

ALASKA LEGISLATURE COMMITTEES 1983-1984

3037 SSA SB 227 8672

ALASKA STATE LEGISLATURE

SENATE STATE AFFAIRS COMMITTEE

SENATOR VIC FISCHER, CHAIRMAN

POUCH V, JUNEAU 99811

(907) 465-4954



April 5, 1983
3:00pm

Butrovich Room
Capitol Bldg.

Members Present

Senator Vic Fischer, Chair
Senator Tim Kelly
Senator Arlis Sturgulewski
Senator Pat Rodey

SB 27--Toll free telephone calls

Held over pending House State Affairs Committee action on new proposal.

SB 115--Individual rights of police officers

Senator Rodey (prime sponsor) explained the provisions of the bill. He said that police officers support the bill but that police chiefs oppose it.

Chief Joe Ciraulo, Juneau Police Department (also representing other police chiefs in S.E. Alaska) spoke against the bill. He felt that having a representative of an officer present at each stage of a disciplinary hearing was unnecessary. He also opposed having to get a search warrant to search an officer's locker.

Senator Rodey said that management policies which address some of these problems can change over time. This bill offers uniform rights for all officers.

Senator Sturgulewski asked if this bill would change present policies regarding disciplinary investigations. Chief Ciraulo answered "yes".

Senator Kelly asked if this bill would apply to only local police departments. Senator Rodey responded that the bill would apply to all peace officers in the state.

Senator Fischer stated that this bill requires a written complaint pursuant to a disciplinary action and asked if that is current practice in the Juneau Police Department. Chief Ciraulo said that he thought so.

John Strutko, an Anchorage police officer, spoke in favor of the bill. He felt that it was a good management tool and that officers should not have to give up their civil rights when they put on a badge.

Senator Kelly asked if there was anything in this bill which is not already covered in the negotiated contract with the Anchorage Police Department. Mr. Strutko stated that the provisions prohibiting involuntary polygraph tests were not in the contract.

Richard Ross, Kenai Police Chief, spoke against the bill. He felt it would be a statutory interference with his municipal personnel system. He felt this system works well. He saw some merit to the polygraph provisions.

Senator Fischer asked if police officers have full fifth amendment rights under the present system. Mr. Ross answered "yes". Senator Fischer then asked if officers would lose their jobs for refusing to answer questions relating to a disciplinary investigation. Mr. Ross said "no".

Ed Martin, Kodiak Chief of Police, spoke against the bill. He said that most of the procedures in this bill are now covered in current state and federal statutory and constitutional law as well as most personnel systems.

Holli Ploog, Attorney for the Anchorage Police Officers Association, spoke for the bill. She stated that current laws limiting polygraph tests exempt police officers. She favors the use of a polygraph exam as a hiring tool but opposes its use as an investigatory tool during employment. She said that locker searches without permission were probably unconstitutional. She said that the Fairbanks Police Officers Association also supports this bill as do many officers in other departments.

Brian Porter, Anchorage Police Chief, spoke against the bill. He said that the bill is a special interest of the Anchorage Police Officers Association but is not supported by other police organizations. He felt that it was inappropriate to use a criminal law standard of proof in a personnel disciplinary matter.

Senator Rodey commented that various blue ribbon commissions have recommended approaches similar to this bill.

Rick Potter, an Anchorage police officer, spoke for the bill. He said that thirteen states have similar legislation. He opposes compulsory use of polygraphs.

Louis Bencardino, Seward Chief of Police, spoke against the bill. He said the bill would cause unneeded expenditures in overtime and other costs.

Senator Kelly commented that he is in favor of police rights but that he does not favor putting provisions into state law that are already incorporated into labor contracts.

Jean Krause, President of N.E.A. Alaska, spoke for the bill. N.E.A. believes that all employees should have full due process rights.

It was the consensus of the committee to hold the bill over.

SB 153--Punishment for obstructing a private citizen who assists a peace officer

Senator Rodey (prime sponsor) explained the bill.

Senator Kelly moved and asked unanimous consent that the bill pass from committee with individual recommendations. There was no objection.

SB 218--Disclosure of information

Senator Kelly asked that the bill be held over.

SB 227--Alaska Council on Science and Technology

Senator Fischer said that this bill is the product of the extensive hearing the committee held on the sunset of the council and that it addressed all the concerns identified at that hearing.

Senator Rodey moved and asked unanimous consent to pass the bill from committee with individual recommendations. There was no objection.

SJR 13--Urging repeal of the Jones Act

Greg O'Cleary, Maritime Trades, testified against the resolution. He said the Jones Act is a bill of rights for American Seamen. Repeal would affect 2000 workers.

Senator Fischer stated that the Administration has problems with the timing of this measure. There are political problems with related federal issues.

Greg Olsen, FOSS Alaska Lines, said that repeal would only decrease freight rates for a short time and reduce the overall quality of service.

The resolution was held over.

Meeting adjourned at 5:00 pm.

by
David Dye
Committee Aide

Chapter 66. Review of the Activities of Agencies, Boards and Commissions.

Section

10. Termination of state boards and commissions

Sec. 44.66.010. Termination of state boards and commissions.

(a) Boards and commissions listed in this subsection expire on the date set out after each:

(1) Alcoholic Beverage Control Board (AS 04.06.010) — June 30, 1983;

(2) Alaska Transportation Commission (AS 42.07.011) — June 30, 1983;

(3) State Board of Parole (AS 33.15.010) — June 30, 1982;

(4) Alaska Public Utilities Commission (AS 42.05.010) — June 30, 1985;

(5) Repealed by § 20 ch 110 SLA 1981.

(6) Alaska Council on Science and Technology (AS 44.21.241) — June 30, 1983;

(7) Alaska Resources Corporation (AS 37.12.010) — June 30, 1992;

(8) Alaska Code Revision Commission (AS 24.20.075) — June 30, 1985;

(9) Rural Development Council (AS 44.47.160 — 44.47.190) — June 30, 1987;

(10) Older Alaskans Commission (AS 44.21.200) — June 30, 1985;

(11) Council on Domestic Violence and Sexual Assault — June 30, 1985.

(b) Upon termination, a commission listed in (a) of this section shall continue in existence until June 30 of the next succeeding year for the purpose of concluding its affairs.

(c) A commission scheduled for termination under AS 44.66.010 — 44.66.060 may be continued or reestablished by the legislature for a period not to exceed four years. (§ 3 ch 149 SLA 1977; am § 3 ch 101 SLA 1978; am § 10 ch 179 SLA 1978; am § 3 ch 44 SLA 1980; am § 1 ch 115 SLA 1980; am § 11 ch 131 SLA 1980; am § 11 ch 136 SLA 1980; am § 3 ch 172 SLA 1980; am § 1 ch 32 SLA 1981; am § 1 ch 64 SLA 1981; am § 4 ch 79 SLA 1981; am § 3 ch 101 SLA 1981; § 20 ch 110 SLA 1981; am Executive Order No. 48, § 5 (1981); am § 1 ch 65 SLA 1982; am § 31 ch 142 SLA 1982)

Revisor's notes. — In subsection (a)(6), the reference "AS 44.21.241" was substituted for "AS 44.21.200" to reflect the renumbering of that section by the revisor of statutes under AS 01.05.031.

Effect of amendments. — The first 1981 amendment substituted "1982" for "1980" in paragraph (3) of subsection (a).

The second 1981 amendment substituted "1983" for "1981" in subsection (a)(1).

The third 1981 amendment added paragraph (10) of subsection (a).

The fourth 1981 amendment added paragraph (11) of subsection (a).

The fifth 1981 amendment repealed



THE ALASKA COUNCIL ON SCIENCE AND TECHNOLOGY

February 2, 1983

Mr. Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit
Pouch W
Juneau, Alaska 99811

Dear Mr. Wilkerson:

This responds to your letter of January 17, 1983 enclosing a copy of "A Performance Report on the Department of Administration, Alaska Council on Science and Technology, December 1, 1982."

There are many errors and misconceptions in your report. These we discussed in our letter of November 30, 1982 and personally in your office on January 11, 1983.

The following summarizes our position on your report.

1. From the title of your report you imply that the Council is a line organization of the Department of Administration. This is not true; the legislative record is clear that the Council's affiliation with the Department of Administration is for administrative "house-keeping" purposes only.
2. The Council rejects your assertion that the legislative intent associated with its statutory establishment and duties was to coordinate and centralize research information. We believe a number of legislators and administrative personnel associated with the Council's establishment and operation can testify to this matter.
3. The Council asserts that it has functionally defined Alaska research needs. That these statements are currently valid and offer priorities by research function or field (i.e., Transportation, Minerals, Natural Hazards, Agriculture and Animal Husbandry, Health and Human Life, Communications, etc.). The Council rejects your assertion that it is charged with the prioritization of research across a spectrum of Alaskan societal concerns. Such prioritization can only be done by policy makers in the executive and legislative branches; and properly so.

Comments on many of the details of your report are contained in our letter of November 30, 1982. The Council reaffirms the content of that letter, rather than to repeat its substance here, since there are clearly

Mr. Gerald L. Wilkerson
February 2, 1983
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basic differences of opinion between your office and the Council on a number of matters. These differences we view as honest questions of interpretation and here express our appreciation for the professional and courteous manner in which your staff conducted its analysis of Council affairs.

Sincerely,



David M. Hickok
Chairman

DMH:pb

cc: L. Rudd, Commissioner, Department of Administration
C. Noah, Executive Director, ACST

REC'D. FEB 07 1983
ALASKA COUNCIL ON
SCIENCE & TECHNOLOGY



THE ALASKA COUNCIL ON SCIENCE AND TECHNOLOGY

November 30, 1982

Jerry Wilkerson
Director
Legislative Budget & Audit
Alaska State Legislature
Juneau, Alaska 99811

RE: Interim Letter #1, Carol Carroll, Auditor

Dear Mr. Wilkerson:

The Alaska Council on Science and Technology (ACST) appreciates the receipt of your interim audit findings dated November 8, 1982. In our meeting of November 17-18 the Council reviewed your findings and offers the following comments for your consideration.

Generally speaking, we agree with some of your substantive conclusions but question the rationale from which they are derived. In other cases we believe either the legislative history or the actual statute governing ACST operations has been misconstrued, at least in part.

As a place of beginning it is of basic importance to examine your statements: a) "The primary legislative goals were to coordinate and centralize research information in order to -----" (page 1, last paragraph) and b) several statements implying that the Council is mandated to "coordinate" state funded research, per se. An examination of the statute indicates that the word "coordinate" or its derivatives is used only in the following statutory references:

1. In Section 1. LEGISLATIVE FINDINGS "(3) expenditures are not adequately coordinated in the state to achieve the highest and best use of research dollars" (emphasis added).
2. In Section 44.19.182 (c) "8. coordinate its data and information needs with other research organizations in order to avoid unnecessary duplication;" (emphasis added).

By way of additional comment on the "coordination" role, it is well to be aware that an early draft of the ACST bill drew particularly strong opposition from state agency and university leaders. The context of this draft was that "state money may not be spent for research projects, unless, before commencing the research, the agency or person responsible for conducting the research submits to the council for its review and comment a scope of work proposal-----". Consequently, the legislature rejected early the idea that the Council should "coordinate" research through any measure of review or sanction.

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Broadly speaking, the legislative background of the establishing statute led the Council to consider its general mandates as being to survey research needs, to recommend research priorities, to award research grants and to provide advice to the governor and legislature upon request. In these general mandates, the Council asserts that it has, in fact, derived its research needs statements and data and information needs in a "coordinated" fashion with other research organizations, state and federal agencies, and the private sector. The proof of this statement is twofold: a) the Council drew expert membership for all its research needs committees from those agencies having cognizance and from involved university and private sector research or management organizations. (By this means coordination of research needs assessment by the Council was definitely achieved.); b) informational needs of ACST have also involved a large interagency and interorganizational coordinative network including particular relationship with the information transfer expertise of the state, federal and university library systems, the Arctic Environmental Information and Data Center (AEIDC), and the federal-state interagency Committee on Natural Resource Information Management (CONRIM); and c) in addition to meeting the informational needs of the Council itself (the statutory mandate), ACST has also vigorously supported the information transfer and dissemination function through grants, publications, and the support of numerous conferences. All of these contacts and activities, we believe, belie your comment that, "interaction with state agencies has been limited".

