

The ARCTIC POLICY REVIEW

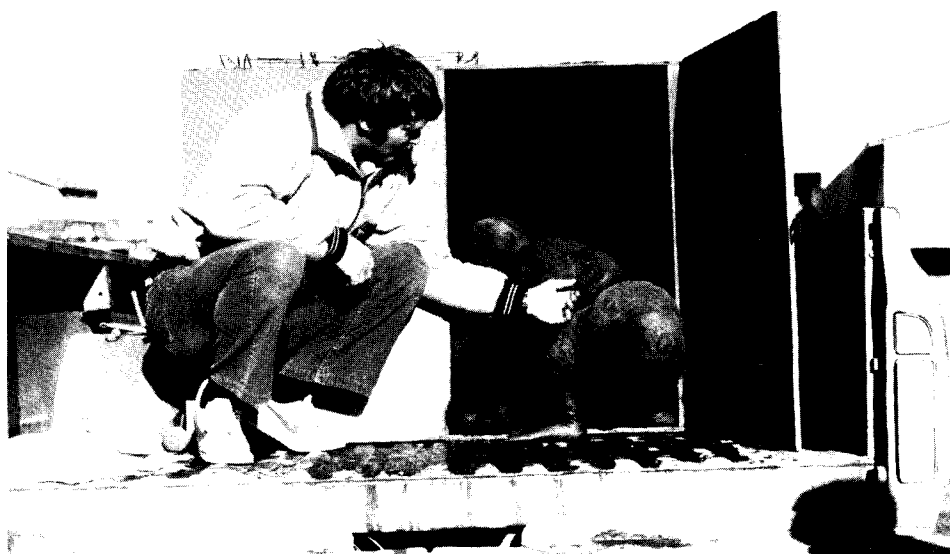


JANUARY 1983





NSB Program Saves Walrus Pups Taken to Sea World for Care and Display



NSB vet Les Dalton preparing client for trip to Sea World: 36 hours with no sleep.

Recent increase in the walrus population that migrates along the coast of the Chukchi Sea to Barrow has also brought an increase in the take by local hunters. As will happen in such hunts, young pups are sometimes orphaned. Abandoned by the herd, they are usually left to die.

This last summer, however, six walrus pups orphaned near Barrow were saved by NSB Public Health Officer, Dr. Les Dalton, who with the support of the North Slope Borough and the cooperation of U.S. Fish and Wildlife Service, and Wien, Western, and United Air-

lines was able to transport the pups to Sea World in San Diego, California. The first five pups were from two to four months old and weighed from 122 to 164 pounds. The last was believed to be around six months old.

Valued Zoo Animals

A mature female walrus gives birth about every three years. The pups are born weighing over 100 pounds and are dependent on their mother for a minimum of twelve to eighteen months.

The young walruses imprint any moving object and are easily captured. The

last one was taken by Dr. Dalton after following his canoe into shore. According to Dalton, the walruses make intelligent and affectionate zoo animals and will receive the best of care in San Diego's Sea World. They will be bottle fed for about eight months, at which time weaning will begin. Then they will be maintained on public display.

The delicate condition of the walrus pups demanded that they be escorted by Dr. Dalton, a veterinarian, one at a time from Barrow to Sea World. The threat of overheating demanded monitoring the pup's condition at each stop and providing ice and refrigeration at all plane changes. The schedule demanded constant attention and no sleep for Dalton over a 36-hour period. Another day was spent at Sea World monitoring the condition of the pup in order to determine its chances for survival.

The NSB Veterinarian Program

Dr. Dalton and his staff, employees of the NSB Department of Health and Social Services, operate an animal clinic in Barrow, where most of the patients are local cats and dogs. Much of their time is spent in community education projects throughout the Borough giving instructions in animal-carried diseases such as rabies, animal inflicted wounds, and public health practices. Another responsibility of the staff is water safety and sanitation. ■

Arctic Policy Review

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The Barrow Gas Field



c. Art Stein 1982

Interior Secretary James Watt conferring with Mayor Eugene Brower and NSB Washington liaison Tom Smythe; immediate transfer of the field and \$30 million proposed.

NSB Proposes Take-over of Barrow Gas Field Local Gas Supply in Question

North Slope Borough Mayor Eugene Brower has begun negotiations with Interior Secretary James Watt to assume local ownership of the Barrow gas fields which supply natural gas to Barrow and the nearby moth-balled Naval Arctic Research Laboratory. Brower and Watt met in the Secretary's Washington, D.C. office for an hour on November 24, 1982. These negotiations continue.

From the point of view of the North Slope Borough, very important Arctic policy questions are involved in these negotiations. Brower hopes the negotiations will lead to reliable and enlightened Federal Arctic community energy policy providing continued economic access to Arctic gas reserves near Arctic coastal villages.

The Problem of Access to Local Energy

When the U.S. Navy converted its fleet from coal to oil after World War I, President Taft established, February 27, 1923, the Indiana-sized Naval Petroleum Reserve-No.4, a huge Arctic tundra prairie where oil seeps had long been

reported. (The questionable legality of this executive appropriation of Inupiat land—which took place without any consultation on their part—has been compared to the Teapot Dome oil scandal of the same period.)

Following WWII, the Navy established the Naval Arctic Research Laboratory north of the City of Barrow to support the Navy's Arctic submarine surveillance and defense program. A search was launched for natural gas to heat and electrify the new research base, and gas was discovered in 1948 south of Barrow.

The Navy installed a gas transmission line from the gas field, past Barrow to NARL and, the Air Force's POW-Main DEW-Line station just north of NARL. Later, gas was piped to connect other Federal buildings in Barrow: the school, hospital, FAA, the Post Office, and the Weather Service. But the Navy refused to connect Barrow homes to gas, holding it had no authorization to sell gas for civilian use. This led the Inupiat community of Barrow to cut its political teeth in Washington, D.C. on the politics of natural gas, and the Inupiat

community's political strength in Washington D.C. developed to its present state.

Under the leadership of Eben Hopson, Sr., the Barrow City Council undertook a 12-year struggle to secure Congressional authority to connect to the gas supply residing under their own traditional lands, which by treaty and Congressional act, they had been given the right to use and occupy.

The Barrow Gas Supply: Unsafe, Uncertain

With the enactment of legislation authorizing the Navy to sell surplus gas to Barrow, the Barrow Utilities Cooperative was organized, today known as the Barrow Utilities Electrical Cooperative, Inc. (BUECI).

