

A Transportation Link Vital to Alaskan Economy

Editor's Note: The Port of Anchorage is a major force in the economy of south central and Interior Alaska and directly affects the lives of an estimated 80 percent of the state's citizens. To learn more about this vital transportation link, AC&O's Grant Peterson interviewed Port Director William McKinney. The port supervisor has been in Anchorage for 54 years, and has worked for the port for the last 10, serving as office manager and assistant port director until selected to head the facility in 1975.)

Like a great many businesses throughout the state, the Port of Anchorage has been and continues to be affected by the trans-Alaska oil pipeline. The port's ability to handle large quantities of materials needed for construction of the line was a significant factor in its schedule completion.

With the windup of the pipeline's construction phase, the amount and type of traffic at the port has changed considerably. Now the facility is preparing for what Director McKinney describes as a "slow but steady increase in traffic. We're expanding, but more to upgrade what we have rather than for additional business; we think what we have will last quite awhile."

Describing Alaska's traffic trend as "a chart of upward and downward spurts," the port chief says the lack of a gradual change makes use projections "a guestimating procedure, especially when you try to find that hypothetical line which shows the long-term growth that's overshadowed by a boom and bust situation."

Port tonnage figures for 1975 to 1977 substantiate both a long-term increase in consumer demands (general cargo) and a reduction in pipeline-related requirements (bulk petroleum). In 1975, general cargo tonnage was over .93 million, the following year it was 1.07 million and through July 1977, the total was .6 million, representing a two percent increase. McKinney attributes this to the increased population and resulting increased commercial and residential building activity. "I doubt that the average man in the street is

aware of the importance of the port to his daily life, especially when he goes to buy something—be it food, clothing, building materials, his transportation or whatever. It has a major effect on the prices he pays and often on the job he has."

"Alaska's Congressional delegation, however, is well aware of the value and the importance of a port in Anchorage to the economy of south-central Alaska, and they've been a big help in securing funding for it. I might add our service area is much larger than just Anchorage. In addition to the municipality, we ship both general cargo and petroleum products to Fairbanks, the Kenai and even to Seward."

In the area of bulk petroleum, the same two-and-one-half year period shows a significant drop in tonnage. During the peak-demand year of 1975, a total of 1.9 million tons of petroleum went through the port, much of it to meet the heavy demands generated by the pipeline construction. 1976 showed a total of 1.7 million tons and for the first six months of 1977, less than .59 million came through the port. In addition to the diminished pipeline requirements, the recently-completed Nikiski-to-Anchorage pipeline across Turnagain Arm also has reduced the total.

McKinney looks for further decreases in petroleum throughout "because of the refinery at North Pole near Fairbanks. If the tariff is right, the prices of refined products in Fairbanks will be less than those of refined fuels coming into Anchorage, then sent north by rail. I've been told by several of the oil companies that they won't be able to compete with the refinery's prices."

Another oil-related activity, oil exploration, in the Gulf of Alaska, has added to recent general cargo crossing the Anchorage dock—cargo, ironically bound for another port, Seward. "One of the biggest trains ever assembled by the Alaska Railroad recently went from Anchorage to Seward in support of OCS exploration in the northeast Gulf."

"That," says McKinney, "is not too surprising, however, since Anchorage is a wholesale and distributing center and that activity has held up the general cargo tonnage pretty well."

With a "leveling" general cargo and petroleum tonnage total, estimated to be about 2.5 million in 1977, the port has come a long way since construction of the number one

berth began in 1958. Built by DeLong Construction company for \$8.2 million, the berth was completed in 1961, and included two 40-ton and two 7.5-ton level luffing gantry cranes.

