2-26-87

Meeting

Offered: 3/4/87
Referred: Labor & Commerce

5-0123B

Original sponsor: Boucher

IN THE HOUSE

BY THE HOUSE SPECIAL COMMITTEE ON TELECOMMUNICATIONS

CS FOR HOUSE BILL NO. 5 (Telecommunications)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to regulation of telecommunication services."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 42.05 is amended by adding a new section to read:

Sec. 42.05.145. TELECOMMUNICATIONS REGULATION POLICY. A utility that provides local exchange or interexchange telecommunication service in the state affects the public interest. Regulation of these utilities shall, consistent with this chapter, seek to

(1) maintain and advance the efficiency, availability, and affordability of universal basic telecommunications service;

(2) ensure that charges to customers for telecommunication services are reasonable; and

(3) ensure that revenue earned from noncompetitive telecommunication services is not used to subsidize the competitive ventures of telecommunication companies.

No. 1

STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE

112

REQUEST:

Revision Date:

Title: "An Act relating to regulation of telecommunication services

Sponsor: Boucher

Requestor:

Bill Version: CSHB 5(Tele)

Publish Date: HOUSE 3/4/87

Agency Affected: Commerce & Econ. Dev.

BRU: Alaska Public Utilities Commission

Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-

REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

This bill proposes a bacis statement of telecommunications policy and is not expected to have any fiscal impact on this agency.

Prepared by: T.S. Moninski, II, Executive Director Phone: 276-6222

Division: Alaska Public Utilities Commission Date:

Approved by Commissioner: [signature] Date: 2/26/87

Agency: Commerce and Economic Development

Distribution (by preparer):
- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

Offered: 3/4/87
Referred: Labor & Commerce

5-0202B

Original sponsor: Boucher

IN THE HOUSE

BY THE HOUSE SPECIAL COMMITTEE ON TELECOMMUNICATIONS

CS FOR HOUSE BILL NO. 23 (Telecommunications)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to reduced rates and discounted service for low-income telecommunication customers."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 42.05.301 is amended by adding a new subsection to read:

(b) Notwithstanding (a) of this section, a public utility may propose a discounted service or a reduced rate for essential telecommunication services for the benefit of its low-income customers. The commission may not require a utility to provide a discounted service or reduced rate under this subsection. The commission may not require a telephone utility to incur uncompensated costs or administrative burdens that are not recoverable through an approved tariff if the utility provides a discounted service or reduced rate.

* Sec. 2. AS 42.05.391 is amended by adding a new subsection to read:

(c) Notwithstanding (a) of this section, a public utility may propose a discounted service or a reduced rate for essential telecommunication services for the benefit of its low-income customers. The commission may not require a utility to provide a discounted service or reduced rate under this subsection. The commission may not require a telephone utility to incur uncompensated costs or administrative burdens that are not recoverable through an approved tariff if the utility provides a discounted service or reduced rate.

No. 1

116

STA[illegible] OF ALASKA 1987 LEGISLATI[illegible] SESSION
FISCAL NOTE

REQUEST:

Bill Version: CSHB 23(Tele)
Publish Date: HOUSE 3/4/87

Revision Date:
Title: "An Act relating to reduced rates & discounted service for low-income tele. customers
Sponsor:
Requestor: Becky Bear

Agency Affected: Dept. of Commerce & Econ. Dev.
BRU: Alaska Public Utilities Commission
Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL TIME	-0-	-0-	-0-	-0-	-0-	-0-
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

Although implementation of this proposed legislation could result in some new filings before this Commission, the number of proceedings should be fairly minimal and would not likely result in the need for additional fiscal resources.

Prepared by: T.S. Moninski, II, Executive Director Phone: 276-6222
Division: Alaska Public Utilities Commission Date: 2/26/87

Approved by Commissioner: [illegible signature] Date: 3/2 6/87
Agency: Commerce and Economic Development

Distribution (by preparer): ✓
- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

HB 21, (cont'd)

14.17.170, whichever is greater. Additional state aid shall be obligated by the commissioner before June 30."

Effective July 1, 1987.

Introduced January 19 and referred to Health, Education & Social Services and Finance.

Hazardous Physical Agents in Workplace

HOUSE BILL NO. 22, by Reps. Pourchot, Boyer, Ellis, Davis, & Koponen. Identical to SB 24, page 12.

Introduced January 19 and referred to Labor & Commerce, and Finance.

Telecommunications (discounts for low-income)

HOUSE BILL NO. 23, by Rep. Boucher. Amends the Alaska Public Utilities Commission Act, sections on discrimination in service and discrimination in rates (AS 42.05.301 & 391) by adding: "...a public utility may initiate a discounted service or a reduced rate for essential telecommunication services for the benefit of its low-income customers." Prohibits the Alaska Public Utilities Commission from requiring a utility to provide discounted service. Also adds: "The commission may not require a telephone utility to incur uncompensated costs or administrative burdens that are not recoverable through an approved tariff if the utility provides a discounted service or reduced rate." Does not provide for an effective date (becomes law 90 days after being signed by the Governor).

Introduced January 19 and referred to the House Special Committee on Telecommunications after establishment of the committee by HR 1, and then to Labor & Commerce.

Bail (remission after forfeiture)

HOUSE BILL NO. 24, by Reps. Boucher and Gruenberg. Adds to AS 12.30.060 (violation of release conditions that lead to forfeiture of bail): "(b) After entry of a judgment of forfeiture, the surety may apply to the court for a remission. If it appears that justice does not require the forfeiture, the court may grant the application and remit forfeiture, in whole or in part. The court may impose conditions of remission, including payment of the expenses incurred in the proceedings for the enforcement of the forfeiture and in securing the return of the defendant."

Does not provide for an effective date (becomes law 90 days after being signed by the Governor).

Introduced January 19 and referred to Judiciary.

Office of Equal Employ. Opportunity

HOUSE BILL NO. 25, by Rep. Martin. Expands the powers of of the Office of Equal Employment Opportunity contained in AS 44.19.442(b) by adding that the Office may: "(2) require the division of personnel in the Department of Administration to purge records from an employee's personnel file if the records are the direct or indirect result of complaint of unlawful

The Future of State-Supported Broadcasting in Alaska

Final recommendations

to the
House Special Committee
on Telecommunications

by
Larry L. Pearson

Assistant Professor
Department of Journalism and Public Communications
University of Alaska Anchorage

Committee Members

Rep. H.A. "Red" Boucher,
Chairman,

Rep. Bill Hudson,
Vice Chairman,

Rep. Fran Ulmer

Rep. Fritz Pettyjohn

Rep. Virginia M. Collins

March 1987
Revised August 1987

Table of Contents

Executive Summary

This report is intended to provide the House Special Committee on Telecommunications with information so that it can help decide in the next few days the future of broadcast telecommunication in Alaska.

This report makes no recommendations about a level of support for broadcast telecommunication -- although it comes close to that. It does identify the main options and the central arguments relating to each of them. It also identifies what the author believes to be the two central -- and distinct -- policy questions that must be addressed in this debate:

1. Should the state maintain its commitment to assuring that all Alaskans have broadcast (as opposed to taped) radio and television service?

2. Should the state maintain its support of types of broadcast content that are not provided by the private sector?

The answers to these questions are political ones and therefore outside the scope of this report. It is the intent of this report to provide information that will promote better understanding of just what is at issue.

This report addresses one other issue: the policy-making process as it relates to telecommunication today. The state today has no telecommunication policy structure. The absence of such a structure made it difficult -- even impossible -- to collect information that was vital to this report. *The absence of such a structure made this report necessary.*

This report does make one recommendation:

> That the State of Alaska establish an independent entity responsible for management and planning for all its telecommunication resources.

This recommendation is consistent with the committee's Information Resource Management Report and with HB 40, now before the committee.

This report is organized in three sections which are followed by several tables and, finally, an appendix that summarizes a private proposal for an alternative to state-supported broadcasting. The first section of the report addresses the issue of broadcast telecommunication management, the second looks from an economic perspective at the telecommunication options available to the state, and the third looks at telecommunication content and the ways it serves the state.

> **"You've got to have a system of communication if you're going to have a modern state."**
> -- Dr. William R. Wood, former president, University of Alaska; former mayor, Fairbanks

Management of Alaska's Broadcast System

The state of Alaska has spent tens of millions of dollars in the last 20 years to help develop and maintain a complex broadcast system. Its investment in the Rural Alaska Television Network channel alone is estimated at more than $60 million.

Yet, today, when the value of the system is being challenged, there is no one within state government who can speak for that system. There are only two places within state government where the broadcast system is treated as a whole. One place is the House Special Committee on Telecommunications. The other is the office of the Governor.

It appears to this observer that both are operating with inadequate information, and that this is a weakness of the system. No matter how well intentioned the people within it may be, the system as it exists today is incapable of supporting well-informed decision making about broadcasting in Alaska. It is fragmented and suffers from a lack of direction.

There is a real danger that this lack of direction will prove costly to the long-term interests of the state in the coming weeks.

The state government entities with responsibilities for broadcast telecommunication are:

- the Alaska Public Broadcasting Commission,
- the Division of Telecommunications, Department of Administration, (formerly the Division of Telecommunications Services and the Division of Telecommunications Operations),
- the RATNET board of directors,
- the Office of Instructional Services, Department of Education,
- Instructional Telecommunications Services, University of Alaska.

The RATNET and APBC budgets are channeled through the Department of Administration. The Division of Telecommunications maintains state-owned equipment used by RATNET. In other respects, RATNET and the APBC are independent of DOA.

One of the ironies of the current debate over telecommunication is that the Department of Administration -- which controls the budget and maintains much of the equipment for state-supported broadcasting -- is advocating elimination of that funding. The Division of Telecommunications originally recommended elimination of the RATNET budget in an exercise conducted for then-Governor Bill Sheffield. The costs of RATNET are relatively fixed. To preserve its budget within a small division facing a 15 percent budget cut, the rest of the division's budget would have had to have been cut 40 percent.

DOA Deputy Commissioner John Andrews indicated in testimony before the DOA Budget Subcommittee in February and in a later interview that elimination of broadcast funding is now recommended by the department because it believes the content of RATNET and public broadcasting is not important enough to deserve state support. The great flaw in that argument is that the Department of Administration is not charged with responsibility for the content of the channels it services. It made a content decision without having any expert advice available.

The Department of Administration, through its annual inventory of telecommunication services, has also provided the information on which many of the arguments in the current debate are based. This document has been cited by the chairman of the DOA Finance Subcommittee, the House Special Committee on Telecommunications, cable operators in their proposal for a substitute for RATNET, the Department of Administration itself, and this author.

Yet the accuracy of this document is questionable.

Its validity was challenged in a memo from APBC engineer Herb Holeman to the APBC executive director, and in teleconference testimony from around the state before the House Special Committee on Telecommunications. It appears from this that the DOA inventory is a highly optimistic estimate of radio coverage in Alaska.

The inventory contains information collected with limited resources by an agency that was given only general direction about what information to collect and how to go about it. As an agency charged mainly with maintenance of the telecommunications system, it has had little reason to do the more sophisticated analysis of coverage areas that was conducted by Holeman.

The inventory gives an inflated picture of broadcast coverage because it relies on the reports of station managers. It is in the interest of the commercial station managers to include in their service areas those communities where the signal is only occasionally and imperfectly received. Witnesses from several communities listed in the document as having both public and commercial radio testified that only public radio was available. These communities include Haines, Skagway, Angoon, Unalaska and McGrath. A witness from Angoon, for example, testified, "AM radio is available here only at certain times and only if we have good antennae."

Holeman's re-analysis was based on the FCC standards for determining service areas in Alaska. It found that 28 communities listed in the DOA inventory as receiving both public and commercial radio in actuality receive only public radio. More than 10,000 people who would appear from the inventory to have an alternative to public radio probably do not.

