

S J R

52

HOUSE COMMITTEE REPORT

(9)

Date Referred: March 26, 1990

FURTHER REFERRALS: FINANCE

Date of Committee Action: 4/25/90

The RESOURCES Committee considered:

CSSJR 52 (RESOURCES)

CS SJR NO. 52 (Resources)

GROUND FISH OBSERVER TRAINING PROGRAM

Requesting the National Marine Fisheries Service to approve a groundfish observer training program at the University of Alaska for federal fishery observer programs off Alaska.

RECOMMENDATIONS:

- [] be replaced with _____ [] the same title
- [] _____ [] a new title
- [] have attached amendment(s)
- do pass
- [] do not pass
- [] no recommendation
- [] individual recommendations
- [] additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):
(Dept)

APPROVES PREVIOUS:

(Date/Dept)

- fiscal impact _____ [] fiscal note(s) _____
- zero fiscal note Com. Fisheries [] zero fiscal note(s) _____
- [] zero with analysis _____ [] zero fn/analysis _____

SIGNING DO PASS:

SIGNING:

(Check approp. column)

Do Not
Pass No Rec Amend

<u>Cliff Davidson</u> DAVIDSON			
<u>Sam Mendenhall</u> MENDENHALL			
<u>Bill Hudson</u> HUDSON			
<u>Bob Sharp</u> SHARP			
<u>Jack</u> JACKO			

Cliff Davidson

Chairman's Signature

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: NMFS Observer Training

Agency Affected: Fish and Game
BRU: Commercial Fisheries

Sponsor: Sturqulewski
Requestor: Governor

Components: All

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	0					
TRAVEL	0					
CONTRACTUAL	0					
SUPPLIES	0					
EQUIPMENT	0					
LAND & STRUCTURES	0					
GRANTS, CLAIMS	0					
MISCELLANEOUS	0					
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
---------	---	---	---	---	---	---

REVENUE	0	0	0	0	0	0
---------	---	---	---	---	---	---

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

No FY 90 impact

Prepared by: Robert C. Clasby
Division: Commercial Fisheries

Phone: 465-4210
Date: 3/19/90

Approved by Commissioner: *Sturqulewski*
Agency: _____

Date: 3/19/90

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

Alaska State Legislature

SENATOR
ARLISS STURGULEWSKI
Senate President Pro Tempore
Chairman, Senate Rules Committee




2937 SHELDON JACKSON STREET
ANCHORAGE, ALASKA 99508

While in Juneau
P.O. BOX 5
JUNEAU, ALASKA 99801
(907) 465-3118

MEMORANDUM

Senate March 31, 1990

TO: Representative Cliff Davidson, Co-Chairman
Representative Curt Menard, Co-Chairman
House Resources Committee

FROM: Senator Arliss Sturgulewski 
Senate District F

RE: Hearing request for SJR 52 "Requesting the National Marine Fisheries Service to approve a groundfish observer training program at the University of Alaska for federal fishery observer server programs off Alaska."

CSSJR 52(Res) asks the National Marine Fisheries Services (NMFS) to certify a federal fishery observer training program at the University of Alaska - A Sea Grant College.

Since the majority of domestic groundfish is harvested off the coast of Alaska, it is appropriate for the University of Alaska to be involved. It is important from the standpoint of fishery resources protection and educational opportunity for Alaskans. Through establishment of a domestic observer training program at the University of Alaska School of Fisheries and Ocean Sciences through the Sea Grant Program, we can work to achieve both goals.

I have enclosed a packet of background information and would appreciate your consideration for an early hearing. Thank you.

Attachments

1 WHEREAS an observer training program at the University of Alaska would
2 provide the Alaska fishing industry with an alternative source of trained
3 observers, thus increasing the availability of trained observers and fos-
4 tering price competition for observer service; and

5 WHEREAS the lower operating costs of the observer program that will
6 result from competition would reduce the costs of a mandatory observer
7 program that are associated with observer training; and

8 WHEREAS an approved groundfish observer training program at the Uni-
9 versity of Alaska can be used by the National Marine Fisheries Service as a
10 model for other Sea Grant colleges that are interested in conducting train-
11 ing for observers deployed in other fisheries throughout the nation;

12 BE IT RESOLVED that the Alaska State Legislature respectfully requests
13 the National Marine Fisheries Service to approve the University of Alaska
14 groundfish observer training program and establish procedures for certify-
15 ing the Alaska trainees in time for the groundfish fishery off Alaska in
16 the fall of 1990.

17 COPIES of this resolution shall be sent to the Honorable Robert A.
18 Mosbacher, Sr., U.S. Secretary of Commerce; John Knauss, Administrator of
19 the National Oceanic and Atmospheric Administration; William W. Fox, Jr.,
20 Assistant Administrator for Fisheries, National Marine Fisheries Service;
21 Steven Pennoyer, Regional Director, Alaska Region, National Marine Fisher-
22 ies Service; and to the Honorable Ted Stevens and the Honorable Frank
23 Murkowski, U.S. Senators, and the Honorable Don Young, U.S. Representative,
24 members of the Alaska delegation in Congress.

Original sponsor(s): SEN. STURGULEWSKI

1 IN THE SENATE BY THE RESOURCES COMMITTEE
2 CS FOR SENATE JOINT RESOLUTION NO. 52 (Resources)
3 IN THE LEGISLATURE OF THE STATE OF ALASKA
4 SIXTEENTH LEGISLATURE - SECOND SESSION

5 Requesting the National Marine Fisheries
6 Service to approve a groundfish observer
7 training program at the University of
8 Alaska for federal fishery observer
9 programs off Alaska.

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

11 WHEREAS the domestic groundfish fishery off Alaska has rapidly ex-
12 panded in recent years and continues to grow; and

13 WHEREAS there is a requirement for the use of trained observers on
14 board groundfish vessels to collect essential scientific data necessary to
15 manage the domestic groundfish fishery; and

16 WHEREAS there have been several recent proposals to greatly increase
17 the number of observers on board domestic groundfish vessels off Alaska;
18 and

19 WHEREAS the existing training program conducted by the National Marine
20 Fisheries Service at its Seattle facilities will not be able to generate
21 the number of trained personnel necessary to effectively implement the
22 groundfish observer program; and

23 WHEREAS Sea Grant colleges, such as the University of Alaska, have the
24 technical capability to train domestic groundfish observers, thus providing
25 an important service to the federal government; and

26 WHEREAS the University of Alaska has experience in training observers
27 for domestic fisheries and has expressed interest in becoming an observer
28 training center in a letter to the National Marine Fisheries Service dated
29 February 23, 1990; and

UNIVERSITY OF ALASKA FAIRBANKS



School of Fisheries and Ocean Sciences
Alaska Sea Grant College Program
138 Irving II
Fairbanks, Alaska 99775-5040
(907) 474-7086

February 23, 1990

Dr. William W. Fox Jr.
Assistant Administrator for Fisheries
NOAA/NMFS
1335 East West Highway
Silver Springs, MD 20910

Dear Dr. Fox:

This letter is a proposal by the University of Alaska, a Sea Grant College, to train NMFS certifiable marine resource observers for deployment to the North Pacific fishery. We are initiating the process via this letter with the assumption that subsequent discussions will be necessary as we move to solidify an institutional relationship between NMFS and the University.

The University proposes to provide training in two ways; 1) with a concentrated program located in Anchorage focused on the needs of NMFS and observer contractors for large numbers of observers on a quick turn around basis, and 2) a curriculum based program on campus for training students in the context of a larger program of study. The program as a whole would be administered by the Sea Grant College Program within the School of Fisheries and Ocean Sciences, a part of the University of Alaska Fairbanks. The University of Alaska Anchorage, particularly its College of Community and Continuing Education, will serve as our partnership linkage in Anchorage.

OBSERVER PROGRAM EXPERIENCE

This University and its Sea Grant College Program has experience with fisheries and mammal observer programs and is confident that in partnership with NMFS we will provide the quality training which is so important to the success of the new domestic observer program in the North Pacific.

- We operated the North Pacific Fishery Management Council's Pilot Domestic Observer Program. We were selected to manage that effort because of our successful history of working both with the fishing industry and with federal and state agencies on important and sometimes sensitive issues. Our success in managing the Pilot Domestic Observer Program is seen in the support of the

1 WHEREAS an observer training program at the University of Alaska would
2 provide the Alaska fishing industry with an alternative source of trained
3 observers, thus increasing the availability of trained observers and fos-
4 tering price competition for observer services; and

5 WHEREAS the lower operating costs of the observer program that will
6 result from competition would reduce the costs of a mandatory observer
7 program that are associated with observer training; and

8 WHEREAS an approved groundfish observer training program at the Uni-
9 versity of Alaska can be used by the National Marine Fisheries Service as a
10 model for other Sea Grant colleges that are interested in conducting train-
11 ing for observers deployed in other fisheries throughout the nation;

12 BE IT RESOLVED that the Alaska State Legislature respectfully requests
13 the National Marine Fisheries Service to approve the University of Alaska
14 groundfish observer training program and establish procedures for certify-
15 ing the Alaska trainees in time for the groundfish fishery off Alaska in
16 the fall of 1990.

17 COPIES of this resolution shall be sent to the Honorable Robert A.
18 Mosbacher, Sr., U.S. Secretary of Commerce; John Knauss, Administrator of
19 the National Oceanic and Atmospheric Administration; William W. Fox, Jr.,
20 Assistant Administrator for Fisheries, National Marine Fisheries Service;
21 Steven Pennoyer, Regional Director, Alaska Region, National Marine Fisher-
22 ies Service; and to the Honorable Ted Stevens and the Honorable Frank
23 Murkowski, U.S. Senators, and the Honorable Don Young, U.S. Representative,
24 members of the Alaska delegation in Congress.

industry through the North Pacific Management Council for a continued observer process.

- We operated an observer program on the Copper River Delta near Cordova, Alaska for the purpose of observing fisheries/mammal interactions in that region. This program was undertaken by agreement with NMFS, the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game, and the fishermen of Cordova. Under contract to the NMFS we briefly extended observations into Prince William Sound to monitor whale populations there following the grounding of the Exxon Valdez. Our reports of mammal/fisheries interactions on the Copper River Delta have recently been appended to the NMFS request for proposals for mammal observer services in the Gulf of Alaska because they provide the most comprehensive set of observations in the region.

- We developed the curriculum and provided the training for observers required by the Alaska Department of Fish and Game for their mandatory crab processor observer program. Working with that agency and observer contracting personnel we developed on short notice the necessary training course for that new observer program.

QUALIFIED PERSONNEL

The University will use both faculty dedicated to observer training and specialists already existing on the faculty in the School of Fisheries and Ocean Sciences. Already on the faculty are ichthyologists, two experienced fishery observers, marine safety specialists and marine advisory faculty with substantial experience working on domestic fishing vessels. As special emphasis is needed, other fishery and oceanographic specialists are available on the faculty. To ensure that an observer training course which needs to be taught on a monthly basis receives the constant attention that it will need, a supervising faculty member, and one other, both well attuned to the NMFS observer program, would be selected and dedicated to this instructional program.

CURRICULUM

The Alaska Fisheries Center of NMFS has a long and successful history of observer training. Over the years their curriculum has undergone modification and improvement. We have reviewed that curriculum and feel that it provides a sound basis for training. We would adopt those program elements and continue, as the Alaska Fishery Center has in the past, to build from there. Currently within that curriculum are the following elements:

Introduction to the observer program

- An overview of the northeast Pacific fishery, its history, economic significance, and management under MFCMA

- The life of an observer; duties and life aboard, seasickness, communication difficulties, hardship

Duties and Professionalism

- conduct
- objectives, priorities, workload
- citizenship aboard

Technical Training

- fish identification
- mammal identification
- obtaining haul information and overall catch estimates
- sampling techniques
- data forms, species reports and report groups
- navigation
- computations and reporting ashore and at sea
- radio operations
- special scientific sampling; tagged animals, otolith and scale sampling, etc
- logbook entries, comparison of observer and vessel logs

Safety Training

- general safety aboard
- safe deck operations
- cold water survival
- medical emergencies
- fire control

Debriefing Expectations

As during its use by the Alaska Fisheries Center, the curriculum will continue to be adjusted to meet new demands, or to better serve continuing ones.

Modifications anticipated at this time include:

Safety training: The NMFS trained observers which we employed in the Pilot Domestic Observer Program stated a desire for increased emphasis on safety training. Given the greater variety of vessels in the domestic fleet compared to the foreign and joint venture fleets, we believe that an increased emphasis in this area is justified.

Crab emphasis: It is our experience that NMFS trained groundfish observers need a bit of additional training in order to become ADF&G crab processor observers. This training would include additional crab identification work, biological and legal measurement of crab, and an introduction to the Alaskan fishing laws. The observer contractors with whom we have worked provide observers to both federal and state fisheries. Having increased numbers of observers crossed trained would be a benefit to both observer contractors and to the fleet. A more stable employment opportunity for observers will help reduce the current high

turnover rate. We believe that the benefits of the broadened pool will also accrue to the management agencies as well.

Statistical sampling: The sampling environment is substantially more complicated for the new domestic observer program than has been usual in the past, especially for the observers assigned to shore delivery vessels, or for the observer who is switching between shore based vessels, shore based plants, and factory trawlers, and even to crab processors between groundfish assignments. Additional emphasis on sampling strategies will probably be needed to accommodate this new flexible element in observing.

These additional areas of study could be accommodated by two or three additional days of training.

COORDINATION WITH NMFS

We are mindful of the importance of the data being collected via the observer program both to the long term health of the fishery and to its management agencies. The Magnuson Fishery Conservation and Management Act has left private industry, government, and educational institutions playing an unusual set of roles. Private industry and even educational institutions have been undertaking the normal government function of data collection. Government, not an educational institution, has been providing training. Because under this new domestic program the relationship between the fishing industry and the observer contractors may be closer than the relationship between government and those data gathering contractors, there remains the opportunity for errors or even mischief. The quality of education and training provided to the observers is a critical element to the success of the program. The University of Alaska is anxious to be a part of a success story in addressing these unusual circumstances and recognizes that its relationship with NMFS is a key element to that success.

To date there has been considerable advantage in NMFS providing the training of observers in-house. Consistent errors in data collection or transmittal uncovered as observers were debriefed would signal a need for increased emphasis on that particular element in the training program. Close communication must be established between University of Alaska training personnel and the NMFS Alaska Fishery Center in order to ensure the same degree of responsiveness of this training program. With the observer program now focused almost exclusively on the domestic fishery off Alaska, debriefing will necessarily move to Alaska in order to provide both timely debriefing and cost savings to the fleet and its observer contractors. The important linkage between training personnel and debriefing personnel may therefore actually be enhanced by the training taking place in Alaska. We look forward to establishing the cooperative linkages with NMFS which will speed the adaptation to these new circumstances.

BUDGET

The present reading of the Magnuson Act leaves the National Marine Fisheries Service without the ability to recover costs directly from the industry for training and deployment of observer personnel, yet the agency is left with the task of administering an observer program required by the North Pacific Fishery Management Council. The costs for observer deployment will be borne directly by the fishing industry. Training costs, at one time funded by receipts from the foreign fishery, have not been provided to NMFS under this expanded domestic program. Neither has budget been provided to the University of Alaska for the training of observers. At the same time, the debriefing of this new Alaska based corps of observers and the new data handling demands are an increased burden on the agency. We believe that the training cost issue is one which we should join together in taking to the Congress. In the short term, the university would be willing to look to other sources of funds to pool with available NMFS funds to get this expanded training program underway.