Much of your interim report dwells on your interpretation that the Council has a mandate to coordinate statewide research. This assumption, as earlier pointed out, has no statutory basis. Nevertheless, further comment is still appropriate, particularly on your conclusion drawn from questionnaires, that "the Council has had little effect on State research programs". Through our research needs reports, activities concerned with U.S. Arctic and Alaska science policy and legislative committee contacts we have had direct impact on several state research programs, including the following examples:

- * The seismology program of the Division of Geological and Geophysical Surveys of DNR;
- * The development of programs within ADF&G for the economic appraisal of fish and wildlife resources;
- * The establishment of the Alaska Climate Center within the Arctic Environmental Information and Data Center, University of Alaska.
- * The establishment of the airport weather program in Alaska rural villages within the DOTPF;

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- * The resolution of the rural village smoke/fire safety program within the Department of Public Safety;
- * The acceleration of mineral mapping programs within DGGS;
- * The general research programs conducted by the University of Alaska notably in the biological, geological, agricultural, atmospheric sciences;

and other examples of longer term impact such as the very large influence on public health research, both state and national.

Letters or testimony on these examples can be made available.

The implication of state sponsored research duplication also requires comment. The ACST, after considerable investigation, is unaware of any specific cases of research duplication, nor does your audit report identify any. Moreover, in scientific inquiry duplication is not necessarily bad. Redundant research is practiced in all fields of scientific or engineering endeavors as a means of conclusion verification. It is not bad, per se. More to the point of duplication in state government may be the practice whereby more than one agency investigates or analyzes a particular problem, e.g. the current studies of the so-called "All Alaska gas pipeline". Nevertheless, here again, there may be valid state purposes served by duplicative efforts.

Finally, your comment under A3, page 2, is, in our opinion, particularly lacking in comprehension. This commentary makes two points. They are:

1. That the Council has been "ineffective in gathering research available to them through departmental budget documents, session laws, and various reports required by the legislature."; and
2. That the Council has limited itself to coordination of its own research budget----. When compared with the University of Alaska research budget it is clear that the Council has had little statewide effect on research coordination or on reduction of unnecessary duplication".

On the first point: germane session laws and legislative reports are reviewed by Council members and staff. Departmental budget documents, based upon our experience, are worthless as sources of information on research. A much greater comprehension of research activity can be ascertained from other sources previously mentioned. On the second point: our position is that the size of current budgets available to any organization is unrelated to either "research coordination" or reduction of unnecessary duplication. In discussion with you, we would be pleased

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to point out the general sources of approximately 200 million dollars of research expenditures in Alaska, but the issue of coordination is primarily related not to the totality or share of these expenditures, but rather to specific problems and the means whereby they may be solved. It is with regard to achieving coordinated mechanisms for solving research problems that the Council members have spent so much effort on the introduction and passage of S.1562, the Arctic Research and Policy Act, in the Congress and also on the introduction in the upcoming state legislature of an Alaska science policy resolution.

In summary, the Council believes your first interim finding that ACST "has been ineffective in coordinating statewide research information" is inappropriate on the grounds that you have misinterpreted the statute and legislative history and have not fully comprehended the "coordinating" mechanisms which, on the record, the Council has utilized to meet its statutory requirements and service to the State generally.

Your second interim finding B. (page 2) was that "the Council has not complied with the intent of AS44-.21.242 (c) 3 requiring comment on significant research activities funded by the state during the preceding year" (emphasis added). Your narrative with this finding makes three points: a) the implication that comment upon significant research was not included in our annual report; b) that the Council lacks the knowledge on the type and cost of research funded by state agencies; and c) that this alleged lack of our knowledge is due to the appropriation of research funds to agencies without requiring coordination through the Council or reports to the Council. The Council's response to this interim finding is as follows:

1. In our 1981 Annual Report (pages 8-14) the Council made specific comment on areas of state research, or the lack thereof, which in our view were most significant.

2. The Council absolutely rejects the notion that it is lacking in knowledge on the type of research pursued by state agencies, including the University of Alaska. Through its interdisciplinary membership, the involvement of state and university scientific personnel in Council affairs and reports and particularly close relationships with AEIDC and CONRIM, the Council as a body has a greater and broader understanding of state funded research as pertains to subject, type, and who is doing research than any other group of people in Alaska. We do, however, acknowledge that only partial information is available to the Council (or for that matter, anyone) on the costs of such research. On this point we agree that there is no requirement for state or university reporting on this subject. Thus, the only cost data available are furnished to the Current Research Profile (CRP) maintained by AEIDC through a voluntary response questionnaire system. A basic problem in this regard is that while cost information on particularly designated

projects sometimes appears in budgetary documents, it is often augmented with other funds from various agency sources. Furthermore, research funded from operational budgets is often undesignated, except in the CRP, after the fact, and again total costs from one or more sources may not be reported.

In summary, there is a dichotomy between knowledge of who is conducting research on what subjects and how much it may cost.

On page 3 of your interim report, under C., you raise the review of State research needs. It is the view of the Council that research needs in functional areas of activity (i.e., transportation, living resources, etc.) can be prioritized. This we have endeavored to do at minimum costs, a process largely involving the voluntary committee apparatus of cognizant experts. The Council is of the opinion that scientific or engineering expertise cannot, nor is it appropriate to, prioritize research needs between functional or subject areas because societal aspirations between, e.g. health needs research on one hand or natural hazard research on another, can only be prioritized in the political arena. Science and engineering expertise can properly indicate the gaps of knowledge needed for research attention to solve certain problems. The determination of society's priority to solve particular problems must be a reflection of the relative worth of the endeavor as determined by representatives of the people in the political process.

Point D (page 3) of your interim report is, we suggest, not wholly or directly related to the Council's administration of research grants. The administration of research grants by the Council began as a legislative response to our early research needs reports. Research funds were not initially requested by the Council for Council administration. Rather, it was perceived by the legislature that the Council could perform this task most effectively. A technique involving nationally accepted peer review processes was initiated and received national recognition in Science as a model of efficient and qualitative review of research proposals. As a deliberative body with scant staff the Council turned to the peer review process in order to evaluate the efficacy of scientific or engineering propositions advanced for research funding. Early on, during the receipt of proposals for research funding, several Council members went on the record over the problem of research advantage to University of Alaska proposers over the private or governmental sectors. As you are aware, University research organizations are only funded between 25 and 30 percent by direct state appropriation, although the total authorized appropriation by the legislature is 100 percent. Thus, when University research is authorized at about 48 million dollars by the legislature only about 14 million dollars represent direct state fiscal outlays of money. The remaining 34 million dollars authorized is expected to come from federal, state, and private grants and contracts. This situation forces University proposers to be highly experienced and capable competitors for research funds. Indeed by peer review standards their proposals to the

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Council were generally superior to others received. This of course resulted in the high percentage of Council grant awards to University researchers.

The next part of your discussion on research grants involves University overhead charges. As you should realize, overhead charges in the University accounting procedure are real costs of performing research. They greatly transcend "administrative" costs. University overheads conform to audits conducted under federal regulations to all universities receiving federal dollars. Internal audits by the University and the state are cognizant of this fact, and those responsible in the University administration and the State Department of Administration are aware of this overhead audit procedure. There simply is no relationship between University "overhead" charges and the administrative costs of less than 10 percent experienced by the Council in the execution of research grant awards. The Council takes the position that a 10 percent cost for the processing of grant or contract awards will compare favorably with any similar state or federal activity.

Your point E (page 4) again, in our view, illustrates certain misconceptions. You state that "the primary objectives of the Council are duplicative of functions presently performed by AEIDC. This is not the case. As indicated earlier, the Council's primary functions are the ascertainment of research needs, the recommendation of research priorities, the awarding of research grant funds and the providing of scientific or technological advice to the executive or legislative branches upon request.

AEIDC's primary missions are scientific and technological information transfer and referral, information dissemination, and the execution of interdisciplinary problem solving research and investigations, primarily but not wholly in developing areas of new science and technology.

The Council has coordinated its informational needs with AEIDC and has cooperatively utilized their resources in information transfer and dissemination. AEIDC has no primary objectives in determining or prioritizing state research needs, commenting upon state policy in scientific or technological matters, or advising either the executive or legislative branches on state research programs. While AEIDC does have a major role in channeling research information to various public, governmental, and private sector users, AEIDC does not aspire to, nor is it equipped, as a University organization, to "coordinate" statewide research, per se.

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From the foregoing comments the Council asserts that your interim report conclusions cannot be substantiated in logic, by the record, or by statutory reference. In summary, the Council has not coordinated State funded research on an a priori basis because it is not mandated to do so, nor was it ever conceived that it do so. Research grants of the Council, we believe, have been efficiently administered. The Council's primary functions are not duplicative of AEIDC.

Now, having, we believe, refuted most of your interim report analysis within this response, the Council nevertheless can agree with some of your conclusions and recommendations. We direct the following commentary towards your recommendations since we believe that the Alaska apparatus concerned with state science and technology policy and the administration of research grants can be improved.

Commentary on Recommendation No. 1

Leaving aside our rejection of your rationale on the Council's information base, the Council does believe it is a salutary recommendation that all research contracted or performed by state agencies be reported to a central informational entity. The Council could be this entity or the existing arrangements between the Council and AEIDC could be strengthened or any other appropriate unit of state government, including AEIDC, could be so designated.

Commentary on Recommendation No. 2

The Council believes it has, subject to the limitations imposed by staff resources, met its statutory obligations. In order to be effective the Council requires a much closer relationship to both the Executive and Legislative branches on policy issues of concern. The Council can respond in research priorities to specific policy issues. It cannot prioritize research needs across policy issues which are a reflection of societal aspirations.

Commentary on Recommendation No. 3

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Again, setting aside the rationale for this recommendation, the Council agrees that the granting of research funds by a deliberative body may not be appropriate. Indeed, if you will go back into the legislative history of the Council you will find that the three rather disparate functions of the Council generally, i.e., policy advice, research funding, and technical subject problem analysis, were first proposed in three distinct bodies. These were: governmental policy assistance through a Council apparatus such as ACST; research funding through a line organization paralleling national and other state entities, in effect an Alaska Science Foundation; and technological subject expertise application through a private sector organization such as the newly formed Alaska Academy of Engineering and Sciences which could assemble expertise through Academy committees. The experience of the past four years reinforces the efficacy of this original conception.

Commentary on Recommendation No. 4

We agree and have endeavored to do so.

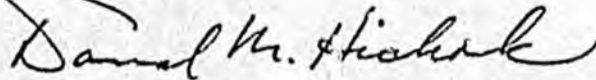
Other Recommendations to be Considered

The Council is in effect a voluntary organization. Members have devoted a great deal of their time to its deliberations. The staff is very small and is more administratively than scientifically oriented. An expansion of staff resources may be a consideration of merit. We should discuss this with you.

By way of conclusion to this response, the Council is attaching its own analysis of the questionnaire results it received from you. The analysis was done by Council member Neil Davis. We hope that this analysis may be useful to you.

Despite our disagreements with you on several points we have offered our comments in a constructive sense and hope we can share with you further dialogue eliminating our differences and which will be reflective of both the Council's strengths and weaknesses. Thank you for the opportunity to respond to your report.

Sincerely,



David M. Hickok
Chairman

DMH/pp

Enclosure

STATE OF ALASKA

AUDIT DIVISION
POUCH W--ALASKA OFFICE BUILDING

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

JUNEAU, ALASKA 99811

November 8, 1982

David Hickok
Chairman
Alaska Council on Science
and Technology
Pouch CV
Juneau, Alaska 99811

Dear Mr. Hickok:

Re: Interim Letter No. 1

It is the policy of the Division of Legislative Audit to inform the auditee of any significant audit findings noted during the course of our audit. We would appreciate receiving a written response from you to help us evaluate the findings and recommendations presented below.

Since the audit has not yet been completed, information included in this letter should be considered confidential. A preliminary report which may or may not contain these findings will later be sent to you for your comments.

In order to facilitate the completion of our audit, please furnish this Division with your written reply within twenty days.

We have reviewed the activities of the Council in relation to the enabling legislation and the statutory duties and obligations set forth in Session Laws of Alaska 1978, Chapter 101. This review was performed in order to analyze the efficiency and effectiveness of the Council in meeting the objectives of the Legislature. The primary legislative goals were to coordinate and centralize research information in order to (1) provide concise, relevant scientific information from which informed policy decisions could be made; (2) discover and eliminate unnecessary duplicative research funded by public monies; and (3) to identify areas where research gaps existed.

