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# Alaska State Legislature

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## Senate

### Committee on Resources

TO: Senator Parr, Chairman  
Senate Health, Education and Social Services  
Committee

FROM: Bettye Fahrenkamp *BF*  
Chairman

DATE: April 21, 1981

RE: SB 397

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Attached please find the background information regarding  
SB 397 which passed out of the Resources Committee April 20th.

Attachments

BF:rk



Alaska State Legislature

Senate

RESOURCES SUBCOMMITTEE ON FISHERIES

JUNEAU, ALASKA

April 15, 1981

TO: Senator Bettye Fahrenkamp, Chairman  
Senate Resources Committee

FROM: Senate Resources Subcommittee on Fisheries

SUBJ: SB 397 "An Act establishing a Fishery Industrial Technology Center as part of the University of Alaska; and providing for an effective date."

The subcommittee has taken testimony and reports SB 397 back to the committee as a whole with the following recommendations.

Members	Recommendation
Senator Mulcahy	<i>Do Pass</i>
Senator Eliason	<i>Do Pass</i>
Senator Gilman	<i>No Pass</i>



Senate

JUNEAU, ALASKA

RESOURCES SUBCOMMITTEE ON FISHERIES

April 15, 1981

Senate Resources Subcommittee on Fisheries meeting

The meeting was called to order by Chairman Mulcahy at 3:03 PM. All members of the committee were present.

First on the agenda was SB 49 "An Act relating to Limited Entry".

Commissioner John Williams, of the Commercial Fisheries Entry Commission, testified on SB 49. Commissioner Williams explained the bill to the committee.

SB 49 was moved with individual recommendations.

Next on the agenda was SB 397 "An Act creating a Fishery Industrial Center".

Don Rosenberg, Director of the Office of Fisheries and Alaska Sea Grant for the University of Alaska, testifies on SB 397. Mr. Rosenberg explained the bill, and the method in which the program would be set up.

SB 397 was moved with individual recommendations.

Next on the agenda was SSSB 111 "An Act relating to fishing hunting, trapping license fees".

Senator Eliason briefly explained SSSB 111.

Louis Bandirola, Deputy Director of the Division of Sport Fish of the Department of Fish and Game, testifies on SSSB 111.

SSSB 111 was moved with individual recommendations.

The meeting was adjourned by Chairman Mulcahy at 4:05 PM.

*Senate*  
RESOURCES SUBCOMMITTEE ON FISHERIES

## SECTIONAL ANALYSIS OF SB 397

Sec. 1: This section details findings of the legislature.

Sec. 2:

Sec. 16.12.010 establishes the Fishery Industrial Technology Center as part of the University of Alaska.

Sec. 16.12.020 gives the duties of the center. The purpose is to create employment opportunities and other benefits to the state.

Sec. 16.12.030 establishes the Fishery Industrial Technology Center Policy Council. This policy council is made up of 11 people appointed by the president of the U. of A. The council is composed of 4 people from the processing industry, 4 people from the fishing industry, and 3 people from the general public.

Sec. 16.12.040 locates the principal activities of the center in Kodiak, and gives the Board of Regents authority to establish other offices in other areas of the state.

Sec. 16.12.050 requires an annual report to the legislature including a description of the work done during the year, training sessions, and any other information the Board of Regents feels will describe the activities done.

Sec. 16.12.060 requires that in the development of its programs, the center shall consult with the following agencies:

1. Department of Fish and Game
2. the Council on Science and Technology
3. ARRC
4. Div. of Economic Development, Dept. of Commerce
5. Department of Education
6. Department of Natural Resources
7. Alaska Fisheries Development Foundation
8. Alaska Seafood Marketing Institute
9. North Pacific Fisheries Management Council
10. National Marine Fisheries Service

Sec. 16.12.070 gives definitions used in this Act.

Sec. 3: This section gives an effective date of immediately.

By Resources

To: \_\_\_\_\_ SENATE BILL No. 397

To: \_\_\_\_\_ HOUSE BILL No. \_\_\_\_\_

PAGE: 3

LINE: 28

Add new line-"(6) the Department of Labor;", and re-number following subsections accordingly.



