

Leg. Finance - Finance Comte Files (1971-72) 8879

HB 619, 627, 632



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James D. Smith
Signature of Camera Operator

4/4/89
Date

Introduced: 2/11/72
Referred: State Affairs and
Finance

1 IN THE HOUSE

BY MCGILL

2 HOUSE BILL NO. 619

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SEVENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act appropriating to the Department of Public
7 Works, division of communications; and providing for
8 an effective date."

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

10 * Section 1. The sum of \$350,000 is appropriated from the general fund
11 to the Department of Public Works, division of communications, for the
12 installation of a television translator system for southwestern Alaska.

13 * Sec. 2. The appropriation made by this Act is for a capital project
14 and is subject to the provisions of AS 37.25.020.

15 * Sec. 3. This Act takes effect July 1, 1972.
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ALASKA STATE LEGISLATURE

SEVENTH Legislature SECOND Session

HOUSE BILL NO. 619
by MCGILL

"An Act appropriating to the Department of Public Works; division of communications; and providing for an effective date."

Pub Wks/communications

Introduced in the House 2/11/ 19 72

HISTORY IN THE HOUSE

19 72

Feb 11

Read first time and referred to Committee on State Affairs and Finance

Reported back with recommendation that

Read second time and

Read third time and

PASS Yeas
Nays
Absent
Excused

Effective Date

PASS Yeas
Nays
Absent
Excused

Reported correctly engrossed
Signed by Speaker
Sent to Senate

CHIEF CLERK OF THE HOUSE

HISTORY IN THE SENATE

19

Read first time and referred
to Committee on

Reported back with
recommendation that

Read second time and

Read third time and

PASS Yeas
 Nays
 : Absent
 Excused

Effective Date

PASS Yeas
 Nays
 : Absent
 Excused

Reported correctly engrossed

Signed by President

Returned to House

SECRETARY OF THE SENATE

HISTORY IN THE HOUSE

19

Received from Senate

Reported correctly enrolled

Sent to Governor

..... By Governor

Filed with Secy. State

Chapter No.

"An Act appropriating to the Department of Public Works, division of communications; and providing for an effective date."

Committee Report

HOUSE OF REPRESENTATIVES

2/25/72

_____ Date

Mr. Speaker

The Committee on FINANCE has had HB 619 under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for _____ and that CS for _____ do pass
- (and) recommends it be referred to the _____ committee
- reports it back without recommendation
- (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ CHAIRMAN

"An Act appropriating to the Department of Public Works, division of communications; and providing for an effective date."

2/11/72

Committee Report

FINANCE

HOUSE OF REPRESENTATIVES

Feb 24, 1972

Date

Mr. Speaker

The Committee on STATE AFFAIRS has had HB 619 under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for _____ and that CS for _____ do pass
- (and) recommends it be referred to the _____ committee
- reports it back without recommendation
- (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

Richard L. McVeigh Mike Rose _____

Helen M. Fischer Frank Angus _____

J. G. B. [unclear] _____

[unclear] _____

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

Jess Harris recommends: DO NOT PASS

Jean [unclear] recommends: DO NOT PASS

_____ recommends: _____

_____ recommends: _____

_____ recommends: _____

Richard L. McVeigh
CHAIRMAN

The Legislature of the State of Alaska
FISCAL NOTE
Second Session - Seventh State Legislature

I. REQUEST

Bill Identification: HR 119
 Title: TV Translator Appropriation
 Requested by: Legislative Finance Date: 2/24/72
 Return Date Requested: 3/10/72
 Agency: Public Works Program: _____

II. FISCAL DETAIL

Budget Request Unit(s) Affected: _____

A. EXPENDITURES: (Thousands of dollars)

OBJECT	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77
100 PERSONAL SERVICES		5,000.	3,600.	4,000.	4,500.	5,000.
200 TRAVEL		3,000.	1,200.	1,800.	2,000.	2,500.
300 CONTRACTUAL		342,000.	1,700.	2,500.	3,000.	3,500.
400 COMMODITIES			10,000.	12,000.	13,500.	15,000.
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		350,000.	16,500.	20,300.	23,000.	26,000.

B. FUNDING: (Thousands of dollars)

GENERAL FUND		350,000.	16,500.	20,300.	23,000.	26,000.
FEDERAL FUNDS						
OTHER						

C. POSITIONS:

PERMANENT/TEMPORARY	/	/ 1	/ 1	/ 1	/ 1	/ 1
MAN MONTHS (P./T.)	/	/ PT	/ PT	/ PT	/ PT	/ PT

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

Costs are based upon turn-key system installation (342,000).
 Maintenance costs reflect time and travel to perform routine maintenance and repair, contractual services for fuel delivery to remote sites. Fuel and Power generation costs are included in commodities.

IV. ATTACHMENTS

Engineering Feasibility Study.

V. DATE: March 2, 1972

PREPARED BY: C. L. Buck

C. L. Buck, Director
 Division of Communications

Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)

Introduced: 2/11/72
Referred: State Affairs and
Finance

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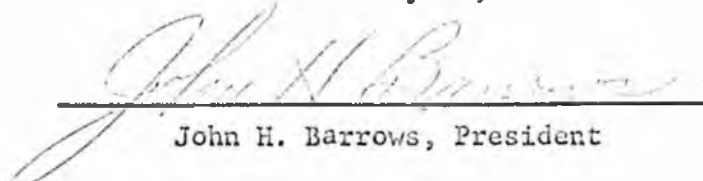
HB 619 file

REPORT OF THE INVESTIGATION
OF THE
FEASIBILITY OF EXTENDING TELEVISION SERVICE
FROM THE ALASKA FORCES
TELEVISION NETWORK STATIONS
TO REMOTE VILLAGES IN ALASKA

by

PACIFIC WESTERN ENGINEERING CORPORATION
13256 Northrup Way
Bellevue, Washington 98005
Telephone (206) 746-3110

Submitted May 28, 1971


John H. Barrows, President

REPORT OF THE INVESTIGATION
OF THE
FEASIBILITY OF EXTENDING TELEVISION SERVICE
FROM THE ALASKA FORCES
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INTRODUCTION

The State of Alaska is endeavoring to bring television to remote villages. This project has important social significance. It is intended to make the English language commonplace in native villages. It will have educational effects and may act as a general economic stimulus creating strong desires for electricity, communications and other conveniences, goods and services.

In 1970, Pacific Western Engineering performed a pilot study to determine the feasibility of providing television services at Dillingham by extending the transmissions from the Air Force station at King Salmon. It was found that such an extension was feasible. Subsequently, the State authorized the preparation of plans and specifications for securing competitive bids on the installation of television translator equipment. It is expected that this system will be placed in service during the year 1971.

On February 24, 1971, Commissioner George W. Easley, Department of Public Works, State of Alaska authorized Pacific Western Engineering to undertake this office study. It concerns determining the feasibility of extending television signals from eight AFRN television stations to remote cities or villages.

The study examines the location of population centers adjacent to AFRN stations to determine if extension of television service is technically feasible. It also considers the size and composition of these centers. Technical considerations included use of VHF and UHF translator systems, path loss calculations, tower height determination, areas of coverage, power requirements and cost estimates. U. S. Coast and Geodetic Survey

Maps 1:250,000 and World Aeronautical charts 1:1,000,000 were used for topographic data. TV channel designations used in this report are for illustrative purposes only. Actual channel determination would result from further investigation during the final design work.

POPULATION AND BACKGROUND DATA

The initial step in selecting locations to consider for television reception was to set an area within a 100-mile radius of each AFRN television station as the practical limit of service. Communities in each of these areas were examined as to population size, racial mix of population, activities and income.

Population: The investigation of population utilized the preliminary 1970 U. S. Census figures. The table below lists the eight AFRN Service Areas and shows the population of principal potential service locations in each. A few very small communities are not shown in the Table.

TABLE I
POPULATION OF POTENTIAL SERVICE LOCATIONS
BY AFRN SERVICE AREAS

I. GALENA		II. BIG DELTA (Fort Greeley)	
Ruby	145	Delta Junction	703
Koyukuk	124	Tanacross	84
Huslia	159	Dot Lake	42
Nulato	308		
Kaltag	<u>260</u>	TOTAL	<u>829</u>
TOTAL	942		

TABLE I (continued)

III TATALINA

McGrath	27
Nikolai	112
Stony River	74
Red Devil	81
Sleetmute	109
TOTAL	<u>655</u>

IV COLD BAY

King Cove	283
Belkofski	59
Squaw Harbor	65
Sand Point	360
Pavlof Harbor	39
False Pass	<u>62</u>
TOTAL	<u>868</u>

V KING SALMON

Dillingham	914*
Pilot Point	68
Naknek	178*
S.Naknek	154*
Egegik	148
Levelock	74
Ekwok	103
New Stuyahok	214
Koliganek	142
Aleknagik	128
Clark's Point	95
Eruk	51
Manokotak	214
Igiugig	36
Kakhonak	88
Newhalen	88
Iliamna	<u>58</u>
TOTAL	<u>2753</u>

VI KODIAK

Ouzinkie	160
Port Lions	227
Old Harbor	290
Larsen Bay	109
Karluk	98
Akhiok	115
Kaguyak	59
Woody Island	<u>41</u>
TOTAL	<u>1099</u>

VII ADAK ISLANDVIII SHENYA ISLAND

The population of these island is concentrated at the military bases. Statistics on remote areas do not show sufficient population to justify examination of the technical feasibility at this time.

* Presently being installed

Population Characteristics: An attempt was made to ascertain characteristics of the population in the localities listed in Table I. The 1970 census data is not yet available so 1960 data was examined. Investigation of this information was for the purpose of establishing guidelines or priorities for the construction of television extensions. The information obtained is assembled in Table II. We emphasize, however, that it is

not conclusive. It is, of course, 10 years old. Figures shown are typical of whole census areas and probably are not typical of the particular areas of interest to this study. Nevertheless, we have included the Table as a general indication of the composition of the population, education and income. We believe it does demonstrate that there is a need for education and that the economic status of family units in remote areas is extremely low.

TABLE II
POPULATION CHARACTERISTICS*

	Shemya Adak Cold Bay	Tatalina	Big Delta	King Salmon	Galena	Kodiak
PerCent Population which is Non-White	38.6%	74.5%	9.4%	64.6%	50.5%	18.8%
Number People Per Family (includes White & Non- White)	4.05	4.17	4.17	4.42	3.30	3.63
PerCent of Working Force which worked 50-52 weeks in 1959 (includes both White and Non-White)	65.8%	42.9%	61.5%	40%	53.7%	56.4%

* 1960 figures for the census areas in which listed localities are situated.

TABLE II (continued)

EDUCATION

TOTAL STATE OF ALASKA	Median education of White Males 25 Years of Age and Over (in 1960)	12 years
"	Median education of Non-White Males 25 Years of Age and Over (in 1960)	6.6 years
RURAL NON-FARM AREAS OF ALASKA ONLY	Median education of White Males 25 Year of Age and Over	12.3 years
"	Median Education of Non-White Males 25 Years of Age and Over	5.6 years

INCOME

ALASKA-RURAL NON-FARM AREAS	Median Income of White Families & Non-Related Individuals	\$4209 per year
"	Median Income of Non-White Families & Non-Related Individuals	\$2019 per year
"	Median Income of White Families	\$7565 per year
"	Median Income of Non-White Families	\$2812 per year
"	Median Income of White Unrelated Individuals	\$1921 per year
"	Median Income of Non-White Unrelated Individuals	\$1468

Additional Background Data: The major activities in nearly all the villages listed in Table I are hunting and fishing for subsistence and also fishing for profit. Several fish canneries operate on a seasonal basis in the coastal areas.

