APPENDIX A

Convening Meeting Notice



800 Megahertz Public Meeting Notice

Having been duly certified to the Federal Communications Commission (FCC) by the Associated Public-Safety Communications Officers, Inc. (APCO) as the Convenor of an initial meeting of representatives of parties eligible for radio licensing in the FCC's Public Safety and Special Emergency Radio Services to establish a Regional Planning Committee in the State of Wisconsin (Region 45), as described herein-after), I hereby give public notice that such an initial meeting will be held on April 28, 1989 at State Patrol Headquarters District #3, Hwys 41 and 151, Fondulac, WI. beginning at 10:00AM. The Wisconsin Region is one of 48 established by the FCC, throughout the United States.

The responsibility of the Regional Planning Committee well be to develop a Plan for the use of frequencies in the 821-824 and 866-869 megahertz bands allocated by the FCC for use by such Licensees. Parties interested in participation in the regional planning process should contact me.

This Public Notice is in accordance with the FCC's Report and Order in General Docket No. 87-112 adopted by the FCC on November 24, 1987.

The Report and Order was based in large part on the Final Report of the National Public Safety Planning Advisory Committee, which was submitted to the FCC on September 9, 1987.

Copies of both the Report and Order and the Final Report are available from the FCC's duplication contractor, International Transcription Services, Inc., Suite 140, 2100 M Street, N.W., Washington, D.C. 20037. Phone (202) 857-3800.

Carl R. Guse, Convener Wisconsin Region Dodge County Sheriff's Department N5504 Hwy E Iron Ridge, WI. 53035

Phone (414) 485-4455

February 17, 1989

FIRE FIGHTERS OF WI, PROFESSIONAL WI PROFESSIONAL POLICE ASSN 23 N. PICKNEY ST MADISON, WI 53703

7 N. PINCKNEY ST SUITE 325 MADISON, WI 53703

WI SCHOOL BUS ASSN 1015 ERIE AVE P.O. BOX 168 SHEBOYGAN, WI 53082-0168

APCO BULLETIN P.O. BOX 669 NEW SMYRNA BEACH, FL 32070

1919 M STREET N.W. WASHINGTON, D.C. 20554

FEDERAL COMMUNICATIONS SYSTEMS FEDERAL BUREAU OF INVESTIGATION 517 E. WISCONSIN AVE MILWAUKEE, WI 53201

RCR PUBLICATIONS 1728 DOWNING ST DENVER, CO 80218

MOBILE RADIO TECHNOLOGY P.O. BOX 12901 OVERLAND PARK, KS 6612-9981

WIS COUNTIES ASSN 802 W. BROADWAY MADISON, WI 53701 MOTOROLA BILL DAVIS 5302 OLSON CT. MCFARLAND, WI 53558

MOTOROLA BOB SCHNESE 2360 ABBEY AVE. OSHKOSH, WI 54904

WI STATE PATROL BRIAN HUDSON 5005 HY 53 SOUTH EAU CLAIRE, WI 54701

WIS STATE FIRE CHIEFS ASSN CAL PHILLIPS, SEC/TREAS 101 COURT ST OSHKOSH, WI 54901

GREENFIELD PD CAPT. PHIL HALL 5300 W. LAYTON AVE. GREENFIELD, WI 53220

DODGE CO SHERIFFS OFFICE CARL GUSE 816 S. LINCOLN AVE. #201 BEAVER DAM, WI 53916

APPLETON PD CHARLES SAHR 222 S. WALNUT APPLETON, WI 54911

WIS CHIEFS OF POLICE 2000 N. CALHOUN RD CHIEF JEROME WOLFF BROOKFIELD, WI 53005

CITY OF MILWAUKEE CITY CLERK ROOM 205 CITY HALL 200 E. WELLS ST MILWAUKEE, WI 53202

DEPT. OF H&SS CLAUDETTE HIGGINS ONE W. WILSON ST., RM 672 MADISON, WI 53702

NATIONAL COMMUNICATIONS SYSTEMS STATE OF WI, DHSS DALE STOUFFER ACE & SOUTH COURTHOUSE RD ARLINGTON, VA 22204

EMS, DEPT. OF H&SS DAN EKLOF P.O. BOX 309, 1414 E. WASHINGTON 100 EDWARD ST MADISON, WI 53701

IL STATE POLICE COMMISSION DARRELL BARTZ 601 SANGAMON AVE SPRINGFIELD, IL 62701

MOTOROLA DAVE STRAUSS 1815 WASHINGTON ST TWO RIVERS, WI 54241

WAUSAU POLICE DEPT. DON PAGENKOPF 3506 SWAN AVE. WAUSAU, WI 54401

159A S 2 ST MEDFORD, WI 54451-1810

SW WI VETERINARY MEDICAL ASSN DR. JOHN SCHNELLER, SECRETARY S11139 COUNTY C SPRING GREEN, WI 53588

DANE CO VETERINARY MEDICAL ASSN DR. RENE A. CARLSON, SECRETARY

DR. ROBERT L. MADSON, SECRETARY 5129 UNIVERSITY AVE MADISON, WI 53705

LAW ENFORCEMENT BULLETIN CRIME INFORMATION BUREAU DIRECTOR P.O. BOX 2718 MADISON, WI 53701-2718

DAN EKLOF P.O. BOX 309 MADISON, WI 53701

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MI STATE POLICE COMMISSION DIVISION DAVE HELD 714 S. HARRISON RD EAST LANSING, MI 48823

WALWORTH CO SHERIFFS OFFICE DICK BUGGS COURTHOUSE BLDG. ELKHORN, WI 53121

WINNEBAGO CO SHERIFFS OFFICE DON SLEIK 420 JACKSON OSHKOSH, WI 54901

NORTHERN WI VETERINARY MEDICAL NW WI VETERINARY MEDICAL ASSN DR. CATHY MILLER, SECRETARY DR. DENNIS VAN ROEKEL, SECRETARY RT 2'640 200 ST. BALDWIN, WI 54002

> OZAUKEE-WA VETERINARY MEDICAL ASSN DR. REBECCA ARMSTRONG, SECRETARY P.O. BOX 793, 4860 COUNTRY AIR CEDARBURG, WI 53012

VETERINARY MEDICAL ASSN OF NE WI 1238 DELRAY DRIVE GREEN BAY, WI 54303-1445

COULEE REGION VETERINARY MEDICAL DR. ROBERT SPENCER, SECRETARY DR. STEPHANIE ROSIN, SECRETARY W5706 HIGHWAY 33 LACROSSE, WI 54601

GE MOBILE DUANE MCCUNE 31W007 NORTH AVE. W. CHICAGO, IL 60185

AMERICAN RED CROSS GREATER MILW CHAPTER HDQS 2600 W. WIS AVE MILWAUKEE, WI 53233

WI SHERIFFS & DEPUTY SHERIFFS JIM CARDINAL P.O. BOX 145 CHIPPEWA FALLS, WI 54729

WI STATE PATROL D4 JIM LOHFF 2805 MARTIN AVE. WAUSAU, WI 54401

WI VETERINARY MEDICAL ASSN LESLIE SCHOENFELD, EXEC DIRECTOR LT. WILLIAM TIEGS 301 N. BROOM ST MADISON, WI 53703

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APCO SPECTRUM MICHAEL HOIER ROUTE 1, BOX 162 A TOMAH, WI 54660

GENERAL ELECTRIC PAUL JOHNSON 210 MADISON AVE. FORT ATKINSON, WI 53538 DODGE CO VETERINARY MEDICAL ASSN 1147 BOUGHTON ST WATERTOWN, WI 53094

DNR GARY ADLER 2421 DARWIN RD. MADISON, WI 53704

EMERGENCY GOVERNMENT HARRY HILLEGAS 2309 GOVERNMENT CENTER ROOM A MINNEAPOLIS, MN 55487-0239

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FEDERAL EMERGENCY MANAGEMENT AGENCY MAYNARD J. TINSMAN JR. 500 C ST. S.W. WASHINGTON, D.C. 20472

WAUSAU PD MICHAEL MICHLEN 610 FIFTH ST. WAUSAU, WI 54401

GE PAUL JOHNSTON 210 MADISON AVE. FORT ATKINSON, WI 53538 CALUMET CO. SHERIFF PAUL RUSCH 206 COURT ST. CHILTON, WI 53014

WISCONSIN BELL
PETER O'KANE
125 N. EXECUTIVE DR. 2ND FLOOR
BROOKFIELD, WI

WI TOWNS ASSN, INC RICHARD J. STADELMAN ROUTE 4 BOX 320 SHAWANO, WI 54166

STATE PATROL COMMUNICATIONS ROBERT L. BENNETT P.O. BX 7912 MADISON, WI 53707

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MOTOROLA C & E, INC. STAN PAYNE 1000 MITTLE RD. WOOD DALE, IL 60191

TWO-WAY RADIO STEVE HARMON 1241C MENOMONIE ST. EAU CLAIRE, WI 54703

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RANDALL H. FRAILING
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ST. CROIX CO. COMM STEVE T'KACH 911 FOURTH ST HUDSON, WI 54016

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WILLIAM M. JERMAIN JR.
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WIS FIRE JOURNAL
BOX 606, RT 3, GOLF COURSE RD
SPRING GREEN, WI 53588

APPENDIX B

Meeting Minutes



Meeting Dates

- April 28, 1989
- June 6, 1989
- July 6, 1989
- August 17, 1989
- September 20, 1989
- November 2, 1989
- February 8, 1990
- May 21, 1992

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE

The following are the minutes from the April 28, 1989 meeting of the Wisconsin 800 MHz Regional Planning Committee held at Wisconsin State Patrol Headquarters-District 3 in Fond du Lac.

Present were: Sgt. John Lampkin, Off. Dan Bennington, Green Bay Police; Capt. Phil Hall, Lt. Bill Tiegs, Greenfield Police; Robert Bennett, Richard Shulak, WSP/DOT; Rick Strauss, Milwaukee County Sheriff; Jim Charneski, Ted VanRassum, Brown County Sheriff; Don Sleik, Winnebago Sheriff; Ron Beck, Charles Sahr, Appleton Police; Michael Michlen, Wausau Police; Carl Guse, Dodge County Sheriff; Dan Eklof, DHSS & EMS; Claudette Higgins, DHSS; Dave Strauss, Bob Schnese, Bill Davis, Motorola.

