

COMMITTEE REPORT

SENATE

FURTHER:

3/7/86

Date 5/2/86

Mr. President

The Committee on FINANCE considered SB 453

relating to memorial scholarship revolving loans, crating the A.W. (Winn) Brindle memorial scholarship loan; efd.

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

- do pass
- do pass with attached amendment(s)
- replace with/or adopt CS for _____
- new title
- same title and recommends _____
- and attached a "LETTER OF INTENT" NEW FISCAL NOTE
- reports it back without recommendation D DOE
- recommends referral to _____ Committee

MEMBERS SIGNING
DO PASS

Jorgensen

MEMBERS HAVING
OTHER RECOMMENDATIONS

W. H. H. NO REC
Rick Halford NO REC
Paul F. F. NO REC
W. H. H. NO REC

Co- Chairman
No Rec
Chairman recommendation

STATE OF ALASKA 1986 LEGISLATIVE SESSION FISCAL NOTE

Revision Date : _____

REQUEST

Bill/Resolution No. : SB 453
 Title : RE: A.W. "Winn" Brindle
 Memorial Scholarships

 Sponsor : Zharoff
 Requestor : Senate HESS
 Date of Request : March 3, 1986

FISCAL DETAIL

Agency Affected : Education
 BRU : Postsecondary Education

 Components : Memorial Scholarship
 Loans

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	N.A.	-0-	-0-	-0-	-0-	-0-

CAPITAL						
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REVENUE						
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FUNDING : (Thousands of Dollars)

GENERAL FUND	N.A.	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS						
OTHER						
TOTAL	N.A.	-0-	-0-	-0-	-0-	-0-

POSITIONS :

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

ANALYSIS : Attach a separate page if necessary

No fiscal impact within the time of this note, since all funds are contributions, and repayments begin after schooling.

Prepared by : Kerry D. Romesburg, Executive Director Phone : 465-2854
 Division : Alaska Commission on Postsecondary Education Date : March 3, 1986

Approved by Commissioner : _____ Date : _____
 Agency : _____

Distribution (by Agency preparing fiscal note):

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

Age 3/7/86

Introduced: 2/18/86
Referred: Health, Education and
Social Services and Finance

1 IN THE SENATE

BY ZHAROFF

2

SENATE BILL NO. 453

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FOURTEENTH LEGISLATURE - SECOND SESSION

5

A BILL

6

For an Act entitled: "An Act relating to memorial scholarship revolving
loans, creating the A. W. (Winn) Brindle memorial
scholarship loan; and providing for an effective
date."

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9

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

11

* Section 1. AS 14.43.250(b) is amended by adding a new paragraph to
read:

12

13

(5) the A. W. (Winn) Brindle memorial scholarship loan
perpetuates the memory of A. W. (Winn) Brindle, who was the president
of the Wards Cove Packing Company and Columbia-Wards Fisheries and
whose death July 4, 1977, terminated a distinguished career dedicated
to the development of the Alaska seafood industry.

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* Sec. 2. AS 14.43.255(a) is amended to read:

19

(a) There is created a memorial scholarship revolving loan fund.
The fund shall be used to provide educational scholarship loans to
students selected under AS 14.43.250 - 14.43.325. Repayments [ALL
REPAYMENTS] of loans made under AS 14.43.250(b)(1) - (4) [PRINCIPAL]
shall be deposited [PAID] into the memorial scholarship revolving loan
fund and repayments of loans made under AS 14.43.250(b)(5) shall be
deposited into the scholarship revolving loan fund created under
AS 14.43.090. Repayments shall be used to make new [SCHOLARSHIP]
loans.

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* Sec. 3. AS 14.43.300(a) is amended to read:

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(a) A scholarship loan to a recipient under AS 14.43.250(b)(1) -

1 (4) [AS 14.43.250 - 14.43.325] may not exceed \$2,500 a school year for
2 an undergraduate student or \$5,000 a school year for a graduate stu-
3 dent, and [. LOANS] may not be made to a student for more than six
4 years. A scholarship loan to a recipient under AS 14.43.250(b)(5) may
5 not exceed the cost of tuition and required fees, books and education-
6 al supplies, room and board, and transportation for two round trips
7 between the recipient's home and school each year. A loan under
8 AS 14.43.250(b)(5) may not be made for more than five years of under-
9 graduate study, five years of graduate study, or a combined maximum of
10 eight years of study.

11 * Sec. 4. AS 14.43.300(b) is amended by adding a new paragraph to read:

12 (5) a A. W. (Winn) Brindle memorial scholarship loan may be
13 used only to pursue a certificate or degree program in an accredited
14 school, college, or university in fisheries, fishery science, fishery
15 management, seafood processing, food technology, or other closely
16 related field.

