ALASKA LEGISLATURE COMMITTEE FILES 1981-1982 8672

2137 ST SB 207 - SB 212

2137

FY 1976 7/1/75-6/30/76	Turning basin and ent. channel maint. dredging	12,100 cy (clamshell) 21,550 (suction)	3/4 cy clamshell (GILPIN) 12-inch pipeline dredge (Bethel)	Offshore disposal areas	Govt. owned equipment	$183,381
July-Oct. 1976	Turning basin and ent. channel maint. dredging	6,650 cy (silts and sands)	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$105,588
1977	Turning basin and ent. channel maint. dredging	12,120 cy	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$278,880
1978	Turning basin and ent. channel maint. dredging	9,110 cy	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$363,248
1979	Turning basin and ent. channel maint. dredging	13,000 cy	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$346,250
1980	Turning basin and ent. channel maint. dredging	13,000 cy	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$322,250
1981*	Turning basin and ent. channel maint. dredging	13,000 cy	3/4 cy clamshell (GILPIN)	Offshore disposal areas	Govt. owned equipment	$490,000

* Projected

Source: U.S. Army Corps of Engineers

TABLE 3 (CONTINUED)

With the escalating cost of diesel fuel, replacement parts, and skilled labor, these expenditures will continue to rise in the future. A principal goal of the proposed port design is to minimize the dredging requirements at Nome. Placement of any new coastal structure will have an effect on the sand transport along the shore. With proper consideration of this effect, it is hoped that a reduction in the dredge requirements at Nome can be achieved.

2.9 ECONOMIC BASE

2.9.1 Fishing Industry

The fishing industry of the Norton Sound area is limited and the commercial harvesting of fisheries resources must compete heavily with subsistence fishing interests. High operating costs have discouraged investment of private capital in seafood processing in the Norton Sound area and, consequently, transportation is a major cost factor. Typically, the fishermen of the area do not have large capital investments in their boats and equipment, and most use 18-foot skiffs with outboard motors.

Salmon

Salmon gillnetting is the principal commercial fishery in the Norton Sound area. Five species are harvested in Norton Sound waters with the vast majority of catches being pink and chum salmon (NOAA, 1977).

Until recently, the Norton Sound commercial fishery was sporadic because of the lack of processors and buyers or inadequate tendering service. However, the recent development of cooperatives and improved tendering facilities have helped to stabilize the fishery (Gusey, 1979).

The commercial salmon fishing season extends from June 15 to September 30, a basic season that has been in effect since 1963. The Norton Sound fisheries began in 1961. The period of high fishing effort from 1962 to 1964 was followed by several years of low effort. Beginning in 1969, levels recovered and have been consistently exceeding 140,000 fish annually (Gusey, 1979).

Annual commercial salmon harvests in the Norton Sound region ranged from 40,000 to 316,000 fish during the 1961 to 1976

period, averaging about 170,000 annually. During that time, chum salmon comprised nearly 65 percent of the total catch, followed by pink salmon with 29 percent (NOAA 1977).

In 1979, commercial fishermen harvested 10,706 king, 21,438 coho, 167,411 pink, and 140,789 chum salmon, totaling 350,344 fish in Norton Sound. This was the second largest catch on record and was 110% of the recent 5-year average annual harvest of 310,005 salmon. A total of 204 commercial fisheries entry permits were issued for the Norton Sound district in 1979. Approximately $875,000 was paid to fishermen for their 1979 salmon catches. Eleven processors operating in the Sound in 1979 purchased approximately 2.1 million pounds of salmon (Schwarz,1980A).

Commercial catches of salmon during the 1961 to 1976 period are shown in Table 4.

TABLE 4

COMMERCIAL SALMON CATCH, 1961-1976

Year	Norton Sound Commercial Catch of Salmon (No. of Fish)
1961	101,711
1962	232,431
1963	233,863
1964	164,671
1965	40,524
1966	100,345
1967	74,818
1968	124,499
1969	178,972
1970	178,218
1971	141,977
1972	149,713
1973	176,797
1974	315,829
1975	257,802
1976	192,917

Source: NOAA, 1977; Gusey, 1979

In the subsistence category, nearly all of the native peoples are dependent to some degree on the fish and game resources for their sustenance. In 1979, all subsistence fishermen interviewed by the Alaska Department of Fish and Game reported catching a total of 46,446 salmon, about 35 percent above the recent 5-year annual average harvest (Schwarz, 1980A).

Herring

The earliest American commercial effort on Bering Sea herring apparently took place in the early part of this century at Golovin Bay in Norton Sound. It declined because of foreign competition and then resumed in 1964 near Unalakleet and has continued on a limited and sporadic basis. The harvest is not taken in the Nome area, but rather in the Cape Denbigh, Unalakleet, and Stuart Island to Klikiktarik areas.

Commercial fishing for herring is carried out by local inhabitants and foreign gillnet fleets. Fishing is performed primarily with gillnets and occasionally by beach seines. Herring roe is the main product of commercial operations. Most harvest occur after winter ice break-up in May-June, while herring are in spawning concentrations (NOAA, 1977).

Considered a developing fishery, interest in northwestern Alaska herring stocks appears to be increasing. Market conditions, however, have a large influence on the catch. For example, when 1172 metric tons of herring were harvested in Norton Sound in 1979, the market price was about $300 per metric ton. This year, however, the price has fallen to $200 per metric ton and will likely significantly influence the volume of harvest (Schwarz, 1980A).

Historical herring catch figures for the 1964 to 1976 period are shown in Table 5.

TABLE 5

COMMERCIAL HERRING CATCH, 1964-1976

	Norton Sound Commercial Harvest of Herring (Metric Tons)		
Year	Local Inhabitants	Japanese Fleets	Total
1964	18.1	0	18.1
1965	0	0	0
1966	0	0	0
1967	0	0	0
1968	0	125	125.0
1969	0	1270	1270.0
1970	7.3	54	61.3
1971	17.7	621	638.7
1972	15.3	11	26.3
1973	32.3	25	57.3
1974	3.1	720	723.1
1975	2.0	5	7.0
1976	7.7	N.A.	N.A.

Source: NOAA, NMFS, 1977; Gusey, 1979
N.A. = Not Available

King Crab

Another developing fishery is that of King Crab. A winter and summer commercial king crab fishery has recently developed in Norton Sound. The summer fishery is a large vessel fishery consisting mainly of Dutch Harbor vessels. The winter fishery is composed mostly of local fishermen who fish through the ice with pots for the crab. In 1979, 3 million pounds of king crab were harvested; this year, the harvest will be held to only 1 million pounds, however. A subsistence king crab fishery also exists.

The fishing industry harvests in Norton Sound are not expected to experience significant change, other than that resulting from normal market economics. New fisheries development is not expected for the area due primarily to the far north location,

proximity to markets, and the competition offered by more attractive, plentiful fisheries in other parts of the state (Schwarz, 1980B).

2.9.2 Mining Industry

Next to federal and state spending, mining and tourism were the major components of the cash economy of northwest Alaska prior to the discovery of oil at Prudhoe Bay. The Seward Peninsula has historic ties with the gold mining industry which date back to the gold rush of 1898 and the resultant settling of Nome. Beginning with this gold boom in 1898, the following minerals have been located and produced in significant quantities in the Seward Peninsula: gold, tin, tungsten, and beryllium. Small amounts of antimony, bismuth, copper, silver, lead, and quicksilver have also been found but no large deposits of these metals are known to exist on the Peninsula. A residual iron deposit occurs near Nome, while zinc, arsenic, uranium, and molybdenum occur in or near the tin and base metal lodes. Platinum, manganese, mica, fluorite and graphite have also been reported (Corps of Engineers, 1974A). Although gold is being produced at this time, other minerals are not now under active operation.

Gold

As discussed earlier, gold mining in the area dates from 1898. Although large dredges continued to mine placer gold in the Nome area until 1962, production was not steady and suffered severe fluctuations over the years. In 1962, the United States Smelting, Refining, and Mining Company (USSR&M) discontinued their operations, having previously employed as many as 400 persons in the area. With an increase in the price of gold, the Alaska Gold Company (successor to the USSR&M) resumed their dredging operations in 1975 and have operated in the area since

that time during the summers. The company is one of the major employers in Nome, and their operations have contributed to the overall economy. In 1978, the Alaska Gold Company produced 11,925 troy ounces of gold from the Nome area using two large dredges.

Tin-Beryllium-Fluorite

At the present time, the Lost River and Tin City deposits constitute the most important tin reserve in the United States. Although the deposits are not large, they are the only known deposits of significance in the United States. The heavy minerals belt passes through the Seward Peninsula and tin production from this belt has been in the form of both lode deposits and placer tin. Production is now relatively inactive (City of Nome, 1968).

If fluorite and beryllium deposits in the Lost River area are developed, the tin ore reserves at that location may be confirmed and expanded. In addition, tin claims on Humbolt Creek, 125 miles due north of Nome at Serpentine Hot Springs, were explored during 1970 and 1971. These are believed to be an extension of the lode tin deposits at Lost River which would make them the fourth largest known tin lode in the world (Corps of Engineers, 1974A).

Almost all of Alaska's known beryllium deposits occur in the Lost River area. These are reported to be a substantial portion of the total national resource. Although these deposits occur in commercial quantities, the feasibility of mining them is not proven due to minerology and economic factors. A proposed fluorite, tin and beryllium mining venture at Lost River is not presently active (City of Nome, 1968; 1979).

Similarly, fluorite is known to occur in commercially significant quantities at the Lost River tin mine. No active production

operations are underway (City of Nome, 1968; 1979).

Tungsten

By itself, tungsten production does not appear to be feasible on the Seward Peninsula. In connection with the tin mining activity at Lost River, however, tungsten may be a minable by-product of tin lodes in this region (City of Nome, 1968).

Other Minerals

The mining of lead, zinc, and copper does not appear to be commercially feasible at this time. Small smounts of these ores have been recovered in the past as a by-product of gold mining. In addition, there has been a minimal amount of silver production as a by-product of gold mining. Future production, however, probably rests upon the development of some of the lead and silver bearing galena lodes scattered about the Seward Peninsula (Corps of Engineers, 1974A).

Future

The future of large-scale mineral development on the Seward Peninsula is affected by the remoteness of the deposits from market outlets, available transportation, the absence of an industrial and institutional infrastructure, and the associated high production costs. The key to successful mineral production is the development of a market demand sufficient to pay the high costs of Alaska production and transport (City of Nome, 1979; Corps of Engineers, 1974A).

Transport costs alone cannot be isolated as the major impediment to development. Oil, for example, with 50 percent of its market price absorbed by transportation costs, can support its own highly sophisticated transport system. Under present economic circumstances, however, most other Alaska resources cannot

do this because they are not valued high enough in the market place.

With the exception of gold, mineral development in the Seward Peninsula must, therefore, be considered to be far in the future. The extent and timing of development is dependent partly upon unpredictable market forces. A long-term potential for development of the Lost River deposits does exist, but probably for a small, seasonally-operated mine only (Sanders, 1980).

On the other hand, the potential for developing gold in offshore beaches is very high. Forecasts of future production are not available, however.

2.9.3 Coal

Alaska possesses extensive coal resources, distributed widely throughout the state. Of the total 130 billion tons speculatively estimated to exist in the state, more than 90 percent is believed to be located in the northwestern Arctic. This includes an estimated total of 19.3 billion tons of bituminous and 100.9 billion tons of subbituminous and lignite coals (Corps of Engineers, 1974A). This area encompasses about 30,000 square miles bounded by the Brooks Range in the south, the lower Colville and Itkillite Rivers to the east, and the Beaufort and Chukchi Seas to the north and west. Roughly 24,000 square miles of this coal-rich area is included in the National Petroleum Reserve No. 4. The U.S. Bureau of Mines has identified the parts of the area along the Chukchi Sea coast as being "very important" in its potential for economic viability and national or local economic or strategic need for development (DMJM, 1979).

Alaska's identified resources (130 billion tons) are approximately 7.5 percent of the total United States identified coal resources of 1,730 billion tons.

Alaskan coal, including that in the Arctic, is low in sulfur content. The subbituminous coal is generally high in water and ash content, but bituminous coal of some areas possesses good coking characteristics. Some of the beds are known to be of good quality and are capable of being mined in large blocks with large mechanized equipment. Coking coal is generally in high demand on the world market at the present time (City of Nome, 1968; DMJM, 1979).

The major markets for Alaskan coal, given the limited domestic market, are the west coast of the United States and Japan. The United States market is limited to coal for electric power production, while the Japan market is limited primarily to metallurgical coal. Key to the marketability of this coal is the technology and cost of moving it from the northwestern Arctic area to a coastal loading point (Federal-State Land Use Planning Commission, 1978). Substantial investments would be required in mining equipment and transportation systems before coal can be moved from these northwestern fields. Such problems as moving the coal from mine to a port in a roadless area, plus the development of suitable port facilities and loading techniques, have caused some to hold a pessimistic outlook on near-term coal development. Rather, they suggest that production of northwestern Arctic coal under present technology and costs is far in the future (Corps of Engineers, 1974A). A more recent report (Massachusetts Institute of Technology, 1980), stresses the importance of coal as a source of energy in the United States' future. The study, which reflects the recent instability of Mid-East oil supplies, states that coal will become the primary domestic energy source for the United States within twenty years.

