


M E M O R A N D U M

TO: Council, SSC, and AP members

FROM: Clarence Pautzke
Executive Director 

DATE: April 7, 1988

SUBJECT: Domestic Observers

ACTION REQUIRED

- (a) Status report on Council's pilot domestic observer program.
- (b) Review draft NMFS Domestic Observer Policy.

BACKGROUND

(a) Pilot Domestic Observer Program

The Council's pilot observer program began again in February and seems to be going along quite well. Coordination with the fleet and ADF&G is much better now and insurance and boarding agreement problems are not as serious as they were last fall. Ron Dearborn, the program manager and Director of Alaska Sea Grant will report on our pilot program.

(b) NMFS Domestic Observer Policy

NMFS is about to go to press with a revised version of their proposed domestic fishery observer policy which is in your notebooks under item C-5(a). The earlier draft has been clarified but there remains the same basic problem that NMFS will not fund any mandatory observer program designed to monitor the fishery for attainment of catch or bycatch quotas. If mandatory observers are needed as a management technique to keep an area or fishery open, NMFS believes that the industry that benefits should pay the freight, through direct charges, non-federal organizations, or user fees. They recognize that the latter will require a change in the Magnuson Act.

Even if non-federal funding were available, the Secretary of Commerce will only approve a mandatory monitoring program using observers if:

1. It is part of a fishery management plan.
2. Will not place a significant burden on industry.
3. No other reasonable alternative exists to collect the data.
4. It's a minimum coverage, but still scientifically reliable.
5. Observers are not used as enforcement officers.

Lack of observers will seriously hamper the Council's flexibility to use management approaches envisioned by the Bycatch Committee in Amendment 12 to the Bering Sea and Aleutians Groundfish plan and now used in zones 1 and 2 in the yellowfin sole/other flatfish fishery. The proposal to control nonretainable bycatch of groundfish in Amendment 12 also seems inoperable with no observers.

Somehow NMFS needs to be convinced that a totally DAP fishery must have observer coverage if the bycatch problem is ever to be addressed. In response to a call from NMFS for special funding requests for FY1990, I submitted a two-page proposal for funding for about 200 man-months of observers. I very roughly estimated the cost to be around \$1.1 million. This may seem like a lot of money but the coverage it would give us in 1990, considering the rapidly expanding DAP fishery, will be way less than 15%-20%, barely enough for statistically reliable information. The proposal I submitted is under item C-5(b).



UNITED STATES DEPARTMENT
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Washington, D.C. 20235

AGENDA C-5(a)
APRIL 1988

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FEB 2 1988

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MEMORANDUM FOR: Office, Regional, and Center Directors, NMFS
Executive Directors, Regional Fishery
Management Councils
FROM: *James E. Douglas*
Williams E. Evans
Assistant Administrator for Fisheries
SUBJECT: Proposed Domestic Fishery Observer Policy

Attached is a revised version of the policy document of March 6, 1987. The revision takes into account comments made by representatives of the fishing industry, Regional Fishery Management Councils, the Marine Fisheries Advisory Committee, and NMFS Offices, Regions, and Centers. This draft is being sent to you and MAFAC for a final round of informal comments before sending the policy to the Federal Register for public comment. Please provide comments to Richard H. Schaefer, Director, Office of Fisheries Conservation and Management, NOAA/NMFS, Washington, D.C. 20235, by noon on February 29, 1988.

As revised, the policy provides guidelines for the selective provision, through the Magnuson Act's fishery management process, of mandatory domestic fishery observer programs for the collection of essential fishery monitoring and scientific data needed for fishery management purposes. Any domestic fishery observer program instituted under the policy is to be non-federally funded, and is to be tailored to the data-gathering requirements for the fishery with due regard to any impacts upon fishermen and the fishing industry.

The principal changes are:

- o a clarification and re-definition of terms;
- o clarification of the nature of voluntary scientific sampling programs and mandatory fishery observer programs;
- o clarification of the guidelines for implementation;
- o clarification of the section on liability;
- o clarification that observers are not enforcement officers, and
- o clarification of the section on confidentiality of data.

Attachment

cc: General Counsel, NOAA



National Marine Fisheries Service
Policy for Requiring Observers to be
Carried on U.S. Fishing Vessels (Proposed Policy)

Introduction

The rapid Americanization of the U.S. Exclusive Economic Zone (EEZ) under the Magnuson Fishery Conservation and Management Act (MFCMA) is resulting in the elimination of fisheries performance and scientific data formerly collected from the foreign fishing observer programs. Further, the development of sophisticated fishery management plans (FMPs) for the domestic fisheries has accelerated the need for more accurate and timely fisheries monitoring and research data. Consequently, the Regional Fishery Management Councils (Councils) and the National Marine Fisheries Service (NMFS) are proposing the use of observers on domestic fishing vessels to collect these essential data needed to effectively manage the fisheries.