With access to inexpensive gas, Barrow Utilities grew into an important community industry which enabled Barrow to catch up to the explosive growth which began in the mid-1970s. The utility began its gas service in 1969 on a jerry-built distribution system consisting of above-ground pipes resting on oil drums, running through back yards, and

Continued on next page

bracketed over roads, adding new eyeglasses to the town's half-century collection of industrial debris. The system was considered unsafe from the day it was put in service.

Indeed, the entire south Barrow gas-field operation has developed as an off-budget, ad hoc, non-standard result of unplanned circumstances, and the calamity of sudden loss of gas production has always remained an unspoken fear. The first indications for this possibility appeared in 1972 when the Navy had to shut down its new gas-fired solid waste incinerator when well pressures were lowered to dangerous levels by the incinerator's drain upon the reserves.

By 1974, NSB officials began hearing disturbing reports of rapidly declining wellhead pressures, and at least one knowledgeable gas production technician warned NSB Mayor Eben Hopson that well pressures were becoming dangerously unreliable. What could Barrow do if gas stopped flowing? By 1974, Barrow had become totally dependent upon gas. Barrow Utilities could convert to oil for electrical generation, but Barrow

would freeze if gas pressure stopped.

The Navy recognized the problem, but did not move to solve it by drilling more wells. NARL's strategic military value had diminished as the Navy's Arctic submarine defense research focus shifted to Greenland. The Navy did not want to spend money to maintain south Barrow gas production. It wanted to close NARL altogether. And the Navy wanted to increase the cost of gas from the \$.50 MCF to at least \$.75, or even at rates necessary to amortize the cost of gas field development.

NPR-A Transferred to Interior

This potential emergency was one of the important factors which influenced Hopson to join Congressman (now U.S. Senator) John Metcalfe (D-Montana), then Chairman of House Interior's Subcommittee on Public Land and Indian Affairs, in drafting the Naval Petroleum Reserves Production Act of 1976, which transferred NPR-4 to civilian control of the Department of Interior. Section 104(e) of this Act authorized continued subsidized gas production for Barrow at "reasonable and equitable rates."

When Interior took over the Petroleum Reserve it expanded the Navy's south Barrow exploration program, and by 1977 new wells had been drilled east of the initial field (the east Barrow field) indicating new reserves large enough to accommodate continued booming growth in Barrow's gas consumption for years to come. Confident of continued gas supply, the NSB completed hundreds of thousands of square feet of new construction in Barrow between 1978 and 1982.

Rather than suffer an increase in the cost of gas, Barrow Utilities enjoyed a price cut from \$.50/MCF to \$.33/MCF. With the transfer of NPR-4 to the Department of Interior, the NSB had secured access to large new gas reserves; new east field discoveries seemed to provide reserves to supply Barrow for years to come. And this gas would be available at our nation's most reasonable rates. The NSB's strategy to pursue transfer of NPR-4 to Interior, while risky, proved successful. It appeared to be an important political victory.

However, with the transfer of NPR-4 from the Navy, the last remaining serious Navy interest in remaining in Barrow was removed, and in 1979 the Bureau of Naval Research began decommissioning and mothballing its

Naval Arctic Research Laboratory. With NARL's closure, the last remaining strategic rationale for Federal maintenance of the south Barrow Gas Fields was removed.

New Target for Reaganomics

By 1981, Interior's south Barrow gas-field operations were running a \$4 million annual deficit, with about two-thirds of gas production being used in Barrow, and one-third by NARL and the DEW-Line Station. When Interior began looking around for programs it could cut to come up with the money promised the Department of Defense by President Reagan, the south Barrow gasfield subsidy was nominated. NARL could be converted to fuel oil for far less money than it was costing to maintain gas production.

When both of Alaska's U.S. Senators came to Barrow in April, 1982 to conduct hearings into their Arctic Science Policy legislation, they warned Mayor Brower of Secretary Watt's intention to either close down production, or negotiate the transfer of the gasfields to the North Slope Borough. Stevens was well-informed of Secretary Watt's Alaskan agenda by his former Senate staff aide, William Horne, who had been appointed Deputy Undersecretary at Interior by President Reagan. Divestiture of the south Barrow gasfields became Horne's responsibility.

So, Brower took Stevens' warning seriously, and engaged engineers to prepare a comprehensive Barrow energy study to determine the facts about the fields. In what condition are they, and how much gas remains.

For once again, low well pressures were causing concern, and raising urgent questions as to how much gas actually remained in the wells fueling Barrow and NARL. There was renewed talk of drilling new wells to maintain adequate safety margins. How did this square with the high pressures and high reserve estimates reported for the new wells in 1976-77?

The Technical Dilemma

The Barrow gasfield's discovery and development deviated in many ways from industrial standards for many reasons, most relating to shortage of money. The Navy never really planned to discover gas, and never really appropriated the money needed to develop the gasfields to safely supply a public utility.

"Until the reserve is transferred to the jurisdiction of the Secretary of the Interior, the Secretary of the Navy is authorized to develop and continue operation of the South Barrow gas field, or such other fields as may be necessary, to supply gas at reasonable and equitable rates to the native village of Barrow, and other communities and installations at or near Point Barrow, Alaska, and to installations of the Department of Defense and other agencies of the United States located at or near Point Barrow, Alaska. After such transfer, the Secretary of the Interior shall take such actions as may be necessary to continue such service to such village, communities, installations, and agencies at reasonable and equitable rates."

*—Naval Petroleum
Reserves Act of 1976*



Pressure-regulating and gas heater buildings at the East Barrow Gas Field: falling pressures and untested reserves.

NSB consultants believe, for example, new gas wells have never been properly subjected to deliverability testing. Until these tests are done, no reliable estimate of reserves can be made, and no accurate estimate of depletion rates can be made. The present policy is to throttle down production to a 10 percent draw-down, which may not produce enough gas to meet peak demand loads this winter.

Assuming its gasfields are seriously depleted, what are Barrow's energy alternatives? Diesel oil, or the development of the Walapka fields, 15 miles south of Barrow, about 35 miles east of Wainwright. Both are expensive; oil is 57 times more expensive than the present price of natural gas, and development of Walapka would cost an estimated \$160 million.

There is reasonably held hope that deliverability testing will reveal south and east Barrow gas reserves are adequate given reasonable energy conservation measures. One of these would be to cut off NARL, where thousands of square feet of empty and badly insulated space is heated unnecessarily. Another would be a comprehensive heat-loss analysis of all Barrow homes followed by corrective insulation and winterization. It is estimated a successful energy conservation program in Barrow could save 288,000 MCF/year. Another 172,000 MCF might be saved if Barrow's power generation plant were retrofitted with waste heat recovery equipment costing \$6.9 million.

