REGION 55 800 MHz PLANNING COMMITTEE

Allen L. Capwell, Chairman Public Safety Building 151 North Main Street Warsaw, NY 14569

May 12, 1992

Ms Donna R. Searcy, Secretary Federal Communications Commission 1919 M Street N.W. Washington, DC 20554

Dear Ms Searcy:

Reference is made to General Docket 87-112 in the matter of Development and Implementation of a Public Safety National Plan.

Enclosed herewith is an original and. 6 copies of the Public Safety Communications Plan for the Western counties of upstate New York identified as Region 55.

This Plan is submitted in accordance with 90.16 and 90.34 of the Commission's Rules and Regulations, General Docket 87-112, and the United States-Canada Treaty, regarding the assignment of channels involved in this Plan.

The Regional Planning Committee wishes to applaud the Commission for its foresight in establishing local planning committees to assist the Commission in the channel allocation process.

Please feel free to contact this committee at any time, should you have questions, or need any additional information.

Very truly yours,

Allen L. Capwell

- REGIONAL PLAN -

THE WESTERN NEW YORK RADIO PLANNING COMMITTEE

(FCC-REGION 55) NEW YORK - BUFFALO

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- REGIONAL PLAN - THE WESTERN' NEW YORK RADIO PLANNING COMMITTEE

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THE WESTERN NEW YORK RADIO PLANNING COMMITTEE (FCC-REGION 55)

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- REGIONAL PLAN -

THE WESTERN NEW YORK RADIO PLANNING COMMITTEE

(FCC-REGION 55)

SCOPE

Introduction

When the Federal Communications Commission announced the 800 MHz allocation of reserve radio frequencies to Public Safety Radio Services and Special Emergency Radio Services (SERS) in July 1986, they mandated that a National Plan outlining the use of public safety radio frequencies must be in place before any agency would receive channels for this new allocation. As part of this mandate, Regional Plans conforming to the National Plan were to be developed. A Regional Plan for radio spectrum usage by public safety agencies in the Western New York State area was written by members of the Region 55 Radio Planning Committee. This group, representing a cross-section of public safety radio users in the Region 55 area, has among its members, the Associated Public Safety Communications Officers (APCO) local frequency advisor for this area of New York State.

See Appendix G.

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Purpose

The Regional Plan was developed to insure that maximum public benefit be derived from all radio communications systems used by eligibles that come under FCC rules for Public Safety Radio Services and SERS. The Plan was established with the objective of insuring that unassigned frequencies would be distributed in an equitable fashion with the priority given to those public safety agencies that are primarily responsible for the protection of life and property and that assigned frequencies were being utilized in the most efficient manner.

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AUTHORITY

Regional Planning Committee

Authority for the Regional Planning Committee to carry put its assigned tasks is derived from the Federal Communications Commission (FCC Report and Order, Docket 87-112).

Eligible Agency

Any entity, agency, or sub-agency which is eligible to be licensed under Subparts B or C of Part 90 of the FCC Rules and Regulations, Federal Agencies, and other interested parties are eligible for membership on this Regional Planning Committee. Each agency or sub-agency of a governmental agency which is entitled to hold a license in one or more of the Radio Services listed under Subparts B or C of Part 90 shall be considered to be a separate entity up to a maximum of one agency or sub-agency, for each Radio Service listed under those subparts. For example, a city could have separate entities for Local Government, Police, Fire, Highway Maintenance, Forestry Conservation, and Special Emergency.

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Participating Agency

Any ELIGIBLE AGENCY who has had a representative attend at least one previous meeting of the Region 55 Planning Committee shall be a Participating Agency.

Agency Representative

Agency Representative is a person who is employed by a PARTICIPATING AGENCY, or in the case of a PARTICIPATING AGENCY which is comprised solely of volunteers, any person who is a member in good standing of that agency. A person may represent only one PARTICIPATING AGENCY at a Regional Planning Committee Meeting.

Voting

Except for Federal Agencies and some Commercial Entities, each PARTICIPATING AGENCY who has an AGENCY REPRESENTATIVE in attendance at the Regional Meeting shall be allowed one vote on any matter brought before the Committee for a vote. If there is more than one AGENCY REPRESENTATIVE from a PARTICIPATING AGENCY present at the meeting, they must decide among themselves on how their agency vote is to be cast. Federal Agencies and Commercial Entities, not eligible to be licensed under Subparts B or C of Part 90 of the Commissions Rules, shall not be entitled to vote.

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Listing of Persons end Agencies who have been Credentialed

The Secretary of the Region 55 Planning Committee shall REQUIRE, as part of the "sign-in" procedure for any Regional Meeting, the name of the individual and the name of the Agency (including any sub-agency, such as the Police Department) that the individual is representing. The Secretary shall keep a separate listing by PARTICIPATING AGENCY of all individuals who have been credentialed for that Agency.

Challenges to Credentials

If the credentials of any individual or agency are challenged by a member of the Regional Committee, the matter shall be referred to the members of the Administrative Committee who are present at the meeting. The Administrative Committee shall make a recommendation to the Chairman of the Regional Planning Committee as to the proper agency representative and that the matter be brought before the entire Regional Planning Committee for resolution.

Sub-Committees

There are four Sub-Committees, Administrative, Operations, Technical, and Regional Plan Update.

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 in the country may differ from the Plan for this area due to dissimilar situations. By officially sanctioning the Plan, the FCC 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 Service but, rather, it provides procedures that are the consensus of the public safety radio services user agencies in the Region. If there is a perceived conflict, then the judgment of the FCC will prevail.

Federal Interoperability

Interoperability between Federal, State and Local Governments during both daily and disaster operations will take place, primarily, 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 account for up to 2% increase in mobile units, provided that written documentation from Federal agencies supports at least that number of increased units.

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Regional Plan Update Committee

With the approval of the Regional Planning Committee, the Chairman shall appoint a Regional Plan Update Committee (RPUC). This Committee will remain in place to recommend changes in the Regional Plan to the FCC and provide a mechanism for inter-regional resolution of problems which arise.

The standing membership of the RPUC shall consist of the APCO designated local frequency advisor for the Regional Planning Area, two members each representing the three geographical areas of Region 55 - Rochester, Buffalo and Elmira (6 members). In no case shall any radio service have a majority membership.

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The following rules and procedures shall be established:

- elect a Chairman
- develop a mechanism to fill Committee vacancies
- with FCC approval modify Committee membership
- set response time to process received frequency applications
- Publish meeting schedule
- determine Committee voting standards
- develop applicant appeal process
- audit implementation of those systems, subject to the Plan
- enact policy for frequency give-backs
- maintain coordination with neighboring regional Committees
- participate in the annual meeting of adjacent regional Committees
- promulgate other rules and procedures as required.

It should be noted that the FCC will not fund any expenses incurred by the RPUC.

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SPECTRUM UTILIZATION

This portion of the Plan provides a basis for proper spectrum utilization. Its purpose is to guide the Committee in their task of evaluating the implementation of radio communication systems within the Region.

Region Defined (See Appendix E)

A region is a geographic area that is designated a region for some noteworthy purpose. In the Region 55 area for Public Safety Communications purposes, it is that area of Upstate New York having significant population and multiple administrative jurisdictions, consisting of the Counties of Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming and Yates. Within this region are the major cities of Buffalo, Rochester, and Niagara Falls, along with their heavily populated suburbs.