Purpose

This paper establishes the policy and addresses the issues related to the mandatory placement of NMFS employees or federally authorized observers on U.S. fishing vessels.

Scope

The policy focuses on the use of mandatory domestic fishery observer programs to collect essential fishery data to meet the objectives of FMPs implemented under the MFCMA. The policy does not govern the use of any voluntary scientific sampling programs that are carried out for scientific and other research purposes.

Definitions

For the purposes of this policy:

"Authorized individual": means a person employed by an organization under contract to NMFS to carry out observations on board U.S. fishing vessels.

"Domestic fishery observer": means a NMFS employee or authorized individual mandatorily placed aboard a U.S. fishing vessel to collect data essential for fishery management purposes.

"Fishermen and fishing entities": means those who harvest marine fishery resources for pleasure or profit, but does not include crewmen on commercial or recreational fishing vessels.

"Monitoring data": means group or fishery catch and effort data used to assess the performance of the fishery (e.g. to establish when fishery quotas or allowable catch limits may be reached, or to assess the effectiveness of fishery management measures such as mesh size).

"Scientific data": means biological and fishery-dependent catch data used to assess fish stocks, their habitat, and the effects of fishing.

"Scientific sampler": means a NMFS employee or other authorized individual voluntarily accepted on board a U.S. fishing vessel to collect scientific data for research purposes.

"Secretary": means Secretary of Commerce.

Background

Prior to the implementation of the Marine Mammal Protection Act (MMPA) in 1972, the U.S. fishery agencies responsible for scientific research and joint international management of living marine resources beyond the territorial sea had a long history of using scientific samplers on board U.S. fishing vessels to collect fishery monitoring and/or scientific data. These programs were carried out on a voluntary basis and provided high quality, valid fishery-dependent data.

After 1972, fishing which required authorization under the MMPA became subject to certain obligations. One of these obligations was the regulatory requirement that, in certain circumstances, a Government employee or authorized individual be carried on board particular vessels. The purpose of this action was to collect data to monitor the level of marine mammal take and to monitor the performance of the fishery. This was the first use of mandatory observers by NMFS.

The passage of the MFCMA in 1976 proclaimed the right of the U.S. Government to manage the marine living resources of the fishery conservation zone (FCZ). The MFCMA established that fishing in the waters of the FCZ was subject to the fulfillment of specific legislative requirements. In the case of foreign fishing, one of these requirements was the mandatory stationing of observers on all foreign fishing and processing vessels in the U.S. FCZ. The objective of this program was to gather accurate monitoring and scientific data for both management and research purposes.

Since 1972, NMFS has continued to use scientific samplers, or scientific observers, in a number of domestic fisheries. The scientific samplers have been carried aboard U.S. fishing vessels on a voluntary basis by vessel owners/operators. These programs are funded through the NMFS budget for data gathering, and are under the supervision of NMFS Chief Scientists. The information gathered has been used in the research matrix required to complete the Agency's management and research functions. This policy will not affect the operation of these voluntary programs.

Under the MFCMA, Councils have encouraged the "Americanization" of the U.S. EEZ and developed more sophisticated FMPs. This process has resulted in the loss of foreign fishing monitoring and scientific data and the need for more timely and accurate U.S. fishing vessel data. Consequently, some Councils have requested that NMFS use mandatory domestic fishery observer programs to collect essential data to meet the objectives of some FMPs.

NMFS, Councils, and the fishing industry generally accept the concept of the voluntary carriage of U.S. scientific samplers on board U.S. fishing vessels on a government-funded basis. However, the mandatory placement of industry-funded monitoring observers on board U.S. fishing vessels fishing for the domestic market is viewed by some as costly, intrusive, and imposing a management burden on the development of an efficient domestic fishery. Others believe that in non-selective multispecies fisheries managed by way of by-catch limits, or where fishery products are exported directly from the EEZ, the mandatory use of industry-funded observers is an appropriate data-gathering technique. The MFCMA provides, and the Proclamation of the Exclusive Economic Zone (Proclamation 5030; March 10, 1983) affirms, that the fishery resources of the EEZ shall be conserved and managed for the long-term benefit of the people of the United States. Since fishermen and fishing entities accrue a substantial benefit from access to a public resource without any direct compensation to the American people, it is not unreasonable that fishermen and fishing entities should be expected to share proportionally in the burden of management, including the carriage of domestic fisheries observers when it is deemed necessary.