In summary, the University of Alaska and its Sea Grant College Program looks forward to working in partnership with the National Marine Fisheries Service in providing the necessary training of marine resource observer personnel to ensure a successful domestic fishery/mammal observer program. Our experience with observer programs, our well qualified faculty, and our history of successfully working both with your agency and with the fishing industry provide assurance that we could undertake this new program successfully and to the benefit of your agency and the north Pacific domestic fishing industry. We look forward to continuing this discussion with you.

Cordially,



R.K. Dearborn
Director

RKD

cc: Dr. Patrick O'Rourke, Chancellor UAF
Dr. Donald Behrend, Chancellor UAA
Dr. Vera Alexander, Dean SFOS
Mr. Steven Pennoyer, Dir. NMFS Alaska Region
Dr. William Aron, Dir. NMFS Alaska Science Center
Mr. Donald Collinworth, Chairman, NPFMC
Dr. William McCaughan, Asst. Vice Chancellor, CCCE

National Marine Fisheries Service Provides Observer Update

The Council's domestic groundfish observer program took effect on January 1, 1990. Vessels of 125' in length or longer must have a NMFS-certified observer on board. Vessels less than 125' but over 60' must carry an observer for 30 percent of their fishing time. Vessels under 60' must carry observers only if requested by NMFS. NMFS reported that observers are being deployed as soon as they are trained and that the program is running smoothly.

Onshore processing facilities are also required to have observers. A shore plant that annually receives 10,000 mt (round weight) or more of groundfish must have an observer present on each day it receives groundfish in those months with deliveries of 1,000 mt or more of groundfish. Shore plants that annually receive 1,000 mt - 9,999 mt (round weight) of groundfish, must have an observer 30 percent of the days of any month in which they receive 500 mt or more groundfish. Shore plants annually receiving less than 1,000 mt of groundfish do not need observers unless requested by NMFS.

To participate in the 1990 groundfish fishery off Alaska, industry must obtain NMFS-certified observers and pay their costs. Industry must obtain observers from the list of certified contractors. This list may be expanded during the year.

Alaskan Observers, Inc.
150 Nickerson, Suite 104
Seattle, WA 98109
(206) 283-6604

Data Contractors, Inc.
600 West 41st Ave, Suite 203
Anchorage, AK 99503
(907) 561-2055

Oregon State University
Int'l Development & Research
Observer Program
Corvallis, OR 97331
(503) 737-2683

Frank Orth & Associates
10900 N.E. 4th St., Suite 930
Bellevue, WA 98004
(206) 455-9693

Pacific Observers, Inc.
University of Washington/
Fisheries Research Institute
4055 21st Avenue West
Seattle, WA 98199
(206) 285-3480

Saltwater, Inc.
540 L Street, Suite 202
Anchorage, AK 99502
(907) 276-3241



STATE OF ALASKA
OFFICE OF THE GOVERNOR

BILL ANALYSIS

DEPARTMENT Fish and Game	DIVISION Commercial Fisheries	BILL NUMBER CS SJR 52	SPONSOR Sturdulewski
SHORT TITLE OF BILL NMFS Observer Training			
DEPARTMENT POSITION Support			
PREPARED BY Bob Clasby	DATE 3/19/90	COMMISSIONER'S SIGNATURE <i>[Signature]</i>	DATE 3/19/90

SUMMARY

OTHER AGENCIES AFFECTED BY BILL University of Alaska	CONSTITUENT GROUPS AFFECTED BY BILL Unknown
ORGANIZATIONAL SUPPORT FOR BILL Unknown	ORGANIZATIONAL OPPOSITION TO BILL Unknown

FISCAL IMPACT NONE FISCAL NOTE ATTACHED

BACKGROUND LEGISLATIVE HISTORY
Provide job opportunities for Alaskans in the observer program.

ANALYSIS OF BILL PROGRAM EFFECTS
None

AMENDMENTS PROPOSED
None

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: NMFS Computer Training

Agency Affected: Fish and Game
BRU: Commercial Fisheries

Sponsor: Styrqulewski
Requestor: Governor

Components: All

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	0					
TRAVEL	0					
CONTRACTUAL	0					
SUPPLIES	0					
EQUIPMENT	0					
LAND & STRUCTURES	0					
GRANTS, CLAIMS	0					
MISCELLANEOUS	0					
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
----------------	----------	----------	----------	----------	----------	----------

REVENUE	0	0	0	0	0	0
----------------	----------	----------	----------	----------	----------	----------

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

No FY 90 impact

Prepared by: Robert C. Clasby
Division: Commercial Fisheries

Phone: 465-4270
Date: 3/19/90

Approved by Commissioner: [Signature]
Agency: _____

Date: 3/19/90

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

Federal observers eye bottomfishing

THE ASSOCIATED PRESS

ANCHORAGE - A floating fish processor in January will haul its net from the depths of the Bering Sea to dump the season's first load of pollock into the hold.

And a federal observer will be watching.

Sometime next summer, some longliner will switch on his power gurdie and pull a string of sablefish from the rough waters of the Gulf of Alaska.

And a federal observer will be watching.

The 1990 North Pacific bottom fishery will be the first in which U.S. ships - like the foreign fleets they have replaced - must carry observers to ensure the ships are not taking more than their share of declining fish stocks.

"The sooner the better; we need the data," said Dave Fraser of Cape Flattery Fisheries. He operates an 86-foot trawler that delivers to a U.S. mother ship in the Bering Sea and Gulf of Alaska. "We are being managed by unsubstantiated rumors."

Since American ships have taken over the \$1 billion North Pacific bottom fishery in recent years, U.S. fishery managers have lost their best source of data - the foreign ships that had to carry observers and report catch data in return for the right to fish.

"We have had for the last number of years 100 percent (observer) coverage of joint ventures, and before that for foreign fisheries," said Janet Wall, assistant chief of the National Marine Fisheries Service observer program in Seattle. "We had the information from those vessels, and that was responsible for a good portion of the fish catch. But now that that's being phased out we had to get data from other means."

The 1978 Magnuson Act, which established the 200-mile economic exclusion zone and encouraged U.S. ships to fish there, also required foreign ships to carry U.S. observers to gather data.

The National Marine Fisheries Service depends on observer data to decide how much fish can be taken without hurting the stocks. And the North Pacific Fishery Management Council created by the Magnuson Act depends on such data to decide fish allocations. Both agencies are eager to add to their still-insufficient stock of information on the fishery.

"They sample the catch, estimate catch size and sample the size count and weigh the species so they can come up with an accurate

species assessment, including the number and weight of prohibited species taken," Wall said.

Accurate data has become even more critical since it is becoming clear that stocks of pollock - the mainstay of the Bering Sea fishery - have been decreasing in the past three years, scientific advisers to the council said at a meeting in Anchorage last week.

And further, rapid investment in both floating and on-shore processing plants has far outstripped the available resource.

A November industry survey by the NMFS showed the industry stands ready to process 3.7 million metric tons of bottom fish; the council decided to set that level at 2.3 million metric tons.

"As the foreign and joint venture fleet phased out and the domestic industry began taking its place, we just weren't getting comparable information for the domestic industry," said Dale Evans, NMFS chief of fisheries management in Juneau.

Even at its recent meeting in Anchorage, the North Pacific council had to base its 1990 catch limits on data gathered from joint venture catches as far back as 1987.

The program will require an observer at all times on ships longer than 125 feet. In 1988, 61 such ships took 59 percent of the domestic catch, NMFS figures show. Ships of 50 to 125 feet must carry an observer for 30 percent of their fishing time in any four-month period. In 1988, 352 of these ships took 38 percent of all domestic catch.

Though 1,000 vessels smaller than 50 feet fished in 1988, they took only 8 percent of the catch, and will not have to carry observers.

The six shoreside processors that received more than 10,000 metric tons of bottom fish in 1988 must have a full-time observer in 1990. About 14 smaller processors must have observers for a third of the days they receive bottom fish, while the remaining 65 smallest plants will be exempt.

Observers will be recruited from six NMFS-certified contractors in Alaska, Washington and Oregon. Each will cost about \$7,000 for each month on board. The cost of observers on shore and on the water will be about \$3.6 million.

Owners of each large factory trawler will bear the costs themselves. But some owners of the smaller ships plan to pool their money and split the cost, said Nancy Munro, chair of the council's expert advisory panel.

Cowper

By BRIAN S. AKRE

THE ASSOCIATED PRESS

Gov. Steve Cowper proposed a \$2.4 billion state budget for 1991 - a \$60.3 million increase over this year's budget to cover increased operating expenses and several new programs.

Preliminary figures released by the Empire early Friday indicate the boost would be about \$20 million.

The budget includes more money for education, environmental safeguards and state troopers - but major cuts. While state revenues are expected to remain stable next year, the outlook for the rest of 1991 remains bleak because of expected declines in oil production.

Much of the 2.6 percent increase in Cowper's budget reflects an estimated \$100.3 million in additional spending that budget director Ali Elgee said is beyond the administration's control.

That includes programs in state spending is based on population growth federal law. Leading the list is a million increase in the state's share of school funding, \$33.9 million for the state-federal Medicaid, welfare programs, and \$9.4 million more for the state's longevity program that provides monthly payments to elderly Alaskans.

Also included is a \$3.6 million

Soviet

By DEAN FOSDICK

THE ASSOCIATED PRESS

ANCHORAGE - Military officials from the United States and the Soviet Union have started talking to one another in a series of "confidence building" tests aimed at preventing the accidental outbreak of a nuclear war.

Air Force Lt. Gen. Thomas Inerney, head of the Alaskan command, said in an interview that air-to-air and air-to-ground radio links were opened about a week ago by pilots of both nations flying over the Mediterranean Bering seas.

The first-ever joint exercises were conducted over the Mediterranean on Dec. 6; over the Bering and adjacent to U.S. and Soviet territory on Dec. 7 and Dec. 8, officials said.

"Their (Su-27) Flankers met ours (F-15s) (a military derivative of the Boeing 707) and our F-15s one of their Bears (a long-range bomber)," Inerney said. "The exercise was conducted in English according to a script. Essentially it was a structured means of opening a dialogue with one another."

The crews of the TC-135 and Bear talked with one another while circling near St. Lawrence Island and before heading toward



UNIVERSITY OF ALASKA, ANCHORAGE

March 2, 1990

Dr. William E. Fox
Assistant Administrator of Fisheries
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
1335 East-West Highway
Silver Springs, Maryland 20910

Dear Dr. Fox:

Attached is an expanded request for authorization which further details the letter of proposal forwarded to you by Dr. Ronald Dearborn of the Alaska Sea Grant College Program. As outlined in the correspondence from Dr. Dearborn, it is the intent of the University of Alaska to seek federal authorization to act as an agent of the National Marine Fisheries Service for the training portion of the Marine Resource Observer program.

The Alaska Sea Grant Program and the University of Alaska Anchorage, College of Community and Continuing Education will act in partnership as the facilitators for the training program in the Anchorage area. As outlined in this proposal, the University of Alaska has the staff expertise to conduct a successful Marine Resource Observer program and the classroom and laboratory facilities to support the program are available at the Anchorage campus. The University is coordinating with the Municipality of Anchorage to provide office, storage, and generic classroom space at other convenient locations in the community.

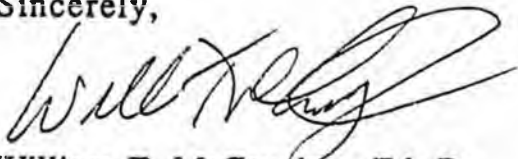
Because of the scope of fisheries activity in Alaskan waters and the geographic proximity of Anchorage to this activity, it seems logical that Anchorage could and should be the training site for the program.

The University of Alaska Alaska Sea Grant College Program and the College of Community and Continuing Education have both the experience and the desire to make the establishment of the training program in Alaska a reality.

We have reviewed the resources available to us to successfully conduct the program and have concluded that we have the availability of personnel, laboratory and classroom facilities, dormitory space and the logistical infrastructure necessary to handle this responsibility on an ongoing, long-term basis. We propose that the program be located in Anchorage, Alaska and that we work together with NMFS to expedite the initiation of activity as soon as possible. We feel very positive and confident about the program and look forward to involvement in it.

As indicated in the Request for Authorization, much of the information included in the attached report has been synthesized from multiple sources in an attempt to present the concept of relocating the observer training program in a more complete context. We look forward to working with your office and the staff of NMFS and the Alaska Fisheries Science Center to make this request a reality.

Sincerely,



William T. McCaughan, Ed. D
Associate Vice Chancellor
College of Community and Continuing Education
University of Alaska Anchorage

cc: Dr. Donald F. Behrend, Chancellor UAA
Dr. Patrick O'Rourke, Chancellor UAF
Dr. Vera Alexander, Dean SFOS
Mr. Steven Pennoyer, Director NMFS Alaska Region
Mr. Donald W. Collinsworth, Chairman, NPFMC
Dr. William Aron, Director Northwest and Alaska Fisheries
Science Center
Senator Arliss Sturgulewski, Alaska State Legislature
Mayor Tom Fink, Municipality of Anchorage, Alaska
Dr. Russ Nelson, Alaska Fisheries Science Center
Dr. Ronald K. Dearborn, Director Alaska Sea Grant College
Program

**REQUEST FOR AUTHORIZATION
for
UNIVERSITY OF ALASKA
ALASKA SEA GRANT PROGRAM
to conduct a
CERTIFICATION TRAINING PROGRAM
for
NATIONAL MARINE FISHERIES SERVICE CERTIFIED
MARINE RESOURCES OBSERVERS**

PURPOSE OF REQUEST

The purpose of this document is to request that the NOAA, National Marine Fisheries Service (NMFS) grant authorization to the University of Alaska, Alaska Sea Grant College Program (ASG) to conduct certification training for Marine Resources Observers.

The training of observers is, arguably, the critical foundation element necessary to the overall success of the resource management decisions required of the North Pacific Fishery Management Council (NPFMC). The information provided to NPFMC by NMFS for this management process is dependent on efficient and credible data collection efforts in the North Pacific fishery. In order for this data collection process to succeed, assurances must be given that the training of the Marine Resources Observer corps be consistent from month to month and yet be flexible enough to adapt to changing management and research needs and requirements. Development and implementation of the observer certification process is, by its nature, a dynamic process. The goal of this proposal is to develop a Marine Resources Observer training program for the North Pacific which can provide the necessary level of both consistency and flexibility. The observer training program proposed by ASG will be designed around three objectives:

- to provide credible scientific data
- to develop a professional cadre of observers capable of working in multiple fisheries and responding to changing research priorities
- to provide a cost-effective training program which maximizes the data collected per dollar, and is responsive to the changing needs of managers, industry, and the fishery resource.

The ASG observer training program will provide a comprehensive training sequence which is based on the NMFS's concept of the Marine Resources Observer and incorporates the NPFMC's requirements for a domestic groundfish observer program, NMFS' current effort in development of observer programs for marine mammals and the Alaska Department of Fish and Game's (ADF&G) crab catcher/processor and groundfish observer programs. This comprehensive Marine Resources Observer training program will be a major step in resolving the data crisis facing the North Pacific fishing industry.

NMFS has proposed and is proceeding on a plan for 1990, to have the Alaska Fisheries Science Center (AKC) conduct the initial observer training required to meet the level of observer coverage specified by NPFMC (See Attachment A). NMFS has indicated its intention to investigate the feasibility of utilizing other agencies to construct a pilot training program to be developed and conducted in the second half of 1990. It has been proposed

by NMFS that this effort be evaluated and a decision made to either contract for all training in 1991 and beyond or continue NMFS in-house training of observers.

Initial discussions regarding this effort have centered on the issuing of a Request for Proposal for development of such a training program. The University of Alaska, ASG proposal seeks authorization for the ASG program to assume responsibility for this aspect of the overall observer program. This would place the training of observers, already agreed upon as the crucial "core" of a successful data collection effort, under the auspices of a federally established and funded agency, ASG, whose primary focus is the arena of research, education, and training related to marine resources.