The only type of broadcasting that has been ably represented in the current debate is public broadcasting. The APBC director, Charles Northrip, has represented the interests of his client broadcast stations before the Legislature and is supporting a proposal that would turn the RATNET channel into a public broadcast channel.

RATNET and educational broadcasting have no such representation.

RATNET board members have testified individually before the House

Special Committee on Telecommunications, but there has been no organized defense of the RATNET mission. RATNET members see their duty as making program decisions about RATNET content. They take this duty very seriously; the minutes of their meetings are largely a record of lengthy discussions of whether particular programs are what RATNET viewers want. The RATNET board does not seem to have taken a larger view of the role of RATNET in Alaska, and there is no one to articulate such a view and present it on the board's behalf.

Similarly, the Department of Education and the University of Alaska have taken on responsibilities for instructional broadcasting throughout the state.

These responsibilities are part of the larger mission of both organizations. The efforts of both organizations to protect Learn Alaska when it was threatened in 1986 were weak and tardy, with the result that the only channel dedicated to the broadcast of instructional television was lost. The arguments that could have been presented in defense of instructional programming appear even now to be poorly understood by surviving members of the telecommunication community.

What is missing from the telecommunication infrastructure today -- and what is sorely needed -- is a place where telecommunication is treated as a whole. In the absence of such a place, what we have is a conglomeration of special interests that are by their actions weakening the structure they are a part of. Not all of them are unaware that this is happening. But they are powerless to do more than they are doing already. They are prisoners of a system which lacks a larger view.

"The state doesn't have any telecommunications policy."

-- Bill McCaughan, Anchorage
Community College, former director
of the Learn Alaska Network

Options for Alaskan Broadcasting

What follows is a brief discussion of the options available to the state as it considers whether to continue to fund broadcasting and, if so, at what level. This discussion addresses mainly the economic questions. More detailed discussion of the social issues is contained in the later descriptions of the services provided by the various media.

The complexity of the problem is well illustrated by the number of options presented here. Almost all of them have been proposed at some time during the current debate. And, of course, if the state decides to fund broadcasting at some reduced level, there are a number of possible permutations of these options.

I. A statewide TV channel

A. Keep RATNET in its present form at current funding level.

This would cost the state $2.8 million a year.

B. Keep RATNET in its present form with reduced funding.

RATNET gets its programming free from commercial television and public television stations. There is no savings to be realized there. About 90 percent of the RATNET budget goes to ALASCOM to pay for transmission of the programming. There's some reason to believe a new contract at a somewhat reduced rate might be negotiated. The state now pays about $900,000 for use of an Alascom transponder. Transponder space on other companies' satellites is now being sold for about $600,000.

C. Substitute public broadcast content for RATNET content with reduced funding.

The FCC allows carriers to transmit public broadcasting at lower than commercial rates. Public broadcasting in Alaska is willing to provide content for a statewide TV channel. The thought is that Alascom might be persuaded to provide public broadcasting content on a statewide channel for the same amount of money -- $1 million -- that it would get as a termination payment if the channel were shut down.

The projected saving is $1.8 million. There is some question that it could be that large. In actuality it would be someplace between that figure and $380,000.

Even if Alascom didn't reduce its rates, there would be a savings of about $380,000 because the $329,800 for the Anchorage tape delay center and $50,000 for RATNET travel would no longer be needed.

This proposal involves several assumptions:

a. That Alascom would be willing to provide service for $1 million. Alascom's actual costs -- which are unknown -- are the same regardless of content. They may or may not be more than $1 million.

b. That state funding for public television -- about $3 million -- will be continued. If that funding is eliminated, or even sharply reduced, public television probably couldn't provide this service.

c. That rural audiences will accept this programming as a substitute for the current programming mix.

D. Eliminate budget for a statewide channel

This would involve some costs. The most significant is a $975,000 shutdown payment to Alascom. Others would be for retrieval and continued maintenance of equipment now located in 248 villages, and for provision in alternative ways of services regarded as essential.

Maintenance costs are not included in the $2.8 million RATNET budget. Therefore it is not easy to see how much it will cost the state to maintain equipment in 248 villages that will no longer be used. But this cost is included in the FY '88 budget as part of the budget of DOA's Division of Telecommunications. Maintenance costs for more than 90 state-owned earth stations are said to be negligible; the costs for 248 RATNET transmitters are estimated at $1,000 apiece annually (a significant portion of this cost is for travel to the sites). In addition to the RATNET transmitters, Learn Alaska transmitters remain in most villages (they are being removed as technicians visit communities to work on other equipment). Thus it appears that about 450 transmitters will continue to be maintained. Since they would no longer be operating, maintenance costs should be minimal once they have been prepared for storage.

RATNET is part of the statewide emergency broadcasting network and was scheduled to soon become the means of alerting the radio stations within the network in statewide emergencies. Costs of providing a substitute for it are unknown, but the director of the telecommunications division said they "would not be trivial." Before RATNET, 100 of the 248 villages it serves had single-sideband receivers for emergency messages. Many of these are still in the villages and some of them have been maintained. The cost of re-establishing single-sideband service for those 100 villages is estimated at $30,000. The cost of extending such service to another 148 villages is not known. There would also, of course, be maintenance costs. Other solutions might prove more economical than restoration of single-sideband service.

There would be some economic impact on the commercial television stations that provide programming for it. These stations provide programming on condition that advertisements be retained. This allows the stations to charge advertisers more for those ads that will be shown on RATNET as well as on the originating station. The general manager of the Anchorage TV station which covers the Iditarod said coverage would be sharply reduced if it could no longer be shown on a statewide channel. He said the Anchorage market is too small to meet the costs of the extensive coverage his station now provides.

Thus, the shutdown of RATNET would necessitate one-time and continuing costs. It was not possible for this investigator to determine in the time available how close these costs might come to the $2.8 million budget for a fully funded RATNET channel.

There are no other short-term options. Private industry could not provide statewide television service by the start of the next fiscal year. Even in the long run, private industry could not provide statewide service without state assistance. It appears that the cost to Alaska of a privately operated statewide service would be much greater than the cost of the present RATNET service (see Appendix A, "The North Star Concept").

There has been some discussion of turning over state-owned facilities to villages so that they could provide community access programming. This would not be a viable substitute for a statewide channel, and would involve substantial costs for transfer of FCC licenses, purchase and maintenance of equipment, and training of users. Community-access programming could eventually become an important component of a statewide channel, however.

II. Public television

A. Maintain funding at its current level.

The cost to the state would be $2.1 million for the three stations that receive state money through the Alaska Public Broadcasting Commission. An additional $600,000 goes to the University of Alaska for KUAC-TV in Fairbanks. The KUAC-TV funding is not dependent on whether the APBC budget is approved.

B. Continue funding, but at a reduced level.

The key question here is: How much does it cost to operate a public

TV station in Alaska? The 1987 operating budgets ranged from $1,093,100 for KYUK-TV in Bethel to $2,461,100 for KAKM-TV in Anchorage. The Bethel station was most dependent on state support -- it got 62 percent of its income from the state -- while Anchorage was least dependent on the state -- it got 31 percent of its income from that source.

A good answer to the question would require close analysis of each station. Costs may vary greatly depending on the costs and condition of its physical plant and equipment. Local variations in salaries may be expected. (The number of full-time TV employees ranges from 16 at KTOO to 25 at KAKM. The number of volunteers ranges from 32 -- some of whom help with the radio rather than the TV station -- at KYUK to 200 at KAKM.) The amount of locally originated programming is another factor as is long-term contracts for other programming.

If every station was to be assured an operating income of $1.1 million, the state would need to contribute somewhat more than $1 million for the three TV stations funded through the APBC, compared with the $2.1 million they received in 1987. (An exact estimate of the state funding necessary is difficult to arrive at because federal money is provided only if certain requirements are met. These include income of $300,000 from other sources, a minimum of 10 full-time staff, 3,000 hours of programming and the production and broadcast of locally originated programming. State funding would need to be great enough to enable the stations to meet these requirements. And the costs of meeting these requirements are likely to vary from station to station.)

The APBC has indicated that the stations actually need considerably more than $1.1 million. A budget of $1.8 million to $1.9 million would make more sense as an austerity budget in the absence of more detailed information about operating costs. This would mean a savings for the state of $210,000 to $300,000.

C. Continue funding, but only for a single, statewide station.

The Alaska Public Broadcasting Commission estimates that it would cost the state an additional $75,000 a year if it chose to support only one public TV station. Costs would include the loss of 33 jobs at stations, the loss of 43 jobs in the private sector, loss of $1.2 million in federal revenue. There would also be the loss of regional program content -- and this would be most evident in the area served by the Bethel station. There would be additional expenses for uplink/downlink facilities and for technical staff, for acquisition of programming to be broadcast statewide, and so forth.

This information suggests that a single statewide public television station wouldn't make economic sense as a substitute for the four more locally oriented stations. However, it appears to make economic sense if it were also intended to replace the RATNET channel. The state might then expect to save about half the money it now spends on television broadcasting.

The biggest question raised by this option is how well it would be accepted by, first, the public television audience and, second, by rural Alaskans who would receive it instead of RATNET.

D. Eliminate funding.

The Anchorage station should survive. The Bethel station would not. Survival of the Juneau and Fairbanks stations is doubtful. APBC's executive director, Charles M. Northrip, says neither station could survive without state support. Hours of operation of any surviving stations and the amount of locally-originated programming would be significantly reduced.

KYUK-TV in Bethel depends on state funding. It gets only $80,000 of the $300,000 it needs to qualify for federal funding from private sources. Without state support, it would have to try to operate on $80,000 a year -- a clear impossibility.

KTOO-TV in Juneau would still have an operating budget of about $380,000, enough to meet the federal requirement for income. However, according to its general manager, it would be unable to meet the other requirements to qualify for federal funding. It would cease operation, he says.

KAKM-TV in Anchorage would qualify for federal funding even without state assistance. KAKM's operating income without state funding ($1.7 million before adjustment for reduced federal funding) might still be larger than is KYUK's today.

There would be some costs for the state in finding other ways to distribute educational programming now carried by these stations. (The state film library, which could have responded to schools' requests for videotapes, has also been a victim of budget cuts.) The state might also want to increase its tourism promotion budget to counter any effects on tourism of the loss of Alaskan programming carried on the national PBS system. (No information is available on the contribution such programming has made to tourism in the state.) If it eliminated funding for public television but kept the RATNET channel, it might have to provide RATNET with funds to purchase PBC programs such as Sesame Street, NOVA and the National Geographic Specials.

III. Public Radio

A. Continue funding at the current level.

The state now spends $4 million annually to fund 15 full-service and five repeater public radio stations (repeater stations basically relay programming that originates elsewhere; they are capable, however, of originating some local programming). Two additional repeater stations are scheduled to go into service soon.

B. Continue funding, but at a reduced level.

To qualify for federal funding, public radio stations must receive $150,000 annually from non-federal sources, have at least five full-time staff members and provide a significant amount of locally produced programming. The repeater stations are not eligible for federal funding. State funding, if it is to preserve the system, must be at the level that allows the full service stations to continue to qualify for federal funding and that meets the expenses of the repeater stations. (The operating costs of a repeater station are reported to be 25 percent of the costs of a full-service station.)

C. Continue funding, but only for stations reaching rural areas that otherwise would not be served.

The difficulty is that even the urban stations reach some areas that have no alternative radio service (see Table III, Page 29). If this proposal is strictly interpreted, it would require that funding be continued for nearly all the public radio stations.

A second difficulty, discussed in more detail later in this report, is that much of the content carried by the rural stations is originated by reporters working for the urban stations. There would be significant costs in providing that content if there were no longer urban public radio stations in Alaska.

The administration's revised budget for public radio in Alaska would provide $1.3 million for stations in Barrow, Bethel, Dillingham and Kotzebue. These stations reach 77 communities that receive no other radio station. Twenty-four rural communities would no longer receive any radio service if this plan were adopted. The surviving stations would provide little, if any, of the statewide public radio programming now available.