Policy

- o NMFS considers that, in some circumstances, the use of mandatory observer programs involving U.S. fishing vessels is a legitimate and cost-effective technique of collecting essential fisheries scientific and monitoring data.
- o Mandatory domestic fishery observer programs will only be implemented when the Secretary, through the MFCMA fishery management planning process, is satisfied that:
 1. The program, being an integral part of the FMP, is reasonable and the results essential for the conservation and management of the fishery;
 2. The program will not place a significant burden on industry, measured against the overall benefits accruing from the FMP;
 3. There is no other reasonable method of obtaining the same information or data; and

4. The percentage of observer coverage of a fishery is set at that minimum level which will ensure adequate and reliable statistical coverage, recognizing that different levels of coverage may be appropriate for different aspects of the fishery.
- o Mandatory domestic fishery observer programs that have monitoring data collection objectives or a combination of monitoring and scientific data collection objectives will only be implemented on a non-Federally funded basis.

Guidelines

1. A Council fishery management team seeking Secretarial approval for an FMP containing provisions for a mandatory domestic fishery observer program must be able to demonstrate that the program is reasonable and that the program results are essential to achieve the FMP's conservation and allocation objectives. It must be clearly established, by examining all the options, that there is no other less costly or intrusive method of collecting the data and that these data are essential to the success of the FMP.
2. The observer program design is to be included in the justification for the FMP and in the approved regulations, thus providing fishermen and other interested parties full opportunity to participate in the discussion of the proposed domestic fishery observer program and to comment upon it. To be considered reasonable, the following operational elements must be included in the design and regulations:
 - a. A system of informing all vessel operators and/or owners involved in the fishery of the objectives of the observer program and their legal obligations with respect to it. The specific role, responsibilities, and powers of an observer must also be clearly communicated to all fishing industry members involved in the program;
 - b. A system of giving the vessel operator and/or owner adequate notice of an observer being stationed on board at a particular place and time; and
 - c. A system of training and written instruction that ensures that all observers understand their roles, responsibilities, and powers, and that they are fully competent to perform clearly defined activities on board the vessel.

3. To establish that the design of an observer program is fair and equitable, the Council and NMFS must demonstrate that:
 - a. The program design is the most effective possible in obtaining needed data, and considers all types and sizes of vessels; and
 - b. It will not result in a significant lowering of overall industry efficiency.
4. Domestic fishery observer programs will, under normal circumstances, be funded in their entirety from non-Federal sources. When a system of non-Federal funding is established for a particular observer program, it shall be fair and equitable, and the Council and NMFS shall demonstrate that all those fishermen and fishing enterprises benefiting from the results of the program shall contribute to the costs.
5. Any form of non-Federal funding of a mandatory domestic observer program managed by NMFS dictates that there be direct accountability to the funding source. Therefore, NMFS will present an annual report on domestic fishery observer programs. The annual report shall contain:
 - a. Program objectives;
 - b. Program activities for the year;
 - c. Program costs, and
 - d. Program results and evaluations.
6. The economic and social impact studies and analysis required to meet MFCMA national standards, Executive Order 12291, and the Regulatory Flexibility Act must be completed. It must be clearly shown that the conservation and economic benefits of a domestic fishery observer program mandated by an FMP outweigh any economic and social costs associated with its implementation.
7. Any mandatory observer program must be operated in the most cost-efficient manner considering the total management responsibilities of both the Councils and NMFS. When developing program objectives, a substantiated rationale for the proposed program shall be provided by the Council. This rationale, through a cost-benefit analysis outlining the potential gains and losses, and incorporating both quantitative and qualitative information concerning the fishery, shall show why the program and its design was selected and reasonable alternatives to that program. A cost-benefit analysis relating to the management and staffing options will also be required.

Issues

1. Program objectives: collecting scientific and monitoring data

The information-gathering technique of placing an observer on a U.S. fishing vessel can be operated in different ways to achieve different objectives. Two fundamental, but not mutually exclusive, reasons have been expounded for the implementation of domestic observer programs: the collection of scientific data and the collection of monitoring data. This policy does not address the criteria under which voluntary scientific sampling programs will be implemented. However, it is important to understand the characteristics of each in order to recognize the unique legal context of a mandatory program.

Scientific sampling programs: NMFS views the use of scientific samplers to collect scientific data as one of the many information-gathering techniques that may be cost-effective in some situations. A voluntary scientific sampling program is a cooperative venture between NMFS and the fishing industry in which fishermen voluntarily carry scientific samplers. To obtain scientifically valid fishery-dependent catch information from this data collection technique, a fisherman's behavior must not be influenced from the norm. To achieve this such programs should be research-focused, distanced from programs with monitoring objectives, and carried out on a voluntary Government-sponsored basis. NMFS, in consultation with the appropriate Council or Councils, will determine the level of scientific sampling coverage taking into account such variables as species characteristics, fleet profile, type of fishing gear and methods used, fishing patterns, etc., and the precision of information required for the research being carried out.

