR	29.03 miles

Site : BANDERA

Co-channel Users

JACKSON	141.51 miles
WILSON	56.14 miles
HIDALGO	215.30 miles
SAN PATRICIO	131.60 miles
VICTORIA	122.18 miles
DIMMIT	85.39 miles
NUECES	140.73 miles
GOLIAD	105.97 miles
BROOKS	177.28 miles

Adjacent channel Users

GILLESPIE	30.72 miles
ZAVALA	55.16 miles
VAL VERDE	84.30 miles
MCMULLEN	81.21 miles
KLEBERG	158.17 miles
BROOKS	177.28 miles
FRIO	50.37 miles
GOLIAD	105.97 miles
NUECES	140.73 miles
VICTORIA	122.18 miles
WILLACY	228.17 miles
KINNEY	48.96 miles
ATASCOSA	43.06 miles
WEBB	114.60 miles

Site : ZAVALA

Co-channel Users

GILLESPIE	92.68 miles
VAL VERDE	62.87 miles
JACKSON	174.27 miles
WILSON	81.55 miles
BROOKS	134.20 miles
SAN PATRICIO	119.29 miles
KERR	72.93 miles
JIM HOGG	120.11 miles
BEXAR	60.45 miles
BEE	99.13 miles
CAMERON	208.05 miles

Adjacent channel Users

BROOKS	134.20 miles
BEXAR	60.45 miles
BEE	99.13 miles
REAL	53.37 miles
JACKSON	174.27 miles
WILSON	81.55 miles
BANDERA	55.16 miles
HIDALGO	170.05 miles
SAN PATRICIO	119.29 miles
MCMULLEN	57.65 miles
VAL VERDE	62.87 miles
ARANSAS	157.01 miles

Site : GUADALUPE

Co-channel Users

LIVE OAK	57.24 miles
CAMERON	221.60 miles
VICTORIA	63.53 miles
LA SALLE	89.11 miles
HIDALGO	197.17 miles
EDWARDS	110.89 miles

Adjacent channel Users

VICTORIA	63.53 miles
HIDALGO	197.17 miles
KINNEY	126.10 miles
DE WITT	38.27 miles
MEDINA	45.58 miles
MAVERICK	132.37 miles
ATASCOSA	43.37 miles
KERR	55.20 miles
KLEBERG	133.69 miles
KENDALL	35.90 miles
JIM WELLS	102.94 miles
LIVE OAK	57.24 miles
KARNES	27.20 miles

Site : CALHOUN

Co-channel Users

CAMERON	136.55 miles
JIM HOGG	135.53 miles
GILLESPIE	166.70 miles
LIVE OAK	73.38 miles
MAVERICK	209.01 miles
HIDALGO	139.65 miles
BEXAR	111.56 miles
DUVAL	101.80 miles

Adjacent channel Users

LAVACA	49.54 miles
BEXAR	111.56 miles
WEBB	135.38 miles
NUECES	34.08 miles
KLEBERG	60.89 miles
EDWARDS	218.80 miles
DE WITT	45.81 miles
DUVAL	101.80 miles
UVALDE	179.33 miles
LIVE OAK	73.38 miles
HIDALGO	139.65 miles

Site : MCMULLEN

Co-channel Users

KLEBERG	53.29 miles
VAL VERDE	145.85 miles
ARANSAS	82.59 miles

Adjacent channel Users

JACKSON	114.77 miles
WILSON	41.14 miles
BANDERA	81.21 miles
HIDALGO	108.72 miles
SAN PATRICIO	42.64 miles
VICTORIA	83.94 miles
DIMMIT	55.01 miles
ZAVALA	57.65 miles
BROOKS	70.81 miles
KERR	96.99 miles
NUECES	44.18 miles
ZAPATA	76.04 miles
KENEDY	84.40 miles
BEXAR	51.74 miles
VAL VERDE	145.85 miles
JIM HOGG	64.92 miles
BEE	32.66 miles
CAMERON	141.12 miles

Site : DIMMIT

Co-channel Users

VICTORIA	149.19 miles
HIDALGO	144.74 miles
BANDERA	85.39 miles
NUECES	110.05 miles
JACKSON	178.95 miles
ZAPATA	82.64 miles
KENEDY	137.82 miles
BEXAR	78.97 miles
VAL VERDE	82.05 miles

Adjacent channel Users

MCMULLEN	55.01 miles
KLEBERG	112.35 miles
BEXAR	78.97 miles
DUVAL	61.66 miles
VAL VERDE	82.05 miles
SAN PATRICIO	110.51 miles
ARANSAS	150.36 miles

Site : KENEDY

Co-channel Users

UVALDE	185.54 miles
ARANSAS	65.49 miles
JACKSON	131.60 miles
ZAPATA	78.98 miles
DIMMIT	137.82 miles
BEXAR	154.76 miles
VAL VERDE	244.12 miles

Adjacent channel Users

JIM HOGG	47.52 miles
ATASCOSA	119.14 miles
ZAPATA	78.98 miles
BEXAR	154.76 miles
GOLIAD	95.25 miles
SAN PATRICIO	56.52 miles
ARANSAS	65.49 miles
MCMULLEN	84.40 miles

Site : WILLACY

Co-channel Users

LA SALLE	136.05 miles
NUECES	78.64 miles
VICTORIA	148.69 miles
KINNEY	237.14 miles
ATASCOSA	159.00 miles
WEBB	89.69 miles

Adjacent channel Users

ZAPATA	78.59 miles
BEXAR	194.36 miles
GOLIAD	138.32 miles
BROOKS	31.51 miles
BEE	120.86 miles
REAL	248.40 miles
SAN-PATRICIO	98.11 miles
BANDERA	228.17 miles

Site : BROOKS

Co-channel Users

BEXAR	146.17 miles
BEE	81.26 miles
REAL	194.84 miles
JACKSON	150.72 miles
WILSON	131.91 miles
ZAVALA	134.20 miles
SAN PATRICIO	64.11 miles
KERR	193.05 miles
BANDERA	177.28 miles

Adjacent channel Users

LA SALLE	82.11 miles
WILLACY	31.51 miles
NUECES	39.22 miles
GILLESPIE	214.40 miles
ZAVALA	134.20 miles
VAL VERDE	217.11 miles
MCMULLEN	70.81 miles
BANDERA	177.28 miles
GOLIAD	102.63 miles
VICTORIA	122.00 miles
KINNEY	183.11 miles
ATASCOSA	112.11 miles
WEBB	39.09 miles
FRIO	119.30 miles

Site : HIDALGO

Co-channel Users

JACKSON	180.69 miles
WILSON	168.06 miles
BANDERA	215.30 miles
SAN PATRICIO	98.24 miles
VICTORIA	154.43 miles
DIMMIT	144.74 miles
KINNEY	217.55 miles
DE WITT	165.24 miles
MEDINA	184.23 miles
MAVERICK	168.02 miles
NUECES	73.28 miles
KARNES	150.01 miles
WEBB	68.32 miles
REFUGIO	118.23 miles
CALHOUN	139.65 miles
BEXAR	183.61 miles
KENDALL	224.96 miles
UVALDE	201.29 miles
LAVACA	194.53 miles
LA SALLE	119.07 miles
GUADALUPE	197.17 miles
EDWARDS	243.68 miles
REAL	231.99 miles

Adjacent channel Users
Site : HIDALGO

GILLESPIE	252.29 miles
ZAVALA	170.05 miles
VAL VERDE	249.91 miles
MCMULLEN	108.72 miles
KLEBERG	49.19 miles
BEXAR	183.61 miles
DUVAL	53.77 miles
GUADALUPE	197.17 miles
LIVE OAK	106.05 miles
COMAL	212.58 miles
JIM WELLS	49.86 miles
EDWARDS	243.68 miles
LAVACA	194.53 miles
FRIO	157.10 miles
DE WITT	165.24 miles
KENDALL	224.96 miles
GONZALES	184.53 miles
UVALDE	201.29 miles
LA SALLE	119.07 miles
WILSON	168.06 miles
REAL	231.99 miles
REFUGIO	118.23 miles
WEBB	68.32 miles
CALHOUN	139.65 miles
KARNES	150.01 miles
MEDINA	184.23 miles
GOLIAD	136.99 miles
NUECES	73.28 miles

Site : KINNEY

Co-channel Users

VICTORIA	189.39 miles
HIDALGO	217.55 miles
KARNES	134.52 miles
WEBB	78.36 miles
WILLACY	237.14 miles
ATASCOSA	95.06 miles

Adjacent channel Users

BEXAR	95.29 miles
DUVAL	130.41 miles
GUADALUPE	126.10 miles
LIVE OAK	131.20 miles
KLEBERG	180.44 miles
BROOKS	183.11 miles
SAN PATRICIO	169.58 miles
BANDERA	48.96 miles

Site : BEXAR

Co-channel Users

ZAPATA	151.83 miles
GOLIAD	66.22 miles
BROOKS	146.17 miles
BEE	55.50 miles
REAL	62.44 miles
DUVAL	92.32 miles
LAVACA	73.06 miles
WEBB	96.97 miles
NUECES	103.36 miles
KLEBERG	122.84 miles
EDWARDS	82.64 miles
JIM WELLS	91.94 miles
VAL VERDE	131.54 miles
STARR	179.36 miles
CALHOUN	111.56 miles
HIDALGO	183.61 miles
JACKSON	100.42 miles
DIMMIT	78.97 miles
KENEDY	154.76 miles
JIM HOGG	141.00 miles
ZAVALA	60.45 miles
CAMERON	214.00 miles
REFUGIO	96.08 miles

Adjacent channel Users
Site : BEXAR

continued

UVALDE	57.24 miles
ARANSAS	114.76 miles
KENEDY	154.76 miles
LA SALLE	61.53 miles
WILLACY	194.36 miles
NUECES	103.36 miles
GILLESPIE	44.43 miles
ZAVALA	60.45 miles
VAL VERDE	131.54 miles
VICTORIA	81.00 miles
DIMMIT	78.97 miles
HIDALGO	183.61 miles
KINNEY	95.29 miles
STARR	179.36 miles
KARNES	36.73 miles
CAMERON	214.00 miles
CALHOUN	111.56 miles
REFUGIO	96.08 miles
WEBB	96.97 miles
JIM HOGG	141.00 miles
LIVE OAK	47.26 miles
MAVERICK	98.58 miles
KLEBERG	122.84 miles
SAN PATRICIO	93.40 miles
GONZALES	36.02 miles
DE WITT	53.65 miles
DUVAL	92.32 miles
EDWARDS	82.64 miles
LAVACA	73.06 miles
MCMULLEN	51.74 miles