So, given adequate reserves and a conservation program able to reduce depletion significantly, how much money would it take to put the south Barrow gasfields in industrially standard condition, safe, and worthy of being transferred from Federal ownership? In staff negotiations leading to the meeting between Brower and Watt, Interior estimated \$5 million. The NSB's engineers estimated \$15 million would be required to put the south Barrow fields into proper condition.

New Revenues Sought: the Camp Lonely Plan

Presumably, "proper condition" would enable the Borough to reduce the gasfield's present \$4 million annual operating deficit somewhat, but how could the Borough make up the rest? Straining against State-imposed operating revenue limitations already, how could the Borough produce additional revenue to continue to subsidize south Barrow gasfield operation? Two ways were discussed: increased gas tariff rates to BUECI, and dedication of income from such public enterprise as oilfield servicebase operation within NPR-A. For instance, income from a Borough-owned industrial service center at Camp Lonely.

Lonely is a DEW-Line site converted into an NPR-4 exploration logistics and supply base, and being surplus along with several other DEW-Line sites along the Borough's coastline. Linkage oc-

curred between the disposition of the Barrow gasfields, Camp Lonely, and other DEW-Line sites.

The basis for this linkage was the NSB's Kaparuk Industrial Center (KIC) Project, and the policy of the NSB to try to contain oilfield service industrial development to operations within Borough-provided service centers. Now under development, the KIC is a 160-acre gravel pad with full utilities, labor camp facilities, shops and warehousing developed in cooperation with ARCO and SOHIO, and designed to conserve valuable caribou habitat from needless degradation through the kind of uncontrolled industrial sprawl which occurred at Prudhoe Bay.

In addition to the KIC to serve the Kaparuk fields, the NSB has projected a Bullen Point Industrial Center to serve east field development in the Pt. Thomson area. The Bullen Point DEW-Line site was transferred by the Air Force to NSB ownership in 1980 for this purpose. When the Air Force and Interior began disposing of the remaining DEW-Line sites, Lonely was added to the Borough's list of potential industrial service center sites.

Indeed, Lonely was put out for bid, and it was announced in early November that the Cook Inlet Region, Inc. (CIRI), in joint venture with the Arctic Slope Regional Corporation, had bid over \$5 million for the site. CIRI spokesmen told of plans to operate an industrial service center there to support both

Continued on next page

NPR-A exploration and development, and offshore Beaufort Sea operations. It was a shrewd business move for CIRI which involved no outlay of cash. The \$5 million would merely be deducted from money owed CIRI by Interior under terms of the Alaska Native Claims Settlement Act.

Could income from a major industrial service base facility at Lonely subsidize south Barrow gasfield operations? It seemed a gamble, but what were the alternatives?

One alternative was to try to tough it out, to fight Watt's attempts to dump the gasfields as a terminationist act in violation of his Native trust responsibilities to the Inupiat, and in contravention of Section 104(e) of H.R. 49, which mandated Interior's continued subsidized operation of the south Barrow fields.

Brower Meets with Watt: New Settlement Proposed

But with the entire Alaska Congressional delegation urging the Borough to begin transfer negotiations, including Senate Majority Whip Ted Stevens, one of Washington's political leadership, Mayor Brower wondered if legal or

political resistance could really succeed. He decided to parley, and asked a mutual friend to set up a meeting with Secretary Watt.

The meeting was set for 1:00 p.m., Tuesday, November 23. Mayor Brower was accompanied by his Washington, D.C. Liaison Officer, Tom Smythe; Special Assistant Ralph Andersen, and a number of other staff and consultants. Brower began the meeting by acknowledging Watt's desire to discuss a number of issues, but asked to focus upon the Barrow gasfields problem. He introduced Tom Smythe and asked him to brief the Secretary. However, shortly after Smythe began explaining the Borough's view of the problem, Watt broke in to question the need for Smythe's presentation, believing Smythe to be a Washington, D.C. lawyer. Brower explained to Watt that Smythe was on his staff, and then asked Smythe to continue. Things tensed up.

As Smythe went through items the Borough wanted included in any Barrow gasfields transfer agreement, Horne would dismiss them as too difficult or unnecessary. Basically, Watt and Horne wanted to transfer the gasfields as soon as possible, and offered to sweeten the deal by giving the Borough up to \$15

million to defray costs of field standardization and initial operating deficits.

After an hour of inconclusive talk, Watt excused himself to make another meeting, and left Bill Horne in charge of trying to hammer out terms for an agreement with Brower. Brower met in an adjoining room to assess the situation with his advisors. It was clear Watt recognized the potential for stalling on this issue, and Brower figured Watt might respond well to Borough initiative. So, Brower stepped back into the room to ask Bill Horne to find the Secretary, and when Watt returned Brower told him the Borough would take "immediate transfer" of the gasfields for \$30 million in cash, and title to Camp Lonely, plus other NPR-A oil-field economic concessions to be worked out in detail in the transfer agreement.

The Secretary seemed pleased by the Mayor's offer, and while he made no commitment, the two agreed to continue negotiations from this point forward. Later, it was learned the Air Force was negotiating with the Cook Inlet Region, Inc. to sell all of its DEW Line sites, raising doubt about Watt's ability to make a deal involving transfer of these surplus facilities to Borough ownership. ■



Rod Stapleton

The Barrow gasline arches: an off-budget, unplanned, and unsafe industrial eyesore.

Chair of Northern Studies Honors Eben Hopson

NSB Funds Position at McGill University

by Linda Lord-Jenkins

A permanent university position has been created at a Montreal, Canada university in the name of the late Eben Hopson, first Mayor of the North Slope Borough and founder of the Inuit Circumpolar Conference.

The position—the Eben Hopson Chair of Northern Studies—was founded and is being paid for by the North Slope Borough. Funding over the next four years will total \$500,000 according to North Slope Borough Mayor Eugene Brower.

In a ceremony held in Barrow last week, North Slope Borough Assembly President Jimmy Stotts presented Michael Maxwell, Dean of the McGill University College of Liberal Arts with an \$84,500 check as part of the first installment on paying for the “chair.”

Maxwell said the endowment means that there always will be a position at McGill which is dedicated to studying the conditions of the Arctic.

That position will be determined to a great extent by the wishes of the North Slope Borough, he said, because the Borough is paying for it. “That means that the emphasis could change depending on the wishes of the borough,” said Maxwell.

The “chair” could for some years be held by a person knowledgeable in the study of the bowhead whale or the study of economics in Arctic regions or northern arts—depending on the priorities set by the Borough.

Maxwell said that the “chair” will not be filled for four more years to allow the money donated by the Borough to build up to a level that it can draw interest and “renew itself.”