There are presently seven AFRN television stations in Alaska whose signals could be received and rebroadcast into remote areas. These stations are located at King Salmon AFB, Galena AFB, Tatalina AFB, Shemya AFB, NS Kodiak, NS Adak, and Fort Greeley. A future station is being planned for Cold Bay AFB. Stations with sufficient population in the surrounding areas to warrant further investigation are King Salmon, Kodiak, Galena, Cold Bay, Tatalina and Fort Greeley. Those with insufficient population in the surrounding area are Adak and Shemya.

For all stations investigated, only the population centers within a 100 miles radius of the station were considered for services. This was considered a practical limit because of cost and technical limitations of using low-cost translator systems beyond that distance.

TRANSLATOR SITES AND PATHS

King Salmon AFB: In addition to the King Salmon to Dillingham system previously studied, several other systems appear to be practical in this area. The first of these, shown on Figure 1, is Naknek to Egegik. This system uses the Naknek Translator of the King Salmon to Dillingham system for the first hop. Signals are then relayed by way of Johnston Hill to Hill 170 northeast of Egegik. Egegik is served by the Hill 170 translator. A 30-foot tower is required at Johnston Hill and a 190-foot tower is required at Hill 170.

The next system is Naknek to Kaliganek providing service to Levelock, Ekwok, New Stuyahok and Kaliganek. This system requires a 200-foot tower at Levelock, a 150-foot tower at Ekwok, a 150-foot tower at New Stuyahok and a 200-foot tower at Kaliganek.

The next system is an extension of the King Salmon-Dillingham system to serve Manokotak. A single translator located on Hill 1900 approximately 4.7 miles northeast of Manokotak will accomplish this function. A twenty-foot tower would be adequate.

The last system considered is an extension of the King Salmon-Dillingham system to serve Aleknagik. A single translator is located on Hill 800 which is southwest of and overlooks Aleknagik. A thirty-foot tower is required at this location.

In each of the systems considered here, with the exceptions of the Dillingham extensions, UHF translator equipment to carry the signal from point to point was found to be necessary, with VHF equipment used to serve the areas of interest. This arrangement minimizes the number of hops and the required tower heights. Those savings are somewhat offset by the increased cost of UHF equipment, but a lower overall cost is still realized.

In the four systems discussed there are four remote locations which do not have power available. These are Johnston Hill, Hill 170 (NE of Egegik) Hill 800 (SW of Aleknagik) and Hill 1900 (NE of Manokotak). These sites will require thermoelectric generators or other similar source of power. The other areas, as far as we are able to determine have power available to them.

NS Kodiak: The only population centers around this station to which television could practically be extended are Port Lions and Ouzinkie (See Figure 2). A single translator located on Hill 2300 to the north of the Kodiak Naval Station would serve both areas. This is a remote site and will require a source of power such as a thermoelectric generator. Access to the area should be possible by 4-wheel drive vehicle. The translator would be VHF to VHF.

Galena AFB: There are two areas (Shown in Figure 3) in the vicinity of Galena AFB to which it would be practical to extend television service. These are the Ruby area and the Koyukuk-Nulato-Kaitag areas with the latter locality being the more practical because of the larger population.

The Ruby system calls for a remote translator on Hill 800 east of Galena and a translator on the Hill to the east of Ruby. The remote translator would require a thermoelectric generator, while the Ruby site can use commercial power. A 50-foot tower is required at Hill 800 and a 20-foot tower is required at Ruby.

The Koyukuk-Nulato-Kaitag system will use remote translators at Koyukuk Mountain and Nulato VABM, and a commercially powered translator at Kaitag CAA Station. Twenty-foot towers are required at these three sites.

Access to all repeaters should be possible by 4-wheel drive vehicle. All translators will be VHF to VHF.

Tatalina AFB: There are two areas, shown in Figure 4, in the vicinity of Tatalina AFB to which it appears technically possible to extend television service. These are the McGrath area and the Stony River-Sleetemute Parks (Red Devil) areas. McGrath presently receives a very weak, erratic

signal which could be greatly improved with a remote translator on Hill 1972 southwest of McGrath. This translator would require a thermoelectric or similar power source and would be a VHF to VHF translator. A 20-foot tower would be adequate.

The Stony River-Sleetemute-Parks (Red Devil) area system would be composed of four translators. The first of these would be on Hill 2000, approximately 77 miles south of Tatalina AFB on a line connecting Tatalina AFB and Sparrevohn AFS. The other sites would be near the towns of Stony River, Sleetemute and Parks. Power is available at these latter three locations but not at Hill 2000.

Cold Bay: The AFRN station at Cold Bay may be installed within two to three years. When that station becomes active, two areas, King Cove on the mainland and Sand Point on Popof Island, shown on Figure 5, appear to be the only areas to which it would be practical to extend television service.

King Cove would be served by a single translator located on Hill 2000 north of King Cove. This would be a VHF to VHF translator and would require a 20-foot tower. This would also serve as the first leg of the Cold Bay to Sand Point system.

The Cold Bay to Sand Point system would require in addition to the Hill 2000 translator, translators on Tolstoi Mountain and Fourth VABM on Unga Island. Sand Point would be served from the Unga Island site. Twenty-foot towers would be required.

All these stations would require thermoelectric or similar sources of power. The Tolstoi Mountain and Unga Island sites are in very remote locations and would probably require servicing by helicopter.

Fort Greeley: The only area near Fort Greeley, shown in Figure 6, to which television could reasonably be extended is Delta Junction. It appears, however, that the Delta Junction area is presently covered in a limited fashion by the Fort Greeley transmitter. Some improvement in service could be achieved by installing a translator at Delta Junction.

Adak and Shemya Islands: These areas, shown in Figure 7 and Figure 8, do not contain sufficient permanent populations to warrant the expense of translator systems. No further investigation of these areas was performed.

ECONOMIC CONSIDERATIONS

Tables III through XIV show the estimated cost of the various translator systems investigated. The population of each area considered is shown in Table I. We estimate a family unit to consist of 5 persons in these locations. From this data we computed the number of families in each area under consideration and have assembled it in Table XV. Also shown in this table is the approximate initial cost and the recurring annual costs for various areas.

TABLE III

COSTS: EGECEK SYSTEM

	<u>Johnston Hill</u>
Equipment	\$ 3700
Receive Antenna & Coaxial Cable	250 110
Transmit Antenna & Coaxial Cable	450 110
Building	2100
Tower	300
Power	2600
Shipping	5380
Installation	7790
Subtotal	<hr/> \$ 21,790
Engineering Costs	
TOTAL	

<u>Egegik</u>	<u>TOTAL</u>
\$ 2600	\$ 6300
450	700
380	490
250	700
380	490
2100	4200
2850	3150
2600	5200
5000	9380
9940	17,730
<hr/>	<hr/>
\$ 26,550	48,340
	<hr/>
	6,800
	<hr/>
	\$ 55,140

TABLE

ESTIMATED COSTS: NAKNEK

	<u>NAKNEK</u>	<u>LEVELOCK</u>
Equipment	4500	4000
Receive Antenna & Coaxial Cable		850
Transmit Antenna & Coaxial Cable	780	850
Building	-	2100
Tower	-	3000
Power	-	-
Shipping	610	3840
Installation	1060	6540
Subtotal	<u>\$ 6950</u>	<u>\$21,180</u>

Add: Engineering Costs

T O T A L

K-TO-KOLIGANEK SYSTEM

<u>EKWOK</u>	<u>NEW STUYAHOK</u>	<u>KOLIGANEK</u>	<u>TOTAL</u>
7100	7100	2600	25,300
670	670	670	2,860
1140	1140	470	4,380
2100	2100	2100	8,400
1590	1590	1590	7,500
-	-	-	-
3880	3880	3290	15,500
5990	5990	4950	24,530
<hr/>	<hr/>	<hr/>	<hr/>
\$22,380	\$22,380	\$15,580	\$88,470
			11,800
			<hr/>
			\$ 100,270

Table V
COSTS

MANOKOTAK SYSTEM

	<u>Dillingham</u>	<u>Hill 1900</u>	<u>TOTAL</u>
Equipment	\$ 1800	\$ 2000	\$ 3800
Receive Antenna & Coaxial Cable	-	360	360
Transmit Antenna & Coaxial Cable	300	360	660
Building	-	2100	2100
Tower	-	200	200
Power	-	2600	2600
Shipping	240	4150	4390
Installation	440	6530	6970
	<hr/>	<hr/>	<hr/>
SUBTOTAL	2780	18,300	21,080
Add Engineering Costs			<u>5,200</u>
T O T A L			\$26,280

TABLE VI

COSTS: ALMERAGIK SYSTEM

	<u>Dillingham</u>	<u>1111 800</u>	<u>TOTAL</u>
Equipment	\$ 3400	\$ 2600	\$ 6000
Receive Antenna & Coaxial Cable	-	350	350
Transmit Antenna & Coaxial Cable	350	350	700
Building	-	2100	2100
Tower	-	200	200
Power	-	2600	2600
Shipping	410	4200	4610
Installation	790	6640	7430
Subtotal	4950	19,040	23,990
Engineering Costs			<u>5,200</u>
TOTAL			\$ 29,190

Equipment

Receive Antenna &
Coaxial Cable

Transmit Antenna &
Coaxial Cable

Building

Tower

Power

Shipping

Installation

Subtotal

Engineering Costs

T O T A L

TABLE VI

COSTS: FORT LIONS SYSTEM

Hill 2300

\$ 4600

250

100

500

200

2100

200

2600

4470

6710

\$ 21,730

4,600

\$ 26,330

TABLE VIII

COSTS: RUBY SYSTEM

	<u>1111 800</u>
Equipment	\$ 2000
Receive Antenna & Coaxial Cable	250 150
Transmit Antenna & Coaxial Cable	250 150
Building	2100
Tower	500
Power	2600
Shipping	5220
Installation	11,480
Subtotal	<hr/> \$ 24,700
Engineering Costs	
 T O T A L	

<u>Ruby</u>	<u>TOTAL</u>
\$ 2000	\$ 4000
250	500
100	250
250	500
100	250
2100	4200
200	700
-	2600
4880	10,100
10,700	22,180
<hr/>	<hr/>
\$ 20,580	\$ 45,280
	<hr/>
	6,800
	\$ 52,080

TABLE IX

COSTS: KOYUKUK-NULATO-KALTAG SYSTEM

	<u>Koyukuk</u>	<u>Nulato</u>	<u>Kaltag</u>	<u>TOTAL</u>
Equipment	\$ 2000	\$ 2000	\$ 2000	\$ 6000
Receive Antenna & Coaxial Cable	250 100	250 100	250 100	750 300
Transmit Antenna & Coaxial Cable	250 100	250 100	250 100	750 300
Building	2100	2100	2100	6300
Tower	200	200	200	600
Power	2600	2600	-	5200
Shipping	4140	4140	2880	11,160
Installation	10,220	10,220	9700	30,140
Subtotal	<u>\$ 21,960</u>	<u>\$ 21,960</u>	<u>\$ 17,580</u>	61,500
Add: Engineering Costs				<u>9,900</u>
T O T A L				\$ 71,400

TABLESTONY RIVER SYSTEM:

	<u>HILL 2000</u>	<u>STONY RIVER</u>
Equipment	2000	2000
Receive Antenna & Coaxial Cable	250 220	250 220
Transmit Antenna & Coaxial Cable	250 220	250 220
Building	2100	2100
Tower	1500	1500
Power	2600	-
Shipping	4450	3190
Installation	11,310	9790
Subtotal	<u>\$ 24,900</u>	<u>\$ 19,526</u>