Site : GONZALES

Co-channel Users

FRIO	81.66 miles
KENDALL	66.06 miles
GILLESPIE	85.14 miles
STARR	186.84 miles
CAMERON	203.79 miles

Adjacent channel Users

REFUGIO	62.30 miles
CAMERON	203.79 miles
JIM HOGG	153.74 miles
HIDALGO	184.53 miles
NUECES	95.90 miles
BEXAR	36.02 miles
KLEBERG	120.22 miles
WEBB	122.59 miles

Site : ATASCOSA

Co-channel Users

JIM HOGG	106.45 miles
KERR	58.82 miles
VICTORIA	69.47 miles
WILLACY	159.00 miles
KINNEY	95.06 miles
WEBB	60.63 miles

Site : ATASCOSA

Adjacent channel Users

UVALDE	58.21 miles
ARANSAS	86.88 miles
KENEDY	119.14 miles
GUADALUPE	43.37 miles
COMAL	48.38 miles
BROOKS	112.11 miles
SAN PATRICIO	58.38 miles
BANDERA	43.06 miles

Site : GOLIAD

Co-channel Users

ZAPATA	136.35 miles
BEXAR	66.22 miles
BANDERA	105.97 miles
NUECES	48.35 miles
FRIO	81.65 miles

Adjacent channel Users

UVALDE	127.54 miles
ARANSAS	31.94 miles
KENEDY	95.25 miles
LA SALLE	82.28 miles
WILLACY	138.32 miles
NUECES	48.35 miles
BROOKS	102.63 miles
HIDALGO	136.99 miles
REAL	145.18 miles
MAVERICK	157.99 miles
BANDERA	105.97 miles

Site : BEE

Co-channel Users

BROOKS	81.26 miles
BEXAR	55.50 miles
REAL	130.98 miles
JIM HOGG	91.60 miles
ZAVALA	99.13 miles
CAMERON	134.88 miles

Adjacent channel Users

LA SALLE	63.58 miles
WILLACY	120.86 miles
NUECES	28.02 miles
GILLESPIE	122.41 miles
ZAVALA	99.13 miles
VAL VERDE	184.34 miles
ARANSAS	33.37 miles
MCMULLEN	32.66 miles

Site : SAN PATRICIO

Co-channel Users

JACKSON	75.58 miles
WILSON	73.45 miles
BANDERA	131.60 miles
HIDALGO	98.24 miles
ZAVALA	119.29 miles
BROOKS	64.11 miles
KERR	146.85 miles

Adjacent channel Users

GILLESPIE	161.43 miles
ZAVALA	119.29 miles
VAL VERDE	207.99 miles
MCMULLEN	42.64 miles
KLEBERG	28.75 miles
FRIO	88.45 miles
BEXAR	93.40 miles
VICTORIA	47.07 miles
WILLACY	98.11 miles
KINNEY	169.58 miles
ATASCOSA	58.38 miles
WEBB	71.28 miles
JACKSON	75.58 miles
ZAPATA	101.85 miles
DIMMIT	110.51 miles
KENEDY	56.52 miles

Site : STARR

Co-channel Users

KARNES	150.31 miles
CAMERON	56.12 miles
BEXAR	179.36 miles
GILLESPIE	246.89 miles
GONZALES	186.84 miles

Adjacent channel Users

COMAL	209.67 miles
JIM WELLS	51.71 miles
EDWARDS	226.14 miles
LAVACA	201.30 miles
BEXAR	179.36 miles
WEBB	51.25 miles
NUECES	80.21 miles
VAL VERDE	225.78 miles
KLEBERG	56.38 miles
REFUGIO	125.86 miles

Site : REAL

Co-channel Users

BROOKS	194.84 miles
BEXAR	62.44 miles
BEE	130.98 miles
LA SALLE	89.45 miles
WILSON	97.60 miles
HIDALGO	231.99 miles
MAVERICK	54.34 miles

Adjacent channel Users

LA SALLE	89.45 miles
WILLACY	248.40 miles
NUECES	170.24 miles
GILLESPIE	41.61 miles
ZAVALA	53.37 miles
VAL VERDE	57.06 miles
KENDALL	54.39 miles
HIDALGO	231.99 miles
MEDINA	28.43 miles
MAVERICK	54.34 miles
KARNES	115.10 miles
JIM WELLS	153.44 miles
FRIO	59.85 miles
GOLIAD	145.18 miles

Site : KARNES

Co-channel Users

STARR	150.31 miles
CAMERON	172.78 miles
HIDALGO	150.01 miles
KINNEY	134.52 miles
WEBB	83.43 miles
MEDINA	58.91 miles
JIM WELLS	54.80 miles

Adjacent channel Users

COMAL	51.41 miles
JIM WELLS	54.80 miles
EDWARDS	138.92 miles
LAVACA	47.48 miles
BEXAR	36.73 miles
WEBB	83.43 miles
NUECES	61.98 miles
KLEBERG	85.74 miles
VICTORIA	34.24 miles
LA SALLE	62.19 miles
GUADALUPE	27.20 miles
HIDALGO	150.01 miles
REAL	115.10 miles
MAVERICK	132.98 miles

site : DUVAL

Co-channel Users

BEXAR	92.32 miles
FRIO	62.24 miles
DE WITT	86.14 miles
COMAL	122.23 miles
EDWARDS	152.15 miles
CALHOUN	101.80 miles

Adjacent channel Users

VICTORIA	95.63 miles
DIMMIT	61.66 miles
HIDALGO	53.77 miles
KINNEY	130.41 miles
REFUGIO	62.36 miles

ite: DUVAL

Adjacent channel Users (continued)

CALHOUN	101.80 miles
BEXAR	92.32 miles
DE WITT	86.14 miles
UVALDE	108.32 miles
LAVACA	125.47 miles

Site : KERR

Co-channel Users

JACKSON	150.54 miles
WILSON	68.18 miles
ZAVALA	72.93 miles
BROOKS	193.05 miles
SAN PATRICIO	146.85 miles
ATASCOSA	58.82 miles
WEBB	129.28 miles

Adjacent channel Users

MCMULLEN	96.99 miles
VAL VERDE	71.56 miles
GUADALUPE	55.20 miles
COMAL	29.03 miles
NUECES	156.19 miles
FRIO	65.56 miles

Site : MEDINA

Co-channel Users

DE WITT	83.65 miles
HIDALGO	184.23 miles
MAVERICK	59.74 miles
NUECES	114.27 miles
KARNES	58.91 miles
JIM WELLS	98.76 miles

Site: MEDINA

Adjacent channel Users (continued)

GUADALUPE	45.58 miles
LIVE OAK	63.10 miles
COMAL	27.51 miles
JIM WELLS	98.76 miles
EDWARDS	53.31 miles
CAMERON	218.02 miles
LA SALLE	49.68 miles
WILSON	43.89 miles
REAL	28.43 miles
VICTORIA	112.25 miles
HIDALGO	184.23 miles
MAVERICK	59.74 miles

Site : REFUGIO

Co-channel Users

CAMERON	128.20 miles
HIDALGO	118.23 miles
BEXAR	96.08 miles
KLEBERG	46.02 miles
WEBB	95.41 miles

Adjacent channel Users

BEXAR	96.08 miles
WEBB	95.41 miles
FRIO	102.97 miles
GONZALES	62.30 miles
LAVACA	54.45 miles
EDWARDS	195.39 miles
DE WITT	39.19 miles
COMAL	109.84 miles
DUVAL	62.36 miles
JIM WELLS	33.76 miles
GILLESPIE	156.96 miles
STARR	125.86 miles
CAMERON	128.20 miles
HIDALGO	118.23 miles

Site : LIVE OAK

Co-channel Users

GUADALUPE	57.24 miles
JIM HOGG	69.18 miles
GILLESPIE	115.62 miles
CALHOUN	73.38 miles
MAVERICK	120.74 miles
CAMERON	133.62 miles
UVALDE	98.03 miles
LAVACA	81.76 miles
KENDALL	90.25 miles

Adjacent channel Users

VICTORIA	61.01 miles
HIDALGO	106.05 miles
KINNEY	131.20 miles
DE WITT	38.60 miles
MEDINA	63.10 miles
MAVERICK	120.74 miles
BEXAR	47.26 miles
KLEBERG	42.37 miles
LAVACA	81.76 miles
EDWARDS	141.44 miles
CALHOUN	73.38 miles
KENDALL	90.25 miles
UVALDE	98.03 miles
LA SALLE	46.07 miles
GUADALUPE	57.24 miles

Site : MAVERICK

Co-channel Users

DE WITT	160.61 miles
HIDALGO	168.02 miles
MEDINA	59.74 miles
JIM HOGG	117.67 miles
GILLESPIE	108.89 miles
CALHOUN	209.01 miles
LIVE OAK	120.74 miles
CAMERON	208.23 miles
NUECES	146.95 miles
REAL	54.34 miles

Adjacent channel Users

GUADALUPE	132.37 miles
LIVE OAK	120.74 miles
COMAL	117.00 miles
JIM WELLS	128.43 miles
EDWARDS	50.46 miles
BEXAR	98.58 miles
KLEBERG	146.67 miles
LAVACA	194.02 miles
LA SALLE	59.89 miles
WILSON	122.41 miles
REAL	54.34 miles
KARNES	132.98 miles
MEDINA	59.74 miles
FRIO	60.10 miles
GOLIAD	157.99 miles
NUECES	146.95 miles
MEDINA	98.76 miles

Site : JIM WELLS

Co-channel Users

COMAL	119.96 miles
EDWARDS	171.40 miles
BEXAR	91.94 miles
KENDALL	134.83 miles
KARNES	54.80 miles

Adjacent channel Users

DE WITT	70.28 miles
HIDALGO	49.86 miles
MEDINA	98.76 miles
MAVERICK	128.43 miles
STARR	51.71 miles
KARNES	54.80 miles
CAMERON	80.70 miles
GUADALUPE	102.94 miles
REFUGIO	33.76 miles
VICTORIA	69.44 miles
LA SALLE	53.99 miles
EDWARDS	171.40 miles
REAL	153.44 miles

Site : CAMERON

Co-channel Users

STARR	56.12 miles
KARNES	172.78 miles
CALHOUN	136.55 miles
REFUGIO	128.20 miles
JIM HOGG	69.00 miles
GILLESPIE	283.04 miles
LIVE OAK	133.62 miles
MAVERICK	208.23 miles
VICTORIA	161.11 miles
GUADALUPE	221.60 miles
ZAVALA	208.05 miles
BEXAR	214.00 miles
BEE	134.88 miles
GONZALES	203.79 miles