The total population of the area as outlined below is 2,840,302 people according to the 1990 Census; 15.8% of the entire State of New York. Within this region are a plethora of jurisdictions ranging from state governments, to quasi-municipal organizations, crossing county lines, towns, villages, water districts, fire districts, etc., with many involved in public safety. Their involvement extends from search and rescue during crisis to immediately responding to the replenishment and repair of roadways, lights, power, etc.

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The Region adjoins the major population center of Canada: the Province of Ontario including the City of Toronto. For radio communications planning purposes, this proximity increases the area population to approximately 9.5 million people and significantly impacts the availability of radio spectrum and the need for spectrum efficiency and a comprehensive spectrum usage clan.

A majority of the Region 55 area lies within the Canadian Treaty impact zone. In most Public Safety Services, the pool of frequencies in the $150-170~\mathrm{MHz}$ and 420, $450-470~\mathrm{MHz}$ bands have been exhausted in the high population areas of this Region.

At the time of filing this Plan, the currently identified needs of Region 55 can be met through the use of the 800 MHz band.

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Usage Guidelines

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.

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."

Systems which do not meet FCC loading standards will be required to share the frequency on a non-exclusive basis.

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

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

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 city/county-multiple municipality government pubic safety radio users as an be managed technically.

The city/county-multiple municipality agency or agencies, depending upon system loading and the need for multiple systems within an area, must provide inter-communication between areawide systems. In a multi-agency environment, a lead agency using 800 MHz spectrum must implement the Common Channels in this band, as mandated by the National Plan. Such implementation must be reviewed and approved by the Committee.

In order to provide a title for the next level of communication system, the term "Town" is used to define the level below city/countywide. "Town" communication, for Regional Plan 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 town 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 the public safety service must then consider uniting their communications efforts to form one large system, or forfeit use of the limited 800 MHz spectrum.

Where smaller conventional 800 MHz channel needs are requested, the 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. Harmful co-channel interference within an authorized area of coverage will be examined on a case by case basis.

A requesting applicant for radio communications in the 800 MHz public safety services in this Region will be required to provide loading criteria information 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 area of coverage to the boundaries of the applicant's agency's jurisdiction must be observed. Overlap or extended coverage must be minimized even where systems utilizing 800 MHz trunked radio are proposing to intermix systems for cooperative and/or mutual aid purposes.

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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 the necessary coverage with the proper amount of ERP. All necessary precautions will be taken to gain maximum reuse of the limited 800 MHz spectrum.

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

Reallotment of Frequencies

It is anticipated that, in all but the most unusual cases, frequencies presently utilized by a licensee will be turned back for reassignment. The FCC authorized frequency coordinators will be responsible for allotment of the channels to the various agencies awaiting channels in the lower frequency bands. Normal coordination procedures will be followed with these turn back channels except that the application evaluation criteria established in the National Plan and further defined in this Regional Plan is to be considered by the appropriate Frequency Coordinator.

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In such cases where specific channels are required by numerous applicants, the applicant evaluation matrix of this plan will be utilized by the Frequency Coordinator. In all cases, area of coverage criteria and channel loading criteria will be applied, except upon unique circumstances after receiving a waiver from the Regional Planning Committee. It is not consistent with the goals and objectives of this Region to permit the direct assignment of radio frequencies between agencies. All frequencies are to be returned to their respective pools to be allotted to the most beneficial use. Similarly, an agency should not be able to "farm down" frequencies to other services within their political structure simply to take advantage of surplus equipment. The need for communications by such an agency may be outweighed by the needs of another political subdivision.

This Regional Plan will consider for planning purposes the communication needs of all current eligibles under the FCC's Public Safety Radio Services and Special Emergency Radio Services. Additionally, this Regional Plan will consider the communication needs of those public safety service associated operations as the Regional Planning Committee may deem necessary and desirable for local area needs.

Supplement to the Application Form

With each application form (modified APCO Form FDR2) submitted directly to the local frequency advisor, the applicant shall also supply the following supplemental information:

- Details of engineering survey showing radio coverage will not exceed applicants minimum requirements.
- Explain how system will be used to communicate with other services in other bands.
- Explain any budget commitment that has been made for the proposed system.
- Explain how system will interface with long distance radio communications such as amateur radio, satellite communications and/or long-range emergency preparedness communications systems.
- Statement of need for installing a new 800 MHz system.
- Explain and certify that the applicant's agency will comply with the common channel implementation requirements.
- Provide details of all existing channels used by the applicant within 70 miles of the proposed system.

"Slow Growth" Authority

All Public Safety applicants of Region 55 shall be considered "Slow Growth" in accordance with applicable Federal Communications Commission "Slow Growth" Rules in effect at the time of application.

Each form 574 submitted by a Public Safety applicant for coordination/licensing must clearly indicate "Slow Growth" authority is being requested.

COMMUNICATIONS REQUIREMENTS

Common Channels - Defined

In accordance with the FCC R&R 90.16, 90.34 and 90.619(c)(1), and the National Plan (Report and Order in General Docket 87-112), channel 601 (821/866.0125 MHz) is designated as a calling channel; and channels 639 (821/866.5125 MHz), 677 (822/867.0125 MHz), 715 (822/867.5125 MHz), and 753 (823/868.0125 MHz) are designated as tactical channels for mutual aid purposes. These channels are, by international agreement between the United States and Canada, available for mutual aid use in both countries. The channel names will, therefore be identified with the "I" prefix, as in ICALL and ITAC-1 thru ITAC-4.

Common Channel Implementation

The implementation of the common channels required under the National Plan will utilize a two tier network.

1. The calling channel, ICALL, will be implemented as full mobile relay Wide area coverage transmitters to be installed by large system users (5 channels or more). The location of these transmitters shall be assigned by mutual agreement between the applicant, Regional Planning Committee, and the local frequency advisor to maximize regional coverage.

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Large systems users (5 channels or more) of 800 MHz may be required to provide satellite receiver feeds into this wide area transmitter's area of coverage. A watch will be maintained on this channel using control stations. Any agencies in the Regional Planning area may be required to operate a control station for the purpose of monitoring and rendering assistance on the calling channel.

Each licensee of more than five 800 MHz channels must be willing to provide sufficient satellite receivers for in street mobile coverage within their system area, consistent with their system coverage requirements.

2. Tactical Channels will be geographically distributed throughout the region. (See ITAC-1 thru ITAC-4 Channel Assignment by County on pages 33 and 34.)

Each major user (5 channels or more) of 800 MHz will be required to sponsor, individually or jointly, one or possibly two localized mobile relays to cover specific geographic areas. This will give a fixed number of working channels in an area. Depending upon the needs in an area, multiple channels could be implemented. The placement and coverage of these systems will be controlled to permit reuse several times within the Region. Talk-around on all four tactical channels will provide additional on-scene communications to supplement the localized mobile relay. In addition, talk around will also provide on-scene communication in areas where there exists no localized mobile relay.

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Areas of Operation

The total area of operation shall encompass the Region as defined elsewhere in the Plan, and shall extend outward to include the total system area of any system which is licensed pursuant to this plan.

Operation on the Common Channels

The five National Mutual Aid channels are to be used in accordance with the Operating Procedures set forth below, and only for activities requiring inter-communications between agencies not sharing any other compatible communications system.

