COMMITTEE REPORT

SENATE

5/7/81

FURTHER: None

Date: May 28, 1981

Mr. President:

The Committee on FINANCE has had CSHB 262(Fin) am establishing a Fishery Industrial Technology Center as part of the U of A

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

[ ] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[X] replace with CS for CSHB 262(Fin) [ ] same title [ ] new title

and recommends Do Pass

[ ] AND attaches a "Letter of Intent" [ ] New Fiscal Note

[ ] reports it back without recommendation

[ ] referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

S 60 (Rev. 12/78)

Original sponsor: Zharoff

IN THE HOUSE BY THE FINANCE COMMITTEE

SENATE CS FOR CS FOR HOUSE BILL NO. 262 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

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

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

* Section 1. FINDINGS. (a) The legislature finds that

(1) there are large fishery resources in the waters off Alaska, primarily untapped by the industry of the state;

(2) these resources and the fishing industry are of vital importance to the state;

(3) one of the primary keys to the establishment of a state-based fishing industry is aggressive training coupled with strong research and development;

(4) Alaska has a responsibility to assist the industry in the development and wise use of fishery resources;

(5) the establishment of a technology training and research center under the University of Alaska is best able to aid the individuals and businesses in the development of fishery resources;

(6) the work of the center will provide significant employment benefits to the citizens of the state and will stimulate the development of the state's fishery resources.

* Sec. 2. AS 16 is amended by adding a new chapter to read:

CHAPTER 12. FISHERY INDUSTRIAL TECHNOLOGY CENTER.

Sec. 16.12.010. FISHERY INDUSTRIAL TECHNOLOGY CENTER. There is established a Fishery Industrial Technology Center as part of the

University of Alaska.

Sec. 16.12.020. DUTIES. The center shall create employment opportunities in the state's fishing industry and other benefits to the state by

(1) providing training opportunities to citizens of the state on the most efficient and appropriate technologies for the harvesting, processing and conservation of the fishery resources of the state;

(2) providing information and technical assistance on the adaptation of existing and new technologies to the users of the fishery resources of the state;

(3) providing research and development activities to adapt existing technologies to enhance the economic viability of the industry;

(4) providing research and development activities to create new technologies which will enhance the effectiveness of the industry, and provide economic benefits to state citizens; and

(5) encouraging joint projects between industry and government in order to use industrial experience and government programs to enhance the productivity of the industry.

Sec. 16.12.030. FISHERY INDUSTRIAL TECHNOLOGY POLICY COUNCIL. (a) A Fishery Industrial Technology Policy Council is established to provide program and planning guidance to the center. The policy council shall be composed of members of the state's fishing and processing industry.

(b) The policy council consists of seven members appointed by the president of the University of Alaska, including

(1) two members appointed from the seafood processing industry; the members appointed under this paragraph shall be owners or employees of firms which are in operation in the state and, insofar as

possible, shall represent diverse processing operations;

(2) two members who are commercial fishermen; the members appointed under this paragraph shall be actively engaged in commercial fishing in the state and, insofar as possible, shall represent fishing for diverse fisheries resources;

(3) three public members.

(c) A member of the policy council serves a term of two years.

(d) At least five members of the policy council shall be residents of the state.

Sec. 16.12.040. LOCATION. The principal activities of the center shall be located in Kodiak, Alaska.

Sec. 16.12.050. ANNUAL REPORT. The Board of Regents shall prepare an annual report of the center's activities and submit a copy of the report to the legislature by the 20th day of each regular session. The report shall include a description of the work conducted by the center, the training sessions held and number of students trained, and any other information which the Board of Regents determines should be included to describe the work of the center.