Adjacent channel Users

COMAL	241.21 miles
JIM WELLS	80.70 miles
EDWARDS	281.52 miles
LAVACA	203.08 miles
BEXAR	214.00 miles
WEBB	108.17 miles
NUECES	91.81 miles
FRIO	192.03 miles
GONZALES	203.79 miles
KLEBERG	73.14 miles
VAL VERDE	289.60 miles
MEDINA	218.02 miles
KENDALL	256.62 miles
ARANSAS	115.47 miles
MCMULLEN	141.12 miles
REFUGIO	128.20 miles

Site : KLEBERG

Co-channel Users

MCMULLEN	53.29 miles
BEXAR	122.84 miles
WEBB	59.74 miles
REFUGIO	46.02 miles

Adjacent channel Users

JACKSON	102.58 miles
WILSON	105.41 miles
BANDERA	158.17 miles
HIDALGO	49.19 miles
SAN PATRICIO	28.75 miles
VICTORIA	79.90 miles
DIMMIT	112.35 miles
KINNEY	180.44 miles
KARNES	85.74 miles
WEBB	59.74 miles
JIM HOGG	43.16 miles
GILLESPIE	191.89 miles
CALHOUN	60.89 miles
LIVE OAK	42.37 miles
MAVERICK	146.67 miles
CAMERON	73.14 miles
BEXAR	122.84 miles
GUADALUPE	133.69 miles
GONZALES	120.22 miles
STARR	56.38 miles
DE WITT	100.99 miles

Site : VAL VERDE

Co-channel Users

GILLESPIE	101.56 miles
ZAVALA	62.87 miles
MCMULLEN	145.85 miles
BEXAR	131.54 miles
WEBB	103.42 miles
NUECES	211.53 miles
JACKSON	252.26 miles
ZAPATA	179.82 miles
DIMMIT	82.05 miles
KENEDY	244.12 miles

Site : VAL VERDE
Adjacent channel Users

continued

BROOKS	217.11 miles
BEXAR	131.54 miles
BEE	184.34 miles
REAL	57.06 miles
JACKSON	252.26 miles
WILSON	159.25 miles
BANDERA	84.30 miles
HIDALGO	249.91 miles
SAN PATRICIO	207.99 miles
ZAVALA	62.87 miles
KERR	71.56 miles
VICTORIA	227.40 miles
DIMMIT	82.05 miles
NUECES	211.53 miles
STARR	225.78 miles
CAMERON	289.60 miles
ARANSAS	244.91 miles
MCMULLEN	145.85 miles

Site : EDWARDS

Co-channel Users

COMAL	84.63 miles
JIM WELLS	171.40 miles
LAVACA	174.30 miles
BEXAR	82.64 miles
DE WITT	160.73 miles
DUVAL	152.15 miles
VICTORIA	188.49 miles
LA SALLE	101.21 miles
GUADALUPE	110.89 miles
HIDALGO	243.68 miles

Site: EDWARDS, continued

Adjacent channel Users

DE WITT	160.73 miles
HIDALGO	243.68 miles
MEDINA	53.31 miles
MAVERICK	50.46 miles
STARR	226.14 miles
KARNES	138.92 miles
CAMERON	281.52 miles
JIM HOGG	193.74 miles
GILLESPIE	42.37 miles
CALHOUN	218.80 miles
LIVE OAK	141.44 miles
REFUGIO	195.39 miles
BEXAR	82.64 miles
KENDALL	64.10 miles
JIM WELLS	171.40 miles

Site : WEBB

Co-channel Users

LAVACA	151.21 miles
BEXAR	96.97 miles
NUECES	66.27 miles
HIDALGO	68.32 miles
KINNEY	78.36 miles
KARNES	83.43 miles
VAL VERDE	103.42 miles
KERR	129.28 miles
KLEBERG	59.74 miles
VICTORIA	126.24 miles
WILLACY	89.69 miles
ATASCOSA	60.63 miles
REFUGIO	95.41 miles

Adjacent channel Users

STARR	51.25 miles
KARNES	83.43 miles
CAMERON	108.17 miles
CALHOUN	135.38 miles
REFUGIO	95.41 miles
BEXAR	96.97 miles
KLEBERG	59.74 miles
VICTORIA	126.24 miles
NUECES	66.27 miles
FRIO	52.89 miles
GILLESPIE	150.95 miles
GONZALES	122.59 miles
BROOKS	39.09 miles
SAN PATRICIO	71.28 miles
DE WITT	108.95 miles
HIDALGO	68.32 miles
BANDERA	114.60 miles

Site : NUECES

Co-channel Users

LA SALLE	73.11 miles
WILLACY	78.64 miles
LAVACA	95.83 miles
BEXAR	103.36 miles
WEBB	66.27 miles
VICTORIA	53.86 miles
BANDERA	140.73 miles
DIMMIT	110.05 miles
HIDALGO	73.28 miles
VAL VERDE	211.53 miles
MEDINA	114.27 miles
MAVERICK	146.95 miles
GOLIAD	48.35 miles
FRIO	94.02 miles

Adjacent channel Users

ZAPATA	84.42 miles
BEXAR	103.36 miles
GOLIAD	48.35 miles
BROOKS	39.22 miles
BEE	28.02 miles
REAL	170.24 miles
STARR	80.21 miles
KARNES	61.98 miles
CAMERON	91.81 miles
CALHOUN	34.08 miles
MCMULLEN	44.18 miles
VAL VERDE	211.53 miles
VICTORIA	53.86 miles
KERR	156.19 miles
WEBB	66.27 miles
GILLESPIE	171.93 miles
GONZALES	95.90 miles
LA SALLE	73.11 miles
WILSON	84.21 miles
HIDALGO	73.28 miles
MAVERICK	146.95 miles
BANDERA	140.73 miles

.6 Assignment Statistics

Maximum field strength for co-channel operation is	5.00 Dbu
Maximum field strength for adj.-channel operation is	25.00 Dbu
Iterations required for solution	45
Number of channels used for solution	224
Total number of channels assigned	301
Total number of unassigned channels	43
Total number of reserved channels	41
Total number of co-channels assigned	160

Probability of interference with the nearest :

- * Co-channel user is between 0 % and 1 % .
- * Adj.-channel user is between 0 % and 1 % .
- * Estimated assuming a 40 Dbu signal at the boundary.

5.7 Expansion of Initial Allocation

In the event that the allocation for any county becomes depleted, the Region Review Committee shall meet to make further allocations to said county. Should this occur, the applying agency or entity shall submit the proper license and coordination applications with all applicable fees, as in any other licensing request. Allocations will be made based on the initial frequency allocation plan as mentioned above, taking into consideration the channels which were returned to the reserve pool.

5.8 Prioritization of Applicants

A very simple method of prioritization has been chosen for use in this Region. As there is no unmet spectrum requirement, there appears to be no great need for prioritization. In order to facilitate future problems which may arise, the following rating system shall be used.

When unmet spectrum requirement can be projected, it will be the APCO Frequency Advisor's responsibility to advise the Regional Planning Committee to begin prioritization of applications. Prioritization shall be done according to a final score, based on applicant criteria. The highest score, in points, shall be given priority in a situation where spectrum is insufficient to fulfill the needs of all.

Public Safety Agencies	2 Points
Public Services Agencies	1 Point
Multi-agency Systems	2 Points
Multi-agency/Multi Jurisdiction Systems	3 Points
Single Agency/Jurisdiction Systems	1 Point
Agencies that give back frequencies	1 Point

9.9 Appeal Process

At any time, any applicant may appeal an allocation, rejection, or any limits placed on a particular application for any reason. The appeal process has two levels; the Region 53 Review Committee, and the FCC. An applicant who decides to appeal a rejection should initiate that appeal immediately upon notification of rejection. In the event that an appeal reaches the FCC, their decision will be final and binding upon all parties.

10 THE REGION 53 PLANNING COMMITTEE

This committee shall consist of the Region 53 Chairman, a state agency representative, one representative from the Police, Fire and one representative from the emergency medical services, and a representation from other eligibles are also welcome. This committee and its composition will be assured by the Texas APCO chapter and other Public Safety organizations. Membership on this committee will be solicited on an annual basis. Since this committee will probably not have regular business, it will be up to the Region 53 Chairman to notify the committee of problems, conflicts, or when it becomes apparent that spectrum demands will outpace available spectrum. Each member of the committee shall be furnished a copy of this plan upon their appointment or election to the committee.

CHAIRMAN AFFILIATION

Don Brooks
City of San Antonio
P.O. Box 839966
San Antonio, Texas 78283-3966
(512)299-7022

William Davenport
San Antonio Fire Department
P.O. Box 839966
San Antonio, Texas 78283-3966
(512)299-7968

Nolan Suarez
Alamo Area Council of Governments
118 Broadway, ste. 400
San Antonio, Texas 78218
(512)225-5201

Victor Perez
Deputy Director
Bexar County Information Services
203 W. Nueva
San Antonio, Texas 78207-4507
(512)978-0211

Gene Kilgore
Director of Communications
Coastal Bend Council of Governments
P.O. Box 9909
Corpus Christi, Texas 78469
(512)883-5643

Jay Loretta Nelson
Coastal Bend 911 Network Director
P.O. Box 9909
Corpus Christi, Texas 78469
(512)883-5643

Roy D. Williams, Lt.
Department of Public Safety Communications
6502 S. New Braunfels
San Antonio, Texas 78223
(512)533-9171

Denny Arnold
Assistant City Manager
City of Victoria
P.O. Box 1758
Victoria, Texas 77902
(512)572-2720

Glenn Perry
Communications Department
City of Victoria
P.O. Box 1758
Victoriam, Texas 77902
(512)572-2748

Glenn Futch
Captain Victoria Police Department
P.O. Box 1758
Victoria, Texas 77902
(512)572-2742

Robert Kirk
Director of Human Services
Golden Crescent Region Planning Commission
P.O. Box 2028
Victoria, Texas 77902

Bob Wynd, Lt.
Technical Services
Corpus Christi Police Department
P.O. Box 9016
Corpus Christi, Texas 78403
(512)886-2800

David Neuman, Lt.
Communications
Converse Police Department
P.O. Box 36
Converse, Texas 78213

Ken Yoder, Frequency Coordinator
Department of Public Safety
Austin, Texas 78773-0001
(512)465-2104

Kelly Holder
Communications Supervisor
New Braunfels Police Department
New Braunfels, Texas 78130
(512)625-6872

John Wommack, Lt
Criminal Investigation Division
New Braunfels Police Department
New Braunfels, Texas 78130
(512)625-6872

PPENDIX A

NOTICE OF FIRST PLANNING MEETING. SENT OUT OVER THE TCIC/NCIC STATE-WIDE COMPUTER SYSTEM AS A-1.

PROOF OF PUBLICATION FROM THE SAN ANTONIO LIGHT NEWSPAPER FOR ADVERTISEMENT OF FIRST MEETING AS A-2.

