

Alaska's North Slope Demands Experience and Capability

When venturing into the Alaskan Arctic — or any portion of the Arctic hemisphere — conditions allow little room for error. Companies with experience in these areas are not only desirable, but absolutely necessary.

The Arctic Slope Regional Corporation and its subsidiary companies have that experience and the capability of performing projects in the Arctic.



Arctic Slope Communications, Inc. Barrow Cable TV

Cable TV distribution, remote site telecommunication support and construction of communications systems put ASRC at the forefront of telecommunication technology.

Houston Contracting Company—Alaska (HCC-A) Alaska Petroleum Contractors (APC)

The two companies - one operating union and the other open shop - perform pipeline and building trades work for the oil and gas industry.

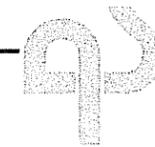
SKW/Eskimos, Inc. Eskimos, Inc.

Working closely with villages throughout the North Slope, they provide general building construction, equipment leasing, automotive parts and fuel distribution.

Arctic Slope Consulting Engineers Ocean Technology, Ltd.

ASCE & OT continue to be the leaders in the public and private sector with professional services in the surveying, engineering, planning and applied science fields.

This edition
sponsored by:



arctic slope
regional corp.

Bulk Rate
U.S. Postage
PAID
Anchorage, AK
Permit No. 377

ADDRESS
CORRECTION
REQUESTED

Resource Review

Resource Development Council for Alaska, Inc. Box 100516, Anchorage, AK 99510

December 1987



ANWR decision in 1988?

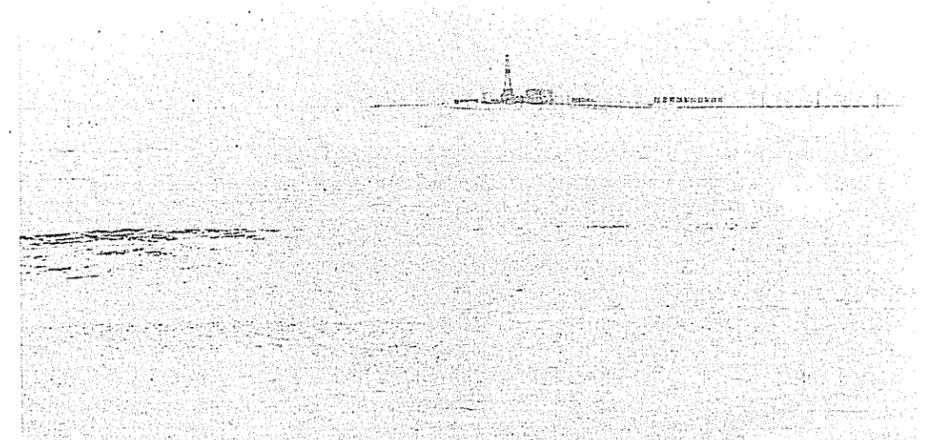
Support is widespread, but jurisdictional battles erupt

Although little action is likely before early spring, prospects for opening the Coastal Plain of the Arctic National Wildlife Refuge to oil and gas leasing and development have improved since the Interior Department made its recommendations to lease the barren and flat treeless region last February.

A flurry of bills affecting ANWR leasing have been introduced in Congress lately, but Senator Bennett Johnston, the Louisiana Democrat who heads the Senate Energy and Natural Resources Committee, announced that there is too little time left in the congressional session to tackle the development controversy. Johnston's committee plans to work on the bill, receive comments and get it in good shape between now and February when hearings are expected to resume.

See related story and graphics
on page 3.

With the continuing turmoil in the Persian Gulf and growing U.S. dependence on oil imports, there is substan-



A drill rig at the Prudhoe Bay oil field stands as a lonely sentinel on the flat landscape. As a conservation measure, drilling takes place from a central gravel pad. Up to 40 wells can be drilled from a single pad.

tial grassroots support for opening America's hottest onshore oil prospect to development. In addition, considerable national support for opening ANWR has come from professional and business organizations, minority groups, recreational organizations and various government bodies, including state legislatures and municipalities.

Public responses to Congress on the issue have also revealed strong support from coast to coast for opening

the Coastal Plain. Congress itself appears very concerned about the Persian Gulf situation and that concern has raised their interest level.