Although coal production activities in the northwest Arctic area would be remote from Nome, Nome may play a future role as a base of operation and supply as well as a loading terminal point for coal exports to both Japan and the west coast of the continental United States.

2.9.4 Petroleum Industry

The potential for development of petroleum resources in the Norton Sound area is uncertain at this time, although inferential data indicates that reserves may be sufficient for feasible development. Because detailed geophysical data is unavailable and because there is no drilling history in the Norton Basin, reserves estimates have been based upon known characteristics of similar geologic areas. Present estimates of undiscovered recoverable oil and gas reserves in North Basin are:

	Low Find	Medium Find	High Find
Oil (billions of barrels)	0.38	1.4	2.6
Gas (trillions of cu. ft.)	1.2	2.3	3.2

Source: Dames & Moore, 1980.

If exploration, development, and production of the Norton Basin petroleum resources does occur, Nome will serve as a support base for supplies and services, including aerial support for offshore operations. The extent to which this occurs will depend upon the magnitude of the development and production phases (Dames & Moore, 1978). In addition, the future development of petroleum resources to the north in the Chukchi Sea area, Kotzebue Sound, and the National Petroleum reserve could also have a significant effect upon the Community of Nome, first as a staging and transshipment point for supplies, materials, and personnel destined for these northern areas and, second, as the pipeline terminus and transshipment point for product oil from these areas.

The lease sale No. 57 for the Norton Basin is scheduled to take place in September, 1982, and is to be preceded by a number of intermediate formal steps leading to this sale. In addition, a continental offshore stratographic test well will be drilled by ARCO in 1980 to better identify the geologic strata in the Norton Sound (Scott, 1980; Fisher, 1980).

Exploitation of a petroleum reserve involves three distinct phases of activity, i.e., exploration, development, and production. The development phase involves drilling the optimum number of production wells for the field and construction of the equipment and pipelines necessary to process the crude oil and transport it to its destination. Whereas the exploration and production phases are not particularly labor intensive, the development phase creates the highest levels of employment locally and the import of the greatest amount of materials, supplies, and services for development activities (Dames & Moore, 1980).

The development of petroleum resources included in lease sale No. 57 is expected to result in the production and employment levels shown in Table 6.

TABLE 6

PETROLEUM DEVELOPMENT SCENARIOS

	Low Find	Medium Find	High Find
OIL			
Years of Production	1990-2009	1990-2011	1989-2016
Peak Years	1993	1994	1995
Peak Production	153,000 b/d	463,000 b/d	764,000 b/d
GAS			
Years of Production	1990-2009	1989-2009	1989-2011
Peak Years	1993-2001	1994-2000	1995-1998
Peak Production	230.4 mmcfd	460.8 mmcfd	691.2 mmcfd
EMPLOYMENT			
Onshore & Offshore			
Peak Years	1990	1990	1991
Peak Employment	1376	3555	5276
Onshore Only*			
Peak Years	1989	1990	1987
Peak Employment	387	374	1544

* A portion of this work force may establish residence at or near Nome.

Source: Dames & Moore, 1980

2.9.5 Port Operations

Freight service to Nome is generally via ocean-going cargo barges direct from Seattle, although some freight is transported to Nome by air. In 1979, 18 general cargo barge trips were made by the three firms serving the city as follows:

Pacific-Alaska Lines	4 Trips
Alaska Cargo Lines, Inc.	4 Trips
Foss Barge Company	10 Trips

Barges from Seattle normally do not arrive fully loaded, having previously stopped in Bethel and Dillingham.

The barge season generally runs from May 1 to September 25, a period of slightly less than 5 months. Incoming general cargo averages between 6,000 and 8,000 tons per year. Nearly all general cargo is containerized; an ocean-going barge can haul about 150 containers.

Because of extensively shoaled beaches, ocean-going barges calling at Nome presently anchor about one mile offshore for unloading and reloading of cargo and freight. The harbor is too shallow to allow ocean ships and barges to enter. Therefore, cranes onboard the ocean-going barges are used to offload containers and other cargo to lighters. The average time required to offload the typical ocean-going barge is 18 hours. The shallow-draft lighters are towed through the surf and the shallow entrance channel for unloading at the transfer facilities of the lighterage company, Arctic Lighterage (Crowley Maritime). Consequently, freight is, of necessity, double-handled in lightering from ship to shore and, furthermore, freight destined for interior locations is handled a third time. Winds in excess of 15 knots make the transfer to lighters extremely difficult, the resulting delays adding a demurrage charge of $12,000 per day.

On shore, the lighters are unloaded over the entrance channel revetment by portable cranes. Empty containers and outgoing shipments are reloaded to lighters inside the harbor area for return to the ocean-going barges anchored offshore.

Lighterage costs represent approximately 22 percent of the typical freight bill between Seattle and Nome.

Bulk petroleum products are presently delivered to Nome by Chevron Shipping Corporation in tankers loaded at Richmond, California. In 1979, three direct shipments were made. The average annual imports of petroleum amount to about 7 million gallons. As with the general cargo barges, tankers are anchored offshore at Nome and the products are offloaded to lighters for transfer to onshore storage facilities.

Waterborne commerce through the Nome Harbor for the period 1969 to 1979 is presented in Table 7.

TABLE 7

CARGO TRANSPORT, NOME HARBOR, 1969-1979

	TONNAGE		
	General Cargo	Liquid Petroleum	Total
1969	5,945	20,327	26,272
1970	8,108	12,843	20,951
1971	6,145	15,786	21,931
1972	10,643	32,506	43,149
1973	5,620	23,162	28,782
1974	10,158	22,156	32,314
1975*	N.A.	29,000	N.A.
1976*	N.A.	25,000	N.A.
1977*	N.A.	29,000	N.A.
1978*	6,800	24,000	30,800
1979*	8,100	25,000	33,100

* Estimates by Arctic Lighterage

Projections of future commerce through Nome Harbor depend upon expected population growth within the service area, the extent to which the natural resources of the Seward Peninsula are developed (mining, petroleum, fishing), the potential of the Nome Harbor as a cargo transshipment point for developing areas and communities in such categories as tourism and recreation. The future of some of these factors depends upon outside economic, marketing, and physical determinants. The future of the harbor as a transshipment point may depend largely upon the physical development of the port facility itself.

In the event that the population of the service area was to increase by the projected 65 percent between 1970 and 1985, then the increase in the throughput of staples would likely increase proportionately. Other dry cargo, such as equipment and construction materials, would not necessarily experience such a proportionate increase. Rather, the import volume of these items would relate more to the economic activity and new development in the region. The consumption of oil products is expected to continue its steady long-term increase.

~~of the local labor force.~~

4.1.1 The Selected Causeway Design

Based on the evaluation of the various causeway designs presented previously, the cross-section shown in Figure 4.3 has been selected for the port of Nome causeway. The major positive attributes of this design are as follows:

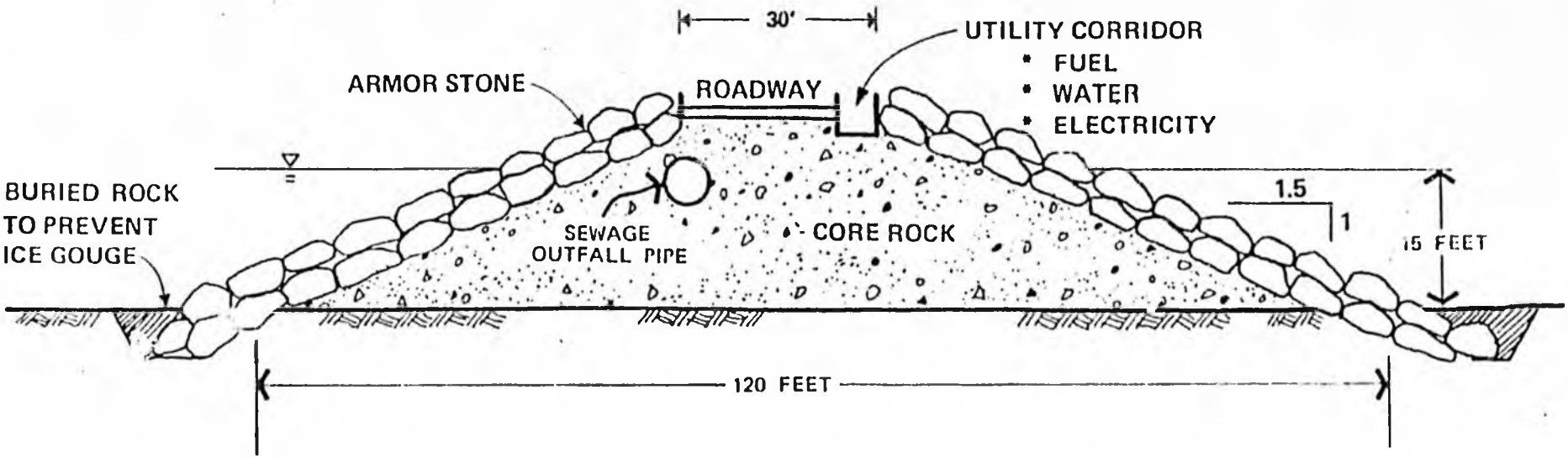


FIGURE 4.3: CAUSEWAY DESIGN CROSS--SECTION

1) Local availability of all construction materials
2) Simple construction methods
3) Durability
4) Ease of expansion
5) Maximum use of local labor force
6) Moderate cost

The use of this design assumes that wintertime port operations will not be undertaken since ice can be expected to over-ride the structure. For this reason, no structural elements will be placed on the causeway surface. Similarly, the quarrystone armor must be placed carefully to minimize its displacement by the moving ice. All utilities (fuel, water, electricity) must be placed in a covered containment channel thereby allowing easy accessibility for future expansion or maintenance of these items. Nome has an immediate need to develop an effective sewage disposal system in order to avoid the necessity of constructing a secondary sewage treatment plant. By burying an outfall pipe in the causeway, primary-treated sewage can be discharged to the relatively deep waters at the end of the causeway. The feasibility and cost-effectiveness of this plan must await future analysis. The armor rock will be buried to a depth of five feet to reduce the possibility of displacement due to wave or ice scour. The side slopes (1:1.5) have been designed to minimize construction cost while maximizing the protection afforded from wave and ice impact.

The data needed to fully refine this design is not yet available. Such critical design considerations as side slope alignment, causeway elevation, height and thickness of armor layer, and filter layer thickness are best designed in detail following close examination of the performance of these components in scale-model testing experiments. In this way, the total design can be optimized to deal with all the serious threats posed by waves, ice, and high water levels at the minimum construction cost. For example, the results of analytical studies on ice impact at the causeway shows that ice along the Nome coast will ride-up and

over the causeway if a 1:2 side slope is used. The choice of a 1:1.5 side slope will cause the formation of ice piling at the slope. It becomes important from an economics standpoint when one realizes that the choice of a 1:1.5 slope will decrease the total causeway volume by 25% relative to a 1:2 side slope. Steepening the side slopes will require an increase in the size of the largest individual armor stones, however, from 7.25 tons to 8.5 tons. The economic impact of the need for larger armor rock is not presently known. In addition, the steeper side slope will have an effect on wave overtopping during severe wave events. The final design decisions for the causeway will rely on adequate wave and water level data as well as the results of small-scale hydrodynamic testing that will seek to minimize project costs while properly dealing with expected wave and ice forces.

4.2 OFFSHORE TERMINAL DESIGN

4.2.1 Vessel Traffic

At the present time, the City of Nome is visited by a number of vessel types that are serviced by the existing harbor facility. Those vessels with drafts in excess of five feet are normally unable to enter the port and must be serviced by "lightering" barges operated by Arctic Lighterage, a Division of Crowley Maritime, Inc. The expected vessel traffic that is anticipated at the Port of Nome is briefly discussed below.

Ocean-going Barge

The largest vessel type that currently visits Nome is the major cargo-carrying barge that arrives throughout the summer period. These vessels are normally towed by ocean-going tugs and the containerized cargos that they carry are off-loaded to shallow-draft lighterage barges for the transfer to the Nome city dock. The dimensions of the ocean-going barges are approximately as follows:

Length:	400 Feet
Beam:	100 Feet
Draft: (Loaded)	22 Feet

Because many of these barges make stops at Bethel and/or Dillingham prior to arrival at Nome, a fully loaded barge having a 22-foot draft is relatively rare at Nome. However, for the sake of conservatism and acknowledging the future status of the Port of Nome as the major maritime transport center of northwestern Alaska, the 22-foot draft value has been chosen for design purposes.

These large barges would be berthed at an offshore facility using a small fleet of tugs working in conjunction with the barge's towing vessel.