Add: Engineering Costs

T O T A L

X

ESTIMATED COSTS

<u>SLEETEMUTE</u>	<u>RED DEVIL</u>	<u>TOTAL</u>
2000	2000	8,000
250	250	1,000
220	220	880
250	250	1,000
220	220	880
2100	2100	8,400
1500	1500	6,000
-	-	2,600
3190	3190	14,020
9790	9790	20,680
<hr/>	<hr/>	<hr/>
\$ 19,520	\$ 19,520	\$ 83,460
		11,400
		<hr/>
		\$ 94,860

TABLE XI
ESTIMATED COSTS: McGRATH

	<u>MC GRATH</u>
Equipment	2000
Receive Antenna & Coaxial Cable	350
Transmit. Antenna & Coaxial Cable	350
Building	2100
Tower	200
Power	2600
Shipping	5140
Installation	10,700
Subtotal	\$ 23,440
Add: Engineering Costs	4,600
TOTAL	\$ 28,040

TABLE XII

ESTIMATED COSTS: KING COVE SYSTEM

	<u>KING COVE</u>
Equipment	2300
Receive Antenna and Coaxial Cable	350
Transmit Antenna and Coaxial Cable	350
Building	2100
Tower	200
Power	2600
Shipping	4170
Installation	5280
	<hr/>
Subtotal	\$ 17,350
Add: Engineering Costs	<hr/> 4,600
T O T A L	\$ 21,950

TABLE XIII

COSTS: SAND POINT SYSTEM

	<u>King Cove</u>	<u>Tolstoi Mountain</u>	<u>Fourth VABM</u>	<u>TOTAL</u>
Equipment	1800	2000	2000	5800
Receive Antenna & Coaxial Cable	-	250	250	500
	-	100	100	200
Transmit Antenna & Coaxial Cable	250	250	250	750
	100	100	100	300
Building	-	2100	2100	4200
Tower	-	200	200	400
Power	-	2600	2600	5200
Installation	2750	4140	4140	11,030
Shipping	3430	7420	7420	18,270
Subtotal	<u>8330</u>	<u>19,160</u>	<u>19,160</u>	<u>46,650</u>
Add Engineering Costs				<u>7,600</u>
T O T A L				\$ 54,250

TABLE

ESTIMATED COSTS:

Equipment

Receive Antenna and Coaxial Cable

Transmit Antenna and Coaxial Cable

Building

Tower

Power

Shipping

Installation

Subtotal

Add: Engineering Costs

TOTAL

DELTA JUNCTION

DELTA JUNCTION

2000

270

270

2100

1500

-

5120

11,720

\$ 22,980

4,600

\$ 27,580

TABLE XV
COST ANALYSIS

Area	No. Families	Initial Cost	Initial Cost Per Family	Annual Operating Cost	Annual Operating Cost Per Family
King Salmon:					
Egegik	30	\$55,140	\$1838	\$2700	\$90
Kaliganek-Level- cock-New Stuyahok	107	100,270	937	4100	38
Manokotak	43	26,280	611	1350	31
Aleknagik	26	29,190	1122	1350	52
Kodiak:					
Port Lions- Ouzinkie	74	26,330	356	1350	18
Galena:					
Ruby	29	52,080	1796	2375	82
Koyukuk-Nulato- Kaltag	138	71,400	517	3725	27
Tatalina:					
McGrath	56	28,040	500	1350	24
Stony River- Sleetemute-Parks	53	94,860	1790	4425	83
Fort Greeley:					
Delta Junction	141	27,580	195	1025	7
Adak & Shemya Islands *		*	*	*	*
Cold Bay **					
King Cove	57	21,950	385	1350	24
Sand Point	72	54,250	753	2700	38

* Costs were not estimated because of limited permanent population.

** AFRN Station to be installed in future

The estimated cost of operation and maintenance of a typical translator site is shown in Table XVI.

TABLE XVI
DIRECT OPERATION AND ANNUAL MAINTENANCE COSTS
OF A TYPICAL TRANSLATOR

	<u>Remote</u>	<u>Commercially Powered</u>
Electricity	-	\$ 50
Propane Costs Per Year	\$ 250	-
Operation-Direct Labor	500	475
Maintenance & Repair Costs	600	500
Estimated Total Operation & Maintenance Costs Per Year:	<u>\$ 1350</u>	<u>\$ 1025</u>

CONCLUSIONS AND RECOMMENDATIONS

It is technically feasible to extend television services to several locations near the Alaska Forces Television Stations. Table XVII has been prepared to give an approximation of the coverage of population that would obtain for the various systems investigated. The cost of installing all of these systems would be approximately \$600,000.

TABLE XVII
AREA COVERAGE DATA

<u>AREA & TRANSLATOR SYSTEM</u>	<u>POPULATION OF REMOTE VILLAGES (Table I)</u>	<u>POPULATION TO BE SERVED</u>	<u>% SERVED</u>
GALENA			
Ruby		145	
Koyukuk-Nulato-Kaltag		692	
	942	837	89%
BIG DELTA			
Delta Junction		703	
	829	703	85%

TABLE XVII(continued)
AREA COVERAGE DATA

AREA & TRANSLATOR SYSTEM	POPULATION OF REMOTE VILLAGES (Table I)	POULATION TO BE SERVED	% SERVED
TATALINA			
McGrath		279	
Stony River-Sleetemute- Red Devil		<u>264</u>	
	655	543	83%
KING SALMON			
Dillingham-Naknek- S. Naknek		1246	
Manokotak		214	
Koliganek-New Stuyahok- Ekwok-Levelock		533	
Aleknagik		128	
Egegik		<u>148</u>	
	2753	2269	82%
COLD BAY			
King Cove		283	
Sand Point		<u>360</u>	
	868	643	74%
KODIAK			
Port Lions-Ouzinkie		<u>387</u>	
	1099	387	35%
GRAND TOTAL	7146	5383	75%

Examination of the population numbers and the income level indicates rather quickly that the extension of television services to many remote villages cannot be undertaken as a commercial venture at this time. There is simply not enough money to install systems and operate them.

Moreover, even though the initial installation were funded by the State or other government authority, maintenance and operation of the translator systems may also require subsidy for a few years. In fact, purchase and operation of television receivers may be a great difficulty for many families.

Listed below are the systems which will serve the most people at the least cost. This listing is arranged in ascending order of cost per inhabitant of the area served. Based on costs alone, we recommend priority of implementation of the projects in the order listed. We recognize however that there are other considerations to be weighed and that an office study of this type may need to be supplemented by people in the field having knowledge of local conditions and a good understanding of the social, educational and cultural aspects of the matter.

TABLE XVIII
ECONOMIC PRIORITY

<u>SYSTEM</u>	<u>ESTIMATED COST</u>
1. Naknek-S.Naknek-Dillingham	\$ 62,800
2. Port Lions-Ouzinkie	26,330
3. Koyukuk-Nulato-Kaltag	71,400
4. Manokotak	26,280
5. Koliganek-New Stuyahok-Ekwok-Levelock	100,270
6. Aleknagik	29,190
7. Stony River-Sleetemute-Red Devil	94,860
8. Ruby	52,080
9. Egegik	55,140

The AFRTV station at Cold Bay will be established at some indefinite time in the future. When this occurs, consideration can be given to the following systems.

TABLE XIX
FUTURE SYSTEM

<u>SYSTEM</u>	<u>ESTIMATED COST</u>
1. King Cove	\$ 21,950
2. Sand Point	54,250

The following areas are presently receiving at least weak television signals and therefore were assigned a lower priority than other potential reception areas not presently receiving signals. It may be advantageous at some future date to upgrade these areas by the addition of translator stations.

TABLE XX
SERVICE IMPROVEMENT

<u>SYSTEM</u>	<u>ESTIMATED COST</u>
1. McGrath	\$ 28,040
2. Delta Junction	27,580

It is technically feasible to reach most of the communities set out in Table I. Localities not named in the system listed in Table XVIII have been eliminated principally by economic factors. If substantial population growth or other significant change should occur in these areas it would be appropriate to review matters and investigate service to them at that time.

Koyukuk Mountain
Elev. 903'

to

Nulato VADM
Elev. 1050'

Distance = d = 13.2 miles

Frequency-Channel 13 = F = 213 MHz

Free Space Loss

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 46.57 + 22.41 \\ &= 101.28 \text{ db} \end{aligned}$$

Received Signal

$$\begin{aligned} \text{Received Signal} &= \text{Transmit Power} + \text{Antenna Gains} - \text{Free Space Loss} - \text{Other Losses} \\ \text{Transmit Power} &= +10 \text{ dbm} \\ \text{Assume Transmit Antenna Gain} &= 8.0 \text{ db} \\ \text{Assume Receive Antenna Gain} &= 8.0 \text{ db} \\ \text{Assume Other Losses} &= 2.0 \text{ db} \\ \text{Received Signal} &= +10.0 \text{ dbw} + 8.0 + 8.0 - 2.0 - 101.3 \text{ db} \\ &= -77.3 \text{ dbw} \\ \text{Required Signal for Acceptable Performance} &= -92.7 \text{ dbw} \\ \text{Fade Margin} &= 15.4 \text{ db} \end{aligned}$$

Tower Height Requirements

$$\begin{aligned} \text{Tower Height} &= \text{Highest Midpath Point} + \text{Fresnel Zone Clearance} \\ &\quad + \text{Earth Curvature} - \text{Receiving Site Elevation} \\ &= 150' + 180' + 30' - 1050' \\ &= 360' - 1050' \\ &= -690' \end{aligned}$$

Use 20 foot Towers

Kodiak to Hill 2300
Elev 300' Elev 2300'

Distance: 6.0 miles = d

Frequency-Channel 8: 183 MHz = F

Free Space Loss:

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 45.25 + 13.98 \\ &= 92.73 \text{ db} \end{aligned}$$

Received Signal

Received Signal = Transmit Power + Antenna Gains - Free Space Loss - Other Losses

Effective Transmit Power 50 W = +17 dbw

Assume Receive Antenna Gain = 8.0 db

Assume Other Losses = 2.0 db

Received Signal = 17.0 + 8.0 - 92.73 - 2.0
= -69.73 dbw

Required Received Signal = -92.73 dbw
Margin = 23 db

Tower Height Requirements

Tower Height = 2(Earth Curvature + Fresnel Zone Clearance)
- Height of Transmitting Antenna Above Path
Low Point - Receiving Site Height Above
Low Point.

Assume Fresnel Zone Clearance = .6

Tower Height = 2(10 + 108) - 150 - 2500
= -2414 Ft.

Use 20 foot tower

PATH CALCULATIONS

Hill 2500 to Port Lions
Elev 2500' Elev 400'

Distance: 14.0 miles = d

Frequency-Channel 13: 213 MHz = F

Free Space Loss:

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 46.57 + 22.9 \\ &= 101.8 \text{ db} \end{aligned}$$

Received Signal

Received Signal = Transmitted Power + Antenna Gains - Free Space Loss - Other Losses

Transmit Power at Hill 2500 = 10 watts
= +10 dbw

Assume Transmit Antenna Gain = 12.00 db

Assume Receive Antenna Gain = 4.0 db

Assume Other Losses 1.0 db

Received Signal = 10 + 12 + 4 - 1 - 101.8 db
= -76.8 dbw

Required Received Signal
For Acceptable Performance = -92.7 dbw

Note: Signal is strong enough to be received directly on home receivers without further translation.

Tower Height Requirement

Tower Height = 2(Earth Curvature + Fresnel Zone Clearance)
- Height of Transmitting Antenna Above Path
Low Point - Receiving Site Height Above
Path Low Point.