In the meantime, environmental proponents have been extremely inflexible in their approach to the ANWR issue, according to Roger Herrera, Exploration Manager for Standard Alaska Production Company.

"They have stuck to their position — to make the ANWR Coastal Plain wilderness — and have not moved an inch off that position," Herrera said. "Drawing a line and holding that line is sometimes an effective approach, but it doesn't work in Washington, where

— INSIDE —

Management of the
boreal forest pages 4-5

Merry Christmas and Happy New Year!

from the
President, Board and
staff of RDC



President Joe Henri with Projects Coordinator Mike Abbott, Executive Director Becky Gay, Public Relations Director Carl Portman and Member Services Director Anne Bradley.

RDC's strength is in its membership

"Keep up the good work and put the money to good use," was the heart-warming message from Steve Connelly when he sent us his Permanent Fund dividend check recently. Steve, a former RDC intern, is one of several thousand Southeast Alaska residents whose livelihood is directly dependent on the Tongass National Forest.

Through his 1987 dividend, Steve has chosen to invest a slice of Alaska's oil wealth into the Resource Development Council. Through his past association with RDC, he recognizes that elevating resource development and private industry on the public policy agenda has not been an easy task. Advancing Alaska's economy requires attention and diligence on the state, national and international levels, as well as the local scene.

The membership of this Thorne Bay logger in RDC is an investment in and a commitment to the goals of a strong statewide economy. His support is just one example of a dedicated and diverse membership which fuels RDC's efforts and enables us to continue working on fronts which are vital to the health of the economy.

The strong opposition of non-development interests to resource development in Alaska, requires that we work to-

gether to strengthen Alaska's economy. If you're not a member of RDC, we urge you to join our ranks. Each of us is important to the outcome, and by uniting, we make a difference.

With your help, RDC will continue to direct its efforts in 1988 toward issues that have tremendous impact on Alaska's economy. ANWR and the Tongass are just two of these issues which require a great deal of time, energy and money.

Aside from the satisfaction of knowing you are personally supporting the most hard-hitting and influential pro-development group in the state, as a member your investment will pay off in a stronger economy and jobs for Alaska.

Many thanks to Steve and all our great members across America!

Message from the executive director

By
Becky L. Gay



Resource Review is the official monthly publication of the Resource Development Council, Box 100516, Anchorage, Alaska 99510 — (907) 276-0700.

The RDC business office is located at 807 G Street, Suite 200, Anchorage.

Material in the publication may be reprinted without permission provided appropriate credit is given.

Carl Portman
Editor & Advertising Manager

Resource Development Council, Inc.

The Resource Development Council (RDC) is Alaska's largest privately funded nonprofit economic development organization working to develop Alaska's natural resources in an orderly manner and to create a broad-based, diversified economy while protecting and enhancing the environment.



Executive Committee Officers

President	Joseph Henri
Vice President	Shelby Stastny
Vice President	John Forcaskie
Vice President	John Rense
Secretary	Stephen Ellis
Treasurer	Larry Laughman
Past President	Boyd Brownfield

Staff

Executive Director	Becky L. Gay
Public Relations Director	Carl Portman
Projects Coordinator	Mike Abbott
Member Services	Anne M. Bradley

Valdez refinery endeavor still alive

Despite threatening trade legislation pending in Congress, Alaska Pacific Refining, Inc., is continuing work on its proposal to build a refinery in Valdez.

"Our company has continued to pursue the Valdez export refinery because it has financial merit even if exports are limited to 33 percent of its output," said President J. Timothy Campbell in an interview with Alaska Economic Report.

"There is a large U.S. West Coast and U.S. military market in the Pacific Rim which is supplied by foreign refiners," Campbell said. "We intend to compete easily with those fuel sources."

Campbell insisted that the feasibility of the Valdez Export Refinery is not dependent on the export limitations of the Omnibus Trade Bill pending in Congress. However, Congressman Wolpe's amendment limiting exports to 33 percent of the plant's output has caused problems. Serious financial support from potential Pacific Rim customers has

been delayed because of the amendment.

According to Alaska Pacific Refining, the Valdez project has gained new political support from the AFL-CIO. Some seven million man hours of Alaska-based labor will be employed in construction of the refinery. The company has also offered the Seafarers Union a compromise that 50 percent of exported products could be shipped on U.S. Flag Jones Act Vessels.