The five National Mutual Aid channels are not to be used for daily operations or for interagency communications which can use other communications channels. In major emergency situations, one or more additional tactical channels may be assigned by the primary Public Safety dispatch center after primary and secondary default assignments have been used. (See pages 33 and 34.)

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 Special Emergency Radio Services may also participate to the extent required to ensure the safety of the public.

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Sub-Regions

The Region shall be broken down into sub-regions that conform with political boundaries. Within each sub-region the Regional Planning Committee shall designate an appropriate agency to establish a primary Public Safety dispatch center.

Each such dispatch center shall operate a base station on the National Public Safety Calling Channel (ICALL) as well as on the four National Public Safety Tactical Channels (ITAC-1 thru ITAC-4) and shall be responsible for coordination with adjacent primary Public Safety dispatch centers.

Operating-Procedures

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

Users will be coming from varied backgrounds and disciplines each having their own language. Any attempt to introduce a new code would only confuse the issue and cause confusion and possibly even rejection of the interoperability concept.

Calling Channel (ICALL)

The calling channel shall be used to contact other users in the Region who can render assistance at an incident. This channel shall not be utilized as a working channel. Encrypted transmissions are not permissible on this channel. Once contact is made between agencies, a designated tactical channel shall be used for continued communications.

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Tactical Channels (ITAC-1 thru 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 responsible for that area. These frequencies may be subdivided into use by various services of public safety as needed.

Network Operating Method

A network will be established on the calling channel, ICALL. This network will be wide area to cover large sections of the Region. Multiple networks may be required to fully cover the outlying areas of the Region. Multi-state coverage networks are encouraged to be monitored by selected agencies.

Communications systems on ITAC-1 thru ITAC-4 will be implemented by agencies who agree in their application to do so. Mobile relay stations operating on ITAC-1 thru ITAC-4 will provide limited coverage to permit maximum reuse of the channel within the Region and in adjacent regions.

Encryption Standards

Encryption shall be permissible on the Tactical Channels, only when utilized with hardware capable of receiving encrypted and non-encrypted transmissions, and after having been prearranged with the primary Public Safety dispatch center.

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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 lead agencies within this region. These agencies shall integrate the appropriate interface to the five national channels as a minimum. Such long distance radio communications might be Amateur Radio Service communications: Including the Amateur Radio Emergency Service (ARES), the Radio Amateur Civil Emergency Service (RACES), and the related Military Affiliated Radio System (MARS); satellite communications facilities; and/or long-range emergency preparedness communications systems, such as Operation SECURE and other local government radio service channels in the 2 to 8 MHz bands. Interface may be by any means - automatic or manually controlled direct retransmission, or by simply repeating a message.

Any and all such long-range communications capabilities 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 earth-quakes, hurricanes, floods, widespread forest fires or nuclear reactor incidents could require the need for such long range communications.

Cellular Telephone and RF Interference

The cellular telephone service is a rapidly developing and expanding service in this Region. Such systems have facilities and cell capacity more specifically designed for the longer transmission durations associated with telephone conversations. There are numerous public safety applications for this service, such as the use of cellular biotelemetry in the provision of emergency medical services, direct long distance communications required to deal with hazardous materials incidents, etc. Such mobile telephone service currently provides a "one-to-one" communication link, not a fleet communications directed at multiple units, as is typical of most public safety applications. Nevertheless, there is clearly a limited role for the interconnection of the cellular telephone network into the common tactical channels.

In this Region, cross-connected communications into the four tactical channels may be utilized but only under manual control by a control point.

Under no circumstances will cross-connected communications into the national calling channel be permitted.

Expansion of Existing Systems

Existing systems that are to be expanded to include the frequency bands of 821-824/866-869 MHz may have their mobile radios 'grandfathered' provided that they are modified in conformance with the Memorandum Opinion and Order - FCC Docket 87-112. Existing base stations in the frequency bands 806-821/851-866 MHz shall not be used, unless they are appropriately type accepted, in the frequency bands 821-824/866-869 MHz.

Coordination with Adjacent Regions

The interoperability aspects of this Plan are consistent with those proposed in Region 30, New York - Albany Radio Planning Committee and Pennsylvania Region 28.

As Pennsylvania, Region 36, and Ohio, Region 33, develop their Plans, both this Region's Plan and the appropriate members of our Committee will be available to ensure compatibility. We anticipate inter-regional cooperation in the implementation of the common channels in areas which comprise our common borders.

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IMPLEMENTATION AND PROCEDURES

Notification

A series of informational meetings were held in two locations across New York State for the purpose of familiarizing eligibles with the NPSPAC Final Report and the Regional Planning process required by Report and Order 87-112.

All interested parties were invited to participate in the development of this Regional Plan. This notification was accomplished by the FCC issuing a Public Notice. In addition, the mobile communications print media were contacted by the "convener" and made aware of the Committee's formation. Also notified were State and Local Government Agencies concerned with emergency management as well as Federal Agencies responsible for National Security and Emergency Preparedness. See Appendix H.

Frequency, Allocation Process

In performing the allocation process, the Committee used a combination of computerized and a manual method. (See Appendix F), as this offered maximize spectrum utilization under the unique conditions in Region 55. The Committee also considered the results of a recent demographic study to determine the future needs of applicants (see Appendix B). Any system that may frequency impact a neighboring planning region has been coordinated by the respective Committee Chairmen of the affected regions.

The Plan incorporates a filing "window" concept which will provide for the evaluation of all applications for the available spectrum at the same time. (The Committee established December 15, 1989 as the closing of the first window.) The response was underwhelming, probably due to fiscal conditions. Two applications were received from the New York State Police, seeking uniform statewide channels. A second "window" will be established within 90 days of plan approval. The flow chart, entitled "Evaluation Matrix" (see Appendix A), shows the sequence of events that will be followed in the allocation of the 6 MHZ of 800 MHz spectrum. This process follows the guidelines established under the National Plan:

The allocation is placed in the frequency pool (Block #1). If frequencies are available in the pool (a second iteration of the evaluation matrix could occur if all frequencies are not allocated on the first iteration), a window opening announcement is made (Block #2). The window period will be thirty days (Block #3 through Block #4) with late applications rejected (Block #5). Applications are received and reviewed during the window period by the local frequency advisor (Block #6).

The Regional Plan Update Committee (RPUC) will consult with State Communications Planning Administrators, where they exist, to determine if the application is in compliance with State Plans (Block #7).

An application that is not in compliance with an existing State Plan will be rejected at this point (Block #8) and returned to the applicant with an explanation of the reason(s) for rejection.

Having passed the tests of State Plan compliance and the needs assessment, the RPUC will apply the evaluation matrix (Block #9).

The implementation of the evaluation matrix will result in the award of a score for each application. That score is the total of the points awarded in seven categories, with a maximum possible score of 1000 points. Prior to the allocation of points for the seven categories, a needs assessment review is conducted (Block #10). The applicant submits a statement of need for the requested frequencies. This statement of need serves as an over-view of the proposed system. The seven categories are as follows:

- 1. Service (Block #11) maximum score 350 points. Each of the eligible services has a predetermined point value (Appendix D). That point value is multiplied by ten (10) to determine the score for the Service Category. An applicant with multiple services will be scored on the basis of the percentage that each service represents of his total system. That is, a system that is 50% police and 50% local government (school administration) would be awarded the total of 50% of the point value for police plus 50% of the point value for school administration.
- 2. Intersystem Communications (Block #12) maximum score 100 points. The application is scored on the degree of interoperability that is demonstrated, with a range of points from 0 to 100.