In the performance of our review, we found that the Council has been ineffective in meeting the objectives of the legislature and, in some cases, has failed to fulfill statutory duties. Due to the analysis presented below we believe the Council should be allowed to terminate.

A. The Council has been ineffective in coordinating statewide research information for the following reasons.

1. Research dollars are appropriated to other entities without requiring coordination with the Council. For example, the University of Alaska was appropriated \$47.7 million for organized research in fiscal year 1982. None of this research was coordinated through the Council.
2. Other State agencies involved in research are not required to report to the Council about what research was funded or performed during the year. Council staff has suggested that some agencies do not consider that the Council's coordination function includes their research programs. Consequently, interaction with State agencies has been limited. Questionnaires received from agency personnel support the conclusion that the Council has had little effect on State research programs. Some State employees responding to our questionnaire were unaware of the existence of the Council. Due to this lack of interaction, substantial research monies are not coordinated by the Council and any duplicative research has remained undiscovered.
3. Even though we realize that the Council has been limited in its ability to effectively coordinate research because of the above problems, the Council has also been ineffective in gathering information on research available to them through departmental budget documents, session laws, and various reports required by the legislature. The Council has limited itself to coordination of its own research budget which has totalled \$3.3 million from fiscal year 1979 to 1983. When compared to the University of Alaska's research budget alone, it is clear that the Council has had little statewide effect on research coordination or on reduction of unnecessary duplication.

B. The Council has not complied with the intent of AS 44-.21.242(c)(3) requiring comment on significant research activities funded by the State during the preceding

year. This information is required to be in the Council's annual report to the governor and the legislature. The Council is hampered in fulfilling this requirement by its lack of knowledge of the types and cost of research funded by public monies. As stated in section A., causes of this lack of knowledge are due in part to research monies being appropriated to other agencies without requiring coordination through the Council or without requiring agencies to report to the Council.

- C. The Council is required by AS 44.21.242(c)(2) to annually review the research needs of the State of Alaska, as determined by the Council, and to prioritize those needs for funding. The Council has produced ten research needs reports since its inception, seven reports were prepared in 1980 and three in 1981. None of the needs reports have been annually reviewed and only one of the 1980 reports was revised in 1982.

Within the research needs reports, the Council listed ninety areas needing research. Eighty-five of these needs were listed as priorities in the 1981 annual report to the Governor and Legislature. We believe it would be more effective to limit the number of research needs identified as priorities because it is unrealistic to expect the legislature to fund eighty-five projects. Concise, effective presentation of research priorities should result in necessary research being funded by the legislature.

- D. According to AS 44.21.242(b)(3) the Council may award and administer research grants and contracts. We reviewed each research grant awarded since FY 1981. During our review, we found that 79% of the grants were being awarded to the University of Alaska. Included in each research grant was a budget detailing costs for performance of the research. Each budget included overhead charged by the University to administer the grant. These overhead charges ranged from 25% to 62% of the grant awarded less any expenditures budgeted for research equipment. Total overhead charged amounted to \$677,000 of the \$2,700,000 awarded to the University during fiscal years 1981 and 1982. At this same time the Council expended at least \$263,000 administering these same grants. We believe it is an inefficient use of public monies to unnecessarily duplicate research costs. Since the University of Alaska is receiving 79% of the grants and it is in the business of doing research it would be more efficient to directly appropriate the funds to the University thus saving the State, in this case, at least \$263,000.

- E. In addition to the above, we believe that the primary objectives of the Council are essentially duplicative of functions presently performed by the Arctic Environmental Information and Data Center (AEIDC), University of Alaska, Anchorage. AEIDC's Information Services section performs research data accumulation and centralization functions with the objectives of creating an awareness of research performed or being performed in Alaska, of identifying research needs or gaps, and to aid in avoiding unnecessary duplication of research. AEIDC publishes a yearly Current Research Profile from information accumulated in its data files. This profile outlines research performed in Alaska by subject, investigator, and funding source. This profile and the data files are the basic tools needed for coordination of research. We believe that it would be more efficient to coordinate research through AEIDC because it is presently equipped with the necessary tools for statewide research coordination.

We base our recommendation for allowing the Council to terminate on its ineffectiveness and inefficiencies as outlined above. It has not coordinated State funded research, it has not fulfilled various statutory obligations, it has been inefficient in administering research grants, and lastly its primary functions are, in themselves, duplicative of functions performed by AEIDC.

If the legislature determines that continuation of the Council on Science and Technology is in the best interest of the public the following recommendations should be implemented.

Recommendation No. 1

Legislation should be introduced requiring all State agencies to report to the Council on all research contracted or performed during the year.

As addressed in section A. the Council has little information and no control over almost all of the monies appropriated each year for research. Coordination in this type of situation is nearly impossible. Attempts to centralize information is made very difficult and time consuming when extensive researching of agency documents is required. Since it is unrealistic to expect all monies for research to be appropriated to the Council, a reasonable alternative is to require all agencies with research budgets to report to the Council on the ultimate allocations and expenditures of those funds. This would result in a more efficient means of collection and analysis of research information.

Recommendation No. 2

The Council should fulfill its statutory obligations as stated in AS 44.21.242(c)(2) and (3).

- A. As addressed in section B. of the preceding analysis, the Council has not commented in its annual report on the significant research activities funded by the State during the preceding year. Since the legislature requires this information, we recommend the Council comply with this requirement.
- B. As addressed in section C., the Council does not review or effectively prioritize its research needs. We recommend the Council comply with the requirement to annually review its research needs reports. We also recommend the Council rank its priorities by some criteria that would establish a direct relation to policy issues facing decision makers and limit the priorities to a realistic number.

Recommendation No. 3

The legislature should consider eliminating the authority of the Council to award research grants.

As addressed in section D. of the preceding analysis, the University of Alaska has received most of the research budget appropriated to the Council. By funnelling the money through the Council, unnecessary costs of at least \$263,000 have been added to the cost of the research. Additionally, the Council has spent a large percentage of its time in reviewing, awarding and administering the grants to the detriment of its other duties. We do not believe that elimination of the authority to award research grants will adversely affect the ability of the Council to coordinate research information, if State agencies are required to report to the Council. Effective coordination can be accomplished by concise reports to the legislature and governor on projects funded that were unnecessarily duplicative, poorly done or invalid. Research needs can be effectively presented by analysis of information obtained from agency and University reports to the Council.

Recommendation No. 4

The Council should formally review its performance in accomplishing the goals and objectives of the program.

Periodic performance reviews are a valuable tool in measuring the effectiveness of management policies in achieving

David Hickok
November 8, 1982
Page 6

program goals. Areas needing improvement or redirection can be identified and procedures updated to more effectively meet management's requirements. These reviews should result in information beneficial to the Council and can be used to measure its success in meeting program objectives.

If you have any questions regarding this letter, please contact me at 465-3815.

Sincerely,



Carol Carroll
Auditor
Division of Legislative Audit

STATE OF ALASKA

THE LEGISLATURE
BUDGET AND AUDIT COMMITTEE

AUDIT DIVISION
POUCH W
JUNEAU, ALASKA 99811

January 17, 1983

David Hickok
Chairman
Council on Science and Technology
326 4th Street #510
Juneau, Alaska 99811

Dear Mr. Hickok:

Enclosed is a copy of our preliminary audit report on:

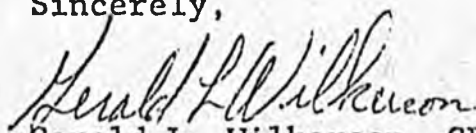
A Performance Report on the Department of Administration,
Alaska Council on Science and Technology, December 1, 1982.

We request that you submit a written response to this report by February 7, 1983. Your response will become an integral part of our final report. In your response, please clearly state your agreement or disagreement with each recommendation. If you agree, indicate the methods you will use or have used to implement the recommendation; if you disagree, you should indicate your reasons. In addition, the date the recommendation was fully implemented or will be implemented should be stated.

This report is confidential in nature and is not for public release pending final review and approval by the Legislative Budget and Audit Committee.

Additional copies of this report have been distributed to the Governor, the Commissioner of the Department of Administration, and the State Internal Auditor for their review.

Sincerely,


Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit

Enclosure

A PERFORMANCE REPORT ON THE
DEPARTMENT OF ADMINISTRATION
ALASKA COUNCIL ON
SCIENCE AND TECHNOLOGY

December 1, 1982

Commissioner, Department
of Administration

Lisa Rudd

Deputy Commissioners, Department
of Administration:

Administrative Management
Personnel Management
Telecommunications

Anselm Staack
Eleanor Andrews
Steve Gregg

Alaska Council on Science and Technology

Chairman
Member
Member
Member
Member
Member
Member

David Hickok
T. Neil Davis
Mim Dixon
Richard R. Straty
Robert D. Burkett
Jay Hogan
Charles Webber

STATE OF ALASKA

AUDIT DIVISION
POUCH W
JUNEAU, ALASKA 99811

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

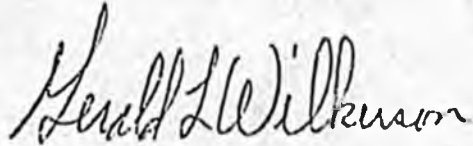
January 6, 1983

Members of the
Legislative Budget and Audit Committee:

In accordance with the intent of Titles 24 and 44 of the
Alaska Statutes, the attached report is submitted for your
review.

A PERFORMANCE REPORT ON THE
DEPARTMENT OF ADMINISTRATION
ALASKA COUNCIL ON
SCIENCE AND TECHNOLOGY

December 1, 1982



Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit

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PURPOSE AND SCOPE OF THE REPORT

Purpose

In accordance with the intent of Titles 24 and 44 (sunset legislation) we conducted an examination of the Department of Administration, Alaska Council on Science and Technology to determine if the Council has been operating in an effective and efficient manner and if there is a public need for the program.

As required by legislative intent this report shall be considered during the legislative oversight function in determining whether the Alaska Council on Science and Technology should be reestablished. The law currently specifies that this program will terminate as of June 30, 1983.

Scope

Our review consisted of evaluating the efficiency and effectiveness of the Council in (1) coordinating and centralizing research information in the State in order to identify and reduce unnecessary duplication, (2) determining and prioritizing State research needs; and (3) awarding and administering research grants in priority areas. We reviewed the following sources of information:

1. Applicable statutes and legislative intent
2. Budget documents
3. Research needs reports
4. Minutes of Council meetings
5. Correspondence files
6. Surveys of academic, private and governmental institutions
7. Surveys of Council members
8. Tests of records and documents of the Council, and
9. Any complaints filed with the Office of the Ombudsman, State Equal Employment Opportunity Office, or Human Rights Commission.

ORGANIZATION AND FUNCTION

The Alaska Council on Science and Technology was established by the 1978 Session Laws of Alaska, Chapter 101. There are seven Council members: two members are from executive agencies having significant research activities, two members from the Alaska academic community, two members from the general public who have significant activities or direct interest in research, and one member from the staff of the Legislature. Members are appointed by the Governor for overlapping three year terms.

The Council is organized under the Department of Administration which provides financial support. The Council has no regulatory function.

The Council was established to provide research data coordination through information centralization and review and to provide the scientific and technological community with a mechanism to advise decision makers on scientific issues.

The purposes of the Council are as follows:

1. Review and recommend the scientific and technological research needs of State government
2. To issue research grants and contracts
3. To oversee the issued grants and contracts
4. To promote high standards of research for the priorities proposed by the Council
5. To address stated legislative or administrative requests for research.

REPORT CONCLUSIONS

Policy Issues

This report contains policy issues raised as a result of our evaluation of various Council endeavors. The final policy decisions affecting these endeavors are not within the scope of this review but require legislative consideration. In debating these issues, the legislative oversight committees should consider the findings and alternatives presented in this report so that the potential impact of policy changes can be evaluated.

Report Conclusions

In our opinion the continuation of the Alaska Council on Science and Technology is not necessary (see Recommendation No. 1).

In the event the Council is reestablished by the Legislature, certain changes must be made to enable the Council to effectively and efficiently perform the duties intended by the Legislature, and to serve the public interest. These changes are outlined below.

1. Legislation should be introduced requiring State agencies and the University of Alaska to report to the Council on all research funded or contracted out during the year (see Recommendation No. 2).
2. The Council should comply with AS 44.21.242(C)(2) and (3) which require comment on significant State research activities and annual review of research needs. Additionally, the Council should more effectively prioritize research needs (see Recommendation No. 3).
3. The legislature should consider eliminating the authority of the Council to award research grants (see Recommendation No. 4).
4. The Council should formally review its performance in accomplishing the goals and objectives of the program (see Recommendation No. 5).

