National Public Safety Planning Advisory Committee

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NPSPAC REGION 2, ALASKA

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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FCC MAIL ROOM

PR 93-81

February 1, 1993

Ms Donna Searcy
Secretary
Federal communications Commission
Washington, DC 20554

Dear Ms Searcy:

Please find enclosed our committee's Frequency Utilization Plan for the State of Alaska formulated in accordance with FCC Dockets 87-112 and 87-359.

Our notice of initial meeting appeared in the Anchorage Daily News (a state wide publication) on November 30, 1992. In addition, I made personal telephone calls to various Public Safety agencies in the south central area of the State advising them of the initial meeting. The meeting was held as scheduled on December 4, 1992 at the Fire Training Center in Anchorage, Alaska. Gene Soules was elected Chairperson. Three Committee Members and a Recording Secretary were elected. The committee represents a good cross section of Public Safety communications users in the State of Alaska, with a Local Government, a Borough, and the State of Alaska all having representation.

On January 8, 1992 the committee scheduled a second meeting to allow additional input from any interested parties. The meeting was advertised by mailing to all APCO members in the State, and again with personal phone calls. Though encouraged, there seemed to be little interest for special input from any area or agency across the State at this time. We have thus made provisions for each area based on known population and knowledge of existing radio communications systems.

Alaska's filing date was established as February 1, 1993. In order to comply, some of the time frames had to be compressed. I hope we will receive consideration in this matter, with my assurance that every Public Safety agency in the State of Alaska received opportunity to form the provisions of this plan as submitted.

Sincerely,

Gene Soules

Gene Soules, Chairperson
Region 2 State of Alaska
800 Mhz Planning
Municipality of Anchorage
3650 East Tudor Road Bldg "C"
Anchorage, AK 99507

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PUBLIC SAFETY RADIO

COMMUNICATIONS PLAN

FOR

* REGION 2

THE STATE OF **ALASKA**

ITEMS TO CHECK PERTAINING THE PLAN
REGION 2.

1) Cover page - identifying the region Yes

2) Chairperson - name, address, phone number and signature
See page Cover Page.

3) Committee members - name, organizational affiliation, address, phone numbers. See page 23.

4) Summary of major elements of the plan. See page 2, 3.

5) General description of how spectrum is allotted among users. See page 19.

6) Explanation of how the requirements of all eligibles are considered and met. See page 5.

7) Explanation of how eligibles are prioritized in areas where not all eligibles may receive licenses.
See page 22.

8) Explanation of how the plan has been coordinated with adjacent regions. See page 11.

9) Description of how the plan puts spectrum to best possible use by

   I. requiring system design with minimum coverage areas (see page 9)

   II. Assigning frequencies so that maximum frequency reuse and offset channel use may be made (see page 16)

III. making use of trunking (see page 16)

IV requiring small entities with minimal requirements to join together on a single system where possible (see page 16-18)

10) Explanation of how interoperability channels are managed (see page 6)

11) "Slow Growth" language. See Page 17.

12) Does the plan refer to **Give-Back** frequencies? If yes, give page number 11.

13) Use the APCO sorting program. See page 19.

14) Appeal Process. See page 22.

15) Does the plan provide for regional mutual aid channels, in addition to the five (5) common channels. If so, ND are there guards bands for these channels.

16) Similar to the Generic Plan describe the formation of the committee;

I. Advertising - copy should be attached to legal notice, letters to the industry, etc. ✓

II. Who could vote? and what procedure was used after first meeting? see page Append. A.

III. How was the final plan adopted. Was it by members attending a meeting or mail ballot? BALLOT

PUBLIC SAFETY RADIO

COMMUNICATIONS PLAN

FOR

* REGION 2

THE STATE OF ALASKA

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1.0 SCOPE

1.1 Introduction

In December of 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a plan to ensure that the communications needs of state and local public safety authorities would be met. By their regular means of initiation, the FCC began the process of developing such a plan. Through their efforts, and the efforts of the National Public Safety Planning Advisory Committee (NPSPAC) the plan was begun.

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

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

1.2 Purpose

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

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

The National Plan, as developed by NPSPAC, was followed very closely in all considerations for frequency allocation, re-use, turn back, regional interoperability, spectrum requirements and adjacent region operations. This plan should provide the flexibility to accommodate the growth and changes which are bound to occur in public safety and public service communications operations long into the future.

2.0 AUTHORITY

2.1 Regional Planning Committee

The development of the Public-Safety Radio Communications Plan for Region **2** , the State of **ALASKA** , has followed the requirements of the FCC's Report and Order as issued in the matter of General Docket 87-112.

In accordance with the FCC's Report and Order 87-112, the Associated Public-Safety Communications Officers Inc. (APCO) recommended to the Commission the appointment of a "Convenor" for **ALASKA** Region **2** . The Convenor served as the coordinator for the assembly and formation of the planning committee.

Participants in the formation of the Regional Planning Committee represent interested parties from both

2.3 National Interrelationships

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

2.4 Federal Interoperability

Interoperability between the Federal, State and Local Governments during both daily and disaster operations will primarily take place on the five common channels identified in the National Plan. Additionally, through the use of S-160 or equivalent agreements, a licensee may permit Federal use of a non-Federal communications system. Such use, on other than the five identified common channels, is to be in full compliance with FCC requirements for government use of non-government frequencies (Title 47 CFR, sec 2.103). It is permissible for a non-Federal government licensee to increase channel requirements to account for 2-10 percent increase in mobile units, dependent on the amount of Federal Government Agencies involvement in its area, provided that written documentation from Federal agencies supports at least that number of increased units.

2.5 Regional Review Committee

Upon approval of this Plan by the Federal Communications Commission, a Region Review Committee

3.0 SPECTRUM UTILIZATION

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

3.1 Region Defined

Region 2 is the State of **ALASKA**. This region is the result of definition by the Federal Communications Commission as a result of recommendations made in the National Public Safety Planning Advisory Committee (NPSPAC) plan as submitted and approved and contained in Docket 87-112. For purposes of this plan the State of **ALASKA** shall be defined as all the lands and waters contained within the boundaries of the State of **ALASKA**.

3.2 Region Profile (Demographic Information)

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

3.2.1 State Of ALASKA Population And Expected Growth Percentage. (See Appendix B)

The population of the state is (1990 Census) is broken down borough and city. The areas consist of three Municipalities, 13 boroughs and 151 cities (see Appendix **B**) . The four boroughs; Anchorage, Fairbanks, Kenai and Juneau represent the major population centers with 384,543 (70%) of the State's 550,043.00 total population. Anchorage alone represents 42% of the population of the state of Alaska.

3.2.2 Geographical Description

There are **10** boroughs in the state with a total land mass of **586,400.00** square miles. The largest borough is North Slope , with a total of **85,000.00** square miles. The population per square mile is somewhat sparse which generally indicates that the concentration of radio users for public safety activities is also sparse. All of these items were taken under consideration in the allocation plan.