February 24, 1981

Dear Bob:

Below are the actual tasks to be undertaken and our cost estimate for the initial phase of the establishment of the Fishing Industrial Technology Center.

Tasks

1. Establish the Fishery Industrial Technology Center Policy Council.
2. Through the Policy Council determine the initial training and research and development projects to be undertaken by the center during the first phase.
3. Through the Policy Council, and with the assistance of consultants, identify the facilities and plans which will be needed to support the programs under the first phase.
4. Identify the overall programs and facilities needs for the additional implementation phases of the Center.
5. Identify and begin cost benefit analyses on special facilities such as a training vessel and flume tank.
6. Enter into cooperative agreements between other agencies and organizations which could use the facilities or assist in supporting the Center's program.

Costs

Salaries, wages and benefits (1.75 FTE) <sup>1</sup>	\$ 80,000
Policy Council Honorarium <sup>2</sup>	17,000
Policy Council travel and per diem	20,000
Administrative travel	10,000
Contractual services	67,000
Other (telephone, copying, etc.)	5,000
Supplies	1,000
	<hr/>
	\$200,000

<sup>1</sup> Fisheries Consultant (0.75 FTE) 55,000  
Secretarial (1.0 FTE) 25,000

<sup>2</sup> \$200/day/council member for 11 members for three or four,  
2-3 day meetings.

if you have any questions, please do not hesitate to call.

Sincerely,



*DR*: Don Rosenberg

The Honorable Bob Mulcahy  
Alaska State Senate  
Pouch V, State Capitol  
Juneau, Alaska 99811

cc: Fred Zharoff

DR:MH:mm

A TRAINING AND TECHNOLOG. CENTER FOR  
ALASKA'S FISHING INDUSTRY

Alaska Sea Grant College  
University of Alaska

February 1981

## ACKNOWLEDGEMENT...

This brochure describes a concept for a Center to carry out training and research and development in support of the development of Alaska's fishing industry. The program and facilities described herein result from a Fisheries planning effort developed for the University of Alaska under sponsorship of the Department of Commerce and Economic Development, State of Alaska.

The brochure was prepared and published by the University of Alaska Sea Grant College cooperatively supported by the U.S. Department of Commerce, NOAA, National Sea Grant College Program under Grant Number NA81AA-D-00009 and by the University of Alaska with funds appropriated by the State of Alaska.

## THE RESOURCES OFF ALASKA...

The resources off Alaska are bountiful by any standard and fully justify the bravado which usually prefaces the reports, proposals, and brochures which describe Alaska's fisheries and marine resource potentials.

- The Alaska domestic fishery is the richest fishery in the nation.
- \$1.2 billion fishery products landed in 1979 by U. S. fishermen.
- Alaska has over 70 percent of the total United States Continental Shelf.
- \$1.22 billion value of domestic fishing vessels and processing plants in Alaska.
- Over 80 percent of the total foreign catch off the United States is off Alaska.
- The foreign catch off Alaska in 1979 was 3.1 billion pounds, valued at \$1.8 billion.

## WHAT DOES THIS MEAN?...

It means that with the enactment of the Magnuson Fishery Conservation and Management Act, the natural evolution of the development of the U.S. fishery from traditional species (such as salmon, crab, and halibut) into new species (such as pollock, cod, sablefish, and flounder) greatly accelerated. It means that the United States fishing industry will have to rapidly become economically and technologically competitive. When compared to other developing industries and to fishery development situations in other countries, it means a concrete need exists for Alaska to establish aggressive training programs coupled with strong research and development programs.

## A FISHERIES PLAN...

The State of Alaska has a strong constitutional and moral obligation to be concerned with the rational conservation and management of her natural resources while providing for the sound development of a fisheries industry. The University of Alaska has recognized its responsibility in assisting the state in meeting this obligation by focusing components of its educational and research programs on the problems associated with management and development of Alaska's fisheries resources.