This category does not rate the application on the inclusion of the mandated five common channels for interoperability. This category does rate the application on his proposed ability to communicate with different levels of government and services during times of emergency.

- 3. Loading (Block #13) maximum score 150 points. Those applicants that have demonstrated they are part of a cooperative, multi-organization systems, will be scored on a range of 0 to 100 points depending upon the extent of the cooperative system. An expansion of an existing 800 MHz system will be scored on a range of 0 to 50 points, depending upon the degree of expansion. A system could be an expansion of an existing 800 MHz and a cooperative system as well and, as a result, receive the combined point values for these two sub-categories for a maximum value of 150 points.
- 4. Spectrum Efficient Technology (Block #14) maximum score 100 points. This category scores the applicant on the degree of spectrum efficient technology that the system demonstrates. A point value range of 0 to 100 points can be awarded for this category. A trunked system would be considered a spectrum efficient technology as well as any technological system feature which is designed to enhance the efficiency of the system and provide for the efficient use of spectrum.

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- 5. Systems Implementation Factors (Block #15) maximum score 100 points. This category scores the applicant on two factors, budgetary commitment and planning completeness. The degree of budgetary commitment is scored on a range of 0 to 50 points. An applicant that demonstrates a high degree of commitment in funding the proposed system will receive the higher score. Each applicant will be scored on the degree of planning completeness with a range of scoring from 0 to 50 points. Applicants will be required to submit a timetable for the implementation of the communications system or systems.
- 6. Geographic Efficient (Block #16) maximum point value of 100 points. Each applicant will be scored on the level of geographic efficiency, scoring will be based upon two subcategories, the ratio of mobiles to area covered and the channel reuse potential. The ratio of mobiles to area covered measures the level of efficient coverage that a system demonstrates. The higher the ratio (mobiles divided by square miles of coverage) the more efficient the use of the frequencies. The ratio of mobiles to area covered is scored on a scale of 0 to 50 points. Those systems which cover large geographic areas will have a greater potential for channel reuse and will, therefore, receive a high score in this sub-category. The level of channel reuse potential is scored on a scale of 0 to 50 points.

7. Givebacks (Block #17) - maximum score 100 points. The applicant is scored in two sub-categories: the number of channels given back and the extent of availability of those channels to others. The greater the number of channels given back the higher the score will be, with range of points of 0 to 50. The greater the level of availability of the give backs, the higher the score will be in the subcategory for availability to others with a range of points of 0 - 50.

Points are totaled for each application (Block #18) and the applications are prioritized by the RPUC (Block #19). The frequency pool is allocated (Block #20), the Appendix to the Regional Plan is updated, The Plan is then sent to the FCC for review and approval, as outlined in the Report and Order, Docket 87-112 (Block #21). The license applications are then submitted and simultaneously coordinated by APCO. After this point, the FCC would grant the license(s) to the applicant (Block #23).

The licensee, under "slow growth" has three years to implement the system. Should system implementation not begin (award of contract) within a two year period, or if projected channel loading is not attained within three years after granting of license, the channels will be returned for reallocation to others.

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The implementation of systems is monitored by the RPUC who determines if progress is made on the implementation of the system (Block #24). Monitoring of system implementation will take place at the above designated intervals. If progress is made the system is ultimately implemented (Block #26). If progress is not made the licensee is warned of the consequences of his lack of progress (Block #27). The local designated frequency advisor continues to monitor progress on the implementation of the system (Block #28). If the continued monitoring indicates that progress is still not being made, the licensee is notified of pending action to withdraw the license (Block #29). The notified licensee can appeal this action (Block #30) or can allow the license to be withdrawn. If the allocated frequencies are withdrawn, they are added back to the frequency pool (Block #32) and the process starts a second iteration at Block #1.

Appeal Process

Throughout the frequency allocation process, applicants are given opportunities to appeal decisions which have caused rejection of their application. The appeal process has two levels: the full Region 55 Committee and the FCC, who decides to appeal a rejection should initiate that appeal immediately upon notification of rejection. In the event that an appeal reaches she second level, the FCC, their decision will be final and binding upon all parties.

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- REGIONAL PLAN -.

THE NEW YORK-BUFFALO RADIO PLANNING COMMITTEE

CHANNEL PLAN

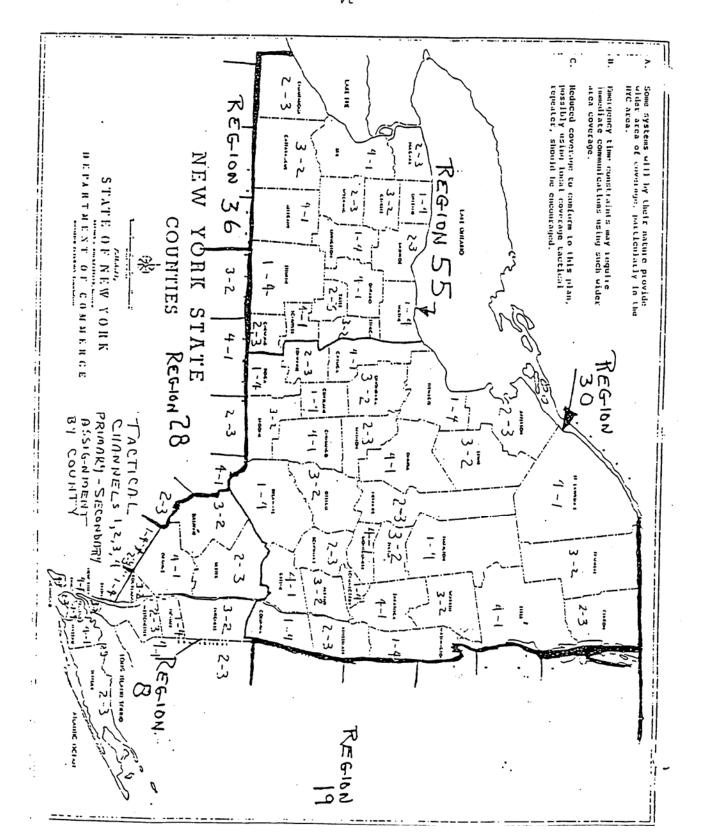
ITAC-1 thru ITAC-4 CHANNEL ASSIGNMENT BY COUNTTY

COUNTY	PRIMARY	SECONDARY
ALLEGANY	4	1
CATTARAUGUS	3	2
CHAUTAUQUA	2	3
CHEMUNG	2	3
ERIE	4	1
GENESEE	3	2
LIVINGSTON	1	4
MONROE	2	3
NIAGARA	2	3
ONTARIO	4	1
ORLEANS	1	4
SCHUYLER	4	1
SENECA	3	2
STEUBEN	1	4
WAYNE	1	4
WYOMING	2	3
YATES	2	3

NOTE A: Some systems will by their nature provide wider area of coverage than the boundaries of the County indicated in the table.

NOTE B: Emergency time constraints may require immediate communications using such wider area coverage.

NOTE C: Reduced coverage to conform to this Plan, possibly using a local coverage tactical repeater, should be encouraged.