3.2.3 Usage Guidelines

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

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

3.2.3 Usage Guidelines (continued)

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

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

The next level of communication coverage will be a borough/multiple municipality area. Those systems that are designed to provide area communication coverage must demonstrate their need to require such wide area coverage.
This would apply in a situation such as a city requesting coverage of an entire borough. 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 borough/city government public safety and public service radio users as can be managed technically.

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

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

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

3.4 Technical Design Requirements For Licensing

3.4.1 Definition of Coverage Area or Area of Jurisdiction

3.4.3 Determination of Coverage (continued)

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

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

Effective Radiated Power (ERP):
The ERP is the transmitter output power times the net gain of the antenna system. The actual formula is: ERP (w) equals Power(w) times Antilog (net gain in dB divided by 10).

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

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

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

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

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

Preparation of these requirements shall be the responsibility of the applicant. The Federal Communications Commission provides, in part 90.309(a)(4) of the Rules and Regulations, some additional guidance for these calculations.

3.4.4 Annexations And Other Expansions

It is well known that as cities grow, annexations occur. When an expansion of the present city limits of any city currently using an 800 megahertz system within the spectrum as herein specified occurs, it is understood that the existing system may have to be expanded and its range increased. This is a

3.4.5 Coverage Area Description

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

3.4.6 Give-Back Frequencies

All agencies participating in the use of the new 800 megahertz spectrum shall prepare and submit a plan for the abandonment of their currently licensed frequencies in the lower bands. These released frequencies shall be available for reassignment to those agencies not migrating to 800 MHz at this time.

These released frequencies shall be returned to the radio service from which it was assigned. These frequencies shall then be available for reassignment by the assignment / coordination criteria in effect for that particular service by the regular FCC authorized coordinator for that service.

Frequencies which are to be abandoned by an agency shall not be handed down to another agency within the respective jurisdiction. Though this may seem a convenient method to re-use existing radio equipment, the reassignment must be handled through the normal process. It is recommended that any jurisdiction wishing to "hand down" frequencies to another agency submit the proper coordination and application forms with the document of release. This will put the applicant in a better posture for reassignment of the frequency in question. It should be noted that even though this procedure is followed, there is no guarantee that a particular frequency will be assigned to the returning jurisdiction.

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

3.4.7 Unused Spectrum

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

3.4.8 Adjacent Region Considerations

There was no need for Adjacent State coordination for region 2.

3.5 Initial Spectrum Allocation

3.5.1 Frequency Sorting Methodology

The initial spectrum allocation for the Region was performed by APCO. The purpose of the frequency sorting is to specific eligibles and to pools for future assignments is two-fold:

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

3.5.2 Blocked Channels

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

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

3.5.3 Transmitter Combining

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

3.5.4 Special Considerations

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

3.5.5 Protection Ratios

There are two interference protection ratios built into the computer program. One is for the co-channel case, the other is for the adjacent channel case. The ratios provide 40 dB Desired/Undesired signal ratio for co-channel assignments, and 15 dB Desired/Undesired ratio for the adjacent channel case. These ratios provide an acceptable probability of interference for Public Safety Services.

4.0 COMMUNICATIONS REQUIREMENTS

4.1 Common Channel Implementation

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

The International calling channel (821/866.0125 MHz) shall be implemented as a full mobile relay. Wide area coverage transmitters will be installed where applicable within a system. Large system users (5 channels or more) of 800 MHz shall be required to monitor this channel at all times. The area of coverage for this channel shall be equal to the area covered by the licensed system. This may or may not require the use of satellite receivers within the area to meet this requirement.

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

4.1.1 Areas of Operation

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

4.1.2 Operation on The Common Channels

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

4.1.3 Operation 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.

4.1.3(I) International Calling Channel (ICALL):

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

4.1.3(II) International Tactical Channels (ITAC-1 - ITAC-4):

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

4.3 Requirements For Trunking

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

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

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

Depending on systems loading and the need for multiple systems within an area, operators of wide area systems (including, but not limited to, designated "Monitoring Agencies") must provide for coordination between area-wide systems and "Monitoring Agencies". Single municipalities or agencies must restrict design and implementation of their systems(s) to provide only the communications needed within its geopolitical boundaries. The use of trunked systems is encouraged. However, if the total number of radios in service does not reach minimum loading criteria for a trunked system, that user must consider utilizing the next higher system level if 800 MHz trunked radio is available in the area. As systems reach capacity, the smaller system users must consider consolidating their communications systems to formulate one large trunked system.

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

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

4.4 Channel Loading Requirements

An agency/jurisdiction requesting a single frequency to replace a frequency currently in use that will be turned back for reassignment will not be required to meet loading requirements in order to obtain the new frequency. However, if the single frequency is not loaded to more than 50 units within three years after the license is granted, the frequency will be available for assignment to other agencies on a shared basis in the event that other frequencies meeting the criteria for assignment are exhausted. Shared use of a frequency is not interference free. Users of single frequency systems may be required to provide the

4.4 Channel Loading Requirements (continued)

comply with the loading standards as outlined below or provide a "Traffic Loading Study" that meets the criteria as outlined below.

4.4.1 Loading Tables

EMERGENCY		NON-EMERGENCY	
CHANNELS	UNITS/CHANNEL	CHANNELS	UNITS/CHANNEL
1 - 5	70	1 - 5	80
6 - 10	75	6 - 10	90
11 - 15	80	11 - 15	105
16 - 20	85	16 - 20	120

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

4.4.2 Traffic Loading Study

Justification for adding frequencies, or retaining existing frequencies, can be provided by a traffic loading study in lieu of loading by number of transmitters per channel. It will be the responsibility of the

4.5 Use of Long Range Communications

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

4.6 Expansion of Existing Systems

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

5.0 IMPLEMENTATION AND PROCEDURES

5.1 Notification

Several methods of notification were used to invite interested parties to participate in the development of this plan. Initially, personal contact was made by the "convenor" to all of the major State agency communications users in the State of ALSAKA. Announcements were made at various group meetings such as the Alaska Peace Officers' Association, the Anchorage Fire fighters Association, the office of Emergency Management , and the Alaska Division of Telecommunications.

Supplemental to the personal contact, an advertisement was placed in a State-wide newspaper several weeks prior to the initial meeting. All APCO Chapter members and a large number of other interested parties who had requested notification were sent letters of invitation. See Appendix C.

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

When the work on the plan was completed, a final planning committee meeting was called. This meeting was held at the Anchorage Fire Training Center, 1140 Airport Heights Rd., Anchorage, Alaska, on January 8, 1993. Each member of the planning committee was presented with a draft copy of the plan for study. A copy of the final draft was mailed to each member of the committee not present at the meeting. Each plan contained a ballot for voting on the acceptance of the plan. As with the formation of the committee, a public notice was placed in the Anchorage Daily Newspaper (see appendix D) announcing the completion of the plan and the intention to file with the Federal Communications Commission.

5.2 Frequency Allocation Process

The method used for "packing" Region 2 was APCO's . The approximate geographical location for the center of each borough, in latitude and longitude, along with the approximate radius to cover the borough lines.