D. Fund a single, statewide public radio station.

This would be costly if all but one of the now-existing radio stations were converted to repeater stations. That would mean 19 stations would no longer qualify for federal funding. They would no longer be in a position to solicit local contributions. They would still require maintenance. Their operating costs, as noted above, are about 25 percent of those of full-service stations. Costs to the state of maintaining such a system would exceed the costs of maintaining five full-service public radio stations.

The costs would appear to be much less if 19 stations were shut down and the signal of the remaining station were carried on a subchannel of a statewide TV channel (see the North Star Concept in Appendix A). However, it would be necessary to install low-power radio transmitters in the communities served by the statewide channel. The capital cost is estimated by the APBC at $2.5 million. There would also be maintenance and operation costs.

An additional major cost would be the creation of a statewide news staff to duplicate the activities of the Alaska Public Radio Network. That network, which is funded by dues from the Alaska public radio stations and relies on news reports from member stations, could not survive if only one station was left. The new network would need to be operated in such a way that it was assured independence of the state government in making content decisions.

The greatest difficulties with this proposal, however, are non-economic ones. Radio is a local medium. The muskeg message service, for example, wouldn't be possible on a single statewide channel, nor would coverage of village council meetings. This proposal would turn Alaska public radio into something far different from what it is today.

E. Eliminate funding.

KSKA radio in Anchorage would survive. KSKA's manager said in an interview that he believed his station is the only one that could survive and that even the programming of his station would be dramatically altered by the loss of state funding. Several public radio station managers have testified that they could not survive without state funding.

There would be a cost for the state. Several of the public radio stations provide the only means of broadcasting emergency warnings in the areas they serve. The director of the Division of Telecommunications has said this would not be a trivial cost. It might be necessary to provide ways of transmitting other types of messages such as weather information and fisheries information now carried by public radio.

Conclusion

Only two of the combinations of options listed above provide any likelihood of preserving a statewide telecommunication system resembling the one the state now has. Other options significantly reduce broadcast coverage areas as well as types of content offered -- and some of them offer no assurance of significant savings for the state.

The most cautious course of action -- if preservation of the system is the goal -- is to continue to fund broadcasting at the present level: $10 million.

The second course would be to reduce funding for telecommunications by up to 15 percent -- on the assumption that all of the telecommunications services, including RATNET, could survive at that level. Even this course of action would likely have some negative effects on content, but it might make survival of the telecommunications infrastructure possible.

Any course of action requiring sharper reductions in funding will necessitate a weighing of the value of broadcasting against that of other services provided by the state. There will be real social costs in such cuts, and these non-economic costs are outlined in some detail in the following section.

> **"It doesn't sound complicated when you first start to talk about it -- but it is."**
>
> Mel Hoversten, director, DOA
> Division of Telecommunications

How State-Supported Broadcasting Serves Alaska

Alaska's broadcast system is complex and the media within it are interconnected. The nature of these interconnections is far from obvious at a casual glance. For many Alaskans, because of geographical isolation or physical handicaps, radio and television are the only window opening onto a larger world. In many communities newspapers, if they arrive at all, arrive days late. But the broadcast media in Alaska are more than simply a window on the world.

The different media within this system serve different functions and are only imperfectly substitutable for each other. Radio is a more local medium than television; television can show types of cultural and educational programming such as Native dances that radio cannot. A survey for this committee conducted last fall found that television was preferred by a 4-to-1 ratio as the source of some kinds of information. This is consistent with equally recent national findings that, if people were limited to just one medium, they'd pick television.

Within the media, the commercial, public supported and state operated sectors serve separate functions and, again, one sector is unlikely to fill gaps created by the loss of another. The loss of Learn Alaska, for example, led to no shifts in the types of programming offered by either public-supported or commercial TV. Managers of Anchorage commercial TV and radio stations said in recent interviews that they would not adjust their programming if public broadcasting were to disappear.

Within sectors of the media such as public broadcasting, the urban and rural components are interconnected. Rural audiences of public radio, for example, depend for their reports of governmental and other activities in Juneau, Anchorage and Fairbanks on the public radio stations in those cities. Similarly, the urban stations depend on the rural public radio stations to provide their listeners accounts of life in the Bush.

The following pages provide a sketch of how RATNET, public television and public radio serve the interests of the State of Alaska.

The RATNET television channel serves many communities that would otherwise have no television. Similarly, public radio reaches many communities that would otherwise not have radio service.

Communities reached by public television have alternative television channels available. However, these alternative channels do not -- and are unlikely to -- provide the type of programming carried on public television. Some of RATNET's content is there only because it was made available at no cost by public television.

The Department of Education and the University of Alaska produce instructional programming. The only outlets for this programming that exist today are RATNET, public television and Anchorage's Cable Channel 10.

Thus, there are two major issues in a discussion of state-supported broadcasting:

1. Whether the state should maintain its commitment to assuring that all Alaskans have radio and television service.

2. Whether the state should maintain its commitment to types of broadcast content that would otherwise be unavailable.

These issues are distinct. However, decisions that fail to take both of them into account may have unforeseen consequences. For example: Elimination of RATNET on the grounds that a statewide channel is unnecessary would mean loss of the only means of broadcasting instructional programs across the state.

"What is it necessary for the state to do that no one else can or will do?"

-- Ted Lehne, executive director, Alaska Telephone Association

"I see this as a great emotional issue. People get very emotional about television because it becomes sort of like a member of the family."

-- Al Bramstedt Jr., general manager of KTUU-TV, an Anchorage commercial station

RATNET - An Overview

The statewide RATNET channel of the Satellite Television Project is made possible by funding from the state and free programming from commercial and public television. Special consent from the three national networks and the Federal Communications Commission was required before the system could begin broadcasting in January 1977. Content selections are made by a 17-member board of directors who meet four to six times a year and make recommendations based on their understanding of viewer desires.

RATNET is of value to the state because:

*It is Alaska's only statewide television channel,
*It reaches thousands of Alaskans who receive no other channel,
*Even for Alaskans who receive other channels, it may provide programming not otherwise available,
*In areas where cable television is the only alternative, it provides programming for those who cannot afford cable,
*The channel can be used as a carrier for other types of information such as radio signals and teletext.

RATNET is primarily an entertainment channel -- its entertainment offerings include national network programming as well as programs about Alaska as they become available -- but it also provides a variety of information services. These include:

*Alaskan and national news
*Alaska weather
*state legislative news
*congressional delegation report
*instructional programming for downloading to schools during the early morning hours
*emergency tone. It is scheduled to become the connection for the 15 regional radio stations in the emergency broadcasting system.
*textual information and graphics. The system is being used by the University of Alaska, Fairbanks, library for transmission of data in its Gnosis project. It could be used for statewide delivery rapidly and at low cost of a wide variety of textual information.

In addition, RATNET subchannels are being used to carry the audio signal for KSKA public radio to Valdez, Galena and Seward. The KSKA signal, the emergency tone and the textual information now can be carried at virtually no extra cost to the state. These services would be eliminated if RATNET was shut down. The textual information can be transmitted over phone lines but graphics could not be transmitted in this way. In addition, villages without local access to the University of Alaska Computer Network would have to pay long distance charges for getting their information.

How RATNET operates

RATNET does not originate its own programming.

At their meetings, RATNET board members discuss individual programs with representatives of commercial channels and other program sources. Often film clips are viewed. Board members make their decisions based on their understanding of what the majority of the viewers they represent want to see. The board has expressed reluctance to accept programs in any of the Native languages or to accept instructional programming for transmission during the daytime hours. It is receptive to programs about Alaska and Alaskans, though proposals to air these programs can generate heated discussions if they are on such controversial subjects as the Arctic National Wildlife Refuge.

Two Anchorage TV stations provide news programs that are transmitted over RATNET. Both of these programs are oriented toward Anchorage news. KTUU-TV attempted to provide a statewide news program for RATNET beginning in the fall of 1982. It increased its staff by seven full-time employees to provide the program. However, the station was unable to get the necessary advertising support and took the program off the air in April 1983. (An attempt to establish a statewide commercial radio news network in the early 1980s was equally unsuccessful.)

Almost half of the 248 communities that RATNET serves have no other source of television. RATNET is still meeting one of the goals that was originally stated for it in 1976: to distribute television programming to small communities. RATNET remains the only television channel available to about 18,000 Alaskans in 121 communities (Table I at end of report).

The communities that remain dependent on RATNET for television are the smaller ones; their population averages 155. Economic considerations discourage cabling of smaller villages. Cabling on poles costs $20,000 to $25,000 a mile, underground cabling costs $30,000 to $40,000 a mile. The head end charges for a village, regardless of its size, are approximately $100,000. Use of village transmitters by commercial broadcasters to transmit over-the-air signals would be somewhat cheaper (see Appendix A). Just four RATNET-only villages, with a total population of 800, got cable systems in 1986. But, however slowly, more will inevitably follow.

In the long run -- if the concern is simply to make television available to all Alaskans -- it might be cheaper for the state to cable the remaining villages than to continue to fund RATNET. High monthly cable charges, however, will still deny some Alaskans access to television. If RATNET costs were calculated in this way, they would come to $2.35 per month apiece for each of its 124,000 viewers. And it would not be cheaper to turn to cable if the state also accepted the obligation to pay the monthly charges for users. Witnesses at a House Finance Committee hearing Feb. 25, 1987, estimated charges for providing cable programs to rural Alaskans would be $91 million a year, and more than half of that money would go to cable companies in the Lower 48.

Alascom owns much of the RATNET resources. Its property includes:

*The TV Operations Center
*Juneau, Anchorage and Kotzebue uplinks
*Space satellite transponder
*149 downlinks (earth station satellite dishes)

State equipment includes:

*More than 90 TV receive-only satellite dishes that have been used in areas where the Alascom dishes were not available
*248 RATNET transmitters
*Anchorage Tape Delay Center
*NW Arctic ITV production facility, Kotzebue

The transmitters are licensed by the FCC as low power television stations.

A total of $60.6 million has been spent by the state on the RATNET program since it began. This includes $1.5 million in capital expenditures, $41.7 million in operating expenditures and $17.4 million in unidentified capital and operating expenditures.

RATNET's future

Despite its strengths, RATNET is vulnerable.

Before Learn Alaska went on the air in the early 1980s, RATNET's content was somewhat different than it is today. The entertainment programming was shown between 5 p.m. and 1 a.m., with a number of daytime hours being set aside for instructional programming. The RATNET directors were asked to return to that format after Learn Alaska was shut down in the summer of 1986. They refused. Since then they have considered instructional programs during the day on a case by case basis and have expressed unwillingness to make a regular day-time slot available for instructional programs.

The loss of instructional programming has increased the resemblance between RATNET's content and that offered by public and commercial stations.

Unlike most of the cable systems that have appeared in Alaska today, RATNET has been able to offer network programming. But it would appear to be a direct competitor -- and therefore an inhibitor -- of services such as the North Star Concept which would provide network programs. Thus, unless it offers programming different from commercial services, it could be seen as slowing the spread of commercial television to villages. (The author believes that, even without RATNET, the spread would not be very rapid in the short run. Commercial broadcasters have indicated that the smaller villages are not a very attractive market.)

RATNET, clearly, is vulnerable from several quarters. As a state-supported service it must be seen as something that contributes to telecommunication in the state -- not as something that could inhibit its growth. Today, it is a unique channel that provides a number of valuable services. However, these services are widely perceived as rather peripheral benefits of RATNET.

The implications of this for RATNET are clear: If RATNET is to long survive, it must provide an alternative to the programming from other sources that is being offered to a steadily increasing number of its viewers. This unique content, not entertainment programs, will provide the justification for its continued existence.

Public Television -- Overview

There are four public television stations in Alaska: KAKM in Anchorage, KYUK in Bethel, KUAC in Fairbanks and KTOO in Juneau. The Fairbanks station is University operated; the others receive state funds through the Alaska Public Broadcasting Commission. All receive significant portions of their funding from the federal government and from private donors.

