

Time of Decision¹

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We are now witnessing developments which may result in a final act of decision permitting a system of transportation, the trans-Alaska pipeline, for the southward flow of oil from the North Slope of Alaska to Pacific ports. Concurrently the goods and facilities necessary for pipeline construction and operation will allow a counterflow of materials and people northward, the people drawn by opportunities to participate in new economic ventures or simply to view and enjoy environments at present of limited access. The last, great wilderness frontier of the United States — Alaska — has long since been breached. Now the government of the United States must resolve a conflict between the forces of economic growth and those of environmental protection and preservation as to whether that breach shall be widened.

That decision is only one of many which will have to be made when and if development proceeds. A period of such decisions is upon us. The problem focuses on Alaska, but the forces that create the requirement for decisions, as well as the decisions themselves, are centred far from Alaska. The decisions will be fateful for they will be influential in the pattern that is developing as man is forced to deal with problems of mushrooming numbers of his own kind in continually deteriorating environments. Many will be watching, for the results will be of significance far beyond the boundaries of Alaska.

At this time only with temerity can one prophesy the outcome. Historically a decision to exploit oil resources as large and as economically attractive as those of the North Slope rested largely with the petroleum industry, the assumed right to exploit and with the dream of ever continuing economic growth. Not so now! Today there is the growing politics of total environmental conservation and of the public interest therein—an interest based on the preservation of viable environments and not entirely upon the real or imagined requirement for more and more energy from fossil fuels. Oil discovery in northern Alaska just happened to come at a time when environmental concern attained strength that guarantees confrontation between opposing viewpoints. It is tempting to predict that the proponents of rapid development, arguing on such bases as a pending “critical energy crisis” and “national security” will emerge the victors. There is opportunity in the meantime for thoughtful appraisal of all issues and the rendering of a statesmanlike decision.

The most desirable goal is resource development with environmental protection. That happy state cannot be completely attained, but perhaps it can be closely approached at an appropriate time and level of knowledge. It is unrealistic to believe that the oil resources of northern Alaska will not or should not be brought into

¹This article expresses some of the many points of view in the U.S.A. on the trans-Alaska pipeline; the September issue of *Arctic* will carry a Commentary on the Canadian scene.

production. Whatever the urgency, or lack of urgency, to meet energy requirements, Alaska badly needs to develop a viable economic base, which oil and gas can provide. Furthermore, through such development, the native peoples of the State have the prospect of economic and social gains. They make up about one-fifth of Alaska's population and they have become a powerful political force in their own right. A part of the perspective also is the fact that Alaska has many other resources of fish, shellfish, water, minerals, timber, wilderness, scenic beauty and grandeur, wildlife and other recreational and economic assets. These are the heritage for all the people and are a source of wealth and pleasure far into the future if protected. Exploitation of non-renewable resources for early gain must not be permitted by practices threatening the longer-term benefits of those that can remain renewable.

The question is one of determining whether oil production and transportation can take place without unacceptable environmental damage on a scale threatening other natural resources, including man in his environment. So far we hardly have the beginning of an answer to that question. Until we have an answer it appears perilous to proceed. Many Alaskans are intent upon preserving the bountiful environmental resources which they value and enjoy, but there are lively differences of opinion within the State. The most hopeful sign pointing to a thorough airing of issues and an ultimate decision representing a balanced judgment is the level of intelligent concern on the part of the public, both within and outside Alaska and, in some degree, on an international scale.

The role of decision-maker in this case is not an enviable one. The issues are many, facts up to this point are often either not apparent or contradictory and every valid argument for an issue is met by a counter argument considered equally valid by its own proponents. The questions are not always clear and until they are the answers can be no better. There is positive evidence that many of the right questions are surfacing and that the principals in opposition are attempting to understand and to respond wisely to the issues of a highly complex problem. The petroleum industry has exhibited responsibility through demonstrated capability to protect the environment in the Prudhoe Bay area and also through its attempts to get needed answers through research. On the government side responsibility is evidenced by the fact that, despite what must be enormous pressures, no right-of-way for a pipeline or access road has been yet permitted across the federal lands.

One way to understand better the complex situation created by the urge to develop oil as against the urge to protect and preserve the environment is to break down the complex into the major issues constituting the whole. These issues can then be considered individually and, taken all together, can give a better appreciation of what is going on and provide a basis for prediction of what is likely to happen in the future.

A few of these issues are mentioned below in very summary fashion. Each has its proponents and detractors. There is no opportunity here to illuminate fully the arguments and no attempt is made to be comprehensive.