This allocation is the minimum and only applies to counties with a population of 10,000 or less. One additional channel is allocated for each additional 10,000 of population.

ANCHORAGE CITY OF	603,607,611,615,619,623,627,631,635,645 647,651,655,659,663,667,671,675,681,
BRISTOL BAY BOROUGH	749,755
FAIRBANKS NORTH STAR BOROUGH	759,763,767,771,775,779
HAINES BOROUGH	783,787

5.2 Frequency Allocation Process (continued)

5.2 Frequency Allocation Process (continued)

JUNEAU BOUROUGH OF	685,689,693,697,701,705,709,713,717
KENAIL PENINSULA BOROUGH	791,795,799
KETCHICAN GATEWAY BOROUGH .	803,807
KODIAK ISLAND BOROUGH	811,815
LAKE AND PENINSULA BOROUGH	819,823
MATANUSKA-SUSITNA BOROUGH	605,609,613
NORTH SLOPE BOROUGH	617,621,625
NORTHWEST ARCTIC BOROUGH	629,633
SITKA BOROUGH	637,643
POOLED CHANNELS	721,725,729,733,737,743,747,751,757, 761,765,769,773,777,781,785,789,793, 803,809,813,817,821,825,826,827,828, 829,830

NOTE THAT THE REASON CERTAIN CHANNELS ARE NOT LISTED HERE IS DUE TO ADJACENT-CHANNEL INTERFERENCE PROBLEM.

Revised February 1992

UNIFIED HOME RULE MUNICIPALITIES

	July 1, 1991 POPULATION	APPROXIMATE SQ. MILES	INCORPORATION DATE
City and Borough of Juneau	28,985	3,100	July 1, 1970
City and Borough of Sitka	8,588	7,900	December 2, 1971
Municipality of Anchorage	237,907	1,900	September 15, 1975

BOROUGHS

	July 1, 1991 POPULATION	APPROXIMATE SQ. MILES	INCORPORATION DATE
Home Rule			
Denali Borough	1,783	12,800	December 7, 1990
Lake and Peninsula Borough	1,668	25,000	April 24, 1989
North Slope Borough	6,288	85,000	July 1, 1972
Northwest Arctic Borough	6,113	37,300	June 2, 1986
City & Borough of Yakutat			September 14, 1992
Second Class			
Aleutians East Borough	2,464	15,400	October 23, 1987
Bristol Bay Borough	1,410	870	October 2, 1962
Fairbanks North Star Borough	77,720	7,350	January 1, 1964
Kenai Peninsula Borough	40,802	25,600	January 1, 1964
Ketchikan Gateway Borough	13,828	1,250	September 6, 1963
Kodiak Island Borough	15,535	17,800	September 30, 1963
Matanuska-Susitna Borough	41,797	20,550	January 1, 1964
Third Class			
Haines Borough	2,212	2,600	August 29, 1968

CITIES

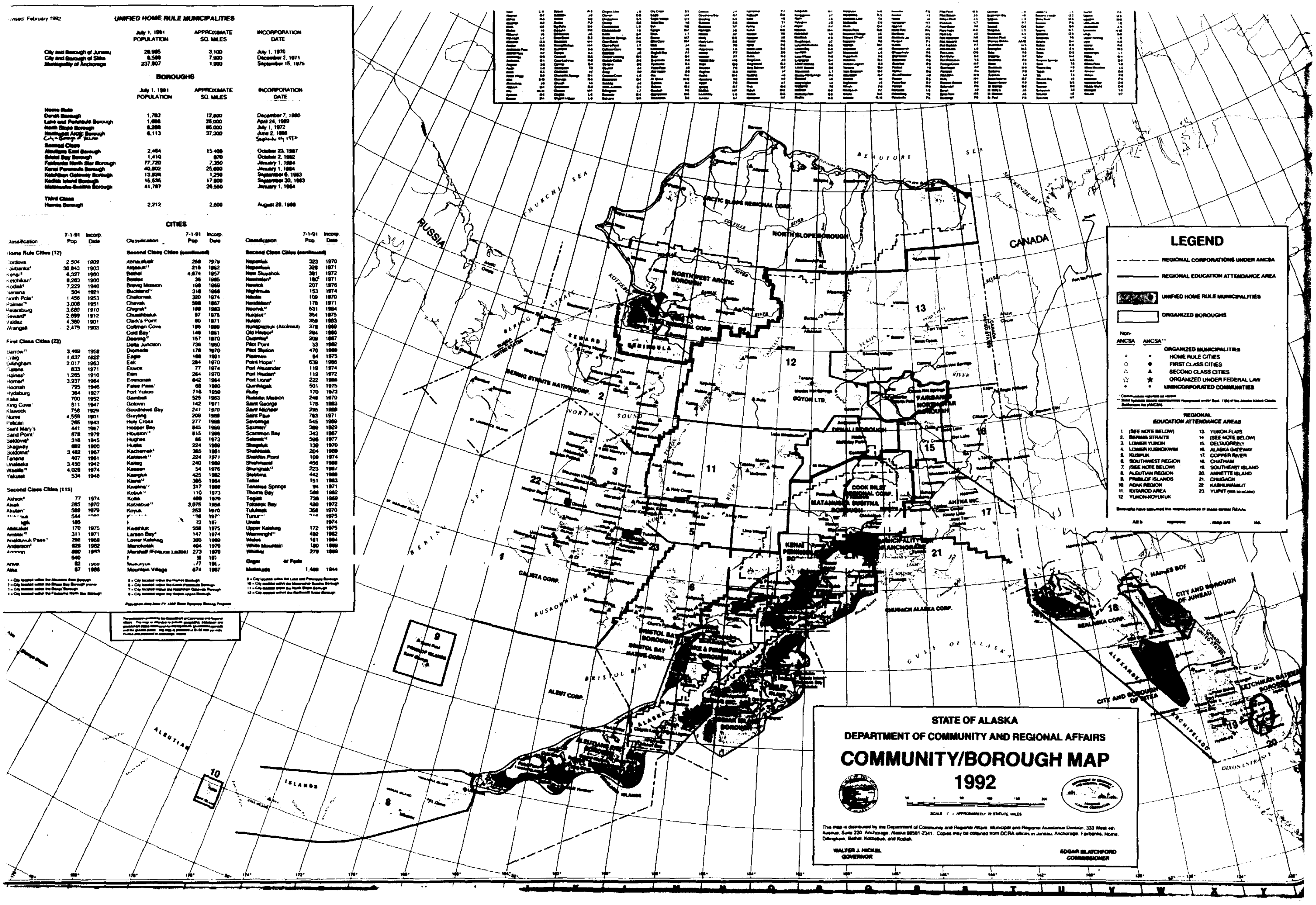
Classification	7-1-91 Pop	Incorp. Date
Home Rule Cities (12)		
Cordova	2,504	1909
Fairbanks[4]	30,843	1903
Kenai[6]	6,327	1960
Ketchikan[7]	8,263	1900
Kodiak[8]	7,229	1940
Nenana	504	1921
North Pole[4]	1,456	1953
Palmer[10]	3,008	1951
Petersburg	3,680	1910
Seward[6]	2,699	1912
Valdez	4,360	1901
Wrangell	2,479	1903
First Class Cities (22)		
Barrow[11]	3,469	1958
Craig	1,637	1922
Dillingham	2,017	1963
Galena	833	1971
Haines[5]	1,265	1910
Homer[6]	3,937	1964
Hoonah	795	1946
Hydaburg	384	1927
Kake	700	1952
King Cove[1]	811	1947
Klawock	758	1929
Nome	4,559	1901
Pelican	265	1943
Saint Mary's	441	1967
Sand Point[1]	878	1978
Seldovia[6]	316	1945
Skagway	692	1900
Soldotna[6]	3,482	1967
Tanana	407	1961
Unalaska	3,450	1942
Wasilla[10]	4,028	1974
Yakutat	534	1948
Second Class Cities (115)		
Akhiok[8]	77	1974
Akiak	285	1970
Akutan[1]	589	1979
[illegible]	544	[illegible]
[illegible]	186	
Allakaket	170	1975
Ambler[12]	311	1971
Anaktuvuk Pass[11]	258	1959
Anderson[3]	628	1962
[illegible]	680	[illegible]
[illegible]	540	
Anvik	82	[illegible]
Atka	87	1988