The meeting was called to order by Carl Guse at 10:10AM, followed by introductions. The Wisconsin Region (Reg 45) was defined as all of the state excluding the following counties: Kenosha, Milwaukee, Dodge, Washington, Walworth, Jefferson, Racine, Ozaukee, Waukesha, Dane and Rock. These counties are part of the Southern Lake Michigan Region.

Election of the Regional Chairman-Qualities of the chairman should be that he have commitment from his employer, able to travel and also have the funding for expenses such as mailings, etc. Nominations from the floor were taken. John Lampkin from Green Bay Police Dept. and Richard Shulak were nominated. A vote was taken by the show of hands with Richard Shulak receiving the majority. Richard Shulak was installed as the Chairman of the Wisconsin 800 MHz Regional Planning Committee.

Election of the Regional Secretary-Qualities of the secretary should be that the person work closely with the chairman, having access to a word processor, preferably DisplayWrite 3 or 4, able to travel and have the time. The secretary would be responsible for generating the final version of the Wisconsin plan and take meeting notes. They may delegate or seek volunteers. Dick Buggs volunteered. Richard Shulak and Carl Guse decided that a talent search should be conducted to try and find someone who is part of the Wisconsin Region. Dick works for the Walworth County Sheriffs Office which is not part of the Wisconsin region. A talent search will be conducted between now and the next meeting. An attempt will be made to finalized the Secretary's position at the next meeting.

The following documents were then handed out: FCC Docket 87-112, NPSPAC Minutes, Public Safety Radio Communication Plan, and an 800 MHz paper written by Richard Shulak.

Discussion was then turned over to the chairman. Mr. Shulak gave a short history of why the Regional Planning Committees were formed. He also related the progress of the Southern Lake Michigan 800 MHz Regional Planning Committee.

The formation of sub-committees was then presented. These committees would be based on the Regional Planning Tasks as outlined in the Communications Plan handout. A motion from the floor for the formation of 3 committees; Administrative, Operational, and Technical was passed.

Tasks as listed in the outline were then assigned to different committees. To the administrative committee--Tasks 1 (Short and Long Term Planning), 3 (Review Process), 4 (Application Procedure and Evaluation) and 6 (Existing Frequency Policy); To the operational committee--Task 2 (Regional Interoperability); and to the technical committee--Tasks 5 (Spectrum Efficiency) and 7 (Digital Voice Encryption). It was suggested that the committees meet before the main meeting and present their reports at the main meeting. An explanation of the tasks of each committee was given following the outline provided in the PUBLIC SAFETY RADIO COMMUNICATIONS NATIONAL PLAN handout.

The roster was passed around so everyone could list their preference for committee assignments. It was recommended that if a department has more than one representative, they each work on a different committee. The committee chairmen would be chosen after the committee meets.

The next meeting is scheduled for <u>JUNE 6, 1989</u>, 1:00PM at District 6, WSP in Eau Claire. <u>The committees will meet at 11:00AM</u>, followed by lunch at Noon, and have the main meeting at 1:00PM.

Meeting notices will be posted in the Law Enforcement Bulletin and at the Chiefs and Sheriffs Association meeting.

Meeting adjourned at 11:55AM.

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE

MINUTES

The second meeting of the 800 MHz regional planning committee was held at Eau Claire Tuesday June 6, 1989. The standing committees met at 11:00AM to discuss the manner in which committees would report to the general committee. The consensus was that items deferred from the main meeting would be discussed during the 30 days between regular meetings. Decisions would then be brought to the main body for approval. This being the only matter before the committees, the committees adjourned at 11:35AM.

The main meeting started at 1:00PM. As there is no secretary at this time, I asked for volunteers to record the minutes. Mr. Ron Yow of Outagamie Co. "volunteered".

A call was made for volunteers for the Secretary's job. The secretary should have access to a word processor, DISPLAYWRITE 3 or 4 are preferred. There were no volunteers and the search for a secretary will continue.

A presentation by Mr. John Haugen of Motorola, Inc. followed. The subject was 800 MHz trunking systems in general and Motorola's implementation of 800 MHz in particular. A video tape titled "SMARTNET TRUNKING" was shown. John also provided a handout titled "Trunking Basics". A lively question and answer period evolved. The group spent over two hours grasping the concepts associated with 800 MHz trunking.

The group was reminded that hand outs were available covering the NPSPAC meetings, FCC Docket 87-112 and the Public Safety National Plan.

Members requested that an attendance sheet, a list of committee members and a mailing list in general accompany the minutes. The mailing list will be expanded to include each and every Sheriff's Department with the exception of those eleven counties in the Southern Lake Michigan Region.

The next meeting was set for <u>District 4 headquarters</u> in <u>Wausau</u> on <u>July 6, 1989</u>.

There will NOT be committee meeting prior to the general meeting. The General meeting will start at 1:00PM.

Motion to adjourned passed at 3:30 PM.

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE CORRECTED MEETING MINUTES

The Wisconsin 800 MHz Regional Planning Committee met at Wisconsin State Patrol District #4 Headquarters in Wausau, Wisconsin on July 6, 1989. The meeting of the Committee of the Whole was called to order by Chairman Shulak at 1:05p.m. Agendas were passed out to all present.

First order of business was the reading of the minutes of the last meeting in Eau Claire by the Chair, since no permanent Secretary had been named. John Lampkin moved, and Dan Ecklof seconded that the minutes be accepted as read. Motion carried.

Introductions followed. Among those present were representatives of both Motorola C & E, Inc. and the General Electric Company.

A call for nominations for the Regional Secretary was made and there being no response, an offer by Richard Buggs of Walworth County to act as Secretary for the group was accepted. Mr. Buggs was nominated by Dan Eklof. Call for additional names was made by Chairman Shulak. There being no more names submitted, Mr. Eklof moved and Mr. Lampkin seconded that Mr. Buggs' election be by unanimous ballot. Motion carried.

A report by the Chair on the recently published frequency sort and assignments for the Southern Lake Michigan Region followed. Chairman Shulak and Carl Guse explained the methodology and reasoning behind the sort and assignments. Discussion ensued on the report and the status of adjacent regions, such as Minnesota. Excerpts from the Minnesota region's meeting notice were presented. Bill Davis suggested we request Steve T'Kach attend the next Minnesota meeting as our representative.

Chairman Shulak named committee chair appointees. Don Sleik was appointed as Administrative chair, Dan Eklof as Technical chair and John Lampkin as Operational chair. Each was presented with a portion of the existing Southern Lake Michigan plan to review as core information for their plan documents.

After a short break in the meeting, and the Motorola representatives left our group, a presentation by the General Electric Company of their Trunking Systems and ancillary equipment followed. The General Electric Company presentation was made by Mr. Duane McCune of the Chicago office. A question and answer period followed.

Upon completion of the General Electric presentation, Chairman Shulak charged the various committees with a rework of the Lake Michigan documents, to allow us to utilize as much of their verbiage as possible to complete our plan. The intent was that each committee chair report back next meeting, on what revisions they feel should be made, to create a germane plan for the Wisconsin Region. The presentations then can be discussed and adapted or revised as required with input from the various committee members. A brief discussion was held on the FCC Docket and History of the creation of the Planning groups by the FCC for new members who had questions on the matter.

Finally, the NEXT MEETING DATE is set for THURSDAY, 17 August, 1989, at Wisconsin State Patrol Headquarters, District #3, in Fon Du Lac. It was agreed the the General Meeting should commence at 1:00p.m.. The conference room is reserved all day should the committees find it necessary to meet in the morning.

Meeting adjourned at 3:30p.m..

Respectfully submitted Richard E. Buggs, Secretary

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE Wausau, WI July 6, 1989

AGENDA

CALL TO ORDER (Richard Shulak)

Approval of Minutes

INTRODUCTIONS

ELECTION OF REGIONAL SECRETARY

REPORT ON ADJACENT AREAS

Southern Lake Michigan Regional RCRC Meeting of June 28. (Carl Guse-Richard Shulak)

Explanation of frequency sort procedure (Carl Guse)
Minnesota Meeting Notice (Richard Shulak)

PRESENTATION BY GENERAL ELECTRIC
(Duane McCune and Bill Henderickson)
Q & A Period

DISTRIBUTION OF BACKGROUND DOCUMENTS

FCC Docket 87-112 NPSPAC Minutes Public Safety Radio Communication Plan Southern Lake Michigan 800 MHz Regional Plan

Committee Assignments of Tasks for Developing the Wisconsin Plan

Pages 1 thru 17 Administrative Pages 18 thru 22 Operational Pages 23 thru 25 Technical Pages 27 thru 31 Operational

NEXT MEETING TIME AND PLACE

WISCONSIN 800MHz REGIONAL PLANNING COMMITTEE

AGENDA

AUGUST 17, 1989

CALL TO ORDER (RICHARD SHULAK)

APPROVAL OF MINUTES

INTRODUCTIONS

NATIONAL APCO CONFERENCE REPORT

STATUS OF ADJACENT STATES

REPORT BY COMMITTEES

- A) ADMINISTRATIVE
- B) OPERATIONAL
- C) TECHNICAL

OLD BUSINESS

NEW BUSINESS

NEXT MEETING TIME AND PLACE

ADJOURN

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE MEETING MINUTES

The Wisconsin 800 MHz Regional Planning Committee held its scheduled August meeting at Wisconsin State Patrol District #3 Headquarters in Fond du Lac, Wisconsin on August 17, 1989. The general meeting of the Committee of the Whole was called to order by Chairman Shulak at 1:00 p.m. Agendas were passed out to those present.

First order of business was the reading of the minutes of the last meeting at Wausau by the Chair. Upon the reading, corrections as to the meeting date and transposition of committee chairman for the Administrative and Operational committees were offered. The minutes as corrected from the floor were then accepted upon motion of Carl Guse, seconded by Don Sleik.

Introductions followed. New participants, Paul Rusch of the Calumet County Sheriff's Department and Paul Johnston, the recently appointed Wisconsin representative of General Electric joining the nine other members present.