The University has completed a study of the broad categories of the needs of management and industry and has recommended to the President and the Board of Regents a comprehensive block of programs to address these needs head-on. The programs are aimed at two types of problems; resource management, and industrial and technology development.

The recommendations associated with resource management have resulted in a proposed strengthening of the University of Alaska's formal fisheries education and basic research programs. The recommendations on industrial technological development have resulted in proposed strengthening of the University's fisheries extension activities and the building of an applied research capability within the University. The purpose of this publication is to describe the strengthening of industrial technology and development components of the University by establishing a new University unit--a Fishery Industrial Technology Center.

## WHY A FISHERY INDUSTRIAL TECHNOLOGY CENTER?...

Why should Alaska invest in a technology center; why not just increase training through existing educational and extension programs to meet the needs of the fishermen?

For the Alaska fishing industry to effectively capture the massive fishery resources of its state, it must use the most advanced technology available adapted to the Alaskan conditions. World fishing and seafood processing has become highly technical and more scientific, and thus fishing and seafood processing have become demanding occupations.

Fishing is more than just seamanship and navigation. Processing is more than just cooking and canning. The modern Alaskan, involved in the fishing industry must be a highly skilled technician as well as a cook or seaman. He is currently unfamiliar with and unable to adapt the sophisticated skills and technology used today by the world's fishing fleets.

Effective training or retraining of these modern Alaskans and the adaptation of modern technology to Alaskan fisheries will require a full range of professional teachers and technologists including engineers, naval architects, food scientists, and food engineers. This staff must be abreast of modern developments and techniques. This staff must be involved in the leading edge of research and development which will be required to advance the Alaska fishing industry.

Alaska must not depend upon the foreign industry to provide its technology. Alaska must have a cadre of professionals available, not only to carry out the required training and retraining, but also to adapt existing technology and to develop new technology for the Alaska fishing industry. This training and technology development program is one of the keys to making the Alaska fishing industry the most effective in the world.

## WHY THE UNIVERSITY OF ALASKA?...

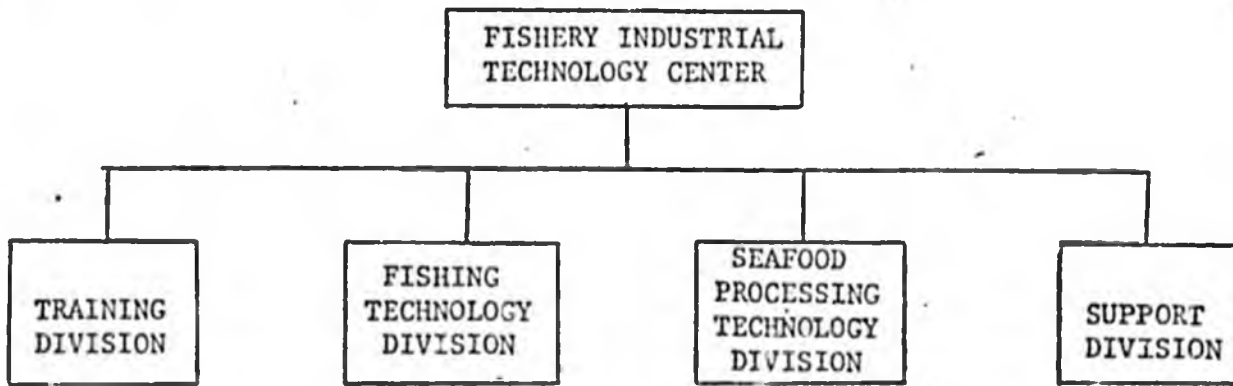
Effective training and retraining of fishermen and processors around the world has been accomplished by training programs that are tightly linked to significant industrial research and development programs. The University of Alaska, a Land-Grant/Sea Grant University, has as its major functions education and training, and basic and applied research.