= 2(30 + 180) - 1300 - (-900)
= 20 feet

Use 20 foot Tower

PATH CALCULATIONS

Cold Bay to Hill 2000 North of King Cove
Elev 200' Elev 2000'

Distance: Approximately 17 miles

Frequency-Channel 3 : 183 MHz

Free Space Loss:

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 45.25 + 24.60 \\ &= 102.2 \text{ db} \end{aligned}$$

Received Signal:

$$\text{Received Signal} = \text{Transmit Power} + \text{Antenna Gains} - \text{Free Space Loss} - \text{Other Losses}$$

$$\begin{aligned} \text{Effective Transmitter Power} &= 108 \text{ watts W} \\ \text{at Cold Bay} &= 20.3 \text{ dbw} \end{aligned}$$

$$\text{Assume Receive Antenna Gain} = 8.0 \text{ db}$$

$$\text{Assume Other Losses} = 2.0 \text{ db}$$

$$\begin{aligned} \text{Received Signal} &= 20.3 + 8.0 - 2.0 - 102.2 \\ &= -75.9 \text{ dbw} \end{aligned}$$

$$\begin{aligned} \text{Required Signal for} &= \\ \text{Acceptable Performance} &= -92.7 \text{ dbw} \end{aligned}$$

$$\text{Fade Margin} = 16.8 \text{ db}$$

Tower Height Requirements

$$\begin{aligned} \text{Tower Height} &= \text{Highest midpath point} + \text{Fresnel Zone Clearance} \\ &\quad + \text{Earth Curvature} - \text{Receiving Site Height} \\ &= 0 + 204 + 40' - 2000' \\ &= -1756' \end{aligned}$$

Use 20' Tower

PATH CALCULATIONS

Hill 2000 to Tolstoi Peak VABM
Elev 2000' Elev 1700'

Distance: 38.5 miles

Frequency-Channel 13: 213 MHz

Free Space Loss

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 46.57 + 31.7 \text{ db} \\ &= 110.6 \text{ db} \end{aligned}$$

Received Signal

$$\text{Received Signal} = \text{Transmit Power} + \text{Antenna Gains} - \text{Free Space Loss} - \text{Other Loss}$$

$$\begin{aligned} \text{Transmit Power} &= 10 \text{ watts} \\ &= +10 \text{ dbw} \end{aligned}$$

$$\text{Assume Transmit Antenna Gain} = 10.0 \text{ db}$$

$$\text{Assume Receive Antenna Gain} = 10.0 \text{ db}$$

$$\text{Assume Other Losses} = 2.0 \text{ db}$$

$$\begin{aligned} \text{Received Signal} &= 10.0 + 10.0 + 10.0 - 2.0 - 110.6 \\ &= -82.6 \text{ dbw} \end{aligned}$$

$$\begin{aligned} \text{Required Signal for Acceptable Performance} &= -92.7 \text{ dbw} \end{aligned}$$

$$\text{Fade Margin} = 10.1 \text{ db}$$

Tower Height Requirements

$$\begin{aligned} \text{Tower Height} &= \text{Highest midpath point} + \text{Fresnel Zone Clearance} \\ &\quad + \text{Earth Curvature} - \text{Receiving Site Height} \\ &= 300 + 336 + 200 - 1700 \\ &= -864' \end{aligned}$$

Use 20' Tower

Fourth VABM to Sand Point (Popof Island)
Elev 1964' Elev 0'

Distance: 9.4 miles

Frequency Channel 7: 177 MHz

Free Space Loss:

Loss db = $32.3 + 20 \log F + 20 \log d$
 = $32.3 + 44.3 + 19.5$

Loss db = 96.6 db

Received Signal

Received Signal = Transmit Power + Antenna Gain - Free Space Loss
 - Other Loss

Transmit Power = 10 watts
 = 10 dbw

Assume Transmit Antenna Gain = 10 db

Assume Receive Antenna Gain = 4.0 db

Assume Other Losses = 2.0 db

Received Signal = $10.0 + 10.0 + 4.0 - 2.0 - 96.6$
 = -74.6 dbw

200 MV Signal @ 75 ohms = -92.7 dbw

Margin = 18.1 db

12,900 MV @ 75 ohms = 24,800 MV @ 300 ohms

Note: Signal is strong enough to be received on home receivers without further translation.

Tower Height Requirement

Tower Height = Highest midpath point + Fresnel Zone Clearance
 + Earth Curvature - Receiving Site Height

 = $0 + 0 + 0 - 100'$
 = -100'

Use 20-30' masts

Tolstoi Peak VABM to Fourth VABM
Elev 1700' Elev 1964'

Distance: 29.5 Miles
Freq., Channel 11: 201 MHz

Free Space Loss

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 46.06 + 29.4 \\ &= 107.8 \text{ db} \end{aligned}$$

Received Signal

$$\begin{aligned} \text{Received Signal} &= \text{Transmit Power} + \text{Antenna Gain} - \text{Free space} \\ &\quad \text{loss} - \text{Other losses} \\ \text{Transmit Power} &= 10 \text{ watts} \\ &= +10 \text{ dbw} \\ \text{Assume Transmit Antenna Gain} &= 10.0 \text{ db} \\ \text{Assume Receive Antenna Gain} &= 10.0 \text{ db} \\ \text{Assume Other losses} &= 2.0 \text{ db} \\ \text{Received Signal} &= 10.0 + 10.0 + 10.0 - 2.0 = 107.8 \\ &= -79.8 \text{ dbw} \\ \text{Required Signal for} & \\ \text{Acceptable Performance} &= -92.7 \text{ dbw} \\ \text{Fade Margin} &= 11.9 \text{ db} \end{aligned}$$

Tower Height Requirements

$$\begin{aligned} \text{Tower Height} &= \text{Highest midpath point} + \text{Fresnel Zone Clearance} \\ &\quad + \text{Earth Curvature} - \text{receiving height.} \\ &= 0 + 264 + 115' - 1964' \\ &= - 1585 \\ &\text{Use 20' Tower} \end{aligned}$$

Hill 800 to Ruby VADM
Elev. 850' Elev. 665'

Distance = d: 29.2 miles

Frequency=F - Channel 11: 201 MHz

Free Space Loss

$$\begin{aligned} \text{Loss db} &= 32.3 + 20 \log F + 20 \log d \\ &= 32.3 + 46.06 + 29.30 \text{ db} \\ &= 107.7 \text{ db} \end{aligned}$$

Received Signal

$$\text{Received Signal} = \text{Transmit Power} + \text{Antenna Gains} - \text{Free Space Loss} - \text{Other Losses}$$

$$\begin{aligned} \text{Transmit Power} &= 10.0 \text{ watts} \\ &= +10.0 \text{ dbw} \end{aligned}$$

$$\text{Assume Transmit Antenna Gain} = 8.0 \text{ db}$$

$$\text{Assume Receive Antenna Gain} = 8.0 \text{ db}$$

$$\text{Assume Other Losses} = 2.0 \text{ db}$$

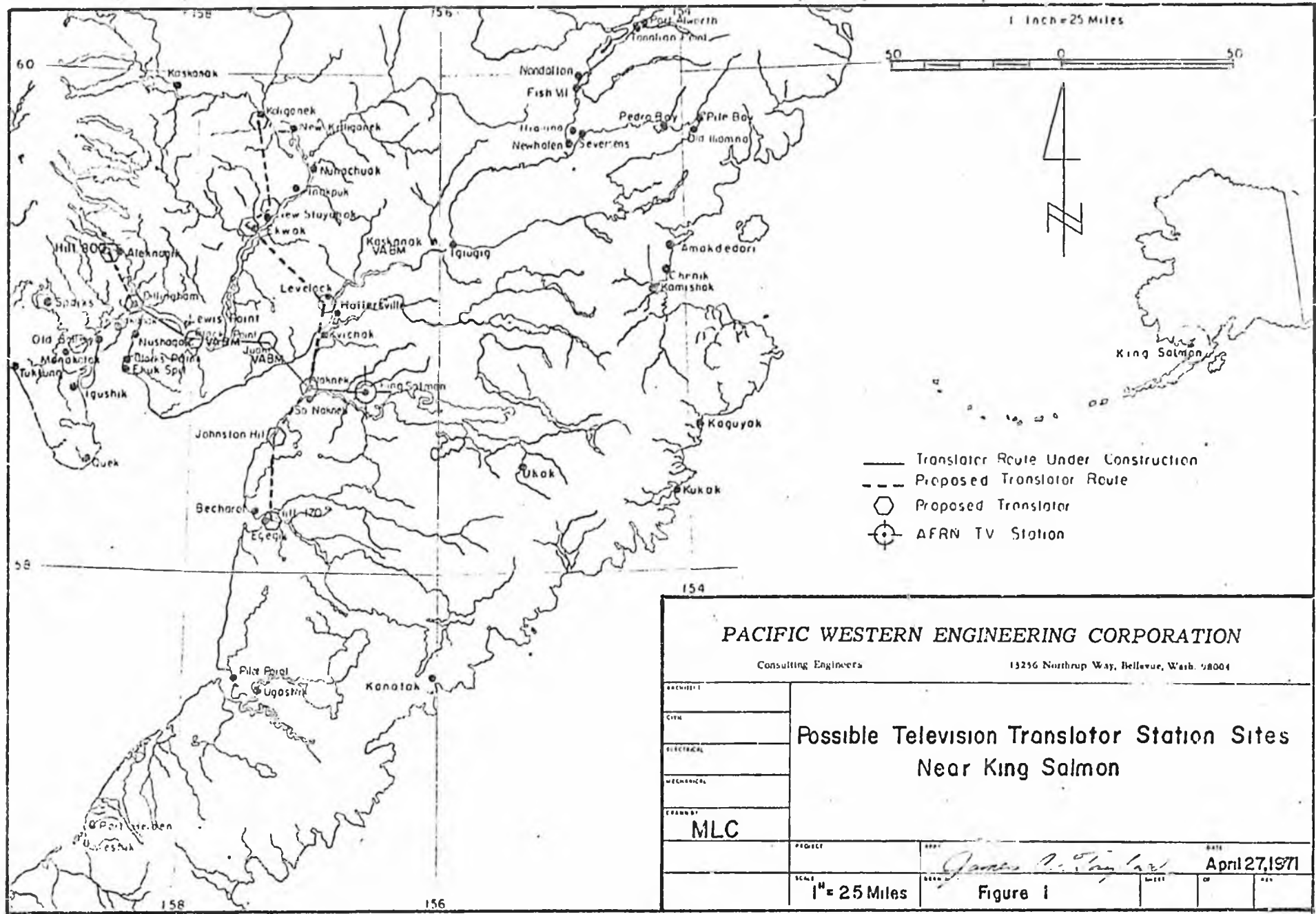
$$\begin{aligned} \text{Received Signal} &= +10.0 \text{ dbw} + 8.0 + 8.0 - 2.0 - 107.7 \text{ db} \\ &= -83.7 \text{ dbw} \end{aligned}$$

$$\begin{aligned} \text{Signal Required for} \\ \text{Acceptable Performance} &= -92.7 \text{ db} \end{aligned}$$