A report on the National APCO conference at Sparks, Nevada was given by Carl Guse. Carl emphasized the information presented during the general session by Beverly Baker and Ralph Haller of the Commission and others during this and other meetings in respect to Regional Plans and frequency allocation procedures in particular. It was stressed that each regional group make every effort to foster participation by all eligibles in its boundaries.

Next order of business was committee reports. Don Sleik outlined his groups status and their decision to replace the survey used by the Southern Lake Michigan Region with a history and outline of methods used in notification of eligibles plus comments on the general response throughout the region. Comment was made on making more local presentations to groups such as the Sheriff's and Chiefs of Police and Fire on the state level. Support at our local level by federal agencies should be solicited. It was noted APCO will assist with publication and distribution of regional plans to insure public access. Our group apparently can charge for the costs of printing and postage for plan distribution, it was reported. An outline of support information for the plan document was given to the Secretary by Mike Michlein.

Dan Eklof, chair of the Technical committee reported on a minor change in the verbiage of his draft plan portion.

John Lampkin of the operations group covered changes in their text. A draft copy of John's changes will follow shortly, it being compiled and typed in the near future by John. Upon receipt of the text, it will be incorporated into the computer generated draft to be distributed to the membership.

Under Old Business, Carl Guse reviewed Docket 89-112 and called attention to the contents required in a regional plan document. Discussion ensued among the members.

As an order of New Business, an explanation of the new sort form, criteria required for the sort and methods of laying out the various areas for accurate sort was given. It was noted that one sort is made at no cost, so it is necessary to be realistic in our layout. County level sorts and how to accurately layout certain areas was discussed at length.

Bob Schnese of the Administrative committee, raised the possibility of deferring the selection of the Regional Plan Review Committee to a later date.

Carl Guse reported his new address, good for the next several months as:

Carl Guse 816 South Lincoln Avenue Apt #201 Beaver Dam, Wisconsin 53916 Telephone: (414) 885-4450

Final order of business was selection of the NEXT MEETING DATE, set for Wednesday, 20 September, 1989, at the same location, Wisconsin State Patrol Headquarters, District #3, in Fond Du Lac. Again the General Meeting shall commence at 1:00 p.m. The conference room is reserved for all day, for committee use as may be necessary.

Meeting Adjourned at 2:40 p.m.

Respectfully submitted Richard E. Buggs, Secretary

WISCONSIN 800MHz REGIONAL PLANNING COMMITTEE

AGENDA

SEPTEMBER 20, 1989

CALL TO ORDER (RICHARD SHULAK)

APPROVAL OF MINUTES

INTRODUCTIONS

STATUS OF ADJACENT STATES

REPORT BY COMMITTEES

- A) ADMINISTRATIVE
- B) OPERATIONAL
- C) TECHNICAL

OLD BUSINESS

Reading of Wisconsin 800 MHz Plan Richard Buggs Method of defining areas of coverage Involvement of users in the planning process

NEW BUSINESS

NEXT MEETING TIME AND PLACE

ADJOURN

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE MEETING MINUTES

September 20, 1989

The Wisconsin 800 MHz Regional Planning Committee held its scheduled September meeting, at Wisconsin State Patrol District #3 Headquarters in Fond du Lac, Wisconsin on 20 September, 1989. The general meeting of the Committee of the Whole was called to order by Chairman Shulak at 1:00 p.m.

Agendas were passed out to those present.

First order of business was the presentation of the minutes of the last meeting in Fond du Lac by the Chair. It was moved by Don Sleik and seconded by Carl Guse that the minutes be accepted as presented. The motion was passed unanimously.

Introductions were dispensed with as there were no new members present.

Report on status of the adjacent States revealed that Minnesota's meeting this month falls on todays date and that Minnesota seems to have accelerated their planning process. It is hoped that our representative to their group will keep us advised of their status. Carl Guse suggested we send along to Minnesota a copy of the proposed Wisconsin frequency assignments. These follow generally the Southern Lake Michigan outline and it is proposed that Wisconsin promote them across their area. The Chair will see that Iowa, Michigan and Minnesota are advised.

Iowa's planning status has been a question and Chairman Shulak will also establish a more expeditious line of communication with Iowa and Michigan to insure we do not miss, nor do they miss our meeting notices.

No Sub-committee reports were presented, due to the late date of the last draft of the plan. Draft copies were passed out at todays meeting.

Criticism of the late distribution of the draft by the Chair led to the establishment of a schedule to match input and output dates to the work schedules and vacations of the members. It is anticipated that this will correct the problem and allow us to schedule meetings in a timely manner.

Reading of the Plan was deferred since there were several changes to the text made during this session. Further, it may be that certain verbiage in the administrative portion will undergo change by Mike Michlein so that it will read more comfortably. These changes will be incorporated as soon as possible and the redrawn draft distributed for members to review prior to October 1st, 1989 if at all possible.

Questions again arose on methodology and actual preparation of the areas to be presented for frequency sort. Dave Strauss of Motorola C. & E., Inc. offered to try his Engineering Department's patience and solicit their help in adjusting the sort criteria. He hopes to be able to have their yes or no answer by the week of October 7th, 1989. If Dave's people are unable to help us, due to time constraints, then he will try to gather information on the method they used to establish sort areas in the eleven Southeastern Wisconsin counties that reside in the Southern Lake Michigan Region. We can then apply similar logic to our efforts.

There being no new business, the date for the next meeting was set for Thursday, 2 November, 1989, again at Wisconsin State Patrol, District #3 Headquarters in Fond du Lac. Location being generally determined by those in attendance and their location in relation to Fond du Lac as a central point.

Motion to adjourn was tendered by Carl Guse seconded by Don Sleik and passed unanimously at 2:30 p.m.

Respectfully Submitted Richard E. Buggs, Secretary

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE MEETING MINUTES

The Wisconsin 800 MHz Regional Planning Committee held its scheduled November meeting, at Wisconsin State Patrol District #3 Headquarters in Fond du Lac, Wisconsin on 02 November, 1989. The general meeting of the Committee of the Whole members present was called to order at 1:00 PM by Carl Guse, Wisconsin APCO Convenor, acting as chairman upon request of Chairman Richard Shulak who was unexpectedly detained in Wausau.

The first order of business was the reading and approval of the minutes of the last meeting, by unanimous vote.

There being no introductions or other immediate business, the committee proceeded with its agenda intent of reading the Wisconsin Plan and any revision of verbiage required. Several changes were made to more fully reflect actual events as they occurred in historical and organizational documentation of plan development. Similarly there were minor changes and additions in the text to define intent and provide fully accurate descriptions, such as the addition of the mandated CTCSS code in table #2.

Upon conclusion of the review of the Plan and Preface, it was moved by Don Sleik and seconded by Bob Schnese, that the committee attempt to have the FCC Private Radio Bureau Staff review a preliminary draft of the plan, prior to final submission to insure its ability to withstand full formal action by the Commission.

Moving on, Dave Strauss of Motorola introduced Stanley Payne, engineer from Motorola C & E, Inc. who will be conducting the frequency sort for the Wisconsin Region. After thanks for the use of his good offices were given by the committee, Mr. Payne went on to explain how the sort would be conducted, how the counties involved would be sectioned (if required) and what other criteria may bear on his work. Members present were also provided with illustrations of the 821 MHz Band channel spacing, with Mutual Aid channel and Encryption channel requirements showing by way of explanation of channel spacing criteria. Mr. Payne went on to outline the sort data he uses. Radius of any operating area for the sort, should not exceed 25 miles maximum distance from its center and not extend beyond 3.0 miles into any adjacent operating area. In cases where large or odd shaped geographic areas require subdivision, then all subdivided areas radius should be the identical.

Based upon the foregoing information, and Mr. Payne's concern that the initial sort at a minimum of 5 frequencies for per assignment might not allow our allotted free sort to be completed, it was discussed and moved, that the sort criteria be amended as follows; Based upon the Wisconsin Department of Administration, Bureau of Demographics - 1/1/89 Report and using the figures estimated for the year 2005...Sort shall be conducted with channel allocations set as;

- 1. Assignment Areas with Populations of less than 10,000 be allotted Two (2) channels.
- 2. Assignment Areas with Populations of 10,000 and up to 25,000 be allotted Three (3) channels.
- 3. Assignment Areas with Populations of 25,000 and up to 50,000 be allotted Four channels.
- 4. Assignment Areas with Populations of 50,000 and up to 100,000 be allotted Five (5) channels.
- 5. Assignment Areas with over 100,000 Population shall be allowed One (1) additional channel, to the Five (5) shown above, for each additional 25,000 people.

Mr. Payne appeared to be more than satisfied with these criteria, and by unanimous agreement the motion to implement passed.

Finally, Carl Guse reported upon a telephone call from Steve T'Kach who has been maintaining our liaison with the Minnesota planning region. Steve reports that they are behind us in the planning process, and he will forward us information on their status. Steve apologized for not being able to attend, however he wished to keep us abreast of developing events in the Minnesota Region.

Weather permitting, the next scheduled meeting was tentatively set for 14 December, 1989 at 1:00PM again in Fond du Lac at Wisconsin State Patrol District #3 Headquarters.

Motion to adjourn by Bill Davis passed at 2:30PM.

Respectfully submitted

Richard E. Buggs, Secretary

MEETING NOTICE

WISCONSIN 800 MHZ

REGIONAL PLANNING COMMITTEE

The meeting scheduled for Thursday, January 25, 1990 was cancelled due to inclement weather. The new meeting date is <a href="https://doi.org/10.1009/mm.meeting.nlm.new.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.neeting.nlm.nlm.neeting.nlm.nlm.neeting.nlm.nlm.nlm.nlm.nlm.neeting.nlm.nlm.n

Agenda items at this time include:

I. A review of the Wisconsin Regional Plan.

At the conclusion of the meeting, it is hoped that the narrative portion of the plan will be ready for submittal to the FCC.

II. Modifications to the Geographic and channel assignments prior to asking for the CET frequency sort.

The channel assignment information received from Stan Payne include assignments to the eleven South Eastern Wisconsin counties included in the Southern Lake Michigan region. These assignments need to be modified to reflect the actual planned usage of frequencies in those counties. This will mean a change in available channels for the rest of Wisconsin. Your input at this time is critical.