THE NEED FOR ENERGY

All the signs indicate that the curve of energy requirement will continue to rise for the foreseeable future and that most energy for a long time will continue to come from oil. The United States now imports about one-fifth of the oil it uses and the total use is about 15,000,000 barrels per day. The resources of northern Alaska can go a long way toward relieving any dependence upon oil from foreign sources. The reserves are large enough to help in making the United States self sufficient in petroleum for many years. The counter argument holds that energy requirements cannot be permitted to escalate and that both reduced need and greater use of other fossil and novel fuel sources will obviate the need for North Slope oil. It is not yet clear whether the time has come that people are ready to make the sacrifice of reduced energy consumption in the interest of environment and the future, although the evidence appears to be mounting. Industry cannot yet count on lessening of the slope of the requirement curve in the future in making decisions that must be made today. Likewise, the time for environmental protection is now.

THE ENVIRONMENTAL CRISIS

Although oil extraction and use have a great bearing upon the total environmental deterioration on a global scale we cannot treat these broader implications here. Rather we address the potential effect of large-scale oil development in Alaska. Most of the concern commonly expressed centres around the related problems of oil pollution and the integrity of a pipeline crossing active earthquake zones and areas of permafrost of high ice content.

Essentially nothing is known about the effects of large oil spills in the Arctic Ocean which possibly might occur if the ocean should be used for tanker routes or if, as may well be done, large oil resources are developed off the north shore of Alaska under the ocean. Catastrophic spills or chronic loss of oil to any of the hundreds of streams are a threat not only to their own ecology but also possibly to their entire drainage systems and the ocean into which they drain. Transfer of oil from pipeline to ship and southward transport of oil raises the spectre of well-known hazards which with some unknown order of frequency can be expected to pollute the ocean and its shorelines from Alaska to the west coast markets. Canada shares apprehension on this matter. So little is known of the Arctic Ocean, of its marine life, of the effect of partial and changing ice cover, low temperatures of both air and water, and of means of operating on the arctic continental shelf that answers to questions of pollution are mostly impossible at this time. Perhaps the clearest fact of all is that knowledge at present is inadequate to cope suitably with oil pollution either on land or at sea.

The northern environments can be easily, and sometimes irrevocably, changed. A prime complicating factor is the presence of deep permafrost in northern Alaska, as well as thinner permafrost in the interior of the State. Permafrost not only is easily disturbed itself, but to deal with it in oil field and other operations requires tremendous quantities of gravel, or other suitable fill, to provide bases for roads, airfields, drill and camp sites and every type of operation. Thus there is danger of

changing the regimen of streams and of shorelines of lakes and the ocean, and of destroying fish spawning grounds and water supplies. Permafrost complicates seismic operations, drilling of wells and especially production of wells, because the hot oil must be brought up through previously frozen materials. Of major concern is the burial of a hot-oil pipeline in ice-rich permafrost. Melting of ice, erosion and collapse of the supporting substrate would be hazards to buried pipe over a great deal of the proposed pipeline.

Because operations can so readily change the surface environment in the North, it can directly affect ecological relationships of all natural populations. Far too little is known about the ecology of the North and certainly not enough to predict the chain of events that may be triggered by large-scale operations.

THE ECONOMIC PICTURE

The cost of exploration, development and production of oil will be high as a consequence of austere climate, long winter darkness, permafrost, an ocean frozen for much of the year, absence of any sizeable trained labour supply, poor transportation and communications and distance and isolation. However, the reserves are very large and it is predictable they will be extended by exploration during production of the now-known reserves. Such prospective enlargement of operations enlarges also the prospect of environmental dangers and these too are a factor in today's decision. The yield of individual wells will be high — on the order of several thousand barrels per day, as against the U.S. average of 15 to 16 barrels. The oil will be valuable — perhaps worth between \$2.50 and \$3.00 per barrel. The economic outlook is bright in the long-term view. Furthermore it will be U.S. oil without risk of expropriation. The economics of environmental damage and loss is not so readily assessed. Any decision lacking this part of the equation appears irrational.

THE INTEREST OF THE STATE OF ALASKA

Alaska has now been a state for more than ten years, with all the prerogatives that go with statehood, plus some additional ones that were authorized in the statehood act, such as the right to select, over a period of years, a very large amount of formerly public land. Alaska cherishes its privileges as a state, including its title, through the Submerged Lands Act, to offshore lands to the three-mile limit. Alaskans see great opportunity for the State, and many of them for themselves individually, in the development and production of oil on the North Slope. They already have seen the bounty that fell on the State in one lease sale aggregating nearly one billion dollars — or something like \$3,000 for every man, woman and child. They have also seen the economic havoc wrought by delays in development. Alaskans must share the dilemma of enjoying the fruits of development at the risk of environments they also value highly.