The money came from the Borough discretionary fund according to John Buchholdt, a borough consultant.

The endowment ceremony was marked with a sample of university pomp and circumstance as Maxwell and university representatives Professor Marianne Stenbaek, who has worked with the Inuit Circumpolar Conference,

and Les Duer, associate dean of Liberal Arts appeared in their academic gowns resplendent with the braids and ribbons that such gowns require.

Maxwell, speaking in a very proper English accent told those at the Borough Assembly meeting that “It can hardly be imagined that there is a more appropriate way to perpetuate the memory of Eben Hopson whom so many here today knew and loved, than by the establishment of this chair.



Eben Hopson: the vision continues.

“We pledge ourselves to do all that we can to advance those interests that Eben Hopson cherished, through advancing knowledge about the Arctic Region.”

Such a university position will contribute to the goals of the ICC which, he said, were to “encourage the cooperation between Inuit, the establishment of policies that affect them and the circumpolar region, and the assistance of research in areas of interest to Inuit People.”

The “chair” can become “the focal point for the study of Arctic policy, which is a priority with the North Slope Borough and the ICC,” said Maxwell who reminded the assembly and the family of Eben Hopson of the words of the Englishman Francis Bacon who said “knowledge itself is power.”

Eben Hopson, when he was mayor of the North Slope Borough, clearly “saw far ahead of the immediate problems that he faced from day to day,” said Maxwell.

“It is clear to us that what Eben Hopson started is being well continued by his successors . . . the endowment clearly is but part of a great strategy on your part, and surely this strategy is a continuation of Eben Hopson’s own plan for his people.”

Part of the endowment will provide scholarships to two Greenland students who are studying at McGill as exchange students from the ICC, said Maxwell. The endowment will continue to provide scholarships in the memory of Eben Hopson to Inuit students from across the Arctic, he said.

“The endowment marks the first occasion in history when the Inupiat have contributed to the support of a university in this manner. . . . The Inuit have known the Arctic and its ways for far longer than the white man. Now the endowment of the Eben Hopson chair forms a bridge between two cultures as they both strive to learn more about the Arctic and thus preserve both its physical and human environment.

“Eben Hopson would surely be proud to know that his memory will be perpetuated by a gift that stems directly from his struggle to protect the interests of his people, and that this gift will continue that struggle through the advancement of knowledge.”

Hans Pavia Rosing, president of the Inuit Circumpolar Conference attended the ceremony and said that “it is important to make the scientific world understand our special needs.”

The chair, he said, will allow the Inuit peoples to develop the skills necessary to obtain support for Inuit needs in the scientific community.

“We, the people of the North must show an active and direct interest in setting guidelines for resource development.”

“I hope this chair will be a focal point by which other programs can be estab-

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Borough Assembly Adopts Comprehensive Plan New Era in Planning and Development Signalled



Mayor Eugene Brower: facing another afternoon of industry opposition to local government.

The oil industry representatives were worried as they got off the plane in Barrow on December 7, 1982. Their long campaign against local regulation of the industry in the Arctic was about to suffer its worse setback since the North Slope Borough was established eleven years ago. The word was out that the Borough Assembly was ready to enact its Comprehensive Plan and Land Management Regulations and there was no way to turn it back.

As the new arrivals filed into the Borough Administration building for what was to be the last hearing on the Plan, assembly members were still conferring with the Mayor in his offices. After the Assembly members filed out of the Mayor's office and down to the Assembly room, NSB Mayor Eugene Brower, whose administration had completed the Plan, was all seriousness as he took his seat alongside the Assembly, ready to face an afternoon of familiar industry objections. Jimmy Stotts, Assembly President and also a major advocate of the Plan, opened the hearing without comment and called for the first testimony.

Don Glass of Shell Oil, speaking on behalf of the Alaska Oil and Gas Association (AOGA), was first to testify. Several of his points were to be repeated by other industry representatives frequently throughout the afternoon hearing, some of them raising the hackles of Assembly members. Among those objections were charges that the Assembly was "rushing passage" of the Plan and the Regs, that the Assembly had not given due notice of the proposed plan and had not given due consideration to industry's comments, that the plan gave priority to subsistence activities rather than a "multiple use" policy, and that, finally, the Borough was usurping federal and state authority in attempting to regulate the oil and gas industry within its boundaries.

At times, such statements drew crisp remarks from the Mayor, but clearly leading the charge in behalf of the Plan was Stotts and the outspoken Chairwoman of the Planning Commission, Mary Edwardson. Repeatedly throughout the hearing, Edwardson rose to challenge industry statements. Addressing the assembly in Inupiat she said, "What you see before you did not happen overnight. There has been expressed concern that it has taken place too fast. We wish to state that this was developed under the leadership of Eben Hopson—it goes way back. It is also based on many hearings held throughout the Borough in which we learned that the villagers were glad to have this written document that will give us a handle on development.

"The lack of a plan has been the cause of great conflict among our people," she explained. "It will be a powerful tool for the resolution of this conflict. We have given expression to our concern about protecting our land, our resources, and the animals, but it does not mean that we do not want others on our land. We are not doing this too fast—we have been working on it for several years."

Later in the hearing, Stotts summarized the objections he had been hear-

ing, and, speaking for himself, rejected them outright. Anxious to get it over with, he suggested going into a business meeting and voting on the plan. NSB attorney Harold Curran counseled that such an action was scheduled for the regular meeting of the Assembly that night and recommended a delay. Dismayed with Stotts' assault on their complaints, many of the industry representatives left the meeting still complaining about the "lack of due consideration" given their viewpoint.

During the evening meeting, opposition to the plan was led by Assemblyman Jacob Adams, whose statements—and those of Assemblyman Donald Long—reflected the objections of Arctic Slope Regional Corporation. They also introduced several amendments to the plan to accommodate the concerns of industry. In spite of the passage of these amendments, they opposed the plan when it came up for the final vote and passed handily (4-2).

The End of a Long Trail

The Borough's new Comprehensive Plan and Land Management Regulations were written by planning consultants Wickersham and Flavin of Anchorage, after more than two years of work by the Borough Planning staff, Arctic Technical Services, the NSB Planning Commission, former Mayor Jacob Adams, and Mayor Eugene Brower. Coordination and guidance was provided by Bud Stevens, Borough Planning Director, and Shehla Anjum, Project Coordinator. The development of the plan entailed not only hearings in all the villages, but numerous workshops and individual conferences conducted for industry and other government agencies.

