Although the petroleum industry has held the economic limelight in Alaska of late, federal government activities continue to make a substantial contribution to the State's economy. According to the Office of Economic Opportunity, federal expenditures in Alaska during Fiscal Year 1970 totaled nearly \$729 million. This sum rivals even the \$900 million paid by the petroleum industry during the same period for oil and gas leases on the North Slope. Making the largest contribution to the total was the Department of Defense. Expenditures for military related activities during Fiscal Year 1970 came to \$281 million. This figure represents nearly 40 percent of all monies spent in Alaska by the federal government. Taking the next largest slice of the pie was the Department of Transportation which spent almost \$146 million. Average federal employment for the period at 16,700, excluding active duty military personnel, maintained the federal government's position as Alaska's largest single employer.

As can be seen by the above figures, military activities play a major role in Alaska's economy. However, in the face of continuing defense cutbacks resulting from changes in United States global strategy, the military presence in Alaska can be expected to decline. (In fact, this is already Witness the de-activation of NIKE occuring. anti-aircraft missile batteries around Fairbanks, and the closure of the Navy's Kodiak facility). These military related cutbacks are especially significant since such reductions, as a rule, result in a net loss of employment to the State as defense functions are either abolished or transferred elsewhere. On the other hand, cutbacks in non-military areas of government usually result in a shifting of duties from federal to a State or local government agency. An example of this in Alaska is the transfer of BIA native education programs to the State-operated school system.

Because military cutbacks result in a net loss of employment, their effect has been, and will continue to be, to raise Alaska's unemployment. Of course the gain in unemployment is not necessarily proportional to the number of jobs eliminated, since many of the affected civilian and military personnel are simply transferred to locations outside the State. However, civilians who will not or cannot accept a transfer elsewhere are generally laid off. Furthermore, as cutbacks continue many local firms who deal largely with the military will inevitably be forced to lay off people as facilities close and business declines.

Of course, once work on the Trans Alaska Pipeline gets under way, activities related to that massive project will take up much of the slack resulting from declining defense activities. But, when one considers the substantial contribution made to the State's economy by the military, it becomes obvious that impending large cutbacks can only add to Alaska's unemployment problems.

AN ALTERNATE MARKET FOR NORTH SLOPE GAS?: Closely tied to the development of Alaska's North Slope gas reserves has been a proposed transportation system from Prudhoe Bay across Canada to the Mid-Western United States. Little, if any consideration has been given to the possibility of transporting the gas across Alaska via the route of the proposed Trans Alaska crude oil pipeline. This is because, up until now at least, it has been felt that the main market for Alaskan natural gas lies in the Mid-Western United States. However as a result of several diverse but related factors this situation could change in the near future. These factors include: the presence of immense gas reserves. both confirmed and suspected, beneath Canada's arctic islands: Japan's air pollution problem; and rising prices for foreign crude oil.

The first factor to be considered is the presence of immense quantities of natural gas beneath Canada's arctic. This gas, once it is tapped, will be sold largely to the United States. If the reserves prove sufficiently large, a situation could be created in which Canadian gas would compete with natural gas extracted in Alaska for preeminence on the American market. If this eventuality comes to pass, then it seems logical that the Canadian government will impose taxes on Alaskan natural gas crossing Canada to give gas from Canadian fields a price advantage on the American market. Import restrictions levied by the United States against Canadian gas such as those now in effect against crude oil from that country, would not be effective in such a situation. This is because they would only prompt Canada to in turn restrict the amount of Alaskan gas that she would allow to cross her territory.

In view of the difficulties which could arise from transporting North Slope gas to market across Canada, an alternative might be to send it via the route of the Trans Alaska Pipeline to a liquification plant in Southcentral Alaska (say in Valdez). Here it would be liquified and transported via a fleet of specially designed cryogenic tankers to a west coast port. From there it could be piped to mid-west markets. This alternative has already been explored and rejected because, as one might suspect, the costs involved in such a roundabout method of transport would make Alaska produced gas noncompetitive with gas from other sources.

All of this raises a rather intriguing possibility. Mainly that at least part of Alaska's gas production might be piped from the North Slope to Southcentral Alaska, and liquified as mentioned above. However, instead of being shipped to the West Coast, the gas would then go to Japan. Why Japan? Because the Japanese, due to their rapid industrial development, have created what is probably the worst air pollution problem in the world. The cleanest burning fuel now available for power generation and other industrial uses is natural gas. In fact, Japanese utility companies have already expressed an interest in doubling their present annual purchase of liquified natural gas from Cook Inlet area fields. If they do carry through with this plan, total exports of the hydrocarbon to Japan would rise to 1.92 million tons annually. However, the Japanese possess the third largest industrial machine in the world. Hence it would seem that the potential market in that country for liquified natural gas is probably greater than can be satisfied from known gas reserves in Southcentral Alaska.

In addition to its low pollution index, much of the increased Japanese interest in Alaska's natural gas stems from its improving competitive position on the world market vs. foreign crude oil. This improvement has been brought about by recent negotiations between major oil companies and Mid-East producing nations which has, among other things, resulted in higher crude oil prices. If the producing nations continue to squeeze the oil companies, the competitive position of foreign crude

oil vs. liquified gas from Alaska, on the Japanese market will be further eroded. Such an occurrence might serve to spur Japanese interest in the immense gas reserves known to exist on the North Slope.

In conclusion it should be emphasized that as yet there has been no indication from sources in either the oil industry or Japan of any plans to market North Slope gas in that country. However, with delays in Trans Alaska Pipeline construction continuing to multiply and Japanese concern over their pollution problems rising, the possibility of such plans being formulated should not be ruled out.

## ALASKA'S ECONOMY IN APRIL

EMPLOYMENT: Total estimated employment moved seasonally upward increasing by 2100 from March to April. Over the year employment was up by a bare 100 persons as a mass closure of canneries in Kodiak combined with a generally uncertain economic outlook held back seasonal growth in the economy as a whole.

Mining: Mining employment was unchanged over the month as declining levels of employment on the North Slope were offset by gains in mineral exploration throughout the State. On the North Slope the approaching breakup caused a decline in drilling activity. Among the four active wells one, by Atlantic Richfield, was completed as an oil well. This well, where ARCO earlier encountered oil at shallow depths, penetrated still another producing formation further down. Two others were suspended for the summer with drilling to resume after freeze-up next winter. No information was available concerning the fourth well being drilled by Humble Oil in the Mikkelson Bay area. However, it was believed nearing total depth as of the end of April.

In metal mining things were on the upswing. In the Seward Peninsula PC&E explorations, a Canadian firm was was preparing for a brisk summer of exploration at their Lost River tin and flourite discovery. Reports indicate that between 50 and 100 men will be employed at the company's campsite this year. In Southeast Alaska exploration was also picking up, with exploratory crews active throughout the length and breadth of the panhandle.