LETTERS TO INDIVIDUALS REQUESTING THEIR ATTENDANCE AND PARTICIPATION IN DEVELOPING THE REGION 53 PLAN.

Lt. Tommy Capell, San Antonio Police Department

Please send this notice ove the TCIC network.

TO: ALL DEPARTMENTS

A MEETING WILL BE HELD IN THE AACOG OFFICES, 118 BROADWAY SAN ANTONIO, TX. 12-4-92 AT 2:00PM TO REVIEW AND DISCUSS THE REGION 53 (S. TEXAS) COMMUNICATIONS PLAN.

ALL INTERESTED PERSONS ARE INVITED TO ATTEND.

DON BROOKS,
REGION 53 CONVENOR

TO SAN ANTONIO

TO ALL DEPTS

MEETING WILL BE HELD IN THE 34003 OFFICES 110 REGION 53 SAN ANTONIO TX
ON 12-04-91 AT 1400 HRS TOR REVIEW AND DISCUSS THE REGION 53 (3) (B) (C)
COMMUNICATIONS PLAN.

ALL INTERESTED PERSONS ARE INVITED TO ATTEND

ON BROOKS REGION 53 CONVENOR SH021444CTT

OUTPUT MSG 009, FROM SAPG 12/02/91 14:40

SAN ANTONIO LIGHT
TUESDAY
DECEMBER 3, 1991

(512) 841-8894
or Fax (512) 824-8838

Legal Notices 950

A MEETING
WILL BE HELD IN THE
AACOG Office, 118 Broadway,
December 4, 1991 at 2:00 p.m. 808
AMtz to develop a communica-
tions plan for South Texas.

L-632.



LEGALS

Bids and Proposals 940

Sealed bid proposals will be received by the Board of Trustees of the San Antonio Independent School District for the following:

Bid No. 91-216

"DRY CEREAL ITEMS"
THURSDAY, DECEMBER 19,
1991, @2:00 P.M.

BID NO. 91-218

"STRING INSTRUMENTS"
THURSDAY, DECEMBER 19,
1991, @2:30 P.M.

Specifications and bid forms may be obtained from the Purchasing Office, (512) 224-2781. Bids will be received not later than the dates and times shown above at the Purchasing Office, 1215 Austin St., San Antonio, Texas 78208, at which time bids will be opened publicly.

Sealed bids will be received by the Board of Trustees of the San Antonio Independent School District for the following:

BID #91-214

"PHYSICAL EDUCATION SUPPLIES"
THURSDAY, DECEMBER 19, 1991
@ 1:30 P.M.

Specifications and bid forms may be obtained from the Purchasing Office, (512) 224-2781. Bids will be received not later than the dates and times shown above at the Purchasing Office, 1215 Austin St., San Antonio, Texas 78208, at which time bids will be opened publicly.

FISERV JOINT VENTURE

The following aircraft are being offered as-is, where-is by sealed bid. 1981 Cessna Model 172BQ. No logs. Each shows 345 King Digger Avionics, WXJ, RNAV and KFC 150, good paint and interior. 1971 Mitsubishi F Model. No interior, no logs. Sealed bids will be accepted until 5:00 p.m. Dec. 31 at 8941 Tesoro Drive, Suite 554, San Antonio, Texas 78217. The aircraft are available for inspection by appointment. Contact Ramiro Rodriguez at (512) 841-8644 or Fax (512) 824-8658.

INVITATION FOR BIDS MAINTENANCE ITEMS

Sealed bids will be received at the office of the Housing Authority of the City of Del Rio, Texas, at 401 Las Vegas Street until 4:00 p.m. on January 2, 1992. The will be opened on Friday, January 3, 1992 at 10:00 a.m. All information should be included in the original bid package. No calls will be accepted. Specification packages can be obtained from the Housing Authority at the address. Specification packages will cost \$100. The Housing Authority reserves the right to reject any or all bids and to waive any bid formalities, when doing so would serve the best interest of the Housing Authority. The following is a list of some of the items that are on the specification package: Bathroom accessories, shower doors, bathtub faucets, shower wall grab bars, water heaters, wall furnaces, curtain rods, screens for sliding patio doors, portable generator and illuminated address light.

Legal Notices 950

A MEETING
WILL BE HELD IN THE
AACOG Office, 118 Broadway,
December 4, 1991 at 2:00 p.m. 808
AMH to develop a communica-
tions plan for South Texas.



BARGAIN BUYS

REMINGTON 1100 12 gauge with 2 barrels, Marlin NRA Commemorative 22 caliber Winchester model 74 22 auto; high standard 22 & 22 Mag Longhorn pistol. All like new 512-935-2285

ROTTWEIL SHOTGUN, 12Ga, W/2 bbls. Tubes for 410, 28, 20 ga. (each choked) Americase, extras; \$2595. obo, Ron 825-7531 Days, 822-5037 Nights.

RUGER 25.06
With Tasco 12 power scope with gun case, \$400. 640-2858. Leave message.

RUGER No. 1 Varmint Special 220 Swift w/Leupold 6.5x20 target scope \$500 OBO; Remington-Union Mohawk 600 308 w/scope \$350 OBO. 694-0172

RUGER Red Label 20GA IAP/MOQ like new \$675. 652-4492, 654-3935

SMITH & WESSON 38 Special, stainless steel revolver, \$250/OBO. 724-6227

TU-99 WMAA, Colt-Browning style, NIB. \$139.95. Bill 342-4867.

TURKEY GUN, Savage 380, 3 inch, 12 gauge, 30 inch full, 25 new, \$165. 675-3134

TWCA GUN SHOW
SA Conv Ctr, Dec 7-8, Buy-Sell-Trade, no Spurs Game, 657-7469

WINCHESTER Model 180, 243 caliber, PRE-64, \$425. Call Joe, 496-0122

WINCHESTER Model 70, 243 w/Weaver Scope, \$525. 649-3807.

Winchester model 181 12 ga. Toss 734-7442, 735-7236 or come by 2110 West Ave @ 1410

WINCHESTER Model 70, 243 w/Leupold scope, 657-7469

SOLD-IT WORKS!

Health Care/Exercise 832

3 WHEEL Electric Scooter batteries and charger \$1050. Bed-side potty \$25. 723-0046

A BRUNSWICK Pool Table 4'x8' Century Model used 3 mos. excel cond \$1200. 828-0870

AIR Purifier-Henrywall Electro- static one year old \$275 call 724-7784 Jim.

AJAY 1000 TREADMILL, speed adjustment, distance, like new, \$225 cash. 796-8105

AM Electric heating bed, Gert chair, shower chair, over bed table, wheelchair, 732-4634

Commercial Tanning Bed Call 652-7378

CONTINENTAL LAT EXERCISE MACHINE, \$275, used 1 inch plates, 624-2057

DP Fit for Life weight machine, \$385. 523-9574

ELECTRIC HOSPITAL BED, siderails & mattress. \$450. Call Donna 333-1539

EVERST Joannina, 3 wheel scooter, like new, \$1100. 420-3708 aft. 4.

EXERCISE bike, Sears & Ro- bustler, rowing machine, \$45 each. 695-8027 or 567-5963

FOR SALE: SCOOTY BUS electric wheel chair, excellent condition, 659-7138.

Quinton Cross Country stairstepper. Excellent condition. Paid \$500. Asking \$250. 690-6316

SOLO FLEX WANTED. New with attachments, \$400-\$500; or machine only \$150-\$200. Cash 512-452-0811 512-459-6237.

SOLOPLEX for sale w/attach- ments, like new, \$799 cash only. 212-336-1811 or 672-7725



BARGAIN BUYS

FINE Diamond earrings 53 carats on 14KT butterfly mountings. Appraised for \$1,250. Will Sell for \$425. Rick 532-8144

FREE GOLD WEDDING BAND- with purchase of ladies Tiffany style engagement ring. Four pronged 1.07CT, color "G", clarity "SI2". Valued at \$4000 sell for \$2800 or best offer. 1-512-863-7299 please leave message.

LADIES 5 DIAMOND BAND size 5 1/2 white gold 48% new, \$300. 624-2057

LADIES yellow gold ring 2 round point 77ct, 12 clarity, JK & LJ color appraised \$5432 sell \$2800. Also 2 marquis diamonds .40ct each 13 clarity J color, value \$1700 ea. sell \$600 ea. Phone 652-7469

MAM'S 18K yellow gold diamond ring, round stone, 1.15 Ct. VS-1, \$3750. 657-3577

MAM'S large 14K yellow gold nugget bracelet, Mail price \$1500, will take \$700. 657-3577

MAM'S ROLEX, 18K & stainless, quick set, \$2500 or trade for good automobile, 681-7412.

MARQUIS DIAMOND RING, 62ct, appraised at \$3440, listed \$1300 obo, ask for Bob, 697-8176.

MEN'S beautiful diamond ring, 1 karat worth \$2000. Asking \$1300. 654-7582

ROLEX

BUY-SELL-TRADE
NEW OR USED. 341-0143

ROLEX Men's Oysterflex, Stainless & Gold, 18kt, exc. \$2600. 520-5305.

ROLEX Stainless Steel, very good condition. 657-7469

SOLD-IT WORKS!
WANTED, Emerald & Diamond Ring, must be reasonable. 796-7171.

WANTED: Gold Snake Brooch, Ruby eyes, will pay cash. 344-7000.

WE BUY

TICKETS

LightLine 554-0833

VoiceMail Box #21182

Lawn & Garden 838

CARPET and Bermuda grass mix \$45 per pallet at Lyda. Can deliver. 512-775-2364.

SEARS 8 hp riding mower, 85 model, exc. start, very good cond. \$395/obo. 658-5508.

IT WORKS!

Machinery & Tools 840

198 OH Cracker Loader with 4 way clam shell bucket. Excellent condition, \$4500 or best offer. 1-512-648-4444 ask for Doug.