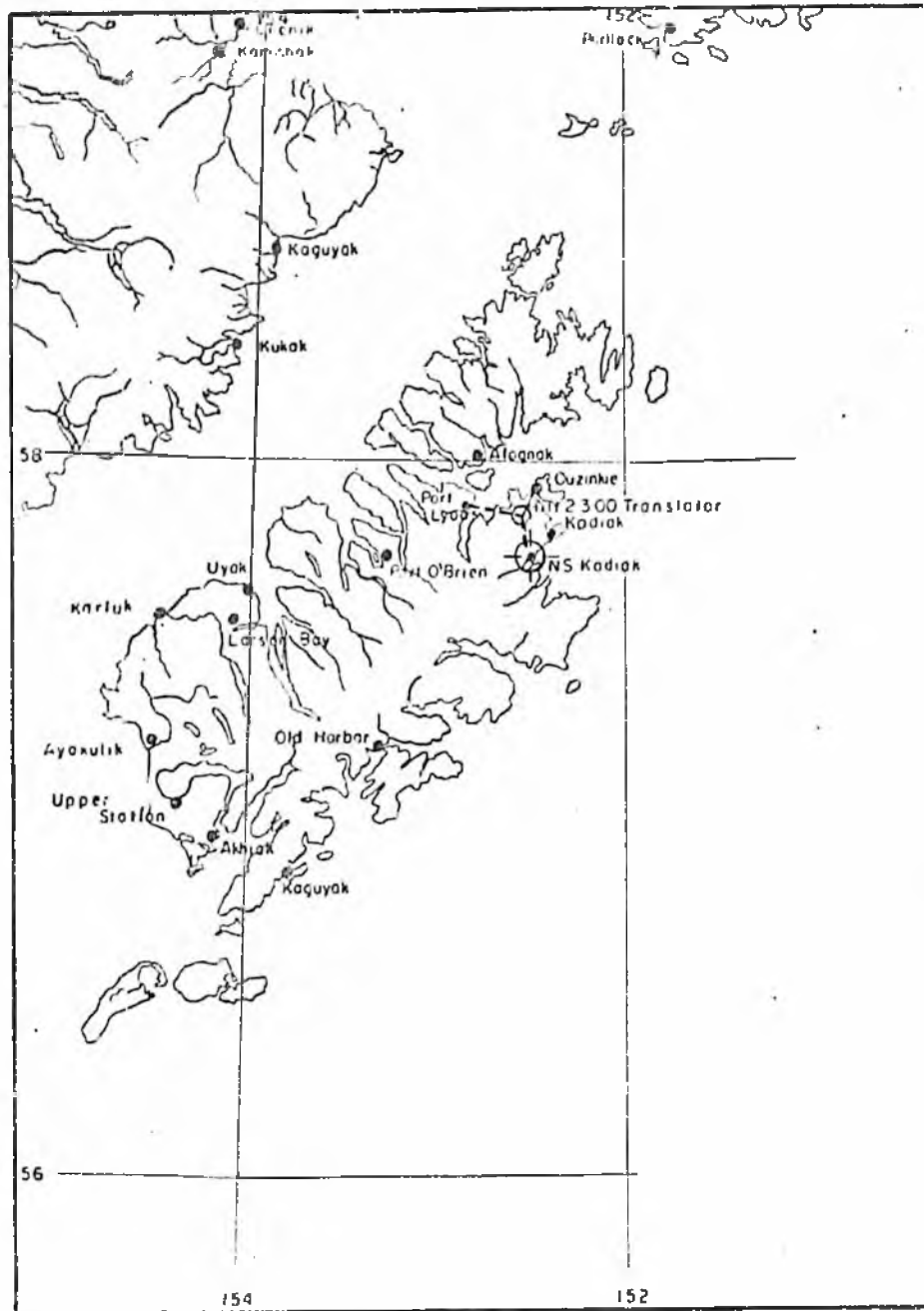
$$\text{Fade Margin} = 9.0 \text{ db}$$

Tower Height Requirements

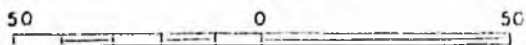
$$\begin{aligned} \text{Tower Height} &= \text{Highest midpath point} + \text{Fresnel Zone Clearance} \\ &\quad + \text{Earth Curvature} - \text{Receiving Site Elevation.} \\ &= 150 + 265 + 40 - 665 \\ &= -110 \text{ ft.} \\ &= \text{Use Twenty Foot Tower} \end{aligned}$$



PACIFIC WESTERN ENGINEERING CORPORATION	
Consulting Engineers 13256 Northrup Way, Bellevue, Wash. 98004	
ARCHITECT	Possible Television Translator Station Sites Near King Salmon
CITY	
ELECTRICAL	
MECHANICAL	
DESIGNED BY	MLC
PROJECT	<i>James P. Taylor</i>
SCALE	1" = 25 Miles
DATE	April 27, 1971
FIGURE	Figure 1



1 Inch = 25 Miles



- Proposed Translator Route
- Proposed Translator
- ⊕ AFRN TV Station

PACIFIC WESTERN ENGINEERING CORPORATION

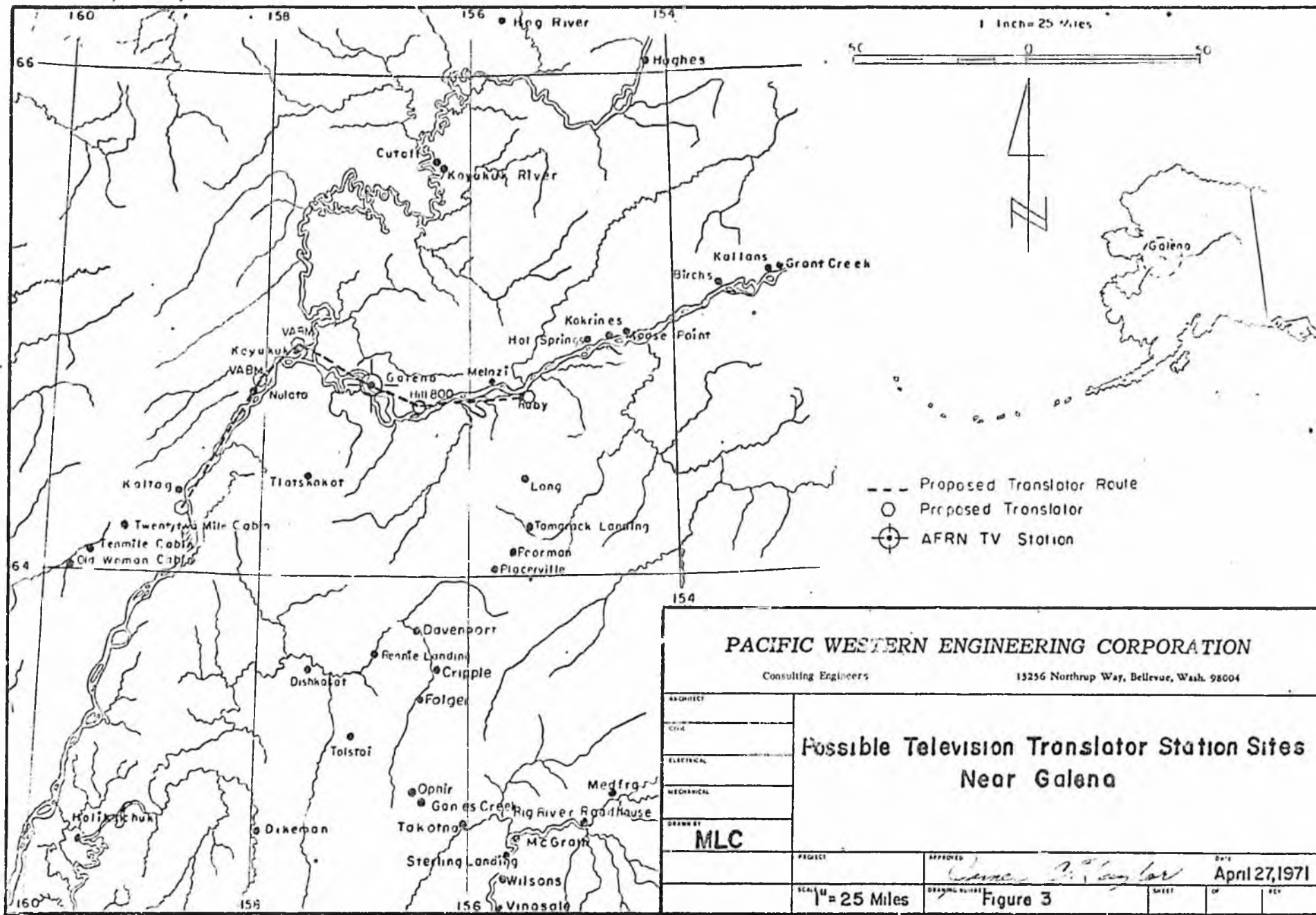
Consulting Engineers

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Possible Television Translator Station Sites Near Kodiak

ARCHITECT
CIVIL
ELECTRICAL
MECHANICAL
DRAWN BY MLC

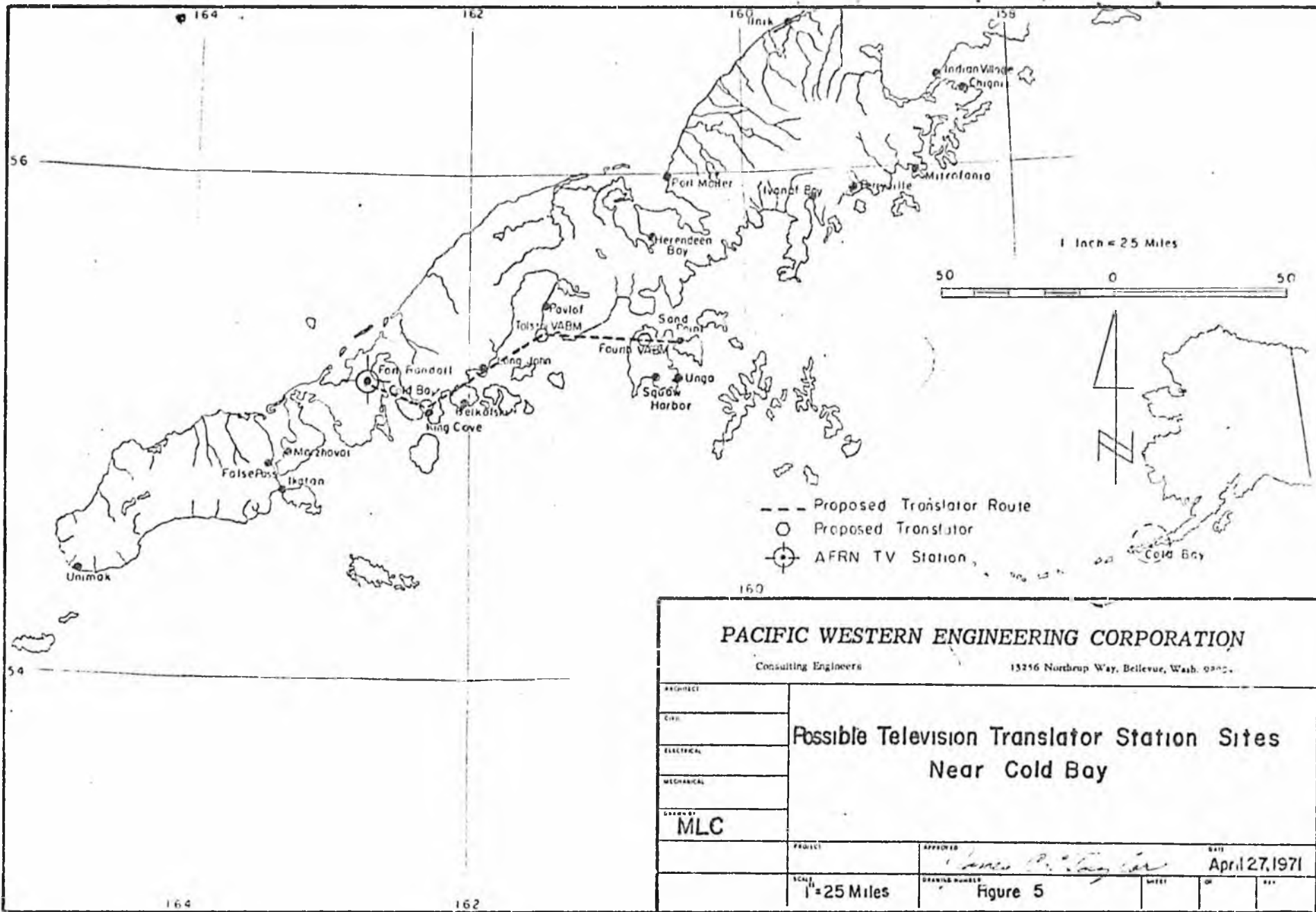
PROJECT	APPROVED <i>James D. Taylor</i>	DATE April 27, 1971
SCALE 1" = 25 Miles	DRAWING NUMBER Figure 2	SHEET OF FIG.