17 * Sec. 5. AS 14.43.300(c) is amended to read:

18 (c) The recipient of a memorial scholarship loan shall be a
19 resident of Alaska and [EITHER

20 (1)] enrolled or eligible for enrollment as a full-time
21 [UNDERGRADUATE OR GRADUATE] student in a certificate or [LEADING TO AN
22 ASSOCIATE, BACCALAUREATE OR GRADUATE] degree program in a field listed
23 in (b) of this section that is appropriate to the memorial scholarship
24 loan received [;

25 (2) A GRADUATE OF A HIGH SCHOOL, OR SCHEDULED FOR GRADUA-
26 TION FROM A HIGH SCHOOL WITHIN SIX MONTHS, WITH SUFFICIENT ACADEMIC
27 CREDITS TO BE ADMITTED TO A COLLEGE OR UNIVERSITY INTENDING TO PURSUE
28 A COURSE OF STUDY LEADING TO A DEGREE IN ONE OF THE FIELDS LISTED IN
29 (b) OF THIS SECTION THAT IS APPROPRIATE TO THE MEMORIAL SCHOLARSHIP

1 LOAN RECEIVED; OR

2 (3) AN OFFICER OR EMPLOYEE OF A DEPARTMENT, AGENCY OR
3 MUNICIPALITY IN THE STATE WHO INTENDS TO PURSUE A COURSE OF STUDY IN
4 THE OFFICER'S OR EMPLOYEE'S PROFESSIONAL FIELD LEADING TO A DEGREE IN
5 ONE OF THE FIELDS LISTED IN (b) OF THIS SECTION APPROPRIATE TO THE
6 MEMORIAL SCHOLARSHIP LOAN RECEIVED].

7 * Sec. 6. AS 14.43.305(a) is amended to read:

8 (a) Memorial scholarship loans under AS 14.43.250(b)(1) - (4)
9 shall be noninterest-bearing and security for the loan may not be
10 required. However, the note signed by the recipient shall provide for
11 the payment of attorney fees, costs of court and skip-tracing fees if
12 any are incurred in collection of the unpaid amount owed on the loan.

13 * Sec. 7. AS 14.43.305(e) is amended to read:

14 (e) A recipient of a memorial scholarship loan under AS 14.43.-
15 250(b)(1) - (4) [AS 14.43.250 - 14.43.325] who graduates from a degree
16 program shall receive forgiveness of one-fifth of loan indebtedness
17 for each one-year period the recipient is employed full time in Alaska
18 in

19 (1) law-enforcement or related fields, if a recipient of a
20 Michael Murphy memorial scholarship loan;

21 (2) criminal law, criminal justice or other closely related
22 fields, if a recipient of a Carroll L. "Butch" Swartz memorial schol-
23 arship loan;

24 (3) a recognized branch of the engineering profession or
25 other closely related fields, if a recipient of a Harvey Golub mem-
26 orial scholarship loan; or

27 (4) education or public administration, or other closely
28 related field, if a recipient of a Robert L. Thomas memorial scholar-
29 ship loan.

1 * Sec. 8. AS 14.43.305(g) is amended to read:

2 (g) A recipient who does not qualify for forgiveness of all or a
3 part of the loan made under AS 14.43.250(b)(1) - (4) [AS 14.43.250 -
4 14.43.325] shall begin repayment of the unforgiven portion within six
5 months after leaving employment, or terminating studies, in

6 (1) law enforcement or related fields, if a recipient of a
7 Michael Murphy memorial scholarship loan;

8 (2) criminal law, criminal justice or other closely related
9 fields, if a recipient of a Carroll L. "Butch" Swartz memorial schol-
10 arship loan;

11 (3) a recognized branch of the engineering profession or
12 other closely related fields, if a recipient of a Harvey Golub memori-
13 al scholarship loan; or

14 (4) education or public administration, or other closely
15 related field, if a recipient of a Robert L. Thomas memorial scholar-
16 ship loan.

17 * Sec. 9. AS 14.43.305 is amended by adding a new subsection to read:

18 (i) To the extent they are not in conflict with terms and con-
19 ditions under AS 14.43.250 - 14.43.325, the terms and conditions of a
20 memorial scholarship loan made under AS 14.43.250(b)(5) are the same
21 as the terms and conditions for a scholarship loan under AS 14.43.-
22 090 - 14.43.160.

23 * Sec. 10. AS 14.43.310 is amended by adding a new subsection to read:

24 (c) In selecting from among eligible applicants for award of a
25 memorial scholarship loan under AS 14.43.250(b)(5), the administering
26 authority shall give preference to applicants nominated by private
27 donors to the A. W. (Winn) Brindle memorial scholarship loan account
28 in the memorial scholarship revolving loan fund.

29 * Sec. 11. This Act takes effect July 1, 1986.

ANALYSIS FOR SENATE BILL 453

An Act relating to memorial scholarship revolving loans, creating the A.W. (Winn) Brindle memorial scholarship loan and providing for an effective date.

Senate Bill 453 would establish the A.W. (Winn) Brindle memorial scholarship loan program to provide loans for courses of study in fisheries, seafood processing, food technology and related fields. Loan terms and conditions would be the same as for student loans (currently \$6,000 maximum, 5% interest, 10-year terms, 1-year grace period and 50% forgiveness). Repayments of Brindle loans would be deposited into the student loan revolving loan fund.