CHANNEL ASSIGNMENTS BY APPLICANT / COUNTY

The Region 55 area is surrounded by Canada, Region 30, Region 28, and Region 36. As such, the availability of channels meeting acceptable distance to system radius (D/R) ratios outside the channel allotment limitations of the Canadian Sharing Zone is quite limited. A computer program was written to exclude Canadian Sharing Zone channels, perform distance and D/R ratio calculations, from each of the Region 55 site locations against the site locations of previously allotted channels in the three Regional Planning Areas noted above. Their data had been provided to Region 55 following the CET computer packing runs.

Those channels which were requested for Region-wide or State-wide reserved use and not in conflict with the Canadian Sharing Zone channel restrictions are assigned first. Then, those channels which remain and produce acceptable D/R ratios (5 minimum for co-channel and 3 minimum for adjacent channel), are listed in order of the following:

 Counties outside the Canadian Sharing Zone are provided channels below channel 759 to the extent possible up to their defined level (6 channels - all are below 150,000 population) in priority order by population.
 No channels closer than 50 KHz are permissible within a county or immediately adjacent to a county.

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CHANNEL ASSIGNMENTS BY APPLICANT / COUNTY (continued)

2. Remaining counties are provided channels above channel 759 in priority order by population. No channels closer than 50 KHz are permissible within a county or immediately adjacent to a county.

By this procedure, only Steuben, Chemung, and Niagara counties were able to achieve their allotment totals of 6, 6 and 9 respectively. All other counties received significantly less or none at all (i.e., Erie 11 out of 40, Monroe 11 out of 30)

Since all county assignments are pool assignments, subject to coordination with adjacent regions, the Regional Planning Committee has decided to submit the list of channels which could be allotted by any county. In that manner, on a "first come -first served" basis, an applicant may request any channel(s) listed to a county, subject to inter-regional coordination at the time of application. Upon issuance of an allotment to an applicant, those channel(s) would be removed from pool status and the list of available pool channels would be revised along with listing the applicant allotment. In accordance with the Canadian Treaty, all stations located within the Sharing and Protection Zones would be restricted to 500 Watts ERP and 500 feet.

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CHANNEL ASSIGNMENTS BY APPLICANT / COUNTY (continued)

REGION-WIDE RESERVED CHANNELS:

- All Eligibles channel 830 (Low Power 7.5 Watts ERP, mobile only.)
- All EMS Eligibles channel 822 (Low Power 7.5 Watts ERP, mobile only.)
- All Fire Eligibles channel 820 (Low Power 7.5 Watts ERP, mobile only.)
- All Police Eligibles channel 824 (Low Power 7.5 Watts ERP, mobile only.)
- New York State Department of Environmental Conservation -channel 794.
- New York State State Emergency Management Office channel 792.
- New York State Police (in the Counties of Chemung, Schuyler and Steuben) 602, 640, 678, 716 and 754
- New York State Police (Low Power 7.5 Watts ERP) channels 826, 827,828, and 829.

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- REGIONAL PLAN -

THE NEW YORK-BUFFALO RADIO PLANNING COMMITTEE (FCC-REGION 55)

CHANNEL ASSIGNMENTS BY APPLIQIVT / COUNTY (continued)

REGION-WIDE GUARD CHANNELS:

The following channels are not to be allotted in order to protect receiver operations on adjacent reserved channels: 603, 641, 679, 717, 755, 791, 793, 795, 819, 821, 823, 825.

POOL ALLOTMENTS:

The following channels are pool allotments by county, available on a "first come - first served" basis. In a competitive "application filing window" process, the highest scoring applicant would be afforded priority over others of lower score. "*" = preferred choice.

- 619 Steuben
- 621 Steuben*
- 637 Steuben*
- 642 Schuyler
- 643 Steuben
- 645 Steuben
- 649 Chemung *, Schuyler
- 658 Steuben
- 659 Steuben, Schuyler*
- 661 Steuben
- 663 Steuben
- 664 Chemung, Schuyler, Steuben*
- 665 Chemung, Schuyler, Steuben
- 666 Chemung, Schuyler, Steuben
- 668 Chemung, Schuyler, Steuben
- 670 Chemung, Schuyler, Steuben *
- 672 Schuyler, Steuben
- 673 Chemung, Schuyler, Steuben
- 675 Chemung *, Schuyler, Steuben
- 685 Chemung *, Schuyler, Steuben
- 687 Chemung, Schuyler, Steuben
- 688 Chemung, Schuyler, Steuben
- 690 Schuyler *, Steuben
- 692 Schuyler, Steuben
- 693 Chemung, Schuyler, Steuben
- 694 Chemung *, Schuyler, Steuben
- 695 Chemung, Schuyler, Steuben
- 696 Chemung, Schuyler, Steuben
- 705 Schuyler, Steuben*
- 706 Chemung
- 713 Schuyler, Steuben*
- 729 Chemung *, Schuyler, Steuben
- 730 Steuben
- 732 Steuben
- 733 Chemung, Schuyler, Steuben
- 734 Schuyler, Steuben
- 735 Chemung *, Schuyler, Steuben

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CHANNEL ASSIGNMENTS BY APPLICANT / COUNTY (continued)

POOL ALLOTMENTS (continued)

- 741 Chemung, Schuyler *, Steuben
- 742 Schuyler, Steuben
- 747 Steuben
- 749 Steuben
- 757 Chemung, Schuyler, Steuben
- 759 Chemung, Schuyler *, Steuben
- 761 Erie, Monroe, Niagara *, Livingston, Genesee, Wyoming, Orleans, Steuben
- 762 Erie, Monroe *, Niagara, Wayne, Ontario, Livingston, Genesee, Allegany, Wyoming, Orleans, Seneca, Yates, Steuben, Chemung, Schuyler
- 763 Erie *, Monroe, Niagara, Livingston, Genesee, Allegany, Wyoming, Orleans, Steuben, Chemung, Schuyler
- 764 Monroe, Niagara, Wayne *, Ontario, Livingston, Genesee, Wyoming, Orleans, Seneca, Yates, Schuyler
- 765 Monroe, Niagara *, Genesee, Orleans
- 767 Monroe *, Niagara, Genesee, Orleans
- 768 Erie *, Niagara, Genesee, Allegany, Wyoming, Orleans
- 769 Erie, Monroe, Niagara, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Steuben
- 770 Erie, Monroe, Niagara *, Ontario, Livingston, Genesee, Wyoming, Orleans, Yates, Steuben
- 771 Erie, Niagara, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Steuben, Chemung, Schuyler
- 772 Erie *, Monroe, Niagara, Chautauqua, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Yates, Steuben, Chemung, Schuyler
- 773 Erie, Niagara, Genesee, Allegany, Wyoming, Orleans
- 774 Erie, Monroe *, Niagara, Chautauaua *, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans
- 775 Erie, Niagara, Chautauqua, Cattaraugus, Genesee, Allegany, Wyoming, Orleans
- 776 Erie *, Monroe, Niagara, Chautauqua, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Yates, Steuben, Chemung, Schuyler
- 777 Erie, Monroe, Niagara, Chautauqua, Wayne *, Ontario, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Seneca, Yates, Steuben, Schuyler
- 778 Erie, Monroe, Niagara *, Chautauqua, Ontario, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Yates, Steuben
- 779 Erie, Monroe *, Niagara, Livingston, Genesee, Wyoming, Orleans
- 780 Niagara, Genesee, Orleans
- 781 Erie *, Monroe, Niagara, Livingston, Genesee, Wyoming, Orleans, Steuben
- 782 Erie, Niagara, Chautauqua, Cattaraugus, Genesee, Allegany, Wyoming, Orleans