Alaskan public television provides:

*Programming to 90 percent of the state's population,
*Alaskan Aviation Weather. This is a nightly half-hour show produced by KAKM in Anchorage and broadcast on RATNET. Annual costs of this program are estimated at $96,000 even though the meteorologist's time is donated by the National Weather Service,
*Free programming for RATNET. Public broadcasting programs that have been picked up by RATNET include National Geographic specials, the MacNeil-Lehrer news hour, Mystery and Masterpiece Theater,
*Television service to some Alaskans who would otherwise have none. The signals of even the Anchorage station reaches -- through translators -- some Alaskans who have no other television service,
*Types of programs not offered -- or likely to be offered -- by commercial TV. Two Anchorage TV station operators said the disappearance of public TV would have no effect on their programming.

Benefits of public television include:

*Production of programs about Alaska that are broadcast in the Lower 48 and presumably encourage tourism. Examples include the just-completed half-hour documentary, "Denali Flyers," and a series of seven programs on cooking Alaskan seafood that has been aired by 33 stations in 27 states. The general manager of KUAC in Fairbanks testified that her station provided two series and five documentaries to the national networks in the last three years.
*Information about the political process. This includes voter information such as the 44-hour "Running" series last year and coverage on political debates and individual candidates. Even this year, when the legislative TV program is being produced by a commercial station, it is being shown

on public rather than commercial channels in cities other than Juneau.
*Instructional programming. KAKM, for example, provides air time for Anchorage Community College, the Mat-Su Community College, Kenai Community College, the University of Alaska and the Anchorage, Kenai and Mat-Su school districts.
*Information about Native cultures. A teleconference witness, for example, credited KYUK-TV in Bethel with helping the Yupik culture to survive. Another witness said KYUK radio and TV were the only bilingual media available in the Bethel area.
*Health information. The same witness credited the public stations in Bethel with broadcasting programs that helped that region to deal with its infant mortality rate, which had been the highest in the nation. (Nine public information messages and 10 radio messages on perinatal health care were produced by Instructional Media Production Services; the people who made them lost their jobs when Learn Alaska was shut down.)
*Programming that can be simultaneously broadcast by public radio stations. KFSK in Petersburg, for example, has simulcast KTOO-TV broadcasts of governors' speeches and legislative events.

How public television operates

Public television in Alaska enjoys strong public support. It has loyal viewers whose contributions per capita are among the highest in the country. A total of 569 volunteers help the four stations with fund-raising and production. That support has put public TV in a strong position *vis a vis* commercial television. Public television is unusually strong relative to commercial television in Alaska because of the state's small and scattered population.

However, public TV does not compete with commercial TV except for audience share. Even there it is not a real competitor as a look at last November's Nielsen ratings for the prime-time, 8-10 p.m. slot makes clear. The public channel in Anchorage, KAKM, ranked fifth of the five stations with a 5 percent share of the audience, compared with 32 percent, 30 percent, 25 percent and 6 percent for the commercial stations.

What public TV offers is an alternative type of programming; programming that has social value but is too expensive for commercial stations to provide. Public TV does not try to attract large, homogeneous audiences but to provide a variety of programming that will include material of interest to a wide variety of viewers over the course of a typical week. (KAKM's general manager testified that more than 50 percent of the Southcentral residents watch that channel every week.) Commercial TV cannot afford to operate in this way.

This is the rationale for state support of public TV programming in Alaska. Three of the four public TV stations in the state are in urban areas. They do not reach audiences that have no other source of television. They do address audience needs, however, that would otherwise go unmet.

The state lacks the economic base to support commercial operations large enough to generate a large amount of state-oriented programming. Only public television is strong enough today to be able to provide this type of programming. A decline in state support of public TV would quickly lead to a decline in this type of programming; severance of state support could mean the loss of most or all of it.

As Alaska's population grows, public TV should become increasingly less dependent on state funding. Evidence of this is contained within KAKM's budget figures for the last decade. As Anchorage's population has grown, the proportion of KAKM's budget met by the state has steadily declined -- from 43.8 percent in FY '76 to 30.6 percent in FY '87. (The dollar amount has increased, although at a lower rate than the increases from other sources of income.)

The future of public television

The survival of public television is in doubt. If state funding is lost, the stations will also lose some or all of their federal funding which is contingent on the amount of funds raised from other sources.

If any stations survive they will almost certainly provide little of the programming that differentiates public television from commercial television. Locally produced programs cost far more than do programs purchased from networks even if they are produced with the help of volunteers. Local production is inevitably the first victim of budget cuts, as KAKM manager Elmo Sackett indicated in his testimony about the effects of previous cuts in state funding on his station's operations. His staff was reduced from 32 to 25 full-time employees following a 14 percent cut in state funding last year; two of those who left were producer-directors, one was a cinematographer. Only one producer remains at the station.

Loss of public television stations would mean loss of the state's investment in equipment. Public stations have purchased equipment under the Public Telecommunication Facilities Program, with two-thirds of the money coming from the federal government and one-third from the state government. Equipment purchased under this program would revert to the federal government. KTOO's general manager argues that the state will never have the money to replace this equipment if it is lost.

It is clear that public television is popular in Alaska and that it satisfies a variety of needs that would otherwise go unmet. Two of the three most viewed public television stations in the United States are KUAC in Fairbanks and KAKM in Anchorage.

The immediate question is: How well does public television satisfy the needs that are important to the state?

The FCC has long required of applicants for commercial licenses information about number of broadcast hours and percentage of total broadcast time that are devoted to the following types of programming: news, public affairs, local programming, all other programs exclusive of sports and entertainment. Despite the easing of broadcast regulation in recent years, commercial licensees continue to maintain logs of this type. If a commercial license is challenged, such logs can prove invaluable in defending it. Even though the state is supporting public television presumably because it is better able than commercial television to provide programming in these categories, it does not make use of this sort of information from the public stations. The public stations do file with the APBC copies of all the reports required of public stations by the FCC; they also provide copies of all program schedules.

Without review of this type of information, it is hard to see whether the state is getting good value for its money. Such a review would not move the state government into the sensitive area of program content decisions. It would, however, act as an incentive for Alaskan public television stations to provide programming in the categories the state regards as important.

The state's interest in public television appears to be justifiable so long as public television continues to show the type of programming relevant to Alaskans that is unlikely to be offered by other media. This programming can help preserve Native cultures and make urban Alaskans more aware of them, it can advertise Alaska to the rest of the country, it can enable Alaskans to participate more fully in the political and economic life of their state. It appears that this programming can be produced at least cost to the state by public television (the most expensive way of producing it is through the letting of contracts by agencies such as the Division of Tourism; that does not assure that the programming thus produced will be televised, unless the state also buys television time).

Public Radio -- Overview

There are nine FM and six AM public radio stations in Alaska. Six of the stations are in Southeast Alaska, one is on the North Slope (Barrow), two are in the Interior, three are on the west coast, three are in Southcentral Alaska. In addition there are repeater stations at Sand Point, St. Paul Island, Galena, Unalaska and Valdez. Repeater stations are nearly ready at Unalakleet and Chevak.

The benefits of public radio are:

*It reaches some Alaskans reached by no other radio station. The residents of St. Paul Island, for example, could receive only Radio Moscow until a public radio repeater station was installed there. (See Tables II and III at end of report.)

*Many of the public radio stations are part of Alaska's emergency broadcasting system. A witness from Kotzebue testified: "Radio is part of our survival gear when we travel."

*It provides message services for Alaskans not easily reached by other media including newspapers and mail. A Barrow attorney testified: "When I go on a village trip I can put a message on radio . . . so people are ready to see us."

*It is a local medium. It provides coverage of local events in depth not rivalled by commercial stations.

*It provides types of specialized programming -- such as Spanish-language, Native and black programming -- that would not otherwise be available in even the most populated parts of the state.

*It provides public service programming. "Staying Alive, 60 Seconds That Could Save Your Life," was broadcast in Yupik and English by the Barrow radio station, for example.

Supporters of public radio say that elimination of state funding will mean the elimination of public radio. The manager of KSKA says that station could stay on the air but that it would have to adopt a format much like that of commercial stations which provide little local programming and no specialized programming. If most public radio stations disappeared, so would the Alaska Public Radio Network (APRN) which depends not on state government funding but on dues from member radio stations.

Public radio content

The public radio stations provide local programming and, through APRN, thev exchange programming so that public radio listeners are kept aware the occurrences in other parts of the state. Much of the news of statewide interest is provided for APRN by reporters at the stations in Anchorage, Fairbanks and Juneau. A survey conducted in January 1986 for the Alaska Public Radio Network found that 49 percent of the adults statewide listened to its Alaska News Nightly program. In Fairbanks, the figure was 45 percent; in Barrow it was 96 percent. APRN is now originating a national Native news program. Its other offerings include a fishing show produced by KMXT in Kodiak.

Eight of the public radio stations and three of the repeaters are part of the Alaska emergency broadcasting network. These are the stations that have been designated to warn of imminent disasters such as tsunamai waves or the storm last fall in the Mat-Su Borough. There is no alternative broadcasting source to seven of these stations (the ones in Barrow, Bethel, Dillingham, Galena, Kotzebue, McGrath and Wrangell).

The vulnerability of public radio to funding cuts was indicated in recent testimony by the general manager of Raven Radio in Sitka. He said the loss of state funding would mean not simply the shutting down of the station, but the loss of its equipment and its facilities. Its facilities are leased. Much of the equipment was purchased under an arrangement with the federal government which required the station to pay only 25 percent of the costs. If it stops operating, the federal government will reclaim the equipment.

If the public radio system ceases to operate, more than 100 full-time employees, 40 part-time employees, and 700 volunteers will lose their jobs.

Witnesses at teleconference hearings testified that information carried on public radio has an effect on their ability to do business. Several fishermen said they depended on public radio for information about closings and openings, and price information. A judge said he used public radio to notify prospective jurors when they would be called for jury duty.

The future of public radio

The future of public radio, like that of public television, appears to be in the hands of the state government. The state now supports 15 stations that provide local information in most parts of the state. Public radio's content is different from that of commercial radio; in areas where both exist, public radio offers viewers types of programming that would otherwise be unavailable. In some areas of the state, commercial radio is not available. In those areas, public radio is important not only for the types of content it provides but as the only radio link to the larger world.