THE PLACE OF THE FEDERAL GOVERNMENT

In spite of the desires and the political power within Alaska the federal government still controls most of the real estate of Alaska. That control is lodged in many departments, bureaus, agencies, offices, commissions and administrations with widely divergent interests, policies, procedures and traditions. Thus it is difficult to find a truly federal position in regard to any Alaskan problem unless it is taken at the highest administrative levels.

Much of the federal interest in the development of Alaska, in the preservation of its environments, and in its native peoples lies in the bureaus and offices of the Interior Department. There is centred much of the responsibility for managing the public lands in Alaska and for administering mineral and oil and gas leases. The basic dilemma between development of petroleum resources and environmental protection is important and real within the Department. In January 1971 the Department released, and on February 16 and 17 held public hearings in Washington, D.C., on its draft document titled "Environmental Impact Statement for the Trans-Alaska Pipeline." This statement in its draft form failed to describe even approximately the real impact of a pipeline or of the total oil transportation system on the environment in any significant way. Testimony to this effect at the hearings was profuse, repetitive and pointed. It is clear that the state of knowledge is inadequate for the task of assessing environmental impact of oil development. What is not clear is how much time and effort will be required to correct the deficiency. Somewhere along the line, and soon, the present administration and the Interior Department may well be forced to arrive at a policy decision with regard to Alaska oil development and to proclaim and defend that position. An interesting point is the extent of the influence that certain of the new government units may have — such as the Council on Environmental Quality and the Environmental Protection Agency — and, in fact, what position such units may take.

NATIONAL SECURITY

Some claim that national security is at stake, and that northern Alaska oil must be brought to production in large quantities in the interest of such security. They point to the unstable political regimes in many of the countries from which foreign oil comes, to the long distances from the Middle East to the larger world markets, to the closed Suez Canal, to the non-operating Trans-Arabian pipeline, to the increasing U.S. demand for foreign oil, to the fact that in times of emergency oil requirements rise rapidly, and on and on.

Those of opposite opinion point to no shortage of world petroleum resources, to the fact that oil from an Alaska Pacific port — Valdez — would also be vulnerable while on the high seas, that the trans-Alaska pipeline itself would be very vulnerable to sabotage or attack, that we would still have for future use oil that we do not develop now, and on and on. The ball has to come to rest somewhere in this time of decision.

NATIVE CLAIMS

The U.S. Government has always recognized that the Indians and Eskimos of Alaska have a certain claim to the lands that they have traditionally occupied and used. Aboriginal rights is the common designation for such claims. This was implied in the treaty of purchase from Russia, and has been confirmed by implication and specific language from time to time since then, such as that in the Alaska Statehood Act.

But just what those rights, or claims are, and to what specific areas they pertain never has been defined. Nor has been determined the extent to which these rights may have been encroached upon already by such areas as are covered by federal leases, national forests, national parks and monuments, wildlife ranges, military reservations, and the like.

The natives number in the order of 60,000, about a fifth of the state's population — and they are organized. Furthermore they are full citizens and have the same voting rights as other Americans. This situation a few years ago resulted in the declaration of a "land freeze" by the then Secretary of the Interior Stewart Udall; that, with minor exceptions, stopped the further disposal of the public lands of Alaska, pending the settlement of the native land-claims issue. And that freeze was continued by Secretary Hickel to the end of 1970, several weeks after he left the Department. It was further continued through June 1971 by Acting Secretary Russell and has not been rescinded by the present Secretary, Rogers Morton.

If petroleum development, or any substantial development is to go forward, the native-claims issue must be settled, preferably by legislation but, if not that way, in the courts.

So, we enter the "Time of Decision." How will it all come out? There are mile-posts along the way indicating the possibility that the outcome can be reasonably good — in the best interests of most of the people — those of today as well as of coming generations. If not we will have muffed the last opportunity in the United States to plan rationally for the opening and wise use of our last wilderness, up to now but lightly touched by man. The first step in the solution of a problem is to recognize it, define it, and seek understanding of all its aspects. The next is to have the various points of view talked about by proponents and dissidents and preferably face to face. The authors of this commentary are in substantial agreement on many aspects of the problem, but the areas of disagreement provide the same conflict that characterizes the totality of opposing forces in this case.

So far most factions have acted responsibly although errors of fact and judgment are found on every hand. Industry is clearly concerned about the environment and many of the protectionists and conservation groups and individuals recognize the need for the development of northern Alaska oil at some time and in some degree. Industry needs to move rapidly and others urge a slower pace if at all. There are many things we need to know before irrevocable commitments are made.

As this is written Rogers C. B. Morton, Secretary of the Interior, has been quoted (*Washington Post*, 20 February, 1971) as saying, "Any decisions that we make are not going to be made on a profit-loss factor inherent to any economic group. They will be determined on the national need" and, "We still are going to do everything we can to protect the environment and I'm a long way from deciding that this pipeline is the way to do it."