The Comprehensive Plan is a decision-making tool for the Borough: it contains the policy basis for land use decisions as well as data and maps which help developers design their projects, and planners, public officials and the public review their projects. One of the

real values of the Plan is that it is comprehensive, that is, it contains all the policy and data the Borough has developed on the various issues that confront it. Policy, especially, is developed in a coordinated manner.

The Borough now has an official statement of its land-use policy which will provide good leverage in working with the state and federal regulatory process. Several laws, including the Coastal Management Act, defer to such local plans in the establishment of regulations.

The Development of the Plan

In 1978, the Borough prepared a Coastal Zone Management Program for the Prudhoe Bay area. This Management Program formed the basis for the subsequent Mid-Beaufort Sea Coastal Management Program (CMP) and Zoning Ordinance.

Due to federal, state, and industry opposition, the mid-Beaufort CMP and Ordinance were withdrawn from Coastal Policy Council consideration, and on 4 December 1979 an interim zoning ordinance (No. 75-6-6) was adopted. The Interim Zoning Ordinance provided the Borough with a mechanism for exercising control over petroleum-development activities in the mid-Beaufort coastal area. The new plan replaces the Interim Zoning Ordinance.

The present comprehensive plan was initiated to fill the need for a plan and ordinances for all areas of the Borough not just the coastal zones. The ongoing efforts to develop a CMP are considered complementary to the Comprehensive Plan, within which it will focus in more detail on the coastal areas. Findings in the CMP may require adjustments in the Comprehensive Plan, and when completed the CMP will be considered an integral part of the larger plan.

Written for the People of the North Slope

The Borough's new plan is unique in many ways. As the Introduction states, "This plan is written for the North Slope Borough community—a community in which Inupiat people and the Inupiat way of life predominate... While attempts have been made to reflect and accommodate state and national interests, the Plan has been designed for the circumstances of the people of the North Slope Borough."

At the beginning of Chapter Three, "Subsistence and Biological Resources," the Plan states:

The primary concern of the Borough is to protect subsistence resources so they can be used by local residents. Preference for subsistence use is also awarded under state and federal legislation.

This subsistence priority raised objections from industry commentators, who suggested that the Borough adopt a "multiple-use" approach that would put development on the same level as subsistence values.

Performance-oriented Policies

Unlike most other municipal plans—including the Borough's first Coastal Management Plan—the new plan does not set up geographical zones with rigid prohibitions which demand a variance process for policy interpretation. It rather sets forth the policy itself and standards for **performance**, allowing all permits on a case-by-case basis.

This unique feature of the plan is largely due to the efforts of Wickersham and Flavin, who joined in

mid-1982. Frank Flavin is a former Alaska State ombudsman and a land-use planner. Kirk Wickersham is another land use planner whose development of the "Permit System" of planning as an alternative to land zoning has won national recognition. His **permit system** development code for Breckenridge, Colorado, received the American Planning Association's Meritous Planning Program Award in 1978.

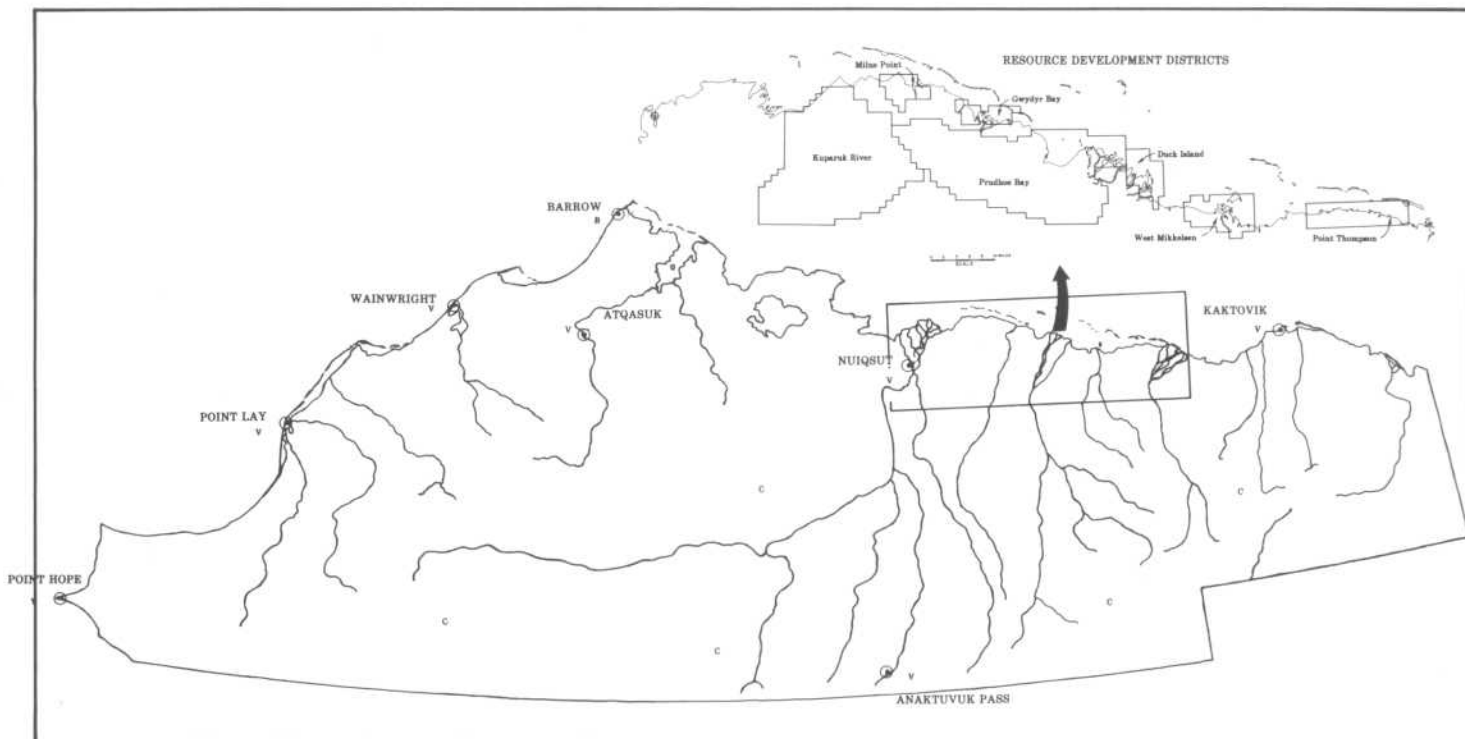
The planners explain that by not locking the municipality into rigid-zone definitions that require a hearing process for mitigation, the permit system not only facilitates development but by setting forth Borough concerns in explicit policy statements, the developers are provided more incentives for innovative and responsive development. Knowing ahead of time clear statements of policy, developers are given more direct information on land use policy, what is expected of developers, and the minimal performance standards for permit approval.