Domestic fishery observer programs: The use of observers to collect accurate real-time monitoring data for management purposes has been used successfully on both foreign and U.S. fishing vessels and is being increasingly requested by the Councils to achieve their FMP objectives. While the level of observer coverage will be determined by factors specific to each fishery and the standard of data required for management decisions, a relatively high level of coverage may be required for effective monitoring-data collection at critical times during a fishing season. This, along with the possibility that information collected by domestic fishery observer programs may be used in decisions to close a fishery when total allowable catch has been reached, generally necessitates mandatory implementation. Experience in domestic fisheries, where NMFS has tried to provide monitoring data for management purposes using the methods of voluntary scientific programs, supports the assumption that monitoring programs should be mandatory.

Domestic fishery observers are not enforcement agents. Data collected by observers may, however, be used for enforcement purposes by NMFS if the data reveals fishing practices or catches which do not conform to the regulations implementing the FMP served by the mandatory domestic fishery observer program.

2. Legal authority

The Secretary has the authority, under the broad rule-making provisions of Section 303 of the MFCMA, to place observers on U.S. fishing vessels. This authority is subject to the observer program being essential to achieving FMP objectives, the program being reasonable and equitable, and the economic and social benefits of the program outweighing the costs. Mandatory domestic fishery observer programs will only be approved by the Secretary when fully justified against these conditions through the FMP process.

3. Liability

Under existing liability law, to recover monetary compensation for personal injury from a private vessel owner, an observer, whether a Government employee or a contracted agent, would have to prove the vessel owner breached a duty of reasonable care. Although the issue has not been litigated, NMFS believes that an observer would not qualify as a "seaman" under the Jones Act or Admiralty law concepts of unseaworthiness and maintenance and cure. As a result, observers would not be entitled to additional seamen's compensation such as maintenance and cure, and would be forced to pursue claims based on negligence which, at law or Admiralty, are subject to higher standards of proof than seamen's claims for unseaworthiness.

If the observer is a Federal employee, he or she may file a claim against the Government under the FECA. If the Government pays a FECA claim, it is assigned, to the extent of payment, the right to bring a negligence action against the vessel owner or operator. This does not preclude the observer from also taking a negligence action against the vessel owner or operator.

The Government cannot indemnify the vessel owner or take away, by way of contract or regulation, the right of an observer to take a negligence action. It would require specific statutory authority to indemnify the vessel owner or operator from a negligence action.

The risks of transporting a mandated domestic fishery observer aboard a U.S. fishing vessel, therefore rests with the vessel owner or operator. This risk can be insured against with a standard protection and indemnity policy. The costs involved can be treated as a legitimate business expense in a pervasively regulated industry, payable by those who obtain direct benefit from the conservation and management of the resource. In the case of voluntary scientific sampling programs for the collection of research data, it is appropriate that the Federal government pay all operating costs, including incremental protection and indemnity policy premiums.

4. Financing

There are two primary financing options available to implement a mandatory domestic observer program. They are not mutually exclusive:

1. Government funded: based on the principle that the management of national natural resources should be paid for by the U.S. taxpayer; and
2. Non-Federally funded: based on the principle that the management of national natural resources should be paid for by the fishermen and fishing entities deriving direct economic and social benefits from the resource.

It is the NMFS policy that mandatory observer programs will be implemented on a non-Federally funded basis. This policy is based on the principle that the mandatory observer programs will provide research and management information beneficial to the utilization of the resource by fishermen and fishing entities. That is, those gaining direct economic and/or social benefit from the use of a common property natural resource should bear the management costs.

Funding options for non-Federally funded programs include:

1. Direct charging of vessel owners required to carry observers for the costs of the carriage and employment of observers;
2. Funding by way of a non-Federal organization(s); and
3. A fee or levy on those fishermen and/or entities benefitting from the fishery.

The direct charging of vessel owners is being used in some existing programs because it is either the only viable financing alternative presently available, or the continuation of fishing, after, for example, the reaching of bycatch limits, is contingent upon the carriage of observers. Using this method, all those benefitting economically from the management of the resource may not be sharing in the costs. Direct charging can also act in a punitive and discriminating way against vessel size and/or gear type and may lead to serious economic distortions in the harvesting sector.

The voluntary funding of observer programs through non-Federal organizations, such as industry groups and/or State governments, provides a possible funding option given the present constraints within the Federal budget and the MFCMA. However, this option may not always be available.