2 TRAILER MOUNTED Arrow boards, message board, Blumious machines. 225-5796

200 GALLON Chameleon air compressor 20hp dual pump, \$3200/OBO. 596-0950

230 Volt spot welder, New. Wholesale cost \$379. Sell for \$299. 658-4271

4 MATCO Toolboxes, full of Matco & Craftsman tools over \$4500 retail. Will sell for \$2000. 534-7213.

BRAND new 5800 900 chain saw, with 20" bar & chain, still in box, \$375/OBO. 640-8664

BULLDOZER, CM 07-E Hydros- tic loader, 40000 hours 612-808

Mr. William Davenport
City of San Antonio
Fire Department
P.O. Box 839966
San Antonio, Texas
78283-3966

Dear William Davenport,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mr. Nolan Suarez
Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas
78218

Dear Nolan Suarez,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
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- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mr. Al Notzon, Executive Director
Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas
78218

Dear Al Notzon,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mr. Victor Perez, Deputy Director
Bexar County Information Services
203 W. Nueva
San Antonio, Texas
78207-4507

Dear Victor Perez,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mrs. Jay Nelson
Coastal Bend 911 Network Director
P.O. Box 9016
Corpus Christi,
Texas
78469

Dear Jay Nelson,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mr. Ken Yoder, Frequency Coordinator
Department of Public Safety
P.O. Box 4087
Austin, Texas 78773-0001

Dear Ken Yoder,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mr. Bob Haider
Motorola, Communications and Electronics
Government Sales
7800 IH 10 West, Ste. 105
San Antonio,
Texas 78230

Dear Bob Haider,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

Mrs. Barbara Cross, Govt. Acct. Representative
General Electric/Ericsson
16607 Blanco Road, Bldg. 6, #604
San Antonio,
Texas 78232

Dear Barbara Cross,

Enclosed for your consideration is the completed Region 53 Public Safety Radio Regional Communications Plan. Please review this document and plan to attend the Regional Planning Committee meeting, December 4, 1991 at 2:00PM.

This meeting will be held at:

Alamo Area Council of Governments
118 Broadway, Ste. 400
San Antonio, Texas 78218
(phone 225-5201)

The purposes of this meeting are:

- (1) Review and comment on the draft of the Region 53 Communications Plan.
- (2) Election of a Region 53 Planning Committee.

Your thoughts and insights are needed to make this plan work for Region 53, please plan to attend.

Don Brooks
Region 53 Convener
phone (512)299-7022

PPENDIX B

COPY OF LETTER OF COORDIANTION ADJACENT REGIONS 49, 50, AND 51.

- 2. NOTICE OF INTENT TO FILE AS SENT OUT OVER THE TCIC/NCIC COMPUTER NETWORK.**

January 2, 1992

Jeff Haislet - REGION 49
Brazos County 9-1-1 District
P.O. Box 2291
Bryan, Texas 77806-2291

John McDaniel - REGION 50
Midland County Sheriff Department
P.O. Box 11287
Midland, Texas 79702-8287

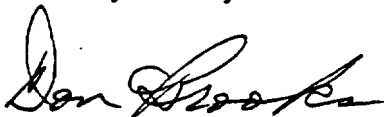
Mark Zeringue - REGION 51
Houston Police Department
Communications Maintenance Division
Room C413
61 Riesner Street
Houston, Texas 77002

Gentlemen:

Enclosed is a copy of Region 53's Plan. In accordance with the procedure established by the Federal Communications Commission we are requesting your review and concurrence.

We assigned spectrum via an APCO/CET packing plan in such a way as to minimize interference between our regions. We have taken into consideration your border assignments in determining our frequency plan.

As part of the Region 53 Plan, I would like to include letters from of the adjoining regions Chairmen indicating their concurrence with the Region 53 Plan. If I do not receive correspondence to the contrary by January 30, 1992, your concurrence will be assumed. Thank you for your attention in this matter.



Don Brooks
Region 53 Chairman
City of San Antonio
Communications Division
P.O. Box 839966
San Antonio, Texas 78283-3966
phone (512)299-7022

January 27, 1992

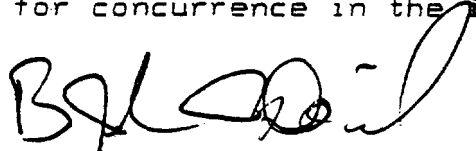
Don Brooks
Region 53 Chairman
City of San Antonio
Communications Division
P.O. Box 839966
San Antonio, Texas 78283-3966

Sir;

Reference is made to your recent letter to Regional Chairmen concerning review and concurrence of the Region 53 Plan.

This Region also opted to use the APCO/CET packing program and the guidelines suggested by APCO. This would indicate compatibility between the two Plans. Upon reviewing the Region 53 Plan, it does appear to be compatible with the pending Region 50 Plan and, therefore, I do concur with the Region 53 Plan.

I look forward to sending to you, a similar request for concurrence in the immediate future.



B. John McDaniel
Region 50 Chairman
Midland County Sheriff's Department
Communications Division
P.O. Box 11287
Midland, Texas 79702

alamo area council of governments

NOTICE OF PUBLIC MEETING

TO: All Persons Interested in Public Safety Communications

The Alamo Area Council of Governments will host a public meeting/hearing concerning Public Safety Radio Communications Plan for Region 53.

The Plan outlines activities in an effort to preserve the allocation of specific radio frequencies in the 800 MHz range for use by public safety agencies as set out in Federal Communication Commission (FCC) National Plan as found in FCC-359, the loading (capacity) of frequencies used, their coverage and the abandonment of unused frequencies in lower hands when implementing the 800 MHz use.

The meeting of the Regional Planning Committee will meet at 10:00 AM, Wednesday, January 15, 1992 at the AACOG Offices, 118 Broadway, Suite 400, San Antonio, Texas 78205. The committee solicits input in the development of the Plan before completing the plan.

All persons interested in future development of public safety communications is encouraged to attend.

PLEASE NOTIFY ANY PERSON(S) WHO MAY HAVE CONCERNS OR INPUT.

To: All Departments

From: Don Brooks, Region 53 Chairman

Subject: Communications Plan for Region 53

The Communications Plan for Region 53 will be presented for final acceptance January 15, 1992 at 10:00AM at the Alamo Area Council of Governments Offices located at 118 Broadway, ste. 400, San Antonio, Texas.

The Region 53 Communications Plan will be reviewed and submitted to the Planning Committee for approval. Upon the Planning Committee's acceptance, this plan will be submitted to the FCC.

All interested parties are encouraged to attend this meeting.

Don Brooks, Chairman
Region 53 Planning Committee

ADMINISTRATIVE MESSAGE FROM: SAPG TIME/DATE OF MESSAGE INPUT: 15:26 01/09/92.

PD SAN ANTONIO

ALL DEPARTMENTS

FROM DON BROOKS, REGION 53 CHAIRMAN

THE COMMUNICATIONS PLAN FOR REGION 53 WILL BE PRESENTED FOR FINAL ACCEPTANCE JANUARY 15, 1992 AT 10AM IN THE ALAMO AREA COUNCIL GOVERNMENTS OFFICES LOCATED AT 118 BROADWAY, STE 400, SAN ANTONIO, TEXAS.

THE REGION 53 COMMUNICATIONS PLAN WILL BE REVIEWED AND SUBMITTED TO THE PLANNING COMMITTEE FOR APPROVAL. UPON THE COMMITTEE'S ACCEPTANCE, THIS PLAN WILL BE SUBMITTED TO THE FCC. ALL INTERESTED PARTIES ARE ENCOURAGED TO ATTEND THIS MEETING.

PD SAN ANTONIO SH091525CDT

OUTPUT MSG 001, FROM SAPG

01/09/92 15:26

To: All Departments

From: Don Brooks, Region 53 Chairman

Subject: Communications Plan for Region 53

The Communications Plan for Region 53 will be presented for final acceptance January 15, 1992 at 10:00AM in the Alamo Area Council of Governments Offices located at 118 Broadway, ste. 400, San Antonio, Texas.

The Region 53 Communications Plan will be reviewed and submitted to the Planning Committee for approval. Upon the Planning Committee's acceptance, this plan will be submitted to the FCC.

All interested parties are encouraged to attend this meeting.

Don Brooks, Chairman
Region 53 Planning Committee

PPENDIX C.

EXPLANATION OF CIRCLEIZING A GEOGRAPHIC AREA

2. EXPLANATION OF THE FREQUENCY SORT PROGRAM
3. MEMORANDUM OF UNDERSTANDING BETWEEN THE FCC OF THE UNITED STATES AND THE SECRETARIA DE COMUNICANIONES Y TRANSPORTES OF THE UNITED MEXICAN STATES CONCERNING PRIVATE LAND MOBILE SERVICE USE OF THE BANDS 821-824 MHZ AND 866-869 MHZ ALONG THE COMMON BORDER.
 - (a). SHARING PRINCIPLES FOR THE USE OF THE FIVE PUBLIC SAFETY MUTUAL AID CHANNEL PAIRS ON BOTH SIDES OF THE COMMON BORDER.
4. TEXAS REGION 53 - MEXICAN BORDER MAP
5. LETTER FROM APCO TO REGION 53 CHAIRMAN, INDICATING THOSE COUNTIES IMPACTED BY THE MEMORANDUM OF UNDERSTANDING BETWEEN THE U.S. AND MEXICO

Circleizing the Geographic Area

In order to define the geographic area for frequency sort, the individual counties, sub-regions, and regions are defined with circles. The circles defining an area must all have the same radius and must not exceed the boundary of the area by more than three miles. The number of circles used to define an area does not have any bearing on the number of channels assigned. The circles used to define the area for the frequency sort program do not represent the location of actual sites within the area. The circleization of the geographic area is used only to define the individual areas within a Region for the frequency sort program.

THE FREQUENCY SORT PROGRAM

R. FLEISSNER

4/4/89

REVISED 4/11/89

Introduction

It must be understood that the Regional Plan must be frequency specific throughout the entire region. Note that it doesn't matter whether or not there are any known eligibles in a specific place at the time the plan is generated.

The task to be accomplished is to preassign specific radio frequencies to both known eligibles and geographic pools for future assignments in an efficient manner, as well as in a compatible manner from an interference standpoint.

It has been determined that a Region can be subdivided into sub-regions equal to or smaller than counties for the purpose of sorting frequencies.

It has also been determined that a ratio of one radio channel per 25,000 people is acceptable for public safety services communications needs. As a minimum, any county would require a minimum number of channels, say two channels. For example, a county with a projected population of 247,000 people would be eligible for 9.88 channels, which would be rounded up to 10 channels. A county of less than 50,000 would always get 2 channels.

If there were one or more known eligibles at the time of the plan within that county, their channel needs would be subtracted from the county pool of channels, leaving a lesser number of, or zero, channels available within the county for future assignment. For instance, if the example county had known eligibles who justified assignment of 6 channels, then the county pool would be reduced to four channels. On the

other hand, if known eligibles had justified need for 10 or more channels, then there would be zero channels in the county pool for future assignment.

Before beginning the process of preparing the information to be entered into the computer program for sorting the frequencies in a spectrum efficient manner, one needs to consider the following.

- 1) Remember that the task being done is a geographic sort of frequencies, NOT A SYSTEM DESIGN. Therefore, the coordinates and range data tabulated should describe the geography and not necessarily be actual user antenna sites.
- 2) Where there are known eligibles in a county, the known eligibles are to be considered first, to the exclusion, if necessary, of county pools for future assignment.
- 3) Where there are no known eligibles in a county, a county pool is to be established from which future assignments will be drawn.
- 4) The number of channels to be allocated to county pools should be related to the population of the county, with every county receiving a minimum number of frequencies.

