CSSB

238

# HOUSE COMMITTEE REPORT

(11)

Date referred: 5/11/87

FURTHER REFERRALS:

DATE: 5-16-87

The Finance Committee has considered CSSB 238(Fin)

"An Act relating to the Alaska Research Policy Act and the science and engineering advisiory commission; and providing for an effective date."

**RECOMMENDS:**

[ ] replace with _____ [ ] the same title

[ ] attached amendment(s) [ ] a new title

[✓] do pass

[ ] do not pass

[ ] no recommendation

[ ] i dividual recommendations

[ ] additional referral to the _____ Committee

**ADOPTS:** [ ] _____ letter of intent

**ATTACHES NEW FISCAL NOTE(s):**

[ ] fiscal impact

[ ] zero fiscal note

[ ] zero with analysis

[✓] same as previous fiscal note published _____

[ ] same as previous zero fiscal note published _____

**SIGNING DO PASS:**

**SIGNING OTHER RECOMMENDATIONS:**

Kay Wallis no rec

Jay Brown No Rec

Chairman's signature

No 333

# STATE OF ALASKA 1987 LEGISLATIVE SESSION
## FISCAL NOTE

Bill Version: CS SB 238 (Fin)
Publish Date:

REQUEST:

Revision Date: 5/7/87
Title: An Act Relating to Alaska Research Policy
Sponsor: Rules Committee
Requestor: Governor

Agency Affected: Governor's Office
BRU: Office of Management & Budget
Compoents: Division of Policy

EXPENDITURES/REVENUES: (Thousands of Dollars)

| OPERATING | FY 87 | FY 88 | FY 89 | FY 90 | FY 91 | FY 92 |
|---|---|---|---|---|---|---|
| PERSONAL SERVICES | | | | | | |
| TRAVEL | | | | | | |
| CONTRACTUAL | | 200.0 | | | | |
| SUPPLIES | | | | | | |
| EQUIPMENT | | | | | | |
| LAND & STRUCTURES | | | | | | |
| GRANTS, CLAIMS | | | | | | |
| MISCELLANEOUS | | | | | | |
| TOTAL OPERATING | | 200.0. | | | | |
| CAPITAL | | | | | | |
| REVENUE | | | | | | |

FUNDING: (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 100.0 | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER | | 100.0 | | | | |
| TOTAL | | 200.0 | | | | |

POSITIONS:

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

ANALYSIS :

Prepared by: Henry Cole, PhD
Phone: 465-3568
Division: Office of Management and Budget
Date: 3/25/87

Approved by Commissioner: Pete Jeans, Chief of Staff
Date: 3/25/87
Agency: Office of the Governor

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)
Senate Secretary

Offered: 5/7/87
Referred: Rules

go1497sB

Original sponsor: Rules/Governor

IN THE SENATE BY THE FINANCE COMMITTEE

CS FOR SENATE BILL NO. 238 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to the Alaska Research Policy Act and the science and engineering advisory commission; and providing for an effective date."

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

* Section 1. AS 44.19.257(a) is amended to read:

(a) The commission is composed of <u>seven</u> [FIVE] members appointed by the governor as follows:

(1) one member is to be appointed from individuals from the academic institutions of the state with expertise in areas of research relating to the state including the physical, biological, health, environmental, social, and behavioral sciences;

(2) one member is to be appointed from individuals who are engaged in activities furthering the welfare of the human and physical environment and who have expertise in areas of research relating to the state, including the physical, biological, health, environmental, social, and behavioral sciences;

(3) one member is to be appointed from state departments with research needs; [AND]

(4) one member is to be appointed from individuals familiar with the state and representative of the needs and interests of private industry;

(5) <u>one member is to be appointed from individuals with experience in national and international research programs;</u>

(6) <u>one member is to be appointed from the general public;</u>

and

(7) the senior science advisor in the governor's office, who serves as chairman and director of the commission.