Under this proposal, ASG will assume the responsibility for conducting certification training and recertification briefings for all observers. The ASG would notify NMFS and NMFS' certified Contractors of schedules for certification training and recertification briefings. Utilizing the basic curriculum and training model now being utilized by NMFS, the ASG would conduct full 2-1/2 week certification training sessions, once per quarter. Additional training sessions would be scheduled to provide training in the event that contractors were not able to meet all observer coverage requirements with the number of certified observers available. Four-day certification briefings for recently experienced observers and recertification briefings (if required) would be scheduled more frequently than once per quarter, if needed.

The North Pacific Fisheries Management Council has made it clear that they desire the AKC to maintain responsibility for the success of the total observer program. This view is reasonable in that the primary goal is improved data management and the analysis required to properly manage the fisheries resource. This proposal requests that the AKC be relieved of the additional burden of managing the observer training and that this function be relocated to Anchorage and managed by the ASG, with a direct reporting responsibility to the AKC in Seattle.

Numerous representatives from within state government have given support to the housing of this program in Anchorage. These officials have and will provide written documentation of support and cooperation for this proposal (See Attachments B, C, D). The Governor of the State of Alaska and several senators and representatives are within this group that would provide supporting documentation. A resolution to this effect has been formulated and forwarded to the legislature for action (See Attachment E).

The content of this proposal is a synthesis of information presented in documents produced by the National Marine Fisheries Service, the Alaska Fisheries Science Center, the North Pacific Fisheries Management Council, the University of Alaska, Alaska Sea Grant College Program, the Municipality of Anchorage, the University of Alaska Anchorage College of Community and Continuing Education (CCCE), and private consultants. While each of these documents concentrates on some specific element of the Marine Resources Observer program, taken as a whole, they provide a complete view of the program, its history, its relationship to the fishery resource, and its role in the management of the resource.

RATIONALE

AMERICANIZATION OF FISHERY. The "Americanization" of the groundfish fishery off Alaska has been one of the most dramatic success stories in the last decade. Formerly harvested and processed almost entirely by foreign fleets, the 2.5 million metric ton groundfish resource within the 200-mile Exclusive Economic Zone (EEZ) off Alaska is now harvested entirely by American fishing vessels. Ninety percent of it is

processed by American shore plants, factory ships, or catcher/processors. Joint ventures, where American fishermen deliver at sea to foreign processors, are the last vestige of a purely foreign presence in Alaskan fisheries. They are being phased out at an accelerating pace and can be expected to disappear completely within the next two or three years.

One hundred percent of the foreign fleet was required to carry U.S. scientific observers. These observers were mandated on fishing vessels, catcher/processors, processors and joint venture processors. All costs were paid by the vessel, and the observers were trained and certified by the National Marine Fisheries Service (NMFS). During the early years of the program observers were paid and deployed by the government, but NMFS later contracted recruitment, pay, and scheduling of observers. Training and certification, as well as equipment, debriefing, and data analysis remained the province of NMFS, at the AKC in Seattle.

This proposal will utilize the thinking and experience of people within the NPFMC, NMFS, ADF&G, and ASG. The experience of NMFS, ADF&G and ASG with existing observer programs, including successes and problems with administration, recruitment, training, insurance, deployment, logistics, data management, and communications will be reviewed and incorporated into the training program design.

The fishing industry will be called upon to provide insight into how to maintain the integrity and cost effectiveness of the program, and how to operate it more efficiently for the new and rapidly changing domestic fisheries. The positive potential of industry's involvement has been demonstrated in their influence on the fledgling ADF&G crab observer program which in the first year dropped costs to \$6,000 per month from a ten-year cost cycle of \$7,500 per month. The combined expertise of state and federal agencies, the University of Alaska, observer contractors, and industry representatives will be utilized to develop a training program with the goal of producing a professional cadre of observers rather than a temporary job program.

NORTH PACIFIC FISHERY MANAGEMENT COUNCIL OBSERVER PROGRAM REQUIREMENTS. As the foreign fishery ended off Alaska so did the mandatory observer program that required all foreign ships to carry an American scientific observer. Agencies responsible for the effective management of the fishery resource, specifically NMFS, ADF&G, and the NPFMC, have become increasingly concerned about the lack of information on U.S. catches. The NPFMC approved amendments to both the Bering Sea/Aleutian Islands and Gulf of Alaska Groundfish Fishery Management Plans which require that U.S. fishing vessels carry observers. The amendments required that NMFS develop and implement a domestic observer program which will be funded by both industry and the federal government. The industry is responsible for the direct costs of obtaining and maintaining observers aboard their vessels while NMFS is responsible for administration of the overall program. The NPFMC's plan calls for 100% coverage of all catcher/processors and 30% coverage of all other groundfish boats over 50 feet long.

Alaskan trawl fisheries can be grouped into 3 general classes, catcher/processor vessels, mothership/catcher-boat vessels and shoreside delivery vessels. Catcher/processor type vessels are those that have the capacity to both catch and process their catch aboard the vessel. These vessels range in size from 75 feet to over 300 feet in length. Mothership/catcher-boat operations consist of a mothership or floating processing vessel which receives and processes either sorted or unsorted catches from smaller catcher vessels. Motherships are generally over 125 feet in length while catcher-boats are generally less than 125 feet in length. Shoreside delivery vessels are trawlers usually between 50 and 125 feet

in length which make trips of between 1 and 5 days and deliver their catch to shoreside plants for processing.

Under the NPFMC plan, vessels required to carry an observer, but without an observer, will not be allowed to fish. This requirement places the burden on industry and NMFS' contractors to ensure that they meet the observer requirement. Vessels under 50 feet in length or judged to be unsafe may not be required to carry an observer.

INTEGRATION WITH MMPA DOMESTIC OBSERVER PROGRAM.

1988 amendments to the Marine Mammal Protection Act required that domestic vessels participating in the Category I trawl fisheries in Alaska carry marine resource observers on 20% - 35% of their effort. The Act provides for an interim exemption for U.S. commercial fisheries (except fisheries for yellowfin tuna) allowing the incidental taking of marine mammals during the course of commercial fishing operations until October 1, 1993. Although Congress provided for an exemption on the incidental taking of marine mammals, they stated that "it shall be the immediate goal that the incidental kill or serious injury of marine mammals permitted in the course of commercial fishing operations be reduced to insignificant levels approaching zero mortality and serious injury rate."

The Act requires the classification of all fisheries in one of three categories according to the frequency of the incidental take of marine mammals. Fisheries classified as Category I Fisheries are defined as those which have a frequent incidental take of marine mammals. Vessels participating in Category I Fisheries are required to obtain an exemption, to report incidental takings of marine mammals and, if requested, to carry a marine resource observer. Observers in these fisheries are to collect data on the incidental taking and interaction of marine mammals and other fisheries data deemed appropriate for the purposes of protection of marine mammals and contributing to the understanding and management of marine ecosystems. The trawl fisheries conducted in the EEZ of the Bering Sea and Gulf of Alaska, because of their history of incidental take of marine mammals, were designated as Category I Fisheries by the Act and, therefore, are subject to observer coverage of 20-35% of their fishing effort. The U.S. domestic trawl fisheries operate throughout the year in the Bering Sea and Gulf of Alaska.

Recent implementation of the NMFS Marine Resource Observer program has provided an integrated coverage program designed to meet the requirements of the MMPA and the NPFMC's requirement for groundfish observers. Funding for the MMPA program is currently being used to cover the NMFS costs for administration and implementation of this integrated program. This "integrated" training model is the approach proposed by the ASG. The result will be a credible, cost-efficient, comprehensive program which will provide more and better data, and a cooperative infrastructure into which scientific designs and money can flow and out of which will come a coordinated data collection program.

NEED FOR MANAGEMENT INFORMATION. The data base derived through the foreign observer program contributed greatly to effective management of the resource by the NPFMC, NMFS, and the ADF&G. As the foreign fishery has been phased out, however, the lack of current information has resulted in the data base becoming increasingly "dated". The "Americanization" of the Alaska fisheries, while a positive step forward, has resulted in a gap in the information available to manage and understand the fisheries because of the suspension of a viable domestic observer program. This paucity of data, if allowed to continue, will inevitably lead to poor or conservative management decisions which will negatively affect all sectors and all fisheries within the EEZ. The gravity of the problem has been recognized by industry, NMFS, ADF&G, the Alaska Fisheries Development Foundation (AFDF), and the NPFMC. It was also reflected in the

Saltonstall-Kennedy (S - K) grant priorities in the Alaska region for 1989: "to develop and test an on board domestic vessel observer program in the EEZ."

Efforts to solve the data crisis have created new sets of problems. As the foreign operations ended, ten separate "mini observer" programs were created or planned for the "Americanized" fisheries off Alaska. This "shotgun" approach to data collection has been due, in part, to the lack of consistent funding sources, and in part to agency focus on separate, rather than collective, data needs. The result has been the collection of minimal new data. The NPFMC estimated that all of the programs combined observed less than one percent of the domestic DAP catch in 1987.

LOCATION OF OBSERVER TRAINING PROGRAM IN ALASKA.

The location of program operations related to the Marine Resources Observer program, becomes increasingly important in light of limited funding. The issue of authorizing the conduct of the observer training portion of the program in Alaska, specifically in Anchorage, has been examined by NMFS, AKC, the Municipality of Anchorage, and the University of Alaska, ASG.

Two different approaches were taken in analyzing the impact of moving the training operation to Anchorage. The AKC approached the analysis based on moving current full time NMFS federal personnel to Anchorage and essentially duplicating, in Anchorage, the operation at the AKC in Seattle. The ASG proposal and analysis done by the Municipality of Anchorage and private consultants has been based on authorizing the ASG to conduct the training in Anchorage, providing local staffing, facilities, and administration.

The analysis based on a training program conducted by the ASG indicated that 20% observer coverage, the minimum generally considered sufficient to provide statistically valid data, would be the break-even point if the program were moved to Anchorage and operated with local staffing. Assuming any higher level of observer coverage, and integration of AFD&G and federal training programs using personnel already available in the Anchorage area for training, there are definite economic and response advantages to relocating the program to Anchorage.

The AKC analysis indicated that, even with duplicating the current AKC operation in Anchorage using full-time federal staffing, the level of observer coverage required for the break-even point in cost between Seattle and Anchorage would be between 55% and 60% coverage of the domestic fishing effort. At this level of coverage, the AKC also indicated that even with full time AKC staffing, if the average observer salary, currently about \$2,500 per month, had to be increased by 3% to cover potential additional costs to the observers resulting from the stationing of the program in Anchorage, the program costs would essentially be "break-even". The current "integrated" program being conducted by AKC is designed to provide a rate of coverage of "100% coverage of all catcher/processors and 30% coverage of all other groundfish boats over 50 feet long." Based on this level of coverage required by NPFMC, the ASG proposal utilizing personnel already on-site in Anchorage, should be well within and perhaps significantly better than the cost parameters desired by NMFS.

Another concern which was initially considered by NMFS in its analysis related to the separation of Anchorage-based program operations from other AKC tasks. The exchange of information and discussion of fishery needs, sampling requirements, program needs and data interpretation are program tasks which are handled by personnel who are also involved in the training program at the AKC in Seattle. The initial analysis done by AKC assumed that the staff involved in these other tasks would be moved to Anchorage. Stationing of the program in Anchorage under these circumstances would essentially isolate the program

from the AKC in Seattle and would not bring it any closer to Regional Office operations which are located in Juneau. The AKC currently also provides observers and required observer program tasks for Northwest Regional fisheries, high seas driftnet fisheries, and foreign research vessels. The ASG proposal, utilizing a separate administrative structure and local staffing would eliminate this concern and would relieve the AKC staff of the additional burden of the training function for the Alaska fishery.

One additional concern expressed by the AKC was related to the perception that the relocation of the observer training program to Anchorage would offer no advantages over its current location in that Anchorage is essentially as far from the actual points of observer activity as Seattle. This observation is not entirely accurate since all observers must transit through Anchorage to reach the points of observer activity. The AKC, in this portion of the analysis, indicated that the placement of field offices in Dutch Harbor and Kodiak which would handle observer field debriefing, gear issue, and logistics interaction with the observer contractor would be a better option to pursue. It was proposed that these field offices could also be tied in with port sampling objectives and possible management representation from the Regional Office. A variation of this objective, the establishment of field sites at Dutch Harbor and Kodiak, has been accomplished as part of the current integrated program. The ASG proposal, by relocating the training program to Anchorage, should result in a substantial overall cost savings in program operation due to the close proximity of Anchorage to these new field sites in Dutch Harbor and Kodiak. In addition to the long-term savings, the opportunity would be present to greatly improve all of the existing observer programs by standardizing and consolidating state, federal and industry efforts.

It is important to note that Alaska has a significant employment rate in the fisheries industry during the winter months. It is believed that a significant applicant pool could be drawn from this Alaskan work force to participate in the training for observer duties during winter months. This fits well with the increased availability of observers during the more desirable summer months. Currently, less than 1% of previously employed observers have been Alaska residents while 55% were West Coast residents. Unquestionably, Alaskans want, need, and are qualified for such positions. While the exact reason for this imbalance has not been identified, it is possible that one major cause is the point of hire and dispatch to vessels. If Anchorage is the operational headquarters for the training program and the point of hire, prospective employees from the Lower 48 will need to pay their own transportation costs to Anchorage. Alaskan employees' transportation costs will be minimal. This fact alone could significantly reduce overall program costs to the industry.

It should be remembered that 1) Anchorage is closer to the industry, 2) observers must pass through Anchorage to board fisheries vessels, and 3) observers must come to Anchorage following their tour at sea. With the mandate that vessels carry observers, it is necessary to insure that observers are available at the time and place of vessel departure. It would be more cost-effective to deploy observers from Anchorage than from locations outside the state. Travel time is less. Observers are readily available to accommodate "short notice" aircraft movements when weather is bad and even though delays are inevitable, if an observer from an Anchorage training headquarters is delayed, it is unnecessary to pay the cost of per diem. Service from Anchorage is far more efficient when it becomes necessary to assist and/or replace observers who may become ill or have other problems requiring consultation with support personnel. Since overall transportation costs are a major factor, Anchorage offers an attractive location from the standpoint of travel-related cost-effectiveness.

The Municipality of Anchorage has actively supported the relocation of the training program for the Alaska trawl fishery to Anchorage, Alaska. The Municipality has

expressed its desires to expand its economic participation in the seafood industry by encouraging projects which are economically feasible and in the common interest of industry and government. Additionally, the Municipality has stated that it wants and needs the observer program to be headquartered and operated in Anchorage. Anchorage intends to expand its economic participation in the seafood industry by building on its present strong base. Anchorage is the headquarters and service center of the Alaska fishing industry. The observer program is a natural addition to the many government/industry related fisheries organizations now headquartered or operating from Anchorage.

Building rental costs in Seattle are not now part of the observer program's operating budget. The Municipality and the CCCE have worked together to develop plans for housing the program and training staff. Instructors and program administrators have been identified who are already located in or near Anchorage, eliminating the need to move professional staff from Seattle to new federal facilities. The Municipality has identified municipally owned space which can be utilized for the instructional facility, housing of the inventory of support equipment, offices, and, potentially, transient housing for observers. These facilities would be made available to the observer training program at no cost other than real utility costs and maintenance (See Attachment F). Equipment and office furniture are available from the Municipality and the CCCE to equip the facility. Identification of low-cost housing options for observers such as winter hotel and summer dormitory space is being explored by both the Municipality and the CCCE. Many observers have enjoyed the freedom of working six months a year and having time to travel and pursue other interests. These individuals have expressed difficulty in finding temporary housing where storage of personal effects while at sea or out-of-town was possible. The Anchorage-based program includes the concept of an "observer house" to use as a home base between trips at a reasonable cost.