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

The Council on Science and Technology should be allowed to terminate.

We have reviewed the activities of the Council in relation to the enabling legislation and the statutory duties and obligations set forth in the Session Laws of Alaska 1978, Chapter 101. The review was performed in order to analyze the efficiency and effectiveness of the Council in meeting the objectives of the Legislature. The primary legislative goals were to coordinate and centralize research information in order to (1) provide concise, relevant scientific information from which informed policy decisions could be made; (2) discover and eliminate unnecessary duplicative research funded by public monies; and (3) to identify areas where research gaps exist. Furthermore, the legislature only intended the Council's coordination function to be a passive collection, commentary on, and dissemination of research information. The Council was never given the authority to actively control research funded by the State. It is in this sense that we use the term "coordination" in the following findings.

In the performance of our review, we found that the Council has been ineffective in meeting the objectives of the Legislature and in some cases has failed to fulfill statutory duties. Due to the analysis presented below, we believe the Council on Science and Technology should be allowed to terminate.

- A. The Council has been ineffective in coordinating state-wide research information for the following reasons:
1. Research dollars are appropriated to other entities without requiring coordination with the Council. For example, the University of Alaska was appropriated \$47.7 million for organized research in Fiscal Year 1982. None of this research was coordinated through the Council.
 2. Other State agencies involved in research are not required to report to the Council about what research was funded or performed during the year. Council staff has suggested that some agencies do not consider that the Council's coordination function includes their research programs. Consequently, interaction with State agencies has been limited. Questionnaires received from agency personnel support the conclusion that the Council has had limited effect on State research programs. Some

State employees responding to our questionnaire were unaware of the existence of the Council. Due to this lack of interaction, substantial research monies are not coordinated by the council and any duplicative research has remained undiscovered.

3. Even though we realize that the Council has been limited in its ability to effectively coordinate research confirmation because of the above problems, the Council has also been ineffective in gathering information on research available to them through departmental budget documents, session laws, and various reports required by the Legislature. The Council has limited itself to coordination of its own research budget which has totalled \$3.3 million from Fiscal Year 1979 to 1983. When compared to the University of Alaska's research budget alone, it is clear that the Council has had little statewide effect on research coordination or on reduction of unnecessary duplication.

On two separate occasions we have met and discussed our findings with representatives of the Council. After initial confusion over our use of the term coordination, the Council agreed that they do have a coordination function, as defined earlier in this report. Furthermore, the Council maintains that they have indirectly coordinated statewide research information by means of research needs reports, seminars, conferences, and policy proposals. However, we do not agree that this fulfills the Council's coordination function as envisioned by the Legislature.

The Legislature wanted information not only on research that needed to be done but also on research that was already completed or in progress. Additionally, this process of data collection was seen as a method to discover the use of public monies to fund research that was unnecessarily duplicative. By this the Legislature meant projects authorized and funded by one agency for information that was already available had the agency known of its existence.

Therefore, in our review of the Council, we expected to find a data file and retrieval system at the offices of the Council that would enable legislators or State agencies to readily obtain information on research in Alaska. For example, if a legislator wanted information on hydroelectric power research, he or she would be able to contact the Council and obtain information on projects completed, in

progress or contemplated by any State agency or the University of Alaska and the costs associated with that research. Also, he or she would obtain some commentary by the Council on the results of the research performed including whether it was relevant or valid.

Since we were unable to find information of this type at the Council Office, we concluded that the Council has been ineffective in this regard.

- B. The Council has not complied with the intent of AS 44-.21.242(c)(3) requiring comment on significant research activities funded by the State during the preceding year. This information is required to be in the Council's annual report to the Governor and the Legislature. The Council is hampered in fulfilling this requirement by its lack of knowledge of the types and cost of research funded by public monies. As stated in Section A., causes of this lack of knowledge are due in part to research monies being appropriated to other agencies without requiring coordination through the Council or without requiring agencies to report to the Council.

The Council maintains that they have complied with this requirement. We again reviewed the Council's annual report to determine if the intent of the legislation was fulfilled. The Council's annual report is, in our judgement, a general review of research topics of interest to the State. There is no report or commentary on significant research funded by the State during the preceding year as required by the statute. There is no accumulation of costs. We believe that this is due to a lack of detailed knowledge on the part of the Council as we saw no information of this type at the Council's Office.

- C. The Council is required by AS 44.21.242(c)(2) to annually review the research needs of the State of Alaska, as determined by the Council, and to prioritize those needs for funding. The Council has produced ten research needs reports since its inception, seven reports were prepared in 1980 and three in 1981. None of the needs reports have been annually reviewed and only one of the 1980 reports was revised in 1982.

Within the research needs reports, the Council listed ninety areas needing research. Eighty-five of these needs were listed as priorities in the 1981 annual report to the Governor and Legislature. We believe it would be more effective to limit the number of research needs identified as priorities because it is unrealistic to expect the Legislature to fund eighty-five projects.

Concise, effective presentation of research priorities should result in necessary research being funded by the Legislature.

The Council, on the other hand, maintains that their function is to identify research needs, while priorities for funding can only be determined by the Legislature. We can only reiterate that the Council is obliged to prioritize research needs and in our opinion; concise presentation of priorities is a more effective means of obtaining necessary research funding.

- D. According to AS 44.21.2(2)(b)(3) the Council may award and administer research grants and contracts. We reviewed each research grant awarded since FY'81. During our review, we found that 79% of the grants were being awarded to the University of Alaska. Included in each research grant was a budget detailing costs for performance of the research. Each budget included overhead charged by the University for performance of research. These overhead charges ranged from 25% to 62% of the grant awarded less any expenditures budgeted for research equipment. Total overhead charged amounted to \$677,000 of the \$2,700,000 awarded to the University during Fiscal Years 1981 and 1982. At this same time the Council expended at least \$263,000 administering these same grants. We believe it is an inefficient use of public monies to unnecessarily increase research costs. Since the University of Alaska is receiving 79% of the grants and it is in the business of doing research it would be more efficient to directly appropriate the funds to the University thus saving the State, in this case, at least \$263,000.
- E. In addition to the above, we believe that the primary objectives of the Council are essentially duplicative of functions presently performed by the Arctic Environmental Information and Data Center (AEIDC), University of Alaska, Anchorage. AEIDC's Information Services section performs research data accumulation and centralization functions with the objectives of creating an awareness of research performed or being performed in Alaska, of identifying research needs or gaps, and to aid in avoiding unnecessary duplication of research. AEIDC publishes a yearly Current Research Profile from information accumulated in its data files. This profile outlines research performed in Alaska by subject, investigator, and funding source. This profile and the data files are the basic tools needed for coordination of research information. We believe that it would be more efficient to coordinate research through AEIDC because it is presently equipped with the necessary tools for statewide data collection and retrieval.

In discussions with the Council, they have maintained that AEIDC has no primary objectives in determining and prioritizing research needs or in advising State policy makers, obligations which are important Council functions. Furthermore, the Council states, AEIDC's functions are information storage and retrieval, data dissemination, and problem solving. However, in a publication put out by the Council titled "Scientific and Technological Research Needs in Alaska", a result of joint meetings of the Council and the Polar Research Board, the supervisor of AEIDC Information Services stated the objectives of AEIDC included identifying research needs or gaps and aiding in avoiding unnecessary duplication. Also, in a research grant proposal written by a researcher employed at AEIDC, there is the statement that AEIDC does answer requests for information from governmental entities or in effect, gives advice as to what information is available and what is unknown. Additionally, the Council has stated that it uses the resources of AEIDC to perform its functions of information dissemination.

This evidence supports our conclusion that AEIDC does perform similar functions also attributed to the Council. AEIDC serves as a data collection and retrieval center, identifies research needs or gaps, and on request advises governmental entities on research information. In our judgement, AEIDC is a practical, cost effective alternative to the Council on Science and Technology.

We base our recommendation for allowing the Council on Science and Technology to terminate on our perception of the evidence presented above. However, if the Legislature determines that continuation of the Council is in the best interest of the public, the following recommendations should be implemented.

Recommendation No. 2

Legislation should be introduced requiring all State agencies to report to the Council on all research contracted or performed during the year.

As addressed in section A, the Council has little tangible information and no control over almost all of the monies appropriated each year for research. Coordination in this type of situation is nearly impossible. Attempts to centralize information is made very difficult and time consuming when extensive researching of agency documents is required. Since it is unrealistic to expect all monies for research to be appropriated to the Council, a reasonable alternative is to require all agencies with research budgets to report to the Council on the ultimate allocations and

expenditures of those funds. This would result in a more efficient means of collection and analysis of research information.

Recommendation No. 3

The Council should fulfill its statutory obligations as stated in AS 44.21.242(c)(2) and (3).

- A. As addressed in Section B. of the preceding analysis, the Council has not commented in its annual report on the significant research activities funded by the State during the preceding year. Since the Legislature requires this information, we recommend the Council comply with this requirement.
- B. As addressed in Section C., the Council does not review or effectively prioritize its research needs. We recommend the Council comply with the requirement to annually review its research needs reports. We also recommend the Council rank its priorities by some criteria that would establish a direct relation to policy issues facing decision makers and limit the priorities to a realistic number.

Recommendation No. 4

The Legislature should consider eliminating the authority of the Council to award research grants.

As addressed in Section D. of the preceding analysis, the University of Alaska has received most of the research budget appropriated to the Council. By funnelling the money through the Council, unnecessary costs of at least \$263,000 have been added to the cost of the research. Additionally, the Council has spent a large percentage of its time in reviewing, awarding and administering the grants to the detriment of its other duties. We do not believe that elimination of the authority to award research grants will adversely affect the ability of the Council to coordinate research information, if State agencies are required to report to the Council. Effective coordination can be accomplished by concise reports to the Legislature and Governor on projects funded that were unnecessarily duplicative, poorly done or invalid. Research needs can be effectively presented by analysis of information obtained from agency and University reports to the Council.

Recommendation No. 5

The Council should formally review its performance in accomplishing the goals and objectives of the program.

Periodic performance reviews are a valuable tool in measuring the effectiveness of management policies in achieving program goals. Areas needing improvement or redirection can be identified and procedures updated to more effectively meet management's requirements. These reviews should result in information beneficial to the Council and can be used to measure its success in meeting program objectives.

ANALYSIS OF PUBLIC NEED

Limited Analysis

The following evaluations of the Council's activities relate to the public need factors defined in the "sunset" law. These evaluations are not intended to be all inclusive, but address those areas we covered in our review.

- I. The extent to which the board, commission or program has operated in the public interest.
 - A. The Council has promoted high standards in the research it has funded.
 - B. The Council has made an attempt to inform the public about new technologies and scientific advances through support of symposiums and conferences in Alaska.
 - C. The Council has been involved in developing an arctic research policy culminating in a bill before the United States Congress.
 - D. The Council has identified various research needs of Alaska and attempted to bring these needs before the public.

- II. The extent to which the operation of the board, commission, or agency program has been impeded or enhanced by existing statutes, procedures, and practices which it has adopted, and any other matter, including budgetary, resource, and personal matters.
 - A. The Council has been impeded in performing its statutory duties by the absence of any condition requiring State agencies and the University of Alaska to report to the Council concerning research funded or performed.

- III. The extent to which the board, commission or agency has recommended statutory changes which are generally of benefit to the public interest.
 - A. The Council has contributed to public discussions in an attempt to develop an Alaskan science policy which could lead to a more coordinated research program in Alaska.
 - B. The Council has assisted the Office of the Governor in development of an Alaskan position on the future of the Naval Arctic Research Laboratory. The fundamental Alaskan position was

to seek a federal/state partnership in both use and financing.