"For the first three years, the port here was pretty idle," according to McKinney. "We had some occasional barge traffic. Alaska Freight Lines brought in three or four barges a month for maybe a year and then there was some local traffic due to oil exploration in the Inlet, but that was about it until the Good Friday earthquake in 1964. When the dust settled, the petroleum docks at Seward and

Whittier and dock facilities at Valdez had been destroyed. Ours was the only dock in south-central Alaska left standing. We experienced some damage but within 96 hours, the port was back in operation and ships were stacking up here to use the only remaining facilities. Everybody moved in, including the railroad and the military, to expedite the unloading of the critically-needed supplies.

"That same year, Sea-Land began service to Alaska and chose Anchorage as their northern terminus. They pretty much swept the state by storm and that of course

affected the freight moving through our port. When Sea-Land came in, we started developing and our tonnage has grown fantastically since then."

According to tonnage records for 1961, a total of 30,000 was reported. From 1962 to 1963 tonnage increased from 100,000 to 200,000. The total by the end of 1964 was 800,000 tons—a four-fold increase in one year.

When the highly-organized Sea-Land operation arrived in Anchorage, it represented the first competition to the state's only other major carrier, Alaska Steamship Company, which unloaded in Seward. Within six months, the newcomer surpassed ASC's tonnage and in less than a year, "Alaska Steam" was all but out of business. ASC's initial problems stemmed from the demands placed on the company by the steward's union for larger salaries and lower steward-to-passenger ratios. The result was a net loss on passenger service expenditures and the elimination of the service. A far more significant problem was developing in ASC's cargo handling.

According to McKinney, they couldn't compete, "It took five days to a week to get from Seattle, through the different ports, to Seward. It then took several days to unload in Seward with part of the cargo going into ARR cars for the Anchorage-Fairbanks area and other cargo separated out for other locations."

"When the produce, such as lettuce, got to Anchorage, you had to peel off the rotten outer layers. When you bought butter, you never knew if it would be rancid or slightly sweet. Another problem was damage and pilferage resulting from the extra handling required at both Seward and Anchorage."

Both Sea-Land and the port continued to expand their operations. In the spring of 1966, the present (612-ft) petroleum dock on the south end was begun and completed later in year. Three years later the Port of Anchorage had its second terminal, stretching 620 feet north of number one.

In 1975, the 718-ft. Terminal 3 was completed on the north end. That year also marked the beginning of the state's first roll-on/roll-off trailer ship service. Following a five-year market research and analysis, the Sun Company initiated its Totem Ocean Trailer Express (TOTE) service to the Anchorage port in September. "After an initial heavy demand from users

wanting to try them out, TOTE's tonnage has steadily increased and is now competitive with Sea-Land's," according to McKinney.

The new arrival presented some problems. The port had just negotiated a preferential berthing agreement with Sea-Land that gave them Terminal 2. "Immediately after that was signed," said McKinney, "Sun Ship came in with a proposal to ship to Anchorage using a ship 790 feet long. We felt we had enough room at the north end without disturbing anyone in either operation, if Sea-Land would remain in Terminal 1 instead of going to Terminal 2."

"Sea-Land declined and TOTE objected requesting that the Federal Maritime Commission decide the issue. In turn, Sea-Land objected to TOTE's preferential usage agreement with the municipality and their entry into trade on the grounds it would cause congestion in Cook Inlet and in the Port of Anchorage."

"The eventual outcome was that both agreements were approved but TOTE had to be given preferential use of Terminal 1 and the petroleum dock. The FMC decided the interference to the petroleum operation was relative-

ly minor, although the petroleum operators do not agree. It takes some doing to avoid impacting their work and requires very careful scheduling of their vessels."

Asked about additional improvements planned for the port facility, McKinney said, "We're improving the berthing situation for both tankers and dry cargo vessels through changes now underway. A \$2 million 180-ft. extension of Terminal 3 will greatly expand and improve berthing accommodations. "At 2,730 feet this will give Anchorage one of the largest continuous piers ever built in the United States," McKinney said.