The retaining of skilled and qualified observers on a longer term basis is a goal which is in the interest of the industry and, likewise, in the interest of the NPFMC as it works at discharging its responsibilities for management of the Alaska fishery. An Anchorage-based observer training program offers the potential for providing personnel for sea duty on factory ships, for deployment to smaller vessels, to shorebased processing plants, and to other temporary positions in related fields on a consistent and continuing basis. The ASG request for authorization to conduct the training program would permit this goal to become a reality.

EXPERIENCE OF UNIVERSITY OF ALASKA WITH OBSERVER TRAINING PROGRAMS. The request by the University of Alaska for authorization for the ASG to conduct Marine Resource Observer training in Alaska is based on an intimate knowledge of what such a program requires and extensive experience with conducting similar programs.

The ASG was selected by the NPMFC to operate its Pilot Domestic Observer Program. The program was funded by NPMFC, industry, and NMFS. The ASG was chosen to manage that program because of its successful history of working both with the fishing industry and with federal and state agencies on similar projects of significant import to the development of the industry and management of the resource. The success of the ASG's management of the Pilot Domestic Observer Program is evidenced in the aggressive support of the industry, through the NPFMC, for a continued observer process.

The ASG also operated an observer program on the Copper River Delta near Cordova, Alaska for the purpose of observing fisheries/mammal interactions in that region. This program was undertaken by agreement with NMFS, the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game, and the fishermen of Cordova. Under contract

to the NMFS, ASG extended observations into Prince William Sound to monitor whale populations there following the grounding of the Exxon Valdez. ASG reports of mammal/fisheries interactions on the Copper River Delta have recently been appended to the NMFS request for proposals for mammal observer services in the Gulf of Alaska because they provide the most comprehensive set of observations in the region.

The ASG also developed the curriculum and provided the training for observers required by the ADF&G for their mandatory crab processor observer program. Working with that agency and observer contracting personnel, ASG developed, on short notice, the necessary training course for that new observer program.

The CCCE will provide the logistical infrastructure necessary for program coordination and liaison with the Municipality on behalf of and under the oversight of the ASG in Anchorage. The CCCE has extensive experience in the development and management of concentrated instructional programs designed to meet the need of specific target groups such as that represented by the Marine Resources Observer Program. This logistical support will include the provision of laboratory and classroom facilities, office space, facilities and resources management, acquisition of observer housing, scheduling of training, coordination of training schedules with contractors and the AKC, and administrative support for instructional and administrative personnel.

STRUCTURE OF TRAINING PROGRAM

SUMMARY OF CURRENT PROGRAM OPERATION. Currently, all West Coast and Alaska federal observer programs are housed in the AKC in Seattle. AKC staff involved in the observer program classify their responsibilities by sub task: (1) overall administration of the program, (2) operations management including observer training and debriefing, management of equipment, and logistics coordination, (3) data management and (4) data analysis.

The Marine Resources Observer program, as currently implemented, operates as a combination of shared efforts and responsibilities among NMFS, the fishing industry and independent observer contractors. NMFS retains the funding and operational responsibility for the overall administration of the program as well as the observer training program, debriefing and data management. The fishing industry is responsible for providing plans of their fishing effort to NMFS and for making arrangements for and paying for the direct costs of placing NMFS certified observers aboard their vessels through independent observer contractors certified by NMFS. The observer contractors, certified by NMFS to provide observer services, are responsible for the recruiting and deployment of observers.

ROLE OF NMFS/AKC. The NMFS/AKC has the responsibility for the placement of trained Marine Resource Observers aboard U.S. domestic vessels operating in trawl fisheries in the U.S. 200-mile EEZ of the Gulf of Alaska and Bering Sea. The Marine Mammal Protection Act Amendments of 1988 (the Act) requires the Secretary of Commerce (Secretary) to station observers aboard domestic trawlers participating in these fisheries so that 20-35% of the effort in these fisheries is observed. The NPFMC has required a rate of coverage of "100% coverage of all catcher/processors and 30% coverage of all other groundfish boats over 50 feet long." NMFS/AKC has overall responsibility for insuring that these coverage standards are met. In order to accomplish this, NMFS/AKC assumes responsibility for program administration, training or certification of observers, contractor certification, final trip debriefing of observers, coordination of observer coverage and logistics, and management of the data collected by the observers. NMFS has described each of these tasks as follows:

1. Program Administration. Establishment of general program policy; specification of observer duties, sampling methods and data formats; observer qualifications; contractor certification; management of NMFS personnel and budgets; and development and implementation of accommodations and placement aboard vessels.

3. Contractor Certification. Contractors desiring to provide observer services to industry are certified by NMFS so that industry and NMFS are assured that the contractors are financially independent of fishing vessel owners and understand their responsibilities under the program. NMFS develops and maintains the set of responsibilities which must be performed at a minimum by each contractor, including observer work requirements, sampling methodology and data collection requirements. Any firm contracted by NMFS to provide observer services is automatically certified. As with the observer certification process, the development of contractor certification standards is a continuing process.

4. Observer Debriefing. The task of observer debriefing is critical to NMFS to maintain the quality control of the data collected by observers, the collection of information on the fishery which is not somehow contained in the standard data collections, and to identify problems and solutions to problems encountered by observers during their deployments. Observers deployed through the program are debriefed by NMFS Observer Program staff at field office in Dutch Harbor, Kodiak, and at the AKC in Seattle. Observers are debriefed between deployments in the field so that data can be made available for entry, editing and use in a timely fashion.

5. Coordination of Observer Coverage and Logistics. The observer contractors are responsible deployment logistics and the vessel owners are responsible for insuring that they have an observer aboard their vessel if required. However, NMFS monitors coverage and placements of observers aboard vessels to ensure coverage requirements are met and to ensure that required data are received from observers. NMFS will also be responsible for determining and notifying the vessels of the need to obtain an observer in the vessel category requiring less than 100% coverage. Requirements for observers in this category are based on fishing operation plans provided by vessel owners and by monitoring the vessel movement and catch reports. AKC is responsible for final acceptance of all observers proposed for hire. *Proposed observers can be rejected if they do not meet required qualifications. Contractors must remove observers who fail to successfully complete certification training, abide by standards of conduct, or who are decertified by the AKC for performing less than satisfactory work.*

6. Data Management. NMFS is responsible for the entry, editing and data base management of all data collected by observers. Data currently resides on the AKC mainframe computer and may be made available to users according to NOAA rules for data confidentiality.

ROLE OF PRIVATE CONTRACTORS. Contractors wishing to provide observer services to the fishing industry must be certified to do so by NMFS. Firms holding a contract with NMFS to provide observer services will automatically be included in the list of certified observer contractors. To obtain certification as an observer contractor, a firm must be financially independent of the fishing companies and vessels to which they are providing observers, must have submitted a proposal to NMFS which is judged adequate by NMFS and which details how they plan to carry out the required

observer contract services, and must agree to provide all data collected by observers directly to NMFS. Vessel owners may choose to work with the firm or firms of personal choice.

Observer contractors are responsible for the following tasks:

1. Recruiting, evaluating and hiring of qualified candidates to serve as observers.
2. *Ensuring that their observers have obtained the required NMFS certification through attendance and successful completion of the NMFS certification training or previous satisfactory completion of a NMFS foreign or domestic observer deployment and attendance at a recertification briefing.*
3. Providing observer salary, benefits and personnel services.
4. Providing basic worker's compensation and P & I insurance to cover and protect observers injured in the performance of their duties.
5. Providing all deployment logistics to place and maintain the observers aboard the fishing vessels. This includes all travel arrangements, hotels and per diem, and any other services required to place the observers aboard the vessels.
6. Providing replacement or back-up observers in the event an observer has to be removed from a vessel for any reason.
7. Keeping NMFS informed of current observer deployments and deployment plans.
8. Arranging and coordinating observer debriefings with NMFS.
9. In cooperation with the vessel owner, assuring that all observer in-season catch messages and other required transmissions between the observer and NMFS are delivered to NMFS within a specified time.
10. Assuring that all data, reports and specimens collected by observers are delivered directly to NMFS within 5 working days of the completion of each observer trip.
11. Assuring that all gear and equipment issued to their observers by NMFS is returned to NMFS within 5 days of the completion of the observers field deployment.

ROLE OF UNIVERSITY OF ALASKA. Under the terms of this proposal, specifically the authorization of the ASG to conduct Marine Resources Observer certification training, the University of Alaska, ASG would assume responsibility for the training of the observer corps for the Alaska fishery. The University of Alaska, ASG has both the experience and desire to perform the "training" function for the Marine Resources Observer program and the ASG and CCCE have the personnel, laboratory and classroom facilities, dormitory space, and logistical infrastructure necessary to handle this responsibility.

The ASG has had extensive experience in providing observer training and is fully knowledgeable of the curriculum, demands and needs of the training program. The ASG,

CCCE, and the United States Coast Guard have a highly developed safety and survival program already in place which would be incorporated into the curriculum. Instructional material in cold water survival has been published, field tested and distributed for international use. Facilities and environments for this training are readily available and will be reflected in the curriculum. Both the ADF&G Groundfish Program and the NPFMC Pilot Program provided models for the fishery-wide coverage needed for the collection of good (statistically valid) management data. ASG has available the professional expertise to provide the instruction which is already housed within the infrastructure of the University of Alaska and in several state agencies.

The Municipality of Anchorage has offered to commit to ASG and CCCE, a building that will provide the space needed for this program. This space is useable for instruction, office support, and teaching laboratories. Indicative of the commitment that the Municipality has to the proposal is its willingness to provide this space at no rental cost.

ROLE OF ALASKA DEPARTMENT OF FISH AND GAME. The ASG will work with the ADF&G to meld ADF&G observer training programs and data gathering needs into the integrated program to be operated on behalf of NMFS/AKC.

TRAINING CURRICULUM. There is an identifiable body of tasks to be conducted and skills that Marine Resources Observers must possess in order for them to be successful in their assignments and achieve the program objectives established by NMFS/AKC. Among the most critical of these tasks is the collection of valid data which must be accomplished by the observer while aboard the vessel. The observer is responsible for obtaining the following types of essential data:

1. The species, number and condition of marine mammals taken in fishing operations or interacting with the fishing gear.
2. The collection of biological data from the marine mammals incidentally killed in fishing operations.
3. The total groundfish catch, location of fishing and fishing effort of every fishing operation conducted.
4. Determination of the catch composition of the permitted catch of groundfish and determination of the incidental catches of prohibited species. Prohibited species are those species whose retention is prohibited in trawl fishing operations.
5. The collection of biological data from designated species which includes but is not limited to length and weight frequency measurements, collection of age structures, collection of stomach samples and food habits data, and collection of data on maturity, fecundity, and reproductive habits.
6. The sending of periodic, usually weekly or daily, radio messages which report the species and numbers of marine mammals incidentally caught and killed, the estimated permitted and prohibited species catches taken and measures of the vessel's fishing effort.
7. Collection of data on fishing gear design and operation.

It is obvious that, in order to accomplish the successful collection, recording, and reporting of this critical data, it is essential that the observer be equipped with the necessary skills and

knowledges required to carry out his/her responsibilities. It is the intent of the ASG to utilize the current Marine Resources Observer Program curriculum developed by the NMFS/AKC as the core of the curriculum for the Alaskan-based program. The NMFS/AKC has a long and successful history of observer training. Over the past several years their curriculum has undergone substantial modification and improvement. The ASG has reviewed that curriculum and feels that it provides a sound basis for development of the proposed ASG training program. The ASG will adopt the applicable elements of the AKC curriculum which provide the underpinnings necessary to conduct the Marine Resources Observer Training Program. The following basic curriculum blocks will serve as the foundation for the developing curriculum of the program:

1. Introduction to the Observer Program
 - An overview of the northeast Pacific fishery, its history, economic significance, and management under the Magnuson Fishery Conservation and Management Act (MFCMA).
 - The life of an observer; duties and life aboard, seasickness, communication difficulty, hardship
2. Duties and Professionalism
 - Conduct
 - Objectives, priorities, workload
 - Citizenship aboard
3. Technical Training
 - Fish identification
 - Mammal identification
 - Obtaining haul information and overall catch estimates
 - Sampling techniques
 - Data forms, species reports and report groups
 - Navigation
 - Computations and reporting ashore and at sea
 - Radio operations
 - Special scientific sampling; tagged animals, otolith and scale sampling, etc.
 - Logbook entries, comparison of observer and vessel logs
4. Safety Training
 - General safety aboard
 - Safe deck operations
 - Cold water survival
 - Medical emergencies
 - Fire control

Some modifications are being planned for at this juncture, based on the experience of ASG in the Pilot Domestic Observer Program. These include the following:

Safety Training: The NMFS trained observers which were employed in the ASG conducted Pilot Domestic Observer Program stated a desire for increased emphasis on safety training. Given the greater variety of vessels in the domestic fleet, compared to the foreign and joint venture fleets, ASG believes that an increased emphasis in this area is justified.

Crab Emphasis: It has been the experience of the ASG that NMFS trained groundfish observers need additional training in order to become ADF&G crab

processor observers. This training will include additional crab identification work, biological and legal measurement of crab, and an introduction to the Alaskan fishing laws. The observer contractors with whom ASG has worked provide observers to both federal and state fisheries. Having increased numbers of observers cross-trained would be a benefit to both the observer contractors and industry. A more stable employment opportunity for observers will help reduce the current high turnover rate. The broadening of the observer pool will accrue benefits for the management agencies as well.

Statistical Sampling: The sampling environment is substantially more complicated for the new "integrated" Marine Resources Observer Program than has been usual in the past, especially for the observers assigned to shore delivery vessels, or for the observer who is switching between shore-based vessels, shore-based plants, and factory trawlers, and even to crab processors between groundfish assignments. Additional emphasis on sampling strategies will probably be needed to accommodate this new flexible element in observing.

It is anticipated that these additional areas of study could be accommodated by two or three additional days of training.

Once candidates have been recruited, training sessions will be scheduled. Scheduling of the sessions depends on when observers are needed in the field and the number of trainees who have been recruited for the training. Trainees passing a final exam at the end of the training session are certified by NMFS as observers.

Observer trainees are paid during training. As the foreign observer program has been phased out, salaries have gone up. Some contractors are paying a flat rate of \$2450 per month for observers in the federal programs. Others differentiate between at-sea and on-land duty, paying about \$2250 on land and \$3000 at sea. Observers who do not have an immediate departure date after training are paid during the interim, which may be up to two and a half weeks. No per diem is paid until the observer actually departs the training location for his or her field assignment.

MARINE RESOURCE OBSERVER TRAINING SYLLABUS. The curriculum for the Marine Resource Observer Program, developed by ASG faculty in consultation with the federal and state management agencies and with experienced observers, will be routinely reviewed and modified to meet the changing needs of the management agencies, industry, and the fishery resource. The ASG and Marine Advisory Programs have faculty experienced as both observers and as instructors. They are knowledgeable in all areas of the curriculum, and expert in several areas. Their talents will be supplemented by faculty with specific expertise. In addition, the training staff at NMFS/AKC, and ADF&G will be consulted extensively for their advice on curriculum content and training techniques. Testing will be conducted in the context of preparation for specific observer duties, and with the approval and coordination of the NMFS/AKC. Beyond the specific curriculum, a program environment will be designed with the specific purpose in mind of developing a sense of professionalism for the observer corps.