- IV. The extent to which the board, commission, or agency has encouraged interested persons to report to it concerning the effects of its regulations and decisions on the effectiveness of services, economy of services, and availability of services which it has provided.
- A. The Council has developed a peer review committee of scientists and technicians who review and comment on research proposals submitted to the Council. This has promoted high research standards in the research funded by the Council.
- V. The extent to which the board, commission or agency has encouraged public participation in the making of its regulations and decisions.
- A. The Council has made extensive use of the public in determining the research needs of Alaska. Scientists and technicians in government, education, and private industry have participated in workshops to discuss research needs. Various research needs reports have evolved from these meetings.
- B. The Council encourages public participation in its discussions by public announcement of its meetings.
- C. The Council participates in the Alaska Science Conference held each year in Fairbanks. Questions and comments concerning the Council and its function are solicited from interested parties.
- VI. The efficiency with which public inquires or complaints regarding the activities of the board, commission or agency filed with it, with the department to which a board or commission is administratively assigned, or with the Office of the Ombudsman have been processed and resolved.
- A. We found no instances where the Council did not respond to public inquires.
- B. We found three complaints handled by the Office of the Ombudsman. Each was resolved efficiently and to the satisfaction of the complainant. The Council implemented the recommendations of the Ombudsman.

- VII. The extent to which the board or commission which regulates entry into an occupation or profession has presented qualified applicants to serve the public.
- VIII. A. The Council does not have a licensing function.
The extent to which State personnel practices, including affirmative action requirements, have been complied with by the board, commission or agency to its own activities and the area of activity or interest.
- A. We found no problems in this area.
- IX. The extent to which statutory, regulatory, budgeting, or other changes are necessary to enable the agency, board, or commission to better serve the interests of the public and to comply with the factors enumerated in this subsection.

Please refer to the previous section, Findings and Recommendations.

APPENDIX A

ALASKA COUNCIL ON
SCIENCE AND TECHNOLOGY FY'83
Summary of Questionnaires

Questionnaires were sent to 165 persons to obtain information about the Council from the public. All names were systematically chosen from a list of peer reviewers provided by the Council and from participants in the Council workshops on research needs. We received 70 responses to our questionnaires. All but eight responses were from the original persons contacted. Many of the responses included thoughtful written comments. Due to space limitations, comments had to be shortened, and many could not be included.

	<u>Private Sector</u>			<u>Federal Government</u>			<u>Research Institutions</u>			<u>State Government</u>			<u>Total</u>			
	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	
1. Have you had any contact with the Council on Science and Technology?	11	2	0	21	0	0	17	0	0	15	4	0	64	6	0	
													91%	9%	0%	
If no, please make any comments you may have in the space provided at the end of this survey.																
2. The Council has the obligation to reduce duplicative research funded by the State. Do you feel the Council has been effective in meeting this goal?	6	1	1	12	0	5	10	3	3	7	5	3	35	9	12	
													63%	16%	21%	

If yes, please explain.

1. Attempt to guarantee monies they allocate are wisely spent.
2. Meetings help researchers get acquainted with each others activities.
3. Research needs reports.
4. Has reduced duplication with their own funds but this is a small portion of State funded research.
5. The Council has reduced duplication through their peer review committee.
6. Council emphasis on avoidance of duplication.

If no, how could they become more effective?

1. More information to the public and to scientists.
2. State level centralization of all research.
3. Need more time.
4. Need more than lipservice from State research agencies.

(Continued on next page).

	Private Sector			Federal Government			Research Institutions			State Government			Total		
	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown
10. Do you believe there is a public need for this program?	11	0	0	21	0	0	16	0	0	12	3	1	60	3	1
													94%	5%	1%

Please explain.

1. ACST is a vehicle by which structured communication can flow back and forth between the technical and scientific community and the executive branch of government.
2. State needs to establish priorities.
3. Need a coherent program to define needs and priorities and to account publicly for them.
4. Make public aware of lack of information.
5. Need a statewide focal point for coordination of research efforts. I believe this role should be strengthened.
6. Reduce duplication if effective.
7. Provides a unique Alaska emphasis with more direct feed back to management agencies.
8. Need a coordinating mechanism for use of State funds.
9. Coordination provides more effective research.
10. The need is for an organization in state government to fund and promote research.
11. Needs tenure to be effective.

11. Any other comments?

Private Sector

1. Impressed by foresight in planning and implementation of the Council Connection to public policy is appropriately distant. If ties were too close the quality of science might greatly diminish.
2. New ideas from Northern Technology available to the public.
3. Very high level reviews of proposals were obtained by donation of time, knowledge and experience by scientists in Alaska - at very low cost.

	Private Sector			Federal Government			Research Institutions			State Government			Total		
	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown	Yes	No	Unknown
7. Do you feel it is government's responsibility to promote scientific and technological inquiry?	13	0	0	21	0	0	16	0	0	14	2	0	64	2	0
													94%	6%	0%
8. If this program were eliminated what effect, if any, would it have on your agency, institution, company, or the public interest?															
1. State funding would be lost.															
2. The idea is good, should not be eliminated.															
3. Would lose valuable vehicle for those in research to bring forward research topics, also raises the quality of research.															
4. State government could lose its easy access to scientists.															
5. Coordination of state and federal research would suffer resulting in more potential for duplication.															
6. Loss of broad view of research needs.															
7. Would lose peer review committee															
8. ACST guided research to topics relevant to Alaska - if not continued research maybe less relavent.															
9. Vestad interests too often get funded for "research" that has no relevance. ACST should have greater advisory status.															
10. Fourteen responses stated there would be little or no effect.															
9. Are there other organizations in the State performing the same duties?	2	5	1	1	18	2	2	12	1	7	5	3	12	40	7
													20%	68%	12%
Please list if yes.															
1. Appropriate Technology.															
2. Nearly every agency, school has research functions and policy roles.															
3. Department of Fish and Game.															
4. Geological and Geophysical Survey.															
5. Arctic Environment and Information Data Center.															
6. University of Alaska direct department budget funding.															
7. Many of the Council's tasks are duplicative of work done by other agencies.															
8. Individual agencies: APA, APEC, APUC, Dept. of Admin., Division of Telecommunications.															

(Continued on next page).

4. I am concerned about the tone of this questionnaire. It seems to have missed the point on most important issues. I don't think ACST has been useful so far but the idea needs to be encouraged and the Council upgraded and given authority to be creative and useful - good idea badly handled.
5. Provides unbiased research - perhaps need an Alaska Science Foundation.
6. More funds for more research.
7. Need more publicity.

Federal Government

1. More publicity.
2. I was quite puzzled over what ACST was receiving for the overhead charge of 50% from the University of Alaska. Would like an itemization of overhead charges. In my opinion the Council's policy of not doing so could lead to misuse of public funds.
3. Needs to be better funded.
4. Council is to be commended on the development of the peer review process.
5. Public needs someone to ensure that only relevant, broad-reaching research is funded.
6. ACST should institute a policy of not funding agencies outside the State if qualified and prepared agencies within the State are ready to do the work.

Research Institutions

1. As a very active researcher on policy issues in Alaska, I see a strong need for ACST.
2. More publicity
3. Needs more funding. It is a relatively low cost program which has great potential. Needs to mature in procedures and priorities.
4. Council provides a scientifically sophisticated mentor for Alaskan decision makers.
5. The State has shown considerable wisdom in setting up the Council.
6. Budget should be increased by \$5,000,000 so they can effectively carry out the funding for Alaskan research problems.

(Continued on next page).

State Government

1. Should be similar to the National Science Foundation.
2. Must be assured existence for seven years.
3. The existence of this body is important but must have a breadth of knowledge about on-going research Statewide to make meaningful decisions.
4. Need a cleaning house activity to control and restrict duplicative research and to monitor overall quality of funded projects.
5. My impression is that ACST's advise was virtually ignored by the Legislature and Executive. Media reported on the grants program, otherwise it didn't seem to accomplish much.
6. Alaska could well profit from a carefully designed long range program of research and development in limited areas.
7. ACST has not had sufficient support to achieve its true potential as a policy guidance tool.
8. Can provide focus on research needs and a forum for exchange.
9. Publish a list of on-going projects and projects under consideration.

APPENDIX B

ALASKA COUNCIL ON
SCIENCE AND TECHNOLOGY
APPROPRIATIONS COMPARED
WITH EXPENDITURES

For the Fiscal Years 1982 and 1981
UNAUDITED

	1981-1982		1980-1981	
	<u>Authorizations</u>	<u>Expenditures</u>	<u>Authorizations</u>	<u>Expenditures</u>
<u>Operating Programs</u>				
<u>General Government</u>				
Alaska Council on Science and Technology (operations)	\$ 603,000	\$ 544,000	\$479,200	\$475,652
<u>Capital Programs</u>				
<u>General Government</u>				
Alaska Council on Science and Technology (grants)	2,500,000	972,000	300,000	28,845
	<u>\$3,103,000</u>	<u>\$1,516,000</u>	<u>\$779,200</u>	<u>\$504,497</u>

Expenditures include encumbrances and are reported on a budgetary basis.
Amounts are per books.

AN ANALYSIS OF RESULTS OF
LEGISLATIVE BUDGET AND AUDIT QUESTIONNAIRE RESULTS
November 21, 1982
Neil Davis

In 1982, the Alaska Legislative Budget and Audit Division sent out 165 questionnaires regarding the ACST. Results:

90% of 71 respondents had had contact with ACST; private sector--85%; federal government--100%; research institutions--100%; state government--75%.

81% of 42 stating opinions said ACST has been effective in reducing duplicative research funded by the state; private sector--86%; federal government--100%; research institutions--77%; state government--60%.

Seven respondents were aware of instances where planned research was not funded because ACST said information was already available; private sector--1; federal government--2; research institutions--4; state government--0.

81% of 53 stating opinions said ACST has been successful in bringing scientific and technological community into closer contact with state policy makers; private sector--80%; federal government--81%; research institutions--93%; state government--60%.

76% of 63 responding to the question were aware of research needs identified as priorities by ACST; private sector--70%; federal government--86%; research institutions--94%; state government--50%.

91% of 47 stating opinions thought the ACST's identified priorities were relevant to State needs; private sector--100%; federal government--94%; research institutions--93%; state government--75%.

58% of 38 stating opinions said that ACST has influenced public policy on scientific issues facing the State; private sector--57%; federal government--55%; research institutions--75%; state government--38%.

97% of 66 stating opinions said it is the government's responsibility to promote scientific and technological inquiry; private sector--100%; federal government--100%; research institutions--100%; state government--88%.

77% of 53 stating opinions said that there are no other organizations in the state performing the same duties as the ACST; private sector--66%; federal government--100%; research institutions--86%; state government--42%.

95% of 61 giving an opinion said there is need for the ACST; private sector--100%; federal government--100%; research institutions--100%; state government--79%.

* * *

NOTE: The tabulation above is reported in percentages of those responding with opinions. It differs from the Budget and Audit tabulation only in that the Budget and Audit tabulation is given in percentages of total respondents, regardless of whether or not there was an opinion.

The Budget and Audit tabulation includes listings of specific comments made by respondents. There were approximately 150 specific comments listed. The following table places these into four categories: "Generally favorable toward ACST", "Generally unfavorable toward ACST", "Constructive criticisms", and "Other". Comments placed in the "Other" category do not fit in the three previous categories: they deal with issues not directly relating to ACST or outside the control of ACST; For example, two of them are criticisms of the Budget and Audit questionnaire, and a sizable fraction state that more time must elapse before a proper evaluation can be made.

<u>Responding Sector</u>	<u>Favorable</u>	<u>Unfavorable</u>	<u>Criticism</u>	<u>Other</u>
Private Sector	18	2	3	5
Federal Government	25	0	6	1
Res. Institutions	29	2	7	7
State Government	24	7	8	4
<hr/>				
Totals	96	11	26	17
Percentage of specifically favorable comments:				64%
Percentage of specifically unfavorable comments:				7%
Percentage of favorable and constructively critical comments:				81%

COMMENTARY ON RESULTS

The results of this survey are overwhelmingly in favor of the role and performance of ACST. There is valuable constructive criticism of ACST that both ACST and State government should heed, but the results of the survey argue strongly for the continuence of ACST.

The results of this survey tell almost as much about state government as about ACST. The results seem to bear out the contentions voiced by Harvey M. Sapolsky in his article in Science, 160, April 16, 1968 that state government in general is less predisposed toward utilizing scientific and technological input to governmental activities than is federal government. Even though a strong majority of respondents from state government show recognition of the value of ACST and its role, they are less unanimous than the respondents from the private, federal and research sectors in believing that there should be a state role at all and that ACST is fulfilling an important gap that previously existed in Alaska's state government.

SELECTED LISTING OF SPECIFIC COMMENTS

Particularly Favorable Comments

Council is a candle in the darkness.

The State has shown considerable wisdom in setting up the Council.

[The Council has] operated as an effective clearinghouse.