Agenda items can be added at any time. I am available at (608) 267-9799 Monday through Friday from 8:00AM to 4:30PM.

Richard J. Shulak, P.E. Chairman Wisconsin 800 MHz Regional Planning Committee

WISCONSIN 800 Mhz REGIONAL PLANNING COMMITTEE MEETING MINUTES

The Wisconsin 800 Mhz Regional Planning Committee held its scheduled February meeting, at Wisconsin State Patrol District #3 Headquarters in Fon du Lac, Wisconsin on 08 February, 1990. The general meeting of the Committee of the Whole members present was called to order at 1:00PM by Chairman Richard Shulak.

The first order of business was introductions by all present. There were several new members and observers on hand.

Second order of business was the reading of minutes of the November regular meeting. The Chairman, upon the reading of Novembers minutes, placed a discussion of the preliminary plan submittal resolution in the immediate agenda for this meeting. Motion to approve minutes as read, was was made by John Lampin and seconded by Paul Johnston, approval was unamious.

Subsequently, a briefing on the work session, held on January 25, 1990, after the scheduled meeting was cancelled due to weather, was given for information purposes.

A report on the Southern Lake Michigan Regional Conformance Review Committee was given by Carl Guse to the committee. Comments for the benefit of new members present, on that region's plan and its status were offerred by the Chairman, by way of historical review of that region's activities to date and their inter-relation to ours.

No reports were presented from the standing committees, as the bulk of their charged work is substantially complete. Information was not available from Minnesota on the plan status on this date, either mail or personally presented. A copy of the Michigan plan was made available for members inspection. Some concerns expressed by members on inspection of the document will be addressed.

Discussion ensued on several items, including a letter from National APCO, relating to FCC's desire, for verbage changes, in existing plans, as well as new plans, for "Slow Growth" implementation of frequencies.

Furthur discussion, upon the preliminary frequency sort by Mr. Stanley Payne of Motorola, was initiated. This information was discussed and several changes made to more fully reflect the Region's members views on frequency assignment needs beyond those produced during initial sort.

The Michigan plan and its allocation scheme produced comments, however it appears their allocation may bear on Canada's projected uses. Bill Teigs, City of Greenfield PD expressed concern with FCC interoperability channels and his concerns were addressed with information at hand.

Final copy plan submission for an informal FCC staff review, might be an alternative, provided it will not delay the formal submission of our plan to the Commission. It was suggested by new member, Peter Kane of Wisconsin Bell, that a working relationship with FCC staff is to our

mutual advantage, and should be developed.

Moving next to the establishment of a Regional Conformance Review Committee, it was decided that this committee consist of a maximum of seven members. The Regional Chairman, APCO Frequency Advisor, plus five additional members from eligible entities in the region, being initially selected from a group of volunteers, by the Committee of the Whole, subsequently to be selected by the RCRC. Initial appointments included Col. Don Pagenkopf of Marathon County O.E.G and the Adjutant General's Office of the Wisconsin Department of Military Affairs. We welcome his participation as it is one of our objectives to serve all eligibles, on all levels in the planning process.

Finally, the Iowa Region requests a copy of our plan on Computer disk, which will be provided by your Secretary, upon final draft.

Weather permitting, the next scheduled meeting was tentatively set for 15 March, 1990 at 1:00PM again in Fon du Lac at Wisconsin State Patrol District #3 Headquarters.

There being no other business, motion to adjourn at 4:00PM.

Respectfully submitted
Richard E. Buggs, Secretary

Final Meeting Notice Wisconsin 800 Megahertz Regional Planning Committee

There will be a final acceptance meeting of the Wisconsin 800 MHz Planning Committee on May 21, 1992. The meeting will begin at 10:00 a.m. at State Patrol District Three Headquarters in Fond Du Lac (Hwys 151 and 41) in the large conference room in the basement.

Agenda items at this time include:

- I. Review and acceptance of the Wisconsin 800 MHz Regional Plan.
- II. Set first meeting date of the Regional Plan Review Committee (RPRC).

A copy of the Wisconsin 800 MHz Regional Plan will be sent to you upon request. Otherwise, plans will be available at the meeting.

Agenda items can be added at any time. I am available at (608)267-9799 Monday through Friday from 8:00 a.m. to 4:30 p.m.

Richard J. Shulak, P.E. Chairman Wisconsin 800 MHz Regional Planning Committee

AGENDA

WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE MAY 21, 1992

10:00AM CALL TO ORDER

INTRODUCTIONS

SIGN UP SHEETS

HISTORY

RPRC (SEE APPENDIX D)

REVIEW OF PLAN

APPROVAL

ADJOURN

WISCONSIN 800 Mhz REGIONAL PLANNING COMMITTEE MEETING MINUTES

May 21, 1992

The Wisconsin 800 Mhz Regional Planning Committee held its noticed general meeting, May 21, 1992, at Wisconsin State Patrol District #3 Headquarters in Fond du Lac, Wisconsin. The meeting was called to order at 10:00 AM by Chairman Shulak.

Agendas were passed out to those present.

First Order of Business was the reading of the minutes of the last meeting. No additions or corrections were offered and a motion by Michael Michlein, seconded by Don Pagenkopf to adopt and make a part of the official record was passed by unanimous vote.

Introductions followed, with the Chair requesting that all present make sure they sign up on the sheets provided for the record.

A brief discourse on the history of our plan and its relationship to those of the surrounding states, with the only State still being in doubt being Minnesota.

The next order, was the discussion of the makeup and verbiage of the

Plan's Appendix "D", outlining the makeup and governing the meetings of the Regional Plan Review Committee, (RPRC) who will be charged with general operation of the Plan. Changes in the Appendix verbiage and meeting spacing were discussed, with suggested changes

to be incorporated in Appendix "D" of the Plan's final publication were accepted upon motion of Don Pagenkopf, seconded by Michael Michlein, and adopted by unanimous vote of the members present.

Carl Guse, Wisconsin APCO Frequency Advisor, noted that his address was now N6377 Woodridge Lane in Beaver Dam, rather than that shown in the record. It was noted that the record reflected the addresses of those members upon the date noted thereon and that further changes were not necessary.

Review of the Plan as published for submittal with the changes was taken up as the next order of business. The only changes suggested other than in Appendix "D" were in the Frequency Sort listings, with Claudette Higgins suggesting the addition of Tabs to make it easier to locate the various portions of the sort data. Carl Guse suggested addition of a page listing certain frequencies reserved for special use after page 120. Change of the present question mark which the sort produced on each State of Wisconsin frequency, to the actual State of Wisconsin labeled designation was recommended.

Actual allocation and the spacing of the Plan related channels to pre-existing frequencies and cellular telephone channels was explained to the members after questions from Don Pagenkopf.

Dave Straus of Motorola inquired as to what his immediate course of action would be to continue planning for Sheboygan County's system. He was advised that the pool frequencies will not be assigned other than as the plan indicates, but he should continue with his initial processing, since those frequencies are available to all users in the Sheboygan County area.

There being no other discussion on the Plan or any of its Appendices motion to accept the complete document for submittal to the FCC was offered by Ron Yow and seconded by Claudette Higgins. Motion adopted by unanimous vote of the members present.

There being no other business, a motion to adjourn tendered by Michael Michlein and seconded by Carl Guse, was adopted by unanimous vote. Meeting adjourned at 10:50 AM.

Respectfully submitted Richard E. Buggs, Secretary

APPENDIX C

Attendees



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WISCONSIN 800 MHZ REGIONAL PLANNING COMMITTEE

PLEASE SIGN IN

June 6, 1989

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WISCONSIN 800 MHZ REGIONAL PLANNING COMMITTEE

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WISCONSIN 800 MHZ REGIONAL PLANNING COMMITTEE

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WISCONSIN 800 MHz REGIONAL PLANNING COMMITTEE

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APPENDIX D

Regional Plan Review Committee



REGIONAL PLAN REVIEW COMMITTEE

The Regional Plan Review Committee (RPRC) will consist of seven members: the Regional Chairman, the Frequency Advisor, the chairs of the Region's Administrative, Operational and Technical Committees and two additional members. The Regional Planning Review Committee shall meet at least once a year and shall meet within three months of receiving an application from the frequency advisor. The RPRC shall meet within three months of FCC approval of this plan at which time by-laws shall be established.

The Committee Members at the time this plan is submitted are:

Richard J. Shulak, P.E. Chairman, Wisconsin Regional Planning Committee P.O. Box 7912 Madison, WI. 53707-7912 (608) 267-9799

Carl Guse Wisconsin Frequency Coordinator N6377 Woodridge Lane Beaver Dam, WI 53916 (414) 885-4450 (414) 885-4452 FAX

Sgt. John Lampkin Chairman, Operations Committee 307 S. Adams St. Green Bay, WI. 54301 (414) 436-3368

Sgt. Donald Sleik Chairman, Administrative Committee 420 Jackson St. Oshkosh, WI. 54901 (414) 236-4938

Dan Eklof Chairman, Technical Committee P.O. Box 309 Madison, WI. 53701 (608) 266-0471

Col. Donald Pagenkopf 3506 Swan Ave. Wausau, WI 54401 (715) 842-0841

APPENDIX E

Application Evaluation Criteria



APPLICATION EVALUATION CRITERIA

CATEGORY WEIGHTS

1. SERVICE: 0 to 100 POINTS

Eligible services have been grouped into the following three priority levels. Each level has a predetermined maximum number of points associated with it. In the case of a "multiple-service" system, the application must state the number of mobiles assigned to each service. The percentages resulting from these totals will determine the total number of points awarded.

PRIORITY LEVEL I: MAXIMUM OF 100 POINTS

Public Safety Radio Service Licenses providing protection of life and property.

PRIORITY LEVEL II: MAXIMUM OF 65 POINTS

Public Safety Radio Licenses providing protection of property only.

PRIORITY LEVEL III: MAXIMUM OF 35 POINTS

Special Emergency Radio Service Licenses

2. SYSTEM TYPE: 0 to 50 Points

From 0 to 50 points can be earned in this category based on the degree of spectrum efficiency demonstrated for the system. The more spectrum efficient a system is, the more points the application earns.