* Sec. 2. AS 44.19.263 is amended to read:

Sec. 44.19.263. POWER AND DUTIES OF THE COMMISSION. The commission shall

(1) with the senior science advisor, develop and recommend an integrated state research policy;

(2) provide policy information to the governor and the legislature on matters that have scientific and engineering significance;

(3) receive scientific and engineering information from the academic and industrial communities;

(4) act in an advocacy role for scientific and engineering issues and science education important to the state that might otherwise be overlooked;

(5) assist state agencies in assessing research needs and establishing priorities among them;

(6) facilitate cooperation between state agencies and the University of Alaska and other academic institutions and industry;

(7) recommend methods to improve logistical planning and support for scientific and engineering research conducted in the state by state, federal, or international agencies, private industry, the general public, or private research organizations [NEEDED STATE RESEARCH];

(8) recommend [SUGGEST] methods for improving efficient acquisition, storage, transfer, [SHARING] and dissemination of scientific and engineering data and information [IN THE STATE] among interested public and private institutions and the general public;

(9) promote science education and training for young scientists and engineers to pursue careers in the state and the Arctic;

(10) cooperate with the federal [FEDERAL] Arctic Research Commission in the formulation of the Arctic research policy; and

(11) not later than September 30 of each year, present to the governor the commission's recommended research priorities of the state for the next fiscal year.

* Sec. 3. AS 44.19.263 is amended by adding a new subsection to read:

(b) The commission may

(1) receive money from private and government sources; and

(2) award contracts and grants to accomplish the purposes of AS 44.19.251 - 44.19.265.

* Sec. 4. AS 44.19 is amended by adding a new section to read:

Sec. 44.19.264. APPROPRIATIONS. Appropriations made for the purposes of AS 44.19.251 - 44.19.265 are not one-year appropriations and do not lapse under AS 37.25.010.

* Sec. 5. Notwithstanding AS 44.19.259, the initial terms of members of the science and engineering advisory commission appointed under AS 44.19.-257(a)(5) and (6), enacted by sec. 1 of this Act, are for three years.

* Sec. 6. This Act takes effect immediately under AS 01.10.070(c).

dr 238

# AN ACT RELATING TO ALASKA RESEARCH POLICY

Henry Cole

Applied research projects which are to be selected from Alaskan Research and Developments grants need to meet certain criteria:

1. The project must produce technical knowledge capable of leading to the start up of a new industry, the improvement of an existing industry or the understanding of an important Alaskan problem.

2. The project should lead to results within a predictable and short time period (such as within 2 years). (The fact that the time frame is predictable means that the problem has been adequately analyzed beforehand.)

3. Even through the project leads to the solution of a practical Alaskan problem, the knowledge gained should be useful in solving related and broader scientific questions.

4. The overall size of the task would be small enough so that a relatively small amount of money could make a difference. The grant would be seed money or a necessary first step of what could be a larger effort.

5. Projects which could stimulate matching funds from industry or the federal government would be desirable. In that case other monies might be obtained resulting to a greater degree of success.

The reason for criteria #3 and #5 is that the existence of a related scientific question could very likely connect this local Alaskan problem to scientific questions of national or global interest. The National Science Foundation and National Oceanic and Atmospheric Administration have considerable interest in funding research in Alaska on basic questions of biological and chemical oceanography, the interaction of the Bering Sea ice edge with nutrients and primary productivity, ocean currents and meteorology.

Federal priorities in research in seven basic areas have been set forth in the working document of the 1984 Arctic Research Policy Act. This document serves as an important point of connection between State and federal research efforts. Federal/State coordinating committees are already assigned for the areas of fisheries, health and logistics. These areas have been identified to be of the highest priority for action by the Arctic Research Commission. In these and other areas which

have been identified, federal agencies would welcome joint participation if the State would pick up some of the costs. And a mechanism for the near term release of small amounts of federal money help could be sought through our congressional delegation. Furthermore, careful initial planning, involvement and awareness by the Alaskan business and scientific communities would generate enthusiasm, lead to possible matching of funds and insure the endorsement of this grant process for future applied research and development schemes.

The execution of these proposals would be according to the following plan.

1. The State appropriation to this pilot effort is $100,000 which will be matched by an additional $100,000 from private individuals.

2. The choice of a suitable project(s) would be made by the Science and Engineering Advisory Commission, instituted by the Alaska Research Policy Act.

Listed below are possible candidates for study which have recently come to my attention. The actual and final choices would be based upon submitted proposals and a proper review process. These examples are listed merely to illustrate the projects which seem to fit the above criteria.

1. Fisheries: Fisheries return data such as overall harvest size and composition and age/size structure is essential for analyzing population status and trends. These data could be provided by a shipboard observer program. Such information permits increased harvest predictability and is necessary for long-term sustainable-yield management of the resource. In addition, such information may apply to our understanding of the overall health and stability of the ecosystem. Certain components of that ecosystem (southern and central Bering Sea), such as marine mammals, have been subject to severe population declines in recent years, for reasons which are poorly understood.