Wolpe's amendment has far-reaching implications for Alaska's petroleum industry. It would cancel Presidential Authority for sale of Cook Inlet royalty oil to Taiwan and also affect overseas sales of residual oil from Tesoro's Kenai refinery.

Section 331 of the House version of the Omnibus Trade Act removes presidential discretion to allow exports of crude oil by placing it under the Export Administration Act, which also includes a ban on exports of North Slope oil.

Boreal forest development ...

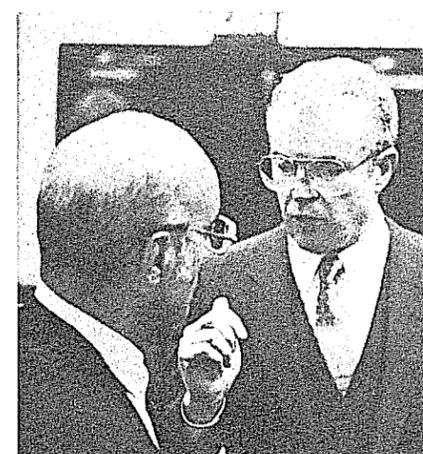
(continued from page 5)

In the seven years since the first FMAs were signed, 13 have undergone intensive reviews involving both government and industry, Armson said. "These reviews have provided opportunity to critically access the agreements from both sides and are required for each agreement by legislation every five years."

Armson revealed that both industry and government are unanimous in their support of the agreements and its principles. "The feature of having a basic agreement, applicable to all companies with a set of 'ground rules' which detail all the specifics of management for each five-year period and are amended jointly every five years, is one that has provided both consistency and flexibility," Armson said.

He noted that Ontario's FMAs do not include penalties, but they provide for the determination of default and for liquidated damages. The conventional penalties for trespass and wasteful practices which exist under the Crown Timber Act still apply.

"Management of a natural resource cannot be productive if it is regulated only by punitive measures — the policeman approach," Armson said. "Rather the owner of the forest land and the forest industry entrepreneur with a long-term interest in its productivity have to work out a mutually agreeable arrangement."



RDC forestry committee member Terry Brady makes a point before Alaska State Forester John Galea.

Forest Management Agreements have evolved successfully in Canada and are providing unparalleled levels of replanting in harvested areas, according to another speaker, Nick Saltarelli, Superintendent of Forestry and Control for Abitibi-Price Corporation of Iroquois Falls, Ontario.

The system is by no means perfect, but "the absolute scope of changes we have witnessed in the past seven years would not have been as marked" if it weren't for the agreements, Saltarelli said.

The Abitibi-Price superintendent said the FMAs have helped place industry in a management role, but the government has retained ultimate authority and approval. He credited the Provincial government with going out of its way to assist industry.

"The Forest Management Agreements have succeeded well beyond our highest expectations because of its rapid evolution," Saltarelli said. Difficulties are being addressed and rectified, he said.

"With all things taken into consideration, FMAs are currently the best vehicle available to assure the most effective and efficient management of the forest resource. This is because it focuses user incentives in the right direction.

"It is being shown in Ontario that the degree to which an endeavor such as this one succeeds or fails is directly related to the stake that the operator has in the endeavor itself.

"Unlike Ontario where its forestry sector is almost fully developed, Alaska's is essentially undeveloped. You are presented with a choice and an opportunity that we in Ontario did not have. After 200 years of industrial growth and forest exploitation, Ontario was left with the conclusion that forest management systems had to change so the industry could keep its head above water. In Alaska you have two logical choices: You may develop a much expanded industrial forestry sector guided by a management system that places the responsibility and accountability at the feet of the sector itself, or you should stay just the way you are."

(Editor's Note: Next month Part II will focus on what Alaska is doing to implement a state boreal forest program.)

Alaska oil or a looming arctic ghetto?

Alaska's North Slope has become the battleground for a Congressional confrontation pitting two powerful but familiar adversaries: environmentalists and the energy industry. Tragically, the people who have the most at stake, the Inupiat Eskimos, are again caught in the middle of a struggle that is being shaped more by environmental romanticism than by the realities of life in the Arctic and the national need for new sources of domestic oil production.