House Bill 58, which is currently in the Senate Finance Committee would allow a 50% tax credit to fish processors for certain expenditures, including contributions to the Brindle Memorial Fund. Per current statute, funds could be accepted from other private sources as well. Brindle, past president of the Wards Cove Packing Company, had a "distinguished career dedicated to the development of the Alaska seafood industry."

There is no fiscal impact.

Dedication

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This year's Annual Report is dedicated to A. W. "Winn" Brindle, who passed away July 4, 1977, at Red Salmon Packing Company in Naknek. This dedication reflects our sincerest gratitude for the valuable contributions Winn made to Alaska's fishing industry and for his wise counsel and keen interest in the affairs of the bank.

Winn served the bank as a director for over 40 years. He first became a director of the Miners and Merchants Bank of Ketchikan in 1934. When that bank and five others consolidated as the National Bank of Alaska in 1960, he was elected to the original Board of Directors, a position held until his death.

Winn came to Alaska as a young child in the early 1900's and was educated in the Ketchikan school system, and attended the University of Washington. Although Winn was noted primarily for his contributions to and accomplishments in the fishing industry, he had a diversity of other business interests. Together with other business associates he developed the Northland Transportation Company, a marine transportation company, which served the major ports of Southeastern Alaska and which was eventually purchased by the Alaska Steamship Company. In the 1930's he was involved with a tugboat and mining venture on Prince of Wales Island. In 1934 he was named director of the Miners and Merchants Bank of Ketchikan. Shortly thereafter he became a major stockholder and became active in the operation of the Tongass Trading Company of Ketchikan.

Winn first became actively involved in the fishing industry when as a young man, with his brother Harold, he purchased a seine boat. In 1928 he and Harold bought the Wards Cove Cannery. From that beginning he expanded to cannery operations throughout Alaska. In 1977 Winn and his associated companies had fishing operations in Ketchikan, Excursion Inlet, Port Bailey, Alitak, Naknek, Chignik, Hoonah, Kenai, Kodiak, Ekuk, Egegik, Koggiung, Libbyville, Craig, Moser Bay, Petersburg, George Inlet, Port Otto, and Ouzinkie, comprising the largest salmon processing organization in Alaska.

In 1969 the Alaska State Chamber of Commerce named him the "Outstanding Alaskan." In further recognition of his diversity of interests the Holy Catholic Church of Ketchikan named one of their school buildings Brindle Hall.

During World War II, Winn was awarded the Legion of Merit while serving in the Aleutian campaign and attained the rank of Major in the U. S. Army.

His wisdom and experience contributed much to the development of all of his associates. The success of Alaska's fishing industry to which he dedicated his career, are monuments to his strength of character, his dedication and personal integrity. The country that he served, the fishing industry that he loved, and his associated companies share a distinguished heritage. He will be sorely missed.

Alaska State Legislature

Advisory Council Members
Senator Bennett, Chairman
Senator Abood
Senator Kerttula
Senator Sackett



PO Box 1
State Capitol
Juneau, Alaska 99811
Phone: (907) 465-3114

Senate Advisory Council

MEMORANDUM

TO: Senator Zharoff
Alaska State Legislature

FROM: Bill Hall *WH*
Senior Advisor

DATE: March 4, 1986

RE: Seafood Industry Training and Educational Programs

It has recently been reported that the Alaska seafood processing industry has a poor record of Alaska hire. One reason for this is the lack of Alaskans qualified to assume many of the skilled job positions required by the industry. As I know you are aware, most Alaskans work in the unskilled positions in the seafood processing plants while the skilled positions are filled by people from outside of the State. These positions include processing machinery, maintenance and repair technicians, refrigeration specialists, bookkeepers, accountants, production managers, quality control technicians, and plant superintendents. There is no reason why Alaskans cannot be trained to fill these jobs.

The future potential of Alaska's seafood industry and the opportunity to create new value for Alaskans from our fishery resources has never been greater. But for us to achieve that potential we must develop the skills of Alaskans so that they will be the ones who apply the modern technologies that are necessary for the development of the new product forms that are demanded by market place. Alaskans will not benefit from future opportunities if they are not capable of recognizing those opportunities and if they are not prepared to meet the challenge of those opportunities.

The University of Alaska has done a poor job in identifying the skills needed by the State's seafood processing industry. The lack of progress on the Kodiak based Alaska Fisheries Industrial and Technology Center is an example of their lack of interest in this area of education. We should ask the question, "Why has the State of Alaska not developed a plan for the education of Alaskans interested in working in the most labor intensive industry in the State?" A plan should have been developed years ago that included programs to meet these basic educational and economic needs of the State's residents.

Such programs would not require the University to provide all of the training and educational programs. A prudent plan to improve Alaskan's skills in this area should take advantage of resources available from other

Senator Zharoff
March 4, 1986

sources such as the University of Washington's Institute for Food Science and Technology, the Clover Park Vocational-Technical Institute in Taccma, Washington, and the Humberstone College of Higher Education's School of Food Studies in Grimsby, England which offers educational programs aimed at students from third world countries. (In the case of the seafood processing industry, it sometimes appears that Alaska is treated as a third world country by the executives of the major seafood processing companies.)