2. Fisheries: Parasitism Research: Investigations into the distribution, causes, and controlling factors of diseases and parasitism affecting commercial fish and shellfish populations could have obvious benefits in terms of increased harvests and resource stability. One such instance which would bear further investigation is the nemertean parasite which attacks crab eggs during incubation. Studies should probably concentrate efforts at possible methods of control, which would probably derive from increased understanding of the life history of the parasite and factors which control its populations.

3. Health: A pathology study on the aorta and heart tissue of atherosclerosis victims from non-native and native Alaskan populations whose diets have been documented. This study would provide a solid link between seafood diet and the characteristics of the heart tissue at death. A clear result could lead to major future federal funding of $3m to investigate the hypothesis that a seafood diet reduces the chance of atherosclerosis.

4. Logistics: To produce a document which lists the types and utility of remote logistic sites and transportation available for field research in Alaska. More than one half the cost of field science in Alaska is logistical. Military, State agencies and the university would be sources of information.

STEVE COWPER
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

April 6, 1987

The Honorable Jan Faiks
President of the Senate
Alaska State Legislature
P.O. Box V
Juneau, AK 99811

Dear Senator Faiks:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting two bills, a substantive measure and an appropriation bill, relating to the Alaska Research Policy Act and the science and engineering advisory commission in the Office of the Governor. AS 44.19.251 -- 44.19.265.

Section 1 of the substantive bill amends AS 44.19.257(a) to increase the size of the science and engineering advisory commission from five to seven members. Section 2 of the bill amends AS 44.19.263 to authorize the commission to receive money from private, as well as government sources, and to award grants to accomplish the purposes of the Alaska Research Policy Act. In sec. 3 of the bill, proposed AS 44.19.264 is added to the Research Policy Act to ensure that appropriations made to carry out the purposes of that Act do not lapse at the end of a fiscal year, but, instead, can be carried forward.

The appropriation bill appropriates $100,000 to the science and engineering advisory commission to implement the Research Policy Act.

I believe that a key to the rejuvenation and redirection of Alaska's economy is the stimulation of our intellectual resources. This is necessary in order to formulate practical solutions to problems with which we are confronted. These solutions include the creation of new products from our natural resources, improvement in the understanding of our fisheries, and developing Arctic technology, as well as the resolution of a host of other questions that will arise as Alaskans seek to become players in the world markets for value-added goods and services. The expertise gained in reaching these solutions will allow us to come to the world bargaining table as an equal player.

The world's economy is moving toward more capital intensive production of goods designed to serve the mass consumer markets of Asia, Europe, and North America. Those countries and corporations that are the most successful have recognized the need to keep abreast of rapidly changing technical knowledge by investing heavily in applied and basic research. If we in Alaska are to compete, we need to follow this example by endowing a research foundation that will work with Alaska's entrepreneurs to help solve technical problems and provide basic information.

The passage of these bills will initiate a process that will, I hope, lead to a proposal for an Alaska Research Foundation. The current commission will be expanded to allow the inclusion of a member who has expertise in international research and a member from the general public. I will direct the commission to leverage the state contribution with those of federal agencies and private donors, in order to fund research projects that meet the following basic criteria:

1. The project must produce technical knowledge capable of leading to the start-up of a new industry, the improvement of an existing industry, or the understanding of an important Alaskan problem.

2. The project should lead to results within a predictable and short time period (such as within two years). A predictable time frame means that the problem has been adequately analyzed beforehand.

3. Even though the project leads to the solution of a practical Alaskan problem, the knowledge gained should be useful in solving related and broader scientific questions.

4. The overall size of the project should be small enough so that a relatively small amount of money could make a difference. The grant would be seed money or a necessary first step of a potentially larger effort.

5. Projects that could stimulate matching money from industry or the federal government would be desirable. In that case, other money might be obtained resulting to a greater degree of success.

Building upon its experience gained in disbursing these grants, combined with a review of successful research foundations and the advice of Alaska's business and scientific communities, the commission will propose a plan for the creation of a permanent research foundation. I hope that members of the legislature will join me in this effort to move Alaska into a more creative and productive future.

Sincerely,

Steve Cowper
Governor

Offered: 5/7/87
Referred: Rules



Original sponsor: Rules/Governor

IN THE SENATE BY THE FINANCE COMMITTEE

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Introduced: 4/7/87
Referred: Finance

wo1497sa

IN THE SENATE

BY THE RULES COMMITTEE BY REQUEST OF THE GOVERNOR

SENATE BILL NO. 238

IN THE LEGISLATURE OF THE STATE OF ALASKA

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