Ocean-going Tugboats

These tugs are large capacity towing vessels that supply the means of propulsion for the ocean-going barges. The dimensions of these vessels are as follows:

Length:	160 Feet
Beam:	30 Feet
Draft: (Loaded)	18-20 Feet

These vessels are very powerful and can be used to maneuver the large barges i to and out of berthing spaces.

Utility Tugboats

Smaller tugboats owned, maintained, and operated by private interests would be used for many tasks at the Port of Nome. They would be required to assist in the berthing of all barge traffic. Also, certain large vessels having their own propulsion systems may require berthing assistance occasionally. Disabled craft will also require the use of these smaller tugs. The dimensions of this vessel type are as follows:

Length:	50-90 Feet
Beam:	10-15 Feet
Draft: (Loaded)	8-12 Feet

Oil Industry Workboats

In 1979, Arco Petroleum initiated field work that sought to determine the extent of the petroleum wealth of Norton Sound.

The first phase of exploratory drilling will begin in 1980. If oil is discovered in exploitable quantities in the Norton Basin/Chukchi Sea Region, workboats employed by the oil industry will call at the Port of Nome to transfer personnel, equipment, and to provide general logistics services. The dimensions of these vessels are as follows:

Length:	150 Feet
Beam:	30 Feet
Draft: (Loaded)	10-15 Feet

Fishing Craft

Various fishing vessels are expected to call at the Port of Nome to transfer their catch ashore, replenish food, water, fuel, and equipment supplies, and to undertake vessel or equipment repairs. These vessels vary in size from large inter-ocean craft to small boats used principally by the local residents to fish the waters of Norton Sound. Maximum draft of the fishing fleet that will utilize Nome as a port of call is assumed to be 20 feet.

4.2.2 The Design Vessel

At the present time, the largest vessel that calls at Nome is the ocean-going cargo barge having a loaded draft of 22 feet. In order to allow for adequate water depths at all times alongside the proposed pier facility, it is recommended that the offshore docking terminal be located at the 30-foot bottom contour. Figure 4.4 illustrates the position of the design vessel when docked at this location for both the high-water and low-water extremes. The extreme low water level will occur when offshore winds drive the surface water to the south. During these periods, the still water level can fall as much as five feet (NOAA, 1977). For design purposes,

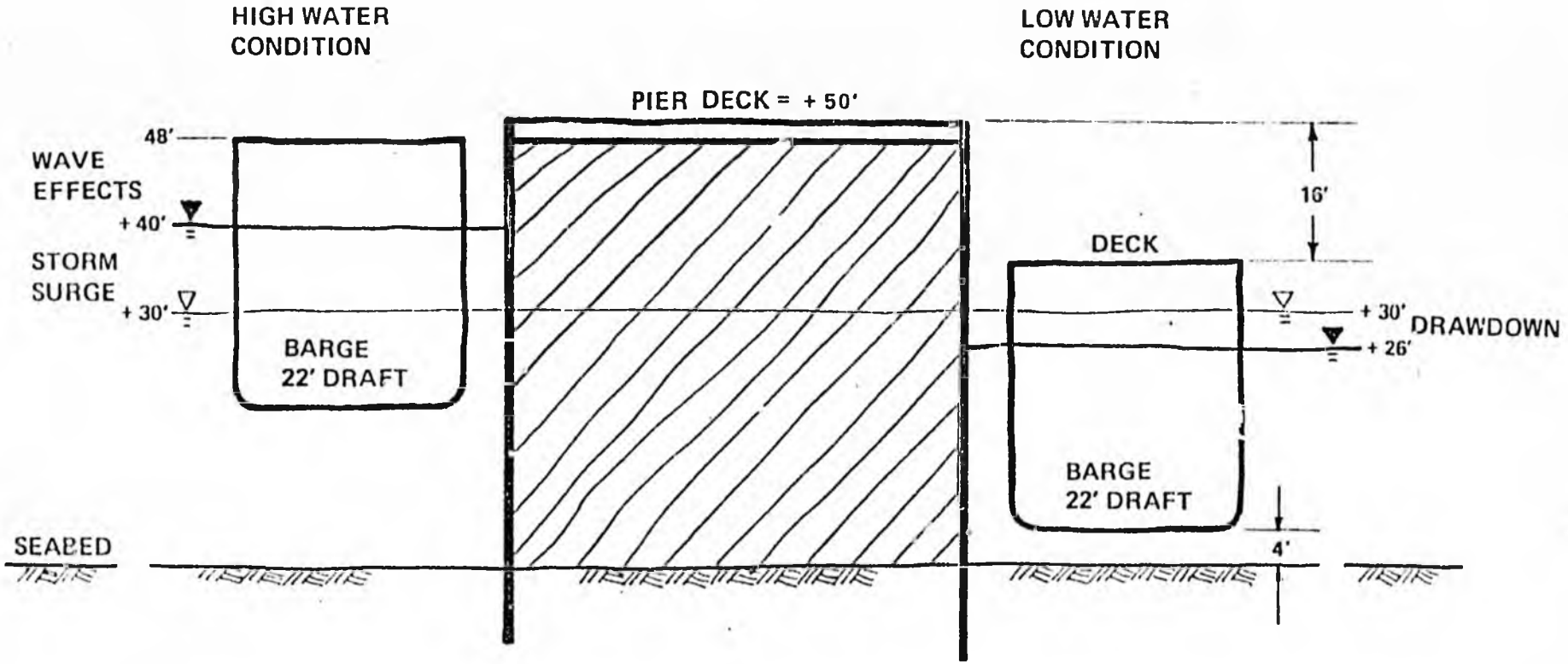


FIGURE 4.4: DETERMINATION OF DESIGN DEPTH ALONG PIER

a four foot water level fall has been chosen. At this level, the hull of the fully-laden barge will be 4 feet above the seabed. This additional depth below the keel is considered adequate to ensure vessel safety.

Conversely, during intense onshore wind episodes, the nearshore still water levels can experience increases of as much as 14 feet (NOAA, 1977). An increase of 10 feet has been chosen for the design of the terminal deck shown in Figure 4.4. During this high water period, the barge keel lies 18 feet above the sea bottom. In both cases of the high and low water extremes, the deck height as shown in Figure 4.4 is considered adequate for safe cargo transfer operations. Each ocean-going barge carries a crane for transferring its cargo. The height differential that exists between the barge and terminal decks is considered to be well within operational limits of the transfer equipment.

4.2.3 Offshore Terminal

The offshore berthing terminal will be connected to the onshore port facility by a 3400-foot long causeway. Five offshore terminal alternatives were developed for consideration in Section 4.0 of this report. A refined version of Alternative III was chosen to best serve the proposed Port of Nome. Figure 4.5 presents a plan view of the anticipated terminal layout. Protection from incoming wave energy will be provided by the southern armorstone slope. Berthing facilities for various vessel types are provided. The large (100' x 400') ocean-going barge is the largest vessel that can be accommodated at the port. A freight transfer area exists on the terminal's southwest corner where trucks from the city will load/unload their cargos. This area is designed such that the trucks can make a single sweeping turn to pick up the cargo and return to the onshore facility. The berthing docks will have vertical walls

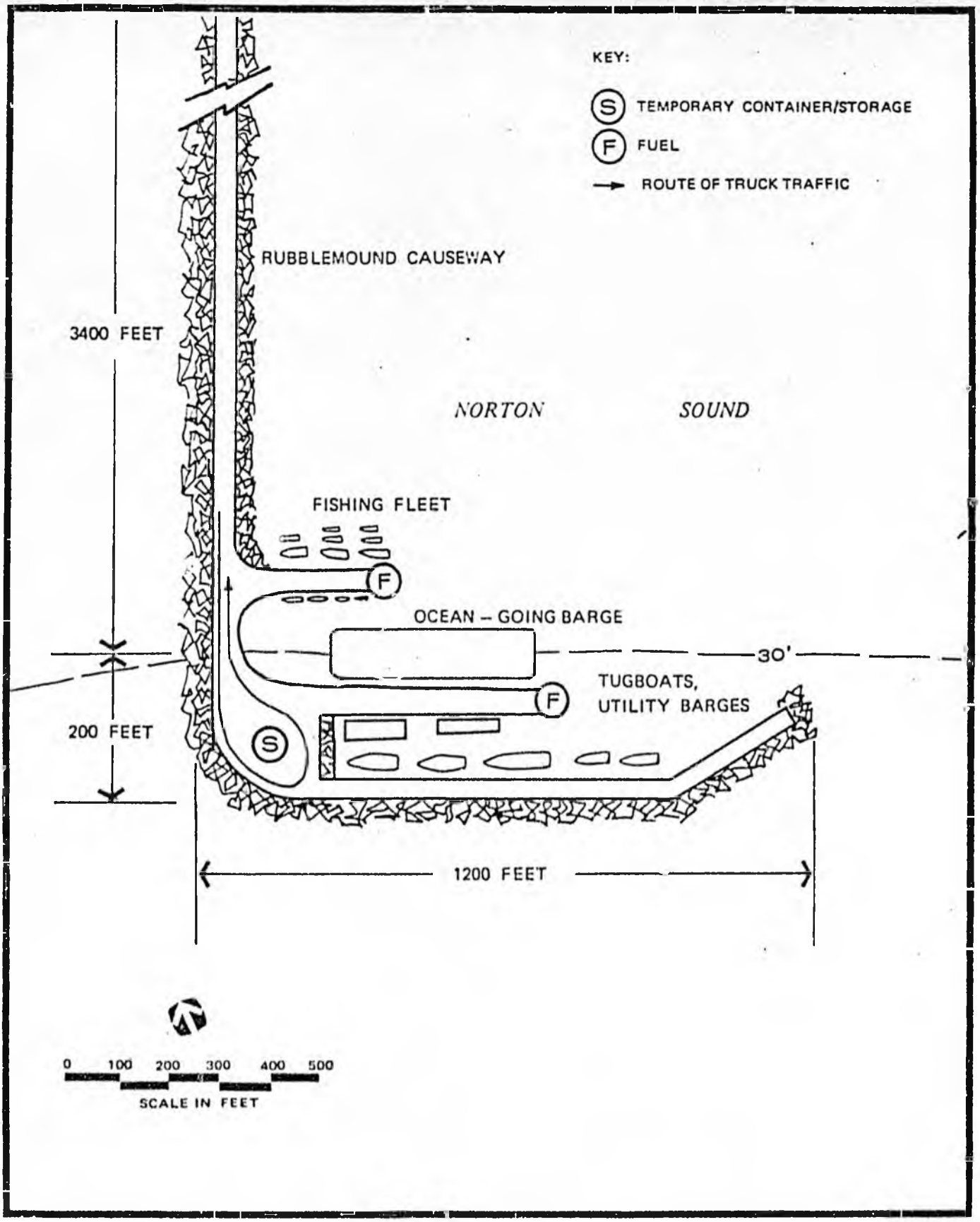


FIGURE 4.5 OFFSHORE TERMINAL LAYOUT

using either parallel sheet pile walls or circular steel sheet pile cells.

The offshore terminal has been separated into three general zones: 1) The ocean-going barge facility (accommodating one barge at a time, 22 foot design draft); 2) A utility barge, tugboat, and deep-draft vessel facility (designed to accommodate a wide range of vessels with maximum drafts of 22 feet); and 3) A small craft berthing area, to be utilized by fishing craft and other lighter-draft vessels (maximum draft = 20 feet).

Only mobile equipment will be utilized at the berthing terminal since the expected winter ice over-ride may damage any permanent facilities. Likewise, the utilities delivered to the piers (water, fuel, electricity, telephone) will be contained within a buried utility corridor.

4.2.4 Phased Development

It may be necessary based on financial or logistical considerations to construct the offshore facility in a number of distinct phases. An example of this means of development is presented in Figure 4.6, where three distinct stages of completion are shown. In Stage I, the south breakwater and cargo transfer area is complete to accommodate ocean-going barge traffic and the related tug fleet.

In Stage II, the primary ocean-going barge berthing facility is contained on the inshore pier structure. This allows a higher level of usage for a medium-draft tug and barge fleet between the breakwater and the newly constructed pier. As the third stage of development, a small pier is constructed further inshore for the berthing of a small-craft/fishing fleet. If additional berthing space is required in the future, small piers similar to that added in Stage III can be constructed from the causeway further inshore.