> **"It seems like we re-invent the wheel every year in telecommunications. The need for stability is to me the most critical."**
>
> -- Edie Lynch, assistant vice chancellor for instructional technology, Anchorage Community College

Table I

Communities Receiving Television Only From RATNET

Community	Households	Population	Community	Households	Population
Akhiok	27	107	Kaltag	58	262
Akutan	17	185	Karluk	21	90
Aleknagik	38	201	Kasaan	9	70
Allakaket	46	175	King Cove	114	521
Ambler	48	262	Kivalina	37	294
Arctic Village	35	109	Klukwan	40	239
Atka	22	80	Kobuk	16	97
Beaver	23	65	Kokhanok	20	80
Bettles	20	60	Koliganek	24	112
Birch Creek	13	31	Koyuk	48	211
Cantwell	29	87	Koyukuk	26	98
Cape Pole	4	30	Labouchre Bay	75	300
Central	19	35	Larsen Bay	41	214
Chalkytsik	29	98	Lime Village	13	33
Chignik Bay	38	141	McGrath	129	499
Chignik Lagoon	14	46	Mekoryuk	44	182
Chistochina	15	43	Mentasta Lake	12	72
Chitina	19	33	Meshik (Pt. Heiden)	29	87
Circle	18	101	Meyers Chuck	21	52
Circle Hot Springs	12	36	Minchumina	7	20
Clark's Point	22	75	Mosquito Lake		
Coffman Cove	62	199	Naukati Bay	42	140
Cold Bay	49	246	Nelson Lagoon	18	64
Cooper Landing	49	346	New Stuyahok	65	246
Council	8	23	Newhalen	18	157
Crooked Creek	25	75	Nightmute	24	134
Diomede	30	153	Nikolai*	22	109
Eagle	48	171	Nikolaief	23	100
Eagle Village	20	56	Noatak	59	355
Egegik	32	72	Nondalton	42	231
Eight Fathom Bight			Noorvik	91	517
Ekuk	2	7	Northway	30	116
Ekwok	20	80	Nulato	71	388
English Bay	28	172	Old Harbor	88	405
False Pass	21	76	Ouzinkie	57	240
Freshwater Bay	13	50	Pedro Bay	11	32
Golovin	31	122	Pelican	64	206
Goodnews Bay	42	230	Perryville	31	107
Grayling	52	220	Pilot Point	16	63
Gustavus	44	218	Point Baker	45	93
Halibut Cove	23	52	Port Alice	34	135
Holy Cross	63	191	Port Alsworth	19	75
Hughes	22	97	Port Graham	53	174
Huslia	59	283	Port Moller	9	37
Hyder	29	79	Portage Creek	13	46
Iliamna	22	90	Rampart	14	49
Ivanof Bay	9	38			

*Community television service is planned

Community	Households	Population
Red Devil	10	27
Rowan Bay	13	50
Ruby	63	283
Saint George	40	172
Saint Paul	126	541
Sand Point	186	870
Shaktoolik	43	186
Slana	16	39
Sleetmute	36	74
Stevens Village	30	94
Stoney River	17	43
Takotna	17	47
Tanana	118	444
Tatitlek	23	54
Telida	8	32
Teller	39	257
Tenakee Springs	70	156
Tetlin	27	110
Tolsona		
Trappers Creek	112	350
Twin Hills	17	67
Venetie	36	129
Wales	37	136
Whale Pass	25	93
White Mountain	36	150
Whittier	77	268
Woman's Bay		
Yakutat	139	453
Total	4,415	18,223+

Compiled with the assistance of Richard Taylor, assistant professor, University of Alaska, Anchorage, Department of Journalism and Public Communications.

Sources:

"Alaska Population Overview." Department of Labor. Juneau: State of Alaska, September 1985.

"Alaska's Cable Television." Department of Administration. Juneau: State of Alaska, February 1986.

"Inventory of Communications Facilities Serving Alaska Communities, 1986 Edition." Division of Telecommunications Services, Department of Administration. Juneau: State of Alaska, 1986.

"Inventory of Communications Facilities Serving Alaska Communities, 1987 Edition." Division of Telecommunications Services, Department of Administration. Juneau: State of Alaska.

Four communities that received only RATNET television in 1985 began receiving a second service in 1986. They are:

Brevig Mission population 151
community television

Deering 150
community television

Elim 248
corporation television

Shungnak 238
community television

In December 1986, the only television that 121 Alaskan communities were receiving was RATNET. The average population of the 117 communities for which information is available was 155.

Table II

Communities Receiving Radio Only From Public Radio

Community	Population	Community	Population	Community	Population
Akhiok	107	Koliganek	112	Sand Point	870
Aleknagik	201	Kongiganak	166	Selawik	635
Anaktuvuk Pass	233	Kotzebue	2,345	Shishmaref	493
Angoon	470	Koyukuk	98	Shungnak	238
Aniak	476	Kwigillingok	246	Skagway	761
Atkasook	214	Levelock	76	South Naknek	185
Barrow	2,943	Lower Kalskag	270	Talkotna	47
Birch Creek	31	Manokotak	302	Togiak	554
Buckland	249	Marshall	281	Toksook Bay	365
Chefornak	268	McGrath	499	Tuntutuliak	203
Chuathbaluk	98	Medfra		Tununak	333
Circle	101	Meshik	87	Twin Hills	67
Clark's Point	75	Meyers Chuck	52	Unalaska	1,630
Cold Bay	246	Mosquito Lake		Wainwright	507
Craig	881	Naknek	405		
Deadhorse	63	Nelson Lagoon	64	Total Pop.	33,122+
Deering	150	New Stuyahok	246		
Dillingham	2,004	Newhalen	157		
Dutch Harbor		Newtok	187		
Eek	259	Nightmute	134		
Egegik	72	Nikolai	109		
Ekuk	7	Noatak	355		
Ekwok	80	Nondalton	231		
Elim	248	Noorvik	517		
Goodnews Bay	230	Nuiqsut	305		
Haines	1,154	Nulato	388		
Hollis		Nunapitchuk	357		
Huslia	283	Pelican	206		
Hydaburg	371	Perryville	107		
Igiugig	32	Pilot Point	63		
Iliamna	90	Pilot Station	372		
Ivanof Bay	38	Pitkas Point	67		
Kaktovik	207	Platinum	64		
Kalskag	145	Point Hope	582		
Kaltag	262	Point Lay	67		
Karluk	90	Port Heiden	87		
Kasigluk	355	Port Moller	37		
Kiana	402	Portage Creek	46		
King Cove	521	Quinhagak	424		
Kipnuk	350	Ruby	283		
Kivalina	294	Russian Mission	195		
Klawock	508	Saint George	172		
Klukwan	239	Saint Mary's	566		
Kokhanok	80	Saint Paul	541		

(population figures unavailable for four communities)

This table is based on a reanalysis by Herb Holeman, APBC engineer, of the "Inventory of Communications Facilities Serving Alaska Communities -- 1987," Department of Administration, Division of Telecommunications.

The DOA inventory, based on station reports, indicated 73 communities with a total population of 20,183+ receive only public radio. Holeman's analysis, based on FCC standards for determining service areas, indicates 102 communities get their only clear radio signal from a public radio station.

It appears that some people in communities excluded from the DOA list receive commercial radio when the atmospheric conditions are right or with special equipment.

Table III

Public Radio Stations That Provide Sole Radio Service for Communities

Station	# Communities	Population
KDLG, Dillingham	33	7,963
KYUK, Bethel	24	6,411
KOTZ, Kotzebue	11	6,260
KBRW, Barrow	9	5,721
KHNS, Haines	4	2,154+
KRBD, Ketchikan	4	1,760+
KIAL, Unalaska	2	1,630
KSDP, Sand Point	2	1,391
KIYU, Galena (translating from KSKA, Anchorage)	4	1,031
KSKO, McGrath	5	938+
KUHB, Saint Paul	2	713
KCAW, Sitka	2	676
KMXT, Kodiak	2	197
KUAC, Fairbanks	2	132
KSTK, Wrangell	1	52
?	1	248

Notes: Total of communities exceeds 102 because six communities receive two public radio stations (four of the six receive both KYUK and KDLG). Stations that do not appear on this list are KBBI, Homer; KTOO, Juneau; and KFSK, Petersburg. The community listed under "?" is on Norton Sound. Although it is not shown on the table, KTOO's general manager says four communities with a total population of 1,050 receive radio only from that station. The table is based on information from the same sources as Table II.

Table IV

Communities That Do Not Receive Any Radio Stations

Community	Population	Community	Population
Akutan	185	Kobuk	97
Allakaket	175	Lime Village	33
Ambler	262	Long Island	
Anvik	82	Mentasta Lake	72
Arctic Village	109	Minchumina	20
Atka	80	Nikolski	54
Bettles	60	Northway	116
Cape Pole	30	Port Alexander	162
Chalkytsik	98	Port Alice	135
Chignik Bay	141	Port Alsworth	75
Chignik Lagoon	46	Red Devil	27
Chignik Lake	153	Shageluk	148
Crooked Creek	75	Sleetmute	74
Dot Lake	69	Sparrevohn	28
Eagle	171	Stoney River	43
Eagle Village	56	Tanacross	148
False Pass	76	Tanana	444
Freshwater Bay	50	Telida	32
Grayling	220	Tetlin	110
Holy Cross	191	Venetie	129
Hyder	79		
		Total population	4,355+

People in some of the 41 communities on the above list may receive radio transmissions if the atmospheric conditions are right or if they have equipment capable of picking up weak signals.

This table is based on a re-analysis by Herb Holeman, APBC engineer, of the "Inventory of Communications Facilities Serving Alaska Communities -- 1987," Department of Administration, Division of Telecommunications. The DOA inventory is based on station reports. Holeman's analysis is based on FCC standards for determining service areas in Alaska.

Appendix A

the North Star Concept

In response to a request, two members of the Alaska Cable Association recently prepared a plan for a commercial television network for Alaska. The plan, which they called the North Star Concept, was intended to show how commercial broadcasters could fill the gap left by the loss of RATNET and other state-supported broadcast services.

The plan was prepared on the assumption that there would be no state funding in the next fiscal year for RATNET or public broadcasting.

The North Star Concept would provide television service to 61 of the 121 communities that now get television only from RATNET. Thirty of these communities would receive six television channels, including the network channels, a PBS channel, an independent station, and an Alaska channel. The other thirty-one communities would receive only a single channel: the Alaska channel. A number of communities that have other television services would also receive the North Star programming. The North Star Concept also calls for transmission of one FM public radio station's programming.

This would not be a cable service. Local transmitters would be used to rebroadcast satellite signals in the way they are now used to broadcast RATNET programming. The capacity of the system would be seven channels. It would take assistance from the state to get the North Star system into operation in a short time. Even with state assistance, the plan's authors estimated it would take six months to a year to get the necessary FCC licenses. This means that a number of villages would have no broadcast services for several months, at a minimum.

Although this would be a commercial service, it would require a state subsidy. The cost of the North Star service is estimated at $5.2 million a year for five years. The state would be expected to guarantee that amount. It was suggested the state could recover some of these costs by billing the villages.

The 60 communities that would lose television service under this plan are those with fewer than 50 households. It was judged uneconomic to provide service to these communities. If service was provided to these communities, the cost to the state of the plan would jump to $10.4 million annually for the five years.

This proposal -- by its limitations -- strongly indicates that the private sector can not provide at a reasonable cost services comparable to those now supported by the state. Even with a subsidy equal to half of what the state now spends on broadcasting, the North Star Concept offers sharply reduced services to Alaskans.

This proposal serves to underline a comment about RATNET made in a recent interview by Augie Hiebert, owner of Channel 11 in Anchorage: "They'll never have a more efficient means of bringing the outside world to the villages."

Appendix B

Sources

This report is based on a number of interviews conducted in February and March 1987 and on a number of documents. Professor Sylvia Broady, chair of the Department of Journalism and Public Communications, University of Alaska Anchorage, and Assistant Professor Doug Barry, also of the department, reviewed and provided comments on some parts of the report.

Interviews

Bob Allison, Alaska Cable Association
John Andrews, deputy commissioner, Department of Administration
Dr. William Bramble, Department of Education
Clyde Bloker, Alaska Division of Emergency Services
Al Bramstedt Jr., general manager, KTUU-TV, Anchorage
Richard Fineberg, Office of Management and Budget
Augie Hiebert, owner, KTVA-TV, Anchorage
Mel Hoversten, director, Division of Telecommunications, Department of Administration
Henry Ivanoff, chairman, RATNET directors
Diane Kaplan, Alaska Public Radio Network
Ted Lehne, executive director, Alaska Telephone Association
Edie Lynch, assistant vice chancellor for instructional technology, Anchorage Community College
William McCaughan, Anchorage Community College, former director, Learn Alaska
Arnold Melsheimer, RATNET board member
Charles Northrip, director, Alaska Public Broadcasting Commission
Michael Roberge, general manager, Cablevision, and president of Alaska Cable Association
Roy Robinson, general manager, KFQD-AM and KWHL-FM, Anchorage, and president of Alaska Broadcasters Association
Brian Rogers, University of Alaska, Fairbanks, chairman of budget transition team
Elmo Sackett, general manager, KAKM public TV, Anchorage
Bruce Smith, general manager, KSKA public radio, Anchorage
Ted Sokoloff, chief engineer, Alaska Public Utilities Commission

Documents

"FY '88 Capital Budget Request, Brief Description of Capital Projects," Alaska Public Broadcasting Commission,

Cable Television Primer, prepared by the engineering staff of Rock Associates, March 1987.