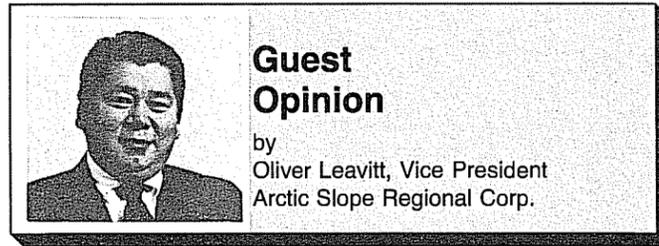
At the center of this struggle, as well as those in many other places in the world, is crude oil. And, in this case, it isn't just a little oil, but possibly as much as 29 billion barrels of oil and 64 trillion cubic feet of natural gas. What is at stake, according to the Department of Interior, is potentially the largest onshore field — consisting of at least 26 separate structures — in the United States.

Plainly stated, the issue is whether Congress will act to permit oil and gas development on 1.5 million acres of public lands in the Coastal Plain area of the Arctic National Wildlife Refuge (ANWR); or whether these lands will be forever locked away within the National Wilderness System.

My people have a direct interest in this matter. We own 92,000 acres of land around our village of Kaktovik. These lands are within ANWR and adjacent to the Coastal Plain. Our lands in this area represent the best — and perhaps our last — chance to participate directly in the economic benefit of Alaskan oil. Unfortunately, we are currently prohibited from developing the oil potential of our land by Federal law.

The Inupiat live, as we have for generations, on the windswept frozen tundra of Alaska's North Slope. Discovery of oil at Prudhoe Bay, 100 miles to the west of Kaktovik (one of the eight North Slope villages), led to dramatic improvements in the quality of life for the Eskimo people. For the first time, we have jobs; we have semi-adequate housing rather than drafty shacks built of sod and driftwood; we have schools in our communities, thus ending the tragic ritual of sending our children to distant BIA boarding schools; we have access to medical care that can be measured in tens — rather than hundreds — of miles; there is electricity rather than seal oil for lighting and heat; and we even have running water and sanitation facilities in some villages. However, we remain essentially dependent on our land for survival; we hunt and fish for what we eat. There is no other way of life for the Eskimo in the Arctic.

My people are deeply concerned about the impact of oil exploration and development on our land. We initially opposed oil and



gas development at Prudhoe Bay. However, we have learned over the past twenty years that careful development can be made compatible with our stewardship of wildlife resources and our traditional subsistence lifestyle. As a result, we support reasonable regulated development of the Coastal Plain's oil and gas resources. But we will insist upon strict environmental controls through the federal, state and our local borough governments. This is our position on the Coastal Plain.

Our future as a people and our claim to economic justice turns on the decision Congress will make on the future use of our Kaktovik lands and the Coastal Plain. The Inupiat have, as a result of the changes brought on by Prudhoe Bay oil development, made the difficult transition from harsh realities of a life in the Arctic to the threshold of a modern life. We realize the benefits of a cash economy, of medical care and of modern communications. We cannot go back to the life we once had. Nor do we want to be subjected to life in a lonely arctic ghetto, living on welfare because of a lack of jobs, development and economic activity. We believe that would be the inevitable consequence of a wilderness designation for the highly prospective Coastal Plain.

Without careful exploration and development of the Coastal Plain, the lives of my children will be grim. During the dark months of this polar winter, long after the photographers from the environmental groups have gone South, we are here, at home, contemplating our future. Fifty years from now, long after the rigs have been dismantled and the oil crews have left, my people will still be here. What the future holds for my children and all our children will, in good part, be decided by Congress.

ANWR prospects in 1988...

(continued from page 1)

compromise is the way the wheels turn."

Because of this inflexibility, "it looks as if the environmentalists are pushing themselves out of the game," Herrera continued. "They are not giving Congress anything to work with, and some of their supporters are leaving them."

Yet Senator Johnston's recent decision to not advance a pro-development bill this year has provided the environmentalists with a two-month window to heavily lobby Congress. In addition, recent introduction of a bill designating the refuge's 1.5 million acre Coastal Plain as Wilderness, has complicated Senate deliberations on what has become the most contentious environ-

mental issue of the 100th Congress.