Sec. 16.12.060. COOPERATION WITH OTHER AGENCIES. In the development of its programs the center shall consult with

(1) the Department of Fish and Game;

(2) the Council on Science and Technology;

(3) the Alaska Renewable Resources Corporation;

(4) the division of economic development of the Department of Commerce and Economic Development;

(5) the Department of Natural Resources;

(6) the Alaska Fisheries Development Foundation;

(7) the Alaska Seafood Marketing Institute;

(8) the North Pacific Fishery Management Council;

(9) the National Marine Fisheries Service;

(10) the Department of Education; and

(11) the Department of Labor.

Sec. 16.12.070. DEFINITIONS. In this chapter

(1) "center" means the Fishery Industrial Technology Center;

(2) "policy council" means the Fishery Industrial Technology Policy Council.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-070(c).

Original sponsor: Zharoff

Offered: 4/14/81
Referred: Rules

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SCS jw CS FOR HOUSE BILL NO. 262 (Finance) ~~am~~

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AMENDMENT

OFFERED IN THE SENATE: BY: Senate HESS

TO: CSHB 262(Fin) am SENATE BILL No. _____

HOUSE BILL No. 262

PAGE: _____ LINE: _____

page 2, line 29: delete "and at least one employee not in management"

insert "or employees"

page 3, line 9 & 10: delete "(d) Each member of the policy council shall be a resident of the state. "

insert "(d) At least ~~eight~~ nine members of the policy council shall be residents of the state."

S 70

Original sponsor: Zharoff

Offered: 4/14/81
Referred: Rules

IN THE HOUSE BY THE FINANCE COMMITTEE

CS FOR HOUSE BILL NO. 262 (Finance) am

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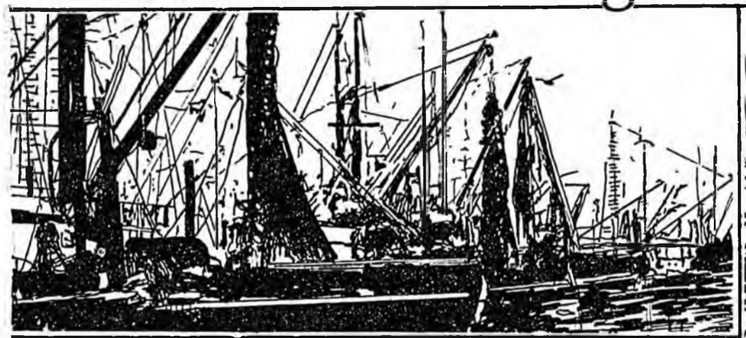
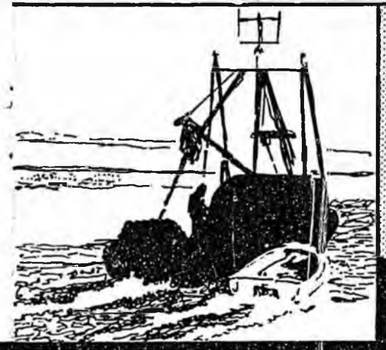
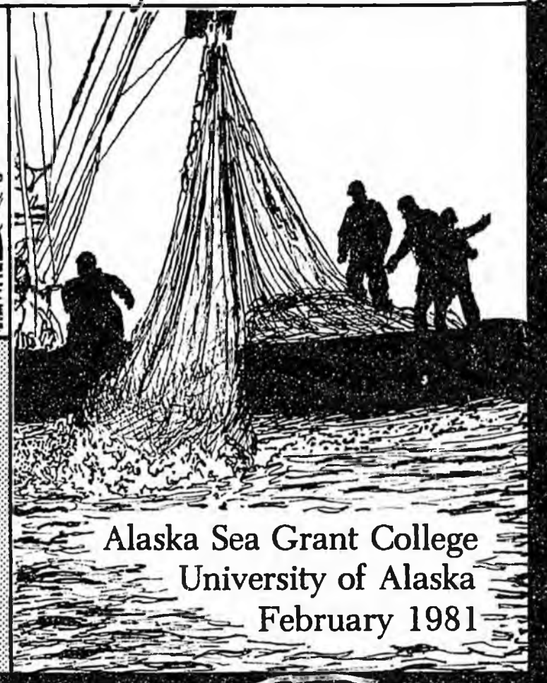
A Training and Technology Center for Alaska's Fishing Industry







Alaska Sea Grant College
University of Alaska
February 1981

A TRAINING AND TECHNOLOGY CENTER FOR ALASKA'S FISHING INDUSTRY

Alaska Sea Grant College
University of Alaska

February 1981

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
TOTAL	$24,300,000
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
TOTAL (per year)	$ 3,102,000

ACKNOWLEDGMENT

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.