The option of funding mandatory observer programs with a fee or levy paid by those deriving direct benefit from the management of the fishery will require the amendment of the MFCMA to allow for

the charging of user fees. This is NMFS's preferred option. In practice, the financial impact of a non-Federally funded domestic fishery observer program upon fishermen or fishing entities may be considerable, and must be evaluated against the conservation and economic benefits that may be derived from the FMP.

5. Organization

Mandatory observer programs with monitoring or a combination of monitoring and scientific data collection objectives may only be approved by the Secretary through the FMP process.

While program responsibility for all domestic fishery observer programs will be with NMFS Regional Directors, NMFS Washington Office will maintain an appropriate standard-setting and oversight role.

6. Confidentiality

Section 303(d) of the MFCMA and the subsequent regulations at 50 CFR 603 provide for the confidentiality of fishery statistics submitted to the Secretary in accordance with the Act. All individual business and personal information collected as a result of any observer program on U.S. fishing vessels, whether that program is mandated by the MFCMA or not, will remain confidential to the NMFS and the individual vessel owner. NOAA Circular 82-40, filed as NOAA Directive 88-30, outlines specific policies and procedures to be used by NMFS and Council staff to protect the confidentiality of information collected by NMFS. The Secretary will only release such information to the public when required to do so by Court order, or when the information is in aggregate or summary form such that it will protect the identity of vessels and vessel owners. The Secretary, however, may use domestic fishery observer collected-data for enforcement purposes when, upon analysis of the data by NMFS, violations of regulations implementing a fishery management plan are found.

7. Issues conclusions

NMFS concludes that:

- o the Secretary has the authority, under the MFCMA, to implement mandatory domestic fisheries observer programs on U.S. vessels;
- c mandatory domestic fisheries observer programs should only be implemented in necessary circumstances on a fair and equitable, non-Federally funded, basis;
- c domestic fisheries observer programs with monitoring or a combination of monitoring and scientific data collecting objectives should, in most circumstances, be implemented on a mandatory basis;

- o the risks involved in the transporting of any domestic fishery observer rest with the vessel owner and/or operator; and
- o all disaggregated information (raw data) collected in mandatory domestic fisheries observer programs will remain confidential to NMFS.

North Pacific Fishery Management Council

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Special Funding Request for FY 1990

SHORT TITLE: Domestic Observer Program

RELEVANT FMPs: Bering Sea/Aleutian Islands Groundfish
Gulf of Alaska Groundfish

OBJECTIVES AND NEED:

Objectives: This voluntary program will:

1. Provide observer coverage of the emerging totally U.S. (DAP) groundfish fisheries in order to obtain harvest information on species composition, age composition, and catch per unit effort in directed fisheries by various gear types.
2. Obtain bycatch information, particularly on catches of other fully-utilized species.

Need: The groundfish resource off Alaska is fully U.S.-harvested and just under half of the 2.3 million metric ton catch will be U.S.-processed. With the end to foreign fishing and the rapid decline in joint venture processing, an important fishery data base heretofore provided by the foreign observer program, is eroding. Observer data are used to assess the status of stocks, estimate bycatch rates of non-target and prohibited species, investigate population interrelationships, and assess the impacts of plan amendments.

Without the information provided by onboard observers, management tends to be overly conservative and may fail to optimize the social and economic benefits of the fisheries. The North Pacific Council is already feeling the impacts of data shortages on their management decisions. For example, a proposed delay in the longline sablefish fishery in the Gulf of Alaska is being analyzed for impacts on halibut bycatch. The bycatch data base for foreign longliners only goes through 1984. The only domestic data available are for two U.S. longliners in 1984 and three in 1987. These very meager data indicate much higher bycatch rates than in the foreign fishery. A second example is a proposal to control bycatch of crabs and halibut in the Bering Sea groundfish fishery using bycatch rates and caps that fluctuate with the abundance of target and non-target species. The Council and NMFS have very little information from the U.S. fleet on which to base those rates. Even less will be available to determine what happens inseason. These two examples show how

Council and NMFS conservation and management of the resources are constrained for lack of data. The problem will only get worse as the groundfish fishery becomes fully U.S.-utilized.

The Council now has a pilot domestic observer program that will end about October 1988, providing about 36 man-months of coverage. Though this is only about 3% coverage of the current groundfish effort, the program has provided useful information about the operations of the domestic fleet, their bycatch, and composition of their target catches. The program has been favorably accepted by segments of the fleet and the Council has learned much about making such a program a success. It needs to be continued and expanded so that a higher level of sampling can produce a statistically valid data base for effective conservation and management.