Classification	7-1-91 Pop.	Incorp. Date
Second Class Cities (continued)		
Atmautluak	259	1976
Atqasuk[11]	216	1982
Bethel	4,674	1957
Bettles	36	1985
Brevig Mission	199	1969
Buckland[12]	318	1966
Chefornak	320	1974
Chevak	598	1967
Chignik[2]	188	1983
Chuathbaluk	97	1975
Clark's Point	60	1971
Coffman Cove	186	1989
Cold Bay[1]	148	1981
Deering[12]	157	1970
Delta Junction	736	1960
Diomede	178	1970
Eagle	168	1901
Eek	284	1970
Ekwok	77	1974
Elim	264	1970
Emmonak	642	1964
False Pass[1]	68	1990
Fort Yukon	718	1959
Gambell	525	1963
Golovin	142	1971
Goodnews Bay	241	1970
Grayling	208	1969
Holy Cross	277	1968
Hooper Bay	845	1966
Houston[10]	815	1966
Hughes	66	1973
Huslia	224	1969
Kachemak[6]	365	1961
Kaktovik[11]	224	1971
Kaltag	240	1969
Kasaan	54	1976
Kasigluk	425	1982
Kiana[12]	385	1964
Kivalina[12]	317	1969
Kobuk[12]	110	1973
Kotlik	498	1970
Kotzebue[12]	3,075	1958
Koyuk	253	1970
[illegible]	136	[illegible]
[illegible]	23	[illegible]
Kwethluk	558	1975
Larsen Bay[8]	147	1974
Lower Kalskag	300	1969
Manokotak	404	1970
Marshall (Fortuna Ledge)	273	1970
[illegible]	38	[illegible]
Mekoryuk	177	[illegible]
Mountain Village	674	1967

Classification	7-1-91 Pop.	Incorp. Date
Second Class Cities (continued)		
Napakiak	323	1970
Napaskiak	328	1971
New Stuyahok	391	1972
Newhalen[2]	160	1971
Newtok	207	1976
Nightmute	153	1974
Nikolai	109	1970
Nondalton[2]	178	1971
Noorvik[12]	531	1964
Nuiqsut[11]	354	1975
Nulato	359	1963
Nunapitchuk (Akolmiut)	378	1969
Old Harbor[8]	284	1966
Ouzinkie[8]	209	1967
Pilot Point	53	1992
Pilot Station	470	1969
Platinum	64	1975
Point Hope[11]	639	1966
Port Alexander	119	1974
Port Heiden[2]	119	1972
Port Lions[8]	222	1966
Quinhagak	501	1975
Ruby	170	1973
Russian Mission	246	1970
Saint George	178	1983
Saint Michael	295	1969
Saint Paul	763	1971
Savoonga	545	1969
Saxman[7]	369	1929
Scammon Bay	343	1967
Selawik[12]	596	1977
Shageluk	139	1970
Shaktoolik	204	1969
Sheldon Point	109	1974
Shishmaref	456	1969
Shungnak[12]	223	1967
Stebbins	442	1969
Teller	151	1963
Tenakee Springs	94	1971
Thorne Bay	569	1982
Togiak	738	1969
Toksook Bay	420	1972
Tuluksak	358	1970
Tununak	[illegible]	1975
[illegible]		1974
Upper Kalskag	172	1975
Wainwright[11]	492	1962
Wales	161	1964
White Mountain	180	1969
Whittier	279	1969
Organized Under Federal Law		
Metlakatla	1,469	1944

1 = City located within the Aleutians East Borough
2 = City located within the Bristol Bay Borough [illegible]
3 = City located within the Denali Borough
4 = City located within the Fairbanks North Star Borough
5 = City located within the Haines Borough
6 = City located within the Kenai Peninsula Borough
7 = City located within the Ketchikan Gateway Borough
8 = City located within the Kodiak Island Borough
9 = City located within the Lake and Peninsula Borough
10 = City located within the Matanuska-Susitna Borough
11 = City located within the North Slope Borough
12 = City located within the Northwest Arctic Borough

Population data from FY [illegible] State Revenue Sharing Program



5.4 Assignment Statistics

Maximum field strength for co-channel operation is 5 Dbu

Maximum field strength for adjacent channel operation is 25 Dbu

Total number of channels assigned
Total number of unassigned channels
Total number of reserved channels

5.5 Expansion of Initial Allocation

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

5.6 Prioritization of Applicants

A very simple method of prioritization has been chosen for use in this Region. As there is no unmet

6.0 THE REGION PLANNING COMMITTEE

CHAIRPERSON:

Gene Soules
Municipality of Anchorage
3650 East Tudor Road, Bldg C
Anchorage, Alaska 99507
Voice 907-243-8953
Fax 907-786-8201

THE REGIONAL PLANNING COMMITTEE

Jack Krill
Matanuska Susitna Borough
Department of Public Safety
680 North Seward Meridian Parkway
Wasilla, AK 99645
907-373-8800

Don Barlow
Anchorage Fire Department
Communications Chief
1301 East 80th
Anchorage, AK 99518
907-267-4950

Harlen Adkinson
State of Alaska
Director of Communications
5900 East Tudor Road
Anchorage, AK 99507
907-269-5944

Appendix A

MINUTES OF INITIAL MEETING
FOR 800 Mhz REGIONAL PLAN
FOR THE STATE OF ALASKA (REGION 4)

I. **CALL TO ORDER.** December 4, 1992. The meeting was called to order by temporary Chairman Gene Soules at 9:45 AM. An attendance roster was passed among the attendees for attendance records. Gene Soules would also serve as temporary Recording Secretary for purpose of recording this initial meeting.