CHANNEL ASSIGWENTS BY APDLICANT / COUNTY (continued)

POOL ALLOTMENTS (continued)

- 783 Erie, Monroe.*, Niagara, Chautauqua *, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Yates, Steuben
- 784 Erie, Monroe; Niagara *, Livingston, Genesee, Allegany, Wyoming, Orleans
- 785 Monroe, Niagara, Livingston, Genesee, Wyoming, Orleans
- 786 Erie *, Niagara, Genesee, Wyoming, Orleans
- 787 Erie, Monroe *, Niagara, Livingston, Genesee, Wyoming, Orleans
- 788 Erie, Monroe, Niagara, Wayne, Genesee, Orleans
- 789 Erie, Monroe, Niagara, Wayne, Livingston, Genesee, Wyoming, Orleans
- 790 Erie, Monroe, Niagara, Wayne, Livingston, Genesee, Wyoming, Orleans
- 797 Erie, Monroe, Niagara, Chautauqua, Wayne, Ontario, Livingston, Genesee, Wyoming, Orleans, Seneca, Yates, Schuyler
- 798 Erie *, Monroe, Niagara, Chautauqua, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Steuben, Chemung, Schuyler
- 799 Erie, Monroe *, Niagara, Ontario, Livingston, Genesee, Wyoming, Orleans, Yates, Steuben, Schuyler
- 800 Niagara *, Genesee, Orleans, Chemung, Schuyler
- 801 Erie, Monroe, Niagara, Livingston, Genesee, Wyoming, Orleans
- 802 Erie *, Niagara, Chautauqua, Cattaraugus, Livingston, Genesee, Allegany, Wyoming, Orleans, Steuben, Schuyler
- 803 Erie, Monroe *, Niagara, Chautauqua *, Cattaraugus, Livingston, Genesee, Wyoming, Orleans
- 804 Erie, Monroe, Niagara *, Wayne, Genesee, Wyoming, Orleans
- 805 Monroe, Niagara, Wayne, Livingston, Genesee, Wyoming, Orleans
- 806 Erie, Monroe, Niagara, Genesee, Orleans
- 807 Erie *, Monroe, Niagara, Chautauqua, Livingston, Genesee, Wyoming, Orleans
- 808 Erie, Monroe *, Niagara, Chautauqua *, Cattaraugus, Livingston, Genesee, Wyoming, Orleans, Yates
- 809 Erie, Monroe, Niagara *, Livingston, Genesee, Wyoming, Orleans
- 810 Erie, Niagara, Chautauqua, Genesee, Orleans
- 811 Erie *, Monroe, Niagara, Livingston, Genesee, Wyoming, Orleans, Seneca, Yates
- 812 Erie, Niagara, Livingston, Genesee, Wyoming, Orleans
- 813 Niagara *, Genesee, Orleans
- 815 Niagara, Genesee, Orleans
- 815 Erie, Monroe *, Niagara, Livingston, Genesee, Allegany, Wyoming, Orleans

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CHANNEL ASSIGNMENTS BY APPLICANT / COUNTY (continued)

POOL ALLOTMENTS (continued)

817 Erie, Monroe, Niagara, Chautauqua, Genesee, Wyoming, Orleans

UNALLOTTED CHANNELS LIST:

This plan does not have unalloted channels.

Channels are either 1) reserved Region-wide, 2) guard channels to reduce the likelihood of adjacent channel interference, or 3) pool channels for selection on a "first come first served" basis.

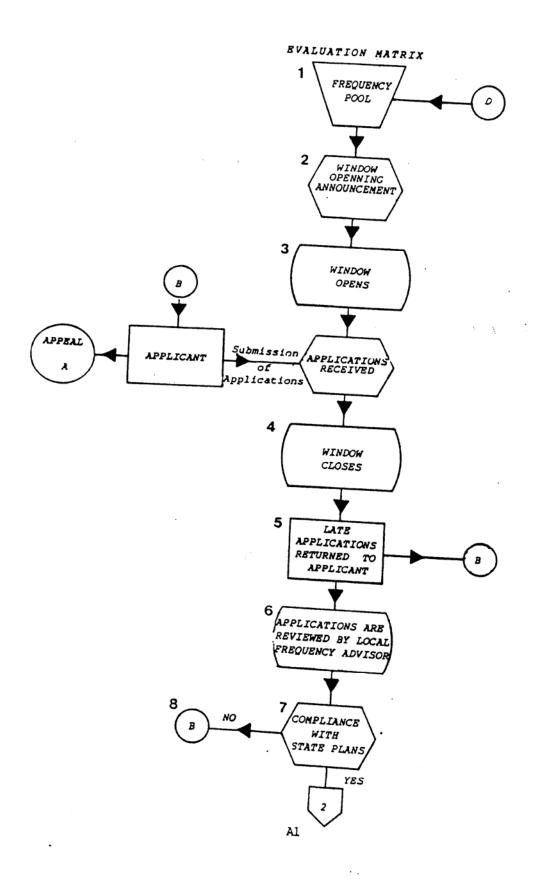
Channels, which are not listed, either are restricted by the Canadian Agreement, or are less than the ${\rm D/R}$ ratio referred to above, or both.