Budget Estimate: Based on experience with the pilot observer program, observer coverage of about 200 man-months, would cost about \$1,100,000.

**Report to the North Pacific Fishery Management Council
on the Pilot Domestic Observer Program**

by

**Alaska Sea Grant College Program
University of Alaska Fairbanks**

April 4, 1988

Summary

Pilot domestic observer program coverage during Spring 1988 from February 1 through April 1 provided eight man-months of coverage. The program spent \$50,300 out of the total \$196,600, or 25% of the total project budget for 22% of the coverage. Out of 232 mandays in the field, 153 (65%) were spent on vessels.

Totals to date combining the fall coverage period and the two months this spring are: \$85,000 spent or 43% of total for 41% of coverage. This provided 407 mandays in the field with 223 (54%) on vessels.

One reason for the percentage of cost to be a bit higher during the spring is that we employed David Edick, who was an observer in the fall, to coordinate the vessel participation. It is also the primary reason we had better ratio of coverage during February and March.

Observer Recruitment

Using the same base of applicants used for the fall period, we were able to hire four observers with good to excellent ratings in the foreign observer program. Katrina Peter and Pam Goddard went to Dutch Harbor, Mandy Merklein and Kevin Bergersen went to Kodiak.

Observer Training

The observers were given training supplemental to that provided for them as foreign fisheries observers at the Northwest and Alaska Fisheries Center during the week of January 25. Training included the different forms being used in the pilot program, sampling techniques on various domestic vessels, and orientation about the different nature of a voluntary domestic program from the non-voluntary foreign program.

Observer Activities

As indicated by Attachment 1, two observers arrived in Kodiak on February 1 and two in Dutch Harbor on February 4 after being delayed in Anchorage due to weather since January 31. Observers were on duty at their stations for the entire two months with the exception of one Kodiak observer who travelled to Seward on February 26 to meet a factory trawler due to arrive several days later. However, the factory trawler encountered poor weather while fishing its way to Seward and upon arriving on March 7 decided to do joint venture fishing. The observer returned to Kodiak on March 8.

Observers were in the field 232 days of which 153 days were spent in 17 trips on 15 vessels (see Attachment 2 for the triplist). Two longline vessels participated, one shore side delivery vessel and one catcher/processor; 13 trawl vessels participated, one processor, two catcher/processors and 10 shore side delivery vessels.

Observer Coverage

The program goal was to provide 18 manmonths of coverage mostly between February and April. However, the number of vessels committed to the program would not keep that many observers busy. Instead of hiring six observers, we hired four and provided eight months of coverage during February and March. One observer will be leaving the program the first week of April and another by mid-May.

Observations

We seem to have resolved most of the problems with the vessel participation agreement. A meeting was held in Seattle in January to acquaint insurance brokers, underwriters, agents and vessel owners with the agreement and to solicit input for modification of the agreement.

David Edick spent time in December and January contacting vessel owners about the program and then moved his operation to Kodiak for the months of February and March in order to better schedule observer trips. This seems to have paid off by providing a better rate of coverage than we were able to obtain in the fall.

Vessel breakdown is as follows:

	Contacted	Verbal Commitment	Signed Agreement
SSD Trawl	61	30	18
Longliners	45	15	8
Factory/Trawl	32	5	4

The four observers have been kept busy, since for the most part when not on vessels, they were completing the necessary paperwork. Although we have 30 signed agreements, we have taken rides on all available vessels. Some vessels with signed agreements were not fishing during this period, and others were fishing for joint ventures.

The University of Alaska continues to reimburse vessel owners for riders if required in order to carry an observer. To date, only six vessels required additional riders, four of them during the spring.

Contact was maintained with ADF&G personnel operating their observer program in Kodiak and Dutch Harbor. Little or no conflict regarding vessels to ride was experienced since each seemed to be interested in different fisheries and gear types. University observers provided skippers of shoreside delivery boats with copies of their data and stamped envelopes addressed to ADF&G. As far as we know, exchanged data has come only from several shoreside delivery vessels.

Continuing Activity

In view of expenditure of less than half of the initial funding, it will be possible to continue present coverage through spring providing between two and four additional manmonths. If fisheries are active enough and vessels are available in great enough number, we can add observers to provide necessary coverage.

We feel that a completely voluntary program will not produce significantly better coverage than shown so far by the pilot program and will elicit participation only by those vessel owners who are familiar with the program and interested in its objectives. To provide the proposed 18 months coverage this spring, we would need double the number of vessels now participating.