Following is a draft training syllabus based on the course of study used by NMFS for its foreign observer training program. Domestic observers have, in the past, received an additional four days of training related to the U.S. fisheries. Guest lecturers will include fishery management agency officials, Coast Guard representatives, ichthyologists, and marine mammal scientists.

Day 1

Orientation Day: Administrative information, introductions all around.
Introductory video about the Observer Program.
MFCMA and management of the EEZ, (brief overview lecture).
Slides and lecture on the history of NE Pacific groundfish fishing, commercially important fish, vessel types and their operations.

Day 2

Slide show on Alaska ports, safety in boarding and disembarking vessels, life at sea, hazards, and observer work.
Hardships, deportment, and conduct lecture.
Statistical areas and vessel check-in reports.
Duties: objectives and priorities, workload.
Guest Lecture: AKC management staff.

Day 3

Species Identification: a general review of identification terminology and slides of various representatives of NE Pacific fish families: presented by a U of A ichthyologist.
General instructions on data forms, use of GMT and the metric system.
Obtaining haul information: data forms 1 and 2US.
Estimation of catch size - by the observer.
Classroom practice of haul weight estimation.
Overnight homework assignment.

Day 4

Estimation of catch size - by the ship.
Correction of homework and quiz over haul data form.
Video on navigation and classroom practice on use of a navigational chart.
Identification of Sebastes and Sebastolobus (rockfish) and other species: lecture, slides and laboratory session presented by U of A ichthyologist.

Day 5

Definitions of species report groups and prohibited species.
Catch Composition Sampling: determining a sample weight.
Methods for random, representative and unbiased sampling.
Slide presentation on sampling.
Data entry on species composition form 3US.
Classroom practice of sampling methods and data entry.
Homework practice assignment.

Day 6

Correction of homework.
Collecting biological information from Tanner crab, King crab, halibut and salmon in samples: weights and lengths, viability, sex, and salmon scale sampling.
Molting crab study.
Collecting data on tagged fish and crab.
Computations for weekly radio messages, (forms RM, RM-1, 7 RM-3).
Lecture, classroom exercise, and homework.

Day 7

Formatting weekly and daily radio messages for transmission.
Length frequency sampling, (form 7US).
Otolith and scale sampling, (form 9US).
Fish dissection and otolith removal: slides and lab practice.
Species identification of crab: slides and classroom practice.

Day 8

Vessel reporting requirements, ADF&G Fish Tickets.
Practice addressing the crew; interactions with vessel personnel.
Considerations and requirements for sampling longline catches.
Assignment of 2nd data exercise.

Day 9

Identification of flatfish and salmon species: lecture, slides and laboratory session presented by U of A ichthyologist.
Background study: Review of previous cruise reports and reading files.
Receive special project instruction.

Day 10 & 11

Safety videos and discussion on hypothermia, medical emergencies at sea, fire control and sea and shore survival.
Medivacs, radiotelephone procedures and preparation of a medical diagnostic chart.
Checkout of survival suits.
Survival suit and life-raft water practice.

Day 12

Correction of homework.
Observer's logbook entries, methods of documentation.
Obtaining vessel production information and product recovery sampling.
Comparison of vessel logs with observer data.
Guest Lecture: Scientist from the National Marine Mammal Laboratory showing slides on identification of marine mammals at sea.
Recording information on marine mammals: as incidental take, (form 10); sightings (form 11).

Day 13

Species identification exam.
Gear issue: familiarization and care of equipment, gear check-out and calibration of scales.

Day 14

Final exam.
Problem solving using small discussion groups and in-class presentations.
Guest speaker: Debriefing supervisor discusses data review process and final reports.
Preparation for first day aboard.
Travel rules and parting information from contractors.

The success of the observer program designed for implementation with the domestic fleet will depend to a large degree on the way that the conduct and quality of the program is perceived by the fleet. Respect and acceptance of the observer by the vessel crew and captain will be the key to the acceptance of the program as a whole. The knowledge,

professional demeanor, and social adaptability of the observers will be primary factors in that acceptance.

Having already successfully trained observers, the ASG is confident that the Marine Resource Observer Training Program proposed here will graduate a professional cadre of observers who are capable of implementing a successful and productive data gathering program. We anticipate that it will graduate observers with outstanding training. The curriculum will remain under constant review for improvements.

ASG TRAINING STAFF. The ASG will use both faculty dedicated to observer training and specialists already existing on the faculty in the School of Fisheries and Ocean Sciences. Already on the faculty are ichthyologists, two experienced fishery observers, marine safety specialists and marine advisory faculty with substantial experience working on domestic fishing vessels. As special emphasis is needed, other fishery and oceanographic specialists are available on the faculty. To ensure that an observer training course which needs to be taught on a monthly basis receives the constant attention that it will need, a supervising faculty member, and one other, both well attuned to the NMFS Marine Resources Observer Program, will be selected and dedicated to this instructional program.

ADMINISTRATION OF PROGRAM

This training proposal will be organized and managed as a joint effort of the ASG and the CCCE. Alaska Sea Grant will be responsible for the training program design, instructional implementation, and coordination of program evaluation and modification with AKC, contractors, and industry. CCCE will assume responsibility for management of the project, fulfilling reporting requirements to AKC, logistical coordination of program support, logistical interface with AKC and AKC certified contractors, and overall coordination of program efforts.

The observer and project management experience of these two entities make them uniquely well-qualified to accomplish this proposal. Sea Grant recently completed operating the experimental pilot observer program for the NPFMC, and has conducted an observer training program for the ADF&G crab program. CCCE is a major college in the University of Alaska Anchorage with state wide responsibilities for continuing professional education program design, implementation, and management. CCCE maintains multiple contractual relationships for training programs with various agencies on an ongoing basis.

ASG is mindful of the importance of the data being collected via the observer program both to the long-term health of the fishery and to its management. The requirement for data gathering and resource management specified by the NPFMC and the Magnuson Fishery Conservation and Management Act (MFCMA), has left private industry, government, and educational institutions playing an unusual set of roles. Private industry and even educational institutions have been undertaking the normal government function of data collection. Government, not an educational institution, has been providing training. Because, under this new domestic program, the relationship between the fishing industry and the observer contractors may be closer than the relationship between government and those data gathering contractors, there remains the opportunity for errors. The quality of education and training provided to the observers is a critical element to the success of the program. The University of Alaska is anxious to be a part of a success story in addressing these unusual circumstances and recognizes that its relationship with NMFS is a key element to that success.

To date there has been considerable advantage in NMFS providing the training of observers in-house. Consistent errors in data collection or transmittal uncovered as observers were debriefed would signal a need for increased emphasis on that particular element in the training program. Close communication must be established between ASG training personnel and the NMFS/AKC in order to ensure the same degree of responsiveness of this training program. With the observer program now focused almost exclusively on the domestic fishery off Alaska, debriefing is planned to be accomplished primarily in the state, resulting in a cost savings to the fleet and its observer contractors. The important linkage between training personnel and debriefing personnel may therefore actually be enhanced by the training taking place in Alaska.

Providing administrative oversight of the Marine Resource Observer Training Program in Anchorage will be Dr. Ron Dearborn, director of the Alaska Sea Grant program, and Dr. Carl Ellis, Associate Dean of the College of Community and Continuing Education. Dearborn and Ellis will interact on a regular basis with contractors, industry, and management agency personnel whose input will be required to make this proposal a consistent success. They are familiar with the NPFMC process and operations, NMFS, the Alaska Board of Fish, and the relationships between the governmental agencies which will be involved in this proposal. They are also familiar with the concerns of people representing diverse aspects of the industry. Sea Grant staff developing the curriculum will include people who are specialists in the different subject areas and already familiar with the domestic industry. Consultants will be used to provide particular expertise, where needed.

RECRUITMENT AND CERTIFICATION OF OBSERVERS

The pool of observers trained to support the foreign fishery observer program is rapidly diminishing. As the domestic fishery has expanded, the need for a full training course to certify new observers on a consistent and ongoing basis has become critical.

NMFS certified contractors are required to develop and maintain a corps of experienced, certified observers that can be deployed to domestic trawl vessels. Contractors recruit observers nationwide through newspaper ads as well as through on-campus recruiting campaigns. Over the last four years, the regional distribution of residence for observers has been: West Coast, 55 percent; Northeast, 12 percent; Great Lakes, 10 percent; Rocky Mountains, 7 percent; Midwest, 7 percent; Southeast, 4 percent. Less than one percent have been Alaskan residents. The reasons for the few observers recruited in Alaska and the heavy preponderance of West Coast residents can only be speculated upon. The regional breakdown does correspond somewhat to the number of universities and colleges in the areas that offer fishery or natural science programs. Both Oregon State University and the University of Washington are or have been contractors in the Federal observer program, so it would be expected they would recruit heavily among their own graduates.

The present system requires candidates to have a 4-year biological science degree and receive two or more weeks of training in a course developed and managed by NMFS before being certified as qualified observers. The requirement is stringent considering the relatively low pay, hard work, long hours, and sometimes miserable working conditions faced by observers. The rationale is that graduated science or biology majors will be versed in the scientific method, collect more reliable data, and will have all the basic skills needed for the job. The degree requirement limits the number of people available for an expanded domestic observer program, particularly if it is the intent of such a program to attract people willing to stay longer than the six months the average observer has lasted.

Observers who meet the basic educational and experience qualifications established by NMFS and hired by contractors to be placed aboard domestic vessels are required to successfully complete the 2.5-week certification training program prior to being placed aboard a domestic vessel. Observers who have served as either a foreign fishery observer or as a domestic observer within the past 24 months under programs administered by the NMFS/AKC Marine Resources Observer Program will be required to attend a four-day recertification briefing prior to their initial deployment. These certified observers may be required to attend periodic two-day recertification briefings throughout their employment. Individuals who have served as observers for a program administered by the AKC but have not done so during the 24 months prior to their employment, will be required to attend and successfully complete a 2.5-week certification training session prior to their initial deployment. Certification training will be provided at a minimum on a scheduled quarterly basis and more frequently (monthly) if required.

As the Marine Resources Observer Program matures, the opportunities for employment should encourage the formation of a corps of professional observers. This might be particularly appealing for individuals with 2-year marine technical degrees. If such a course of studies was required as part of the certification process a number of universities or community colleges might be able to offer it. In such a scenario, the student would be getting credit for the course and would not have to be paid for the extended training period.

QUALIFICATIONS OF OBSERVER TRAINEES.

Contractors are required to develop and implement a program which will provide and maintain a corps of experienced observers who will make repeated observer trips on domestic trawlers throughout the year. As stated above, observers placed aboard domestic vessels by the contractor must have a bachelor's degree in fisheries or wildlife biology or a related field of biology or natural resource management. However, if sufficient numbers of qualified and acceptable applicants with the above educational background are not available, individuals with senior standing within one of those programs listed above or individuals with an Associate in Arts (A.A.) degree in fisheries or wildlife science or technology may be substituted, upon approval by the AKC. Prior experience as an observer through a program administered by the Observer Program of the AKC is highly desirable but not required. As indicated above, individuals who have satisfactorily served as an observer for programs administered by the Observer Program of the AKC during the previous 2 years must attend a certification briefing at the AKC prior to deployment. Individuals who serve as observers must be U.S. citizens. Previous at-sea experience is desirable, though not required.

Work conducted aboard commercial fishing vessels at sea is conducted in a difficult and hazardous environment. Commercial fishing was rated as the most hazardous occupation in the United States last year. The work requires strenuous physical activity which includes frequent lifting of heavy baskets of fish (60-85 lbs.) and long working hours. The nature of the job is also mentally stressful due to the confined living and working space and the differing objectives of the observer and crew aboard the vessel. As a result, individuals must be provided who are physically capable of performing the work, mature and capable of working independently without direct supervision and under stressful conditions. Vessels operate in remote areas of Alaska and, as a result, trained medical help and facilities are not easily or immediately available. Due to the physical and mental demands of the job, all observers must have passed a physical examination by a licensed physician within the past 12 months which certified that there are no health problems or conditions which would jeopardize the observer's safety while at sea or prevent the observer from satisfactorily performing his/her duties. To attempt to assure this, the

certifying physician is made aware of the dangerous, remote and rigorous nature of the work at sea prior to the examination. The physical exam, including appropriate lab tests and medical history, must, at a minimum, be performed to the standards set forth in the NOAA Medical Policy Manual, Chapter 5. Upon request, the AKC may consider and grant a waiver for certain conditions not passed in an individual physical.

NMFS contractors are tasked with submitting a list of individuals to be hired and their respective qualifications to the AKC for approval at least 7 working days prior to the beginning of certification training or briefings for which the individuals are scheduled to attend. Contractors are responsible for supplying alternate observer candidates if one or more observers are rejected by the AKC, an observer(s) fails to successfully complete certification training or an observer(s) resigns prior to completion of duties.

The various and varied observer programs in the U.S. and around the world have used observers with different backgrounds in education, training, and experience. NMFS foreign and domestic observers have been drawn from a pool of individuals who have for the most part received four years of college education and which were then given brief, focused training. The ADF&G and Canadian observer programs have often hired people with less education, but have provided more time for training and apprenticeship. If the multiple U.S. programs are pulled together into a comprehensive effort, a mutual understanding for the demands of the program must be reached. Similarly, if a professional observer corps is to be achieved, one capable of serving the management and assessment needs for the various fisheries and marine mammal programs, and one which provides career opportunity, then the needs for formal education and specific training must be carefully addressed. It may be that breadth of education and social experience may be of relatively greater importance for observers to perform well on long cruises in a new environment, typical of the NMFS foreign observer program, when compared to one or two day trips on shore-based domestic vessels. On the other hand, domestic vessels, especially smaller vessels, may require unusual nimbleness in assessing the sampling environment because of the relative difficulty of sampling hauls. The education and specific training needed for certification for specific duties within an overall program will need to be carefully assessed and monitored as the training program matures. This will be done in consultation with experienced observers, contractors, industry and management agency personnel.

NUMBER OF CERTIFIED OBSERVERS REQUIRED.

The NMFS/AKC is responsible for specifying and notifying contractors of the monthly requirements for numbers of observers, number and types of vessels to be covered, months of observer sampling to be achieved and weekly listings of catcher/processor vessels participating in the fishery. Listings of shoreside delivery vessels participating in the fisheries are to be provided by the contractors' field coordinators from estimates obtained through their contacts with the processing plants. The monthly requirement for numbers of observers, vessels, and sampling months are to be provided to contractors on a quarterly basis 15 days prior to the beginning of the quarter. The AKC is to confirm the projected monthly observer requirements one week prior to the beginning of each month. Contractors are to be advised immediately of any changes in observer requirements resulting from changes in expected fishing effort. In the event a need for additional observers arises due to changes in the fishing effort, contractors are expected to provide the needed number of additional observers within 7 days of notification by the AKC or within a time period mutually agreeable between the AKC and a specific contractor.

In June, 1989, the NPFMC voted to recommend that an observer program with 100 percent observer coverage on vessels greater than 125 feet, 30 percent observer coverage on vessels between 125 and 50 feet and shoreside processor observers be analyzed for feasibility of implementation in 1990. These amendments were approved by the Secretary of Commerce on November 1, 1989. Twenty percent observer coverage is the figure usually estimated by fishery scientists as the minimum to provide statistically valid information on a fishery.

The NPFMC staff, in its draft Environmental Assessment/Regulatory Impact Review (EA/RIR) for amendments of groundfish management plans off Alaska (May 3, 1989), made the following estimates of the number of boats currently registered to fish off Alaska and capable of carrying observers. "Assuming that vessels larger than 50 feet are large enough to physically accommodate observers, the number of vessels capable of accommodating at least one observer are: 650 catcher vessels, 128 catcher/processor vessels, and 19 motherships."