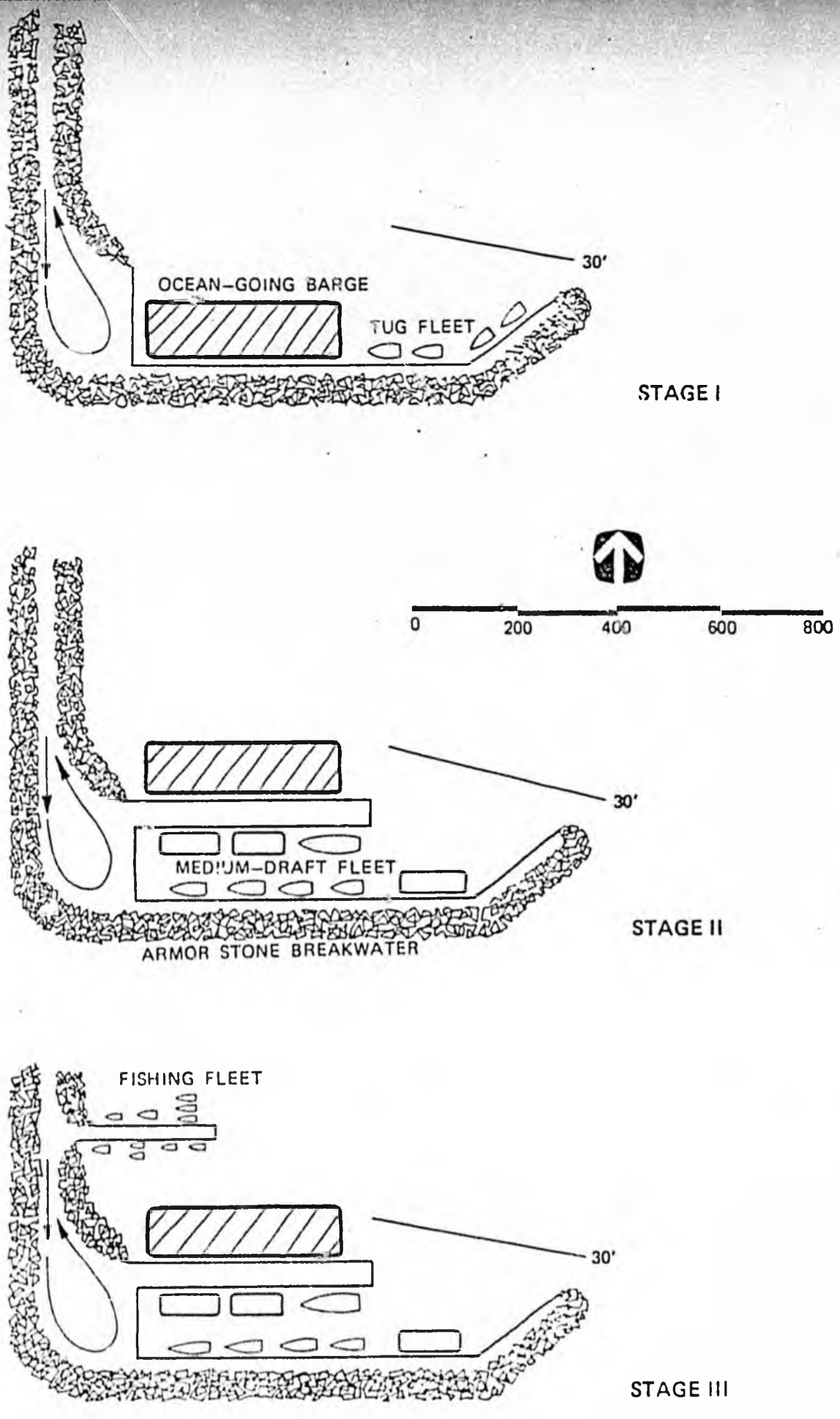


FIGURE 4.6: OFFSHORE FACILITY DESIGN

This phased development concept can be undertaken without disrupting existing port services since the Stage II and III construction sites do not directly impact on the causeway traffic. Further, the causeway can be expanded in length if, in the future, the need for a deeper draft facility becomes apparent. During such expansion activities, the existing port should experience uninterrupted service as it is physically separated from the area of future expansion.

7.0 ECONOMICS

7.1 COST PROJECTIONS

The costs associated with the construction of the proposed port facility at Nome have been estimated using a variety of data sources. The large scale of this construction project and the remote location of Nome make a precise engineering cost estimate extremely difficult to achieve. All estimates presented in this report are in 1980 dollars.

Due to the limited nature of Nome's historic growth and development, cost estimates based on comparable construction projects are not possible. This makes it necessary to develop cost estimates from limited past construction experiences with proper adjustment for both cost escalation and the economy associated with large scale acquisition of construction materials. The major raw material required for the proposed port construction is quarrystone in various sizes ranging from large armor rock to small cobbles and rock fragments that comprise the "quarry run" causeway core. Approximately 800,000 cubic yards of quarry rock are needed for the construction of the offshore facilities.

It is obvious that the unit cost of quarry rock will have a major influence on the economic feasibility of the port development. For the purpose of determining the total project cost, unit costs for the various categories of quarry rock have been selected using prices quoted in the past escalated to 1980 price levels. It is understood in this analysis process that there is a practical limit to the funding capacity of the state government beyond which a port development is not possible. In a sense, the quarry rock unit costs are the controlling factor in the port construction feasibility and should be negotiated with this fact in mind.

The source of the quarry rock needed for the project is yet to be determined, however, potential quarry sites have been identified in close proximity to Nome. The assumed unit costs of quarry rock used in the cost determination are as follows:

Armor Rock	$25/cubic yard
Filter Rock	$ 8/cubic yard
Core (Quarry Run)	$ 5/cubic yard

While more detailed design work may lead to a lowering of the total estimated costs, it seems reasonable to assume that the negotiated unit costs for quarrystone cannot increase significantly above the stated levels without severely impacting ultimate project feasibility.

The general philosophy used for the port design is to construct a simple, efficient, and cost-effective facility that will require a minimum of maintenance. For this reason, basic operating needs are filled without detailed and costly amenities. It is assumed, for example, that no road paving will be undertaken. Also, while the additional Phase B parcel of land should be purchased initially, no improvements shall be placed on that land until bulk cargo facilities are required. The cost of land acquisition is estimated to be $2000/acre. At the present time, there is very little historic cost data upon which to base this figure. No comparable real estate sales have been undertaken in recent years to use as a basis for cost estimation. Negotiations between the City of Nome and the present owner of the land will establish the final cost of the parcel required for the onshore facilities.

An attempt has been made to minimize the need for imported construction materials due to the high cost of transportation to Nome. The major construction element that is not presently available at Nome is the steel sheetpile needed for the construction of the docking facility. The cost of supplying and driving

the sheetpile has been estimated based on prices presented in earlier reports (Gute and Nottingham, 1974; CH2M-Hill, 1976) and our own cost index for remote area construction.

A tabulation of all costs associated with the Port of Nome construction are presented in Table 9.

The total cost of construction of the Port complex is shown in Figure 7.1. The three stages of port development are compared in this figure with costs associated with each option.

The different costs associated with Stage II and Stage II only refer to the additional berthing facilities for auxillary barges and other medium draft vessels and for the small pier that is associated with fishing vessels and other comparably sized smaller craft.

A summary of the primary cost items of the three phases of construction are as follows:

PORT DESIGN	TOTAL COST
Stage I	
Barge Facility	$20,409,300
Stage II	
Barge Facility	$20,409,300
Medium-Draft Dock	3,383,100
	$23,792,400
Stage III	
Barge Facility	$20,409,300
Medium-Draft Dock	3,383,100
Fishing Vessel Dock	2,449,900
	$26,242,300

CONSTRUCTION COST ESTIMATE

TABLE 9.A

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phase I

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
*	3400-FOOT CAUSEWAY				
1	Armor Rock	101,800	CY	$ 25	$2,545,000
2	Filter Rock	54,600	CY	$ 8	436,800
3	Core Rock	130,300	CY	$ 5	651,500
*	OFFSHORE TERMINAL				
4	Armor Rock	211,200	CY	$ 25	5,280,000
5	Filter Rock	75,700	CY	$ 8	605,600
6	Core Rock	264,000	CY	$ 5	1,320,000
*	ROADWAY SUBGRADE AND SURFACE				
7	Gravel	14,300	CY	$ 4	57,200
*	STEEL SHEETPILE (DOCK FACE)				
8	Sheetpiles	64,000	LF	$ 24	1,536,000
9	Pile Driving	533	EA	$620	330,500
10	Tiebacks/Hardware	800	LF	$100	80,000
11	Backfill Compaction	88,180	CY	$ 8	705,400
12	Dock Fenders	LS			32,000
13	Docking Hardware	LS			55,000
14	Navigational Aids	LS			15,000
	SUBTOTAL				13,650,000
15	Contingency (20%)				2,730,000
16	Engineering/Design (6%)				819,000
17	Supervision/Administration (6%)				819,000
18	PHASE I OFFSHORE FACILITIES TOTAL:				$18,018,000

CONSTRUCTION COST ESTIMATE

TABLE 9.B

REFERENCE/PLAN NO. _____

JOB NAME Nome Port

LOCATION Port of Nome
Onshore Facilities - Phase A + B

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
*	LAND ACQUISITION				
19	Phase A	17	Acre	$2,000	$ 34,000
20	Phase B	53	Acre	$2,000	106,000
21	Land Preparation	70	Acre	$4,000	280,000
22	Road Construction	4,500	LF	$ 40	180,000
*	UTILITIES				
23	Water		LS		524,000
24	Fuel		LS		329,000
25	Electricity/Telephone		LS		105,100
26	Lighting	20	EA	$1,500	30,000
27	Administration Building	1,000	SF	80	80,000
28	Restrooms	5	EA	$10,000	50,000
29	Fencing (Phase A only)	2,500	LF	35	87,500
30	Signage		LS		6,000
31	SUBTOTAL				1,811,600
32	Contingency (20%)				362,300
33	Engineering/Design (6%)				108,700
34	Supervision/Administration (6%)				108,700
35	ONSHORE FACILITIES TOTAL:				$2,391,300

CONSTRUCTION COST ESTIMATE

TABLE 9.C

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phases II Dock

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
*	DOCKING PIER AT 30 -FOOT CONTOUR				
36	Core Rock	24,580	CY	$ 5	$ 122,900
37	Sheetpile	76,800	LF	$ 24	1,843,200
38	Pile Driving	640	EA	$ 620	396,800
39	Sheetpile Tiebacks	960	LF	$ 100	96,000
40	Backfill Compaction	8,000	CY	$ 8	64,000
41	SUBTOTAL				2,522,900
42	Fenders		LS		10,000
43	Docking Hardware		LS		30,000
44	PHASE II DOCK: SUBTOTAL				2,562,900
45	Contingency (20%)				512,600
46	Engineering/Design (6%)				153,800
47	Supervision/Administration (6%)				153,800
48	PHASE II DOCK: TOTAL				$3,383,100

CONSTRUCTION COST ESTIMATE - SHEET NO. ___ OF ___

CONSTRUCTION COST ESTIMATE

TABLE 9.D

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phase III Dock

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
*	DOCKING PIER AT 26 -FOOT CONTOUR				
49	Core Rock	16,870	CY	$ 5	$ 84,350
50	Sheetpile	56,000	LF	$ 24	1,344,000
51	Pile Driving	467	EA	$ 620	289,550
52	Sheetpile Tiebacks	700	LF	$ 100	70,000
53	Backfill Compaction	5,620	CY	$ 8	45,000
54	SUBTOTAL				1,832,900
55	Fenders		LS		8,000
56	Docking Hardware		LS		15,000
57	PHASE III DOCK: SUBTOTAL				1,855,900
58	Contingency (20%)				371,200
59	Engineering/Design (6%)				111,400
60	Supervision/Administration (6%)				111,400
61	PHASE III DOCK TOTAL:				$2,449,900

CONSTRUCTION COST ESTIMATE

TABLE 9.E

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Facilities Cost Summary

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

LINE	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
*	PHASE I DEVELOPMENT				
18	Offshore Facilities				$18,018,000
35	Onshore Facilities				2,391,300
*	PHASE I TOTAL:				20,409,300
48	PHASE II DOCK TOTAL:				3,383,100
*	PHASE I + PHASE II TOTAL:				23,792,400
61	PHASE III DOCK TOTAL:				2,449,900
*	PHASE I + II + III TOTAL:				$26,242,300