Council is commended on development of the peer review process.

Council is only unbiased look at needs.

Council has acted as a go-between with scientists and legislators.

It is a relatively low cost program which has great potential. Needs to mature in procedures and priorities.

[ACST] attempts to guarantee the monies they allocate are wisely spent.

[ACST] raises the quality of research.

I am aware of one instance where we did not fund a proposal because ACST knew the proposal was already funded.

All listed reponses to Questionnaire Question 8: If this program were eliminated what effect, if any, would it have on your agency, institution, or the public interest?

Private Sector Responses

My company uses the research results supported by ACS'T. Research areas need to be identified and projects funded in these areas.

State funding needed due to federal cutbacks.

The idea is good, should not be eliminated but should be charged up with larger creative energies--needs intellectual leadership and larger goals and objectives.

Would lose valuable vehicle for those in research to bring forward research topics, also raises the quality of research.

State government would lose its easy access to scientists.

Federal Government Responses

Public awareness needs to be awakened.

Could delay timely responses to destructive land phenomena.

Do not feel federal government can meet all the needs of the state.

Coordination of state and federal fish and wildlife research programs would suffer, resulting in more potential for duplication.

Increased confusion about research directions.

Loss of non-partisan broad view of needs.

Critical research needs not identified.

Screening of research proposals is valuable and would be lost.

Very little. [May refer to impact on agency or on public welfare ??]

None. [May refer to impact on agency or public welfare ??]

Research Institution Responses

Encourage the proliferation of very narrow research operations done within agencies and direct legislative funding of whatever research idea and investigator who has enough political support.

Scientific research is guided by the funding sources. ACST guided research to that relevant to Alaska--if not continued research may not be relevant.

Communication void across agencies working in same areas.

Vested interests too often get funded for "research" that has no relevance to State needs. ACST should have greater advisory status on state funded research.

Would remove a mechanism for research coordination and possible source of funding.

Public have to pay a higher price for outside consultants.

No single voice for Alaskan scientific affairs.

State Government Responses

Scientists need a special interest group because science requires interpretation before it can be useful.

None whatsoever. [Refers to state agency or public interest??]

Minor. [Refers to state agency or public interest??]

It is important to know that some agency is looking for duplicative research funded by state monies--might commit ourselves to research already funded thru other sources.

There is no other agency funding some of the projects funded by the ACST.

Would not have a list of research needs.

Back to "flying by the seat of our pants."

Would be unfortunate if our fledgling attempts at policy directed research were eliminated.

COMMENTARY

Question 8 is perhaps the most important one in the questionnaire. The responses to it seem to argue strongly for continuence of ACST. It is unfortunate that the wording of the question leaves it ambigious as to whether a response refers to impact upon the responder's agency or upon the public welfare.

STATE OF ALASKA 1984 LEGISLATIVE SESSION
FISCAL NOTE

Revision Date: _____

REQUEST

Bill/Resolution No.: SB 227
 Title: Alaska Council on Science
 and Technology
 Sponsor: Senate State Affairs
 Requestor: _____
 Date of Request: _____

FISCAL DETAIL

Agency Affected: OMB
 Program Category Affected: _____
 BRU, Program or Subprogram(s) Affected:
Division of Strategic Planning

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 84	FY 85	FY 86	FY 87	FY 88	FY 89
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL		60.0	60.0	60.0		
300 CONTRACTUAL		40.0	40.0	40.0		
400 SUPPLIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS						
800 MISCELLANEOUS						
TOTAL OPERATING		100.0	100.0	100.0		

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUND		100.0	100.0	100.0		
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME		0	0	0		
PART-TIME						
TEMPORARY						

SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL: None

ANALYSIS: Attach a separate page for analysis

Prepared By: Gordon S. Harrison (gdh) Phone: 465-3568
 Division: Division of Strategic Planning Date: 3-16-84

Approved by Commissioner: [Signature] Date: 3-19-84
 Agency: Office of Management and Budget

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

12/1/83

ALSI.
Wickah

- 1 - not resp. to both bodies - Ex. only
- 2 - policy + needs assessment
→ clin. grant appl.
- 3 - not try to coord. All see in the
- 4 - Rel. det ^{fact} direct. Res. to

-
- 5 - issue reports (Ed Ward)
 - 6 - resp. to colleges from Leg.

Gov. + continue in some form

Gordon Harrison - exist bill draft

Rogers → off. of Gov.

7 - cancel Nortech

Erickson - Gov. office

I. REQUEST

II. FISCAL DETAIL

Bill/Resolution No.: SB 227 Agency Affected: Office of the Governor
 Title: "An Act relating to the AK Council on Science & Tech. BRU, Program of Suoprogram(s) Affected:
 Sponsor: State Affairs Requestor: Sen. V. Fischer & providing for an OMB
effective date."

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES		-0-	-0-	-0-		
200 TRAVEL		-0-	-0-	-0-		
300 CONTRACTUAL		-0-	-0-	-0-		
400 COMMODITIES		-0-	-0-	-0-		
500 EQUIPMENT		-0-	-0-	-0-		
600 LAND & STRUCTURES		-0-	-0-	-0-		
700 GRANTS, CLAIMS, ETC		-0-	-0-	-0-		
TOTAL OPERATING		-0-	-0-	-0-		
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		-0-	-0-	-0-		
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME		-0-	-0-	-0-		
PART-TIME		-0-	-0-	-0-		
TEMPORARY		-0-	-0-	-0-		

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

There is currently 100.0 for FY 84 for the Alaska Council on Science and Technology within the Office of Management and Budget/Division of Strategic Planning Budget.

IV. ANALYSIS: Attach a separate page for any analysis

Prepared By: Michael A. Nizich, Director Phone: 465-3616
 Division: Administrative Services Date: 4/6/83
 Approved by Commissioner: (Signature) Date: 4/6/83
 Department: Office of the Governor

Distribution:

- Original to Legislative Finance
- Copy to Office of Management and Budget (for Legislature introduced bills)
- Copy to Department (for Governor introduced bills)
- Copy to Sponsor
- Copy to Requestor (if different from Sponsor)

FRANK H. MURKOWSKI
ALASKA

COMMITTEE ON ENERGY AND
NATURAL RESOURCES
COMMITTEE ON FOREIGN
RELATIONS
COMMITTEE ON VETERANS'
AFFAIRS

United States Senate

WASHINGTON, D.C. 20510

WASHINGTON OFFICE:
(202) 224-8688

ANCHORAGE OFFICE:
701 C STREET, BOX 1
(907) 271-3736

JUNEAU OFFICE:
FEDERAL BUILDING, BOX 1647
(907) 589-7400

FAIRBANKS OFFICE:
101 12TH AVENUE, BOX 7
(907) 488-0233

March 23, 1983

The Honorable Vic Fischer
Alaska State Legislature
Pouch V, Capitol
Juneau, Alaska 99811

Dear Vic:

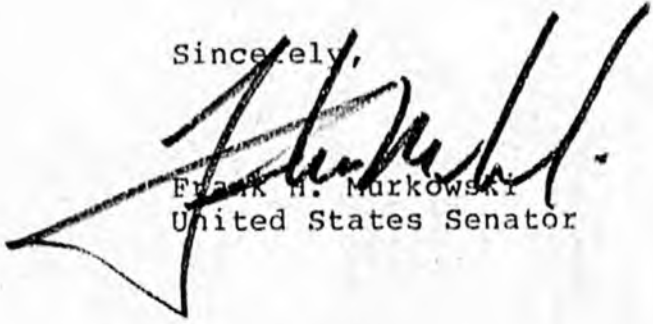
Thank you for your kind offer of assistance with regard to the Arctic Research and Policy Act.

I wanted you to know that the bill was ordered to report out of the Senate Governmental Affairs Committee last week and that quick Senate adoption looks likely. We are likely to face a tougher time, however, in the House. The bill will be referred to the Subcommittee on Science, Research and Technology of the Committee on Science and Technology.

I have already spoken with Don Fuqua, the Chairman of the Full Committee, about the bill, and I will soon be meeting with Doug Walgren, the Chairman of the Subcommittee, about the prospects for the bill's consideration. We may have an opportunity to bring each of these Representatives up to Alaska sometime this summer in order that they may see the problems we face firsthand, and I may ask you for some help in that regard later on. In the meantime, I believe it is important that the State continue to take an active interest in Arctic policy issues occurring at the State level. That interest will reap benefits and will give the State a stronger hand in the State-Federal partnership within which Arctic issues will be addressed in the years ahead.

I appreciate your continued interest in this issue. Let us keep in touch.

Sincerely,


Frank H. Murkowski
United States Senator

TO: Sen. Victor Fischer
 FROM: Brian Rogers
 RE: Alaska Council on Science and Technology draft

Enclosed is a draft proposal on ACST for your consideration. The main features of this draft are:

- (1) continues council through 1987;
- (2) moves council to Office of the Governor [OMB is implicit, but was not made explicit due to legislative/executive disputes over OMB];
- (3) removes power of grant-making from council;
- (4) eliminates laundry-list of purposes, powers and duties of council [streamlining functions];
- (5) repeals northern technology small grants program;
- (6) gives council a role in development and implementation of federal Arctic Science Policy;
- (7) increases membership to 9 members; removes designated seats on council;
- (8) requires all agencies to submit notification of commencement of research activities and copy of final research reports to Office of Governor and council;
- (9) establishes post of Alaska Science Advisor.

I believe this draft meets most of the needs of the Alaska scientific community, the legislature, the governor's office, and the council. It should assist Senator Murkowski in promoting the Arctic Research and Policy Act; it repeals the grants process now in disfavor among House Republicans; it meets the governor's need for scientific advice within OMB. A possibly controversial section is the creation of the Alaska Science Advisor. One item I considered, but did not put in, is enforcement of existing statutes requiring agency researchers (and consultants) to provide copies of research results to the state library and other sources so the research is not lost. You might wish to consider making it a class C misdemeanor not to file the reports required by law to spur compliance. [Such a section would certainly bring attention to the bill; you could argue that a person who deprives the public of the results of state-funded research is guilty of theft.]

I will call you this afternoon to discuss this bill.

① r b

IN THE SENATE OF THE STATE OF ALASKA
THIRTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to the Alaska Council on
Science and Technology, and providing for an
effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*Section 1. LEGISLATIVE FINDINGS. The legislature finds that

(1) there exist in this state scientific and technological
research capabilities which have the potential to contribute
significantly to the processes of state government, to industry,
and to the public welfare;

(2) the scientific and technological capabilities and know-
ledge of the state should be available to assist in issue analy-
sis and fact-finding necessary for governmental policy-making
activities;

(3) policies for expenditures by the state on science and
technology research and development need to be designed or rede-
signed to achieve the highest and best use of research dollars;

(4) state agencies need to improve initiatives to ascertain
the extent of existing knowledge on subjects, problems, or issues
of concern prior to the initiation of new research;

(5) existing organizations concerned with production, trans-
fer, and dissemination of scientific and technological knowledge
in Alaska need to be more effective in the execution of their
missions; and

(6) state agencies and consultants need to comply with

existing law to produce, and properly file, research and other investigative and analytical reports on the completion of research, investigative, or analytical projects.

*Sec. 2. AS 44.19 is amended by adding a new section to read:

ARTICLE 3B. ALASKA COUNCIL ON SCIENCE AND TECHNOLOGY

Sec. 44.19.241. COUNCIL ESTABLISHED. (a) There is established in the Office of the Governor the Alaska Council on Science and Technology. The council consists of one member representing the Office of the Governor and eight members who are appointed by the governor upon the recommendations of the state's scientific, engineering, and related communities and organizations. Members have overlapping three-year terms. The council shall elect one of its members as chair. A chair may be elected for successive terms as chairman and serves until a successor is designated. Five members constitute a quorum.

(b) There is established in the office of the governor the position of Alaska science advisor. The science advisor is in the exempt service and serves at the pleasure of the governor. The governor shall appoint the science advisor after consultation with the council. The science advisor shall act as executive secretary to the council. Administrative costs for the council shall be borne by the office of the governor.

(c) Council members receive no compensation but are entitled to the travel and per diem provided by law for members of boards or commissions.