To the environmentalists' benefit, the ANWR issue has become a major jurisdictional battleground for congressional committees. Over the objections of Bennett and Alaska Senator Frank Murkowski, author of a development bill, the wilderness legislation has been referred to the Senate Environmental and Public Works Committee, which held a hearing on December 10.

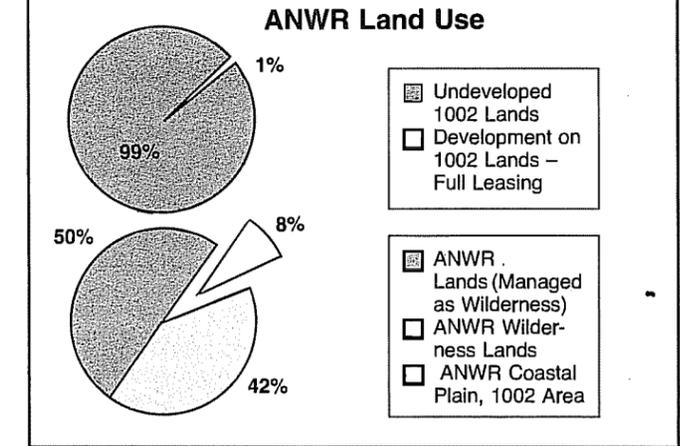
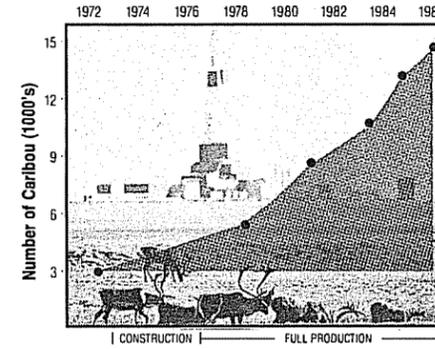
The hearing on the wilderness bill was widely seen as an attempt by the environmental committee to assert itself after it lost an earlier jurisdictional dispute with Bennett's committee on amendments to the 1982 Nuclear Waste Policy Act. If the wilderness bill advances in the Senate next year, a

major floor clash can be expected.

The turf battle plays into the hands of environmentalists who have been concerned about Johnston's fast pace in the Senate for striking a compromise on oil development. The issue is moving slowly in the House where environmentalists are pleased to see split committee jurisdiction.

Both wilderness and pro-development legislation is pending before the House Interior and Insular Affairs Committee, which appears to be almost evenly split. A bill calling for a limited exploration program is pending in the House Merchant Marine Committee, but such an approach has been condemned by environmentalists and development interests.

Prudhoe Bay Development Timeline and Population Increase of Central Arctic Herd



Mounting tensions in Gulf prompt Congress to take serious look at ANWR

Middle East, budget deficit could catapult ANWR issue forward

Mounting tensions in the Persian Gulf are prompting Congress to take a more aggressive look at the issue of whether to open the Arctic National Wildlife Refuge to oil and gas development.

While environmentalists have been encouraged by recent developments in Congress which may slow down fast action on pro-development legislation, there is a general feeling that the Middle East situation and the budget deficit could catapult the issue forward in 1988.

U.S. politicians who seek to revive confidence in the economy after the Wall Street stock market crash while working with the budget and trade deficits are growing more aware of domestic oil production's role in both problems.

With oil imports higher than they were in 1986, the price tag for those imports is higher. Even with modest oil demand growth, most energy officials expect U.S. imports to rise to more than 50 percent in the next few years.

Imports from the Middle East more than doubled during the first seven months of 1986. As of July, oil imports totaled 46 percent of U.S. demand.

That level of dependence is certain to rise. By the turn of the century, North Slope production will be one-fourth of its present volume. At that time, oil imports are expected to rise to 60-70 percent of national needs while domestic reserves fall to their lowest level ever.

The ANWR Coastal Plain offers the best opportunity to replace declining production from North Slope oil fields, which account for some 25 percent of today's domestic production. For those concerned about mounting trade deficits, ANWR oil production could cut America's energy bill for imported oil by \$38 billion annually. Furthermore, development of a major ANWR oil field would create as many as 250,000 jobs nationwide by the year 2005, generating over \$6 billion in annual salaries.