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.

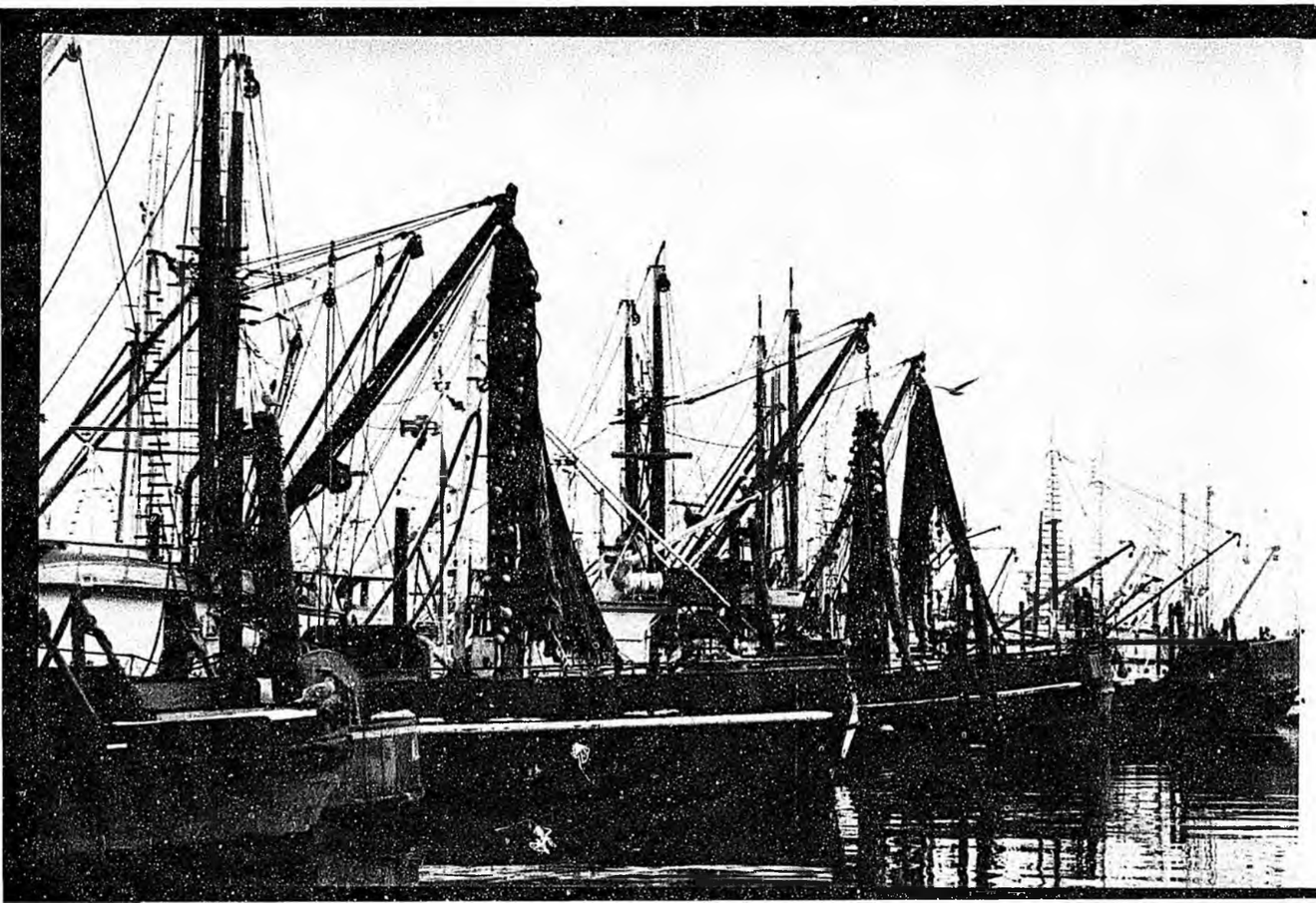
THE RESOURCES OFF ALASKA. . .