Sec. 44.19.242. PURPOSES. The council shall consider problems and developments involving the fields of science, engin-

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engineering, and technology and related activities affecting more than one state agency and shall recommend policies and other measures designed to:

(1) provide access to existing scientific and technological information and expertise necessary to the ascertainment and articulation of public policies or programs for the advancement of state needs or objectives;

(2) identify research or investigative needs, including areas requiring additional emphasis, in order to provide adequate bases of knowledge relevant to the development of public policies or programs for state economic or societal strategies;

(3) achieve more effective utilization of the scientific, engineering, and technological resources and facilities of state agencies, including the University of Alaska;

(4) further cooperation in science, engineering, and technology through policy, program and facility agreements between the State of Alaska and local governments, the academic community, the private industrial and business sector, the agencies of the federal government, and the governments of Canada;

(5) foster development and implementation of a national Arctic science and research policy; and

(6) perform such other duties as the governor or the legislature may assign.

Sec. 44.19.243. POWERS AND DUTIES. (a) The council may

(1) convene committees, task forces, conferences, public hearings, and other meetings necessary to carry out the public's purposes;

(2) request and receive from any agency of the state

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government the assistance and data needed to carry out the requirements of this section; and

(3) assist the Arctic Science Policy Council and the Arctic Research Commission in identifying policy and program needs in national Arctic science and research policy.

(b) The council shall

(1) biannually submit to the governor and the legislature the findings of the council, including a listing, description, ranking, and justification of research needs, and a commentary on significant research activities of the preceding two years funded by the state and including the relationship of that research to the state's needs and priorities;

(2) promote and enhance high standards for research activities conducted by the state;

(3) at the request of either the governor or the legislature, advise in a timely fashion on inquiries concerning scientific investigation or comment;

(4) recommend one or more persons to the governor for appointment as the Alaska Science Advisor; and

(5) assist the governor in making nominations for presidential appointments to the Arctic Science Policy Council.

Sec. 44.19.244. REPORTS. (a) Biannually, within 10 days of the convening of each legislature, the council shall submit to the governor and the legislature a comprehensive report on the state of science and technology in Alaska, the issues surrounding scientific and technological research in Alaska, recommendations on additional research needs of the state, and a summary of

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significant state research activities conducted during the preceding two years.

(b) Each state agency which conducts significant research activities shall, upon commencement of each research project, notify the office of the governor and the council of the project description, cost and source of funding. Upon completion of each research project, each state agency shall notify the council and shall forward the results of the project.

Sec. 44.19.245. DEFINITIONS. In AS 44.19.241-44.19.246, "council" means the Alaska Council on Science and Technology established in AS 44.19.241.

Sec. 44.19.246. SHORT TITLE. AS 44.19.241-44.19.255 may be cited as the Science and Technology Act.

*Section 3. AS 44.66.010(a)(6) is amended to read:

(6) Alaska Council on Science and Technology (AS 44.19.241) -- June 30, 1987 [1987].

*Section 4. AS 44.21.241-44.21.255 (Alaska Council on Science and Technology) are repealed.

*Section 5. AS 44.46.080 (d) (Northern Technology Grants) is repealed.

*Section 6. The unexpired terms of members of the Alaska Council on Science and Technology on the effective date of this Act shall continue until their original termination. New appointments made by the governor to fulfill vacancies on the council shall be made for terms which will result in three members terms expiring in 1984, three in 1985, and three in 1986.

*Section 7. This Act takes effect July 1, 1983.

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OFFICE OF THE VICE CHANCELLOR
FOR RESEARCH AND ADVANCED STUDY

Rm. 10, Arctic Health Bldg.
901 Koyukuk Avenue South



REC'D. MAR 10 1983

ALASKA COUNCIL ON
SCIENCE & TECHNOLOGY

UNIVERSITY OF ALASKA, FAIRBANKS

Fairbanks, Alaska 99701

March 7, 1983

Mr. Christopher Noah
Executive Director
Alaska Council on Science and Technology
Pouch CV
Juneau, Alaska 99811

Dear Chris:

I was pleased to read in the ACST Notes of February 28 that the Council has at least the possibility of renewed life. It would be most regrettable, in my view after watching its activities, were the Council to be eliminated and its funding cancelled. This Council has been one of the wise voices speaking during the recent years of change and development in Alaska—and speaking with the ratifying support of dollars to back new ideas in science and technology.

If we do not have an Alaska Council on Science and Technology, something else will have to be created sooner or later to replace it. Far better to leave it in place and not (once again) convey the impression to all who observe us that we oscillate this way and that in Alaskan political decisions, without any well formulated policy or purpose.

Yes, I do hope that this Council may have some continuity and proceed with its essential work.

Sincerely,

Keith B. Mather
Vice Chancellor for Research
and Advanced Study

KBM/afs

P.S. Marshall
707 A St.
Anchorage, AK 99811

The Honorable
Vic Fischer
Pouch V
Juneau, AK 99811

10 February 1983

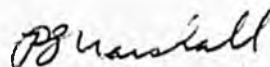
Dear Sir:

The Governor's decision to eliminate FY84 funding for the Alaska Council on Science and Technology came as an unwelcome surprise, considering his favorable campaign stance towards it and the Alaskan science and engineering community. Its termination is shortsighted, because it provided a responsive agency on the State level in a field of what should be increasing endeavor given the course of local development. There is a need for programs supporting science projects special to Alaska. Furthermore, scientific and engineering knowledge for public policy purposes transcending agency missions or interests is no longer available.

On a larger scale, this event may adversely affect Alaskan efforts in the U.S. Congress for a Federal Arctic Science Program. This program, which has passed in the Senate, requires State participation and funding to 25%. It is inexcusable that the U.S. has no organized arctic science program given the size and significance of Alaska.

I strongly urge you to lobby and vote for the preservation of the Council.

Sincerely,



P.S. Marshall

LAKE STREET, (BOX 737)
 SITKA, AK. 99835 PHONE: 907-747-6276

Messages are transmitted via computer lines to the Capitol Building in Juneau and hand-delivered to the Legislators' mail boxes directly outside the Legislative chambers. Messages left after-hours on the recorder telephone will be transmitted the following day.

- * All messages must be accompanied by your name, mailing address, and telephone number so that legislators can respond to you.
- * All messages must be delivered by the signing individual, either brought in person to the Legislative Office or provided by telephone.
- * Messages are limited to 50 words.
- * A 24-hour a day telephone recorder is available (747-6276) for Public Opinion Messages. When recording a message, please speak clearly and remember to give your name, address, telephone number. You do not need to hurry when recording.
- * You may address any individual legislator, several, or all State legislators. If you are uncertain about the appropriate legislators to include for your message, the Legislative Office will be happy to assist you.
- * You are encouraged to follow your Public Opinion Message with a letter or call to the Legislators, giving greater detail or back-up information. Addresses and telephone numbers are available at the Legislative Office.

DATE 25 Feb 83

YOUR NAME

Jan Straley

REPRESENTING

MAILING ADDRESS

PO Box 273
 Sitka Alaska 99835

Home Telephone

747-5431

Business Phone

747-6850

TO:

RE:

FY 84 budget - Alaska Council on Science & Technology

MESSAGE:

50 words

Please do NOT eliminate funding of this program.

It is an invaluable asset to the science and research community. Please maintain funding at FY 82 or higher level. It is ~~not~~ a unique opportunity for an individual in a non-academic community to contribute quality knowledge and information to the state's resources and educational base besides providing otherwise unattainable information.

If this program is slated for cuts or elimination please contact me immediately and let me know the reasons why the Alaska Council on Science and Technology is being considered to be abolished.

Thank you Jan Straley



THE ALASKA COUNCIL ON SCIENCE AND TECHNOLOGY

1982 ANNUAL REPORT

ALASKA COUNCIL ON SCIENCE AND TECHNOLOGY

JUNEAU, ALASKA

JANUARY, 1983

1982 Annual Report

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A. BACKGROUND AND STATUTORY CHANGES

The Council on Science and Technology was established in recognition of the fact that many decisions were being made by policy makers without sufficient scientific information. It was further realized that as oil revenues grew so would the number of large-scale development projects. The need for scientific and technological advice on the projects themselves and the need to identify what research should be undertaken to address these issues gave further impetus to the creation of the Council.

Interest in the Council came from many areas and all worked with the executive and legislative branches to develop a type of advisory body that would include university, state, private and federal researchers. The catalyst came in 1977 when an ad hoc committee of representatives of these groups met at the annual American Association for the Advancement of Science Conference in Anchorage. An additional catalyst was the availability of funds from the National Science Foundation to study approaches leading to the establishment of a state science mechanism that would be most suitable for Alaska. This study resulted in the submission and ultimate passage of House Bill 722 in the 1978 legislative session.

As defined by the statute the main tasks of the Council are to:

- . identify and prioritize state research needs;
- . provide advice to the governor and legislature; and
- . set standards for research and establish review procedures for research proposals.

The initial administrative functions were handled by the Division of Policy Development and Planning in the Governor's office. DPDP began the initial search for members and presented recommendations for Council membership to the governor in the areas specified in the statute:

- . two members from the university,
- . two members from the private research community,
- . two members from state agencies with research activities, and
- . one member from the staff of the legislature.

On October 3, 1978 the Council members were appointed by Governor Hammond.

As the statutory responsibilities of the Council grew they began to tax the administrative capabilities of the governor's office. These duties were transferred by administrative order to the Department of Environmental Conservation in 1980 and then to the Department of Administration in 1981.

In 1979 a bill was passed giving the Council responsibility for the administration of the Northern Technology Grants program. For three succeeding years the Council received appropriations of \$50,000, \$175,00, and \$230,800 which resulted in grant funds for 117 projects.

Also in 1979 the Council's statute was altered to include coordination with the Alaska Renewable Resources Corporation. After two meetings during 1979-1980 it was determined by the Renewable Resources Corporation that they would prefer to forge ahead with their program without Council advice.

In 1981 the Council established the scientific and technological account to fund research projects that addressed state needs. An initial appropriation of \$300,000 allowed the Council to distribute funds via the competitive grant process to six successful grantees. To date 33 projects have been funded using \$3,024,600.

Finally, the Council statutes were altered by the addition of the Council as an advisory body to the Alaska Energy Center. After several initial meetings the Council had little subsequent contact with this agency.

Throughout its history the Council has relied on a small staff consisting of the Executive Director, Administrative Assistant and Secretary. Additional support has come from the Chairman's home institution whether in Juneau, Fairbanks, or as it is presently in Anchorage. It has been a strong policy of the Council to keep staff numbers low and to call for scientific expertise on an as-needed basis through volunteer services, to assist the Council whether in proposal review, prioritization of research needs or other advisory services.

B. SUMMARY OF MAJOR ACTIVITIES 1979-1982

The concept of the Alaska Council on Science and Technology was quite new in the United States and especially to Alaska when it was begun in 1978. After a brief organizational period and the basic administrative tasks completed the Council was able to begin to effectively carry out its charge. Because of its broad mandate and limited resources it was necessary for the Council to decide very early how to accomplish its primary goals. Realizing it could not immediately achieve all of the objectives of its enabling legislation the Council formally adopted a plan which would address the most pressing needs of the state. Operating under this framework the Council's major activities have included:

- assistance in the development of state and national policy for the growth and enhancement of Alaska and Arctic scientific and engineering programs;
- determination of state research needs;
- allocation of grants for scientific and technological research and application;
- dissemination of scientific and technological information; and
- the input of scientific and technological expertise in the formulation of state resource and development policy.

1. SCIENCE POLICY

In an effort to coordinate science on a state level and to provide better coordination with the federal government, the Council has undertaken the responsibility to provide its views on how a coordinated arctic science policy

could be developed. Besides providing general information on arctic research, science and technology, the Council has worked to insure the state of Alaska has a strong voice and role in arctic science policy commensurate with its geographic location. This has been accomplished through testimony at state and federal hearings, sponsorship of resolutions and most especially in close cooperation with federal officials. The Council sponsored formal state hearings to ascertain the community's opinions and facts as background for a state science policy. Other hearings were held to determine the impact of federal cutbacks on cold weather research. Council members provided testimony on legislative resolutions clarifying the state's position on science and technology. The Council has also provided briefing materials and expertise to the governor's office for the state administration's testimony supporting arctic science in Washington, D.C.

2. RESEARCH NEEDS REPORTS

Because of the multi-disciplinary nature of most of the issues facing the state, the Council decided not to present research needs broken down into scientific disciplines but rather on categories of issues. The Council settled on an approach which had been tried by other organizations: to ask the experts what research needs they felt were priority in the areas they knew best. A listing of the ten research needs categories appears as Appendix A. A recent analysis of the research needs reports shows that 65% of the recommendations were adopted, resulting in changed directions in programs and/or funding.