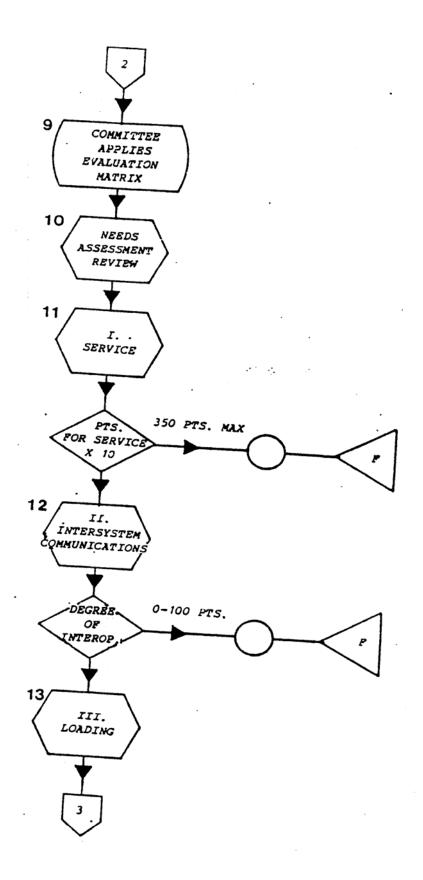
12/3/91 -41-

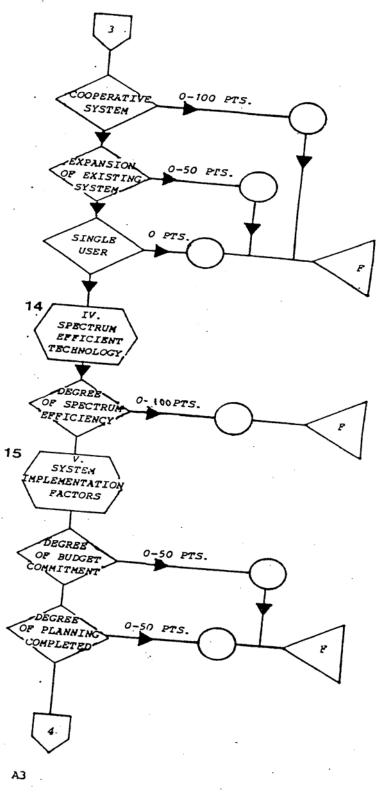
TACTICAL CHANNEL IMPLEMENTATION

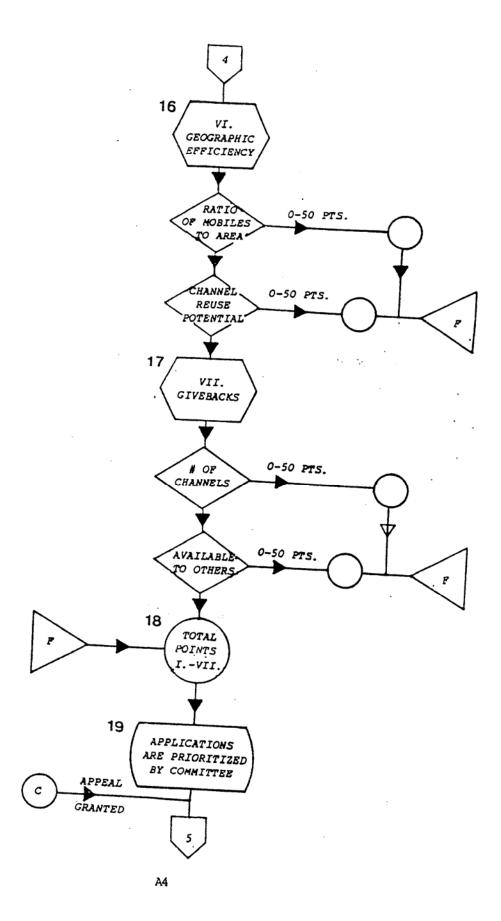
September 5, 1989

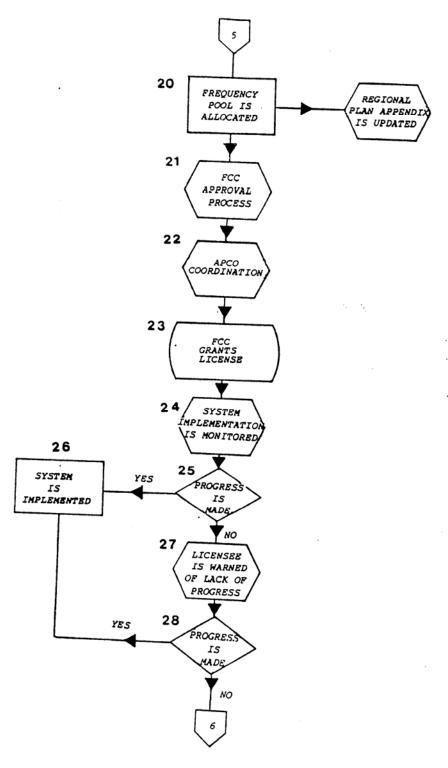
- 1. The lead agency in each State will be the assigning agency of tactical channels for each incident.
- 2. For each licensee of a five channel trunked system it will be required that a base repeater system be placed in operation, by that licensee, on a tactical channel. This channel will be assigned by the RPUC.
- 3. The distribution of base repeater stations assigned by the RPUC will be on a first to license first to be assigned basis, in each county. This will facilitate maximum utilization of tactical channels in each county.
 - 4. After all four tactical channel repeaters are placed in operation in a given area further distribution of base repeater requirements will be determined by the RPUC on a case by case basis.
 - 5. In order to allow use of all tactical channels all existing and future licenses of the 821 pool will be required to place in operation control stations on each of the four tactical channels.
 - 6. Nothing herein shall preclude an organization which operates old 800 pool conventional or trunked systems, or a new 800 pool conventional systems from implementing a tactical channel operation providing they conform to the guidelines set forth above.

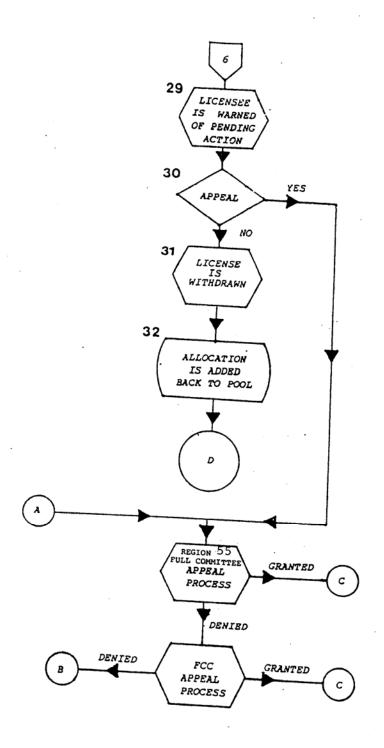












	RESIDENT POPULATION	N
	(NOTE 1)	(NOTE 2)
COUNTY	1990	2020
ALLEGANY	50,470	54,000
CATTARAUGUS	84,234	94,000
CHAUTAUQUA	141,895	153,000
CHEMUNG	95,195	97,000
ERIE	968,532	985,000
GENESEE	60,060	65,000
LIVINGSTON	62,372	72,000
MONROE	713,968	750,000
NIAGARA	220,756	224,000
ONTARIO	95,101	104,000
ORLEANS	41,846	46,000
SCHUYLER	18,662	19,000
SENECA	33,683	32,000
STEUBEN	99,088	106,000
WAYNE	89,123	110,000
WYOMING	42,507	49,000
YATES	22,810	24,000
TOTAL	2,840,302	2,984,000

(NOTE 1) - SOURCE: 1990 CENSUS DATA, U.S. Census Bureau.

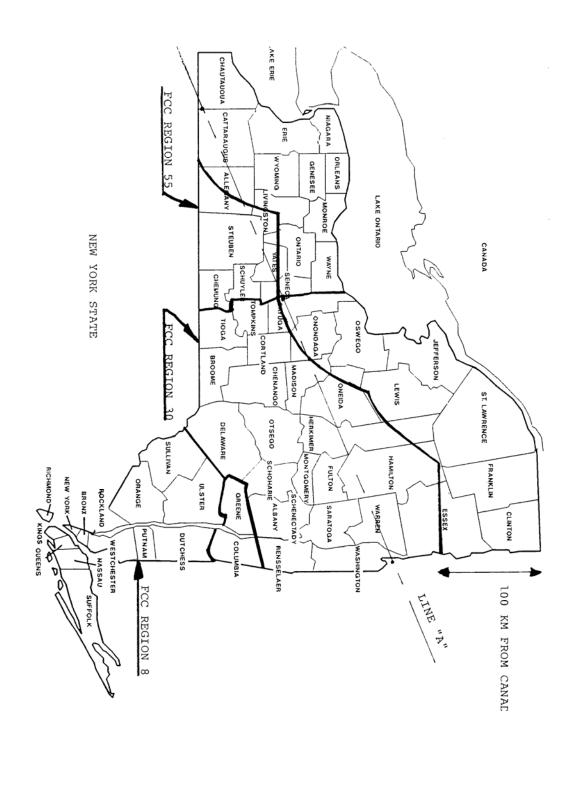
(NOTE 2) - SOURCE: New York State Department of Commerce, State Data Center. (Predicted Data)