Information relating to the system's technology such as trunked or conventional operation and voice and/or data usage must be provided. The narrative should also discuss how utilization of these features will result in an efficient use of the spectrum. Furthermore, details regarding any other enhancements to the system must be provided. The application must also state whether the system is being proposed as a single agency-single service, a multiple agency-single service or a multiple agency-multiple service operation.

3. INTERSYSTEM OPERABILITY: 0 to 100 POINTS

An application will be awarded from 0 to 50 based on its description of how the 800 MHz mobile radios will maintain and/or increase mutual aid capabilities. The fact that the five common frequencies are included in a plan earns no points as this

is a mandate of the National Plan. However, an applicant may earn up to 50 additional points on the initial and all subsequent applications for including fixed equipment necessary for the operation of the common channels in a specific area(s) of the Region.

4. CHANNEL LOADING FACTORS: 10 to 50 POINTS

Applications will receive between 10 and 50 points for proposing a number of mobile units that meet the Channel Loading Requirements mandated by this plan. Consideration will take into account the feasibility of operating the number of mobiles proposed.

5. COVERAGE AREA: 10 to 50 POINTS

Scoring in this category will be based on two factors:

- 1. Compliance with the parameters described in the TECHNICAL DESIGN CONSIDERATIONS of this plan.
- Channel reuse potential.

6. VACATED FREQUENCIES RETURNED: 0 TO 100 POINTS

The applicant will earn from 0 to 100 points depending on the number of vacated frequencies returned and the availability of the frequency(s) for reuse.

7. IMPLEMENTATION SCHEDULE: 0 TO 50 POINTS

The degree of budgetary commitment and the implementation dates will be evaluated. The more explicit an application is, the more points it will earn.

APPENDIX F

Spectrum Allocation Methodology



INITIAL SPECTRUM ALLOCATION

FREQUENCY SORTING METHODOLOGY

INTRODUCTION

The initial spectrum allocation for The Region was determined by a computerized process performed by C.E.T., Inc. of New Smyrna Beach, Florida. The objectives of the computer program were two fold:

- I. The assignments must be made in a manner which results in a high degree of spectrum efficiency.
- II. The assignments must be made in a manner which results in a low probability of co-channel and adjacent channel interference.

Since the desired output is a geographic sorting of frequencies, defining geography must be part of the input. A list of the number of channels or frequencies desired for the Wisconsin Region was submitted to C.E.T. on a county by county basis. In addition, 66 channels were reserved for Statewide implementation. These 66 channels were also assigned for Statewide use on a shared basis in the FCC approved plan for the Southern Lake Michigan Region (Region 54). It is the intent of the immediately adjacent States (Wisconsin, Illinois, Indiana and Michigan) to continue the State shared frequency implementation.

Acceptable interference probabilities were determined. Frequency assignments for the region were made taking into account the Statewide frequency plan mentioned above and the issues of efficiency and minimal interference.

GEOGRAPHIC AREA

For the purposes of the frequency sort, a geographic area is defined as one or more circles. The circle(s) should include the entire area of the eligibles geopolitical boundary and not extend more than three miles past said boundary.

The procedure involved obtaining the necessary maps, outlining the areas of coverage needed, and fitting that area into a series of circles defined by coordinates and radius.

ENVIRONMENT

Four categories of terrain were defined:

I. URBAN A built up city containing large buildings.

- II. SUBURBAN A city or highway with scattered building and/or trees.
- III. OPEN An area where no obstacles such as tall trees or buildings exist.
 - IV. SEMI OPEN An area between suburban and open

BLOCKED CHANNELS

In addition to the 66 channels defined for statewide use, five additional mutual aid channels must be eliminated from the resource pool. These region wide mutual aid channels are identified by FCC channel number.

TRANSMITTER COMBINING

To insure that proper separation is maintained between any two channels at one site, a minimum of 250 kHz spacing was mandated at each site. This will allow the efficient combining of multiple transmitters on one antenna.

APPENDIX G

Frequency Assignments



Appendix G Region 45 - Wisconsin Detailed 800MHz Channel Allotments by Area

	FCC	Mobile	Base	
Area Name	Channel	Frequency	Frequency	Notation
*Provisiona	al 1	851.0125	806.0125	Mutual Aid Calling
	39	851.5125	806.5125	Mutual Aid Tactical
	77	852.0125	807.0125	Mutual Aid Tactical
	115	852.5125	807.5125	Mutual Aid Tactical
	153	853.0125	808.0125	Mutual Aid Tactical
Adams	6	851.0875	806.0875	
	94	852.2375	807,2375	
	118	852,5625	807.5625	
3 - 1- 1 1	-	054 4000	000 1000	
Ashland	7	851.1000	806.1000	
	27	851.3500	806.3500	
	103	852.3500	807.3500	
	130	852.7125	807.7125	
Barron	16	851.2125	806.2125	
	47	851.6250	806.6250	
	97	852.2750	807.2750	
	119	852.5750	807.5750	
Bayfield	10	851.1375	806.1375	
	42	851.5625	806.5625	
	122	852.6125	807.6125	
	_			
Brown	13	851.1750	806.1750	
	17	851.2250	806.2250	
	45	851.6000	806.6000	
	63	851.8250	806.8250	
	81	852.0750	807.0750	
	83	852.1000	807.1000	
	101	852.3250	807.3250	
	103	852.3500	807.3500	
	126	852.6625	807.6625	
	131	852.7250	807.7250	
Buffalo	14	851.1875	806.1875	
	48	851.6375	806.6375	
	118	852.5625	807.5625	
Burnett	2	851.0375	806.0375	
	22	851.2875	806.2875	
	43	851.5750	806.5750	
	65	851.8500	806.8500	
	94	852.2375	807.2375	
G. 7	4	0		
Calumet	15	851.2000	806.2000	
	56	851.7375	806.7375	
	94	852.2375	807.2375	
	121	852.6000	807.6000	

Chippewa	9	851.1250	806.1250
	41	851.5500	806.5500
	82	852.0875	807.0875
	102	852.3375	807.3375
	126	852.6625	807.6625
Clark	12	851.1625	806.1625
	46	851.6125	806.6125
	96	852.2625	807.2625
	128	852.6875	807.6875
Columbia	17	851.2250	806.2250
	50	851.6625	806.6625
	79	852.0500	807.0500
	122	852.6125	807.6125
Crawford	12	851.1625	806.1625
	46	851.6125	806.6125
	128	852.6875	807.6875
Door	8	851.1125	806.1125
	55	851.7250	806.7250
	78	852.0375	807.0375
	98	852.2875	807.2875
	129	852.7000	807.7000
Douglas	8	851.1125	806.1125
	40	851.5375	806.5375
	102	852.3375	807.3375
	125	852.6500	807.6500
Dunn	11	851.1500	806.1500
	44	851.5875	806.5875
	95	852.2500	807.2500
	121	852.6000	807.6000
Eau Claire	7	851.1000	806.1000
	27	851.3500	806.3500
	78	852.0375	807.0375
	98	852.2875	807.2875
	124	852.6375	807.6375
Florence	10	851.1375	806.1375
	131	852.7250	807.7250
Fond du Lac	7	851.1000	806.1000
	27	851.3500	806.3500
	53	851.7000	806.7000
	102	852.3375	807.3375
	125	852.6500	807.6500
Forest	8	851.1125	806.1125
	42	851.5625	806.5625
	62	851.8125	806.8125
	83	852.1000	807.1000
	119	852.5750	807.5750

Grant	5	851.0750	806.0750
	26	851.3375	806.3375
	49	851.6500	806.6500
	93	852.2250	807.2250
	116	852.5375	807.5375
	130	852.7125	807.7125
Green	13	851.1750	806.1750
	40	851.5375	806.5375
	80	852.0625	807.0625
	103	852.3500	807.3500
Green Lake	12	851.1625	806.1625
	43	851.5750	806.5750
	95	852.2500	807.2500
Iowa	15	851.2000	806.2000
	43	851.5750	806.5750
	121	852.6000	807.6000
Iron	5	851.0750	806.0750
	126	852.6625	807.6625
Jackson	3	851.0500	806.0500
	23	851.3000	806.3000
	43	851.5750	806.5750
	63	851.8250	806.8250
	122	852.6125	807.6125
Juneau	58	851.7625	806.7625
	99	852.3000	807.3000
	124	852.6375	807.6375
Kewaunee	6	851.0875	806.0875
	91	852.2000	807.2000
	120	852.5875	807.5875
La Crosse	11 41 61 102 129	851.1500 851.5500 851.8000 852.3375 852.7000 852.7250	806.1500 806.5500 806.8000 807.3375 807.7000 807.7250
Lafayette	19	851.2500	806.2500
	100	852.3125	807.3125
	127	852.6750	807.6750
Langlade	16	851.2125	806.2125
	103	852.3500	807.3500
	128	852.6875	807.6875
Lincoln	6	851.0875	806.0875
	26	851.3375	806.3375
	98	852.2875	807.2875
	121	852.6000	807.6000

Manitowoc	10	851.1375	806.1375
	50	851.6625	806.6625
	79	852.0500	807.0500
	99	852.3000	807.3000
	128	852.6875	807.6875
Marathon	2	851.0375	806.0375
	22	851.2875	806.2875
	44	851.5875	806.5875
	79	852.0500	807.0500
	116	852.5375	807.5375
	125	852.6500	807.6500
Marinette	15	851.2000	806.2000
	65	851.8500	806.8500
	100	852.3125	807.3125
Marquette	19	851.2500	806.2500
	55	851.7250	806.7250
	128	852.6875	807.6875
Menominee	14	851.1875	806.1875
	130	852.7125	807.7 12 5
Monroe	9	851.1250	806.1250
	47	851.6250	806.6250
	95	852.2500	807.2500
	117	852.5500	807.5500
Oconto	11	851.1500	806.1500
	40	851.5375	806.5375
	60	851.7875	806.7875
	93	852.2250	807.2250
	124	852.6375	807.6375
Oneida	13	851.1750	806.1750
	46	851.6125	806.6125
	92	852.2125	807.2125
	117	852.5500	807.5500
Outagamie	5 25 47 52 96 117 119	851.0750 851.3250 851.6250 851.6875 852.2625 852.5500 852.5750	806.0750 806.3250 806.6250 806.6875 807.2625 807.5500
Pepin	17	851.2250	806.2250
	57	851.7500	806.7500
	93	852.2250	807.2250
	116	852.5375	807.5375
Pierce	2	851.0375	806.0375
	6	851.0875	806.0875
	22	851.2875	806.2875