Protection Ratios:

There are two protection ratios built into the computer program. One is for the co-channel case, and the other is for the adjacent channel case. The default ratios provide 35db Desired/Undesired signal ratio for co-channel assignments, and 15db Desired/Undesired ratio for the adjacent channel case. These ratios should provide a probability of interference of less than 1%. It is strongly suggested that these values be used. However, they are adjustable in the program on a global basis, but NOT on a per system basis.

Transmitter Combining:

The computer program is designed to provide a minimum frequency separation between any two channels assigned to the same eligible at the same site. This separation is provided in order to enable more efficient combining of multiple transmitters to a single antenna. These separated blocks of frequencies also have a maximum size. That is to say, if the eligible has more frequencies than the maximum size of the combining block, then a new compatible block is created.

Each of these parameters is adjustable in the program on a global basis. The default parameters are 0.25MHz minimum spacing and five channel blocks. These seem reasonable and are strongly recommended.

How to define Geography

For the purpose of this frequency sort, a geographic area is to be defined as one or more circles of equal radius. To the degree practical, this circle or circles should include the entire area of the eligible's geopolitical boundary, but not exceed the boundary by more than three miles. Note, that if more than one circle is used to define an area, all of these circles must be of equal radius. This is a restriction of the computer program. The largest circle radius acceptable is 25 miles.

So, the procedure is to gather maps of sufficient detail, outline the areas to be defined, determine the co-ordinates and radius of the circles which define each area, and tabulate the data. It is recommended that 2 degree maps be used for this purpose.

Special Considerations!

There are a number of existing licensees in the 806-821/851-866 MHz spectrum who plan to expand existing systems into the 821-824/866-869 MHz band. Existing radio units are unable to operate on 12.5KHz separated carrier frequencies. That is to say, the synthesizers can only generate frequencies every 25KHz. The result is that these radios can only operate on "even" FCC numbered channels in the 821-824/866-869 MHz band. The computer program is able to take this into account when making assignments. Therefore, the need to implement this restriction becomes a necessary part of the input data.

At the risk of confusing the reader, it must be pointed out that if the existing 806-821 MHz radios are operating on off-sets (as authorized in proximity to the Mexican border in Southern California), then the 821-824 MHz channels assigned must be "odd" FCC channel numbers.

Blocked Channels

In each region there will be at least the five national mutual aid channels which must be blocked out to prevent the computer from making assignments on those channels. In addition, large region-wide systems must be identified for the same reason. In this case, one must also consider whether or not the adjacent channels to these region wide assignments must also be blocked. Since the mutual aid channels are spaced at 0.5 MHz intervals, it is recommended that these region-wide systems also be spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.

Define The Environment

In your best judgement, is the county to be considered urban, suburban, open or quasi-open? Use the following indicators:

- 1 = Urban
- 2 = Suburban
- 3 = Quasi Open
- 4 = Open

1-Urban is a built-up city crowded with large buildings or closely interspersed with houses and thickly-grown trees. This would include the downtown area of a major city.

2-Suburban is a city or highway scattered with trees, houses and buildings. This would include the non-downtown area of a major city.

3-Quasi-open is an area between suburban and open areas. This includes areas outside of city limits that have few buildings and houses.

4-Open is an area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300-400 meters ahead. This would include farm land, open fields, etc.

Number of Channels to be assigned

The number of channels to be assigned to each eligible, whether a known entity or a pool for future assignment, will be determined by other procedures in the Regional Plan. Therefore, it merely becomes a piece of input data in the assignment program.

Who is to receive channel assignments?

The eligibles who are to receive channels is a list determined by other procedures in the Regional Plan. Therefore, the list is just a list to be used as input to identify the eligibles.

What the Program Does

1. Input data for the Region (single site systems first)
 - Name (entity-county)
 - Co-ordinates
 - Range
 - Environment
 - Blocked/Protected Channels
 - Even/odd channel requirements
2. Select parameters
 - Combiner spacing
 - Maximum spectrum to be used
 - Number of iterations allowed
 - Protection Ratios for co-channel and adjacent channels
3. Computer determines an ERP/Ant. Height combination which places the 40dbu point at the range specified, in the environment specified for each system.
4. Computer calculates distances between all possible combinations of single site and multiple site systems.
5. The computer uses its input tables to determine compatible assignments such that the signal strength at a co-channel assignees boundary is $< + 5$ dbu, and the signal strength at an adjacent channel assignees boundary is $< + 25$ dbu.

6. If the maximum spectrum allowed is filled before all systems are assigned channels, then the list is re-ordered according to the difficulty of assignments, and another iteration is made.
7. If the maximum number of iterations is reached before all assignments are satisfied, the maximum spectrum allowed is increased and the process begins again. The maximum spectrum allowed is initially set at a value which will fail to find a solution. By incrementing its value on successive attempts, the first successful run should be the most spectrum efficient case this program will ever find.
8. In the event that the spectrum needed exceeds the FCC allocations, to get a solution the following adjustments can be made.
 - Number of assignments must be reduced
 - System ranges must be reduced
 - Protection ratios must be reduced
 - Number of iterations must be increased
 - Combinations of the above

Output Reports

- 1) Input Data For Assignment Program
 - Data Input from Region.
 - Adds ERP and Antenna Height determined by the computer
 - needs to be checked for accuracy
- 2) FCC Channel Assignments
 - Assignments ordered by channel number
 - This list will eventually go to the FCC
- 3) Sites and Assigned Channels
 - Ordered by Site (User)
 - FCC channels within site in numerical order
 - useful for checking combining assignments
 - useful for checking even/odd assignments
- 4) Detailed Assignment lists
 - a very useful tool for trouble shooting the computer output

Format for Transmitting Information to Computer

A standardized format for transmitting the necessary information to the computer program would look like this:

A list of pre-assigned region wide channels and channels reserved for protection must also be supplied.

ANNEX B

SHARING PRINCIPLES

This annex describes the sharing principles for the use of the five public safety mutual aid channel pairs on both sides of the common border.

1. The following channels will be used as public safety mutual aid channels:

<u>Mobile</u>	<u>Base</u>
821.0125 MHz calling	866.0125 MHz calling
821.5125 MHz	866.5125 MHz
822.0125 MHz	867.0125 MHz
822.5125 MHz	867.5125 MHz
823.0125 MHz	868.0125 MHz

2. All equipment capable of operating on the mutual aid channels must be equipped with the tone squelch of 156.7 Hz.
3. The channels shall be 25 kHz wide.
4. Within 110 kilometers of the common border, neither Party shall assign frequencies closer than 25 kHz to any of the mutual aid channels.
5. The mutual aid channels are available on a shared basis to duly authorized public safety agencies on both sides of the border. Users must first monitor the frequency before transmitting to ensure that any on-going emergency communications are not interrupted.

6. The mutual aid channels are to be used only for coordination of tactical communications between different public safety agencies, or for other similar emergency situations. They must not be used for administrative or other routine communications.

7. When the Parties designate regions along the border, they will designate and exchange local points of contact in the corresponding regions to facilitate the coordination of base stations established to provide mutual aid capabilities across the border.

8. Requests for aid across the border should first be made on the calling channel 821.0125/866.0125 MHz.

9. Regions that operate on these mutual aid channels shall designate agencies to monitor the calling channel on a 24 hour basis every day of the year.

10. The points of contact in adjoining regions across the border shall participate in the cooperative establishment of priorities in the case of multiple emergencies requiring use of the channels according to the following general priorities:

Priority A: Large scale disaster and emergency situations involving imminent danger to the safety of the public at large (e.g., earthquakes, large chemical spills).

Priority B: Other emergency situations involving imminent danger to the safety of life or property.

-3-

Priority C: Special event control activities, generally of a pre-planned nature, and requiring coordination of two or more agencies.

Priority D: Drill, test, and exercises of civil defense or disaster response procedures.

Whenever the use of a higher priority is required, all lower priority operations must cease in any area where interference to the use of a higher priority could occur.

1-10-91 WED 14:40 T

MEMORANDUM OF UNDERSTANDING BETWEEN THE
FEDERAL COMMUNICATIONS COMMISSION OF THE UNITED STATES
OF AMERICA AND THE SECRETARIA DE COMUNICACIONES Y
TRANSPORTES OF THE UNITED MEXICAN STATES
CONCERNING PRIVATE LAND MOBILE SERVICE USE
OF THE BANDS 821-824 MHZ AND 866-869 MHZ
ALONG THE COMMON BORDER

Pursuant to paragraphs 2.d and 2.e of Section B of the Agreement
Between the Government of the United States of America and the Government
of the United Mexican States Concerning Land Mobile Service in the Bands
470-512 MHz and 806-890 MHz Along Their Common Border of June 18, 1982
(the 1982 Agreement), the Federal Communications Commission of the United
States of America and the Secretaria de Comunicaciones y Transportes of
the United Mexican States have adopted this Memorandum of Understanding
on the conditions of use of the bands 821-824 MHz and 866-869 MHz to
provide additional spectrum for private land mobile radio stations.

I. Purposes

The purposes of this Memorandum of Understanding are:

1. To establish and adopt a common plan for use of frequencies within 110 kilometers of the common border and provide an equitable distribution of the available channels.
2. To create public safety mutual aid channels for use on both sides of the common border.
3. To establish technical criteria that allow each Party to regulate the use of the channels allocated to the other country on a non-interference basis.

II. Conditions of Use

1. In areas located less than 110 kilometers from the common border, the frequency bands 821-824 MHz and 866-869 MHz shall be shared by the Parties in accordance with the table in Annex A, which is an integral part of this Memorandum of Understanding. The specific sub-bands reserved for each country and the specific allotments within the shared sub-bands are set forth in the above-mentioned annexed table.

-3-

2. The following paired channels shall be available to both Parties as public safety mutual aid channels for coordination of communications between different public safety agencies or for other similar emergency communications:

<u>Mobile</u>	<u>Base</u>
821.0125 MHz calling	866.0125 MHz calling
821.5125 MHz	866.5125 MHz
822.0125 MHz	867.0125 MHz
822.5125 MHz	867.5125 MHz
823.0125 MHz	868.0125 MHz

These channels shall be subject to the sharing principles set forth in Annex B, which is an integral part of this Memorandum of Understanding.

3. Assignments made by a Party on its own primary use frequencies within 110 kilometers of the border shall be authorized subject to the Effective Radiated Power (ERP) and Antenna Height limits specified in the following table.