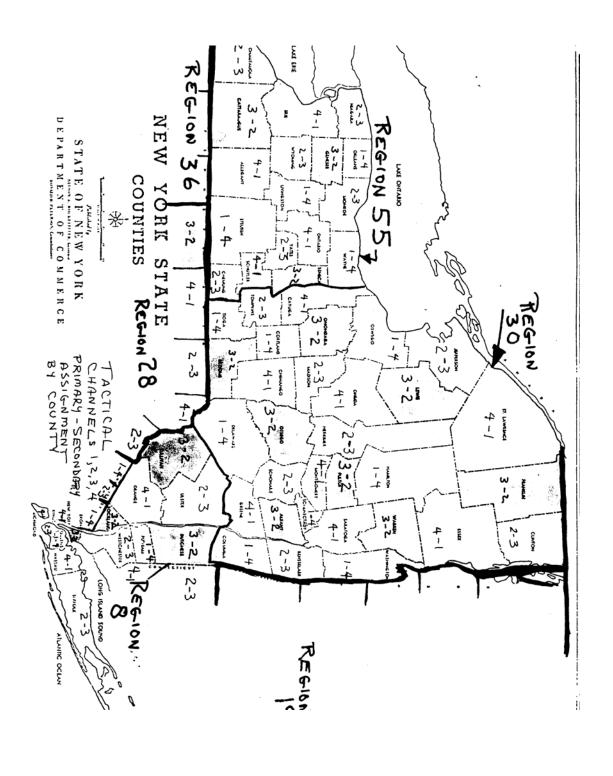
- REGIONAL PLAN THE NEW YORK-BUFFALO RADIO PLANNING COMMITTEE
(FCC-REGION 55)

POPULATION DENSITY COUNTY	1990 CENSUS Total Popul.	LAND AREA Sq. Miles	POPUL. DENSITY Persons per SM
Allegany County	50,470	1,030.286	49
Cattaraugus County	84,234	1,309.943	64
Chautauqua County	141,895	1,062.150	134
Chemung County	95,195	408.192	233
Erie County	968,532	1,044.669	927
Genesee County	60,060	494.135	122
Livingston County	62,372	632.175	99
Monroe County	713,968	659.294	1083
Niagara County	220,756	522.973	422
Ontario County	95,101	644.412	148
Orleans County	41,846	391.427	107
Schuyler County	18,662	328.724	57
Seneca County	33,683	324.925	104
Steuben County	99,088	1,392.729	71
Wayne County	89,123	604.231	147
Wyoming County	42,507	592.982	72
Yates County	22,810	338.251	67
REGION 55 TOTAL = 2	,840,302	11,781.498	241

12/3/91 -C1-

SERVICE POINT RATING All local Government (AVG) Transit Systems Utility Operations School Boards Administration Maintenance Security Patrols Emergency Management Other Functions	POINT 148 188 161 69 141 114 166 288 60	MAX 22 25 23 10 21 20 25 35	AVG 15 19 16 7 14 11 17 29 6	MIN 6 14 10 0 5 5 0 15
Primary Police Auxiliary-Police	350 200	35 30	35 20	35 10
Fire	348	35	35	33
Highway	273	35	27	20
Forestry (AVG) Forest Fire Conservation	241 255 226	35 35 35	24 26 23	10 10 10
All Medical Services (AVG) Hospitals Invalid Coach Physicians	181 269 130 144	30 35 25 30	18 27 13 14	7 10 5 5
Rescue - ALS & BLS	303	35	30	10
Physically Handicapped	134	25	13	5
Veterinarians	83	20	8	0
Disaster Relief Org.	156	25	16	0
All School Buses (AVG) Private-Under Contract Municipal Operated Part of DEM EVAC	137 96 126 189	22 20 20 26	14 10 13 19	5 0 5 10
Beach Patrols	91.	25	9	0
Isolated Areas	115	25	12	0
Comm. Standby Facilities	119	20	12	5
Repair of Comm. Facilities	125	25	13	0





FREQUENCY ALLOTMENT METHODOLOGY

Introduction

The frequency allotment methodology used is a two-stage process. The first stage is to allot channels, to the degree possible, to all eligibles who have applied for them, in accordance with the Committee's Plan. The second stage is to create frequency pools to be used by future applicants for channels which satisfy the coverage and interference parameters to be defined later in this Section.

Desired Coverage

The desired coverage of a system is considered to be, as a maximum, three (3) miles outside of the boundary of the applicant's jurisdiction. The maximum "designed mean signal strength" at this contour shall not exceed +40dBu (+40dB above one microvolt per meter). In order to allow for practical system design, the three mile pad may be altered on a case-by-case basis, and the minimum coverage radius in all cases shall be five (5) miles.

FREQUENCY ALLOTMENT METHODOLOGY (continued)

Interference - Co-channel

Co-channel allotments will be made when it is determined that the two or more systems will create a signal strength of +5dBu or less anywhere within their co-channel partner's boundary.

Interference - Adjacent Channel

Adjacent channel allotments will be made when it is determined that the two or more systems will create a signal strength of +25dBu or less anywhere within their adjacent channel partner's boundary.

Miscellaneous Considerations

For practical engineering reasons in the area of transmitter combining, frequency allotments for the same site, for the same applicant, will be spaced 0.25 MHz apart, to the degree possible.

Present receiver bandwidth limitations require that minimum spacings exist between transmitter frequencies which operate within the same service area. While the minimum amount of spacing required is dependent upon the receiver technical specifications, since current receivers are designed for 25 KHz bandwidth, repeater system channel spacings less than 50 KHz will not be recommended at this time. With improvement in receiver bandwidth performance, closer channel spacing is practical without incurring interference between systems.

12/3/91 -F2-

<u>FREQUENCY ALLOTMENT METHODOLOGY</u> (continued)

Frequency Allotment Methodology

Only one county (Chemung) in Region 55 fell outside the Canadian border influence zone (with limitations on specific channels to a distance of 100 KM, and antenna height and effective radiated cover to a distance of 140 KM) and that county is in close or immediate proximity to adjacent Regions 29, 30, and 36. Therefore, the steps taken in the allotment of channel requests is as follows.

- 1. The channels which could not be used inside the Canadian border influence area were blocked out.
- 2. The channels which were used in adjoining counties of the adjacent Regions were blocked out by using a computer program to calculate distance and minimum K factor (distance between transmitter sites divided by the radius of coverage of the larger system).
- 3. Statewide channels within the available block of channels were blocked out.
- The remaining available channels will be allotted to satisfy applicants to the extent possible .

Pool Allotments .

Following this stage, future allotments are considered by creating pools of channels based on growth projections of population.

12/3/91 -F3-

FREQUENCY ALLOTMENT METHODOLOGY (continued)

Pool channel allotments will be made by county, in order of priority based on highest population, attempting to fulfill the Plan's goal, which is 1 channel per 25,000 population, but no less than 1 conventional channel and a minimum public safety type trunking system (common channel signalling) block of 5 channels per county.

Allotment of pool channels to an applicant will be subject to coordination with the adjacent Region(s).

Once an applicant has been allotted one or more pool channels from this Plan, the Plan will automatically be updated to reflect the change.

12/3/91 -F4-