Industry officials are focusing more on environmental issues, contending that the threat posed by oil and gas operations has been grossly exaggerated. They cite data from four decades of oil operations that support claims that industry operates in harmony with the arctic environment.

The ANWR issue closely resembles the dilemma Prudhoe Bay development and the trans-Alaska pipeline faced in the 1970s. It took an energy crisis and an act of Congress to give the go-ahead to a project that put a lid on U.S. oil imports.

The U.S. might be importing more than two-thirds of its oil

supplies today if North Slope development had not occurred.

Like the old debates of the 1970s, environmentalists are once again concerned about potential effects of development on wildlife should ANWR development occur. Earlier claims that building TAPS and developing the North Slope oil fields would disrupt caribou migrations and calving proved unfounded. Since petroleum development began 15 years ago in the Prudhoe Bay area, caribou populations there have increased fourfold. If there was such a thing as displacement of cows from traditional Prudhoe Bay calving grounds, it has not shown up as an adverse impact on the caribou population.

According to Mike Joyce, Senior Environmental Coordinator for ARCO Alaska, Inc., "the most compelling evidence is that caribou and their calves continue to use those very areas where it is argued that industrial disturbances should bar them."

Given the Prudhoe Bay environmental record and the fact that ANWR development would not be as extensive, industry believes that new arctic oil fields would pose no danger to caribou.

Technological advances will allow operations to drill in ANWR on a much tighter spacing than Prudhoe Bay, requiring less overall area, according to Jim Weeks, Manager of Prudhoe Bay field operations for ARCO. In addition, reserve pits will be much smaller.

Weeks maintains that realistic development scenarios quash the opposition's arguments of energy development's visual effects and land use in ANWR. In the unlikely event that the entire 1002 area were commercially productive, less than one percent or about 11 square miles would be affected by oil development. That means less than 0.1 percent of ANWR would be touched by development of what potentially could be 25 percent of U.S. oil production.

Notable Quote

"The true Permanent Fund of Alaska is its natural resources, but the public policy of Alaska is to cripple investment in natural resources. We're too far from the store. We don't see where the money's coming from. But, the agencies are poorly equipped to tell their story. They're filled with a bunch of ignorant science majors."

— Neil Johannsen
Director, Alaska State Parks

Commitments needed to develop Alaska's boreal forests

Executives of Alaska business, professional foresters, loggers, public policymakers, and community leaders from across Alaska assembled in Anchorage December 3-4 for the first conference in ten years on Alaska's boreal forest resources. Renowned forestry experts from Canada, Finland and the United States addressed 150 conference participants on the practical actions needed to tap Alaska's boreal forest potential.

Major commitments on the part of state government and industry are needed before the boreal forests of Southcentral and Interior Alaska can be transformed into a vibrant component of Alaska's resource-based economy, according to international forestry experts participating in the recent boreal forest conference in Anchorage.

Canadian and Finnish foresters suggested that successful partnerships and forest management agreements in their nations could be customized for Alaska and be the key to unlocking the state's vast northern forest potential. The two-day conference, which also featured state forestry officials, natural resource commissioners and key legislators, was sponsored by the Resource Development Council Education Foundation.

Both state and the industry commitments to the forest industry in Southcentral and Interior Alaska were criticized sharply by University of



Dr. Edmond Packee displays various samples taken from the boreal forest.

Alaska forestry professor Edmond Packee.

The outspoken Fairbanks professor noted that there are well developed northern forests elsewhere, but in those areas there is commitment on the part of government. In Alaska, he said any subsidy of the northern forest industry is minimal if it even exists.