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.
—In 1979 $1.2 billion in fishery products were landed in Alaska by U.S. fishermen.
—Alaska has over 70 percent of the total United States Continental Shelf.
—Domestic fishing vessels and processing plants in Alaska represent $1.22 billion in capital investment.
—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 with 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.



FISHERY INDUSTRIAL TECHNOLOGY POLICY COUNCIL. . .

A Fishery Industrial Technology Policy Council will provide program and planning guidance to the Fishery Industrial Technology Center. The Policy Council is composed of leaders from the fishing and processing industries. It is composed of 11 members who are appointed by the President.

WHY A FISHERY INDUSTRIAL TECHNOLOGY CENTER? . . .

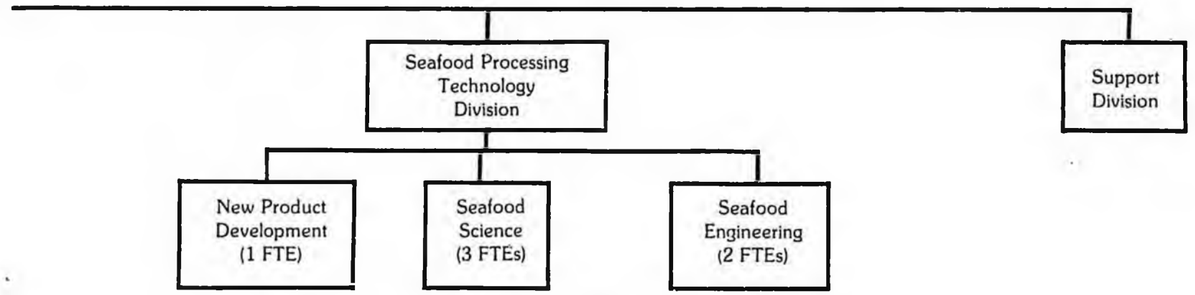
Why should Alaska invest in a technology center; why not just increase training through existing educational and extension programs to meet the needs of the fishermen?

For the Alaska fishing industry to effectively capture the massive fishery resources off 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.

THE CENTER, PRINCIPAL COMPONENTS, PROGRAM AREAS AND PROFESSIONAL EFFORT DISTRIBUTION



FACILITIES. . .

The Fishing Industrial Technology Center will be comprised of 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
Technical Library

Photo by John Doyle

Kodiak harbor

A FISHERIES PLAN. . .