I have included for your consideration, copies of information on the aforementioned educational institutions. If you are interested in this subject, there may be some value in directing the attention of appropriate U of A officials to the need. Please let me know if you have any interest in this subject or if I can provide you with any additional information on it.

Enclosures

AWH:er

cc: Representative Hermann

Clover Park Vocational-Technical Institute

4500 Steilacoom Boulevard S.W.
Tocoma, Washington 98499-4098
(206) 584-7611

Operated by Clover Park School District No. 400

- VOCATIONAL-TECHNICAL CAREER TRAINING
- ELECTIVE HIGH SCHOOL
- SUPPLEMENTAL/CONTINUING EDUCATION

Employment Preparation
Vocational Skill Improvement
Adult High School Completion
Adult Basic Education
Community Service
Special Vocational Projects

ALSON E. GREEN, Jr.
Administrator for Vocational Education
Director, Voc-Tech Institute

CHARLES ALEXANDER
Superintendent
Clover Park School District 400



General Advisory Committee

Dez Isaacson	Donald R. Toney
Harvey Kaufman	Chuck Gross
Dorothy Kippie	Mike McGowan
Mitch Mullan, Jr.	Morlene Scavo
C.F. (Chuck) Gorden	Dr. Edmund A. Kanar
Anrialse Louer	H. Russ Peters

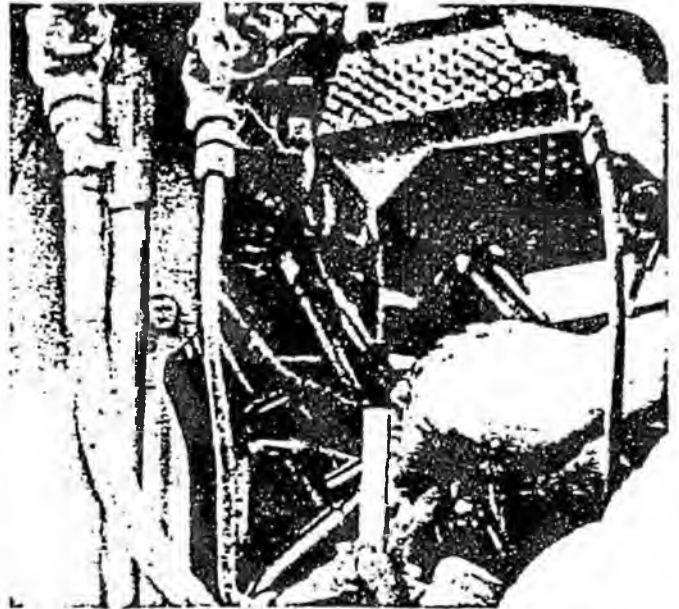
Board Of Directors

Joe M. Ghilarducci, President
Mary V. Madden, Vice President
John C. Dimmer
Donald G. Johnson
Paul C. Wulfestieg

Food Processing Machinery Maintenance and Repair Technician

Job Description

Food Processing Machinery Maintenance and Repair Technicians may perform routine maintenance on a variety of equipment found in food processing businesses such as breweries, meat packing companies, fish canneries, vegetable packers, candy companies, and dairies, for example. The technician may be assigned a specific area of responsibility which may include all the maintenance and repair, adjustment and lubrication of a certain group of machines in a large processing plant. In a smaller plant, he/she may be given total responsibility for keeping all the equipment maintained. Technicians install new equipment, move and level machinery, connect electricity and hydraulic power to the machinery and make necessary adjustments and tests to insure proper operation of new machinery.



To Qualify For Admission

Applicants must be 18 years of age by completion of the course, and be interviewed by an instructor.

Desirable Qualifications

Mechanical aptitude, basic math skills, good physical condition, and high school diploma or GED equivalency by completion of the course

Advisory Committee

Robert F. Morgan	William K. Street	Jack N. Miller
Dick Nelson	Jim Poor	Dick McEntee
Roger De Camp	Rod Sorensen	Mickey VanZile

Instructor

Lance Gilkey

Schedule of Training

84 weeks - 2520 hours
8:00 a.m. to 3:00 p.m.
Monday through Friday

How and When to Apply

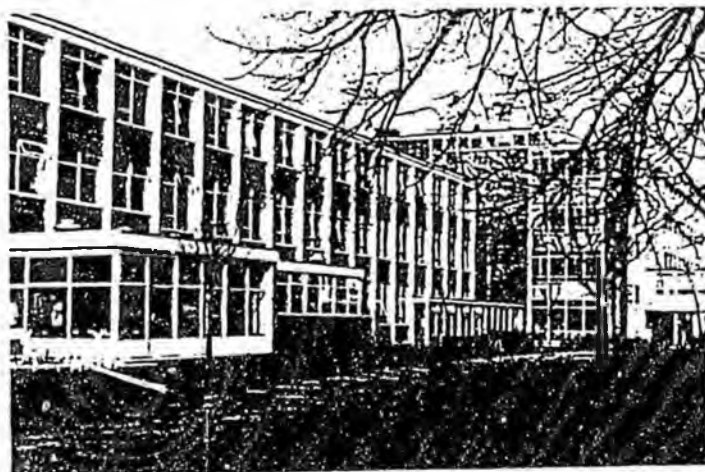
Interested persons may apply anytime during the year. Enrollment in this class is continuous. Early application is recommended to avoid a long wait.