PACIFIC WESTERN ENGINEERING CORPORATION
 Consulting Engineers 13256 Northrup Way, Bellevue, Wash. 98004

**Possible Television Translator Station Sites
 Near Galena**

ARCHITECT		
CIVIL		
ELECTRICAL		
MECHANICAL		
DRAWN BY	MLC	
PROJECT	APPROVED	DATE
	<i>James P. Taylor</i>	April 27, 1971
SCALE 1" = 25 Miles	DRAWING SHEET	SHEET
	Figure 3	OF 1



PACIFIC WESTERN ENGINEERING CORPORATION

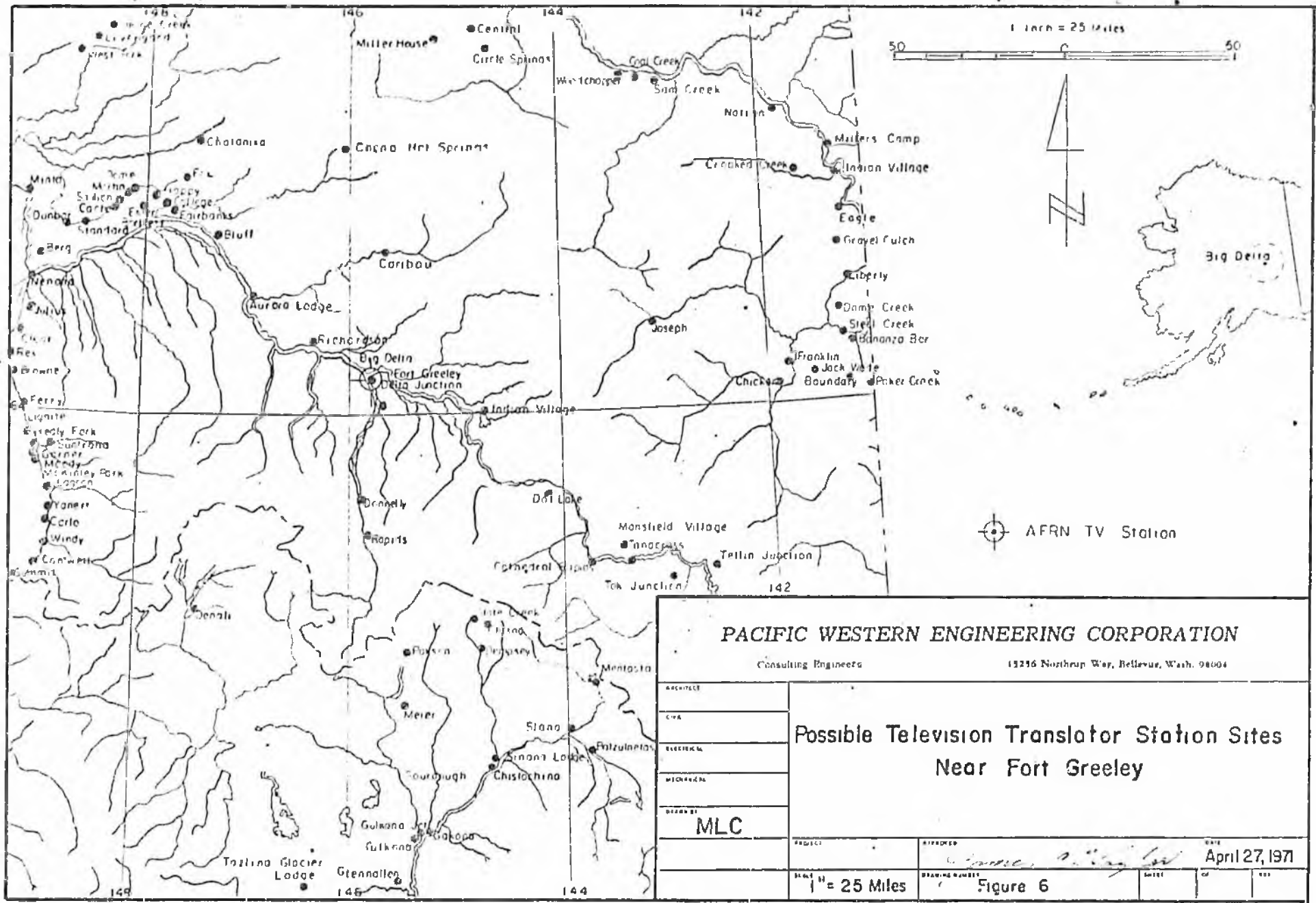
Consulting Engineers

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**Possible Television Translator Station Sites
Near Cold Bay**

PROJECT
 CIVIL
 ELECTRICAL
 MECHANICAL
 DRAWN BY
MLC

PROJECT	APPROVED	DATE
	<i>James P. Taylor</i>	April 27, 1971
SCALE	DRAWING NUMBER	SHEET
1" = 25 Miles	Figure 5	of



PACIFIC WESTERN ENGINEERING CORPORATION

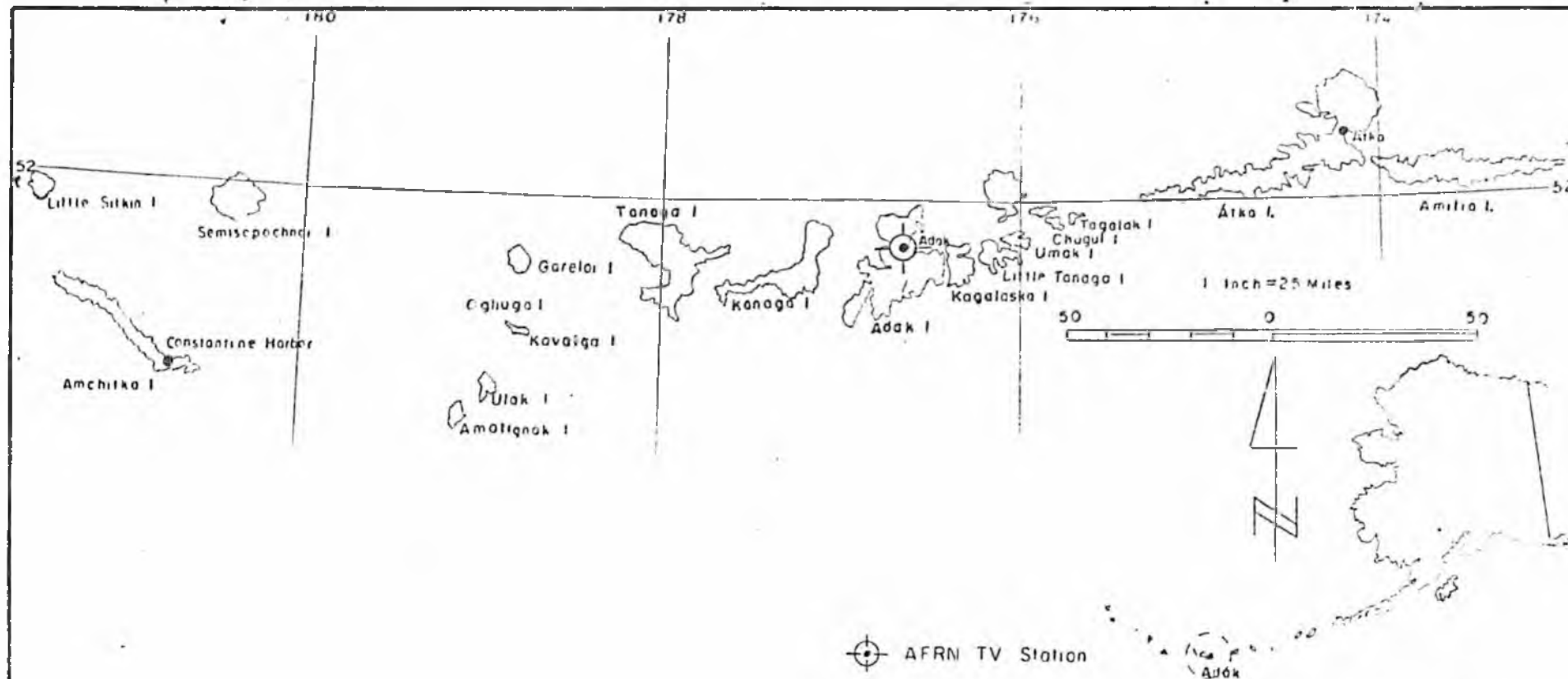
Consulting Engineers

13216 Northrup Way, Bellevue, Wash. 98004

**Possible Television Translator Station Sites
Near Fort Greeley**

ARCHITECT
CIVIL
ELECTRICAL
Mechanical
DESIGNED BY
MLC

PROJECT	APPROVED	DATE
	<i>[Signature]</i>	April 27, 1971
SCALE 1" = 25 Miles	DRAWING NUMBER	SHEET
	Figure 6	OF