	42	851.5625	806.5625
	62	851.8125	806.8125
	123	852.6250	807.6250
	130	852.7125	807.7125
Polk	4 18 24 49 99 117 131	851.0625 851.2375 851.3125 851.6500 852.3000 852.5500 852.7250	806.0625 806.2375 806.3125 806.6500 807.3000 807.5500
Portage	4	851.0625	806.0625
	24	851.3125	806.3125
	48	851.6375	806.6375
	100	852.3125	807.3125
	120	852.5875	807.5875
Price	19	851.2500	806.2500
	43	851.5750	806.5750
	90	852.1875	807.1875
Richland	7	851.1000	806.1000
	97	852.2750	807.2750
	119	852.5750	807.5750
Rusk	14	851.1875	806.1875
	100	852.3125	807.3125
	123	852.6250	807.6250
Sauk	4	851.0625	806.0625
	25	851.3250	806.3250
	52	851.6875	806.6875
	101	852.3250	807.3250
	126	852.6625	807.6625
Sawyer	3	851.0500	806.0500
	23	851.3000	806.3000
	127	852.6750	807.6750
Shawano	7	851.1000	806.1000
	27	851.3500	806.3500
	54	851.7125	806.7125
	122	852.6125	807.6125
Sheboygan	4	851.0625	806.0625
	24	851.3125	806.3125
	46	851.6125	806.6125
	85	852.1250	807.1250
	123	852.6250	807.6250
	130	852.7125	807.7125
St. Croix	8	851.1125	806.1125
	13	851.1750	806.1750
	40	851.5375	806.5375
	60	851.7875	806.7875

		101	852.3250	807.3250	
		103	852.3500	807.3500	
		125	852.6500	807.6500	
		128	852.6875	807.6875	
	M1	4 57	051 0050	000 0000	
	Taylor	17	851.2250	806.2250	
		65	851.8500	806.8500	
		94	852.2375	807.2375	
		131	852.7250	807.7250	
		_			
	Trempealeau	5	851.0750	806.0750	
		25	851.3250	806.3250	
		100	852.3125	807.3125	
		127	852.6750	807.6750	
,	Vernon	2	851.0375	806.0375	
		22	851.2875	806.2875	
		44	851.5875	806.5875	
		92	852.2125	807.2125	
,	Vilas	11	851.1500	806.1500	
		40	851.5375	806.5375	
		122	852.6125	807.6125	
Ţ	Washburn	6	851.0875	806.0875	
		26	851.3375	806.3375	
		129	852.7000	807.7000	
V	Vaupaca	9	851,1250	806.1250	
		61	851.8000	806.8000	
		92	852.2125	807.2125	
		127	852.6750	807.6750	
		r	032.0730	007.0750	
Ţ.	Vaushara	16	851.2125	806.2125	
		89	852,1750	807.1750	
		123	852.6250	807.6250	
		123	002.020	007.0250	
v	Vinnebago	3	851.0500	806.0500	
·		23	851.3000	806.3000	
		58	851.7625		
				806.7625	
		65	851.8500	806.8500	
		98	852.2875	807.2875	
		129	852.7000	807.7000	
₩.	t	40	054 5055	006 5055	
W	lood	40	851.5375	806.5375	
		60	851.7875	806.7875	
		81	852.0750	807.0750	
		103	852.3500	807.3500	
		130	852.7125	807.7125	

STATEWIDE FREQUNCY ASSIGNMENTS

Channels assigned to "Reserved for the State of Wisconsin" are to be shared and coordinated with adjacent States and Regions. These frequencies may be assigned to local agencies as needs dictate.

STATE OF WISCONSIN RESERVED FREQUENCY ASSIGNMENTS

	Channel #	Frequency
	28	851.3625
	29	851.3750
	30	851.3875
	31	851.4000
	32	851.4000 851.4125
	33 34	851.4250 851.4275
		851.4375
	35	851.4500
	36	851.4625
	37	851.4750
	38	851.4875
	66	851.8625
	67	851.8750
	68	851.8875
	69	851.9000
	70	851.9125
	71	851.9250
	72	851.9375
	73	851.9500
Ä	74	851.9625
	75	851.9750
	76	851.9875
	104	852.3625
	105	852.3750
	106	852.3875
	107	852.4000
	108	852.4125
	109	852.4250
	110	852.4375
	111	852.4500
	112	852.4625
	113	852.4750
	114	852.4875
	142	852.8625
	143	852.8750
	144	852.8875
	145	852.9000
	146	852.9125
	147	852.9250
	148	852.9375
	149	852.9500
	150	852.9625

STATE OF WISCONSIN RESERVED FREQUENCY ASSIGNMENTS

Channel #	Frequency
151	852.9750
152	852.9875
180	853,3625
181	853.3750
182	853.3875
183	853.4000
184	853.4125
185	853.4250
186	853.4375
187	853.4500
188	853.4625
189	853.4750
190	853.4875
191	853.5000
220	853.8625
221	853.8750
222	853.8875
223	853.9000
224	853.9125
225	853.9250
226	853.9375
227	853.9500
228	853.9625
229	853.9750
230	853.9875

APPENDIX H

Glossary



GLOSSARY

(Definitions of terms, abbreviations, and acronyms as used in this document.)

ADJACENT CHANNELS

Channels which are separated by 12.5 KHz in the 821-824

band.

AGL

Above Ground Level; altitude.

APCO

Associated Public-Safety Communications Officers, Inc.

AVL.

Automatic Vehicle Locator; a data transmission device

used to determine where a field unit is.

CALLING CHANNEL

FCC Channel 601; use of this channel is restricted to establishing contact among individual agencies for

mutual aid purposes.

CHANNEL

An assigned portion of the radio frequency spectrum which is used for the transmission of information. A channel has a center frequency and a definite bandwidth. A term also commonly used to refer to a paired (but offset) combination of two portions of spectrum used for mobile relay operation; whereby one portion of spectrum is used to transmit while the other

portion is used to simultaneously receive.

CHANNEL LOADING

The number of mobile transmitters authorized to operate on a particular channel within the same service area.

CO-CHANNEL

Utilization of the same channel by two or more

licensees.

CONVENOR

The individual charged with organizing a Planning

Region's initial meeting.

THE COMMISSION

The Federal Communications Commission; also the FCC.

THE COMMITTEE

The Wisconsin (Region 45) 800 MHz Regional Planning

Committee.

COMMITTEE OF THE

WHOLE

All members present at a scheduled Regional Planning

meeting.

COMMON CHANNELS

The five channels specified in the National Plan which are reserved for mutual interagency communication; a

Calling Channel and four Tactical Channels.

CONVENTIONAL OPERATION

A method of operation in which one or more radio frequency channels are assigned to mobile and base stations but are not employed as a trunked group.

CROSS SYSTEM PATCH

A means of linking disparate radio systems.

dB

Prediction of a receiver input signal taking into account radio propagation at the particular frequency of interest.

40 dB

The 40 DB contour locates the area within which a receiver will receive a desired 5.0 microvolt input signal (with a 90% reliability factor) at the appropriate frequency.

INTEROPERABILITY

Communication between, or among, radio units of different agencies.

LOCAL FREQUENCY ADVISOR

An APCO designated individual charged with managing spectrum usage within a state.

MDT

Mobile Data Terminal; a field communications device used to transmit and receive data impulses over radio frequencies.

MOBILE RELAY STATION

A base station in the mobile service authorized to retransmit automatically on a mobile service frequency; communications which originate on the transmitting frequency of the mobile station.

MUTUAL AID INCIDENT

A situation posing a threat to the public safety which requires the services of agencies from differing jurisdictions or services.

NPSPAC

National Public Safety Planning Advisory Committee

THE PLAN

The Public Safety Communications plan for Region 45.

PRIMARY DISPATCH

CENTER

A Public Safety Communications Center designated as a controller of the Common channels.

RCRC

The Regional Conformance Review Committee; a standing body of individuals charged with administering the Plan within the Region.

THE REGION

The Wisconsin (Region 45) 800 MHz Planning Region; 62 counties within Wisconsin

REPEAT DISABLE

The means of inhibiting Mobile Relay.

SLMRPC

The Southern Lake Michigan Regional Planning Committee.

TACTICAL CHANNELS

The four Common Channels on which interagency communications will be conducted during a mutual aid incident.

TRUNKED OPERATION

A method of operation in which a number of radio frequency channel pairs are assigned to mobile and base stations in the system for use as a trunk group.

VACATED FREQUENCIES

Those frequencies returned for re-allocation.

Appendix H Page 2

APPENDIX I

Letters of Concurrence From Adjacent Regions



WISCONSIN REGION 45

June 10, 1992

Clarence Peecher Chairman, Southern Lake Michigan Region 54 State Police Communications Bureau 531 Sangamon Ave. Springfield, IL 62702

Dear Clarence:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

Please review this plan and respond in writing to any concerns that may adversely affect your region. We have set a cut off date of July 10, 1992 for comments. We have solicited comments from you and all adjacent regions to region 45. We intend to submit this plan to the Federal Communications Commission on July 20, 1992.

Thank you for your cooperation.

Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912 Madison, WI. 53707-7912

(608) 267-9799



Wisconsin Department of Transportation

Tommy G. Thompson Governor

Charles H. Thompson Secretary DIVISION OF STATE PATROL 4802 Sheboygan Avenue P.O. Box 7912 Madison, WI 53707-7912

Regional Conformance Review Committee Committee Clarence Peecher, Chairman Illinois State Police 531 Sangamon Ave.
Springfield, Il 62702

July 7, 1992

Dear Clarence:

I called Dave Held on July 6, 1992 to discuss Michigan's area of concerns. We reached resolution on all points. Enclosed is a copy of a letter that I sent to David Held.

Regarding their item one, I've add a page immediately before the F.C.C Channel Assignments. Please add this page to your copy of the Wisconsin Plan. I feel that this addition to the Wisconsin plan should satisfy your concerns for Regions 54 and 13 also. Please advise by letter if this is correct.