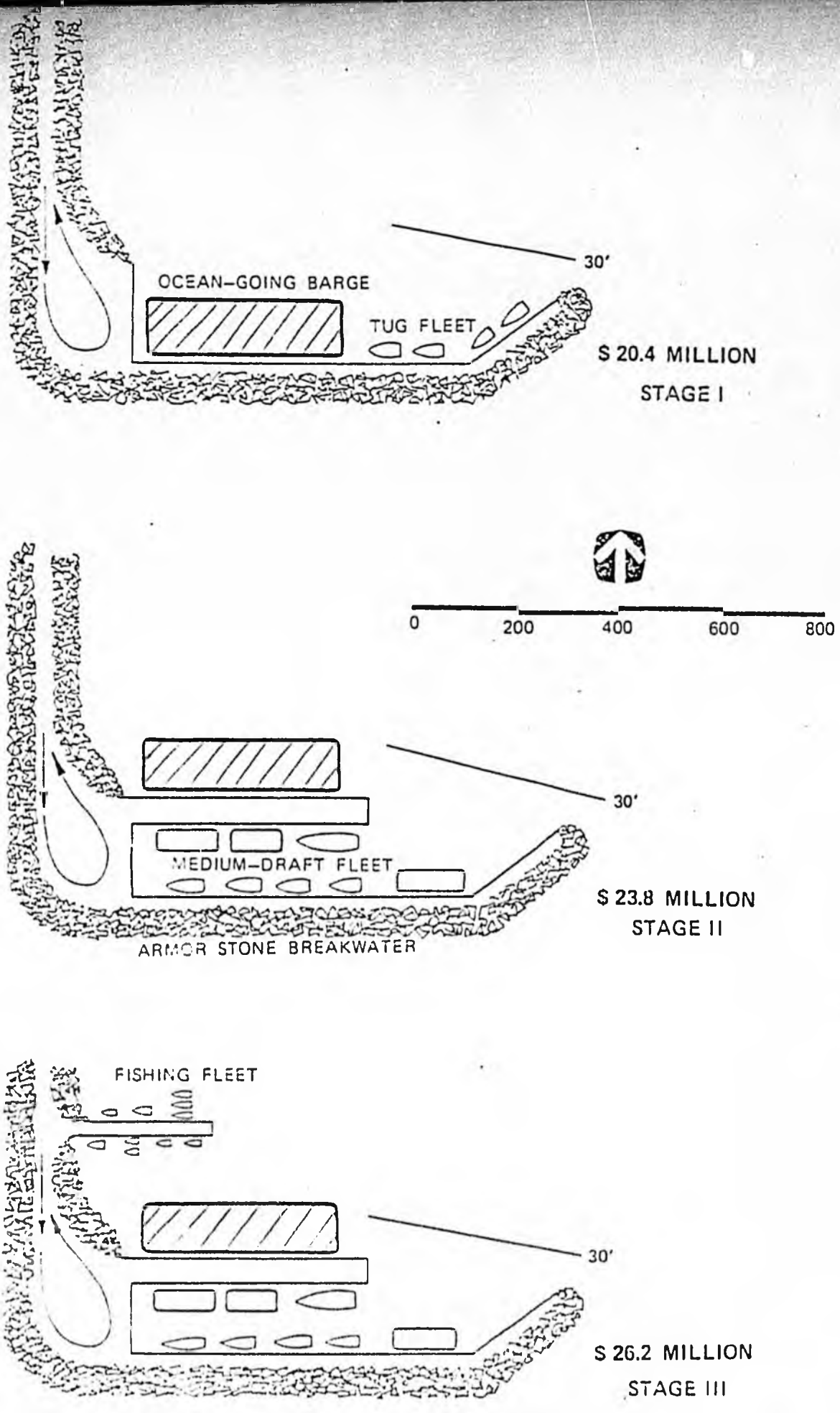


FIGURE 7.1 : TOTAL PORT CONSTRUCTION COSTS

Regardless of the specific offshore terminal design, the onshore facility configuration remains the same. Basic cost items included for development of the onshore facilities are as follows:

- Land Acquisition
- Land Preparation
- Road Construction
- Utilities
  - * Water
  - * Fuel
  - * Electricity/Telephone
  - * Lighting
- Buildings
  - * Administration
  - * Restrooms
- Fencing
- Signage

The cost estimate presented herein assumes development of only the 35 acre onshore facility shown in Figure 5.1.

In order for the port facility to be totally self-supporting, annual port income would have to exceed the yearly costs of operations, maintenance, the initial construction costs, and the costs associated with the debt service on the initial costs. Port costs can be annualized as follows:

A.	Capital Recovery (50 Years @ 8%)	$2,145,000
B.	Operations/Maintenance	
	Maintenance	$ 260,000
	Staff Salaries	35,000
	Equipment Maintenance	10,000
	Administrative Costs	10,000
		$ 315,000

TOTAL: $2,460,000

The level of economic activity in the Nome region is not currently sufficient to generate the income needed to offset the projected $2,460,000 annual costs.

An analysis has been undertaken, however, to determine the extent to which the port projected revenues can offset the city's costs in operating and maintaining the facility.

7.2 REVENUE PROJECTIONS

In order to develop anticipated revenues which might be derived from the usage of port facilities in Nome, the rate structures of several other ports in Alaska were examined. In addition, the actual cargo transported through the Nome Harbor in 1979, amounting to a total of 33,100 tons (refer to Table 6), was applied against these rate structures. Nome cargo, if transported through the harbors at Anchorage, Homer, and Dillingham, would be as follows:

	General Cargo	Petroleum	Total
Total tonnage through Nome in 1979 (refer to Table 6)	8,100	25,000	33,100
Charges by the port if processed through the port at:			
($ in thousands)			
Anchorage	$ 20	$ 2	$ 22
Homer	$ 35	$ 35	$ 70
Dillingham	$111	$305	$416

Establishing Anchorage rates as the base for comparison, the ports would rank as follows:

Port	Port Charges as a Multiple of Anchorage
Anchorage	1.0
Homer	3.2
Dillingham	18.9

The present service area of the Nome Port is generally that area encompassed by the Nome Census Division. Although villages outside the Division may receive goods transshipped through Nome, it is likely that over 90 percent of incoming general cargo and petroleum products is destined for residents or users within the Division. A study of growth in the Division by the Corps of Engineers (1974A) projects a population of about 9,500 persons by 1985 and 15,800 persons by the year 2000, compared to a population in 1978 estimated at between 6,700 and 7,200 (refer to Section 2.8.1).

In the period from 1969 to 1979, the average cargo tonnage through the Nome Port amounted to between 4.6 and 4.9 tons per person per year, with no meaningful trends of increase or decrease in evidence. Therefore, using a figure of 4.75 tons per person per year, the following cargo projections resulted:

Year	Projected Service Area Population (Nome Census Div.)	Total Incoming General Cargo and Petroleum Products through Nome
Base Year (1979)	7,000	33,250*
1985	9,500	45,125
2000	15,800	75,050

* Compares with actual of 33,100 tons (refer to Table 6)

Utilizing a rate structure equivalent to 15.0 times the Anchorage rates results in annual revenues for the Nome Port as follows:

Year	Total Incoming General Cargo & Petroleum Products	Annual Revenues Rec'd from Port Charges & Fees
Base Year (1979)	33,250	$331,250
1985	45,125	$450,000
2000	75,050	$750,000

This amounts to an average rate of $10.00 per ton or about $0.50 per 100 pounds of cargo.

In addition, other port revenues will accrue from sources which cannot, at this time, be adequately quantified. These include:

1. Docking of workboats related to petroleum exploration, development, and production, primarily for the purpose of securing provisions and supplies, and transporting work crews and equipment.

2. Docking of fishing vessels operating in Norton Sound and nearby fisheries, primarily for the purpose of securing provisions and supplies.

3. Docking of vessels for the purpose of receiving minerals mined in northwest Alaska for transport to Japan or the "lower 48".

4. Docking of vessels and transshipment of cargo related to petroleum development activities on the Beaufort and Chukchi Seas. This may include export of quarrystone for oil drilling island construction in these areas.

5. Leasing of land within the port complex to private firms for the purpose of constructing and utilizing operations and storage buildings, fuel facilities, repair facilities, and similar structures, as well as for open land for container storage and other types of storage.

The above revenue items could add significantly to the revenue projections derived from incoming general cargo and petroleum products. The complex and speculative nature of this income requires that an accurate determination of this element of potential income must await further study in Phase B of the planning effort.

7.3 ECONOMIC CONCLUSIONS

It is anticipated that the annual cost of debt service, operation and maintenance activities of the port of Nome will exceed the income generated by the Port. This conclusion is somewhat speculative in part due to the inability of accurate forecasting of the extent and magnitude of developments in the petroleum, mining, coal and fishing industries. It does seem clear, however, that the income generated from port operations will exceed the cost of port operations and maintenance. Given the rather conservative port income scenario that anticipates income from the projected population growth only, the income roughly equals the yearly cost of port operations and maintenance. If other more optimistic scenarios develop that would increase port traffic, income levels would rise accordingly. The highly speculative nature of economic forecasting for Nome dictates that it be limited to those elements that seem most plausible. This has been our objective and it is upon this premise that our preliminary economic evaluation is based.

9.0 CONCLUSIONS

The planning, engineering and economic analyses undertaken in this report conclude that construction and operation of a deep-draft port facility in Nome, Alaska, is feasible from a functional, operational, and environmental standpoint. This conclusion is based solely on the expected growth rate of the city and region although additional growth-inducing factors are considered (petroleum, mineral, fisheries development), these rather speculating elements are not judged to be necessary for the port to succeed. It has been determined that port income will roughly equal the expected port operation and maintenance costs. A primary requirement for the economic viability of the port project is the ability of the State of Alaska to finance the initial costs of land acquisition, engineering design, and construction of the port facilities. The level of income generated by the port is not anticipated to absorb the total construction costs assuming even the most optimistic regional growth scenarios.

The port complex will be composed of onshore cargo storage/handling facilities connected to the offshore terminal by a 3600-foot long rubblemound causeway, as shown in Figure 9.1. The port facility will accomodate vessels with maximum drafts of 22 feet. At the offshore terminal, general and containerized cargo will be handled by vessel-fixed cranes as well as a dock-based mobile crane. Fuel, water, electricity and telephone services will be provided at dockside.

The site selected for the location of the onshore terminal is on an elevated plateau just west of the Snake River. This site is convenient to the city and city services and will lead to reduced dredging requirements at the present harbor due to the sand blocking effect of the causeway.

Onshore area requirements for the cargo storage/handling activities

are contained within a 35-acre parcel designated "Phase A". The "Phase B" parcel is 65 acres and will be utilized as a bulk cargo storage/handling area if the need should arise in the future. It is recommended that the city acquire the entire parcel (Phase A + Phase B) at the present time to preserve these lands for future use. Presently, only about 30 acres of the 100 acre parcel encompassing both Phase A and Phase B development is owned by the city.

The cost of the port project is estimated for three configurations:

Phase I:	Onshore Facilities 3600-foot long causeway Barge Terminal	$20.4 Million
Phase II:	Phase I plus Additional 450-foot long barge/ Ship Pier	$23.8 Million
Phase III:	Phase II plus Additional 300-foot long Docking Pier	$26.[illegible] Million

Construction cost estimates are given in 1980 dollars. Quarry rock costs will have a major impact on project cost. A unit cost of $25/cubic yard for armor rock is assumed for these cost estimates. The structural design of the major port elements have been designed to minimize maintenance costs. This philosophy of design is reflected in the port cost estimates.

Port income will be generated from berthing fees, land/facilties lease income derived from port-related businesses located within the port complex, sales of fuel, water, and power to the port users.

The offshore terminal can be expanded in the future to accomodate deeper draft vessels as well as to provide docking space for a larger number of small, shallow draft vessels. The causeway has been designed to support additional utilities and a bulk material

transfer system in the future.

The existing harbor at Nome (in the Snake River) is envisioned as a small craft harbor with an anticipated vessel capacity of 80-100 boats. It is believed that the presently authorized depth of eight feet will not be required for the Snake River and that small craft traffic within the present harbor will be limited to vessels drawing four feet or less.

Environmental concerns that have been identified appear not to be of the nature or degree that would prevent port construction or operation. These concerns include:

- o Longshore Sediment Transport;
- o Ice Movement and Forces;
- o Salmon Spawning;
- o Crab Fisheries;
- o Expected Regional Growth;
- o Structural Foundation Support;
- o Cultural, Archeological Concerns.

Permitting requirements for the Port of Nome have been identified and include the U.S. Army Corps of Engineers, Alaska Department of Transportation, Alaska Department of Fish and Wildlife, as well as other state and federal agencies. The total time to process all permit applications is 12-18 months, however, if opposition to the project is slight it is conceivable that this time requirement would be reduced.

9.1 RECOMMENDATIONS

Based on the findings of this report, it is recommended that the City of Nome initiate the following tasks in order to expedite the construction of the Port of Nome:

1) Obtain specific data at the proposed port site to properly describe site geology, offshore bathymetry and onshore topography.

2) Undertake negotiations to procure onshore land from present owner.

3) Conduct tidelands survey to allow State to grant ownership to the City of Nome for the offshore lands existing between the city limits and a line located two miles offshore.

4) Conduct refined economic assessment to better quantify the expected port income given various development scenarios.

5) Organize a citizens committee and assign specific responsibilities to establish the means to obtain financial support from the State for the port facility.

6) Provide site and contract specific guidance to Tetra Tech in order to proceed with development of Port of Nome Master Plan (Phase B of ongoing study).

SB

208

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER – DESIGN AND CONSTRUCTION

POUCH Z
JUNEAU, ALASKA 99811
(907) 465-3900

February 17, 1981

200H-

Re: Egan Drive Illumination

The Honorable Robert H. Ziegler, Sr.
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Ziegler:

As requested by Guy Van Doren of your office, following are estimates for continuous illumination of Egan Drive from Norway Point to Mendenhall Loop Road.