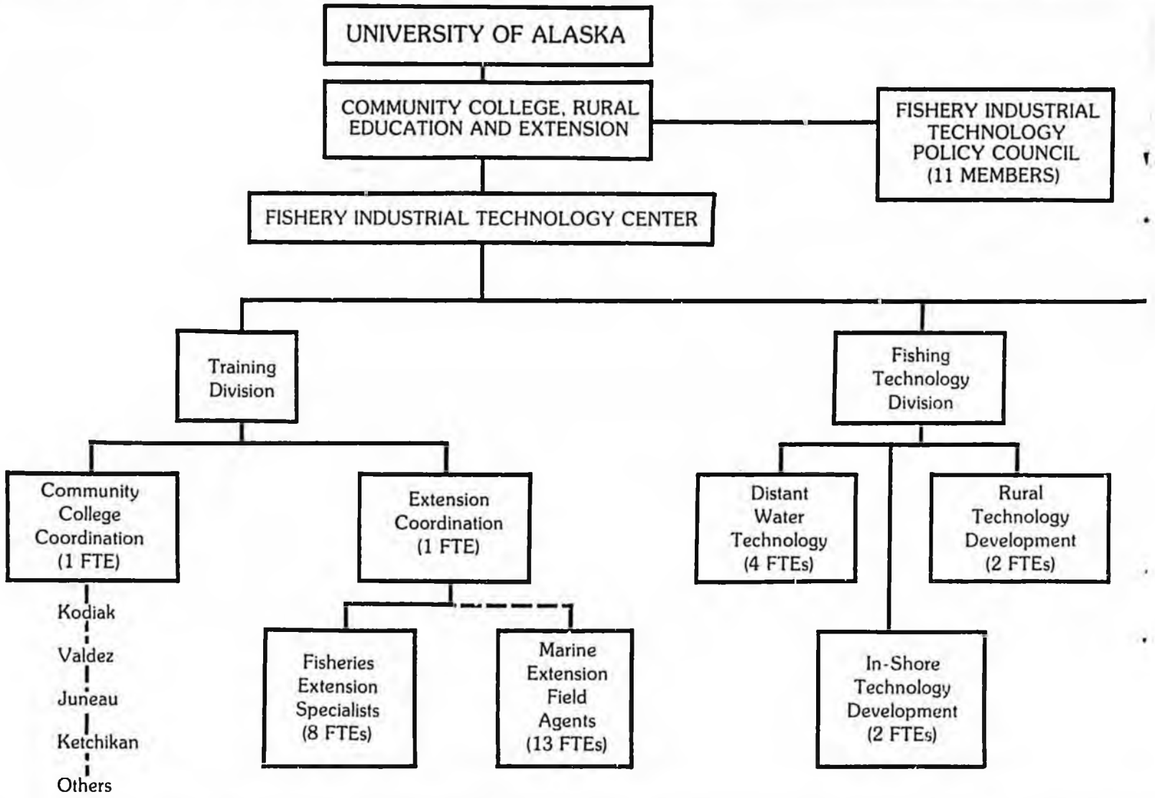
The State of Alaska has a strong constitutional and moral obligation to be concerned with the rational conservation and management of her natural resources while providing for the sound development of a fisheries industry. The University of Alaska has recognized its responsibility in assisting the state 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 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 development components of the University by establishing a new University unit—a Fishery Industrial Technology Center.

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



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.

TRAINING DIVISION. . .

Scope

The Training Division is designed to coordinate and conduct all the Center's educational activitites. 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.

Inside the Fredrich Busse

Photo by Hank Pennington

Photo by Hank Pennington

Seafood processing quality control

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 development, 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. . .

Sc[illegible]

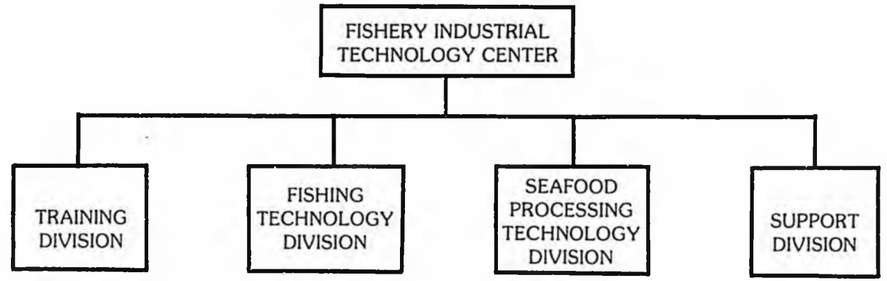
The Support Division will carry out all of the day-to-day administrative and logistic support activities of the Center. Activities will include operation of special Center facilities such as a flume tank, a training vessel, mobile training facilities, and special training equipment. This Division will 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.