II. **ELECTION OF OFFICERS.** A nomination was made and seconded to retain Gene Soules as Committee Chairman. A show of hands indicated unanimous approval. Margaret Townsend was nominated as Recording Secretary. A motion was made and seconded to close nominations. The nomination passed. A show of hands indicated unanimous approval of Margaret Townsend as Recording Secretary.

A. Committee members appointed: Jack Krill, (Matanuska Susitna Borought), Don Barlow, (Anchorage Fire Department), Harlan Adkinson, State of Alaska.

III. **NEW BUSINESS.**

A. The Committee Chairman gave an explanation of the purpose of the meeting:

1. Brief summary of FCC Docket No. 87-112
2. Brief summary of time schedule requirements for submission of the plan for our region.
3. Brief summary of frequencies affected in the 800 Mhz spectrum and as outlined in Part 90.614 of the FCC Rules.
4. Brief summary of plans approved for other regions
5. Brief summary of major plan provisions

B. Discussion from floor pertaining to above listed items. Motion made and seconded to furnish a copy of the plan from other areas to each attendee for detailed review. Show of hands adopted the motion.

C. Discussion of preliminary interest of various agencies, i.e. State of Alaska, Boroughs, and Municipalities.

IV. **ADJOURNMENT.** Motion made and seconded to adjourn the meeting. Motion passed.

A. Prior to adjournment, the Chairman stated other meetings would likely be scheduled to afford more input, and perhaps to give added opportunity for participation by some who did not attend this initial meeting.

B. Meeting adjourned at 11:00 AM.

attachments 2: attendee list
plan copy

AGENCY	NAME	ADDRESS	PHONE
MAT-SU Borough Dept of Pub Safety	Jack Krill	Wasilla AK 99645 6881 S Seward Meridian Pkwy	373-8800
ANCH Fire Dept	Don Barlow	1301 Exit Rd	267-4939
STATE AK DIV. INFO SVCS	Harlan Adkison	5900 East Tudor Rd	269-5744
MOA	Gene Soules	3650 E. Tudor Rd.	786-8375

Appendix B

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age										
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age
State of Alaska	550,043	54,897	392,558	377,699	354,765	216,062	53,929	16,595	12,897	22,369	1,251	29.4
Aleutians East Borough	2,464	181	1,957	1,917	1,771	1,083	237	93	47	58	1	29.1
Akutan city	589	13	560	559	499	306	53	19	11	11	1	29.7
Cold Bay city	148	16	107	104	99	58	27	4	3	--	--	31.0
False Pass CDP	68	7	42	40	40	28	5	1	--	6	--	32.5
King Cove city	451	27	372	364	341	204	50	25	10	10	--	31.2
Nelson Lagoon CDP	83	10	63	60	56	30	11	1	--	6	--	27.7
Sand Point city	878	71	669	651	610	374	78	35	18	19	--	28.5
Aleutians West Census Area	9,478	779	7,691	7,595	6,795	4,523	560	138	95	82	4	27.0
Adak Station CDP	4,633	553	3,452	3,395	2,873	1,921	148	29	7	3	--	23.9
Amchitka CDP	25	--	25	25	25	17	6	2	--	--	--	37.5
Atka city	73	4	50	48	44	26	7	3	4	2	--	30.4
Nikolski CDP	35	2	28	28	27	6	5	3	3	10	--	52.5
St. George city	138	17	85	84	83	53	4	7	7	9	1	28.4
St. Paul city	763	60	577	567	516	310	67	22	14	28	--	28.0
Unalaska city	3,089	142	2,754	2,731	2,542	1,688	285	59	55	25	3	30.3
Anchorage, Municipality of	226,338	21,499	165,628	159,650	149,732	92,078	23,247	6,955	5,142	8,258	374	29.8
Anchorage city	226,338	21,499	165,628	159,650	149,732	92,078	23,247	6,955	5,142	8,258	374	29.8

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age									Median Age
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	
Napakiak city	318	40	193	188	173	85	29	11	5	24	1	24.0
Napaskiak city	328	55	195	178	161	87	20	10	12	16	1	20.3
Newtok city (pt.)	207	32	120	110	97	58	11	5	3	7	--	19.5
Nightmute city	153	15	103	96	88	41	11	6	6	11	4	24.4
Nunapitchuk city	378	54	248	235	215	113	37	7	12	22	--	25.3
Oscarville CDP	57	8	38	35	31	14	7	2	1	2	--	23.1
Platinum city	64	8	44	37	36	18	7	4	1	2	--	25.0
Quinhagak city	501	67	321	300	276	143	46	14	17	28	1	24.7
Toksook Bay city	420	67	270	254	221	107	41	8	13	17	--	22.2
Tuluksak city	358	55	209	200	186	101	16	11	10	19	2	21.8
Tuntutuliak CDP	300	44	191	179	165	80	24	10	10	14	--	23.4
Tununak city	316	46	200	188	175	88	27	12	7	19	--	24.2
Bristol Bay Borough	1,410	123	1,059	1,028	993	647	127	41	23	42	2	29.5
King Salmon CDP	696	37	570	556	533	368	53	10	11	11	--	29.0
Naknek CDP	575	67	396	381	371	231	62	22	11	22	1	30.8
South Naknek CDP	136	19	90	88	86	47	10	9	1	9	1	27.9
Dillingham Census Area	4,012	560	2,618	2,508	2,364	1,389	339	131	97	205	16	27.1
Aleknagik city	185	22	123	117	110	58	12	11	7	15	2	28.3
Clarks Point city	60	7	38	37	36	24	--	3	2	3	--	26.7
Dillingham city	2,017	240	1,356	1,305	1,244	770	196	65	45	89	5	29.1
Ekwok city	77	11	54	54	50	25	9	1	4	8	1	32.2
Koliganek CDP	181	35	109	104	100	61	6	6	5	11	1	24.4
Manokotak city	385	64	232	224	205	107	34	11	9	17	1	23.3
New Stuyahok city	391	70	242	227	210	114	32	8	7	21	5	23.1
Togiak city	613	95	388	364	335	191	38	20	15	31	1	23.7
Twin Hills CDP	66	12	46	46	45	23	7	3	1	7	--	30.4
Fairbanks North Star Borough	77,720	8,086	55,278	53,383	49,339	30,800	6,454	1,933	1,518	2,540	142	27.6
Eielson Reservation census subarea	5,266	826	3,286	3,203	2,905	2,160	50	3	8	4	--	22.6
Eielson AFB CDP	5,251	825	3,276	3,194	2,896	2,152	49	3	8	4	--	22.6
Fairbanks North Star census subarea	72,454	7,260	51,992	50,180	46,434	28,640	6,404	1,930	1,510	2,536	142	28.2
College CDP	11,249	975	8,384	8,080	7,049	4,139	1,097	326	256	268	9	27.1
Ester CDP	147	8	113	110	107	68	25	5	1	3	1	37.0
Fairbanks city	30,843	3,405	22,413	21,791	20,005	11,540	2,209	801	710	1,558	109	26.9
Fox CDP	275	20	210	205	193	116	39	9	7	12	--	33.5
Harding Lake CDP	27	--	26	25	23	12	1	4	1	4	--	42.8
Moose Creek CDP	610	55	445	431	383	220	49	14	12	22	--	25.7
North Pole city	1,456	134	1,063	1,010	933	582	143	36	15	32	--	27.3
Pleasant Valley CDP	401	35	272	263	248	166	51	10	5	7	--	32.0
Salcha CDP	354	29	244	234	223	121	47	14	11	18	--	31.5
Two Rivers CDP	453	41	290	275	270	209	41	5	2	8	--	30.9
Haines Borough	2,117	155	1,589	1,525	1,470	792	258	93	67	182	4	34.5
Covenant Life CDP	47	2	37	35	32	21	3	3	--	2	--	32.5
Haines city	1,238	93	930	896	867	435	165	64	42	113	3	34.9