I. Estimated Initial Cost (February 1981 Dollars)

Preliminary Engineering	$ 50,000
Construction	1,342,000
Construction Engineering	101,000
Total	$ 1,493,000 (current standards)

II. Estimated Maintenance and Operational Costs (February 1981 Dollars)

Electricity Cost	$ 18,000 per year
Maintenance Cost	20,000 " "
Total	$ 38,000 per year

If additional information is needed, please let me know.

Sincerely,

R. D. Shumway, P.E.
Deputy Commissioner

25A-T4LH

SB

209

SB 209 (special appropriation for fire fighting equipment for the City of Whittier)

Revised costs of fire truck and fire-fighting radio equipment for Whittier:

FIRE TRUCK	$175,000
RADIO EQUIPMENT	20,689
TOTAL	$195,689

The revised costs were provided by Chief Livingston by phone February 27. Subsequent to initial costs provided by manufacturers, Chief Livingston learned from Becker Fire Equipment that the chassis price of the fire truck had once again been increased, bringing the fire truck total to $175,000.

Chief Livingston was also notified by Motorola, Inc. that quotes for cost of two pieces of radio equipment had been in error, and that an additional $2,500 was required for each ($5,000); thus the Fire Department will need $20,689 for emergency radio equipment.

City of Whittier

TELEPHONE 907 472-2337
P.O. BOX 608
WHITTIER, ALASKA 99693

472-2330

January 16, 1981

~~$162,650.00~~ $175,500

Jay Kertulla;

Please consider our request for a new fire truck for Whittier, Alaska. The bid for this truck comes to $162,650.00 from Becker Fire Equipment of Casper Wyo. The bid for 2 way radios from Motorola of Anchorage comes to $15,689.00 ← 20,689 These radios are for 2 fire trucks, 1 ambulance, 1 base station and 3 portable units. This is a considerable sum, however I will attempt to justify it.

1. This truck is a class "A" pumper, and is basically the same truck that the Steese VFD received last year at approx. $129,000.00. The chassis price alone went up $10,000.00 due to inflation since last year. This is the only 4 wheel drive chassis we have found heavy enough to meet our needs. We are also asking for extra capabilities that the Steese truck does not have.
   A. Full foam capability with 150 gal foam tank, turret and portable monitor for petroleum and harbor fires.
   B. 1500 gallon per min. vs 1000 gal per min. on the Steese truck.
   C. Built in 3kw generator with 2 telescoping floodlights for emergencey lighting.
2. Of our present 2 trucks, the 1949 Ford is inoperable due to various leaks incurred when it froze during a power outage in 1975. The standby generator was inoperable at that time. The 1952 Howe is operational but is hard pressed to maintain 150-200 gallons per min. This truck was originally a 500 gallon pumper with a 500 gal capacity. We cannot pump straight through from hydrant to the fire. After approx 2 1/2 min. pumping we must shut down for 1 min. and recharge the truck tank. On a fire of any magnitude this is a very unworkable situation. Most of our members are not profesional truck drivers and have troubles shifting the spur gear 5 speed with any degree of success. Our present pumper summed up is complicated to operate, hard to drive and needs more Geritol than we can afford.

The new unit would have the ability to serve Whittier as it grows in years to come, plus meeting our present needs.

Becker Fire Equipment has supplied the majority of fire trucks for Alaska for the past 2 years and has enjoyed a good reputation in our state.

We would appreciate your help as our elected representative on this matter. Becker Equipment advised us that Senator Sacketts office has been of great assistance in securing trucks for other communities on a very short time basis.

Thank you for your time and consideration.

Sincerely, Michael Livingston

Michael Livingston
Fire Chief
Whittier Volenteer Fire Dept.

MOTOROLA INC.

proposal

City of Whittier
Fire Chief
Whittier, Alaska 99502

QTY		DESCRIPTION	UNIT PRICE	EXTENDED PRICE	
1	L53JJB1190M -	VHF, 4 frequency, 60 watt MITREK SUPER CONSOLETTE Base Station (local control)	~~1,930.00~~ 2250.00	$1,930.00	$2250.00
1	TDD6481	6 dB Gain Base Station Antenna	~~244.00~~ 298.00	244.00	298.00
1	TDN6596	100' ½" Foam Heliax Transmission Line	~~180.00~~ 223.00	~~180.00~~	223.00
2	T53JJA1900K	MITREK Mobile, VHF, 4 Frequency, 60 Watts with Touch code assy.	~~1,325.00~~ 1330.00 1580.00	~~2,650.00~~	2660.00 1580.00
3	H33BBU1144N	MT500 Portable, UHF, 4 Frequency, 5 Watts with Nicad Batt. Case & Touch Code	~~1,398.00~~ 1670.00	~~4,194.00~~	5010.00
~~3~~	~~NLN4528~~	~~Swivel Case~~ With T Strap	~~30.00~~	~~90.00~~	
3	NLN4565	Rapid Rate Charger	~~120.00~~ 128.00	360.00	384.00
		TOTAL		~~$9,649.00~~	12,405.00

Airfreight - FOB Destination

Installation at ~~$600.00~~ 700.00 per day (Time and Materials) not including transportation from Portal to Portal. — 2450.00

Total monthly maintenance including parts and labor on mail in basis at $59.50 per month. 69.50 x 12 — 834.00

Customer to provide 2" mounting pipe for base station antenna — Total $15,689.00

Terms: 20% downpayment - net 10 days on balance

Prices quoted are FOB factory. Quotation good for 60 days. 20,689[00]

Delivery in approximately 56 days from receipt of order

Prepared by: ~~William J. Morrison~~ Dan [illegible]

Date: ~~October 30, 1979~~ [illegible] 14 - 1981

NOTE: Conversion of the Auto-Phone Patch and Air Raid Siren can be done with (1) Encoder Board and (1) Decoder Board and some minor modifications to the Auto-Phone Patch. Total cost including labor $1,750.00.

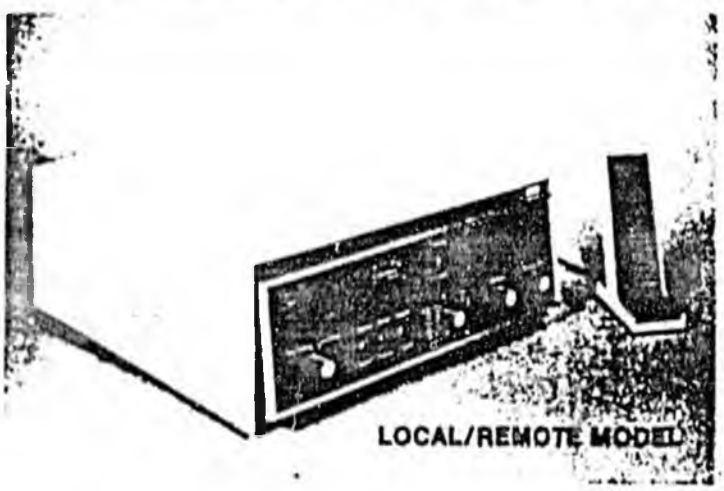
Eq. Cat.	Sec.	Item
R3	2.1	63

MOTOROLA

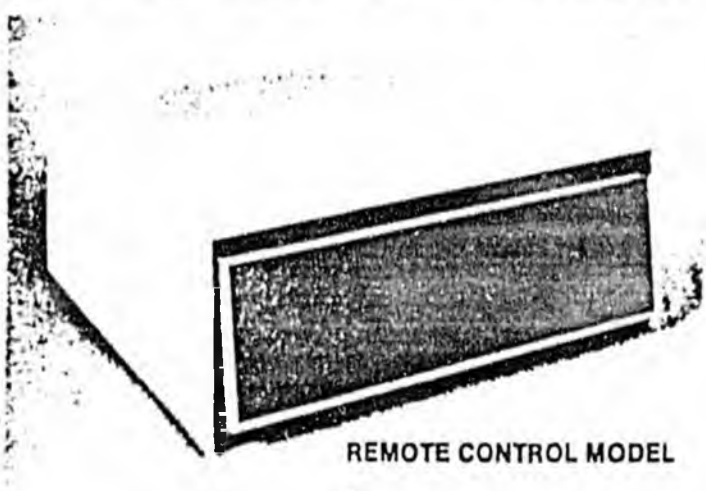
Solid-State

MITREK Super CONSOLETTE Base Stations

Local, Local/Remote and Remote Models
29.7-50 MHz, 60 Watts
136-174 MHz, 40/60 Watts
406-420 MHz and 450-512 MHz, 30/50 Watts



LOCAL/REMOTE MODEL



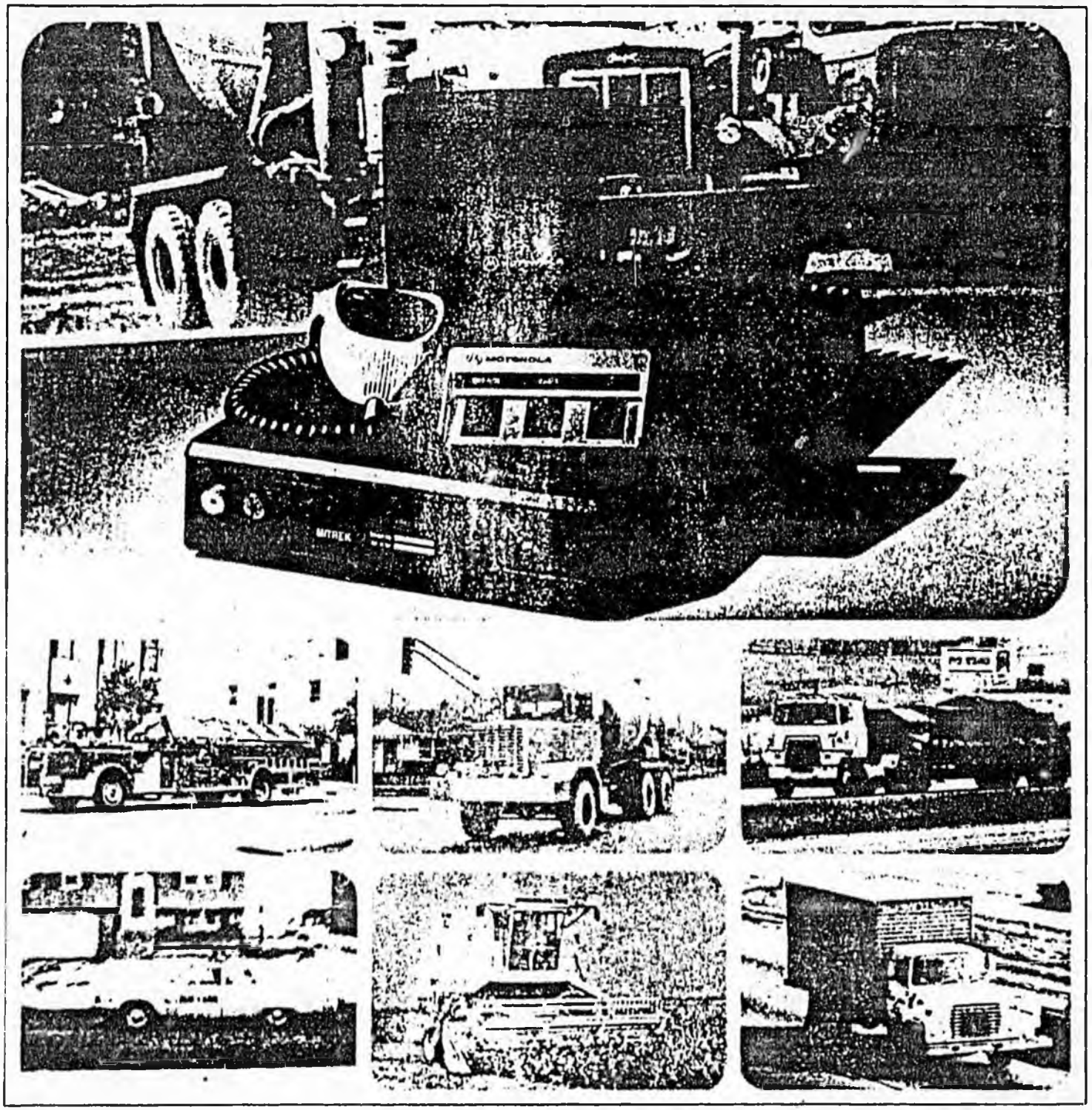
REMOTE CONTROL MODEL

MOTOROLA

MITREK

FM Two-Way Radio

29.7-50 MHz 60/110 Watts
136-174 MHz 40/60 Watts
146-174 MHz 75/110 Watts
406-420 MHz & 450-512 MHz 30/50 Watts
450-512 MHz 75/100 Watts



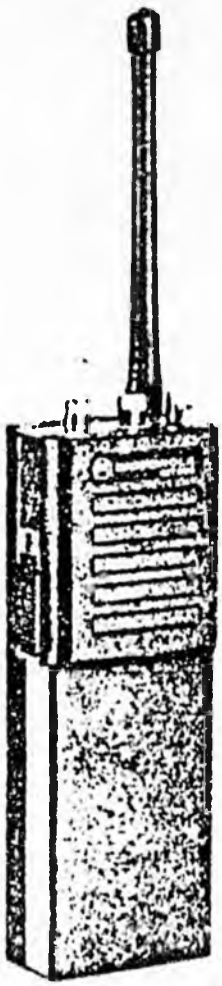
MOTOROLA

MOTOROLA
Technical communications supplier to the United States Olympic Committee

MT 500 Series HANDIE-TALKIE

Two-Way FM Portable Radios

5 or 2 Watts RF Power
136-174 MHz



Motorola's MT 500 Series Handie-Talkie radios offer an optimum balance of high performance, reliable advanced engineering and hybrid circuit design, convenient small size and weight, operational flexibility, and system cost. Major features include:

- Current Systems Compatible
- Rugged Construction
- Top Performance Specifications
- Superior Serviceability
- Improved Audio
- Choice of Power Levels
- 8 Frequency Capability
- Hybrid Modules
- Plug-In Channel Elements
- Basic or Universal Models
- Four Model Sizes
- Selectable Standard Options
- Complete Accessories

FEATURES ● BENEFITS

Current Systems Compatible
The MT 500 radio is a natural extension of the present HT 220 system. ● It provides for both upgrading and expansion with maximum ease. Many accessories are common and can be used on both lines.