More information about this course will be available from the instructor at 3:00 p.m. on the second and fourth Wednesday of every month. Any person is welcome to attend one of these sessions without appointment.

Course Content

- Safety Indoctrination
- Hand Tools
- Basic Welding
- Basic Machine Shop
- Basic Hydraulics and Pneumatics
- Blueprint Reading
- Basic Electricity
- Power Transmission
- Bearings and Lubricants
- Machine Assembly
- Machinery Overhaul and Repair
- Packaging Closures
- Closing Machines
- Filling Machines
- Food Sterilization Equipment
- Slicers, Cutters, and Butchering Machinery
- Vacuum Pumps and Air Compressors
- Packaging Materials
- Vacuum Formers and Sealers
- Weighing Machinery and Dud-Detectors
- Transfer Systems
- Drite-Stack and Casing Equipment
- Box-Formers, Labelers and Sealers
- Refrigeration

British college makes processing a priority



Part of the Grimsby site of the Humberside College of Higher Education.

School of Food Studies doubles its fish space

A BRITISH college that started teaching fish processing in a small way about ten years ago, now has an international reputation as one of the leading centres of food science and technology and attracts students from many countries.

The college concerned is the Humberside College of High Education, and its Grimsby-based School of

Food Studies, headed by Dr. Bryn Arthur, has become highly regarded in many countries. Not only do many Grimsby graduates now hold senior positions in the fish processing industries and institutes of their own countries, but the School of Food Studies has become widely consulted abroad as well as at home.

In 1983, the School of Food Studies and other advanced work in the Grimsby College of Technology was merged with the Hull College of High Education to form the new Humberside College of Higher Education, with main sites at Hull and Grimsby. The School of Food Studies has excellent facilities for food science and technology including specialist laboratories for fish processing, product development, microbiology, biochemistry, food science and analysis/food quality control.

To meet increasing demand for its services, the School is just completing extensive remodelling and extension work that will almost double the space available for fish processing practical work and fish microbiology.

The School provides a comprehensive range of courses at technician, technologist, degree and post-graduate levels. These include National Diploma and High National Diploma in Food Science/Technology, BSc Industrial Food Technology and Post-Graduate Diploma in Food Technology (Fish Processing). In all these courses fish science/technology is offered as a specialist option.

Short specialist courses, designed in collaboration with industry and overseas agencies/governments, are



Dr. Steve Hanson. He directs the research activities of the School of Food Studies.

an integral part of the School's work. Recent courses have included fish quality assurance management and cold storage.

The School of Food Studies, in addition to a very active course programme of its own, has worked closely with the College's School of Fisheries Studies in developing the recently introduced three-month course in Fisheries Planning and Management, which is aimed primarily at overseas students. One week of this course is spent on fish processing at the Grimsby site.

The School makes major contributions in fish science, processing and quality control to the long-established Diploma in Fisheries Management — which about 300 students, mainly from overseas have attended over the last ten years — and the more recent BSc in Fisheries Studies. In the latter, the fish science, processing, microbiology and quality control are taught by the School staff, and represents nearly one-third of this course.

But the course that the School of Food Studies is perhaps most proud of is its Post-Graduate Diploma in Food Technology (Fish Processing), which around 200 men and women have attended over the past ten years. Starting out as a joint Tropical Products Institute-Grimsby College of Technology course in prawn processing, this highly regarded course now attracts about 20 students a year, most of

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Research student Rick Salter carrying out a fish



A. K. Deb, an MPhil student from Bangladesh determining protein content of shellfish.

whom are from tropical developing countries.

Students of varied backgrounds from 40 different countries have attended this post-graduate course, and the Humberside College's School of Food Studies has developed a close relationship with many of their institutions, particularly in Mexico, Portugal and Indonesia.

A few years ago the School ran a special fish processing diploma course for a dozen or so Mexican students, and since then Dr. Arthur has advised the Mexican government on the design and purchase of equipment for a fish/food studies department at the Veracruz polytechnic. Bill Homer, another of the School's staff members, has also advised on staff training and curriculum development in Mexico.

Another consultancy project, for the new Politecnico De Faro in Portugal, also concerns the design and planning of fish technology facilities and the training of staff members at Grimsby. This project, headed by Dr. Arthur and commenced last year, will be ongoing for a two or three year period and may result in the establishment of a formal link between the School and the Politecnico.

The Humberside College's Post-Graduate Diploma in Food Technology (Fishes Processing) which prepares students for higher teaching, research or fish processing posts in their own countries, is designed to familiarise the participants with all aspects of handling, preservation, processing and distribution of fish. Particular emphasis is given to a study of methods to make more effective use of fish, to reduce wastage and spoilage, and to explore new products and methods.