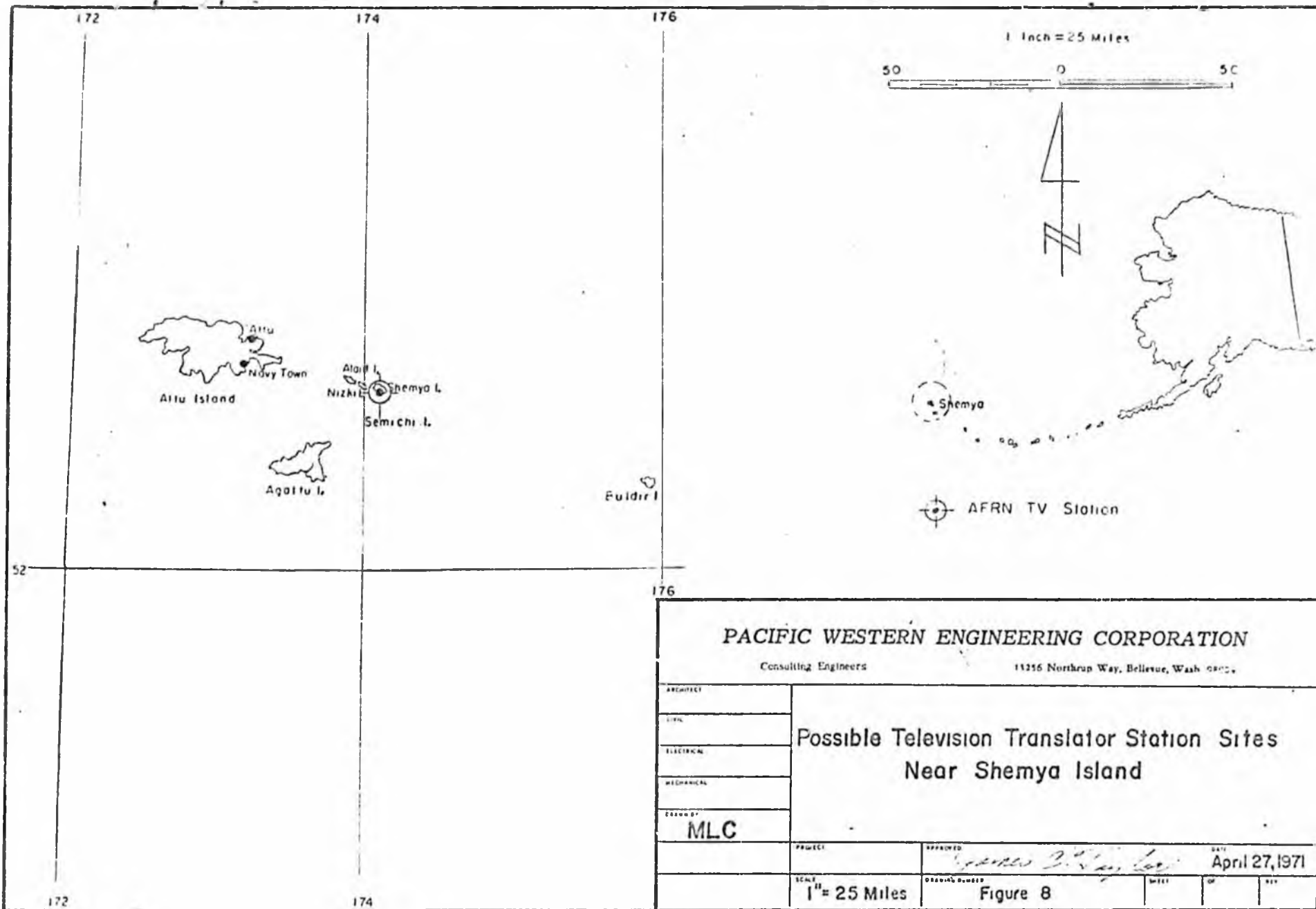
⊙ AFRN TV Station

PACIFIC WESTERN ENGINEERING CORPORATION

Consulting Engineers

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ARCHITECT	Possible Television Translator Station Sites Near Adak		
CIVIL			
ELECTRICAL			
MECHANICAL			
DESIGNED BY MLC			
PROJECT	APPROVED	DATE	
	<i>James P. ...</i>	April 27, 1971	
SCALE 1" = 25 Miles	DESIGNED BY Figure 7	SHEET	OF



PACIFIC WESTERN ENGINEERING CORPORATION

Consulting Engineers 11256 Northrup Way, Bellevue, Wash. 98004

ARCHITECT	<p>Possible Television Translator Station Sites Near Shemya Island</p>		
CIVIL			
ELECTRICAL			
MECHANICAL			
DRAWN BY			
MLC	PROJECT	APPROVED	DATE
		<i>[Signature]</i>	April 27, 1971
SCALE	FIGURE NUMBER	SHEET	OF
1" = 25 Miles	Figure 8		



RECORDS CERTIFICATION



I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

James D. Smith
Signature of Camera Operator

4/4/89
Date

Introduced: 2/14/72
Referred: State Affairs
and Finance

1 IN THE HOUSE

BY SWANSON

2 HOUSE BILL NO. 627

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SEVENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act appropriating to the Department of Public
7 Works; and providing for an effective date."

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

9 * Section 1. The sum of \$50,000 is appropriated from the general fund
10 to the Department of Public Works, division of aviation, for the extension
11 of the Holy Cross airfield.

12 * Sec. 2. The appropriation made by this Act is for a capital project
13 and is subject to the provisions of AS 37.25.020.

14 * Sec. 3. This Act takes effect on July 1, 1972.
15
16
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28
29

COMMITTEE COPY

ALASKA STATE LEGISLATURE

SEVENTH Legislature SECOND Session

HOUSE BILL NO. ... 627 ..

By ... SWANSON

"An Act appropriating to the Department of Public Works; and providing for an effective date."

Pub Wks/airfield Holy Cross

Introduced in the House ... 2/14/ 19 72

HISTORY IN THE HOUSE

19 72

Feb 14

Read first time and referred to Committee on

State Affairs and Finance

Reported back with recommendation that

Read second time and

Read third time and

PASS : Yeas
Nays
Absent
Excused

Effective Date

PASS : Yeas
Nays
Absent
Excused

Reported correctly engrossed
Signed by Speaker
Sent to Senate

CHIEF CLERK OF THE HOUSE

HISTORY IN THE SENATE

19

Read first time and referred to Committee on

Reported back with recommendation that

Read second time and

Read third time and

PASS : Yeas
Nays
Absent
Excused

Effective Date

PASS : Yeas
Nays
Absent
Excused

Reported correctly engrossed
Signed by President
Returned to House

SECRETARY OF THE SENATE

HISTORY IN THE HOUSE

19

Received from Senate

Reported correctly enrolled

Sent to Governor

..... By Governor

Filed with Lt. Governor

Chapter No.

"An Act appropriating to the Department of Public Works; and providing for an effective date."

Committee Report

2/14/72 HOUSE OF REPRESENTATIVES *****FINANCE*****

Feb 22, 1972 Date

Mr. Speaker

The Committee on STATE AFFAIRS has had ⁶² HB 627

under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for _____ and that
CS for _____ do pass
- (and) recommends it be referred to the _____
committee
- reports it back without recommendation
- (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

Richard L. McVeigh _____

Helen M. Jordan _____

W. D. Kille _____

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

Jess Harris recommends: NO RECOMMENDATION

Joe Hunt recommends: _____

_____ recommends: _____

_____ recommends: _____

_____ recommends: _____

Richard L. McVeigh
CHAIRMAN

Introduced: 2/14/72
Referred: State Affairs
and Finance

1 IN THE HOUSE

BY SWANSON

2 HOUSE BILL NO. 627

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SEVENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act appropriating to the Department of Public
7 Works; and providing for an effective date."

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

9 * Section 1. The sum of \$50,000 is appropriated from the general fund
10 to the Department of Public Works, division of aviation, for the extension
11 of the Holy Cross airfield.

12 * Sec. 2. The appropriation made by this Act is for a capital project
13 and is subject to the provisions of AS 37.25.020.

14 * Sec. 3. This Act takes effect on July 1, 1972.
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RECORDS CERTIFICATION



I, the undersigned, an employee of the State of Alaska, do hereby certify that the microfilm images on this microform are accurate reproductions of the original records of the State of Alaska as accumulated during the regular course of business, and that it is the established policy and practice of this State to microfilm its records and to dispose of the original records after microfilm reproductions have been made.

James D. Smith
Signature of Camera Operator

4/4/89
Date

Introduced: 2/14/72
Referred: Commerce and
Finance

1 IN THE HOUSE

BY KERTTULA AND HUBER

2 HOUSE BILL NO. 632

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SEVENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to agricultural and industrial fairs."

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

8 * Section 1. AS 03.20.010 is amended to read:

9 Sec. 03.20.010. STATE AID. The state may grant aid to agricul-
10 tural and industrial fair associations, incorporated under the laws of
11 the state, to assist in the (1) operation [CONDUCT] and maintenance and
12 (2) capital improvements of annual agricultural and industrial fairs.

13 * Sec. 2. AS 03.20.020 is amended to read:

14 Sec. 03.20.020. AMOUNT AND CONDITIONS OF AID. (a) Fairs may
15 be held each year in each of the house election districts and state
16 aid for the operation and maintenance [CAPITAL IMPROVEMENT] of the
17 fairs may not exceed the sum of \$25,000 [\$10,000] each for fairs having
18 an annual event the 10 previous years and may not exceed \$8,000 [\$3,000]
19 for other fairs held annually. The people of each district sponsoring
20 a fair are not eligible for state aid unless they subscribe to spend
21 from their own funds for that purpose an amount equal to the amount
22 of the state aid and have or organize an agricultural and industrial
23 fair association for the operation and maintenance [CAPITAL IMPROVEMENT]
24 of the fairs. Each fair receiving state aid is open to entries by the
25 people of the whole state and special provision shall be made for
26 exhibits from boys' and girls' clubs.

27 (b) An agricultural and industrial fair association qualifying
28 for and applying for operation and maintenance grants may also apply
29 for capital improvement grants.

1 * Sec. 3.. AS 03.20.030 is amended to read:

2 Sec. 03.20.030. APPLICATION FOR AND GRANTING OF OPERATION AND
3 MAINTENANCE AID. (a) Each agricultural and industrial fair association
4 desiring to apply for an operation and maintenance grant [COME WITHIN
5 THIS CHAPTER] shall apply to the commissioner before August 1 [JANU-
6 ARY 31] of the year preceding the fiscal year for which the grant is
7 sought [EACH YEAR]. It shall submit with the application a planned
8 program of operation and maintenance of the proposed fair, the rules and
9 regulations governin~ the fair, and a certificate signed by the president
10 and secretary of the association, certifying that the association will
11 spend for the proposed fair, a sum of money from their own funds
12 equal in amount to the benefits requested under this chapter. When
13 satisfied that the association is entitled to receive state aid under
14 the provisions of this chapter, the commissioner shall have a warrant
15 drawn in favor of the association, in the sum to which it is entitled.
16 The commissioner shall pay annually the sum to be paid under the pro-
17 visions of this chapter.

18 (b) The commissioner shall require each association receiving
19 state operation and maintenance aid to furnish receipts for money paid
20 to them. The commissioner may prescribe the form of the receipt.
21 Each association shall furnish a statement executed and acknowledged
22 by the president and secretary, covering the disbursements by the
23 association of all operation and maintenance funds, for fairs held
24 under this chapter. The statement shall definitely set forth that
25 wherever any state aid money has been disbursed that a like amount of
26 fair association fund money has been expended and that in no instance
27 has the expenditure of state money exceeded the expenditure of fair
28 association money. The association shall make a full report of receipts
29 and expenditures including the sums expended for prizes and awards to

1 the commissioner and this report shall be transmitted to the next
2 legislature.

3 (c) A sum equal to at least 25 per cent of the state operation
4 and maintenance aid received under this chapter shall be used for
5 premiums or transportation cost of exhibits. [NONE OF THE STATE AID
6 FUNDS MAY BE USED FOR FACILITIES SPECIFICALLY DESIGNED FOR ENTERTAIN-
7 MENT. HOWEVER, NOTHING IN THIS CHAPTER MAY BE CONSTRUED TO PREVENT
8 THE USE OF THESE FUNDS FOR THE CONSTRUCTION OF ARENAS, AUDITORIUMS,
9 EXHIBIT HALLS OR CONCESSION STANDS.]

10 * Sec. 4. AS 03.20 is amended by adding a new section to read:

11 Sec. 03.20.035. APPLICATION FOR AND GRANTING OF CAPITAL IMPROVE-
12 MENT AID. (a) Each agricultural and industrial fair association
13 desiring to apply for a capital improvement grant shall apply to the
14 commissioner before August 1 of the year preceding the fiscal year
15 for which the grant is sought. It shall submit with the application
16 a proposed long-term capital improvement plan of the fair covering
17 five years from the time the application is submitted, which shall be
18 certified by the president and secretary of the association as having
19 been reviewed and approved by the governing body of the association.
20 When satisfied that the association is entitled to receive state aid
21 under the provisions of this section, the commissioner shall have a
22 warrant drawn in favor of the association, in the sum to which it is
23 entitled.

24 (b) Each association receiving state capital improvement aid
25 shall furnish receipts to the commissioner for money paid to them.
26 The commissioner shall prescribe the form of the receipt. The associ-
27 ation shall make a full report of its receipts and expenditures made
28 for capital improvements and this report shall be transmitted to the
29 next legislature following the receipts and expenditures.