The actual numbers of observers required to monitor catches by the U.S. fleet are calculated based on the level of coverage specified, the number of days each boat will actually fish, and to some extent on the fisheries in which they are engaged. From the information found in the NPFMC EA/RIR for Amendment 18 to the Gulf of Alaska Groundfish Fishery Management Plan and Amendment 13 to the Bering Sea Groundfish Fishery Management Plan (May 1989), an approximation of the number of months can be calculated.

According to this document, there are 141 vessels over 125 feet in length (95 processors, 18 motherships, and 28 catcher vessels). Using the same assumptions of average number of deliveries and days per deliver found in this report, a total of 527 man-months are required to provide 100 percent coverage.

The report indicates that there are a total of 652 vessels capable of taking an observer between 50 and 125 feet in length. Given the delivery information provided in the RIR, 30 percent coverage of this portion of the fleet would require an additional 342 observer man-months. The RIR states that approximately 140 man-months would be necessary to provide 100 percent coverage of existing shoreside plants. This is a grand total of 1,009 man-months.

Staff at the NMFS/AKC observer program had done an independent pre-estimate of observer man-months needed. This estimate provided for 710 man-months of 100% coverage for catcher-processors, 126 man-months for 30 percent coverage of trawl vessels and 170 man-months for 30 percent coverage of longline and pot vessels. Adding the 140 man-months to cover shoreside plants, this adds up to 1,146 man-months, a slightly higher estimate.

Using these estimate as a range, it is possible to calculation the expected number of three man-months deployments required. An estimated 336 to 382 three man-months deployments are predicted. If each observer worked six months a year, 168 to 191 observers would be needed annually to provide this level of coverage. However, not all observers will work in the field six months a year. Therefore, a more reasonable estimate is 175 to 250 observers per year.

One additional factor that must be recognized to estimate numbers is the overall return factor on the smaller vessels. There is a small (less than 125 ft) trawler. It must be considered that the turn-over and return rates will be far less than on the large factory trawler, therefore a projection of 300 - 325 observers is the figure that the ASG is prepared

to address. Only after 1 - 2 years of operation will a longevity figure become apparent and accepted.

Observer requirements for fiscal year 1990 projected by the AKC for specification to potential contractors were based on the EA/RIR estimates. The schedule containing the estimate for the required number of observer months and three month field deployments for FY 1990 was broken down by region as follows:

Observers deployed to vessels fishing in the Bering Sea/Aleutian Islands region and the western Gulf of Alaska (west of 159 degrees W. longitude). Dutch Harbor, Alaska, is the port of embarkation/debarkation and observers are required throughout the contract period. First deployments under this contract were to begin in December 1989.

1. Shoreside delivery trawlers - 48 observer months or 16 three-month observer deployments. Observers will make repeated short trips of 3 to 10 days duration on vessels throughout the field deployment. The government expects that 70% of each observer's time will be spent at sea and the remaining 30% of time shoreside at Dutch Harbor. During the periods between individual trips, the observer will be preparing reports and data.

2. Catcher/processor or mothership type vessels - 150 observer months or 50 three-month observer deployments. Observers to make repeated trips of 3 to 6 weeks duration on vessels throughout the field deployment. The government expects that each observer will spend about 80% of the time at sea and the remaining 20% of the time shoreside at Dutch Harbor. During the periods between individual trips, the observer will be preparing reports and data.

Observers deployed to vessels fishing in the central and eastern Gulf of Alaska region (east of 159 degrees W longitude). Kodiak, Alaska is the port of embarkation and debarkation. Observers are required throughout the contract period. First deployments under this contract were to begin in December 1989.

1. Shoreside delivery trawlers - 57 observer months or 19 three-month observer deployments. Observers to make repeated short trips of 3 to 10 days duration on vessels through the field deployment. The government expects that 70% of each observer's time will be spent at sea and the remaining 30% of time shoreside at Kodiak. During the periods between individual trips, the observer will be preparing reports and data.

2. Catcher/processor or mothership type vessels - 45 observer months or 15 three-monthly observer deployments. Observers to make repeated trips of 3 to 6 weeks duration on vessels throughout the field deployment. The government expects that each observer will spend about 80% of the time at sea and the remaining 20% of time shoreside at Kodiak. During the periods between individual trips, the observer can be preparing reports and data.

Option for Domestic Observers Aboard Longline and Pot Vessels

In the event that vessels fishing with longlines or pots (traps) are reclassified as Category I fisheries under amendments to the Act in future years or funding to provide observer coverage of these gear types is made available for fishery management purposes, contractors will be responsible for providing qualified observers for these vessels. The requirements for observers, their duties and the responsibilities of the contractors will be the same as those required for the trawl vessels. Likewise, the responsibilities of the AKC

will be as specified for trawl vessels. Both shoreside delivery and catcher/processor type vessels fish with longline or pot gear. Vessels under 50 feet in length will be subject to observer coverage. If funding is provided to place observers aboard these vessels, a 20% level of sampling of the fleet is anticipated.

Observers to be deployed to vessels fishing in the Bering Sea/Aleutian Islands region and the western Gulf of Alaska (west of 159 degrees W. longitude). Dutch Harbor, Alaska, will be considered as the port of embarkation/debarkation. Observers may be required throughout the contract period.

1. Shoreside delivery vessels - 6 observer months or 2 three-month observer deployments. Observers will make repeated short trips of 3 to 10 days duration on vessels throughout the field deployment. The government expects that 70% of each observer's time will be spent at sea and the remaining 30% of time shoreside at Dutch Harbor. During the periods between individual trips, the observer will be preparing reports and data.
2. Catcher/processor or mothership type vessels - 33 observer months or 11 three-month observer deployments. Observers will make repeated trips of 3 to 6 weeks duration on vessels throughout the field deployment. The government expects that each observer will spend about 80% of time at sea and the remaining 20% of time shoreside at Dutch Harbor. During the periods between individual trips, the observer will be preparing reports and data.

Observers to be deployed to vessels fishing in the eastern Gulf of Alaska (east of 159 degrees W. longitude). Kodiak, Alaska will be considered as the port of embarkation/debarkation. Observers may be required throughout the contract period.

1. Shoreside delivery vessels - 51 observer months or 17 three-month observer deployments. Observers will make repeated short trips of 3 to 10 days duration on vessels throughout the field deployment. The government expects that 70% of each observer's time will be spent at sea and the remaining 30% of time shoreside at Kodiak. During the periods between individual trips, the observer will be preparing reports and data.
2. Catcher/processor or mothership type vessels - 27 observer months or 9 three-month observer deployments. Observers will make repeated trips of 3 to 6 weeks duration on vessels throughout the field deployment. The government expects that each observer will spend about 80% of time at sea and the remaining 20% of time shoreside at Kodiak. During the periods between individual trips, the observer will be preparing reports and data.

As can be seen, estimates of the number of observers required can vary widely. The ASG has tended to utilize conservative figures in anticipating the needs for the training program in Anchorage. It is anticipated that any changes that occur will be to the high side and thus strengthen the cost-effectiveness and practicality of locating the program in Anchorage.

COST OF TRAINING PROGRAM

There are three distinct cost components related to the domestic observer programs. The first of these is the administrative component which includes the development and management of operating specifications for the fishery and management and analysis of the data upon which these specifications are based. The second cost component is the

recruitment, deployment and logistical support of the observer. The third is the training of the observer corps to accomplish the data collection in an efficient and statistically valid manner.

The second of these cost components, the recruitment, deployment and support of the observer corps, under the NPFMC plan, is being paid for by the vessel owners working with NMFS certified private contractors. Costs for this segment of the domestic observer program have increased over that experienced in the foreign fishery program. One primary reason for this increased cost is the increase in observer salaries. Observer salaries have increased for several reasons. Some recent programs, such as the Alaska crab observer requirement passed by the Alaska Board of Fisheries in 1988, needed observers immediately. Salaries were increased to attract qualified people quickly. As mentioned earlier, most of the domestic observer programs require an observer with experience as a foreign observer. The pool of experienced observers has shrunk as they move into other fields and fewer observers were trained as the foreign fishery dwindled.

Most observers probably went into the program with little intention of making a career of it. A trip or two after graduation to fill in until a permanent, more attractive job appeared was welcome, but only a few stayed on for any length of time. Some like the life style, six months of hard work and then travel or study the rest of the year. It should be noted that observing on American ships does not have the attraction of a cultural exchange that work on a foreign ship does. The chance to live and work within a foreign culture and perhaps practice a new language was very appealing to many observers. Many of the American fishing vessels are smaller than the foreign ships, more crowded, and engaged in fisheries in ways that are inherently more dangerous than were the foreign fisheries.

Domestic observer contractors are competing for a currently depleted ex-foreign observer pool. All of these factors; non-career expectations, lack of cultural exchange, fewer certified and experienced ex-foreign observers, and poorer working and living conditions, have contributed to the increased salaries for domestic observers.

For the domestic observer programs in which the fishing company negotiates directly with the contractors, costs currently range from \$6500 to \$8300 per observer month. That does not include the NMFS program administration costs.

The University of Alaska Sea Grant College Program managed a pilot domestic observer program for the NPFMC between September 1987 and May 1989. The cost per observer month for this program, which did not include the full costs of Sea Grant administration, was approximately \$3400. Again, this figure does not include costs for NMFS training or debriefing of approximately \$1000 a month. Adding that amount and factoring in a reasonable estimate of Sea Grant administrative costs, an average observer month cost about \$5000.

Observer costs obviously vary considerably. Delivering the most observer time for the least cost, particularly now when it appears the American fishing industry will probably be supporting programs directly, should be a very strong argument for relocation of the training program nearer to the fishery. Developing a pool of observers qualified to participate in all programs could result in both reduced travel cost and less turnover in observers. It has been the experience of most participants that the maximum continual time at sea should be two or three months. Standardizing the programs would give an observer more opportunity to move from an "at-sea" job to one on shore. Combined with field debriefing, observers might stay in the job longer without the need for trips to Anchorage or Seattle for the "end-of-trip" debriefing now used. For example, a Kodiak-based observer might participate in the state crab catcher/processor program and then be stationed

in a shoreside plant before rotating to smaller groundfish vessels participating in the federal program. This would reduce deployment costs while providing more varied and longer term employment for the observer.

However, there is currently no funding mechanism provided for underwriting or recovering the costs related to either the first or third components of the cost structure for the domestic observer program. ASG and the CCCE have developed a preliminary budget which would provide a quality training program located in Anchorage. The program, with its administrative costs, would require an annual figure of approximately \$400.0. This cost estimate compares favorably with the cost-for-training figures estimated by NMFS/AKC personnel.

There still remains, however, no identified source of funding for such a training program, whether located in Anchorage and conducted by ASG or, on a long-term basis, at the AKC in Seattle.

FUNDING MECHANISM

Under the current Marine Resource Observer Program, the fishing industry or vessel owners are responsible for the direct costs for placing observers aboard their vessels. The program requires that fishing vessel owners submit a fishing operations plan to NMFS. These effort plans will be used to determine observer coverage needs and to select vessels. Any vessel owner who is required to carry an observer will be responsible for obtaining a NMFS certified observer from the certified observer contractor of his/her choice. The cost for that observer will be paid by the vessel owner directly to the contractor. Prior to beginning fishing operations during the period which the vessel is required to carry an observer, the observer must notify NMFS that he or she is aboard the vessel and prepared to perform the observer duties.

The NPFMC is trying to secure funding for the program through NMFS or an amendment to the Magnuson Act (MFCMA) which would authorize the regional councils to levy and collect fees from the industry to support a domestic observer program. Several approaches have been proposed and forwarded by NPFMC staff for funding the domestic observer program, but none have been acted upon (See Attachment G).

Funding for domestic observer programs continues to be a problem. The NPFMC contributed \$100,000 to fund the recently concluded pilot program which was run by the University of Alaska, ASG. The Alaska Factory Trawlers Association put up \$100,000 early in 1989 for observers and that amount was matched by NMFS. Industry contributed other, smaller, matching amounts. To date the funds available have been nothing like the more than \$4,000,000 annual observer fees from the foreign fishery. The current training and management effort by NMFS/AKC is being funded through an integrated program utilizing the resources provided for the MMPA.

While pressure for an expanded domestic observer program has grown, means for supporting the critical training component of the program have not materialized. Currently the government cannot legally assess fees to the U.S. industry for observer coverage. Congressman Young introduced a bill which would allow NMFS to assess the industry for observer costs but action on the legislation has not been forth-coming. The need for observer coverage and the realization that they may have to pay for its full implementation is also increasingly recognized by the industry. The amendments passed by NPFMC to their Groundfish Management Plans at the June 1989 meeting called for greatly increased observer coverage. These amendments were approved by the Secretary of Commerce on

November 1, 1989. One way or another, it appears that the observer program will be expanded to something approaching the dimensions once found in the foreign fishery.

The present reading of the Magnuson Act leaves the National Marine Fisheries Service without the ability to recover costs directly from the industry for training and deployment of observer personnel, yet the agency is left with the task of administering an observer program required by the North Pacific Management Council. Training costs, at one time funded by receipts from the foreign fishery, have not been provided to NMFS under this expanded domestic program. Neither has budget been provided to the University of Alaska, ASG for the training of observers. At the same time, the debriefing of this new Alaska-based corps of observers and the new data handling demands are an increased burden on the NMFS/AKC. ASG believes that the training cost issue is one which should be jointly presented to Congress and is willing to work with NMFS and the NPFMC in such an endeavor.

ATTACHMENT A

PROGRESS REPORT

WORKING DRAFT

OPERATIONAL PLAN FOR DOMESTIC OBSERVER PROGRAM

Introduction

The North Pacific Fishery Management Council has approved amendments to both the Bering Sea/Aleutian Islands and Gulf of Alaska Groundfish Fishery Management Plans which will require that U.S. fishing vessels carry observers. The plan amendments require that the National Marine Fisheries Service develop and implement a domestic observer program which will be funded by both industry and the federal government. Industry will be responsible for the direct costs of obtaining and maintaining observers aboard their vessels while NMFS will be responsible for administration of the overall program. As a result of the shared funding responsibilities of NMFS and industry, the proposed observer program will be a cooperative effort between NMFS, industry and observer contractors. The elements of this proposed program is described by this document.

Summary of Program Operation

The proposed domestic groundfish observer program will operate as a combination of shared efforts and responsibilities between NMFS, the fishing industry and independent observer contractors. NMFS will have the funding and operational responsibility for the overall administration of the program as well as observer training, debriefing and data management. The fishing industry will be responsible for providing plans of their fishing effort to NMFS and for then making arrangements for and paying for the direct costs of placing NMFS certified observers aboard their vessels through an independent observer contractor certified by NMFS. The observer contractors certified by NMFS to provide observer services will be responsible for the recruiting, deployment, logistics, insuring that their observers have been NMFS certified, insurance and employee benefits and delivery of observer data to NMFS. The domestic observer program required by the Marine Mammal Protection Act and funded by the federal government will be in operation prior to the approval and implementation of this program and possibly throughout the operation of this program. The integration of these two programs will be discussed later.

NMFS Responsibilities

NMFS will be responsible for the overall program administration, training or certification of observers, contractor certification, final trip debriefing of observers, coordination of observer coverage and logistics, and management of the data collected by the observers. A description of what each of these tasks entails follows.

ATTACHMENT A

2

1. Program Administration. This task consists of establishment of general program policy; specification of observer duties, sampling methods and data formats; observer qualifications; contractor certification; management of NMFS personnel and budgets; and development and implementation of fishery regulations pertaining to observer work, accommodations and placement aboard vessels.