Source: U.S. Department of Commerce, Bureau of the Census. Compiled by Alaska Department of Labor, Research & Analysis, June 1991. CDP: Census Designated Place

Alaska Population by Age
Category: 1990 Census

Census area listing	All Persons	Age										
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age										Median Age
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	
Chiniak CDP	69	9	44	43	43	34	4	2	1	2	--	35.2
Karluk CDP	71	7	42	37	31	18	4	--	1	2	--	19.4
Kodiak city	6,365	603	4,748	4,607	4,353	2,626	625	208	161	288	17	30.6
Larsen Bay city	147	20	100	94	80	42	8	6	5	8	--	23.5
Old Harbor city	284	40	177	168	153	91	15	9	7	11	--	23.2
Ouzinkie city	209	21	154	142	134	66	28	6	9	16	4	31.5
Port Lions city	222	25	153	146	137	84	16	9	6	12	--	28.5
Womens Bay CDP	620	50	452	431	410	288	68	16	4	11	--	31.5
Kodiak Station census subarea	2,025	275	1,342	1,314	1,173	915	50	5	8	6	--	24.4
Kodiak Station CDP	2,025	275	1,342	1,314	1,173	915	50	5	8	6	--	24.4
Lake and Peninsula Borough	1,668	213	1,077	1,034	988	570	136	56	52	85	4	27.0
Chignik city	188	15	130	126	120	85	12	5	3	5	--	28.1
Chignik Lagoon CDP	53	7	35	33	32	19	2	3	2	4	--	29.4
Chignik Lake CDP	133	24	79	75	70	36	12	1	2	7	--	22.4
Egegik CDP	122	16	83	82	80	49	10	7	4	5	--	30.3
Igiugig CDP	33	6	24	23	21	10	5	4	--	1	--	31.5
Iliamna CDP	94	11	60	60	59	33	15	2	3	3	--	30.0
Ivanof Bay CDP	35	5	21	19	18	14	--	--	--	2	--	22.8
Kokhanok CDP	152	20	95	89	88	53	10	3	4	8	--	25.4
Levelock CDP	105	14	71	67	64	34	6	2	7	9	1	27.3
Newhalen city	160	27	89	86	77	43	13	3	7	4	--	20.0
Nondalton city	178	29	108	105	102	50	16	10	7	10	1	26.1
Pedro Bay CDP	42	1	32	31	30	13	5	5	3	4	--	37.5
Perryville CDP	108	9	70	65	60	31	10	4	3	7	1	28.0
Pilot Point CDP	53	8	36	35	32	20	4	--	--	5	--	28.1
Port Alsworth CDP	55	5	35	32	32	21	1	3	--	4	1	28.8
Port Heiden city	119	15	77	74	74	45	12	2	5	2	--	27.7
Matanuska-Susitna Borough	39,683	3,873	26,882	25,670	24,508	15,158	3,927	1,258	1,056	1,866	99	30.8
Big Lake CDP	1,477	113	1,060	1,021	990	532	162	89	71	103	6	34.4
Butte CDP	2,039	190	1,415	1,332	1,265	751	229	78	64	98	5	31.3
Chase CDP	38	--	33	33	32	18	10	1	2	1	--	39.5
Chickaloon CDP	145	12	96	91	90	63	12	5	2	7	--	33.2
Houston city	697	68	479	465	439	251	74	22	26	46	--	31.7
Knik CDP	272	21	189	185	179	98	33	7	8	26	--	33.1
Lazy Mountain CDP	838	63	588	550	516	288	113	39	15	40	4	32.6
Meadow Lakes CDP	2,374	260	1,591	1,519	1,460	937	231	60	66	85	5	30.2
Palmer city	2,866	277	1,949	1,863	1,758	967	206	87	81	301	43	30.2
Skwentna CDP	85	4	59	58	56	34	11	1	3	5	--	32.2
Sutton CDP	308	29	212	205	196	127	31	5	6	14	--	32.1
Talkeetna CDP	250	25	185	179	175	113	26	10	9	14	--	34.9
Trapper Creek CDP	296	23	218	208	199	99	38	17	19	16	--	36.0
Wasilla city	4,028	454	2,708	2,574	2,419	1,483	365	122	78	187	5	28.4
Willow CDP	285	32	190	182	175	93	27	10	20	22	1	32.5

Source: U.S. Department of Commerce, Bureau of the Census. Compiled by Alaska Department of Labor, Research & Analysis, June 1991. CDP: Census Designated Place

Alaska Population by Age Category: 1990 Census		Age										
Census area listing	All Persons	Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age
Nome Census Area	8,288	1,073	5,393	5,113	4,802	2,776	701	247	205	419	25	26.4
Brevig Mission city	198	35	111	110	105	66	11	5	3	9	1	22.9
Diomede city	178	27	104	103	93	50	13	7	6	6	--	22.7
Elim city	264	43	154	147	136	84	14	10	4	14	--	22.8
Gambell city	525	75	333	317	293	161	37	20	14	22	--	24.2
Golovin city	127	21	77	73	67	37	13	2	3	8	--	24.3
Koyuk city	231	33	146	138	125	62	23	6	5	14	1	23.8
Nome city	3,500	369	2,446	2,335	2,215	1,324	365	98	81	166	15	29.2
Port Clarence CDP	26	--	26	26	22	17	--	--	--	--	--	29.0
St. Michael city	295	42	178	158	143	87	19	7	8	11	--	19.9
Savoonga city	519	70	334	315	296	149	45	25	11	23	3	24.4
Shaktoolik city	178	31	109	103	94	53	10	3	3	15	--	22.9
Shishmaref city	456	66	270	253	231	119	34	17	14	13	--	21.3
Stebbins city	400	72	219	196	175	100	16	6	10	20	1	17.7
Teller city	151	24	90	85	84	49	12	5	6	6	--	25.8
Unalakleet city	714	89	450	418	402	234	55	19	23	41	2	26.3
Wales city	161	28	100	97	91	57	9	4	4	12	1	27.1
White Mountain city	180	26	112	107	104	62	12	5	3	15	--	27.9
North Slope Borough	5,979	830	3,883	3,741	3,537	2,082	574	206	121	197	8	26.6
Barrow-Point Hope census subarea	5,581	800	3,557	3,417	3,222	1,889	516	192	111	185	8	25.9
Anaktuvuk Pass city	259	35	156	147	137	71	30	12	6	5	--	23.7
Atqasuk city	216	26	142	135	122	62	25	8	8	3	--	24.6
Barrow city	3,469	485	2,294	2,213	2,094	1,289	312	105	68	117	6	27.2