1 * Sec. 5. AS 03.20.050 is amended to read:

2 Sec. 03.20.050. MORE THAN ONE ASSOCIATION AND FAIR PERMITTED.

3 Nothing in this chapter prohibits the formation of more than one agri-
4 cultural and industrial fair association in each house election district
5 or the holding of an agricultural and industrial fair in several places
6 in each district. When more than one association is formed in a house
7 election district or when a fair is held in more than one place in the
8 district, the minimum operational aid is \$250. When more than one
9 association applies for the benefits of this chapter, the commissioner
10 shall divide the money allotted to the district among the applicants
11 in proportion to the amount justified at the time of application.

12 * Sec. 6. AS 03.20.060 is amended to read:

13 Sec. 03.20.060. EXPENDITURE OF AID FOR NONPERISHABLE EXHIBITS.

14 The commissioner may require an association to expend not more than 10
15 per cent of the state operation and maintenance aid granted, for the
16 purpose of buying nonperishable exhibits. Those exhibits shall be
17 held by the association subject to the order of the commissioner.

18 * Sec. 7. AS 03.20.070 is amended to read:

19 Sec. 03.20.070. FUNDS TO BE RETURNED IF UNEXPENDED OR IF NO FAIR
20 HELD. (a) If an association has received state operation and mainten-
21 ance funds under this chapter and fails to hold a fair in accordance
22 with its program, or does not disburse all of the state funds paid to
23 it for that purpose, the association shall return those funds, or the
24 unexpended portions, to the department within 60 days after the date
25 set for such fair. If an association fails to comply with this section
26 the attorney general shall institute proceedings to recover the funds.

27 (b) If an association has received state capital improvement
28 funds under this chapter and fails to expend them within five years for
29 capital improvements designated in its long-term capital improvement

1 plan in effect at the time of the grant, the commissioner may, after
2 investigation, require that the unexpended funds be returned to the
3 department.
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ALASKA STATE LEGISLATURE

SEVENTH Legislature SECOND Session

HOUSE BILL..... NO. 532...

By .. KERTTULA AND HUBER.....

"An Act relating to agricultural and industrial fairs.

agricultural/industrial fairs

Introduced in the House..... 2/14, 19 72

HISTORY IN THE HOUSE

19 72

Read first time and referred to Committee on

2 14

Commerce and Finance

Reported back with recommendation that

Read second time and

Read third time and

PASS : Yeas Nays Absent Excused

Effective Date

PASS : Yeas Nays Absent Excused

Reported correctly engrossed Signed by Speaker Sent to Senate

CHIEF CLERK OF THE HOUSE

HISTORY IN THE SENATE

19

Read first time and referred
to Committee on

Reported back with
recommendation that

Read second time and

Read third time and

PASS : Yeas
Nays
Absent
Excused

Effective Date

PASS : Yeas
Nays
Absent
Excused

Reported correctly engrossed
Signed by President
Returned to House

SECRETARY OF THE SENATE

HISTORY IN THE HOUSE

19

Received from Senate



Reported correctly enrolled

Sent to Governor

..... By Governor

Filed with Lt. Governor

Chapter No.

3/20/72

Committee Report

HOUSE OF REPRESENTATIVES

Date

Mr. Speaker

The Committee on FINANCE has had HB 632

under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for _____ and that
CS for _____ do pass
- (and) recommends it be referred to the _____
committee
- reports it back without recommendation
- (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

CHAIRMAN

Committee Report

2/14/72 HOUSE OF REPRESENTATIVES *****FINANCE***

March 22 Date

Mr. Speaker

The Committee on COMMERCE has had HB 632 under consideration. A majority of the members of the Committee

- recommends it do pass
- recommends it do not pass
- recommends it do pass with attached amendment(s)
- recommends it be replaced with CS for _____ and that CS for _____ do pass
- (and) recommends it be referred to the _____ committee
- reports it back without recommendation
- (other) _____

MEMBERS SIGNING THE MAJORITY REPORT:

J. M. Centineo _____

W. H. ... _____

Allen M. ... _____

Wilbur L. ... _____

MEMBERS NOT CONCURRING IN THE MAJORITY REPORT:

Jess Harris recommends: NO RECOMMENDATION

_____ recommends:

_____ recommends:

_____ recommends:

_____ recommends:

J. M. Centineo
CHAIRMAN

The Legislature of the State of Alaska
 FISCAL NOTE
 Second Session - Seventh State Legislature

I. REQUEST

Bill Identification: HB 632
 Title: Agricultural & Industrial Fairs
 Requested by: Legislative Finance Date: 3/22/72
 Return Date Requested: 3/31/72
 Agency: Natural Resources Program: _____

II. FISCAL DETAIL

Budget Request Unit(s) Affected: Agricultural Development

A. EXPENDITURES: (Thousands of dollars)

OBJECT	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.	33,000	336,000	461,000	486,000	486,000	486,000
TOTAL	33,000	336,000	461,000	486,000	486,000	486,000

B. FUNDING: (Thousands of dollars)

GENERAL FUND	33,000	336,000	461,000	486,000	486,000	486,000
FEDERAL FUNDS						
OTHER						

C. POSITIONS:

PERMANENT/TEMPORARY	/	/	/	/	/	/
MAN MONTHS (P./T.)	/	/	/	/	/	/

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. ATTACHMENTS

See attachments for present and future capital improvement plans of the various Fairs.

V. DATE: 3/30/72 PREPARED BY: F. S. Honsinger, D.V.M.
 State Veterinarian

Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named)

12

FY 73

CAPITAL BUDGET
PROPOSED PROJECT

AGENCY	CATEGORY	VII	DEVELOPMENT
Natural Resources	PROGRAM	A	Economic Develop
DIVISION	SUB PROGRAM	4	Agri Development
Agriculture	ELEMENT		
	SUB-ELEMENT		

TITLE		Alaska State Fair Inc.		BUDGET COMPONENT	c - State Fairs		COST	100.0	PRIORITY	1.
LOCATION		Palmer		AREA SERVED	South Central Alaska		ELECTION DISTRICT	7	STARTING DATE	3-72
COMPLETION DATE								COMPLETION DATE		9-75
CONSTRUCTION	X	EQUIPMENT		DESCRIPTION: Grandstand Seating Complex for 3,000 to 5,000 people, toilets, dressing rooms and concession area.						
IMPROVEMENT		LAND								

EXPLANATION:

Present seating at the track and horse show area is limited to outdoor bleachers. A covered grandstand with heated facilities will expand the use of the track area for winter sports, local football games and major horse shows during the summer months. Safe, adequate seating is necessary for maximum utilization of the present track area.

Other sources of funds include local loans and income from operations.

Total annual expenditures planned over the next five years are as shown below with the State contribution to those amounts set forth in the block following.

FY 73: \$100.0; FY 74: \$100.0; FY 75: \$100.0; FY 76: \$75.0; FY 77: \$75.0

	TOTAL	FY 73	FY 74	FY 75	FY 76 AND BEYOND	APPROPRIATION REQUEST	AMOUNT
TOTAL ANNUAL EXPENDITURE	350.0	50.0	75.0	75.0	150.0	Federal Receipts	
PLANNING, TRAINING, RESEARCHING						Required General Fund Match	
LAND						Other General Fund	50.0
CONSTRUCTION	350.0	50.0	75.0	75.0	150.0	Inter-Agency Receipts	
EQUIPMENT						Other	
REPAIRS, MAINTENANCE AND OTHER							
INCREASE (DECREASE) IN OPERATING EXPENDITURES						Bonds	
Funding Source	OTHER SOURCES						
	GENERAL FUND						
						TOTAL	100.0

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FY 73

CAPITAL BUDGET
PROPOSED PROJECT

AGENCY	CATEGORY	VII	DEVELOPMENT
Natural Resources	PROGRAM	A	Economic Develop
DIVISION	SUBPROGRAM	4	Agri Develop
Agriculture	ELEMENT		
	SUB-ELEMENT		

TITLE		Tanana Valley Fair Association		BUDGET COMPONENT	c-State Fairs		COST	145.0	PRIORITY	1		
LOCATION		Fairbanks		AREA SERVED	Interior Alaska		ELECTION DISTRICT	16S	STARTING DATE	3-72	COMPLETION DATE	8-73
CONSTRUCTION	X	EQUIPMENT		DESCRIPTION: Completion of livestock barn and remodeling of coliseum for year around use.								
IMPROVEMENT		LAND										

EXPLANATION:

Completion of section 3 of the livestock barn complex will make a total of 150 feet of new barn. This will replace the old unsafe livestock barn presently being used. A planned livestock arena for 7,500 seating will complete this complex. Winterizing and remodeling the coliseum will allow for year around multi-purpose community use. Considerable rental income could be developed during the off season for fairground development. Also planned is a \$40,000 Women's Home Activities Center.

Funding from other sources includes income from operations and possible loans.

Total annual expenditures planned over the next five years are as shown below with the State contribution to the amounts set forth in the block following:

FY 73: \$145.0; FY 74: \$170.0; FY 75: \$200.0; FY 76: \$200; FY 77: \$200.0

	TOTAL	FY 73	FY 74	FY 75	FY 76 AND BEYOND	APPROPRIATION REQUEST
TOTAL ANNUAL EXPENDITURE	425.0	50.0	75.0	100.0	200.0	Federal Receipts
PLANNING AND ENGINEERING						Required General Fund Match
LAND						Other General Fund
CONSTRUCTION	425.0	50.0	75.0	100.0	200.0	Inter-agency Receipts
EQUIPMENT						Other
ADMINISTRATION AND OTHER						
INCREASE (OR DECREASE) IN OPERATING EXPENDITURES						Bonds
Funding Source	OTHER SOURCES					
	GENERAL FUND					
						TOTAL
						50.0

12
FY 73

CAPITAL BUDGET
PROPOSED PROJECT

AGENCY	CATEGORY	VII	DEVELOPMENT
Natural Resources	PROGRAM	A	Economic Development
DIVISION	SUBPROGRAM	4	Agri Development
Agriculture	ELEMENT		
	SUB-ELEMENT		

TITLE		Ninilchik Fair Association		BUDGET COMPONENT	c-State Fairs		COST	50.0	PRIORITY	1		
LOCATION		Ninilchik		AREA SERVED	Kenai Peninsula		ELECTION DISTRICT	10	STARTING DATE	7-72	COMPLETION DATE	6-73
CONSTRUCTION	X	EQUIPMENT		DESCRIPTION: Completion of livestock barn, horse arena and exhibit building, purchase of additional land.								
IMPROVEMENT		LAND										

EXPLANATION:

The Ninilchik Fair is a small fair serving the agriculture community of the Kenai Peninsula. Expansion of their facilities to allow for proper display of local products is necessary. With livestock the major agricultural industry in the area, exhibit space for animals is required. Additional adjoining land is required for parking and building construction to complete the fairground facility. Development of this facility will make available a community activity center for the lower Kenai Peninsula population.

Future plans include exhibit buildings, fencing, additional land and grandstands.

Total annual expenditures planned over the next five years are as shown below with the State contribution to the amounts set forth in the block following:

FY 73: \$50.0; FY 74: \$75.0; FY 75: \$75.0; FY 76: \$75.0; FY 77: \$75.0

		TOTAL	FY 73	FY 74	FY 75	FY 76 AND BEYOND	APPROPRIATION REQUEST	
TOTAL ANNUAL EXPENDITURE		350.0	50.0	75.0	75.0	150.0		
PLANNING AND ENGINEERING								
LAND		29.0	14.0		15.0			
CONSTRUCTION		236.0	36.0	50.0	60.0	140.0		
EQUIPMENT		25.0		15.0		10.0		
ADMINISTRATION AND OTHER								
INCREASE (DECREASE) IN OPERATING EXPENDITURES								
Funding Source	OTHER SOURCES							
	GENERAL FUND							
							TOTAL	50.0