"Comments on Professor Larry Pearson's Final Recommendations on the Future of State Supported Public Broadcasting in Alaska as Submitted to the House Special Committee on Telecommunications," Charles M. Northrip, April 3, 1987.

"Employment/Volunteer Information From Public Broadcast Stations in Alaska," a handout, APBC, Feb. 9, 1986.

"FCC314, Application for Consent to Assignment of Broadcast Station Construction Permit or License," Federal Communications Commission.

Letter regarding RATNET and public broadcasting to Rep. H.A. "Red" Boucher from Jerry Brigham, general manager of KYUK AM/TV and RATNET Council member, March 17, 1987.

Letters to the House Special Committee on Telecommunications regarding proposed elimination of broadcast funding. A listing of the letters and some summary information about them are contained in Appendix C.

Letter and attachment regarding RATNET/APBC to Rep. Mike Davis from Commissioner Garrey Peska, Department of Administration, March 13, 1987.

"Measuring the Concept of Credibility," Journalism Quarterly, by Cecilie Gaziano and Kristin McGrath, Autumn 1986.

Memorandum to Charles Northrip, executive director, APBC, from Herb Holeman, APBC engineer, re Station Coverage, Feb. 24, 1987.

Memorandum describing Ratnet, by Russell Nelson, Bristol Bay RATNET representative, Feb. 12, 1987.

Memorandum in response to "Final Recommendations of the Future of State Supported Broadcasting in Alaska," by Don Rinker, president and general manager, KTOO, March 31, 1987.

Memorandum to Doug Humes, aide to Rep. H.A. "Red" Boucher, regarding effect of the loss of RATNET on statewide data delivery by Steve Smith, Rasmuson Library, University of Alaska, Fairbanks, Feb. 23, 1987.

Minutes, RATNET board meetings of July 17, 1986; Sept. 11, 1986; and Nov. 13, 1986.

North Star Plan, a proposal presented by Michael Roberge and Bob Allison, March 1987

Public Broadcasting in Alaska: A Long-Range Plan, by the Alaska Public Broadcasting Commission, 1986 and 1987 editions.

Report of Budget Transition Team, Subcommittee on General Government, Brian Rogers, chairman.

"Satellite Television Project," presented to the House Special Committee on Telecommunications by the Department of Administration, Feb. 4, 1987.

SECC/Alaska EBS (Emergency Broadcasting Service) Plans, January 1987 (one page).

State of Alaska Emergency Broadcast System Developmental Plan, Revised January 1987.

State of Alaska Telecommunications Operations and Services Annual Reports, January 1987.

State Sponsored Television in Alaska, Alternative for Delivery and Distribution, by Richard Rainery, Rural Research Agency for the Alaska State Senate Community and Regional Affairs Committee, August 1984.

Talking to Each Other, Talking to Machines: Alaska's Telecommunication Future, by Larry Pearson and Doug Barry, report to the Joint Committee on Telecommunications, January 1987.

Transcripts of testimony at hearings held by the House Special Committee on Telecommunications, Feb. 5, 10 and 12, and March 26, 1987.

"The Value and Need for State Funding for Alaskan Public Broadcasting Stations: A Perspective from KTOO-FM & TV," by Don Rinker, March 23, 1987.

Appendix C

Letters

Following is a list of letters regarding funding for the Rural Alaska Television Network channel and public broadcasting that were received by Rep. H.A. "Red" Boucher during January, February, March and April1987 and read during the preparation of the preceding report.

A total of 128 letters are listed. Almost all of these (120 letters) called for continued funding for public broadcasting and/or RATNET. Forty-three letters called for continued funding of RATNET and 91 called for continued funding of public broadcasting. Some of the letters were in the form of resolutions from city councils and other groups; 353 signatures were attached to one of these letters.

More than a third of the public broadcast supporters called specifically for funding of public radio. Three supporters called for an income tax if necessary to assure continued funding while one endorsed a lottery, one called for a special tax and one called for use of the income from the Permanent Fund.

Types of programming that were described as especially valuable were news, public affairs and other informational programs (mentioned in 64 letters), entertainment (22 letters), educational programs (25 letters), message services (20 letters), and emergency warnings (12 letters). Six letter writers said state-supported broadcasting promotes rural-urban understanding. Several writers said it has mental health benefits for citizens in isolated areas.

Several of the letter writers were critical of cable as an alternative to state supported broadcasting, saying it is too expensive. One said its content isn't Alaska oriented.

Eight letters opposed continued funding of some part of the state supported broadcast system. Four letters -- three of them from commercial broadcasters in the Kenai Peninsula -- opposed funding for public radio in communities where commercial radio is available. One of these commercial broadcasters opposed any state funding for public radio. Three letters called for reduced funding for public radio. Two of these letters were from supporters of public radio in rural areas who felt that funding could be cut for urban public radio stations. The eighth letter called for the elimination of state funding for RATNET.

One letter writer, a commercial broadcaster in Southeast Alaska, did not take a position for or against continued funding for public broadcasting.

From public broadcasters

Mary K. Barsdate, chairman, KUAC Policy Advisory Board, College, Feb. 12
Deb Boetcher, KFSK, Petersburg, Feb. 11
Jerry Brigham, general manager, KYUK AM/TV and RATNET council member, March 17
Frances M. Chauvin, member, KUAC Policy Advisory Council, Fairbanks, March 26
Sharon Gaiptman, chairman of the board, Capital Community Broadcasting, Feb. 16
LaVern Garton, general manager, KIYU-AM, Big River Public Broadcasting Corporation, Galena, March 12
Michael C. Harrington, president, KSKO-AM, Kuskokwim Public Broadcasting Corporation, Feb. 12
Barbara Karl, member, Alaska Public Broadcasting Commission, Anchorage, Feb. 18
Rich McClear, general manager, KCAW, Raven Radio, Sitka, March 18
Su Rappleye, acting general manager, KFSK, Narrows Broadcasting Corporation, Petersburg, Feb. 22
Brad Reeve, general manager, KOTZ, Kotzebue, March 20
Les Robinson, general manager, KDLG, Dillingham, March 20
Krista Schaefer, KSTK, Wrangell Radio Group, March 24
Alan L. Schmitt, president, Kodiak Public Broadcasting Corporation, Kodiak, Feb. 10
Bruce Smith, general manager, KSKA, Anchorage, Feb. 5
Gary R. Thomas, general manager, KBBI, Kachemak Bay Broadcasting, Inc., Homer, March 19

From RATNET members

Jerry Brigham (see under public broadcasters)
Linda Davidovics, Feb. 12
Harold E. Hopper, Haines, March 22
Russell Nelson, Dillingham, Feb. 16 (copy of letter to Gov. Cowper)
Nellie Vale, Yakutat, March 25

From commercial broadcasters

David F. Becker, owner and general manager, KPEN and KGTL, Homer, March 16
David Headley, manager and news director, KRXA, Seward
John Lindauer, KKEN, Kenai
Bill Schwartz, KRSA, Petersburg, March 24

From other organizations, businesses

Marie Adams, public information officer in mayor's office, Barrow, Feb. 18
Doris Bailey, director, Alaska Arts Southeast, Sitka, March 26

Bill Brady, executive director, Sitka Council on Alcoholism and Other Drug Abuse, Sitka, Feb. 12
Terry A. Chase, mayor, McGrath, Feb. 17 (resolution in support of continued funding for public radio)
Jerry Covey, acting superintendant, Northwest Arctic School District, Kotzebue, Feb. 10
Marjorie W. Dunaway, program coordinator, Aleutians East Coastal Resource Service Area, Sand Point, April 3
Andy Durny, treasurer, Nulato City Council, March 27 (copy of letter sent to Gov. Cowper)
Bruce Finke, United Brotherhood of Carpenters and Joiners of America, Kodiak, Feb. 12
Oscar Frank Jr., community resources coordinator, Yukon-Tanana Subregion, Tanana Chiefs Conference, Inc.
Patty A. Glackin, Electronic Design & Development, Inc., Haines, Feb. 20
Jim Gove, economic development director, City of Wrangell, Feb. 18
Jean K. Graves, library/media coordinator, Iditarod Area School District, McGrath, Feb. 12
Bob Greene, executive director, Association of Alaska School Boards, Juneau, Feb. 2
Sarah Hanuske-Hamilton, superintendent, and Byron R Walton, 1st vice-chairman, Iditarod Area School District, McGrath, Feb. 18 (resolution in support of KSKO)
R.E. Henderson, mayor, Haines, Feb. 19
R.S. "Dick" Hindman, director, Petersburg Council on Alcoholism, Feb. 17
Gail Holzmueller, president, Fairbanks Council for the Social Studies, Fairbanks, March 24 (letter with attached signatures of 353 teachers and administrators)
Ann D. Kirkwood, co-publisher, Wrangell Sentinel and Weekly Dial, Wrangell, March 16
April S. Lapham, mayor, Haines, March 20 (copy of letter sent to Gov. Cowper)
Urtha S. Lenharr and Alan Paradise, correspondence study teachers, Kotzebue, Feb. 10
Mary Lukens, correspondence teacher, McGrath, Feb. 12
Lon Matheson, principal, Kotzebue Middle School, Feb. 10
Nancy McGuire, editor, the Nome Nugget, Nome, March 19
Walter Sampson, NANA Regional Search and Rescue, Feb. 12
Shageluk City Council, resolution calling for continued funding for RATNET and APBC, accompanied by petition with 40 signatures, March 29
Charles E. Slajer, director, Hyder Community Association, Hyder, Feb. 10
Lois A. Stiegemeier, ITV education specialist, Instructional Center, Educational Program Support, Department of Education, March 19
Kenneth L. Suel, mayor, Chuathbaluk, and Beth A. Suel, March 27
Chow Taylor, local government specialist, Municipal and Regional Assistance Division, Department of Community and Regional Affairs, Feb. 16
Margaret K. Wood, director, Bristol Bay Rural Education Program, UAA, Dillingham, Feb. 20
Dr. William R. Wood, executive director, Festival Fairbanks, Feb. 10

From state legislators

Rep. Peter Goll, March 28

From private individuals

Kay Agnew, Anchorage, March 19
Len Anderson, Kotzebue, Feb. 17
Robert F. Balivet, Anchorage, Feb. 27
Michel Baylor, Anchorage, Feb. 17
Billie Benedict, Dillingham, Feb. 16
Mark Berger, Cordova, Jan. 28 (forwarded by Rep. Betty Cato)
Paul M. and Maria L. Crowl, Ketchikan, Feb. 10
Nina K. Dahl and Barbara J. Janitscheck, Kotzebue, March 12
Lloyd DeWilde, Huslia, March 5
Joe Doerr, Petersburg
Horace F. Drury, North Pole, Feb 25
Michale Edgington, Petersburg, Feb. 19
Randolph Erickson, Haines, March 19
Mrs. Robert Evanson, Kenny Cove, March 8 (letter to Rep. Betty Cato)
Helen Finney, Ward Cove, Feb. 17
Susan Fredricks, Skagway, Feb. 10
Robert Fudge, Wrangell, Feb. 20
Reginald E. Gates, Barrow, Feb. 19
William and Marilyn George, Petersburg, March 27
Judith Grau, North Pole, Feb. 23
Constance F. Griffith, Ketchikan, Feb. 10
Patricia Hand, Klawock
Kent Hanson, Sitka, Feb. 10
Stephen Haycox, Anchorage, Feb. 16
Joanna Hearn, Sitka, Feb. 10
Kurt Hoelting, Petersburg, March 3
Karen Hofstad, Petersburg, March 5
Constance Huber, Fairbanks, Feb. 23
Billy J. Huffman, McGrath
Barbara D. Kalen, Skagway, Feb. 12
Mary Ann and Leo B. Kondro, Kake, March 15
William C. Kurz, Haines, March 25
Catherine LaRiviere, Sitka, Feb. 17
Janice Latta, Whittier, March 27
Dorcas Loudermilk, Kotzebue, March 4
Laurene Madson, Kodiak, Feb. 20
Lawrence Mark, Hyder, Feb. 10
Brian McClear, Sitka, Feb. 28
Doug McCoy, Galena, Feb. 10
Sheila McFadden, Petersburg, Feb. 13 (with supplementary letters from Iolaire and Gabriel McFadden)
John S. McGrath, Douglas, March 8
Nan McNutt, Petersburg, Feb. 20