A good example of the procedure is

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NSB Planning Commission Chairwoman Mary Edwardsen: the plan goes back a long time.



Map from the Land Management Regulations: emphasis on performance, industry initiative.

found in the policy statements regarding subsistence:

3-1.1 Development which will likely result in depleting a subsistence resource, as set forth in Section 3.5.1 of the plan, below the subsistence needs of local residents of the Borough is prohibited.

3-1.2 Development that will likely result in significantly decreased productivity of subsistence resources or their ecosystems is prohibited unless no feasible and prudent alternative is available.

3-1.3 Development which restricts subsistence user access to a subsistence resource is prohibited unless no feasible and prudent alternative is available.

3-1.4 Development which precludes subsistence user access to a subsistence resource is prohibited.

Thus, in this example, both administrators and developers are given a wide choice of options in any case. The granting of the permit depends on whether the impact of the development proposed is absolutely prohibited or not, and, if not, whether alternatives are available. Any action proposed by the developer that would mitigate or eliminate the prohibited impact would

facilitate the granting of the permit. **Prohibitions and permits are related not to the place, but to values, standards, and policies established for the place.**

Industry Opposition Challenged

When the first drafts of the Wickersham-Flavin Plan appeared in late September, the industry was quick to react. In an 15 October 1982 letter from G. N. Nelson of Sohio Alaska, the process of developing the plan itself was attacked as "hurried and unorganized," not permitting industry enough time to react, and not taking its positions fully into consideration.

More to the point was industry's belief that the Borough's "municipal powers do not extend to the general regulation of the oil and gas industry."

Rather than proceed with the present plan, the Borough is advised by Nelson to accede to the responsibility of federal and state agencies in the regulation of oil and gas activities on the North Slope.

Nelson further complained that some of the Plan's definitions are in conflict with the state's Coastal Management Act, that permit fees are too large, that zoning districts are proposed without benefit of a map, and, generally, that too much weight has been given subsistence and local

values—in opposition to the preemptive state and federal regulations.

In a 29 October 1982 letter to Planning Director Bud Stevens, Borough Assemblywoman Flossie Hopson Anderson, the daughter of the late Eben Hopson, answered Nelson's complaints, citing first his "consistency" with the "general attitude of the oil and gas industry" to the Borough's municipal regulatory authority.

"As you know," she stated, "industry challenged the formation and taxing authority of the Borough. The Supreme Court unequivocally ruled in the Borough's favor, citing the necessity for a strong local government to protect our Inupiat subsistence resources, environment, and culture. Thus was determined the justification for establishing the most powerful form of local government provided in the Alaska State Constitution. However, the industry has continued to challenge the Borough's powers and authorities on many issues.

"Understanding that the document has been in the process of development for at least three years, and under much scrutiny, there is no basis for Mr. Nelson's charge that it is being developed too rapidly and in an unorganized fashion," Anderson stated. She went on to take exception also to his recommendation that the Borough plan sim-

ply defer to state and federal regulations.

"After all," she wrote, "the document is neither the state or the federal land use plan. The completed document will be the North Slope Borough's comprehensive plan designed to reflect local land use needs, desires, and policies." She went on to assert that the Plan actually does take federal and state permitting activities into consideration, but, she stated, "I am very much aware of the fact that the state and federal permitting agencies have consistently failed to include the Borough's major concerns in their decisions. The most obvious and recent evidence of this is found in both the state and federal decisions on offshore seasonal drilling restrictions."

While passage of the Plan will "provide the Borough with a long overdue opportunity to exercise its authority and fulfill its responsibility to develop a comprehensive land use plan," Anderson recognized that it would be "initially frustrating" for developers on the Slope to implement and acknowledge the purposes of the plan.

Grandfathering the Industrial Districts

There was also industry opposition to the Plan's placing the whole Borough in a **Conservation District** with the exception of the villages, Barrow, and the Prudhoe Bay and Kuparuk

Resource Development Districts. Within the Conservation District there are existing state and federal leases which will require either a conditional use **Development Permit** or "rezoning" to a Resource Development District which will demand the development of a Master Plan for the area.

In response to the Adams-Long requests, the Assembly adopted an Amendment which placed Milne Point in a Development District and made all industrial uses "Uses by Right" in the Development Districts.

Basic Structure of the Plan

Besides containing the Borough's general Goals, Policies, and Objectives, the Comprehensive Plan will eventually contain:

1. The Coastal Management Program,
2. The Capital Improvements Program for the Borough and each village,
3. Comprehensive Plans for each village that wants one,
4. Special studies or contracts, Master Plans for Resource Development Districts, and
5. The automated Geographic Information System.

The **Land Management Regulations** authorized with the Comprehensive Plan consist of a few simple zone districts, tailored to meet local needs and desires. Everyday developments in-

volving local residents, such as house construction and subsistence activities are not regulated at all, while larger projects are subject to review pursuant to the policies of the Plan.

The Introduction states: "The most important part of the Regulations is not the law itself, but the process, forms, and handbooks which made the decision-making process relatively easy, quick, inexpensive, and understandable to all concerned."

Conflict-oriented Issues

The organization of the basic policies which make up the Plan is covered in the Introduction which states:

The community view of the North Slope Borough area is stimulated and shaped by conflicts between non-renewable resource development and the land and water requirements of subsistence living and the Inupiaq character of life. The evolving community views include perceptions and problems accruing from intensive resource development and establishes a foundation for developing community goals, objectives, and policies.

The various issues presented in the Introduction and addressed in the remaining chapters are:

Chapter 2—Boundaries and Land Status

Chapter 3—Subsistence and Biological Resources

Continued on next page



Top: Assemblyman Lennie Lane and Assembly President Jimmy Stotts

Bottom left to right: Planners Wickersham and Flavin, NSB Planner Shehla Anjum and Assemblywoman Flossie Anderson





Preparing an umiat for the bowhead hunt: while not out to hassle industry, the emphasis is definitely on subsistence values.

Chapter 4—Human Resources
 Chapter 5—Physical Environment
 Chapter 6—Socioeconomic Factors
 Chapter 7—Transportation
 Chapter 8—Petroleum and Mineral Development
 Chapter 9—Government
 Chapter 10—Land Use

Boundaries and Land Status

The history of conflict between competing policies and priorities of federal, state local, and private interests led to the development of this planning goal: "to preserve opportunities for traditional activities and the Inupiaq character of life in the North Slope Borough regardless of ownership and jurisdictional boundaries."