Pilot Domestic Program Fund Expenditure through 4/1/88

	Fall	Spring	Total
Salaries	\$19,584.96	\$31,015.40	\$50,600.36
Travel*	13,613.70	15,293.20	28,906.90
Services	1,506.01	2,272.97	3,778.98
Admin. Fee	736.37	880.92	1,617.29
TOTAL	\$35,441.04	\$49,462.49	\$84,903.53
say....	\$35,450	\$49,450	\$84,900
% of total \$196,600	18	25	43
<hr/> Manmonths of coverage	7	8	15
% of total 36 manmonths	19	22	41

* includes transportation, lodging and meals

Attachment 1

Observer Schedule

as of 4/1

Date	Observer 1	Observer 2	Observer 3	Observer 4
2/1	Katrina	Pam	Kevin	Mandy
2/2			Kodiak	Kodiak
2/3				
2/4	Dutch	Dutch		
2/5	Prowler		Dominion	Taa Singa
2/6				
2/7				
2/8				
2/9				
2/10				
2/11				
2/12				
2/13		Harverst Ent.		
2/14			Kodiak	Kodiak
2/15				
2/16				
2/17				
2/18				
2/19			OceanHope3	
2/20				
2/21				
2/22				
2/23				
2/24			Kodiak	Royal Baron
2/25				
2/26				
2/27			Seward	
2/28	Dutch			
2/29				
3/1		Dutch		Kodiak
3/2				Starfish
3/3				
3/4				Kodiak
3/5				
3/6				
3/7				
3/8	Speedwell			
3/9			Kod./M.Lyn	Pelagos
3/10				
3/11				
3/12			Kodiak	Kodiak
3/13				
3/14				
3/15				
3/16		Aleutian Traw.		
3/17			Pacific Star	
3/18				
3/19				
3/20				

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3/26
3/27
3/28
3/29
3/30
3/31
4/1

Kodiak

Mar del Norte

Kodiak
Eldan

JuliaJolynn

Attachment 2

TRIPLIST THROUGH 3/29/88

Observer Name	Vessel Name	Embark	Disembark	Gear
Merklein, Mandy	Taasinge	02/04/88	02/13/88	SSD Trawl
Bergersen, Kevin	Dominion	02/05/88	02/13/88	SSD Trawl
Peter, Katrina	Prowler	02/05/88	02/28/88	C/P Longline
Joddard, Pam	Harvester Ent.	02/12/88	03/01/88	C/P Trawl
Bergersen, Kevin	Ocean Hope III	02/18/88	02/23/88	SSD Trawl
Merklein, Mandy	Royal Baron	02/22/88	02/27/88	SSD Trawl
Merklein, Mandy	Royal Baron	02/28/88	02/29/88	SSD Trawl
Merklein, Mandy	Starfish	03/01/88	03/03/88	SSD Trawl
Peter, Katrina	Speedwell	03/08/88	xx/xx/xx	Process-T
Bergersen, Kevin	Margaret Lyn	03/08/88	03/11/88	SSD Trawl
Merklein, Mandy	Pelagos	03/08/88	03/12/88	SSD Trawl
Joddard, Pam	Aleutian Trawler	03/15/88	xx/xx/xx	C/P Trawl
Bergersen, Kevin	Pacific Star	03/16/88	03/19/88	SSD Trawl
Bergersen, Kevin	Pacific Star	03/20/88	03/22/88	SSD Trawl
Merklein, Mandy	Mar Del Norte	03/22/88	03/25/88	SSD Trawl
Merklein, Mandy	Eldan	03/27/88	xx/xx/xx	SSD Longline
Bergersen, Kevin	Julie Jolynn	03/28/88	xx/xx/xx	SSD Trawl

C/P=catch and process

SSD=shoreside delivery

Process-T=vessel processes domestic trawl catches, but does not fish

Attachment 2

TRIPLIST THROUGH 3/29/88

Observer Name	Vessel Name	Embark	Disembark	Gear
Merklein, Mandy	Taasinge	02/04/88	02/13/88	SSD Trawl
Bergersen, Kevin	Dominion	02/05/88	02/13/88	SSD Trawl
Peter, Katrina	Prowler	02/05/88	02/28/88	C/P Longline
Joddard, Pam	Harvester Ent.	02/12/88	03/01/88	C/P Trawl
Bergersen, Kevin	Ocean Hope III	02/18/88	02/23/88	SSD Trawl
Merklein, Mandy	Royal Baron	02/22/88	02/27/88	SSD Trawl
Merklein, Mandy	Royal Baron	02/28/88	02/29/88	SSD Trawl
Merklein, Mandy	Starfish	03/01/88	03/03/88	SSD Trawl
Peter, Katrina	Speedwell	03/08/88	xx/xx/xx	Process-T
Bergersen, Kevin	Margaret Lyn	03/08/88	03/11/88	SSD Trawl
Merklein, Mandy	Pelagos	03/08/88	03/12/88	SSD Trawl
Joddard, Pam	Aleutian Trawler	03/15/88	xx/xx/xx	C/P Trawl
Bergersen, Kevin	Pacific Star	03/16/88	03/19/88	SSD Trawl
Bergersen, Kevin	Pacific Star	03/20/88	03/22/88	SSD Trawl
Merklein, Mandy	Mar Del Norte	03/22/88	03/25/88	SSD Trawl
Merklein, Mandy	Eldan	03/27/88	xx/xx/xx	SSD Longline
Bergersen, Kevin	Julie Jolynn	03/28/88	xx/xx/xx	SSD Trawl