Don Morgan, Kotzebue, March 6
Anthony Mueller, Healy, Feb. 19
Al Near, Fairbanks, Feb. 24
Marjorie Rees, College, March 3 (copy of letter sent to Gov. Cowper)
Libby Riddles, Teller
Drew J. Rudgear, Fort Yukon, March 28
Richard and Sue Sant, Mary Louise Molenda, Fletcher and Jerry Burrus, Anchorage (open letter to the Legislature)
David C. Schmitt, Petersburg, Feb. 22
Eleanor Smith, Sitka, Feb. 12
William A. Stelling, Anchorage, Feb. 9
Students in Dillingham (individual letters):

Everette Anderson	Alesha Daugherty
Kerrie Ingram	Missy Johansen
Larry Kiana	Claude R. Kuyukin Jr.
Julia Rogers	Tim Smith
Gail Stelling	

John E. Svenson, Haines, March 22
Bob Taylor, Kotzebue, Feb. 12
Joseph Trubacz, North Pole, Feb. 23
Curtis E. Weiss, Klawock, Feb. 14
Mary A. Wilson, Kotzebue
Kirk Wollin, Sitka, Feb. 19
Minnie Woods, Klawock, Feb. 18
Karen Wright, Wrangell, March 27
Yvonne Yarber, Manley Hot Springs, Feb. 18
Nick Zerbinos, Glennallen, March 5
Bob Zorich, Petersburg, Feb. 17

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING December, 1986

COMMUNITY	POPU-LATION	RAT-NET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE-CONF.	CABLE TV
ADAK	3,169	1				1	1	1
AKHIOK	107	1			1	1	1	
AKIACHAK	378		1		1		1	1
AKIAK	277	1	1		1		1	1
AKUTAN	185	1			1		1	
ALAKANUK	461	1			1	1	1	1
ALEKNAGIK	201	1			1	1	1	
ALLAKAKET	175	1				1	1	
AMBLER	262	1			1		1	
ANAKTUVUK PASS	233	1			1	1	1	1
ANCHOR POINT	317	1	1	1		1	1	
ANCHORAGE	243,829		1	1	1	1	1	1
ANDERSON	468	1	1	1	1	1	1	1
ANGOON	470	1	1		1	1	1	1
ANIAK	476	1	1		1		1	
ANNETTE	143				1	1		
ANVIK	82	1	1		1	1	1	
ARCTIC VILLAGE	109	1				1	1	
ATKA	80	1					1	
ATKASOOK	214	1			1		1	1
ATMAUTLUAK	261	1	1		1		1	
BARROW	2,943	1			1		1	1
BEAVER	65	1				1	1	
BETHEL	3,681	1	1		1	1	1	1
BEETLES	60	1				1	1	
BIG DELTA	294		1	1	1	1		
BIG LAKE	684	1	1	1	1	1	1	
BIRCH CREEK	31	1				1	1	
BREVIG MISSION	151	1				1	1	1
BUCKLAND	249	1			1		1	1
BUTTE	448				1	1	1	
CANTWELL	87	1				1	1	
CAPE POLE	30	1				1		
CENTRAL	35	1			1	1	1	
CHALKYTSIK	98	1				1	1	
CHEFORNAK	268	1	1		1	1	1	
CHENEGA BAY							1	
CHEVAK	532	1	1		1	1	1	1
CHIGNIK BAY	141	1			1		1	
CHIGNIK LAGOON	46	1			1		1	
CHIGNIK LAKE	153	1		1	1		1	
CHRISTOCHINA	43	1				1	1	
CHITINA	33	1				1	1	
CHUATHBALUK	98	1	1		1			
CHUGIAK	5224		1	1	1	1		1
CIRCLE	101	1			1	1	1	
CIRCLE HOT SPRINGS	36	1			1	1		
CLAM GULCH	141					1		
CLARK'S POINT	75	1			1		1	
CLEAR	468	1	1	1	1	1	1	
CLEARY SUMMIT						1		
COFFMAN COVE	199	1				1	1	
COHOE	500		1	1				

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING December, 1986

COMMUNITY	POPU- LATION	RAT- NET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE- CONF.	CABLE TV
COLD BAY	246	1			1	1	1	
COOPER LANDING	346	1				1	1	
COPPER CENTER	219	1		1	1	1	1	
CORDOVA	2,108	1				1	1	1
CORNER BAY		1						
COUNCIL	23	1				1		
CRAIG	881	1			1	1	1	1
CROOKED CREEK	75	1			1	1		
DEADHORSE	63				1			
DEERING	150	1			1	1	1	1
DELTA JUNCTION	1,163	1	1	1	1	1	1	1
DILLINGHAM	2,004	1			1		1	1
DIOMEDE	153	1				1	1	
DOT LAKE	69	1	1	1		1	1	
DUTCH HARBOR		1			1			
EAGLE	171	1				1	1	
EAGLE RIVER	5817		1	1	1	1	1	1
EAGLE VILLAGE	56	1				1		
EEK	259	1	1		1		1	
EGEGIK	72	1			1	1	1	
EIELSON AFB	7837		1	1	1	1	1	1
EIGHT FATHOM BIGHT		1						
EKUK	7	1			1			
EKWOK	80	1			1		1	
ELIM	248	1				1	1	1
ELMENDORF AFB	6020		1	1	1	1		1
EMMONAK	559	1	1		1	1	1	1
ENGLISH BAY	172	1			1	1	1	
ERNESTINE		1		1		1		
FAIRBANKS	27103		1	1	1	1	1	1
FALSE PASS	76	1					1	
FT. GREELY	1832		1	1	1	1	1	1
FT. RICHARDSON	8960		1	1	1	1		1
FT. WAINWRIGHT	9097		1	1	1	1		1
FORT YUKON	665	1				1	1	1
FRESHWATER BAY	50	1						
GAKONA	70	1		1	1	1	1	
GALENA	894	1				1	1	1
GAMBELL	498	1				1	1	1
GIRDWOOD	150	1	1	1	1	1	1	1
GLENALLEN	477	1		1	1	1	1	
GOLOVIN	122	1				1	1	
GOODNEWS BAY	230	1			1		1	
GRAYLING	220	1			1	1	1	
GULKANA	82			1	1	1		
GUSTAVUS	218	1			1	1	1	
HAINES	1,154	1			1	1	1	1
HALIBUT COVE	52	1			1	1		
HEALY	327	1	1	1	1	1	1	
HOBART BAY		1				1	1	
HOLLIS		1						
HOLY CROSS	191	1			1	1	1	
HOMER	3,373	1	1	1	1	1	1	

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING   December, 1986

COMMUNITY	POPULATION	RAT-NET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE-CONF.	CABLE TV
HOONAH	803	1			1	1	1	1
HOOPER BAY	678	1	1		1	1	1	1
HOPE	195	1	1	1	1	1	1	
HOUSTON	668		1	1	1	1		
HUGHES	97	1				1	1	
HUSLIA	283	1					1	
HYDABURG	371	1			1	1	1	1
HYDER	79	1				1	1	
IGIUGIG	32	1			1	1	1	1
ILIAMNA	90	1			1			
IVANOF BAY	38	1			1		1	
JUNEAU	23729		1	1	1	1	1	1
KACHEMAK	320				1	1		
KAKE	574	1	1		1	1	1	1
KAKTOVIK	207	1			1		1	1
KALSKAG	145	1	1		1			
KALTAG	262	1				1	1	
KARLUK	90	1			1	1	1	
KASAAN	70	1			1	1		
KASIGLUK	355	1	1		1		1	1
KASILOF	567	1	1	1	1	1	1	
KENAI	6,072	1	1	1	1	1	1	1
KENNY LAKE	143	1		1		1	1	
KETCHIKAN	7,633	1	1		1	1	1	1
KIANA	402	1			1		1	1
KING COVE	521	1			1	1	1	
KING SALMON	434	1			1	1	1	1
KIPNUK	350	1			1		1	1
KIVALINA	294	1			1		1	
KLAWOCK	508	1			1	1	1	1
KLUKWAN	239	1			1		1	
KOBUK	97	1			1		1	
KODIAK	6,069	1			1	1	1	1
KOKHANOK	80	1			1		1	
KOLIGANEK	112	1			1		1	
KONGIGANAK	166	1	1		1		1	
KOTLIK	412	1			1	1	1	1
KOTZEBUE	2,345	1			1	1	1	1
KOYUK	211	1				1	1	
KOYUKUK	98	1				1	1	
KWETHLUK	509	1	1		1		1	
KWIGILLINGOK	246		1		1		1	
LABOUCHRE BAY	300	1				1		
LARSEN BAY	214	1			1	1	1	
LEVELOCK	76	1			1	1	1	1
LIME VILLAGE	33	1			1	1	1	
LONG ISLAND		1						
LOWER KALSKAG	270	1	1		1			
MANLEY HOT SPRINGS	99	1	1		1	1	1	
MANOKOTAK	302	1			1	1	1	1
MARSHALL	281	1	1		1	1	1	
MCGRATH	499	1			1	1	1	
MEKORYUK	182	1				1	1	

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING December, 1986

COMMUNITY	POPULATION	RATNET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE-CONF.	CABLE TV
MENTASTA LAKE	72	1				1	1	
MESHIK	87	1			1			
METLAKATLA	1,089	1	1		1	1	1	1
MEYERS CHUCK	52	1			1	1		
MINCHUMINA	20	1			1			
MINTO	153	1	1		1	1	1	
MOOSE PASS	143	1	1	1		1	1	
MOSQUITO LAKE		1					1	
MOUNTAIN VILLAGE	610	1	1		1	1	1	1
MT. EDGECUMBE	835		1	1	1	1		
NAKNEK	405	1			1	1	1	1
NAPAKIAK	319	1	1		1		1	1
NAPASKIAK	289	1	1		1		1	
NAUKATI BAY	140	1				1		
NELSON LAGOON	64	1			1		1	
NENANA	544	1	1	1	1	1	1	
NEW STUYAHOK	246	1			1	1	1	
NEWHALEN	157	1			1		1	
NEWTOK	187	1	1		1		1	
NIGHTMUTE	134	1			1		1	
MIKOLAEVSK	100				1	1	1	
NIKOLAI	100	1			1	1	1	1
NIKOLSKI	54	1			1		1	
NINILCHIK	427	1	1	1	1	1	1	
NOATAK	355	1			1		1	
NOME	3,184	1				1	1	1
NONDALTON	231	1			1		1	
NOORVIK	517	1			1		1	
NORTH KENAI	3489		1	1	1	1	1	
NORTH POLE	1005		1	1	1	1	1	1
NORTHWAY	116	1				1	1	
NUIQSUT	305	1			1		1	1
NULATO	388	1				1	1	
NUNAPITCHUK	357		1		1		1	1
OLD HARBOR	405	1			1	1	1	
OSCARVILLE	39	1	1		1		1	
OUZINKIE	240	1			1	1	1	
PALMER	2772		1	1	1	1	1	1
PAXSON	24	1		1	1	1		
PEDRO BAY	32	1			1	1	1	
PELICAN	206	1					1	
PERRYVILLE	107	1			1		1	
PETERSBURG	3,137	1	1		1	1	1	1
PILOT POINT	63	1			1	1	1	
PILOT STATION	372	1			1	1	1	1
PITKAS POINT	67	1	1		1	1	1	
PLATINUM	64				1		1	
POINT BAKER	93	1			1	1	1	
POINT HOPE	582	1			1		1	1
POINT LAY	67	1			1		1	1
PORT ALEXANDER	162				1	1	1	
PORT ALICE	135	1				1		
PORT ALSWORTH	75	1					1	