The NSB views its own participation in all governmental activities directly affecting its lands, airs, and waters as a significant means of attaining this goal. The Plan states that the Borough wishes to actively participate in planning, policy development, and regulatory activities of other governmental agencies within its jurisdiction.

Subsistence and Biological Resources

The prospect of adverse impacts on biological resources from development activities result in these goals:

1. Protection and enhancement of subsistence resources.

2. Maintenance and enhancement of access to subsistence resources.

The specific objectives addressed in this chapter are directed toward eliminating such development impacts as:

- The disturbance of terrestrial and marine mammals and their habitat.
- The disturbance of fish and marine mammal migration patterns.
- Impacts on caribou migration, habitat, and calving grounds.
- Potential disturbance and resulting reduction in bird populations, particularly sea birds and marine waterfowl.
- Exploration effects on animals and sea life (e.g. those resulting from seismic testing).
- Disruption of subsistence activities or access to subsistence resources.
- Competition for subsistence resources.

Human Resources

The preservation of the Inupiat culture in the face of development impacts on cultural and historic resources is the goal of this chapter.

Local concerns addressed in this chapter include:

- Preservation of the traditional Inupiaq character of life.
- The impact of offshore oil development.

- Social problems resulting from population increase caused by industrial development.
- Rising cost of living and energy impacts.
- Disturbance of subsistence revenues.

Physical Environment

The main goals expressed in Chapter 5 are:

1. Protection of the natural environment and its capacity to continue to support subsistence activities from degradation from development activities.
2. Protection of life and property from injury caused by natural hazards and phenomena.

Poorly planned or poorly executed resource development threatens the biological systems which intimately support Inupiat subsistence and culture. Harmful impacts include the disruption of energy flow through the food chain, alteration of habitats, and changes in species populations. Arctic ecosystems have fewer species and shortened food chains. There are fewer replacement species.

Development that is undertaken without regard to natural hazards such as sea ice directly threaten the lives and property of people nearby.



Shell's gravel island in Foggy Bay and Prudhoe Bay oilfield workers: striking a balance between economic opportunities and subsistence needs.

Socioeconomic Factors

The need to improve the economic well-being of local residents while at the same time enhancing traditional values and lifestyles resulted in the Plan's goals of:

1. Full employment,
2. Inupiat industrial development,
3. Community economic development.

The experience of the development of Prudhoe Bay demonstrated that the above goals need not be opposed to one another, as long as subsistence resources and skills are preserved and development is properly planned and executed.

The Plan states:

Great significance is given to the general physical and mental well-being derived from the pursuit of subsistence activities and the related continuation of cultural and historical traditions. It is imperative that fish and wildlife resources and their habitats be protected for they are the basis of the subsistence economy and Inupiat culture.

Recent experience has also shown North Slope residents that significant direct and indirect benefits are derived from resource extraction in terms of jobs, personal income, and capital improvements that bring better housing, schools, health facilities, transportation and communication, safe solid and liquid waste systems, safe drinking water, public safety, and many other improvements. Assuming revenues derived from resource extraction continue to be invested wisely, these physical

and program improvements will benefit the Borough residents for generations.

Energy Development and Conservation

Energy conservation is a primary concern to the people of the North Slope Borough. It is estimated that 24.8 billion barrels of oil and over 88.3 trillion cubic feet of gas lie within the boundaries of the Borough, yet energy costs in the villages are among the highest in the nation. Nowhere is fuel more a basic need than in the Arctic.

Although the Borough is constantly upgrading the housing situation in all communities, many residents still reside in poorly constructed and inefficient housing. For these reasons, the Plan states the following goals:

1. Increased energy conservation.
2. Increased energy supply.
3. Increased energy self-sufficiency.

Transportation

Transportation is another complex issue taken up in the Plan. Improper planning and construction of transportation facilities can result in degradation of fish and wildlife habitats and movements, pollution, disruption of subsistence activities, and increased competition for subsistence resources by commercial and sport users.

Proper planning will insure that transportation development will result in lower costs for goods and services with a minimum disruption of subsistence activities. The goals are:

1. Preservation of subsistence resources and the Inupiat culture.

2. Continued access to subsistence resources by Borough residents.

Petroleum and Mineral Development

The prospect of continued exploration and development of resources both onshore and offshore means that this issue will continue to be a significant issue for the people of the North Slope.

As more is learned about these resource potentials, the opportunities they afford will have to be balanced against subsistence values and needs. This balance is reflected in the following Plan goals:

1. Preservation of subsistence resources by Borough residents.
2. Continued access to subsistence resources by Borough residents.
3. Full employment for Borough residents which provides flexibility for traditional Inupiat culture and subsistence activities.

Government

The function and role of the North Slope Borough itself are discussed in this section, both in its regulatory and taxing powers as well as in its Capital Improvements programs.

In developing its policies, both the cooperation of the developers and the participation of local communities are emphasized. The object of Borough regulation is to protect the vital interests of its local residents, not to hassle developers.

Borough policies encourage industrial and commercial development that

Continued on next page

does not substantially reduce subsistence or disrupt the Inupiat character of life. The Borough will work with industrial and commercial parties who will cooperate with the Borough to achieve these goals.

Both private and governmental development may impact a village. The village must be informed and allowed to participate at all stages of development from planning to completion. Cooperation and coordination with the villages will generate cost efficiency as well as good will and good government. The goals of this section include:

1. Cooperation and coordination with private development.
2. Reinforcement of and cooperation with development (including village-oriented and resource development projects) through phased provision of public services and facilities.
3. To protect and enhance the Borough's tax base.

Land Use

Chapter 10 contains the implementation strategy for realizing the goals, ob-

jectives, and policies set out in the previous chapters. It realizes that this strategy must remain flexible, as "Land issues are seldom static." The procedures established in this chapter are performance and result oriented, designed to accommodate new technologies without altering public policy.

The dynamic features of this planning process as opposed to static zones is most prominent in this chapter, which provides the connection between the Plan itself and the Land Management Regulations which follow.

The Land Use chapter contains discussion of these elements:

- Land Use Policies
- Land Use Zone Districts
- Special Land Use Areas
- Village Areas of Influence
- Zoning Districts

New Era for Borough Planning and Development

If the establishment of the North Slope Borough in 1971 gave the people the capacity for democratic self government and the right to participate in those decisions affecting their lives, the

enactment of the Comprehensive Plan and Land Management Regulations finally gives them the tool to realize that capacity on a Borough-wide basis.