Photo by Hank Pennington

Kodiak harbor

THE CENTER, ITS PRINCIPAL COMPONENTS



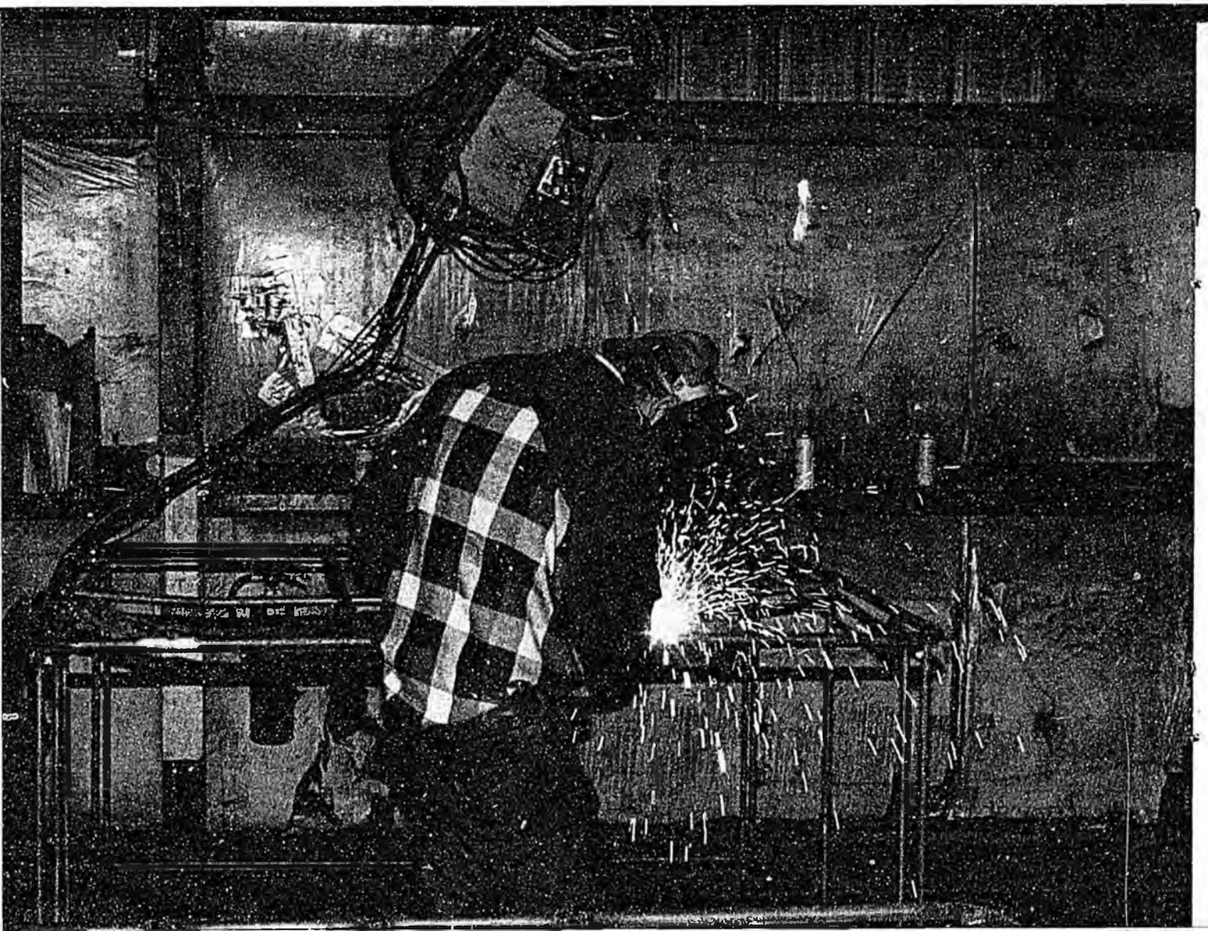


Photo by Hank Pennington

Welding king crab pots

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.