Items 2 through 5 dealt with co-channel assignments between Michigan and Wisconsin. This probably does not concern your regions, but I included it for your information.

In my letter to Michigan, I've computed the distances between sites based on the sites proposed locations. As you can see, the separations are more than adequate, but even so, Michigan and Wisconsin have agreed to keep each other informed on any construction that would involve the use of those specific channels.

I hope this resolves all issues with our plan. I hope to receive a letter from you from both region 13 and region 54 stating your satisfaction with the proposed changes.

Sincerely,

Richard J. Shulak, P.E.

Chairman, Region 45



Wisconsin Department of Transportation

Tommy G. Thompson Governor

Charles H. Thompson Secretary **DIVISION OF STATE PATROL** 4802 Sheboygan Avenue P.O. Box 7912 Madison, WI 53707-7912

Michigan Public Safety Frequency Advisory Committee Mr. David Held, Frequency Advisor 714 South Harrison Road East Lansing, MI. 48823

July 6, 1992

Dear Mr. Held:

I have reviewed your letter of June 19, 1992 and would like to comment on your concerns.

- 1. I agree that the coordination of "State" frequencies is essential. I have added the same verbiage that you use on page 36H of the Michigan Region 21 plan to the Wisconsin plan. Enclosed is an addenda sheet that is to be added immediately before the page entitled "F.C.C. Channel Assignments".
- While Iron County Wisconsin and Iron County Michigan are on the border, the counties are not right across the border as your letter suggests. The borders of the two counties are at least 45 miles apart. The actual separation between any mobile and a fixed site is much greater. The following is the calculated distances between the Wisconsin and Michigan sites:

	Iron County, WI	Iron County, MI	Distance (Miles)
A	45 22 42 N 86 53 59 W	46 12 12 N 88 22 02 W	84.93
В	46 12 54 N 90 07 38 W	Same as above	84.40
C	46 25 05 N 90 20 27 W	Same as above	95.62
D	46 49 38 N 90 20 27 W	Same as above	94.74

3. The calculated distance from our Door County sites to Emmet and Manistee are as follows:

	Door Co. Sites	Emmet Sites	Distance (Miles)
A	45 22 54 N 86 53 59 W	45 31 45 N 84 55 30 W	96.54
В	45 10 31 N 87 04 58 W	Same as above	107.87
C	45 00 05 N 87 13 46 W	Same as above	118.14
D	44 49 38 N 87 22 33 W	Same as above	129.14
E	44 46 09 N 87 35 44 W	Same as above	140.65
	Door Co. Sites	Manistee Sites	
A	Same as A above	44 20 31 N 86 03 33 W	82.62
B C D E	Same as B above Same as C above Same as D above Same as E above	Same as above Same as above	76.47 73.47 73.10 81.39

4. The separation between Kewaunee County, Wisconsin and Schoolcraft, Oceana and Grand Traverse Counties, Michigan are as follows:

	Kewaunee Sites	Schoolcraft Sites	Distance (Miles)
A	44 25 54 N 87 39 12 W	46 06 52 N 86 10 40 W	136.67
В	44 34 02 N 87 36 39 W	Same as above	154.54
A	Same as A above	46 23 22 N 86 10 40 W	127.61
В	Same as B above	Same as above	145.31
	Kewaunee Sites	Oceana Sites	Distance (Miles)
A	Same as A above	43 38 37 N 86 16 40 W	87.48
В .	Same as B above	Same as Above	92.00

	<u>Kewaunee Sites</u>	Grand Traverse	<u> Distance (Miles)</u>
A	Same as A above	44 38 34 N 85 34 30 W	103.67
В	Same as B above	Same as above	100.56

5. The separations between Manitowoc County, Wisconsin and Leelanau County, Michigan is as follows:

	Manitowoc Sites	<u>Leelanau Sites</u>	Distance (Miles)
A	44 12 43 N 87 43 13 W	44 54 24 N 85 51 10 W	103.93
В	44 02 34 N 87 50 54 W	Same as above	115.28

I appreciate you concerns on the over water paths between our two states. With the low power and 100' towers proposed in our respective plans, I feel confident that over water propagation can be minimized. I have the same concerns with your use of the co-channel assignments causing interference on our side of the Lake, but I am sure that with proper engineering and directional antennae, the problem can be minimized. I suggest that we agree to keep each other informed of any construction involving channels 605, 606, 608 and 610 in the above mentioned counties.

Sincerely,

Richard J. Shulak, P.E.

Chairman, Region 45

enclosure: Addenda Wis Plan

REGIONAL CONFORMANCE REVIEW COMMITTEE **REGION 54** ILLINOIS, INDIANA, MICHIGAN AND WISCONSIN

CHAIRMAN: Clarence Peech Illinois State Police 531 Sangamon Ave. Springfield, II 62702 (217) 782-7345

SECRETARY: Anthony J. Tricock Illinois State Toll Highway Authority One Authority Drive Downers Grove, II 60515 (708) 241-6800 Ext. 3401

Richard J. Shulak Chairman Region 45 P.O. Box 7912 Madison, Wisconsin 53707-7912

Dear Richard:

I have received the addition to the Wisconsin Region #45 plan and will add it to my copy per your request. This additional informaton leaves no doubt as to the intent of Wisconsin's plan to fully coordinate the sharing of all channels reserved for the State of Wisconsin with adjacent states and regions.

I also thank you for the additional information concerning the mitigation of concerns with the neighboring regional plans for Michigan and Illinois.

You have resolved the issues I stated in my first letter. Accordingly, I concur with the Region #45 plan and congratulate you for your fine effort. Please do not hesitate to contact me with any future concerns.

Sincerely,

Clarence E. Peecher, Chairman

SLM RCRC REGION #54

arence

920715a.rcc

cc: Carl Guse Donald Kottlowski David Held Richard DeMello Anthony Tricoci RCRC file

DSP-BUREAU OF

JUL 2 0 1992

COMMUNICATIONS

WISCONSIN REGION 45

June 10, 1992

George Snead Chairman, Illinois Region 13 State Police Communication Bureau 531 Sangamon Ave. Springfield, IL. 62706

Dear Mr. Snead:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

Please review this plan and respond in writing to any concerns that may adversely affect your region. We have set a cut off date of July 10, 1992 for comments. We have solicited comments from you and all adjacent regions to region 45. We intend to submit this plan to the Federal Communications Commission on July 20, 1992.

Thank you for your cooperation.

Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912

Madison, WI. 53707-7912

(608) 267-9799



800 MHz Region 13 Public-Safety Planning Committee

C/O: George Sneyd, Chairman
531 Sangamon Avenue, Springfield, Illinois 62702
Phone (217) 782-7345

July 8, 1992

Mr. Richard J. Shulak Chairman, Region 45 P.O. Box 7912 Madison, Wisconsin 53707-7912

Dear Mr. Shulak:

The Region 13 Regional Conformance Review Committee has reviewed your regional plan. We have some concerns that some of the unassigned channels and some of the channels assigned to the State of Wisconsin pose a possible interference problem to the Region 13 area. We would like to see a provision in your plan stating that these channels could not be used within seventy-five miles of Region 13 without the written concurrence of Region 13. These FCC channels are: 757, 764, 771, 773, 795, 799, 801, 809, 819, 821, and 823. With the exception of the issuance of these channels, we have no objection to the Region 45 Plan.

If I can be of further assistance please contact me at 217/782-7345.

Sincerely,

Turge truyd

George Sneyd, Chairman Illinois FCC Region 13

GS:vp

cc: Clarence Peecher
Stuart Marsh
Nelda Reifsteck
Gary Cochran
Lambert Fleck

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COMMUNICATIONS



SUU MIIIZ Kegion 13 Public-Safety Planning Committee

C/O: George Sneyd, Chairman
531 Sangamon Avenue, Springfield, Illinois 62702
Phone (217) 782-7345

July 17, 1992

Mr. Richard J. Shulak Chairman, Region 45 P.O. Box 7912 Madison, Wisconsin 53707-7912

Dear Dick:

The inclusion of the new page to the Region 45 Plan satisfies those concerns that were expressed in my letter dated July 8, 1992. With these concerns satisfied, Region #13 does not have any additional conflicts with the Region #45 Plan. On behalf of Region #13, please accept this letter as our concurrence to the Region #45 Plan.

Sincerely,

George Sneyd, Chairman Illinois FCC Region 13

GS:vp

cc: RCRC Members

DSP-BUREAU OF

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COMMUNICATIONS

June 10, 1992

Donald W. Kottlowski Chairman, Indiana Region 14 Indiana State Police Building 100 North Senate Ave. Indianapolis, IN. 46204

Dear Donald:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

Please review this plan and respond in writing to any concerns that may adversely affect your region. We have set a cut off date of July 10, 1992 for comments. We have solicited comments from you and all adjacent regions to region 45. We intend to submit this plan to the Federal Communications Commission on July 20, 1992.

Thank you for your cooperation.

Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912

Madison, WI. 53707-7912



Wisconsin Department of Transportation

Tommy G. Thompson Governor

Charles H. Thompson Secretary

DIVISION OF STATE PATROL 4802 Sheboygan Avenue P.O. Box 7912 Madison, WI 53707-7912

Donald Kottlowski Indiana State Police 8500 E. 21st Street Indianapolis, IN, 46219

July 7, 1992

Dear Don:

I've made one change to the Wisconsin 800 Mhz plan that calls for coordination between states on the use of the Statewide frequencies. This change reflects our telephone conversation about the need for Wisconsin to add some sort of coordination language to our plan so that there would be no misunderstanding of adjacent channel assignments.

While Wisconsin does not have its statewide frequency plan completed, I understand that Indiana has made some assignments to the northern regions of Indiana. As our statewide assignments are cochannel, I'd like to be kept informed of any construction that may affect Wisconsin. I'll do the same for you.

Sincerely,

Richard J. Shulak, P.E.

Chairman, Region 45

June 10, 1992

David H. Held Chairman, Michigan Region 21 Michigan State Police 714 S. Harrison Road East Lansing, MI 44823

Dear David:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

Please review this plan and respond in writing to any concerns that may adversely affect your region. We have set a cut off date of July 10, 1992 for comments. We have solicited comments from you and all adjacent regions to region 45. We intend to submit this plan to the Federal Communications Commission on July 20, 1992.