A particularly flexible course, its programme of study is designed for each individual student and consists of units that reflect his or her requirements. As part of the programme the student usually undertakes a research project, and practical work plays an important role.

A study programme for this course consists of five units in addition to three foundation units of food preservation, food science and food microbiology, and a project unit (or a unit to

meet the special needs of the student/sponsor).

A typical fish processing programme includes units on fish processing science, fish processing technology, fish microbiology and food analysis, plus food packaging, or food quality assurance management or business organisation.

Topics covered in the fish processing science unit include yield of edible flesh, composition and analysis; post-mortem changes in fish; thaw rigor, fillet shrinkage and drip loss; proteolysis; rancidity, changes in odour, flavour and texture; quality assessment methods; and chemical aspects of smoking, curing and salting.

The unit on fish processing technology also covers a wide range of topics including icing and refrigerated seawater; salting and smoking; canning, freezing; fish meal and FPC production; marinating; shellfish processing; fermented fish products; and other items such as fish sausages and fish cakes.

Fish microbiology covers taxonomy and identification of fish microflora; fish-borne food poisoning; processing hygiene; plant sanitation; growth of micro-organisms at chill temperature; high temperature preservation; causes of spoilage in canned products; and microbiological quality control.

Many students gaining the Post-Graduate Diploma at Credit or Distinction level proceed to MPhil/PhD by part-time or full-time research at the Grimsby School of Food Studies. Fourteen students over the past five years have completed research for higher degrees on fish processing topics.

Research in the School, which is directed by Dr. Steve Hanson, reader in Food Studies, is in general of an applied nature, carried out in collaboration with industry and overseas agencies/governments.

The School's expertise and reputation in areas of fish technology was an important factor in obtaining a major research contract from Britain's Overseas Development Administration (ODA) to investigate cured fish spoilage in Burma, Indonesia, Malaysia, Philippines and Thailand.

The aims of this project, which has been funded over four years with possible



A student operates a retort during a fish canning practical at the School of Food Studies.

extension for a further three years, are to assess the losses that occur, to develop means of reducing them and to investigate potentially harmful compounds in cured fish. Field work is carried out mainly in Indonesia, and involves collaboration with the national fish research centres.

MPhil/PhD students presently investigating cured fish at Grimsby include R. Ibrahim of Indonesia, who is studying ways of improving the quality of the salt-boiled fish known in her country as 'Pindang', and a student from the Seychelles, who is looking at histamine development. Other researches are examining losses due to blowfly infestation, potentially toxic compounds and water activity in relation to spoilage.

Another important research topic is concerned with the development of flesh/bone separation techniques for fish mince production — particularly from small unquitted pelagic fish — formulation of products such as fish balls, sausages, dried salted mince cakes, and assessment of their storage ability with particular emphasis on rancidity development.

Two overseas research students working on this project are Sadr Tausin of Indonesia, who is investigating shark products, and a Filipino, E.T. Banishan, who is looking into the control of rancidity development.

A third research project is concerned with the quality changes that occur during storage and processing of fish and shellfish and involves the development and application of both chemical and bacteriological methods.

Grimsby research students working in this area include N. Rebelo of Portugal, who is examining the effects of inadequate storage temperature on the quality of frozen hake, and A.K. Deb of Bangladesh, who is interested in factors affecting the quality of frozen shellfish.

Another important research topic being investigated at Grimsby is concerned with the incidence and stability of nutritionally important fatty acids and lipid-soluble vitamins, as well as with the potential toxicity of lipid degradation products.

Two overseas students are currently engaged in research in this area. They are N.H. Ahmad of Iraq, who is looking at the effects of processing and storage on fatty acids in fish, and Sunarya of Indonesia, who is investigating nutritional aspects of shark liver oil.

Further information on courses, research or consultancy from Dr. Bryan Arthur, Head of School of Food Studies, Humberside College of Higher Education, Nun's Corner, Grimsby, South Humberside DN34 5BQ, England.



IBERCISA, the Comercio Industrial SA, founded in 1963, is dedicated to design, fabrication and fitting of deck machinery for fishing and merchant vessels, under our own technology.

As a complement to our activities on this field, IBERCISA makes on board installations, vessel repairs and conversions.

The firm diversification and supply, added to its marine QUALITY, EFFICIENCY, ECONOMY, lets IBERCISA be very competitive and gives a great coverage for penetration on the home market and abroad, where IBERCISA deck machinery has been installed on boats from more than thirty countries, operating to the utmost satisfaction of the owners.

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FISHING VESSELS

- Main fishing vessels up to 1000 tons and more tonnage
- Net drums
- Shrimp trawl cranes
- Net hoisting gear
- Auxiliary cranes for trawlers and more tonnage
- Power blocks for purse seiner nets
- Link pumps
- Winches for fishing vessels, platform, and more tonnage
- Hydraulic cranes
- Anchor winches
- Hoisting gears



get fish cheaper

A NEW fish distribution centre for Mexico City will greatly increase the supply of low-priced seafood to the urban area's 15 million consumers.