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING December, 198

COMMUNITY	POPULATION	RAT-NET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE-CONF.	CABLE TV
PORT GRAHAM	174	1			1	1	1	
PORT HEIDEN	87	1			1		1	
PORT LIONS	301	1			1	1	1	1
PORT MOLLER	37	1			1			
PORT PROTECTION						1		
PORTAGE CREEK	46	1			1			
PRUDHOE BAY	49				1	1		
QUINHAGAK	424	1	1		1		1	1
RAMPART	49	1				1	1	
RED DEVIL	27	1			1	1		
ROWAN BAY	50	1				1		
RUBY	283	1			1	1	1	
RUSSIAN MISSION	195	1	1		1	1	1	
SAINT GEORGE	172	1			1	1	1	
SAINT MARY'S	566	1	1		1	1	1	1
SAINT MICHAEL	279	1			1	1	1	1
SAINT PAUL	541	1			1	1	1	
SAND POINT	870	1				1	1	
SAVOONGA	470	1				1	1	1
SCAMMON BAY	296	1	1		1	1	1	
SELAWIK	635	1			1		1	1
SELDOVIA	435	1	1	1	1	1	1	
SEWARD	2,038	1	1	1	1	1	1	1
SHAGELUK	148	1	1		1	1	1	
SHAKTOOLIK	186	1				1	1	
SHELDON POINT	135				1	1	1	
SHISHMAREF	493	1			1		1	1
SHUNGNAK	238	1			1		1	1
SITKA	7,611	1	1	1	1	1	1	1
SKAGWAY	761	1			1	1	1	1
SLANA	39	1				1	1	
SLEETMUTE	74	1			1			
SOLDOTNA	3,538	1	1	1	1	1	1	1
SOUTH NAKNEK	185				1			1
SPARREVOHN	28	1				1		
STEBBINS	327	1				1	1	1
STERLING	1,530	1	1	1	1	1	1	
STEVENS VILLAGE	94	1				1	1	
STONEY RIVER	43	1			1		1	
SUTTON	304	1	1	1	1	1	1	
TAKOTNA	47	1			1	1	1	
TALKEETNA	441		1	1	1	1	1	
TANACROSS	148			1		1		
TANANA	444	1				1	1	
TATITLEK	54	1				1	1	
TELIDA	32	1			1		1	
TELLER	257	1				1	1	
TENAKEE SPRINGS	156	1					1	
TETLIN	110	1					1	
THORNE BAY	392	1			1	1	1	1
TIN CITY						1		
TOGIAK	554	1			1		1	1
TOK	608	1		1		1	1	

COMMUNITIES WITH RADIO, TV, OR TELECONFERENCING December, 1986

COMMUNITY	POPU-LATION	RAT-NET	APBC TV	OTHER TV	APBC RADIO	OTHER RADIO	TELE-CONF.	CABLE TV
TOKSOOK BAY	365	1	1		1	1	1	1
TOLSONA		1				1		
TRAPPERS CREEK	350	1			1		1	
TULUKSAK	272	1	1		1		1	
TUNTUTULIAK	203	1	1		1		1	
TUNUNAK	333	1			1	1	1	1
TWIN HILLS	67	1			1		1	
TYONEK	302	1	1	1	1	1	1	
UNALAKLEET	784	1				1	1	1
UNALASKA	1,630	1	1	1	1	1	1	1
VALDEZ	3,687	1				1	1	1
VENETIE	129	1				1	1	
WAINWRIGHT	507	1			1		1	1
WALES	136	1				1	1	
WASILLA	3459		1	1	1	1	1	1
WHALE PASS	93	1			1	1		
WHITE MOUNTAIN	150	1				1	1	
WHITTIER	268	1				1	1	
WILLOW	232	1	1	1	1	1	1	
WOMANS BAY		1			1	1		
WOODY ISLAND	5				1	1		
WRANGELL	2,3'6	1	1		1	1	1	1
YAKUTAT	453	1				1	1	
(288 communities)	479,918	248	85	53	404	433	233	91

Data extracted from: "Inventory of Communications Facilities Serving Alaska Communities -- 1987 Edition"

COMMUNITIES RECEIVING RATNET

	COMMUNITIES		ANNUAL COST		POPULATION	
and also receiving commercial TV	32	12.9%	451.6		34,281	27.7%
no commercial TV but have cable TV	67	27.0%	945.6		66,754	53.8%
no commercial or cable TV but commercial radio	89	35.9%	1,256.0		14,298	11.5%
no commercial or cable TV no commercial radio but Teleconferencing	44	17.7%	621.0	(*)	7,724	6.2%
none of the above	16	6.5%	225.8	(#)	924	0.7%
	248	100.0%	3,500.0		123,981	100.0%

(*)

AKUTAN	185
AMBLER	262
ANIAK	476
ATKA	80
ATMAUTLUAK	261
CHIGNIK BAY	141
CHIGNIK LAGOON	46
CLARK'S POINT	75
EEK	259
EKWOK	80
FALSE PASS	76
GOODNEWS BAY	230
HUSLIA	283
IVANOF BAY	38
KIVALINA	294
KLUKWAN	239
KOBUK	97
KOKHANOK	80
KOLIGANEK	112
KONGIGANAK	166
KWETHLUK	509
MOSQUITO LAKE	
NAPASKIAK	289
NELSON LAGOON	64
NEWHALEN	157
NEWTOK	187
NIGHTMUTE	134
NIKOLSKI	54
NOATAK	355
NONDALTON	231
NOORVIK	517
OSCARVILLE	39
PELICAN	206
PERRYVILLE	107
PORT ALSWORTH	75
PORT HEIDEN	87
STONEY RIVER	43
TELIDA	32
TENAKEE SPRINGS	156
TETLIN	110
TRAPPERS CREEK	350
TULUKSAK	272
TUNTUTULIAK	203
TWIN HILLS	67

	7,724

(#)

CHUATHBALUK	98
CORNER BAY	
DUTCH HARBOR	
EIGHT FATHOM BIGHT	
EKUK	7
FRESHWATER BAY	50
HOLLIS	
ILIAMNA	90
KALSKAG	145
LONG ISLAND	
LOWER KALSKAG	270
MESHIK	87
MINCHUMINA	20
PORT MOLLER	37
PORTAGE CREEK	46
SLEETMUTE	74

	924

COMMUNITIES RECEIVING PUBLIC TV

	COMMUNITIES		ANNUAL COST		POPULATION	
and also receiving commercial TV	43	50.6%	1,416.5		385,498	92.9%
no commercial TV but have cable TV	19	22.4%	625.9		24.380	5.9%
no commercial or cable TV but commercial radio	9	10.6%	296.5		1,589	0.4%
no commercial or cable TV no commercial radio but Teleconferencing	11	12.9%	362.4	(*)	2,907	0.7%
none of the above	3	3.5%	98.8	(#)	513	0.1%
	85	100.0%	2,800.0		414,887	100.0%

(*)

ANIAK	476
ATMAUTLUAK	261
EEK	259
KONGIGANAK	166
KWETHLUK	509
KWIGILLINGOK	246
NAPASKIAK	289
NEWTOK	187
OSCARVILLE	39
TULUKSAK	272
TUNTUTULIAK	203
	2,907

(#)

CHUATHBALUK	98
KALSKAG	145
LOWER KALSKAG	270
	513

COMMUNITIES RECEIVING PUBLIC RADIO
====================================

	COMMUNITIES		ANNUAL COST		POPULATION	
and also receiving commercial radio	131	64.2%	2,247.5		433,357	95.5%
no commercial radio but commercial TV	1	0.5%	17.2		153	.0%
no commercial radio or TV but cable TV	22	10.8%	377.5		12,045	2.7%
no commercial or cable TV no commercial radio but Teleconferencing	38	18.6%	652.0	(*)	7,048	1.6%
none of the above	12	5.9%	205.9	(#)	937	0.2%
	204	100.0%	3,500.0		453,540	100.0%

(*)

AKUTAN	185
AMBLER	262
ANIAK	476
ATMAUTLUAK	261
CHIGNIK BAY	141
CHIGNIK LAGOON	46
CLARK'S POINT	75
EEK	259
EKWOK	80
GOODNEWS BAY	230
IVANOF BAY	38
KIVALINA	294
KLUKWAN	239
KOBUK	97
KOKHANOK	80
KOLIGANEK	112
KONGIGANAK	166
KWETHLUK	509
KWIGILLINGOK	246
NAPASKIAK	289
NELSON LAGOON	64
NEWHALEN	157
NEWTOK	187
NIGHTMUTE	134
NIKOLSKI	54
NOATAK	355
NONDALTON	231
NOORVIK	517
OSCARVILLE	39
PERRYVILLE	107
PLATINUM	64
PORT HEIDEN	87
STONEY RIVER	43
TELIDA	32
TRAPPERS CREEK	350
TULUKSAK	272
TUNTUTULIAK	203
TWIN HILLS	67
	7,048

(#)

CHUATHBALUK	98
DEADHORSE	63
DUTCH HARBOR	
EKUK	7
ILIAMNA	90
KALSKAG	145
LOWER KALSKAG	270
MESHIK	87
MINCHUMINA	20
PORT MOLLER	37
PORTAGE CREEK	46
SLEETMUTE	74
	937

COMMUNITIES WITH NO OTHER RADIO OR TV
EXCEPT FOR RATNET AND/OR APBC

	POPULATION
AKUTAN	185
AMBLER	262
ANIAK	476
ATKA	80
ATMAUTLUAK	261
CHIGNIK BAY	141
CHIGNIK LAGOON	46
CHUATHBALUK	98
CLARK'S POINT	75
CORNER BAY	
DEADHORSE	63
DUTCH HARBOR	
EEK	259
EIGHT FATHOM BIGHT	
EKUK	7
EKWOK	80
FALSE PASS	76
FRESHWATER BAY	50
GOODNEWS BAY	230
HOLLIS	
HUSLIA	283
ILIAMNA	90
IVANOF BAY	38
KALSKAG	145
KIVALINA	294
KLUKWAN	239
KOBUK	97
KOKHANOK	80
KOLIGANEK	112
KONGIGANAK	166
KWETHLUK	509
KWIGILLINGOK	246
LONG ISLAND	
LOWER KALSKAG	270
MESHIK	87
MINCHUMINA	20
MOSQUITO LAKE	
NAPASKIAK	289
NELSON LAGOON	64
NEWHALEN	157
NEWTOK	187
NIGHTMUTE	134
NIKOLSKI	54
NOATAK	355
NONDALTON	231
NOORVIK	517
OSCARVILLE	39
PELICAN	206
PERRYVILLE	107
PLATINUM	64
PORT ALSWORTH	75
PORT HEIDEN	87
PORT MOLLER	37
PORTAGE CREEK	46
SLEETMUTE	74
STONEY RIVER	43
TELIDA	32
TENAKEE SPRINGS	156
TETLIN	110
TRAPPERS CREEK	350
TULUKSAK	272
TUNTUTULIAK	203
TWIN HILLS	67
63 communities	9.021

COMMUNITIES WITH NO OTHER RADIO OR TV
EXCEPT FOR RATNET AND/OR APBC
AND WITHOUT TELECONFERENCING FACILITY

	POPULATION
CHUATHBALUK	98
CORNER BAY	
DEADHORSE	63
DUTCH HARBOR	
EIGHT FATHOM BIGHT	
EKUK	7
FRESHWATER BAY	50
HOLLIS	
ILIAMNA	90
KALSKAG	145
LONG ISLAND	
LOWER KALSKAG	270
MESHIK	87
MINCHUMINA	20
PORT MOLLER	37
PORTAGE CREEK	46
SLEETMUTE	74
	-----
17 communities	987