A \$500,000 contract for paving of transit area A and construction of a maintenance building will increase the capacity of Terminal 1 for handling cargo. The transit area paving will include raised concrete pads for semi-trailers, whose front parking wheels would otherwise penetrate the asphalt. These projects will be completed by November 10. Eventually all of the transit areas will be covered, as part of a three-year improvement project.

Another major improvement just approved is a \$500,000 grant from the

federal Economic Development Administration for a second petroleum header system 200 feet north of the present system on the petroleum dock. This will accommodate larger tankers and make a safe berth possible in the winter.

"With our present facilities," says McKinney, "a large portion of the ship, roughly a third of it, lies in water that, as the tide rises, puts pressure on the ship. In the winter months, that area of the ship gets a great deal of pressure from the ice moving north with the tide. The result is a breakaway action, especially with the new 35,000 DWT tankers that are being used by some of the oil companies."

"We now can correct the problem by moving the ship farther north and by constructing in the bridge area a header system that is in parallel with the existing header system. The oil companies would then have the opportunity to use either system."

"In the winter months, most would want to use the northern most header system, which puts most of the ship behind the dock thus avoiding the pressure on the bow."

"Formal engineering could be done

within one week and we would go to some kind of expedited call for bids."

"Pipes would go from headers to which we hook the hoses from the tankers, to the back of the dock and over to lines that presently come from the petroleum dock and go ashore to an area called the 'spaghetti farm' (actually a valving station where all the lines from the different petroleum companies come together) and they're valved. They go to the five or seven lines that come from our petroleum dock. There will be five lines and they will be in parallel with the lines that presently exist. They will tap into them and there will be a valve so they can use either header system."

"So we're only talking about roughly 200 feet of piping and valves, plus a little deck work and maybe four pilings to support this system. But it has this appeal from the safety angle—it means that the oil companies can continue using the 35,000 DWT tankers during the winter months because they will be protected from possible breakaway. Larger ships mean fewer trips to deliver the same amount of fuel, and a savings of vessel fuel is a critical factor in our operations."

materials, which we think we will be handling."

"There are studies going on of a railroad extension from the Lower 48 through Canada to Fairbanks. If there will be any mineral development it probably will occur in the Brooks Range. The railroad could carry the southbound movement of ore."

Although water transportation is the cheapest mode, the savings can be eaten up by a land haul and a lot of extra handling just to get cargo to the water. It may be that the economics are such that it would be cheaper to move ore, coal, or whatever all the way south to the Lower 48 by rail than to move it to tidewater by ARR and then transfer it to a vessel."

Looking at possible future major projects that will impact his facility, McKinney sees two: "The gas pipeline will have a noticeable effect on the tonnage, even if not one pound of freight comes across the markings for the line. Camps, food, clothing and other support from wholesalers and retailers will be needed and this will be shipped in."

"The big one as I see it is the hydro-

power work on the Susitna River. This will have a tremendous impact on us. There'll be an enormous amount of concrete and steel needed for it and I would expect a large part to come across our docks."

If and when it does, there is little doubt McKinney and his crew will be more than ready (and waiting) for it. □

One item is the replacement of a 7.5 ton level luffing crane damaged beyond economical repair last October.

"To facilitate present operations, a nearly continuous dredging program is conducted by the Corps of Engineers. Originally begun in 1964 after the 'quake demolished the old adjacent Army dock, the work has since been done almost annually, depending on silting. According to McKinney, "The silt material comes into the inlet where it forms Cook Inlet mud, which is brought in by glacier streams and rivers flowing into Turnagain and Knik Arms. Tons of it are deposited every day. The removal process takes two to three weeks and involves dredging to minus 35 feet below mean low water, starting at the dock and moving out about 100 feet. Once loaded, it is carried out to the middle of the Inlet where currents carry it further out."

McKinney also commented on the potential for increased use of the present facilities: "We now have four carriers coming in on a regular basis—Totem Ocean Trailer Express (TOTE), Sea-Land, Pacific Alaska Line and Coastal Barge Line. In addi-