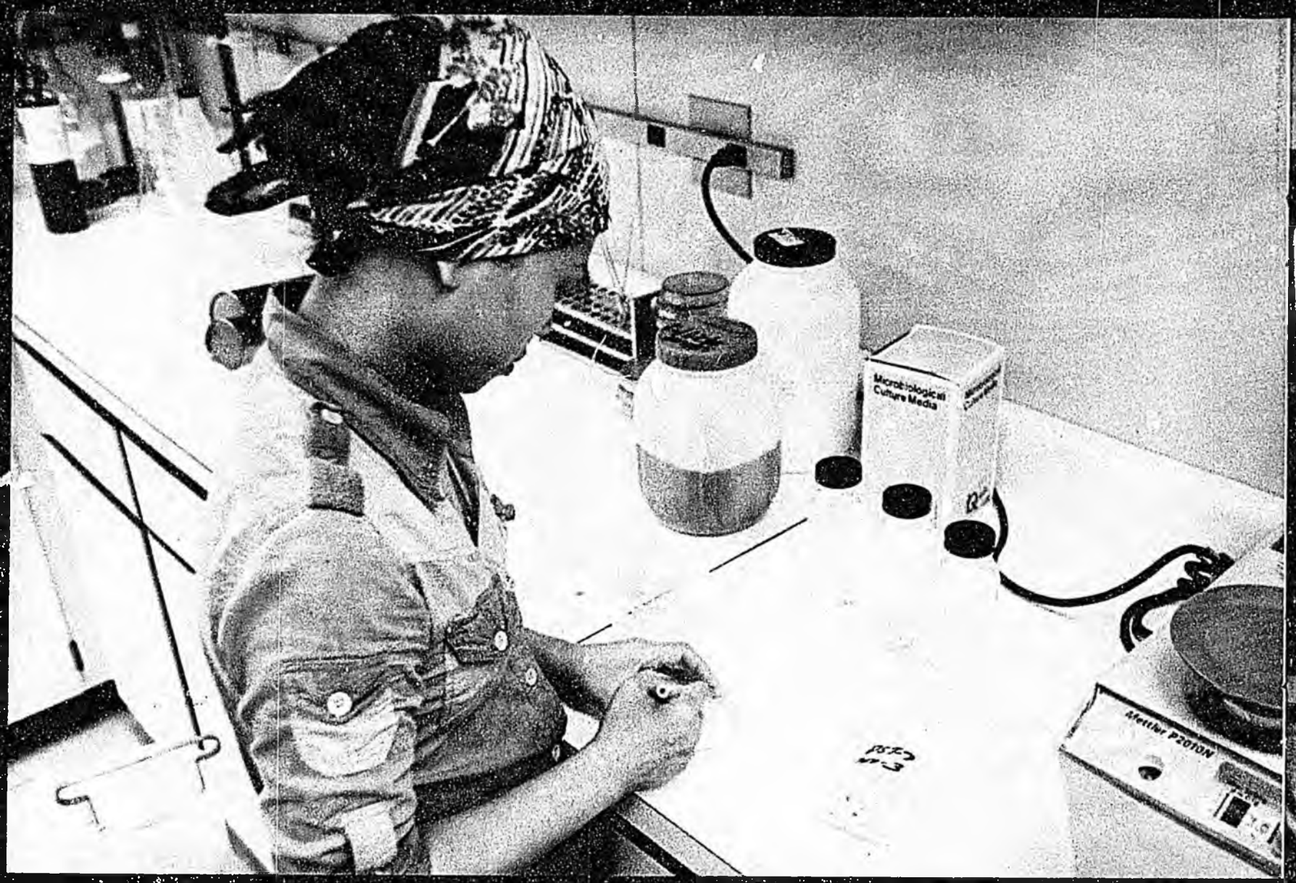
Programs

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.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