C=catch and process
 D=shoreside delivery
 T=process-T=vessel processes domestic trawl catches, but does not fish

Agenda C-5

Pilot Domestic Observer Program
Spring 1988 (February 1 - April 1)
Vessel Coverage Breakdown by Type

Vessel Type	# of Vessels	Observer Days	Percent of Vessel Days	Percent of Total Days
Longline C/P	1	24	15.8	10.3
Trawl C/P	2	37	24.4	15.9
Trawl Processor	1	25	16.4	10.8
Longline SSD	1	6	4.0	2.6
Trawl SSD	10	60	39.4	25.9
Total	15	152	100.0	65.5

NOTE: The number of vessel days used here is 152, not 153 as used in report dated April 4, 1988.

cm
 '13/88

Dom Obs
Peter Craig

FLEET COVERAGE vs STATISTICAL PRECISION

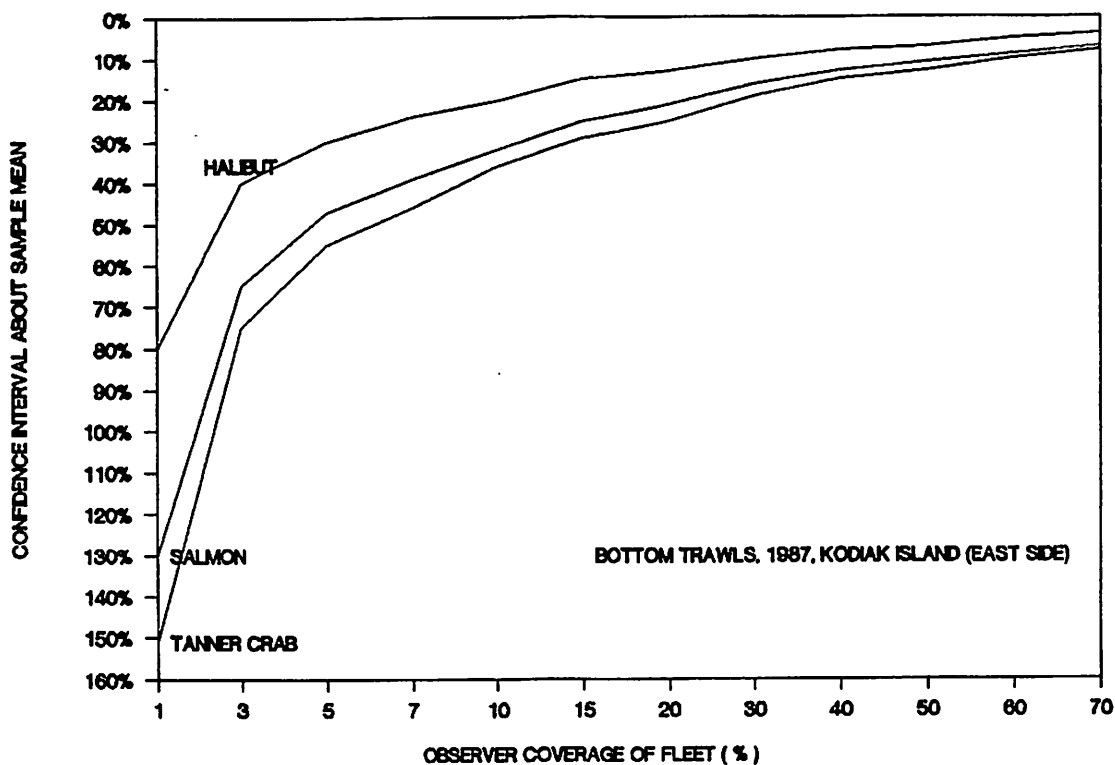


Figure 2. Relationship between observer coverage of the Kodiak bottom trawl fishery and the degree of statistical precision of the data obtained. This analysis is based on ADFG observer data obtained during 16 vessel trips in 1987. The graphs are species-specific because data variability differed for each species.