As Mary Edwardson said in urging passage of the Plan, it will greatly reduce the level of conflict on the North Slope by giving the residents as well as industry a document on which to base discussions. While there are many details and sections of the Plan yet to be completed, the current Plan offers a forum for discussion, cooperation, and harmony, not only for the people of the Slope, but for industry and other governmental agencies as well. It clearly establishes Borough policies on developmental issues and will be recognized as a significant landmark for all future discussions and proposals regarding development on the North Slope.

Whether industry will welcome this latest expression of self determination with its own commitment to make democracy work in the Alaska Arctic has yet to be seen. The reception of the Comprehensive Plan by industry and by other government agencies may well determine the success of America's latest experiment in effective local government. ■

Grant to fund symposium on Eskimo family remains

By Martha Eliassen

Scientists studying the remains of an 18th century Eskimo family discovered frozen in Barrow last July received a grant recently from the Atlantic Richfield Foundation to hold a symposium on their research.

Dr. Jack Lobdell, bioarcheologist at Anchorage Community College, said the \$20,000 grant will be used to fund the symposium March 11 and 12 at the Anchorage Westward Hilton. A session for the general public will be held March 13, but a location has not been chosen yet, Lobdell said.

The five-member Eskimo family—thought to have died more than 250 years ago when wind and tides lifted ice on top of their ocean bluff home—was discovered by a relic hunter. The find was reported to North Slope Borough officials and received worldwide attention because the homesite predates white contact with the Inupiat culture.

"We have a view of things we've

never had before," Lobdell said.

Discovery of the home and its inhabitants generated a whole battery of research ranging from study of the home itself to examination of the remains to find out what sort of health problems were present in the culture before white contact.

Preliminary findings revealed that one of two women had a lung condition caused by inhaling soot produced by a traditional seal oil lamp, Lobdell said.

Lobdell and three other scientists who conducted autopsies on the five bodies will be the principal symposium speakers, he said. The other scientists include Dr. Arthur Aufderheide, pathology department chairman at the University of Minnesota; Dr. Michael Zimmerman, pathology department chairman at Jeans Hospital in Philadelphia; and Dr. Ray Newell, chief research at the Netherlands'

Biologic and Archeologic Institute.

About seven other scientists will travel to Alaska to present information on tissue sample analysis and other small but integral portions of the research, Lobdell said.

In addition, several representatives from the North Slope Borough will attend the symposium, he said.

"We're going to have what is known as a poster session," Lobdell said, explaining that while the actual artifacts discovered on the site are too delicate to transport to Anchorage, large photographs will be on display.

Illustrations will be accompanied by descriptions of what was done in each study.

Lobdell said he hopes to arrange to have the materials on display for about a week. ■

Reprinted from the Anchorage Daily News.

Mike Jeffrey Receives Barrow Court Appointment

Mike Jeffrey, who for years served as the villagers' subsistence advocate on the North Slope as the local Alaska Legal Services attorney, was recently appointed Superior Court Judge in Barrow, Alaska. Supreme Court Justice Jay A. Rabinowitz presided over the festive swearing-in ceremonies in Barrow on 3 December 1982 and said that Jeffrey was the first rural resident in the state to receive so high a judicial title in a rural area.

Speakers at the function praised the appointment because of Jeffrey's understanding of Inupiaq culture. Not only does he speak Inupiaq, but he also performs with the Barrow Dancers and sings in the local church choir. "Mike has a strong commitment to our people up here," said North Slope Borough Mayor Eugene Brower. "He knows our people, how they believe, their lifestyle.... They have a fair judge here, one that will understand their needs."

In his remarks, Jeffrey thanked the people for their support. "There's a feeling, that even though you are alone, you're there partly because the people have said, 'Yes, that's a good

thing,' " he said. It also will be up to the people whether he stays. They will vote whether to keep him when his first term expires.

Jeffrey is noted mainly for his representation of the villages in several controversial challenges of state and federal actions on the North Slope involving oil and gas lease sales, exploration, and development. His work as a legal activist did much to develop a consensus within the Borough on the rights of local residents on development and subsistence issues.

Jeffrey is also known for his dedication to the advance of bush justice. Thanks to his initiative, there are now paralegal workers in each village. He would like the court system to become more visible in the villages. Although it would be impractical in many cases to hold hearings in the villages, he believes it may be possible to conduct sentencing in the villages. There is a growing interest in teleconferencing in the region, and he feels this could possibly be worked into future court proceedings as well. ■



c. Bill Hess—Tundra Times

New Barrow Judge Mike Jeffrey: a rural resident with a dedication to bush justice.



Ankers Capital

Sen. Ted Stevens of Alaska, Honorary Chairman of the Inuit Circumpolar Conference Art Auction for the benefit of C.A.R.E., holds a Portrait Mask, "Spirit of Seal Emerging Through Man," by Lawrence Ahvakana. The Auction is scheduled for January 30 in Washington, D.C.

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c. Linda Lord-Jenkins—Tundra Times

Michael Maxwell, Dean of Liberal Arts at McGill University, thanks the North Slope Borough Assembly for its endowment of the Eben Hopson Chair of Northern Studies at a recent ceremony.

Continued from page 7

Chair of Northern Studies

lished in schools in Canada, Alaska and Greenland.

"I hope this dream continues in the future development of an Inupiat University," said Rosing.

Many members of the family of Eben Hopson witnessed the endowment cere-

mony including his son, Eben Hopson Jr., who works with the Borough in Anchorage. Rebecca Hopson, his widow, was ill and unable to attend the ceremony but the McGill representatives visited her the next day to speak of the chair and her interest in perpetuating the

concerns of her late husband.

Eben Hopson died in 1980 while he was still mayor of the North Slope Borough. ■

Reprinted from the Tundra Times.

Second Bowhead Science Conference Scheduled

On 30 November 1982, NSB Mayor Eugene Brower announced the Second Conference on the Biology of the Bowhead Whale. It will take place in Anchorage, Alaska on March 7, 8, 9, 1983.

The conference format will be similar to that of last year's.

The first day a series of papers will be presented. Some of them will deal with various aspects of population assessment (visual census, acoustical

localization of whales, migratory pathways, population simulation studies, etc.). Other papers will deal with other aspects of basic bowhead biology such as morphology of the reproductive tract, digestive tract, skin, vocalizations, and the like.

The second and third days of the conference will host two concurrent discussion sessions; one concerning population assessment and the other concerning basic biology. Each discus-

sion session will draw upon the interests and experience of the participants, prepare a written review of relevant data with the purpose of identifying areas of needed study, and recommend study designs.

Those interested in participating should contact Dr. Tom Albert, North Slope, P.O. Box 69, Barrow, AK 99723 for more details. ■

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