3. ADMINISTRATION OF GRANTS PROGRAMS

Research Grants

This program was begun in 1981 when the Council received \$300,000 for "geophysical hazards and other research" via a general fund appropriation. Over the life of the program 33 projects have been funded, with 18 supported in 1982. All projects were reviewed using adherence to the aforementioned research needs reports for general guidance. The following specific selection criteria were also used: 1) Significance to Alaska; and 2) Quality of the proposal and proposer. Categories of funding paralleled the Council's research needs reports in health, seismology, transportation, natural hazards, energy, communications, agriculture, education, minerals, and living resources. See Appendix B for a brief progress report on each project.

The volunteer review system established by the Council has received praise from proposers and reviewers. Approximately 275 volunteer reviewers, including many national and international experts, reviewed 142 proposals submitted to the Council. Each proposal was reviewed by five experts in the particular field of the proposal. This comprehensive review allowed the Council to select the best of the proposals submitted. It is estimated that this method of review saved the state approximately \$165,000 in direct expenditures and provided insight from worldwide experts that will enhance research direction critical to state needs. When completed this research will add another positive dimension to developmental decisions facing the state.

Technology Application Grants

The Northern Technology Grants Program began in 1979 with an appropriation of \$50,000. Throughout the history of this program the ACST allocated \$305,000 resulting in 117 projects. Halfway through FY82 the Council voted to suspend funding on new "Nortech" projects. This decision was reached for two reasons: 1. very few innovative proposals were being received and 2. to wait for an analysis of the projects currently funded.

Due to elimination of funding for this program and the corresponding reduction of staff positions, an adequate monitoring program for the 80 currently outstanding projects will not be continued. Projects are monitored on a "time and resources available" basis or in close coordination with other state agencies. The final evaluation of this program is not completed at this time, as more than 75% of the projects are still underway.

4. INFORMATION DISSEMINATION

Information dissemination has taken three forms.

First has been the publication of reports on:

- research needs and priorities;
- summaries of important meetings;
- position papers;
- results of research projects; and
- technical summaries of Northern Technology projects.

The audiences for these reports have varied. However, except for the reports delineating the research results of funded projects and those on science projects, the main purpose has been to inform on an issue or generally explain a project rather than to present an in-depth scientific analysis on science and technology in Alaska.

The second method of information dissemination has been sponsorship of conferences. This form of information transfer began in 1981 but it was not until 1982 when, with the sudden infusion of money, the Council was able to provide new, active methods of promoting scientific interchange. It sponsored 25 scientific and technological conferences, from "Women in Science" to the "6th International Symposium on Circumpolar Health". A complete list of Council supported meetings is attached in Appendix C.

In conjunction with the above, the Council also provided small grants for scientific articles, reports, poster sessions and displays. This type of support has resulted in increased awareness of non-scientists as well as increased communication between scientists.

The third form of increasing scientific and technological awareness has been through a newsletter. The Council decided to alter the initial format of its newsletter from one covering activities to Council actions. The resulting "ACST Notes", provides short, concise updates and progress reports on Council activities. "Notes" also provides a mechanism for readers to request ACST publications and results of research. Such requests run about 80-100 per month for the current twenty-seven publications available. See Appendix D

for a list of ACST publications. This material has proved useful for the average citizen as well as the researcher.

5. COORDINATION WITH OTHERS

Within Alaska

To eliminate potential duplication of effort the Council has worked closely with all state, and most federal entities within Alaska. In 1982, the Council staff and members have worked especially close with scientific and technological counterparts from:

- . Division of Energy and Power Development, Department of Commerce and Economic Development
- . Division of Policy Development and Planning, Office of the Governor
- . Division of Emergency Services, Department of Health and Social Services
- . Village Safety Officer Program, Department of Public Safety
- . Division of Planning and Research, Department of Transportation and Public Facilities
- . State Epidemiologist's Office, Department of Health and Social Services
- . University of Alaska's Research Institutes

Outside Alaska

In its continuing effort to improve advisory services and grants administration functions the Council has contacted other states with similar science advisory groups. A survey of other states was also undertaken by staff to learn of similar organizations and to profit from their experiences. Besides identifying what other groups were doing in this area it was found that Alaska was most unique not only in its organization and functions but

by its administration of its grant program. The results of the survey are in Appendix E.

A typical sample of science and technology groups the Council worked extensively with outside the state in 1982 would include:

- . Science Advisory Board of the Northwest Territories
- . Polar Research Board of the National Academy of Sciences
- . Cold Regions Research and Engineering Laboratory, U.S. Army Corps of Engineers

C. SUMMARY

In the development of a unique science advisory and granting agency successes and failures have been noted; but the process has been dynamic with the Council learning from its failures and capitalizing on its successes.

Of the many programs and activities undertaken by the Council several achievements stand out:

1. COORDINATION

Although coordination of the science community is not a statutory requirement, the Council has served as a de facto focal point for science in Alaska. For it does not "look after" one segment of the scientific or technological community but relies on the depth of knowledge from all: the university, consulting groups, private industry, the state and the federal government.

2. SCIENCE POLICY

The initiatives of the Council coalesced sixteen years of planning into a national arctic science policy which will soon hopefully be a reality with the expected passage of S.373 in the U.S. Senate. This will not only bring valuable research dollars into the state but for the first time formalize dialogue between the state and federal governments on science in Alaska.

3. RESEARCH GRANTS

Besides the actual granting funds for projects that add a scientific dimension to the "puzzle" surrounding state issues, the Council developed a highly successful review process never before used on the state level.

4. NORTHERN TECHNOLOGY

Despite some failures in this program many projects have been successful and lead to "state of the art" technological application in Alaska. However, a more important contribution should be noted: developing alternative technologies has made many Alaskans aware that alternative approaches may be used to solve many of the issues facing the state.

In conclusion it should be noted that for a relatively low expenditure of funds citizens of the state have gained: the use of volunteer experts; provision of science information in decisions; a forum for scientific and technological development and a unified arctic science policy.

ACST/ANNUAL REPORT

APPENDIX A

Research Needs Reports

- . Agriculture and Animal Husbandry
- . Communications and Information Transfer
- . Health and Human Life
- . Living Resources
- . Minerals
- . Natural Hazards
- . Seismology
- . Rural Education
- . Transportation
- . Water Resources

ACST/ANNUAL REPORT

APPENDIX B

Listing of ACST Funded Research for 1982

Title: Enhanced Oil Recovery in Alaska

Grant Amount: \$120,000.

Completion Date: November 30, 1983

Purpose: A two-phase research project on enhanced oil recovery in Alaska. The first phase (funded), deals with the physical properties of the Alaskan crude oils. The second phase, (currently unfunded), which is the subject of a future proposal, will deal with the geological description of the formation properties of Alaskan reservoirs.

Application: Alaska owes most of its present and much of its future prosperity to revenues from oil and gas production within the state. As primary production rates begin to decline and secondary measures such as gas cap injection and water flooding reach the limits of effectiveness, the life of Alaskan reserves will be greatly extended through the design of appropriate enhanced oil recovery (EOR) processes.

Status: Technology for the exploitation of petroleum reservoirs is classified into three modes of production. The first, primary production, is dominated by the removal of reservoir fluids accompanied by declining pressures within the formation. For a typical petroleum reservoir, initial oil remaining in the formation when no more oil can be recovered by the above means is between 70 and 90 percent.

Usually the secondary recovery processes such as water flood or gas cap injection are initiated well before the primary recovery methods are not longer effective. Under ideal conditions, another 10 to 15 percent of the oil in place can be produced using secondary recovery processes. The reservoirs in Alaska are all in various stages of primary or secondary recovery.

The remaining oil and/or gas becomes a potential target for tertiary oil recovery.

The first step in the study of Alaskan crude oil properties was to accumulate and correlate all existing data on Alaskan crude oils. This information will be published in March, 1983. Petroleum companies have provided data from their files for use in this effort. Preliminary results suggest that the Alaskan crude oil properties deviate significantly from published correlations for other regions in North America. It is believed that the new correlations developed through this project will be useful to the operating companies in Alaska.

Partially through funds provided by ACST, the Petroleum Engineering Department has assembled equipment for a laboratory especially designed for the study of reservoir fluids. This "PVT" laboratory is the first of its kind in the State of Alaska and should prove invaluable to work in years to come. The investigators hope to use this laboratory to study the properties of Alaskan crudes in more detail, and to refine property correlations. As a measure of

the importance of this activity, the reservoir fluid analyses provided by "PVT" laboratories are critical in the calculation of reserves, the design of a production policy, and the design of surface handling equipment. The development of more accurate correlations for fluid properties will be particularly useful for the design of enhanced oil recovery processes, and in general, will be useful in all phases of design for the efficient exploitation of Alaska's petroleum resources.

Christine A. Ehlig-Economides
School of Mineral Industry
University of Alaska - Fairbanks

Title: Effects of Commercial Television on Rural Alaska Children

Grant Amount: \$77,714.

Completion Date: June 30, 1983

Purpose: In August, 1982 funds were awarded to support the third and final phase of a study on the effects of the introduction of satellite television on rural Alaskan children.

Application: Research conducted elsewhere in the United States suggests that television may be an even more important influence on minority culture than on majority culture viewers, particularly those who are isolated from alternative sources of information. Reports from this study will provide the state with the opportunity to assess some of the effects of satellite technology on rural Alaska, and to use the information gained in developing telecommunication policy. The information from this study will also be made available to those who participated in the study and to other interested citizens.

Status: During November 1982 data were collected from six villages, four in the Kotzebue basin area and two in Southeastern Alaska. Previous phases of the study, which was initiated in 1976 with funds from the National Science Foundation, included Athapascan and Aleut villages and two non-Native logging camps. Initially, communities in each area were paired so that one had television and one did not. All participating communities now have television.

In each village, students in grades three through eight, high school students who had previously participated in the study, and a sample of parents were interviewed. In addition a number of social, psychological, and education measures were administered to student participants. Those measures reflected television's role as a socialization or acculturation agent influencing sex roles, self-esteem, aggression, ethnic stereotypes, perception of social reality, language use, cultural identity, aspirations and expectations, and spatial-perceptual skills.

The Center for Cross Cultural Studies (CXCS) expects to release a non-technical report of the results of this study in late spring, 1983.

Norma Forbes
Center for Cross Cultural Studies
University of Alaska - Fairbanks

Title: Yukon-Kuskokwim Coastal Community Harvest Disruption Study

Grant Amount: \$79,888.

Completion Date: April 30, 1983

Purpose: When completed, this study will describe and analyze the past and present economy, culture and social organization of three communities on or near the Yukon River delta--Alakanuk, Sheldon's Point, and Scammon Bay.

Application: It will provide information necessary to predict the possible social effects that might result from a disruption in current subsistence harvest patterns in western Alaska following either upland or offshore oil and gas activities. The study sites have been chosen because of their proximity to the site of projected gas and oil development. If the continued viability of these and other communities in western Alaska is seriously valued, it is imperative that potential effects of proposed development on their social and economic systems be identified and analyzed.

Status: Seven points are evident so far: 1) Current subsistence harvest levels continue to be high, with households deriving from 30 to 80% of their protein from the extraction of local resources. The average yearly capital cost of resource extraction is \$5,480. per household. In only a very small number of households, the majority in the larger community of Alakanuk, is there a large enough cash income to purchase the food, clothing and stove oil necessary to see a family through the winter without recourse to the area's renewable resources.

2) In order to harvest these resources (which include birds, marine mammals, fish, berries, eggs, greens, and shellfish) various strategies are employed. Families that have a higher annual income can afford to harvest a wider variety of resources and can afford to exploit those resources requiring relatively high capital investment. For instance, they can afford the gasoline to undertake the numerous trips to the edge of the shore fast ice necessary to harvest sea mammals in the springtime, while cash poor families are restricted to ice fishing in the slough adjoining the village. Also those with year round employment can paradoxically afford to retain salmon for winter use instead of selling it all during the commercial salmon season. Conversely families that have a medium or low annual income, mostly tied to commercial salmon fishing, are those most in need of dried salmon for winter use and seal meat in the spring, yet the least able to exploit these resources. Instead they must rely on the harvest of resources that have no commercial value and that can be obtained without high cash outlay for gasoline for snowmachines or outboards. Given the variety of income levels in the villages today, all resources are important, although the disruption of any one resource would affect families differently.