Alaska Population by Age Category: 1990 Census		Age										
Census area listing	All Persons	Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age
Prince of Wales-Outer Ketchikan Census Area	6,278	585	4,415	4,250	4,037	2,408	736	206	157	216	13	30.4
Metlakatla Indian Community census subarea	1,469	155	970	923	867	476	153	40	44	70	7	27.1
Annette CDP	43	4	26	25	22	10	9	2	--	--	--	23.5
Metlakatla CDP	1,407	149	927	881	828	455	141	36	44	70	7	27.0
Outer Ketchikan census subarea	157	7	126	125	121	63	27	7	6	8	--	35.1

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age										
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age
Wade Hampton Census Area	5,791	1,040	3,362	3,137	2,887	1,563	370	177	126	258	11	20.9
Alakanuk city	544	79	323	302	272	133	32	28	18	19	1	21.0
Chevak city	598	128	330	311	287	169	24	18	12	22	--	19.9
Emmonak city	642	115	397	377	334	154	56	19	16	29	--	21.9
Hooper Bay city	845	175	472	448	414	242	43	21	15	52	4	20.4
Kotlik city	461	84	264	246	229	129	32	11	8	20	--	20.8
Marshall city	273	31	173	159	153	89	20	12	4	15	--	25.7
Mountain Village city	674	111	396	360	319	165	50	18	17	21	--	20.1
Newtok city (pt.)	--	--	--	--	--	--	--	--	--	--	--	--
Pilot Station city	463	97	250	237	218	116	26	13	15	15	--	18.8
Pitkas Point CDP	135	24	80	74	71	45	8	2	1	4	1	22.5
Russian Mission city	246	45	130	117	111	60	13	4	4	14	--	16.9
St. Mary's city	441	61	278	262	251	143	31	18	10	23	1	25.5
Scammon Bay city	343	64	194	175	163	87	22	7	3	21	4	19.4
Sheldon Point city	109	24	64	58	54	25	11	4	3	3	--	20.8
Wrangell-Petersburg Census Area	7,042	688	5,063	4,870	4,641	2,608	748	249	221	507	36	31.7
Petersburg census subarea	4,407	453	3,132	3,019	2,878	1,662	452	140	124	291	22	31.1
Kake city	700	94	472	445	421	224	79	26	18	33	--	27.3
Kupreanof city	23	--	20	20	20	14	3	--	1	2	--	39.4
Petersburg city	3,207	305	2,298	2,217	2,106	1,208	302	103	98	244	21	31.4
Port Alexander city	119	16	70	69	69	49	12	1	1	3	--	29.1
Rowan Bay CDP	133	14	105	102	99	63	22	4	2	--	--	32.1
Wrangell census subarea	2,635	235	1,931	1,851	1,763	946	296	109	97	216	14	32.8
St. John Harbor CDP	69	5	60	58	56	31	14	3	1	--	--	33.2
Wrangell city	2,479	221	1,803	1,728	1,642	875	276	102	92	211	14	32.8
Yukon-Koyukuk Census Area	8,478	930	5,777	5,525	5,314	3,134	867	290	222	392	22	29.4
Koyukuk-Middle Yukon census subarea	5,692	585	3,979	3,824	3,694	2,212	627	185	141	244	16	30.2
Allakaket city	170	18	110	107	102	56	20	5	5	9	1	27.6
Anderson city	628	43	487	476	460	240	130	32	10	10	--	34.2
Bettles city	36	1	28	27	26	17	6	--	--	3	--	39.2
Cantwell CDP	147	8	116	114	114	57	26	12	3	13	--	37.8
Evansville CDP	33	3	24	23	21	13	--	3	2	2	--	31.3
Ferry CDP	56	6	42	41	41	30	8	1	2	--	--	35.6
Galena city	833	70	656	634	614	416	60	19	20	14	1	28.5
Healy CDP	487	51	321	304	293	207	48	9	7	5	--	29.0
Hughes city	54	3	38	36	34	17	3	1	2	6	--	28.3
Huslia city	207	30	126	119	113	59	17	5	9	10	1	23.8
Kaltag city	240	34	140	128	122	71	15	10	3	10	--	21.7
Koyukuk city	126	21	78	78	74	51	6	4	1	8	--	27.2
Lake Minchumina CDP	32	3	22	22	22	13	4	2	1	2	--	33.3
Lignite CDP	99	14	67	66	63	56	2	--	2	--	--	29.8
McKinley Park CDP	171	10	145	139	137	96	24	5	3	3	--	35.7
Manley Hot Springs CDP	96	5	77	77	76	43	9	4	8	9	--	37.6
Minto CDP	218	25	138	134	128	69	15	5	4	26	5	27.4
Nenana city	393	44	266	250	238	143	38	10	15	23	2	30.8

Source: U.S. Department of Commerce, Bureau of the Census. Compiled by Alaska Department of Labor, Research & Analysis, June 1991. CDP: Census Designated Place