2. Observer Training/Certification. Observers who meet the basic educational and experience qualifications established by NMFS (Attachment No. 1) and hired by contractors to be placed aboard domestic vessels will be required to successfully complete a 2.5 week training certification conducted by NMFS prior to being placed aboard a domestic vessel. Individuals who have successfully completed either a foreign or domestic groundfish observer deployment administered by the NMFS AFSC will only require attendance at a 2-4 day briefing. The materials to be covered in the 2.5 week training course are shown in (Attachment No. 2). Certification training will be provided at a minimum on a scheduled quarterly basis and more frequently (monthly) if required. During 1990 the AFSC will initially conduct observer training but will investigate the feasibility of issuing a contract RFP for a pilot training program to be developed and conducted in the second half of 1990. This effort will be evaluated and a decision made to either contract for all training in 1991 and beyond or continue NMFS in-house training of observers. The training of observers is the critical foundation to the overall success of the program and the quality of data collected. Training must be consistent from month to month and must be able to adapt to changing management and research needs and requirements. Further development of the observer certification process is continuing.

3. Contractor Certification. Though NMFS may have an observer contractor(s) established by a contract for MMPA domestic observers, the size and industry funded nature of the NMFS groundfish domestic program should provide an opportunity for other contractors to work with industry to provide observer services. However, contractors desiring to provide observer services to industry should be certified by NMFS so that industry and NMFS are assured that the contractors are financially independent of fishing vessel owners and understand their responsibilities under the program. NMFS will develop a set of responsibilities which must be performed at a minimum by each contractor. NMFS will review technical proposals submitted by prospective contractors which describe how they will perform their specified tasks to ensure they can adequately provide the required services. The cost for providing observers will

ATTACHMENT A

3

not be used in the evaluation. Firms submitting proposals judged adequate to provide services and whose independent financial nature have been verified will be included in a list of certified contractors from which industry members can obtain their required observers. Any firm which has been contracted by NMFS to provide observer services will automatically be certified. A contractor could lose certification if they are found to not be financially independent of vessel owners or if they deficient in the performance of their duties. As with the observer certification process, the development of the contractor certification process is continuing.

4. **Observer Debriefing.** The task of observer debriefing is critical to NMFS to maintain the quality control of the data collected by observers, the collection of information on the fishery which is not somehow contained in the standard data collections, and to identify problems and solutions to problems encountered by observers during their deployments. Observers deployed through this program will be debriefed by NMFS Observer Program staff at field offices such as at Dutch Harbor, Kodiak, and at the AFSC in Seattle. Observers will be debriefed between deployments in the field so that the data can become available for entry, editing and use in a timely fashion.

5. **Coordination of Observer Coverage and Logistics.** Though the observer contractors will be responsible for all deployment logistics and the vessel owners responsible for insuring that they have an observer aboard their vessel if required, NMFS will need to monitor coverage and the placements of observers aboard vessels to ensure coverage requirements are met and to ensure that required data are received from observers. NMFS will also be responsible for determining and notifying the vessels of the need to obtain an observer in the vessel category requiring less than 100% coverage. This task will be aided by the provision of fishing operation plans by vessel owners and by monitoring the vessel movement and catch reports.

6. **Data Management.** NMFS will be responsible for the entry, editing and data base management of all data collected by observers. Data will reside on the AFSC mainframe computer and be made available to users according to the NOAA rules for data confidentiality.

Fishing Industry/Owner Responsibilities

Under the domestic groundfish observer program, the fishing industry or vessel owners are responsible for the direct costs for placing observers aboard their vessels. The program requires that fishing vessel owners submit a fishing operations plan to

ATTACHMENT A

4

NMFS. These effort plans will be used to determine observer coverage needs and to select vessels. Any vessel owner who is required to carry an observer will be responsible for obtaining a NMFS certified observer from the certified observer contractor of his/her choice. The cost for that observer will be paid by the vessel owner directly to the contractor. Prior to beginning fishing operations during the period which the vessel is required to carry an observer, the observer must notify NMFS that he or she is aboard the vessel and prepared to perform the observer duties. NMFS wants to work with industry to resolve issues associated with the need for effort planning and the handling of observer logistics.

Vessels required to carry an observer but without an observer will not be allowed to fish. This requirement places the burden on industry and the contractor to ensure they meet the observer requirement. Vessels under 50 feet in length or judged to be unsafe may not be required to carry an observer. Development of proposed minimal size, safety standards and observer accommodation requirements has not yet been completed. NMFS will be seeking the advice of industry on the further development of these requirements.

Certified Observer Contractor Responsibilities

Contractors wishing to provide observer services to the fishing industry must be certified to do so by NMFS. Firms holding a contract with NMFS to provide observer services will automatically be included in the list of certified observers. To obtain certification as an observer contractor, a firm must be financially independent of the fishing companies and vessels to which they are providing observers, must have submitted a proposal to NMFS and which is judged adequate by NMFS that details how they plan to carry out the required observer contract services and must agree to provide all data collected by observers directly to NMFS. Under this proposal there would be no limit placed on the number of contractors which could participate in the program and a vessel owner could choose to work with the firm or firms of personal choice.

Observer contractors would be responsible for the following tasks at the minimum:

1. Recruiting, evaluating and hiring of qualified candidates to serve as observers.
2. Ensuring that their observers have obtained the required NMFS certification through attendance and successful completion of the NMFS certification training or previous satisfactory completion of a NMFS foreign or domestic observer deployment and attendance at a recertification briefing.

ATTACHMENT A

5

3. Providing observer salary, benefits and personnel services.
4. Providing basic workmen's compensation and P & I insurance to cover and protect observers injured in the performance of their duties.
5. Providing all deployment logistics to place and maintain the observers aboard the fishing vessels. This includes all travel arrangements, hotels and per diem, and any other services required to place the observers aboard the vessels.
6. Providing replacement or back-up observers in the event an observer has to be removed from a vessel for any reason.
7. Keeping NMFS informed of current observer deployments and deployment plans.
8. Arranging and coordinating observer debriefings with NMFS.
9. In cooperation with the vessel owner, assuring that all observer in-season catch messages and other required transmissions between the observer and NMFS are delivered to NMFS within a specified time.
10. Assuring that all data, reports and specimens collected by observers are delivered directly to NMFS within 5 working days of the completion of each observer trip.
11. Assuring that all gear and equipment issued to their observers by NMFS is returned to NMFS within 5 days of the completion of the observers field deployment.

A more detailed work statement for contractor responsibilities will be developed by NMFS and modelled after the statement of work used by the NMFS contract for observers. Certification of a contractor could be completed through the signing of a letter or memorandum of understanding between NMFS and the contractor. A contractor can be decertified if they are found not to be financially independent, they fail to provide the required observer data directly to NMFS or vessels owners can clearly demonstrate that the firm has not performed the required services satisfactorily.

Coordination with MMPA Domestic Observer Program

The 1988 amendments to the Marine Mammal Protection Act require that domestic vessels participating in the trawl fisheries in Alaska carry natural resource observers on 20% - 35% of their effort. This program is currently in place in 1989 and observers

ATTACHMENT A

6

are being deployed by the AFSC to domestic trawlers through a NMFS observer contractor. A request for proposals for a contract to provide observers for 1990 and 1991 will be issued shortly. This contract should be awarded in December, 1989 and will provide a vehicle to place observers funded through federal money.

Once the NMFS domestic groundfish observer program is implemented, it will provide sufficient coverage to meet all requirements of the MMPA. It is also proposed that funding for the MMPA program be used to cover the NMFS costs for administering the Council program. If MMPA funds are available for observers after implementation of the domestic groundfish observer program and accounting for the NMFS costs of program administration, these observers could be placed randomly throughout the fleet, thus relieving those vessel owners for a short time from being responsible for the cost of their observers.

ATTACHMENT A

ACTIVITY SCHEDULE FOR DOMESTIC OBSERVER PROGRAM

The attached tables contain a schedule for the implementation of the domestic observer program. Two separate options are presented. Option A, provides the schedule of activities for the continued operation of the Marine Mammal Protection Act (MMPA) observer program which was implemented in August, 1989 and will continue until the domestic groundfish observer program is implemented in 1990. At the time the requirements of the MMPA program will be met by the groundfish program. Option B, provides the schedule of activities for both the MMPA program and the domestic groundfish program.

ACTIVITY SCHEDULE FOR DOMESTIC GROUND FISH OBSERVER PROGRAM

TABLE 1. MMPA Program Only.

1. Current MMPA Program
 - FY 89 funded observers
 - Observer training
 - Observer deployment
 - FY 90 funded observers - interim program
 - Request WASC approval to use foreign contract
 - Receive FY 90 funding
 - Observer training
 - Observer deployment

2. New FY 90 MMPA Contract
 - RFP process
 - Issue RFP
 - Proposals received
 - Review proposals
 - Negotiations
 - Award contract
 - MMPA contract work
 - Start-up
 - Observer training
 - Observer deployment

	AUG '89	SEP.	OCT.	NOV.	DEC.	JAN '90	FEB.
- Observer training (FY 89)	—						
- Observer deployment (FY 89)							
- Request WASC approval to use foreign contract (FY 90)		—					
- Receive FY 90 funding (FY 90)			—?				
- Observer training (FY 90)				—			
- Observer deployment (FY 90)					—		
- Issue RFP (New FY 90)	—						
- Proposals received (New FY 90)		—					
- Review proposals (New FY 90)			—				
- Negotiations (New FY 90)				—			
- Award contract (New FY 90)					—		
- Start-up (MMPA contract work)						—	→
- Observer training (MMPA contract work)						—	→
- Observer deployment (MMPA contract work)							—

ATTACHMENT A

TABLE 2. MMPA PROGRAM + DOMESTIC GROUNDFISH PROGRAM

1. MMPA program - as described in Table 1, Nos. 1 & 2.

2. Domestic groundfish program
- Approval of operational plan
 - Contractor certification
 - Develop certification criteria
 - Publish criteria & request proposals
 - Receive and review proposals
 - Request clarifications on proposals
 - Publish certified contractor list
 - Review & act on possible protests
 - Observer certification
 - Develop certification criteria
 - Develop observer regulations
 - Establish training schedule
 - Vessel safety criteria & observer accommodations
 - Develop minimal safety and accommodations
 - Develop waiver & review process
 - Develop required regulations
 - Implement regulations
 - Vessel selection & notification
 - Notify owners of need for effort plan
 - Receive vessel operating plans
 - Select vessels including back-up selections
 - Notify owners selected
 - Observer training/deployment
 - Vessel owner selects contractor
 - Contractor obtains observer
 - Observer attends certification training
 - Observer deployment

* NMFS will utilize the MMPA funding to fund program administration for the entire MMPA + domestic groundfish program. Funds available for observer placements will be used to meet the MMPA requirements until the domestic groundfish program is implemented in 1990.

	AUG '89	SEP.	OCT.	NOV.	DEC.	IAN '90	FEB.
1. MMPA program - as described in Table 1, Nos. 1 & 2.							→
2. Domestic groundfish program							
- Approval of operational plan							
- Contractor certification							
- Develop certification criteria							
- Publish criteria & request proposals							
- Receive and review proposals							
- Request clarifications on proposals							
- Publish certified contractor list							
- Review & act on possible protests							
- Observer certification							
- Develop certification criteria							
- Develop observer regulations							
- Establish training schedule							
- Vessel safety criteria & observer accommodations							
- Develop minimal safety and accommodations							
- Develop waiver & review process							
- Develop required regulations							
- Implement regulations							
- Vessel selection & notification							
- Notify owners of need for effort plan							
- Receive vessel operating plans							
- Select vessels including back-up selections							
- Notify owners selected							
- Observer training/deployment							
- Vessel owner selects contractor							
- Contractor obtains observer							
- Observer attends certification training							
- Observer deployment							

**Municipality
of
Anchorage**



OFFICE OF THE MAYOR

P.O. BOX 196850
ANCHORAGE, ALASKA 99519-6650
(907) 343-4431

TOM FINK,
MAYOR

February 16, 1990

Dr. Donald F. Behrend, Chancellor
University of Alaska Anchorage
3211 Providence Drive
Anchorage, Alaska 99508

Dear Dr. Behrend:

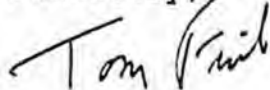
It has been a great pleasure for the Municipality of Anchorage to work with the University of Alaska Anchorage, the University of Alaska Fairbanks School of Fisheries and Ocean Sciences, Alaska Sea Grant College Program, and the UAA College of community and Continuing Education to locate a National Marine Fisheries Service Domestic Observer Training Program in Anchorage.

I have sincerely appreciated the opportunity to work with you in developing this program in the common interest of all involved government agencies and industry. Your outstanding university staff, fisheries community and industry leaders, and government officials have all worked hard to make this project a reality in our community.

Anchorage is the logical site for the observer program because it is the transportation and service center for our seafood industry. This creates a cost advantage for our location in terms of observer time per dollar spent for both NMFS and the fishing industry. Our university system is well qualified to provide the training programs which are vital to both government and industry.

The Domestic Observer Training Program is extremely important to Anchorage and all Alaskans in terms of our economy which is highly dependent upon the seafood industry. We are fully prepared to provide whatever support necessary to further the interests of our citizens participating in this industry.

Sincerely,



Tom Fink



KODIAK ATTACHMENT C
CHAMBER
OF COMMERCE

P.O. Box 1485, Kodiak, Alaska 99615 (907) 486-5557

August 24, 1989

OFFICE OF THE

AUG 27 1989

CHANCELLOR

Governor Steve Cowper
STATE OF ALASKA
P.O. Box A
Juneau, AK 99811-0101

Dear Governor Cowper,

The Board of Directors of the Kodiak Chamber of Commerce have voted to endorse and support the concept of basing the groundfish observer training program in Alaska.


The plan to train and dispatch observers from the University of Alaska Anchorage deserves the support of all of Alaska's coastal communities.

The opportunity to have increased coverage of the multi-billion dollar groundfish fishery in Western Alaska may well be the necessary piece of the puzzle to insure the continued economic well-being of all the coastal communities. Observers on board the fishing vessels and in shore based plants will provide the data we must have to manage the fishery, and insure our ability to sustain a vibrant and healthy fishery resource.

Mayor Tom Fink, his assistant Don Wold, and UAA Chancellor Don Behrends are to be commended and encouraged as they develop the program. As such, the Kodiak Chamber of Commerce would ask for your support of this statewide job training program.

Your attention to this opportunity to add well paying jobs to the Alaskan economy is truly appreciated.

Yours In Economic Prosperity, --


GEORGE F. GODFREY
President

- cc: Senator Ted Stevens
- Senator Frank Murkowski
- Representative Don Young
- Senator Fred Zharoff
- Representative Cliff Davidson
- Mayor Tom Fink
- Chancellor Don Behrends

UNIVERSITY OF ALASKA FAIRBANKS

School of Fisheries and Ocean Sciences
Alaska Sea Grant College Program
138 Irving II
Fairbanks, Alaska 99775-5040
(907) 474-7000

The following resolution was passed by the Sea Grant Association:

"Sea Grant institutions have the capability and experience which would enable them to be valuable assets to the fisheries observer program in the context of providing training and other services. We encourage NOAA/NMFS to work with those institutions which have an interest in joining in partnership in this program."

As a follow-up. The meeting was held, and the message was carried forward. At the meeting for NMFS were Mike Tillman, Senior Scientist for Fisheries (chair), Ed Pastoula, SG Coordinator, Curt Marshall, and John Evert. Bud Griswold attended for NCSG. The meeting moved forward with a very positive tone. The role in training that Sea Grant universities have played in the past and an expanded role that they could play in the future seemed to be appreciated by the NMFS attendees. Likewise, the experience of several of the institutions in providing logistics services for observer programs and their continued interest was discussed. The meeting ended with NMFS stating that a basic policy decision had to be made within NMFS relative to farming out the training which up until this time has been done inhouse, notably at the Northwest and Alaska Fishery Center. The necessary time to adopt a good curricula for this training and the importance of a long term commitment by NMFS to the process if universities were to invest in the development of such a curricula was stated and seemed to be appreciated.