Rugged Construction
Designed for everyday rough handling, the MT 500 radio exceeds the EIA Drop Test Standard RS-316-A. In addition, the radio is weather-sealed against dust, moisture and splashing water. ● These features increase dependability when the going gets rough.

Choice of RF Power
Available in either 5-watt or 2 watt models. ● Motorola's team of experts will help you select the correct model mix to assure that the power levels best meet the needs of your particular system design. You buy what you need for full communications coverage.

SB

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PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

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Introduced:
Referred: Transportation and Finance

IN THE SENATE BY DANKWORTH AND KERTTULA

SENATE BILL NO. ____

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE -- SECOND SESSION

A BILL

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Introduced:
Referred: Transportation
and Finance

IN THE SENATE BY DANKWORTH AND KERTTULA

SENATE BILL NO. ____

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE -- SECOND SESSION

A BILL

For an act entitled: "An act relating to the Alaska Railroad."

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

* Section 1. A.S. 42 is amended by adding a new chapter to read:

"CHAPTER 40. ALASKA RAILROAD AUTHORITY

ARTICLE 1. FINDINGS

Sec. 42.40.100. LEGISLATIVE FINDINGS AND POLICY. (a) The legislature finds, determines, and declares that:

(1) The United States government has expressed its determination to discontinue federal operation of the Alaska Railroad at the earliest possible date;

(2) For the time being, private acquisition and operation of the railroad in a manner consistent with the federal transfer legislation and this chapter is not considered to be a reasonable possibility, or in the best interests of the citizens of the state;

(3) Continued operation of the railroad is possible only if the state acquires the railroad from the federal government and provides for operation of the railroad;

(4) Continued operation and development of the Alaska Railroad is essential to the long-term economic growth and development of the state and its natural resources and will serve an important public purpose; and

(5) Continued operation of the Alaska Railroad will promote the general welfare of the people of the state by providing important freight and passenger service to residents of the state, to businesses of the state, to military installations in the state and to nonresidents visiting or doing business in the state.

(b) It is the policy of the state:

(1) to foster and promote the development of the state's lands and natural resources;

(2) to foster and promote the long-term economic growth and development of the state;

(3) to provide necessary and desirable freight and passenger rail transportation services to the state's residents, visitors, businesses and military installations in the state;

(4) to develop and implement plans for a transportation network that achieves the goals set forth in subparagraphs (b)(1), (2), and (3) above; and

(5) to provide reasonably high quality, safe, economical, and efficient transportation to the state's people, visitors, businesses and military installations in the state.

(c) The legislature further declares that:

(1) The exercise of the powers of the state in the interest of all the people of the state is necessary to

Pages 3 & 4

All suggested changes set forth on page 3 deal with granting to the Railroad greater responsibility and authority to manage its own affairs and cause it to be a greater asset to the State of Alaska when functioning as a railroad.

In those areas in which the Railroad is described as a "public authority," lines 2 and 7 on page 3 and lines 10, 19 through 21 and line 24 on page 4, seem to the Railroad to be emphasizing the public characteristic of the Railroad more than the profit-making, self-sustaining aspect of future Railroad activity. The Railroad recognizes its public responsibility, but if it is to function in the transportation marketplace in competition with other modes of transportation characterizing it as a public agency places emphasis on railroad charactistics which causes the Railroad to lose its competitive edge. The Railroad feels this would not aid the State, because it would probably lead to greater needs for subsidization.

accomplish the goals listed above in (b) of this section by authorizing the creation of ~~a public~~ an authority with the powers, duties, and functions as provided in this chapter, to operate the Alaska Railroad and its rail, industrial, port and other properties;

(2) It is in the best interests of the people of this state for the ~~public~~ authority created by this chapter to operate the Alaska Railroad in such a way as to:

(a) be ~~exclusively~~ responsible for and prudently protect the financial and legal obligations of the Alaska Railroad;

(b) render the railroad authority, and not the State of Alaska, a common carrier subject to the jurisdiction of the Interstate Commerce Commission;

(c) be able to raise capital by issuing obligations which may be exempt from federal and state taxation;

(d) carry out its responsibilities on a self-sustaining basis; to the fullest extent possible;

(e) provide the types and levels of safe, efficient and economical transportation to meet the overall needs of the state, supported where necessary by state investment in capital improvements or by other means;

~~(f) provide the best possible combination of high quality safe, efficient and economical transportation;~~

(g) operate according to sound business management practices;

(h) provide the level of service that best satisfies the needs of the people of the state;

(i) operate in a fiscally sound manner with ~~and~~ authority to invest and diversify; and

(j) ensure that borrowing by the authority does not indirectly endanger the state's own borrowing capacity.

(3) The continued operation of the railroad will assure greater utilization, development, reclamation and settlement of the state's lands for the maximum benefit of the people; and

(4) The important public purposes to be served by the railroad authority require the authority to have all of the powers and duties granted to it by this chapter; the legislature intends that the authority, consistent with sound business management practices, will exercise its powers and duties ~~as a public service~~ on behalf of the State of Alaska and recognizes that the exercise of the powers and duties granted by this chapter will require the authority to engage in the wide variety of different kinds of conduct authorized by this chapter.

ARTICLE 2. CREATION AND ORGANIZATION

Sec. 42.40.200. ESTABLISHMENT OF AUTHORITY. There is established the Alaska Railroad Authority. The authority is a public corporation/~~and, for purposes of Section 22 of Article III of the Alaska Constitution, an instrumentality of the state within the Department of Transportation and Public Facilities~~ established under the provisions of Title 10 of the Alaska Statutes that has a legal existence independent of and separate from the state. The exercise by the authority of the powers provided in this chapter is considered an essential ~~governmental~~ function of the state. The legal existence and authority of the Alaska Railroad Authority shall commence and become effective upon the governor's appointment, under Sec. 42.40.215, of all members of the authority's board of commissioners. The existence of the authority shall be perpetual.

The Railroad, because of its emphasis on business orientation of the new Railroad authority, suggests that the board appointed by the Governor should have a greater business, rather than governmental, flavor. Therefore it suggests that the only government person on the board be that highest official in the Executive Branch which lends a greater credence to the stature of the Railroad as an entity of State government. The Railroad feels that it can function as a profit-making asset in the stable of assets serving under the seal of the State of Alaska. It will make revenues in excess of $50 million this year alone, and has over 500 employees. It is the transportation connecting link between ice-free tidewater and the interior of Alaska, and 80% of the population of the State lives in the railbelt. Therefore, the Governor of the State should serve on its board; along with the Governor, the Chief Executive Officer of the Railroad should serve on the board as most CEO's in private firms serve on the board.

Sec. 42.40.205. LIMITATION OF LIABILITY. All liabilities incurred by the authority shall be satisfied exclusively from the assets and credit of the authority and no creditor or other person shall have any right of action against the state on account of any debts, obligations or liabilities of the authority.

Sec. 42.40.210. BOARD OF COMMISSIONERS. The powers of the authority are vested in the board.

Sec. 42.40.215. APPOINTMENT AND COMPOSITION OF BOARD.

**See below.

(a)/ ~~The board of the authority consists of the Commissioner of Transportation and Public Facilities, six public members appointed by the governor, and the authority's chief executive officer as an ex officio, nonvoting member.~~ The public members shall be persons with substantial experience or professional training and expertise in fields relevant to the purposes of this chapter, including, but not limited to transportation, business and finance and have such standing in their communities as to command the respect of their fellow citizens. ~~One public member shall be an executive of an American railroad or organization which is not a connecting carrier of the Alaska Railroad.~~ At least two public members shall reside in areas served by the railroad. The public members may not be state officers or employees.

(b) The governor may exercise tne power of appointment only upon acceptance by the legislature by law of the closing report or its substantive equivalent prepared and submitted under the federal transfer legislation. The closing report must include a statement of the assets and liabilities of the Alaska Railroad proposed to be transferred to and assumed by the authority and the State /which is as specific and definitive as practicable under the federal transfer legislation. The legislature may

**(a) The board of the authority consists of the Governor or in his stead the Lt. Governor, the chief executive officer of the authority, a union representative appointed by the Governor, and six public members appointed by the Governor. One of the six shall be an executive of an American Railroad or organization which is not a connecting carrier. The union representative shall be selected from a list of members submitted by the unions representing the organized employees of the Railroad. The director of the Department of Transportation and Public Facilities shall be an ex officio member of the board.

accept or reject the report and may not condition acceptance on its modification in any material respect.

(c) The public members of the board must be confirmed by a majority of the membership of the legislature in joint session. Any public member duly appointed by the governor, unless and until he has been rejected by the legislature, has the full powers and responsibilities of a confirmed board member.

(d) The board shall elect one of its members to serve as chairman. The chairman ~~may~~ call meetings of the board at least quarterly and shall preside at the meetings and perform such other duties as the board prescribes in its rules.

(e) The board also shall elect a vice chairman, a treasurer and a secretary and prescribe their specific duties in its rules.

~~(f) The governor by written notice to the member may~~ remove a public member from the board for:

(1) incapacitation caused by injury or sickness that leaves the member unable to perform his or her duties under this chapter;

(2) continued refusal or inability to attend regular or duly called special meetings of the board;

(3) conviction of a misdemeanor involving moral turpitude or a felony; or

(4) any action that was intended to harm the authority whether or not resulting in a conviction.

Sec. 42.40.220. TERM OF OFFICE; VACANCIES. (a) The public members of the board serve for a term of six years. However, with respect to the six members first appointed, the governor will designate two to serve a term of two years, two to serve a ~~term of four years, and two to serve a term of six years.~~

~~(b) A vacancy on the board is filled by appointment by the governor and the appointment must be confirmed by the legislature in joint session. A member selected to fill a vacancy will hold office for the balance of the full term for which his predecessor on the board was appointed.~~

~~(c) A vacancy on the board does not impair the authority of a quorum of members to exercise all the powers and perform all the duties of the board.~~

Sec. 42.40.225. COMPENSATION AND EXPENSES. The public members of the board receive compensation at the rate of Four Hundred Dollars ($400) for each day such members are engaged in actual performance of duties as members of the board. The board's rules will provide for consistent compensation for partial days during which members are engaged in actual performance of their duties. Members are entitled to per diem and travel expenses authorized by law for state boards and commissions under A.S. 39.20.180.

~~Sec. 42.40.230. QUORUM AND NOTICE OF MEETINGS. Four members of the board are a quorum for the transaction of business. In addition to the notice requirements of A.S. 44.62, notice of a meeting of the board, including an agenda for the meeting, must be given to each member, the governor, the leadership of the legislature, at least two newspapers of statewide circulation and upon request to members of the general public.~~

Sec. 42.40.240. VOTING. The board's rules shall provide for the manner of voting and any representation of persons absent from meetings. For example, the rules may, but need not provide for or allow: voting and conferring by telephone or mail or voting as directed in a written proxy taking a position on a particular issue, so long as such voting is consistent with

Lines 4 thru 16

The Railroad has certain reservations about the way the hiring and firing and compensation are structured. The Railroad feels that the board should appoint the Chief Executive Officer and the CEO should appoint all other employees and fix their compensation. If the Railroad is not successful, the board should get another CEO.

However, one important comment should be made regarding the executive salary limited to that salary established for departmental commissioners. Presently there are 11 executive officials of The Alaska Railroad who make in excess of $50,000 base pay a year, plus 17-1/2%, soon to be raised to 22-1/2% cost of living allowance. If it is assumed that all executive officials are within the federal tax bracket of 50%, it can be assumed that the COLA which is tax free means a real take-home pay of double the figure set by the federal government. Therefore, these 11 executive officials must make the real income of $70,000 to $90,000, which is in excess of a commissioner's salary. Some of them may wish to take a pay cut to continue as a State employee, but some of them will not. It is the Railroad's opinion that all 11 are valuable assets to not only the Railroad but to the State of Alaska.