Alaska is unique in that its educational programs must be extended over an area one-fifth the size of the "lower 48." In Alaska, such a fisheries training program cannot be effectively offered at one location. Instead, the program must be prepared to offer its training throughout the state. The University of Alaska already has in place the facilities and framework necessary to provide this statewide educational effort.

A Fishery Industrial Technology Center within the University of Alaska will take full advantage of this statewide system, allowing for training and retraining of fishermen and processors in all the regions of the state.

The organization of the Center will provide for the interaction between the University's regional training programs and industrial research and development to insure that regional fisheries technology needs are met by the Center.

THE CENTER, ITS PRINCIPAL COMPONENTS



## TRAINING DIVISION...

### Scope

The Training Division is designed to coordinate and conduct all the Center's educational activities. Activities of the Division will be divided into two areas; formal education which will be offered through the University's statewide Community College System, and extension education which will be carried out through the University's Marine Advisory Program. Both program areas will be responsible for carrying out a full range of activities, offering training and retraining opportunities to members of the industry.

### Programs

**Formal Education**--Formal education programs will be offered through the Community College System and will include Associate of Applied Science degrees in Marine Technology (fishing option) and Seafood Technology. Refresher courses such as seamanship, navigation, net mending, cold water survival, hydraulics, diesel engines, marine electrical systems, business management, and first aid will also be offered.

**Extension Education**--The Center will offer an array of special interest workshops and technical courses through the University's marine advisory network. Examples of these activities include workshops and demonstrations on fish handling, life raft and survival suit use, vessel alarms and stability, quality control, filleting and trimming techniques,

business and tax management, and fisheries oceanography. Special workshops identifying specific new fisheries such as octopus, snails, and squid will be held. Special one-week courses will be developed and held on such topics as trawl fishing gear, acoustic fish detection, engine room care and maintenance, and oceanography for fishermen.

## FISHING TECHNOLOGY DIVISION...

### Scope

The Fishing Technology Division will be responsible for executing the research and development activities of the Center in the areas of fishing gear and fishing systems, vessel construction and engineering, fish detection, resource survey techniques, energy conservation, electronics and acoustics, hydraulics, and refrigeration. These research and development activities will be carried out by the Center's professional staff of engineers and specialists teamed up with active Alaska fishermen.

### Programs

The Fishing Technology Division will be divided into three principal program areas:

Distant Water Fishing Technology Development--This program will address the problems associated with the larger, far-ranging Alaskan fishing fleet. This area will concentrate primarily on fishing problems associated with development of the massive underutilized resources of the Bering Sea.

In-Shore Fishing Technology Development--This area will work on the problems associated with conversion of the existing Alaskan fishery, allowing it to diversify its fishing activities in order to enter new and more complex fisheries.

Rural Fishing Technology Development--The program will concentrate on the research and development required to allow the rural Alaskan commercial fisherman to effectively and efficiently harvest resources within his reach using technology which is adapted to his environment. The program will primarily concentrate on the adaptation of modern fishing gear and systems to the rural fishing industry.

## SEAFOOD PROCESSING TECHNOLOGY DIVISION...

### Scope

The Seafood Processing Technology Division is designed to conduct research and development activities associated with the needs of the expanding seafood processing industry. Research and development activities to be handled by this Division will include new product developments, quality control measures, food processing techniques, food handling, and food microbiology and chemistry.

### Programs

This Division will be divided into three programs:

New Product Development--This program will address the need for new fisheries products developed from Alaska's unutilized fishery resources.

Seafood Science--This program will work on problems associated with the processing of current seafood products. Emphasis will be placed on the quality and nutritional problems associated with Alaska's currently underutilized species.