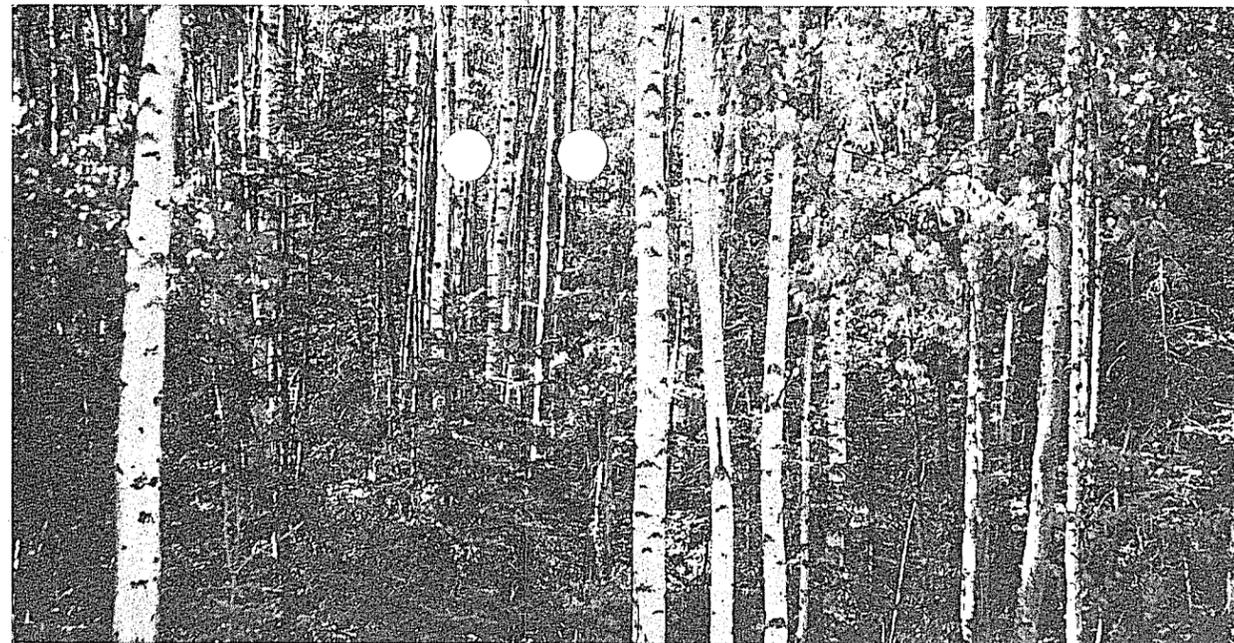
"The state should recognize and support the forest industry in the same manner it has the fishing industry, the tourist industry, the recreation industry and the hunting and fishing industry, and provide incentives," Packee said. He also criticized the state's lack of assistance in creating access to timber resources.

He leveled equal criticism at the private sector, noting that with few exceptions he sees little or no new harvesting equipment in the woods because private operators are either unable to purchase modern equipment or are simply content to work with the inefficient equipment of the past which does little to enhance competitiveness.

"I look at mills in the northern forest of Alaska and compare them to ones I have seen in British Columbia, Minnesota, Wisconsin, Sweden, Finland and Norway. Where is the commitment to producing high quality products that are not only usable in the state, but exportable in the Lower 48 and outside the country?"

Packee pointed out that a major plant in Fort Nelson, British Columbia cuts 98 percent white spruce, a tree that is extremely common throughout the Alaska northern forests. The Canadians do most of their harvesting in the winter months using winter roads and ice-bridges. Eighty percent of the lumber production at the Fort Nelson facility is sold in Florida through its own marketing efforts.

To be competitive, Packee stressed



the Alaska timber industry must not only aggressively market its product, but lower its high costs for delivered logs. He suggested a "delivered log cost target" in line with the world marketplace.

Packee emphasized that good forest management is essential to luring industry to Alaska. He said Forest Management Agreements may be an excellent tool for managing the forest, and should be considered. However, he warned that Alaska must get its costs down to reality for industry to be competitive.

The forestry professor also urged the timber industry to expand its product horizon beyond the 2 x 4 syndrome. He said the objective should be to produce the highest value product from the lowest value raw material. He noted that in other northern forests, industry has been successful in fully utilizing its wood to the point where its "garbage in and high quality out."

The lack of activity and diversity in the Alaska boreal forest is in sharp contrast to that in Finland, according to Dr. Aarne Nyyssonen, director of the Finnish Forest Research Institute.

In Finland, he said forest resources have increased in the past 60 years, with volume rising 8 percent since 1950 and value increasing 20 percent in the same period. Nyyssonen attributed the increases to improvements in forest management which include drainage of wetlands and artificial regeneration and fertilization. Through these and other methods, Finland hopes to increase its forest output by 3 percent annually.

Wood-based products comprise 36 percent of Finland's gross exports and over half of net export earnings by value. These figures mean a lot to the economic life of a country which has no oil or coal resources, and whose mineral resources are strictly limited.