ATTACHMENT E

FORM 16 (10-12-75)

F.2

6-1593E
Utermoila
3/12/90

Original sponsor(s): SEN. STURGULEWSKI

1 IN THE SENATE

2 GO FOR SENATE JOINT RESOLUTION NO. 52 ()

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SIXTEENTH LEGISLATURE - SECOND SESSION

5 Requesting the National Marine Fisheries
6 Service to approve a groundfish observer
7 training program at the University of
8 Alaska for federal fishery observer
9 programs off Alaska.

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

11 WHEREAS the domestic groundfish fishery off Alaska has rapidly ex-
12 panded in recent years and continues to grow; and

13 WHEREAS there is a requirement for the use of trained observers on
14 board groundfish vessels to collect essential scientific data necessary to
15 manage the domestic groundfish fishery; and

16 WHEREAS there have been several recent proposals to greatly increase
17 the number of observers on board domestic groundfish vessels off Alaska;
18 and

19 WHEREAS the existing training program conducted by the National Marine
20 Fisheries Service at its Seattle facilities will not be able to generate
21 the number of trained personnel necessary to effectively implement the
22 groundfish observer program; and

23 WHEREAS Sea Grant colleges, such as the University of Alaska, have the
24 technical capability to train domestic groundfish observers, thus providing
25 an important service to the federal government; and

26 WHEREAS the University of Alaska has experience in training observers
27 for domestic fisheries and has expressed interest in becoming an observer
28 training center in a letter to the National Marine Fisheries Service dated
29 February 23, 1990, and

ATTACHMENT E

1988 10 20 10:30

1 WHEREAS an observer training program at the University of Alaska would
2 provide the Alaska fishing industry with an alternative source of trained
3 observers, thus increasing the availability of trained observers and fos-
4 tering price competition for observer services; and

5 WHEREAS the lower operating costs of the observer program that will
6 result from competition would reduce the costs of a mandatory observer
7 program that are associated with observer training; and

8 WHEREAS an approved groundfish observer training program at the Uni-
9 versity of Alaska can be used by the National Marine Fisheries Service as a
10 model for other Sea Grant colleges that are interested in conducting train-
11 ing for observers deployed in other fisheries throughout the nation;

12 BE IT RESOLVED that the Alaska State Legislature respectfully requests
13 the National Marine Fisheries Service to approve the University of Alaska
14 groundfish observer training program and establish procedures for certify-
15 ing the Alaska trainees in time for the groundfish fishery off Alaska in
16 the fall of 1990.

17 COPIES of this resolution shall be sent to the Honorable Robert A.
18 Mosbacher, Sr., U.S. Secretary of Commerce; John Knauss, Administrator of
19 the National Oceanic and Atmospheric Administration; William W. Fox, Jr.,
20 Assistant Administrator for Fisheries, National Marine Fisheries Service;
21 Steven Pennoyer, Regional Director, Alaska Region, National Marine Fisher-
22 ies Service; and to the Honorable Ted Stevens and the Honorable Frank
23 Murkowski, U.S. Senators, and the Honorable Don Young, U.S. Representative,
24 members of the Alaska delegation in Congress.

**Municipality
of
Anchorage**

ATTACHMENT F



OFFICE OF THE MAYOR

P.O. BOX 196650
ANCHORAGE, ALASKA 99519-6650
(907) 343-4431

TOM FINK,
MAYOR

February 16, 1990

Dr. Donald F. Behrend, Chancellor
University of Alaska Anchorage
3211 Providence Drive
Anchorage, Alaska 99508

Dear Dr. Behrend:

I have received your request regarding the possible use by the University of Alaska Anchorage of the municipal-owned building at 211 West Seventh Avenue as a training center for the Fisheries Observer Program. This building is particularly well suited for this purpose and is surplus to the needs of the municipality for the foreseeable future. I would be pleased to work with you to make it available for this purpose.

As you may know, this building was originally used as the Anchorage police training center and already contains some equipment used for instructional purposes. The building is two stories and contains about 8500 square feet (gross). It is ideally suited for this purpose because:

1. The 2nd Floor presently has classrooms and offices. The two relatively small classrooms are separated by a sliding partition and can be converted into one large classroom. Offices are adequate in number and size. An area is available that would be an ideal communications and computer center.
2. The 1st Floor is presently a storage area and four large garage bays. This area is fully insulated and heated. This floor could be easily converted to the following to meet your needs:
 - a. Equipment storage, repair facilities, etc.
 - b. Room for refrigerators and freezers for fish samples
 - c. Fisheries laboratory for instructional purposes
 - d. Observer personnel lounge
 - e. Personnel bunkhouse

ATTACHMENT F

Dr. Donald F. Behrend, Chancellor
February 16, 1990
Page -2 -

3. The building is located across the street from the Alaska U.S. Federal Building and Courthouse. The cafeteria serves two meals per day at reasonable prices. Several motels are in the area which can provide adequate housing at extremely attractive rates during the winter months. Summer season housing is available at the UAA campus. A municipal bus stop is convenient. A police, fire station and the Anchorage museum are immediately next to the building.

The Fisheries Observer Training Center at UAA is a high priority for the Municipality of Anchorage, therefore, we are pleased to make this building available for this purpose. We will need to work with you to identify necessary modifications required prior to obtaining final approval from the Anchorage Assembly.

Sincerely,



Tom Fink

DRAFT

SEVERAL COST RECOVERY APPROACHES FOR USE IN FUNDING A DOMESTIC OBSERVER PROGRAM

Prepared by Council Staff
August 1989

I. INTRODUCTION

In June the Council approved a comprehensive data gathering program as one of its amendments to the groundfish FMPs. This program which includes a domestic observer program is intended to help the Council and NOAA Fisheries fulfill their management obligations as described in the Magnuson Act. An essential element of this amendment is funding of the observer program. For at least 1990, the Council has stated that the fishing industry will fund the program if federal funds are not available. The industry is currently developing voluntary methods for contributing to the observer program.

A mandatory federal cost recovery system designed for the purpose of funding data gathering programs will require changes to the Magnuson Act. The Council has proposed such an amendment and Congressman Young has introduced H.R. 1554 which would allow for cost recovery programs as a discretionary measure in FMPs. Other draft legislation is also undergoing review. If approved by Congress it could be signed into law by mid-November, with corresponding federal implementing regulations going into effect by mid-1990.

The purpose of this discussion is to explore several cost recovery approaches which would eventually be pursued by the Council should the Magnuson Act be amended to authorize such programs. A Council designed funding system could be included in the 1990 amendment cycle and could dovetail nicely with new Magnuson Act legislation.

II. REVIEW OF OTHER FEDERAL COST RECOVERY SYSTEMS

Several federal cost recovery systems associated with domestic fisheries have recently been developed and are undergoing review. Their overall objective is to provide a source of funds to specific programs at a time of reduced appropriations. The source of the funds are those individuals who directly benefit from the service.

ATTACHMENT G

A. NOAA Fisheries Marine License Program

This system is intended to recover funds from those who directly benefit from the federal marine fishery conservation program. The agency proposes a \$20 annual access fee which all recreational and commercial fishermen between the ages of 16 and 65 would pay if they choose to fish in the Exclusive Economic Zone (EEZ). An additional ad valorem fee, in the amount of 1.75% of the exvessel value of the first delivery for commercial purposes, is also proposed for fish that are actually managed under federal conservation programs. The agency estimates that this program will net about \$60 million in the first year, with recreational and commercial fishermen each contributing about half of the funds.

The funds would be dedicated exclusively to conservation efforts including research, domestic observer programs, monitoring and enhancing of marine habitat, and improvement to existing enforcement programs. The access fee was modeled after the highly successful migration bird stamp program and shares much in common with access fees for national parks. The ad valorem fee is similar to programs which recover federal conservation expenses from commercial users of the national forests and offshore oil and gas fields.

There has been general support for the government's legitimate right to exact economic rent for the harvest of the nation's marine fish resources, due to the expectations that it would provide better fisheries conservation and management. NOAA believes that providing a stable and guaranteed source of funding for conservation and management of these resources is in the best interest of the nation in the long term. However, this support is limited due to the industry's perception that license revenues will be used only to perpetuate what many believe is an unsatisfactory status quo, as opposed to the desired objective of enhancement of fishery management programs. Other criticisms include the belief that recreational fisheries have not benefited from federal management programs and yet this sector of the industry is expected to contribute half of the funds.

B. Coast Guard User Fees

The Department of Transportation is currently developing a plan that calls for the establishment of a fee schedule for specific Coast Guard services and the creation of a Coast Guard stamp that

ATTACHMENT G

will permit purchasers to receive services without additional charge. The system will collect direct user fees for vessel documentation, vessel inspections, and the licensing of individuals when required by other federal law. Indirect user fees will also be collected for such services as search and rescue, aids to navigation, and environmental protection. The cost recovery system is intended to collect \$50 million.

This proposal has also received criticism from the fishing industry. While fees for direct services to individuals may be justified, many believe that indirect fees for services that benefit the public as a whole should not be borne by just the industry. Some sectors of the fishing industry view the proposed fee system as "another tax" and therefore are opposed to it.

III. IDENTIFICATION AND DISCUSSION OF OBSERVER FUNDING SYSTEMS

The previous two examples of federal cost recovery programs show that the Council is not alone in attempting to recover costs from domestic users to fund programs. The difficulties experienced in implementing the proposals also indicate the controversy surrounding these funding approaches. The Council should anticipate similar problems. Already we have heard testimony to the House Subcommittee on Fisheries and Wildlife Conservation and the Environment that a mandatory observer program, funded in part or in whole by the fishing industry, does not have total support of the industry and some view the proposed method of funding as another tax. Efforts should be made to assure the public that information collected through a data gathering program will be used for management, research, and made available to industry for their use, and that both the application of the program upon the industry and the funding system will be fair and equitable.

The analysis for Amendment 18/13 to the Gulf of Alaska and Bering Sea/Aleutian Islands Groundfish FMPs states that the cost of fielding an observer is estimated at \$7,500 per month and that the cost of fielding observers at 20% and 100% fleet coverage levels are approximately \$2 million and \$12 million, respectively. The Council's proposed levels of observer coverage for 1990 will require about \$10 million. Any funding system developed by the Council should use these figures as goals.

ATTACHMENT G

A. Fixed Rate System

Observer coverage will cost \$250 per day. Vessels and processors selected to host observers as a condition to their operation must submit funds to NOAA Fisheries Observer Fund. A check-in/check-out system will be used where the host vessel, processor, or observer contacts the observer program coordinator the day the pre-arranged observer arrives at the location. The program coordinator is again contacted the day the observer officially leaves the vessel or processor and the observer is checked-out from that location. Calendar days accrued between the check-in and check-out will be used in calculating the observer fee and a billing statement will be sent for remittance. All observer accounts must be balanced prior to the vessel or processor being issued a federal fishing permit for the next calendar year.

Advantages:

- Simplicity.
- All hosts of observers pay the same rate.
- Easy to enforce.

Disadvantages:

- Small vessels or processing operations may have more difficulty paying the observer fee than larger operations.
- Vessels or processors prosecuting fisheries on low valued species may have more difficulty paying the observer fee than fisheries targeting on high valued species.

B. Sliding Scale System

Several individuals have suggested that a sliding scale fee system be considered by the Council. The system would work by determining the desired amount of funds needed for the observer program with participant categories contributing various percentages toward the desired total amount. The idea is to spread out the costs of the observer program in such a way so that the observer fee is not overly burdensome to the small operator. Inherent with this concept is the fact that large operators will be making up the difference.

ATTACHMENT G

Participant categories can be designed to reflect the characteristics of the users. For example, the Council has recommended that for 1990 observers be deployed following designated percentages according to vessel size. Similarly, these same vessel size categories could be used for setting a sliding fee scale. One example:

IF:

Observer Program Amount = Funding Goal = \$10 million

Number of Observer Days = 180

THEN:

Vessel Size Category	No. of Vessels	Percent Observer Coverage	Estimated Observer Fee/Day	Funds Generated
125' and over	142	100	\$275/day	\$ 7.0 million
101' to 124'	76	30	\$200/day	\$ 0.8 million
76' to 100'	165	30	\$150/day	\$ 1.3 million
50' to 75'	413	30	\$ 75/day	\$ 1.1 million
			Total	\$10.2 million

Other examples could be developed by modifying the fees, observer coverage percentages, or participant categories. Participant categories could be identified based on quantities of fish caught or processed. The larger producers would be assessed a higher observer fee on the scale compared to the small harvester or processor.

As with the fixed rate system, an observer check-in/check-out method could be used for accounting purposes and a requirement that all fees be paid before obtaining a new federal fishing permit will ease enforcement.

Advantages:

- Costs of observer program are not overly burdensome.
- Easy to enforce.

ATTACHMENT G

Disadvantages:

- More complicated. Observer fees have to be calculated annually as program costs fluctuate.
- Controversy over assigned observer fees likely.

C. Foreign Fee System

NOAA has developed and implemented a fee system designed to recover government costs incurred in managing the foreign vessels in the U.S. EEZ. This cost recovery system is authorized under Section 204(b)(10) of the Magnuson Act and consists basically of poundage fees for designated species of fish and shellfish, and a flat permit fee. For 1989 the goal of the program was to generate over \$6 million in funds. In past years this program has generated as much as \$100 million.

Poundage fees are determined by applying a fixed percentage to the estimated exvessel value of species targeted by foreign vessels. For instance, in 1988 NOAA assessed foreign vessels at a rate of 44.4% of exvessel value and published the following fee table for Alaskan species:

Species	Exvessel Value (\$/mt)	Estimated Foreign Catch (mt)	Estimated Foreign Catch Value (\$)	Species (\$fee/mt)	Species (\$fee/lb)	Recovered Costs (\$)
Pollock	214	540	115,560	95.09	0.04	51,349
Atka mackerel	267	1	267	118.64	0.05	119
Pacific cod	324	30,000	9,720,000	143.97	0.07	4,319,079
Flatfish	187	105	19,635	83.09	0.04	8,725
POP'	441	1	441	195.96	0.09	196
Other rockfish	734	1	734	326.15	0.15	326
Squid	169	1	169	75.10	0.03	75
Sablefish	473	3	1,419	210.18	0.10	631
Other species	240	1,200	288,000	106.64	0.05	127,973
Total		31,852	10,146,225			4,508,473

The foreign fee system requires that proposed fees be published in the Federal Register for public review prior to finalization and implementation. A similar system could be designed for the

ATTACHMENT G

Council's observer program. Publication of proposed fees could accompany the initial TAC/PSC specifications currently released to public review in September with the final fees schedule being approved in December.

As with the two previous systems, payment of the fees would be required prior to receiving a federal permit in the following year.

Advantages:

- System already in effect for foreign vessels.
- All users pay similar poundage fees. No sliding scale needed.
- Amount of fees paid dependent on quantities of fish landed or processed.
- Fees are based on value of species not quantities; users harvesting or processing high valued species will pay more than those utilizing low valued species.
- No observer check-in/check-out necessary. Fees are prorated on Council's anticipated observer program requirements.
- Easy to monitor and enforce. Reporting requirements, observers, and logbooks all track quantities of fish caught or processed.

Disadvantages:

- Requires economic valuation of designated species a priori of season.
- Could require Council time to review valuation estimates and set poundage fees.