Antenna Height Above Mean Sea Level		ERP
Meters	Feet	Watts (maximum)
0 - 503	0 - 1650	500
504 - 609	1651 - 2000	350
610 - 762	2001 - 2500	200
763 - 914	2501 - 3000	140
915 - 1066	3001 - 3500	100
1067 - 1219	3501 - 4000	75
1220 - 1371	4001 - 4500	70
1372 - 1523	4501 - 5000	65
Above 1523	Above 5000	5

4. Certain frequencies shall be used as guard channels to prevent adjacent channel interference to stations operating on their country's primary use frequency.

5. Frequencies primarily allotted for unrestricted use of one Party may be assigned by the other Party within 110 km of the common border under the following conditions:

a. The maximum power flux density (pfd) at any point at or beyond the border does not exceed -107 dBW/m^2 . (The spreading loss shall be calculated using the free space formula taking into account any antenna discrimination in the direction of the border.)

b. Both Parties shall take proper measures to eliminate any harmful interference by their licensees.

c. Each Party undertakes to grant protection to stations that have primary use of the authorized frequency.

d. Stations operating under the provisions of this paragraph shall be considered as secondary and shall not receive interference protection from stations that have primary use of the authorized frequency.

III. Entry into Force

This Memorandum of Understanding shall enter into force upon signature and may be amended by common agreement of the Parties.

-5-

IV. Termination

This Memorandum of Understanding shall terminate when the 1982 Agreement is no longer in force, or when the 1982 Agreement is amended to take into account the provisions of this Memorandum of Understanding, or when the Government of the United States of America and the Government of the United Mexican States, by common accord, agree to terminate it, or six months following notice of termination by either government.

DONE, at Chestertown, Maryland, in duplicate, this second day of July, 1991, in the English and Spanish languages, each text being equally authentic.

FOR THE FEDERAL COMMUNICATIONS
COMMISSION OF THE UNITED STATES
OF AMERICA:

FOR THE SECRETARIA DE COMUNICACIONES
Y TRANSPORTES OF THE UNITED
MEXICAN STATES:

ANNEX A

TABLE OF ALLOCATION

Bands from 821 to 824 MHz and 866 to 869 MHz

Channel	Base Frequency	Mobile Frequency	Country
601	866.0125	821.0125	Both Countries
***	866.0250	821.0250	Not Available
602	866.0375	821.0375	U.S.
603	866.0500	821.0500	U.S.
604	866.0625	821.0625	U.S.
605	866.0750	821.0750	U.S.
606	866.0875	821.0875	U.S.
607	866.1000	821.1000	U.S.
608	866.1125	821.1125	U.S.
609	866.1250	821.1250	U.S.
610	866.1375	821.1375	U.S.
611	866.1500	821.1500	Guard Channel
612	866.1625	821.1625	MEXICO
613	866.1750	821.1750	MEXICO
614	866.1875	821.1875	MEXICO
615	866.2000	821.2000	MEXICO
616	866.2125	821.2125	MEXICO
617	866.2250	821.2250	MEXICO
618	866.2375	821.2375	MEXICO
619	866.2500	821.2500	MEXICO
620	866.2625	821.2625	MEXICO
621	866.2750	821.2750	MEXICO
622	866.2875	821.2875	MEXICO
623	866.3000	821.3000	MEXICO
624	866.3125	821.3125	MEXICO
625	866.3250	821.3250	MEXICO
626	866.3375	821.3375	MEXICO
627	866.3500	821.3500	MEXICO
628	866.3625	821.3625	MEXICO
629	866.3750	821.3750	Guard Channel
630	866.3875	821.3875	U.S.
631	866.4000	821.4000	U.S.
632	866.4125	821.4125	U.S.
633	866.4250	821.4250	U.S.
634	866.4375	821.4375	U.S.
635	866.4500	821.4500	U.S.
636	866.4625	821.4625	U.S.
637	866.4750	821.4750	U.S.
638	866.4875	821.4875	U.S.
***	866.5000	821.5000	Not Available
639	866.5125	821.5125	Both Countries
***	866.5250	821.5250	Not Available
640	866.5375	821.5375	U.S.
641	866.5500	821.5500	U.S.
642	866.5625	821.5625	U.S.

-2-

643	866.5750	821.5750	U.S.
644	866.5875	821.5875	U.S.
645	866.6000	821.6000	U.S.
646	866.6125	821.6125	U.S.
647	866.6250	821.6250	U.S.
648	866.6375	821.6375	U.S.
649	866.6500	821.6500	Guard Channel
650	866.6625	821.6625	MEXICO
651	866.6750	821.6750	MEXICO
652	866.6875	821.6875	MEXICO
653	866.7000	821.7000	MEXICO
654	866.7125	821.7125	MEXICO
655	866.7250	821.7250	MEXICO
656	866.7375	821.7375	MEXICO
657	866.7500	821.7500	MEXICO
658	866.7625	821.7625	MEXICO
659	866.7750	821.7750	MEXICO
660	866.7875	821.7875	MEXICO
661	866.8000	821.8000	MEXICO
662	866.8125	821.8125	MEXICO
663	866.8250	821.8250	MEXICO
664	866.8375	821.8375	MEXICO
665	866.8500	821.8500	MEXICO
666	866.8625	821.8625	MEXICO
667	866.8750	821.8750	Guard Channel
668	866.8875	821.8875	U.S.
669	866.9000	821.9000	U.S.
670	866.9125	821.9125	U.S.
671	866.9250	821.9250	U.S.
672	866.9375	821.9375	U.S.
673	866.9500	821.9500	U.S.
674	866.9625	821.9625	U.S.
675	866.9750	821.9750	U.S.
676	866.9875	821.9875	U.S.
***	867.0000	822.0000	Not Available
677	867.0125	822.0125	Both Countries
***	867.0250	822.0250	Not Available
678	867.0375	822.0375	U.S.
679	867.0500	822.0500	U.S.
680	867.0625	822.0625	U.S.
681	867.0750	822.0750	U.S.
682	867.0875	822.0875	U.S.
683	867.1000	822.1000	U.S.
684	867.1125	822.1125	U.S.
685	867.1250	822.1250	U.S.
686	867.1375	822.1375	U.S.
687	867.1500	822.1500	Guard Channel
688	867.1625	822.1625	MEXICO
689	867.1750	822.1750	MEXICO
690	867.1875	822.1875	MEXICO
691	867.2000	822.2000	MEXICO
692	867.2125	822.2125	MEXICO
693	867.2250	822.2250	MEXICO

694	867.2375	822.2375	MEXICO
695	867.2500	822.2500	MEXICO
696	867.2625	822.2625	MEXICO
697	867.2750	822.2750	MEXICO
698	867.2875	822.2875	MEXICO
699	867.3000	822.3000	MEXICO
700	867.3125	822.3125	MEXICO
701	867.3250	822.3250	MEXICO
702	867.3375	822.3375	MEXICO
703	867.3500	822.3500	MEXICO
704	867.3625	822.3625	MEXICO
705	867.3750	822.3750	Guard Channel
706	867.3875	822.3875	U.S.
707	867.4000	822.4000	U.S.
708	867.4125	822.4125	U.S.
709	867.4250	822.4250	U.S.
710	867.4375	822.4375	U.S.
711	867.4500	822.4500	U.S.
712	867.4625	822.4625	U.S.
713	867.4750	822.4750	U.S.
714	867.4875	822.4875	U.S.
***	867.5000	822.5000	Not Available
715	867.5125	822.5125	Both Countries
***	867.5250	822.5250	Not Available
716	867.5375	822.5375	U.S.
717	867.5500	822.5500	U.S.
718	867.5625	822.5625	U.S.
719	867.5750	822.5750	U.S.
720	867.5875	822.5875	U.S.
721	867.6000	822.6000	U.S.
722	867.6125	822.6125	U.S.
723	867.6250	822.6250	U.S.
724	867.6375	822.6375	U.S.
725	867.6500	822.6500	Guard Channel
726	867.6625	822.6625	MEXICO
727	867.6750	822.6750	MEXICO
728	867.6875	822.6875	MEXICO
729	867.7000	822.7000	MEXICO
730	867.7125	822.7125	MEXICO
731	867.7250	822.7250	MEXICO
732	867.7375	822.7375	MEXICO
733	867.7500	822.7500	MEXICO
734	867.7625	822.7625	MEXICO
735	867.7750	822.7750	MEXICO
736	867.7875	822.7875	MEXICO
737	867.8000	822.8000	MEXICO
738	867.8125	822.8125	MEXICO
739	867.8250	822.8250	MEXICO
740	867.8375	822.8375	MEXICO
741	867.8500	822.8500	MEXICO
742	867.8625	822.8625	Guard Channel
743	867.8750	822.8750	U.S.
744	867.8875	822.8875	U.S.