~~A.S. 44.62.310. However, no proxy may be allowed delegating to the holder discretion to act for a principal on undisclosed or general matters.~~

Sec. 42.40.250. EXECUTIVE OFFICIALS. (a) The board shall appoint and fix compensation for the chief executive officer ~~and legal counsel~~ of the authority. The appointments are subject to the approval of the governor. The chief executive officer appoints and fixes compensation for the other executive officials. The appointments and compensation are subject to board approval. All executive officials serve at the pleasure of the board. ~~No executive official may be compensated at a rate in excess of that established by the state for departmental commissioners except as may be temporarily required by the federal transfer legislation~~. The chief executive officer may appoint and fix compensation for any additional personnel necessary to carry out the purposes of this chapter.

Sec. 42.40.260. DELEGATION. (a) Reserving general or particular authorization or concurrence, as appropriate, the board shall delegate powers and duties necessary and appropriate for the management of the daily affairs and operations of the authority to the chief executive officer.

(b) Within 180 days of its establishment, the board shall adopt by resolution policies governing the following activities of the authority to be conducted, subject to any board review specified in the policies, by the chief executive officer or designated executive official:

(1) leasing, granting easements in and permits for the use of or other conveyances of an interest in authority real property other than a transfer or conveyance of fee simple or the authority's entire interest in said real property;

(2) establishment of specific rates and tariffs; and

(3) routine changes in service levels.

(c) General or particular board authorization or concurrence is required, without limitation, for any of the following:

(1) transfer or conveyance of fee simple or of the authority's entire interest in real estate other than the execution of a release of a lien or satisfaction of a mortgage after payment has been received.

(2) the issuance of notes, debentures, or bonds, and the mortgaging or pledging of authority assets to secure those instruments;

(3) the donation of money, property or other assets belonging to the authority;

(4) an action by the authority as a surety or guarantor;

(5) all individual capital projects with an estimated completion cost in excess of Two Hundred Fifty Thousand ($250,000), or the performance of which by the authority extends over a period of one year or more from the date of execution of the agreement;

(6) adoption annually under A.S. 40.42.425 of long-range program and capital plans;

(7) certification of annual reports to be filed under A.S. 42.40.410;

(8) generally applicable, comprehensive increases and decreases in rates;

(9) diversification and major expansion or reduction of services beyond those provided on the date of transfer or as subsequently provided under this chapter;

Lines 9-30 - Conflicts of interest the portion of the ARR bill. It is believed unecessary, as part of this statute, to laboriously reiterate detailed provisions for conflicts of interest, when there is presently a state statute on conflict of interests and the modification suggested by the railroad adequately covers this matter.

(10) the exercise of the power of eminent domain;

(11) expansion of main or branch lines, other than routine track realignment as necessary to maintain service levels in effect on the date of transfer; and

(12) selection of independent auditors and accountants.

ARTICLE 3. ADMINISTRATIVE PROVISIONS

Sec. 42.40.300. CONFLICTS OF INTEREST. ~~(a) Except as provided in this section, no board member or employee of the~~ authority may participate in any decision of the authority in which he, or a member of his immediate family has a direct or indirect financial interest. For purposes of this section, "participate in a decision" includes all discussions, deliberations, preliminary negotiations, and votes concerning a matter which is the subject of formal action by the board.

(b) (1) A board member or employee is not considered to have a direct or indirect financial interest in a decision if he or a member of his immediate family has only a remote interest and if the fact and extent of the interest is disclosed to the board in a public meeting and is noted in the minutes of the board before any participation by the member or employee in the decision, and thereafter in a public meeting the board authorizes or approves the participation by a vote of its membership excluding the interested member or employee. As used in this subsection, "remote interest" means:

(i) that of a nonsalaried officer of a nonprofit corporation;

(ii) that of an employee or agent of a ~~contracting party where the compensation of the employee or agent~~

Each director on the board and each executive official of the authority shall comply with the requirements of financial disclosure contained in A.S.39.50.010-.200. The board may provide in its rules for the removal by the board of a director or official who intentionally violates an applicable prohibition contained in A.S.39.50.010-.200.

Lines 1-30 - See comment on page 10.
The railroad suggests the total deletion of the special conflicts of interest statute found in the railroad bill. The railroad should be treated as any other arm of State Government. It is the opinion of the Legislature the State Conflict of Interest Act is not strong enough that act not the railroad act should be amended. Cosmetically the railroad act should be as succinct as possible.

~~consists entirely of fixed wages or salary and the contract is~~ awarded by bid or by other competitive process;

(iii) that of a landlord or tenant of a contracting party, except in cases where the property subject to the lease or sublease is owned or managed by the authority;

(iv) that of a holder of less than one percent of the shares of the corporation or cooperative that is the contracting party;

(v) that of an owner of a savings and loan or bank savings or share account or credit union deposit account if the interest represented by the account is less than two percent of the total deposits held by the institution; or

(vi) other interests that in good faith are defined as remote by rules or regulations adopted by the authority.

(2) The provisions of this subsection do not apply to a board member or employee financially interested in a decision who influences or attempts to influence a board member or employee with respect to the decision before he is authorized to participate in the decision as provided by this subsection.

(c) A board member or employee is not considered to be directly or indirectly financially interested in a decision when the decision could not affect him in a manner different from its effect on the public or community generally.

(d) An action, including the award of a contract, in which a board member or employee participates in violation of this section or A.S. 39.50.090 is void if the board member's or employee's vote was necessary to make up a majority of those ~~voting on the decision. In a case where a board member or~~

Page 12

Lines 19 thru 28

The Railroad suggests a modification of the requirement for public council meetings. The Railroad suggests that the executive sessions of the board should be allowed regarding all of the corporate powers given to the Railroad by this Act. All discussions by the board regarding all business decisions vis a vis the corporate powers should be available to the board in executive session. This does not mean that they must discuss these powers within an executive session, but merely have the authority to do so when necessary.

Obviously any discussion of tariffs, divisions and contract rates should fall within the power of the board to discuss those matters in executive sessions.

~~employee participates in a decision in violation of this section~~ or A.S. 39.50.090, and where his vote was not necessary to make up a majority of those voting, the board may ratify the action after disclosure of the violation in a public meeting of the board and without participation by the interested member or employee in the decision to ratify. A board member or employee who violates any prohibition contained in this section or in A.S. 39.50 forfeits his office upon a determination by the board in a public meeting that the violation was intentional.

(e) The executive employees and board members of the authority are subject to A.S. 39.50.

(f) Within 120 days of the first meeting of the board, the board shall adopt and may subsequently amend rules implementing this section, providing additional conflict of interest and ethical rules and regulations as it considers appropriate, and providing for the removal by the board of a board member or employee who intentionally violates a prohibition contained in ~~this section or in A.S. 39.50.~~

Sec. 42.40.310. PUBLIC BOARD MEETINGS. (a) The meetings of the board are public, with the exception of executive sessions as permitted by A.S. 44.62.310 and subsection (b).

(b) In addition to those subjects excepted from public meeting requirements by A.S. 44.62.310, the board may consider in executive session pursuant to the requirements of that section matters that pertain to land acquisition or disposal or proprietary information, as defined in a manner consistent with the standards and practices of the Interstate Commerce Commission for protection of the information.

Sec. 42.40.320. MINUTES OF MEETINGS. The board shall keep minutes of each meeting and shall send a certified copy of the

minutes of the public portion of each meeting to the governor and the leadership of the legislature.

Sec. 42.40.330. ADMINISTRATIVE PROCEDURE. (a) Except for A.S. 44.62.310 and 44.62.312, regarding public meetings, as limited by A.S. 42.40.310(b), and for A.S. 44.62.320(a), regarding legislative review of regulations, the Administrative Procedure Act (A.S. 44.62) does not apply to the authority, its rules, its regulations, or actions taken under this chapter. The authority shall make available to members of the public copies of the rules and regulations adopted under this section. Within 45 days after adoption, the chairman of the board of the authority shall submit a regulation adopted under this section to the chairman of the Administrative Regulation Review Committee under A.S. 24.20.400 - 24.20.460.

(b) The board shall adopt rules and regulations to govern its procedures and to carry out the purposes of this chapter. Within 90 days after its first meeting, the board shall adopt rules establishing a procedure for giving advance public notice and an opportunity for the public to comment on proposed regulations of the authority that the board determines are likely, if adopted, to have a substantial impact on the public or will be used in the authority's dealings with a significant segment of the public. The rules shall also provide for the adoption of emergency regulations without public notice and comment when the immediate adoption or repeal of a regulation is necessary to continue or reinstate the orderly operation of the authority's facilities or programs. However, emergency regulations may not remain in effect more than 120 days unless during that period the board complies with the public notice and comment procedure required for regulations which are not of an emergency nature.

(c) The rules adopted under (b) of this section establishing a regulation-making procedure and all rules or regulations relating to procurement of property by the authority, conflicts of interest, disclosure of information in the possession of the authority, or the regulation of persons outside the authority through the exercise of police power will be submitted to the attorney general for review and approval before becoming effective. The attorney general will respond to the authority within 30 days after receipt of the rules or regulations either approving them as consistent with the Constitution and statutes of the State of Alaska or disapproving them as in conflict with the Constitution and statutes. A disapproval of rules or regulations will be accompanied by a memorandum of law explaining the conflict with existing law and a recommendation for revisions to cure the defect. Rules or regulations submitted to the attorney general are considered approved if the attorney general fails to approve or disapprove them, as specifically provided in this subsection, within thirty days after receipt.

(d) A regulation is not subject to the procedures in (b) of this section if it is one that:

(1) relates to the use of public works, including terminal areas, industrial reserves, rights-of-way and streets, under the jurisdiction of the authority if the effect of the order is indicated to the public by means of signs or signals;

(2) is directed to a specifically named person or to a group of persons and does not apply generally throughout the state;

(3) concerns service schedules of the railroad; or

(4) relates to specific tariffs, divisions, and contract rate agreements.

(e) The authority is an agency of the State of Alaska

Lines 23-30 - The railroad, in its function as an entity of business and industry must be afforded specific protections from disclosure not required by other agencies.

Our suggested language provides such protections, while still bringing the railroad within the requirements of A.S. 09.25.110-.120.

for purposes of jurisdictional determinations and judicial review of the authority's action.

Sec. 42.40.335. PRE-EXISTING RULES, REGULATIONS AND ORDERS OF THE ALASKA RAILROAD. The board, by resolution, may continue in force for a period of not more than two years after transfer all or part of the rules, regulations and orders of the Alaska Railroad which were in effect one day before the date of transfer and are not inconsistent with this chapter or other state law. All authorities continued in force under this section shall expire on the second anniversary of the date of transfer. The board may adopt in its rules, regulations and orders the substance of former federal authorities relating to the Alaska Railroad. This adoption is not considered a continuation of the federal authorities if made in compliance with the procedural requirements of this chapter and other applicable law.

Sec. 42.40.340. PENALTY FOR VIOLATION OF DESIGNATED REGULATION. A person other than an authority executive official or employee within the scope of his employment, who violates an authority regulation, designated as necessary to protect life, health or property, shall be guilty of a misdemeanor punishable by a fine of not more than $1,000 or by imprisonment of not more than six months, or both.

Sec. 42.40.345. PUBLIC DISCLOSURE OF INFORMATION. ~~(a) Facts and information in the possession of the authority are public,~~ and communications, reports, files, books, accounts and papers of every nature in its possession are open to public inspection at reasonable times. However, the authority may, by rule or regulation, designate matters of a nonpublic, privileged, or proprietary nature, consistent with the standards and practices of the Interstate Commerce Commission for the protection of these ~~matters.~~

(a) The authority shall be subject to the provisions of A.S.09.25.110-.120, except as to those materials and information ordinarily treated by railroads as confidential, such as business records, divisions of revenue, contracts, legal or personnel records, or other materials protected as confidential.

Page 16

Line 9 — Conforms with suggested (a) on Page 15.

Line 13 — 42.40.400 - GENERAL POWERS, should read the "Board of Directors, by its own undertaking, or by appropriate delegation to the Chief Executive Office, may" rather than "The Authority may." This change will make the line of power much clearer. The "Authority" is the ultimate entity but all powers and duties should be granted to either the Board of Directors of the "Authority" or the C.E.O. There should be a new paragraph placed in the Bill granting the power to the Board of Directors to assign to the C.E.O. such corporate powers as, in the Board of Directors" opinion, would best serve the business of The Alaska Railroad.

Lines 17 - 18 — (4) This subsection is potentially in conflict with 42.40.250 as currently written. 42.40.250 as currently written gives the Board of Directors, with the approval of the Governor, the power to appoint the C.E.O. and the legal counsel, and all executive officers serve at the pleasure of the Board of Directors. The powers set forth in 42.40.400 as rewritten by the Railroad are clearer and less cluttered, and can be assigned to the C.E.O.

Line 19 — Subsection (5) runs contrary to 42.42.450 as rewritten by the Railroad or is redundant to 42.42.450, as currently written.