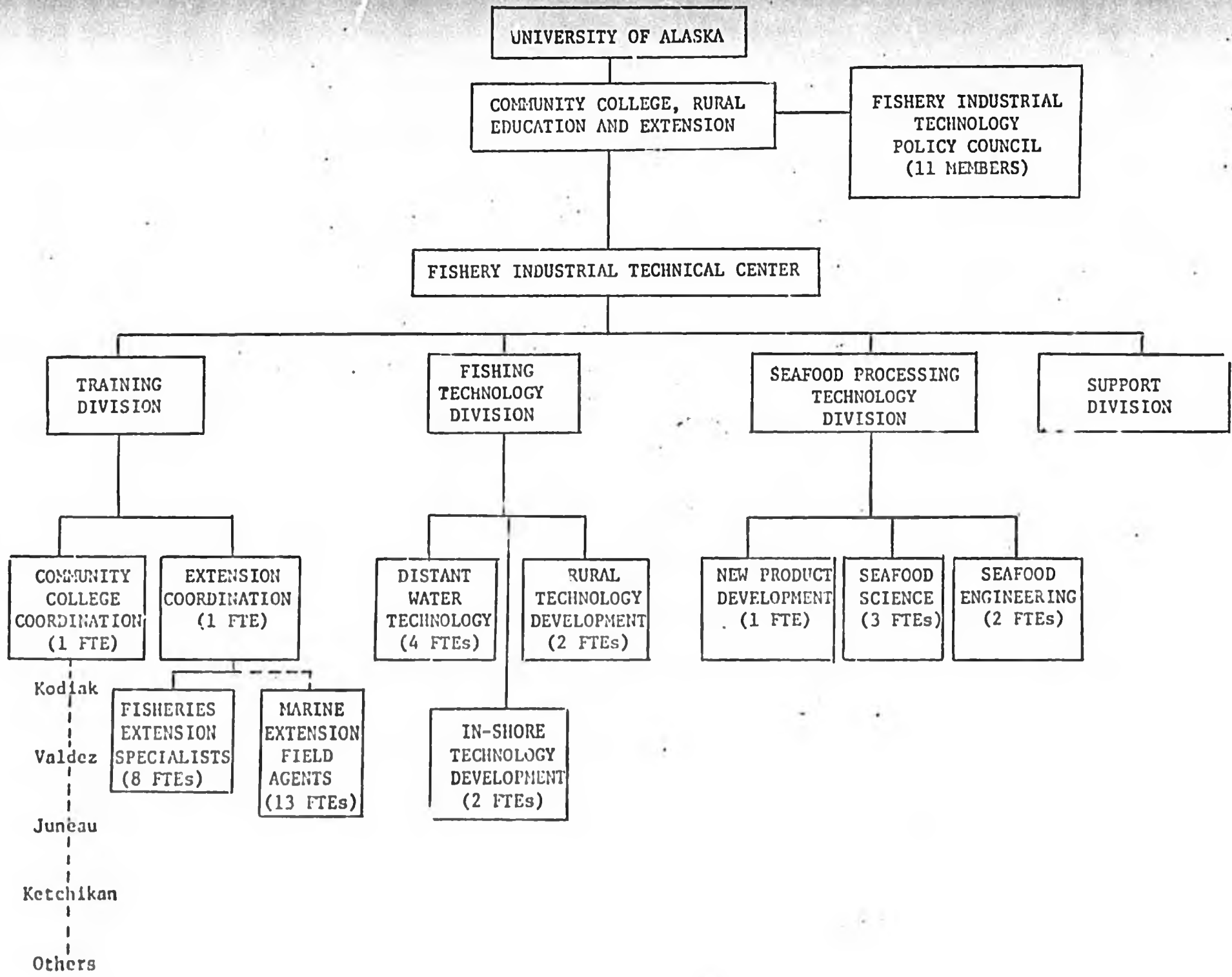
Seafood Engineering--This program will carry out technology development required to effectively adapt existing technology to Alaska fisheries and to develop new technology for handling new fisheries products.

## SUPPORT DIVISION...

### Scope

The Support Division will carry out all of the day-to-day administrative and logistic support activities of the Center. Activities will include operation of special Center facilities such as a gear and vessel flume tank, a training vessel, mobile training facilities, and special training equipment. This Division will also be responsible for all business and personnel management as well as facilities maintenance.

Dissemination of scientific and advisory information resulting from training and development activities of the Center will be an integral function of this Support Division. Included in this task will be material preparation and production as well as distribution.