Almost half of the increase in Finland's raw-material supply will come from large-sized spruce logs.

However, the competition in the export markets has stiffened considerably during the past few years, noted a concerned Nyyssonen. "There has been a sizeable increase in the production capacity of short-fiber pulp based on fast-growing plantations in Spain, Portugal, Brazil and other countries. Since overseas competitors also have to be taken into account, competitiveness has become the key word in maintaining and increasing the production of the forest industries."

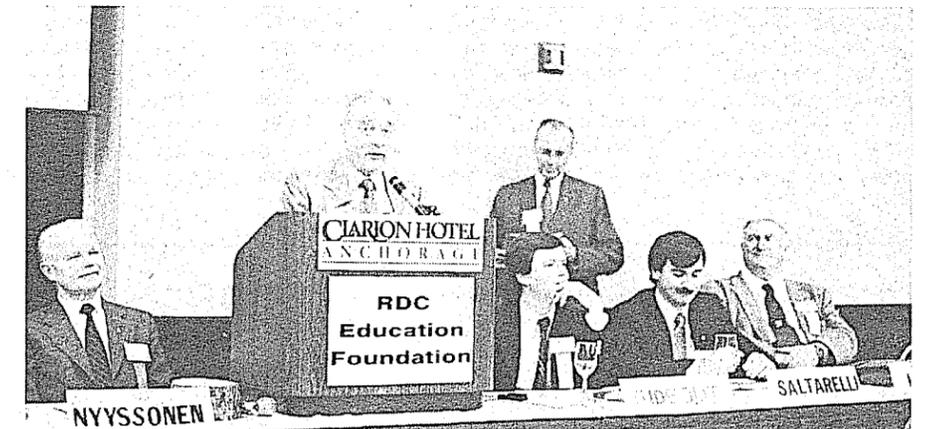
Over the past decades, Nyyssonen said the Finnish wood processing industry has concentrated more on developing production than its competitors. As a result of intensive investment, the production plants are modern, the product range has developed to meet changes in demand and it has been possible to make full use of the available raw materials.

However, Finland has been forced to finance its investments through loans with high service charges. Nyyssonen said the Finnish industry recognizes that it is important to keep costs down.

"Since 80 percent of the production costs are domestic ones, Finland can itself have a decisive effect on the

wood-processing industry's competitiveness," Nyyssonen said. "The profitability of our forest industries is decisively dependent on the success of attempts to maintain production costs at a reasonable level."

A sufficient supply of wood is also closely connected to the competitiveness of the wood-processing industry, Nyyssonen said. "We are faced with a



Dr. Kenneth Armson addresses some 150 conference delegates while Dr. Aarne Nyyssonen, Dr. Douglas Rideout, Nick Saltarelli and Dick Herring ponder his comments. In the background is Dr. James Drew.

considerable challenge in this when we bear in mind that our industry is mainly dependent for its wood supply on small-sized private forest holdings, and that there have been problems during the past decade in obtaining wood," he said.

In contrast to Finland where most of the forest lands are privately owned, Eastern Canada and Ontario have had a long history in the disposition of

timber from publicly-owned lands, according to Kenneth A. Armson, Provincial Forester of Ontario.

In the late 1800s and to a much larger extent following World War I, the offering of rights to timber became a development tool for the opening of a community infrastructure in the boreal forest, Armson said. This development involved the establishment of large pulp and paper mills and the building of entire towns.

Over the past 20 years, government foresters have focused extensively on silviculture while industry has sophisticated its harvesting, Armson said. "Planning and implementation of both proceeded independently and as any forester knows this separation ignores the basic principle of forestry in which harvesting and regeneration are two sides of the same coin," Armson explained.

In 1978, the government decided to bring integration about by negotiating what became Forest Management Agreements (FMAs).

The first FMAs were enacted in 1980. Presently there are 30 FMAs in Ontario covering 70 percent of the total area of Crown Land under license.

The FMAs have given timber companies long term harvesting rights on

public property, but have required that public access on logging roads be allowed and that the timber companies be responsible for reforestation after cutting. The reforestation requirement has brought better environmental practices because loggers now have a stake in minimizing land impacts.

The Ontario agreements provide an evergreen tenure of 20 years with five-

(continued to page 7)