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age										
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	Median Age
Klukwan census subarea	129	12	83	76	71	41	8	5	3	9	1	26.1
Klukwan CDP	129	12	83	76	71	41	8	5	3	9	1	26.1
Skagway census subarea	692	48	523	501	485	282	75	30	26	51	2	33.6
Skagway city	692	48	523	501	485	282	75	30	26	51	2	33.6
Southeast Fairbanks Census Area	5,913	601	3,970	3,805	3,596	2,176	601	168	139	223	19	28.8
Alcan CDP	27	2	19	19	18	11	5	2	--	--	--	40.4
Big Delta CDP	400	38	254	245	236	139	44	13	11	25	2	32.1
Delta Junction city	652	41	453	429	410	214	84	30	29	32	--	33.6
Dot Lake CDP	70	3	45	40	39	19	9	3	1	4	2	27.5
Dry Creek CDP	106	12	66	61	54	33	10	2	1	3	1	22.0
Eagle city	168	9	124	116	112	69	24	4	--	12	--	35.0
Eagle Village CDP	35	1	29	29	28	16	5	--	2	4	--	35.4
Fort Greely CDP	1,147	203	673	655	620	501	13	1	1	--	--	23.0
Healy Lake CDP	47	1	29	29	28	17	5	--	--	3	--	26.9
Northway CDP	123	20	77	74	70	35	11	6	2	7	1	24.8
Northway Junction CDP	88	14	50	47	44	32	6	1	2	2	--	21.0
Northway Village CDP	113	14	66	61	56	27	9	4	3	10	3	20.8
Tanacross CDP	106	8	76	72	71	34	16	4	2	12	3	36.4
Tetlin CDP	87	7	64	60	56	25	7	6	3	10	2	30.4
Tok CDP	935	74	675	647	622	346	139	29	23	50	4	33.0
Valdez-Cordova Census Area	9,952	881	7,306	7,048	6,683	4,047	1,101	350	282	463	24	32.0
Copper River census subarea	2,763	236	1,957	1,886	1,810	983	352	115	93	192	11	33.7
Chistochina CDP	60	6	42	40	37	15	7	5	2	5	--	29.0
Chitina CDP	49	3	37	34	32	15	7	1	1	7	--	37.5
Copper Center CDP	449	50	314	305	292	164	48	18	9	36	5	31.7
Copperville CDP	163	18	102	98	93	58	19	4	1	5	2	28.1
Gakona CDP	25	3	16	14	14	7	2	--	--	4	--	32.5
Glennallen CDP	451	38	326	310	295	157	65	22	12	23	--	32.0
Gulkana CDP	103	8	69	68	66	31	12	9	6	8	--	35.2
Kenny Lake CDP	423	35	283	267	259	144	52	16	10	25	2	31.8
McCarthy CDP	25	1	21	21	21	15	5	--	1	--	--	36.8
Mendeltna CDP	37	2	28	26	26	13	4	1	1	6	1	40.4
Mentasta Lake CDP	96	9	68	65	61	26	11	2	4	13	--	31.0
Paxson CDP	30	2	23	23	22	11	6	1	--	2	--	31.7
Slana CDP	63	5	44	43	42	24	6	3	5	4	1	36.6
Tonsina CDP	38	4	24	24	22	13	2	1	2	4	--	32.0
Cordova census subarea	2,579	244	1,913	1,862	1,771	1,095	238	98	75	137	8	31.7
Cordova city	2,110	186	1,582	1,544	1,461	910	185	84	62	114	8	31.6
Eyak CDP	172	27	113	108	105	77	15	2	1	3	--	30.5
Prince William Sound census subarea	4,610	401	3,436	3,300	3,102	1,969	511	137	114	134	5	31.2
Chenega CDP	94	11	60	58	54	35	7	2	1	2	--	25.0
Tatitlek CDP	119	15	79	74	67	46	8	2	4	4	--	27.5
Valdez city	4,068	359	3,017	2,902	2,740	1,752	461	109	103	113	5	31.4
Whittier city	243	14	201	188	168	88	26	17	6	13	--	32.4

Source: U.S. Department of Commerce, Bureau of the Census. Compiled by Alaska Department of Labor, Research & Analysis, June 1991. CDP: Census Designated Place

Alaska Population by Age Category: 1990 Census

Census area listing	All Persons	Age										Median Age
		Under 5 years	16 years and over	18 years and over	21 years and over	25 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 years and over	85 years and over	

Appendix C

December 21, 1992

Margaret Townsend
APCO President, Alaska Chapter
Anchorage Fire Department
1301 E. 80th
Anchorage, AK 99518

Dear _____:

You are invited to attend a meeting in Anchorage, Alaska at 9:30 AM, January 8, 1993. This meeting will be held at the Anchorage Fire Training Center, 1140 Airport Heights Road. Alaska must submit a Communications Plan for 800 Mhz use to the FCC by February 1, 1993. This plan will reserve certain frequencies in the 800 Mhz spectrum for Public Safety use. Protection of these frequencies is important now, to ensure their availability for future needs of Public Safety users.

APCO is helping with the basic plan outline, but any changes, additions, or deletions to the plan must be completed and submitted to the FCC by February 1, 1993.

Sixty days' time is required by the FCC for advising the communications community in Alaska of this plan. Within this time period, it is expected that anyone desiring input may be heard, and their provisions incorporated in our submittal for the State of Alaska. This will be our second meeting, and we will review the contents of the APCO template plan modified for Alaska. We invite your participation in the formation of this plan for the Alaska Region (Region 4).

Please contact the Chairman of the 800 Mhz Regional Plan Committee:

Gene Soules
Municipality of Anchorage
3650 East Tudor Road
Anchorage, AK 99507

Phone: (907) 786-8375
FAX: (907) 786-8201

The phones are 24 hour numbers, but you are encouraged to call or FAX during regular business hours Monday through Friday, ADT. This will enable you to get immediate response to your input/help with the plan provisions.

Sincerely,

Margaret Townsend
President APCO, Alaska Chapter

Appendix D

Chris: Please run the following newspaper advertisement for me ASAP. Per our telephone conversation of this morning, we're trying to comply with FCC rules to get this plan (including a copy of this ad) in the mail to Florida by Friday of this week.

Thanks again for your help.

Note: Funding Source: 7740-3805 (Public Works Communications)

NOTICE OF INTENT TO FILE
800 Mhz Frequency Plan for Alaska

The National Public Saftey Planning Advisory Committee (NPSPAC) for Region 2, State of Alaska, has the Public Safety Plan in final draft form, and will submit the plan for acceptance to the FCC on February 1, 1993.

All parties located in Alaska who are interested in additional input prior to the filing date should contact the NPSPAC Chairperson.

Chairperson: Gene Soules
Municipality of Anchorage
3650 East Tudor Road, Bldg "C"
Anchorage, AK 99507
(907) 786-8375

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Hartzel 3-bladed prop, 1064 SO. Well-appointed avionics, most Kenmore options. $159,500 wheels, consider late model C-206 on trade.
PH 907-243-5525, FX 243-8311
Ketchum Air Service, Inc.
Anchorage, Alaska

C-310/402/207 ATP pilot wanted for Nome commuter. 3000 hrs. min. No drinkers, no smokers. 443-2229 or eves. 443-5599.

1976 C-180; Float kit, low time, lots of extras, NDH. $59,900. Jim: 265-8580, 345-1686.

'Cobras Over The Tundra' Available at Northern Light Avionics

C-180, 1955, 4200 TT, 250-R, Stol, good shape, $26,000. 376-2788.

'58 C-180, 2370 TT, 140 SMOH, 170 new prop, float kit, Federal hydraulic 3000 skis, floats avail. $42,000, 745-6993.

Public Notices 900

DEPARTMENT OF ADMINISTRATION - DIVISION OF PERSONNEL/OEEO

Notice of Personnel Board Hearing

The Personnel Board, pursuant to authority vested in it under AS 39.25.170, will hold a hearing on January 29, 1993, starting at 9:30 a.m., in Anchorage, Alaska on the following matters:

1. Review procedural matters pertaining to a request for a

Invitations To Bid 910

Financial Systems Software, Related Training and Consulting Assistance

The ARRC is interested in soliciting offers from interested concerns for: Financial Systems Software, Related Training and Consulting Assistance.

Proposals will be accepted until 4:00 pm, February 18, 1993.

Interested concerns are requested to contact the Alaska Railroad Corporation, Con-

Invitations To Bid 910

bid. (Alternate bid items as well as supplemental bid items appearing on the bid schedule shall be included as part of the total amount bid when determining the amount of proposal guaranty required for the project.

The City of Palmer hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this invitation, Disadvantaged Business Enterprises (DBEs) will be afforded full opportunity to submit bids and will not be discriminated