The government's distribution agency wants to provide cheap fish to compensate for the growing shortage of meat in Mexico. The aim is to make such fish as bonito, mackerel, mullet and tuna available for less than 60p a lb.

Consumption

As a result of a fish promotion programme, the per capita consumption of fish in Mexico is reported to have increased from about seven lb in 1982 to 22 lb in 1984.

TWENTY-ONE senior fisheries people from developing countries have recently completed the second Fisheries Planning and Management Course at the Humberside College of Higher Education in England.

Participants this year came from Bangladesh, Belize, Brunei, St. Helena, Indonesia, Maldives, Mexico, Nigeria, Seychelles, Somalia, Sri Lanka, Tanzania and PDR Yemen.

Commenting on the course, Wale Sologhade, marketing manager with the Lonrho group's John Holt company in Nigeria (Africa) said: "This was a very interesting management course in its own right, quite apart from the fisheries content, which was itself very useful as I come from a non-fisheries background."

Mr. Sologhade said he was also impressed by the way the course met his needs as someone from the private sector.

Another participant, K.

Nissanga from Sri Lanka, found the course "very sharp", while Dr. Sumpeno Putro of Indonesia said that he hoped his attendance on the course would be the beginning of an era of close co-operation between the Humberside college and fisheries institutions in his country.

This year's Fisheries Planning and Management Course built on the experience of the first one run in 1984 and reported in *FNI* in June that year. Added emphasis in 1985 was

Humberside College completes another successful course in Fisheries Planning and Management

given to areas such as investment appraisal techniques and management skills, the same process of refinement and improvement will go on into 1986 when the School of Fisheries Studies plans to extend the depth of treatment of some subjects.

Said course director Andrew Palfreman: "If I were asked to select the high spots out of a course already pitched at a consistently high level I would pick the sections on management skills, management accounts and finance, investment

appraisal techniques and the Law of the Sea.

"We continuously review, by means of discussions and questionnaire, the reaction of course participants to the quality of material presented to them, and this gives us a guide in planning of future courses and an indication of those areas which they have found the most useful.

"This is a full-cost course and one of our objectives is for participants to return home feeling that they have received value for money. Accordingly, we attach a lot of importance to the course evaluations completed by participants and use them in planning for the future."

In the section on management skills, a member of the College's staff introduces participants to the techniques which can improve their interactive skills and help them to become better managers. Therefore, over a period of three days they receive mostly new material and then have an opportunity to exercise the skills in group exercises.

This area of management education is developing rapidly and is of great assistance to men and women in all types of management, said Mr. Palfreman. It exercises and improves such areas as group performance, employee evaluation and leadership skills. It also helps the participants to

define more effectively their own roles and organisation.

Mr. Palfreman pointed out that course participants often come from a biological or administrative background, and some have only a hazy and intuitive grasp of accounting and finance concepts. The section of the course on business management and accounts therefore gives participants an understanding of accounting principles and their application to the fish industry.

This section of the course is designed to improve understanding of the way businesses work. Participants leave the course with the tools to undertake extension work in fish industry businesses and to give informed practical advice on organisation and management of fisheries development projects.

One of the leading problems in development today is the improvement of the allocation of investment resources. Government and international agencies have attached a great deal of importance to the objective of increased economic efficiency through the improvement of investment decisions.

The development of techniques of investment appraisal has proceeded rapidly in recent years. Mr. Palfreman said it is essential that senior personnel in developi

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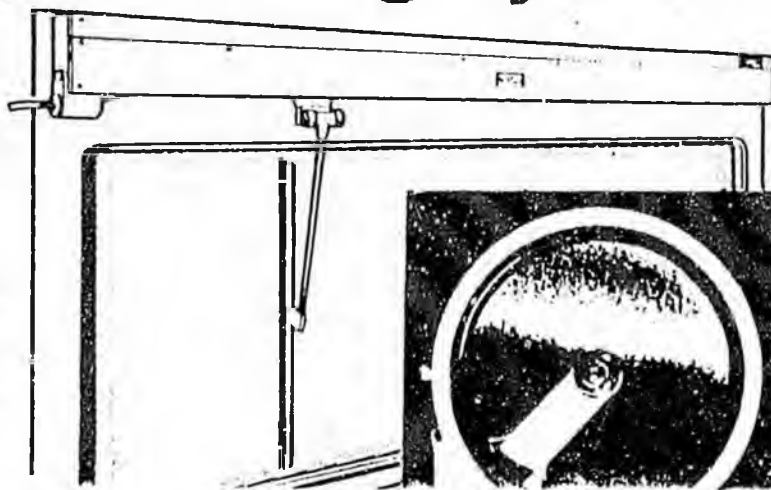
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The 1985 course participants.



College lecturer Chris Pyke teaching management skills.

countries should understand them, so that they can meet the requirements of international funding agencies and critically appraise the work of consultants employed to examine projects.