Thank you for your cooperation.

Frank Student

Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912

Madison, WI. 53707-7912

Michigan Public Safety FREQUENCY ADVISORY COMMITTEE

DIRECT ALL CORRESPONDENCE TO:

David Held, Frequency Advisor Michigan State Police Communications Division 714 South Harrison Road East Lansing, Michigan 48823

REPRESENTING:

Associated Public-Safety Communications Officers, Inc.
Michigan Association of Chiefs of Police
Michigan Sheriff's Association
Michigan Municipal League
Michigan State Police

June 19, 1992

Richard J. Shulak, P.E. Chairman Region 45 P.O. Box 7912 Madison, Wisconsin 53707-7912

Dear Richard:

The Michigan Frequency Advisory Committee for Region 21 Plan have reviewed your plan for Region 45 and have the following concerns that we would like addressed before we support your plan.

- 1. The frequencies allocated for use by the State of Wisconsin are identical to those allocated in the Region 21 Plan for Michigan and Illinois.

 Michigan currently has application on the way to the FCC for some of these frequencies across the border from Wisconsin. This problem may be difficult to resolve and I can only suggest that the adjacent State agencies involved may have to be required to get adjacent state concurrence before being allowed to use these channels in the future. We suggest that your plan include a requirement that anyone applying for these channels in Region 45 must coordinate with Michigan and Illinois.
- You have assigned channel 605 to Iron County, Wisconsin and it is already in the MI plan for Iron County, Michigan right across the border.
- 3. You have assigned channel 608 to Door County, Wisconsin and the MI plan has this channel in Emmet and Manistee County, Michigan right across Lake Michigan.

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- 4. You have assigned channel 606 to Kewaunee County, Wisconsin and that is right across the lake from Schoolcraft, Oceana and Grand Traverse County, Michigan where the same channel is assigned in the MI Region 21 Plan.
- 5. Channel 610 is assigned to Manitowac County, Wisconsin and is already assigned in the Region 21 Plan to Leelanau County, Michigan right across Lake Michigan.

For: Richard DeMello

Chairman, Region 21 MFAC

By:

Davie H. Held

Secretary, MFAC

DHH: kj

cc: William Folske Larry Zabkowski

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Wisconsin Department of Transportation

Tommy G. Thompson Governor

Charles H. Thompson Secretary DIVISION OF STATE PATROL 4802 Sheboygan Avenue P.O. Box 7912 Madison, WI 53707-7912

Michigan Public Safety Frequency Advisory Committee Mr. David Held, Frequency Advisor 714 South Harrison Road East Lansing, MI. 48823

July 6, 1992

Dear Mr. Held:

I have reviewed your letter of June 19, 1992 and would like to comment on your concerns.

- 1. I agree that the coordination of "State" frequencies is essential. I have added the same verbiage that you use on page 36H of the Michigan Region 21 plan to the Wisconsin plan. Enclosed is an addenda sheet that is to be added immediately before the page entitled "F.C.C. Channel Assignments".
- 2. While Iron County Wisconsin and Iron County Michigan are on the border, the counties are not right across the border as your letter suggests. The borders of the two counties are at least 45 miles apart. The actual separation between any mobile and a fixed site is much greater. The following is the calculated distances between the Wisconsin and Michigan sites:

	Iron County, WI	Iron County, MI	Distance (Miles)
A	45 22 42 N 86 53 59 W	46 12 12 N 88 22 02 W	84.93
В	46 12 54 N 90 07 38 W	Same as above	84.40
С	46 25 05 N 90 20 27 W	Same as above	95.62
D	46 49 38 N 90 20 27 W	Same as above	94.74

3. The calculated distance from our Door County sites to Emmet and Manistee are as follows:

	Door Co. Sites	Emmet Sites	Distance (Miles)
A	45 22 54 N 86 53 59 W	45 31 45 N 84 55 30 W	96.54
В	45 10 31 N 87 04 58 W	Same as above	107.87
С	45 00 05 N 87 13 46 W	Same as above	118.14
D	44 49 38 N 87 22 33 W	Same as above	129.14
E	44 46 09 N 87 35 44 W	Same as above	140.65
	Door Co. Sites	Manistee Sites	
A	Same as A above	44 20 31 N 86 03 33 W	82.62
B C D E	Same as B above Same as C above Same as D above Same as E above		76.47 73.47 73.10 81.39

4. The separation between Kewaunee County, Wisconsin and Schoolcraft, Oceana and Grand Traverse Counties, Michigan are as follows:

	Kewaunee Sites	Schoolcraft Sites	Distance (Miles)
A	44 25 54 N 87 39 12 W	46 06 52 N 86 10 40 W	136.67
В	44 34 02 N 87 36 39 W	Same as above	154.54
A .	Same as A above	46 23 22 N 86 10 40 W	127.61
В	Same as B above	Same as above	145.31
	Kewaunee Sites	Oceana Sites	Distance (Miles)
A	Same as A above	43 38 37 N 86 16 40 W	87.48
В	Same as B above	Same as Above	92.00

	<u>Kewaunee Sites</u>	Grand Traverse	Distance (Miles)
A	Same as A above	44 38 34 N 85 34 30 W	103.67
В	Same as B above	Same as above	100.56

5. The separations between Manitowoc County, Wisconsin and Leelanau County, Michigan is as follows:

	Manitowoc Sites	Leelanau Sites	Distance (Miles)
A	44 12 43 N 87 43 13 W	44 54 24 N 85 51 10 W	103.93
В	44 02 34 N 87 50 54 W	Same as above	115.28

I appreciate you concerns on the over water paths between our two states. With the low power and 100' towers proposed in our respective plans, I feel confident that over water propagation can be minimized. I have the same concerns with your use of the co-channel assignments causing interference on our side of the Lake, but I am sure that with proper engineering and directional antennae, the problem can be minimized. I suggest that we agree to keep each other informed of any construction involving channels 605, 606, 608 and 610 in the above mentioned counties.

Sincerely,

Richard J. Shulak, P.E.

Chairman, Region 45

enclosure: Addenda Wis Plan

June 10, 1992

Harry P. Hillegas Chairman, Minnesota Region 22 A-023 Government Center Minneapolis, MN. 55487-0007

Dear Mr. Hillegas:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

Please review this plan and respond in writing to any concerns that may adversely affect your region. We have set a cut off date of July 10, 1992 for comments. We have solicited comments from you and all adjacent regions to region 45. We intend to submit this plan to the Federal Communications Commission on July 20, 1992.

Thank you for your cooperation.

Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912

Madison, WI. 53707-7912

Minnesota Chapter



ASSOCIATED PUBLIC-SAFETY COMMUNICATIONS OFFICERS, INC.

July 30, 1992

Mr. Richard J. Shulak, Chairman Region 45 800 MHz Planning Committee P.O. Box 7912 Madison, WI. 53707-7912

Dear Mr. Shulak:

Thank you for the opportunity to review the proposed 800 MHz Plan for Region 45.

Considering that the "frequency packing" for your region and our adjacent Region 22 was accomplished by the CET program there should be little concern about their compatibility with each other.

As we mentioned in a phone conversation last year however we were not able to allocate as many channels in the seven (7) county Minneapolis/St. Paul metropolitan area as once desired. This metropolitan area has a population in excess of 2,250,000 which is 52 % of the state's total population, however its allocation of channels is in competition with some of your relatively less populated western counties such as St. Croix, Polk, and Pierce. For example, our Washington county with a population of 146,000 and a part of this fast growing seven county metropolitan area could only be allocated 6 channels. Conversely your two counties. St. Croix and Pierce, that border our Washington county on the St. Croix river and with a combined population of only 84,000 has a total of 15 channels.

There were other factors too that limited our allocation of channels in this metropolitan area and we realize that yours alone does not totally account for the apparent disparity.

At this time we would like request that the "door be left open" for adjustments in later years should our allocation be found to be too limited and yours not totally needed.

We wish you the best in implementing your 800 Plan. You will be receiving a final draft of the plan for Region 22 sometime in August. It is now being printed for distribution to all participants.

Thanks for your consideration and cooperation.

H. P. Hillegas, Chairman

Region 22 800 Planning Committee

A-023 Government Center

Minneapolis, MN 55487-0007

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June 10, 1992

Carl Lee Stevens Chairman, Iowa Region 15 Wallace State Office Building Des Moines, IA 50319

Dear Mr. Stevens:

Enclosed is the Wisconsin 800 Mhz plan for the 821-824/866-869 portion of the spectrum. This plan is for that portion of Wisconsin that was not part of the Southern Lake Michigan Region (Region 54). This plan was unanimously approved by a general meeting of 800 MHz participants held on May 23, 1992 at Fond du Lac, Wisconsin.

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Thank you for your cooperation.

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Richard J. Shulak, P.E.

Chairman Region 45

P.O. Box 7912

Madison, WI. 53707-7912



TERRY E. BRANSTAD, GOVERNOR

July 9, 1992

DEPARTMENT OF PUBLIC SAFETY
PAUL H. WIECK II, COMMISSIONER

Mr. Richard J. Shulak, P.E. Chairman, Region 45 P. O. Box 7912 Madison, WI 53707-7912

Dear Mr. Shulak:

We have reviewed your Wisconsin 800 MHz plan for the 821-824/866-869 portion of the spectrum and concur, with the following concerns noted.

Page 24 of the Public Safety Radio Communications Plan and the Associated Public Safety Communications, Inc., recommends that co-channel separation be seventy miles and adjacent channel separation be 40 miles. Special attention should be given to antenna height and power requirements during future frequency coordination involving the counties listed.

Jackson, WI (623) 62 miles from Howard (623)

Iowa, WI (643) 60 miles from Linn (643)

Crawford, WI (646) 51 miles from Linn (646)

Crawford, WI (612) 55 miles from Black Hawk (612)

Grant, WI (649) 22 miles from Winneshiek (650)

Grant, WI (605) 26 miles from Buchanan (604)

Iowa, WI (615) 21 miles from Duqueue (624)

Crawford, WI (612) 26 miles from Delaware (611)

Richland, WI (607) 61 miles from Jones (609)

Sincerely,

Lang Lee Stevens

GARY LEE STEVENS,

Director

GLS:mcc

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