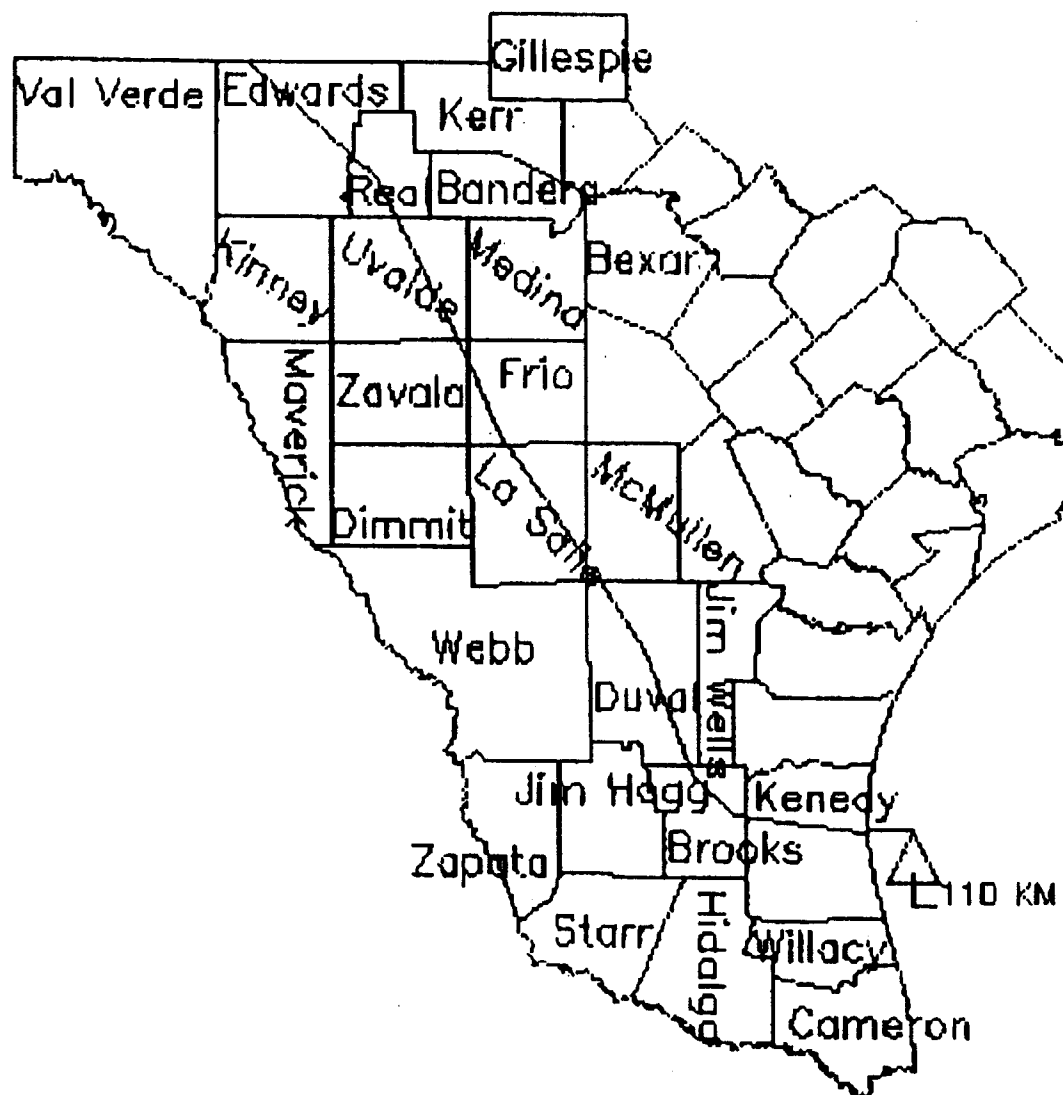
-4-

745	867.9000	822.9000	U.S.
746	867.9125	822.9125	U.S.
747	867.9250	822.9250	U.S.
748	867.9375	822.9375	U.S.
749	867.9500	822.9500	U.S.
750	867.9625	822.9625	U.S.
751	867.9750	822.9750	U.S.
752	867.9875	822.9875	U.S.
***	868.0000	823.0000	Not Available
753	868.0125	823.0125	Both Countries
***	868.0250	823.0250	Not Available
754	868.0375	823.0375	U.S.
755	868.0500	823.0500	U.S.
756	868.0625	823.0625	U.S.
757	868.0750	823.0750	U.S.
758	868.0875	823.0875	U.S.
759	868.1000	823.1000	U.S.
760	868.1125	823.1125	U.S.
761	868.1250	823.1250	U.S.
762	868.1375	823.1375	U.S.
763	868.1500	823.1500	Guard Channel
764	868.1625	823.1625	MEXICO
765	868.1750	823.1750	MEXICO
766	868.1875	823.1875	MEXICO
767	868.2000	823.2000	MEXICO
768	868.2125	823.2125	MEXICO
769	868.2250	823.2250	MEXICO
770	868.2375	823.2375	MEXICO
771	868.2500	823.2500	MEXICO
772	868.2625	823.2625	MEXICO
773	868.2750	823.2750	MEXICO
774	868.2875	823.2875	MEXICO
775	868.3000	823.3000	MEXICO
776	868.3125	823.3125	MEXICO
777	868.3250	823.3250	MEXICO
778	868.3375	823.3375	MEXICO
779	868.3500	823.3500	MEXICO
780	868.3625	823.3625	Guard Channel
781	868.3750	823.3750	U.S.
782	868.3875	823.3875	U.S.
783	868.4000	823.4000	U.S.
784	868.4125	823.4125	U.S.
785	868.4250	823.4250	U.S.
786	868.4375	823.4375	U.S.
787	868.4500	823.4500	U.S.
788	868.4625	823.4625	U.S.
789	868.4750	823.4750	U.S.
790	868.4875	823.4875	U.S.
791	868.5000	823.5000	U.S.
792	868.5125	823.5125	U.S.
793	868.5250	823.5250	U.S.
794	868.5375	823.5375	U.S.
795	868.5500	823.5500	U.S.

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796	868.5625	823.5625	U.S.
797	868.5750	823.5750	U.S.
798	868.5875	823.5875	U.S.
799	868.6000	823.6000	U.S.
800	868.6125	823.6125	Guard Channel
801	868.6250	823.6250	MEXICO
802	868.6375	823.6375	MEXICO
803	868.6500	823.6500	MEXICO
804	868.6625	823.6625	MEXICO
805	868.6750	823.6750	MEXICO
806	868.6875	823.6875	MEXICO
807	868.7000	823.7000	MEXICO
808	868.7125	823.7125	MEXICO
809	868.7250	823.7250	MEXICO
810	868.7375	823.7375	MEXICO
811	868.7500	823.7500	MEXICO
812	868.7625	823.7625	MEXICO
813	868.7750	823.7750	MEXICO
814	868.7875	823.7875	MEXICO
815	868.8000	823.8000	MEXICO
816	868.8125	823.8125	MEXICO
817	868.8250	823.8250	MEXICO
818	868.8375	823.8375	MEXICO
819	868.8500	823.8500	MEXICO
820	868.8625	823.8625	MEXICO
821	868.8750	823.8750	MEXICO
822	868.8875	823.8875	MEXICO
823	868.9000	823.9000	MEXICO
824	868.9125	823.9125	Guard Channel
825	868.9250	823.9250	U.S.
826	868.9375	823.9375	U.S.
827	868.9500	823.9500	U.S.
828	868.9625	823.9625	U.S.
829	868.9750	823.9750	U.S.
830	868.9875	823.9875	U.S.

TEXAS REGION 53 – MEXICAN BORDER



△ 110 KM FROM MEXICAN BORDER

To: Don Brooks, Region 53 Chairperson
From: Cheryl Knutson
Date: October 7, 1991

TEXAS REGION 53 - MEXICAN BORDER

TEXAS COUNTIES WITHIN 110 KM (68.4 MI) OF THE BORDER:

VAL VERDE
EDWARDS
REAL
KINNEY
UVALDE
MAVERICK
ZAVALA
FRIO
LA SALLE
DIMIT
WEBB
DUVAL
ZAPATA
JIM HOGG
BROOKS
STARR
HIDALGO
KENEDY
WILLACY
CAMERON

THESE COUNTIES HAVE USE OF FREQUENCY BANDS 821-824 MHz AND 866-869 MHz IN ACCORDANCE WITH THE TABLE OF ALLOCATION IN ANNEX A OF THE MEMORANDUM OF UNDERSTANDING BETWEEN THE FEDERAL COMMUNICATIONS COMMISSION OF THE UNITED STATES OF AMERICA AND THE SECRETARIA DE COMUNICACIONES Y TRANSPORTES OF THE UNITED MEXICAN STATES.

If you are in agreement with this list, I will forward the information to CET for your region's packing. Please respond by fax, (904)322-2502, so that your region's computer packing can be done.

PPENDIX D

REGION 53 DEMOGRAPHICS

REGION 53

2/05/92

DEMOGRAPHICS

Page 1

NAME	COUNTY SEAT	COUNTY SIZE	1990 POPULATION	2000 PROJECTED	GROWTH CHANGE
RANSAS	ROCKPORT	528S.M.	18992	21839	.87
TASCOSA	JOURDANTON	1236S.M.	31567	36659	.87
BANDERA	BANDERA	798S.M.	10562	14837	.72
BEE	BEEVILLE	880S.M.	27479	30726	.90
BEXAR	SAN ANTONIO	1256S.M.	1185394	1535067	.78
BROOKS	FALFURRIAS	943S.M.	9592	10533	.91
CALHOUN	PORT LAVACA	1032S.M.	21373	25299	.85
CAMERON	BROWNSVILLE	1276S.M.	286687	360555	.80
COMAL	NEW BRAUNFELS	575S.M.	54332	75215	.73
DE WITT	CUERO	910S.M.	18961	20442	.93
DIMMIT	CARRIZO SPRGS	1335S.M.	11616	14197	.82
DUVAL	SAN DIEGO	1796S.M.	13289	14800	.90
EDWARDS	ROCKSPRINGS	2120S.M.	2001	2234	.90
TERO	PEARSALL	1134S.M.	14582	17087	.86
FILLESPIE	FREDRICKSBURG	1062S.M.	17204	20145	.86
GOLIAD	GOLIAD	859S.M.	6084	7042	.87
GONZALES	GONZALES	1070S.M.	18821	19417	.97
GUADALUPE	SEGUIN	714S.M.	64873	84576	.77
HIDLAGO	EDINBURG	1583S.M.	418844	571364	.74
JACKSON	EDNA	857S.M.	13039	14082	.93
JIM HOGG	HEBBONVILLE	1137S.M.	5297	5898	.90
JIM WELLS	ALICE	868S.M.	39550	43235	.92
KARNES	KARNES CITY	754S.M.	12797	13636	.94
KENDALL	BOERNE	663S.M.	16881	20800	.82
KENEDY	SARITA	1946S.M.	460	442	-1.04
KERR	KERRVILLE	1108S.M.	37874	47618	.80
KINNEY	BRACKETTVILLE	1365S.M.	2672	2988	.90
KLEBERG	KINGSVILLE	1090S.M.	32166	32166	1.00
LA SALLE	COTULLA	1494S.M.	5254	6051	.87
LAVACA	HALLETTSVILLE	970S.M.	18487	20724	.90
LIVE OAK	GEORGE WEST	1079S.M.	9284	9851	.95
MAVERICK	EAGLE PASS	1292S.M.	42704	58147	.74
MCMULLEN	TILDEN	1335S.M.	984	1081	.91
MEDINA	HONDO	1335S.M.	27813	32569	.86
MUECES	CORPUS CHRISTI	1166S.M.	309530	344767	.90
REAL	LEAKEY	700S.M.	2922	3023	.97
REFUGIO	REFUGIO	816S.M.	8570	8551	-1.01
SAN PATRICIO	SINTON	707S.M.	63090	76028	.83
STARR	RIO GRANDE CITY	1229S.M.	43445	58300	.75
UVALDE	UVALDE	1559S.M.	25340	31224	.82
VAL VERDE	DEL RIO	3233S.M.	42048	51266	.82
VICTORIA	VICTORIA	889S.M.	77292	88524	.88
WEBB	LAREDO	3376S.M.	139613	178628	.79
WILLACY	RAYMONDVILLE	784S.M.	19466	23022	.85
WILSON	FLORESVILLE	809S.M.	21354	26142	.82
ZAPATA	ZAPATA	1058S.M.	9444	11482	.83
ZAVALA	CRYSTAL CITY	1302S.M.	12122	14438	.84