This Humber-side course is designed to cover all the major issues in project appraisal related to fisheries. Project sequence, project identification and design, measures of the worth of a project, capital structures, financial appraisal, economic appraisal, shadow pricing, bordering pricing, measurement of consumer benefits, risk and uncertainty are some of the topics covered.

The section on the Law of the Sea is taught by David Freestone, an expert in marine law based at the University of Hull. Again, this part of the course presents new material to participants who have not often been faced with the intricacies of international law.

There are also sections on economics, development economics, fisheries bioeconomics and management, joint ventures, fish processing and preservation, computers,

institutions and the fish industry, co-operatives, aquaculture and monitoring, control and surveillance.

The College is able to make use of a wide range of speakers from outside the academic world. For example, economist David Insull spoke on the development of markets for tuna, consultant W.P. Appleyard gave a talk on joint ventures and development, while Mike Hatfield spoke to the course on international tendering procedures, a discussion which many participants are said to have found very useful.

Crick Carleton of Nautilus Consultants made a useful contribution on small businesses in the fish industry. Drs. Steve Lockwood and Mike Pawson of the Ministry of Agriculture, Fisheries and Food's Lowestoft Laboratory, dealt with biological aspects of fisheries management, while Tropical Development and Research Institute economist, Peter Walters, gave an interesting lecture on feasibility studies for a fisheries development project in Bolivia.

These and others brought

practical outside experience to the course and helped to maintain the lively interesting level of the content.

A significant component of the course concerns aquaculture. The supervisors of this section are Drs. Ahmad and Ratcliffe, both senior lecturers at the Humber-side College. Dr. James Muir of the University of Stirling's Institute of Aquaculture also teaches a part of this module.

In 1985 the course included visits to two local fish farms rearing carp and rainbow trout.

The local farms are in a temperate zone and obviously face problems which are often very difficult from those in the participants' own countries, acknowledged Mr. Palfreman. Nevertheless, he said, it is useful to see how technology can be applied in different locations, and how fish farmers have arrived at sometimes unexpected solutions.

The aquaculture component of the Fisheries Planning and Management Course is orientated towards the business of fish farming.

It presupposes some knowledge of the technical side. Course planners want the participants to see fish farming from an economic and commercial angle.

Mr. Palfreman emphasised that the course is a full-cost one and the Humber-side College has no resources to provide scholarships. In 1985 two participants were funded by their own organisations. The remaining 19 were funded by the British Council, NORAD, FAO, the Federal Republic of Germany and US Aid. In 1984 the course was also supported by UNESCO and the EEC. There are also other potential funding agencies which the prospective applicant could approach.

● The course will be repeated in 1986 between 7 April and 27 June. For further details write to Andrew Palfreman, Course Director, Fisheries Planning and Management School of Fisheries Studies, Humber-side College of Higher Education, Cottingham Road, Hull HU6 7RT., United Kingdom.

for 168,000-ton marine harvest

YUGOSLAVIA's fishing industry expects its total catch of marine and freshwater fish to reach 100,000 metric tons this year. But this total is seen as still below the potential of the Adriatic and the lakes, rivers and fish farms.

The industry is introducing a series of measures intended to ensure an 11 per cent increase in the catch, which is planned to reach 168,000 tons in 1990.

Promotion of organisation and technology, modernisation of the fishing fleet and increasing the number of farms are seen as the main tasks for the next Five-year Plan period from 1986 to 1990.

To reach the planned catch of 79,000 tons of sea-fish and 11,000 tons of shell-fish, the fleet will need at least 250 modern vessels. This means - according to industry sources - that 41 vessels will have to be reconstructed and 22 new craft purchased. Substantial expansion of fish ponds will also be required.

The industry expects that another major task will be a change in the pattern of fish production to match processing capacity and market demand. About 20,000 tons of sea and freshwater fish is

exported yearly and about 10,000 tons imported, mainly to supply the processing facilities and the market with additional varieties.

Average annual per capita consumption of four kilos has increased compared with the previous decade but is still considered insufficient. However, increased Yugoslav production in the next few years should boost consumption.

South Americans study resources

PELAGIC fish within 100 miles from the coasts of Chile, Peru and Ecuador are being studied with the help of an Inter-American Development Bank grant to determine feasible future catch levels.

The project, costing 3.3 million dollars, is being shared between the bank and the three participating countries.

The results of several research expeditions are presently being evaluated by the national marine institutes of Chile, Peru and Ecuador.

As a fish meal producer you should examine these two more closely



COMMITTEE REPORT

SENATE

FURTHER:

FINANCE

2/18/86

Date 3-6-86

Mr. President

The Committee on HESS considered SB 453

relating to memorial scholarship revolving loans, creating the A.W. (Winn) Brindle memorial scholarship loan; efd.

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

- do pass
- do pass with attached amendment(s)
- replace with/or adopt CS for _____
- new title
- same title and recommends _____
- and attached a "LETTER OF INTENT" [] NEW FISCAL NOTE
- reports it back without recommendation
- recommends referral to _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS

Jim P. Josephson
Curtis Jurgens
Edna McVies

Paul Frank. No Rec

Bettye Fahrenkamp do pass
Chairman

Chairman recommendation