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PROFESSIONAL STAFF...

Fishing Grounds Specialists

Materials Engineer

Hydrodynamics Engineer

Mechanical Engineers

Design Engineer

Gear Technologists

Instrumentation Specialist

Gear Systems Specialists

Seafood Scientists

Microbiologist

Chemists

Food Engineer

Biochemist/Enzymologist

Toxicologist

Safety Engineer

Quality Engineer

Extension Education Specialists

Community College Coordinator

Support Services Engineer

## FACILITIES...

The Fishing Industrial Technology Center will be comprised of one primary building, a 40,000 square foot facility housing the principal laboratories, shops, and specialized training laboratories as well as administrative and professional staff offices.

Associated with the main facility will be transient student housing, providing living accommodations for up to twenty students. This housing will allow students from elsewhere in Alaska to attend the Center's special training workshops.

The Center will also operate a fishing training vessel where students will be instructed in practical fishing and where new technology will be tested and demonstrated.

## **SPECIAL FACILITIES AND LABORATORIES...**

**Training Vessel**

**Processing Pilot Plant**

**Flume Tank**

**Acoustics Laboratory**

**Gear Design Laboratory**

**Hydraulics and Electronics Laboratories**

**Food Chemistry Laboratory**

**Microbiology Laboratory**

**Communications Laboratory**

**Transient Student Housing**

## LOCATION...

The Center must be located very near the widest possible variety and quantity of all commercial species of fish and shellfish and must be located near (within blocks or minutes) major year-round processors and fishermen and their vessels and plants. The Center should also be centrally located insofar as possible to the industry as a whole.

Reliable telephone, shipping, and mail networks are necessary as are reliable transportation schedules for both people and cargo.

The Center must be located where it can attract world-class professions by providing an attractive, stimulating and academic environment.

In summary, site requirements are:

- Access to the fisheries resource
- Access to the processing industry
- Centrally located within the state
- Reliable communications
- Reliable transportation
- Attractive, stimulating living environment
- Academic environment
- Land availability and quantity.

It is proposed that this facility be located in the community of Kodiak.

**ESTIMATED COSTS...**

**Capital Construction Costs**

Fishing and Processing Technology Laboratory	\$12,000,000
Student Housing	1,000,000
Training Vessel	3,000,000
Warehousing	1,400,000
Special Equipment	2,000,000
Site Development, Roads, Parking, and Design Fees	4,900,000
	<hr/>
<b>TOTAL</b>	<b>\$24,300,000</b>

**Operation Costs (per year)**

Program Costs	\$ 1,818,000
Facilities Operations Cost	354,000
Vessel Operations Cost	500,000
Administrative and Support Costs	430,000
	<hr/>
<b>TOTAL (per year)</b>	<b>\$ 3,102,000</b>

CITY OF KODIAK  
RESOLUTION NUMBER 9-81

A RESOLUTION OF THE KODIAK CITY COUNCIL SUPPORTING HOUSE BILL NUMBER 262 IN THE TWELFTH LEGISLATURE OF THE STATE OF ALASKA.

WHEREAS, the fishing industry and fishery resources in the waters off Alaska are of vital importance to the State; and

WHEREAS, the establishment of the fishery technology training and research center is essential to the establishment of an Alaska based fishing industry; and

WHEREAS, the work of the center will provide significant employment benefits to the citizens of the State and will stimulate development of the State's fishery resources;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Kodiak, Alaska that:

Section 1. The City of Kodiak supports the House Bill Number 262 submitted to the Twelfth Legislature of the State of Alaska entitled "An Act establishing a Fishery Industrial Technology Center as part of the University of Alaska; and providing for an effective date".

Section 2. The City of Kodiak will endeavor to provide a suitable site on Near Island for the Fishery Industrial Technology Center.

PASSED AND APPROVED this 1st day of April, 1981.

CITY OF KODIAK

BY: Alan J. Beardsley  
MAYOR

ATTEST:

Ray M. Baker  
CITY CLERK