



UNITED STATES DEPARTMENT OF COMMERCE
NOAA / National Marine Fisheries Service
Alaska Enforcement Division
P.O. Box 21767
Juneau, Alaska 99802-1767

April 10, 1997

AGENDA ITEM B4

ENFORCEMENT REPORT FOR THE PERIOD 1/1/97 THROUGH 4/10/97

National Marine Fisheries Service
Alaska Enforcement Division

During the reporting period, NMFS and the Coast Guard opened a total of 67 cases. NMFS initiated 65 of these investigations.

Further action was also taken on 30 pending cases during the reporting period. One investigation was closed as unfounded and one case was referred to another agency. Two cases were handled with written warnings. Three cases were handled with summary settlement payments totaling \$2,220 and forfeited proceeds of \$2,820. Four cases were settled through voluntary abandonment of forfeited proceeds and property valued at \$1,080. Seventeen cases were referred to NOAA General Counsel. In addition, General Counsel issued two NOVAs for a total \$6,700 in penalties.

IFQ PROGRAM

The 1997 Halibut-Sablefish IFQ Program has opened with mixed activity. Several major storms has slowed activity in the south central Gulf of Alaska. On the other hand the IPHC set a higher overall quota and therefore individual poundages are up accordingly. With more quota and larger individual poundage allocations, at least in the halibut fishery, it seems reasonable to expect less incentive to violate the quota as prices are up and people logically make more money this season. Activity is anticipated to pick up rapidly as the most recent series of storms blows by.

Lately there has been a lot of publicity regarding staffing in the Alaska Enforcement Division (AED). The straight facts about AED staffing and the IFQ program can be stated as follows:

Personnel from the AED worked closely with the NPFMC, IPHC, industry, public and other components of the NMFS to design an enforcement plan which captured many of the high points from existing IFQ type programs from around the world. Additionally it was designed to take into account the many facets of Alaska's fishing history; vessel types, methodology, infrastructure, people, as well as the needs of government.

This year, the Alaska Enforcement Division is experiencing a field force shortfall of approximately 10 positions which would normally go towards enforcement of the Alaska IFQ program. There are a number of reasons for this shortfall. Over the past five years, for example, the NMFS has requested over 5M dollar increase to fund the expanding NMFS law enforcement mission.



However, during this same period Congress approved only 1M. In addition, the government is downsizing. These efforts also encompass the Office for Law Enforcement and the Alaska Enforcement Division. To compensate for the deficiency in personnel, this year the Office for Law Enforcement is sending Special Agents and Fishery Patrol Officers from all over the United States in support of the IFQ fishery. Many of these agents and officers are veterans who have extensive law enforcement experience including experience in Alaska ports. Agents or officers will be assigned to the most critical ports and ensure coverage as determined by the Special Agent-in-Charge of the Alaska Enforcement Division.

Over the next month, an additional 5 officers will be hired and trained in time for next year's IFQ season. Furthermore, next year, Special Agents and Fishery Patrol Officers from other Enforcement Divisions will again support the Alaska Enforcement Division. The Office for Law Enforcement intends to ensure an adequate level of compliance is maintained whether through a permanent field force or through rotational assignments of qualified law enforcement personnel. At the conclusion of this year's IFQ season, the Alaska Enforcement Division will assess this year's enforcement efforts and report back to the Council as to the effectiveness of this year's operations.

Given the current fiscal and personnel constraints in Federal government, the solution for IFQ enforcement in the future is likely a combination of an officer cadre and a contract dockside monitoring program which, working together, will provide coverage analogous to the IVQ enforcement program in Canada.

While the existing law enforcement personnel shortfall is regrettable, extreme measures have been taken to ensure compliance is maintained in the Alaska IFQ program. Anyone who violates the law risks a high probability of detection, apprehension and prosecution.



5350
14 Apr 97

NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL

U. S. COAST GUARD ENFORCEMENT REPORT
12/1/96 - 03/31/97

1. ENFORCEMENT/SAFETY SUMMARY

A. INTERNATIONAL FISHERIES.

1. US/RUSSIAN CONVENTION LINE.

A. Coast Guard air and cutter patrols monitored foreign trawl activity along the US/RU Convention Line through December, when the remaining two FF/V vessels departed. Since 01 December, the Coast Guard has used approximately 37 cutter days and flown approximately 30 C-130 sorties patrolling the US/RU Convention Line. According to information provided by the Russian Federal Border Service, Russian fisheries in the area will open on or about 20 April. Coast Guard C-130's will monitor the convention line area for fishing activity.

2. DONUT HOLE. No foreign fishing vessel activity was detected in the area during the reporting period. The Coast Guard will continue to monitor the Donut with periodic C-130 patrols, consistent with the minimal threat.

3. HIGH SEAS DRIFTNETS. The Coast Guard has participated in preseason planning meetings with NMFS and Canadian representatives. The threat of activity in violation of the UN Moratorium on high seas driftnetting remains low. NMFS accompanied CA aircraft patrols will be coordinated with CG surveillance flights to maximize effectiveness. The Coast Guard will respond to reports of illegal activity and work cooperatively to exchange timely information with parties to the North Pacific Anadromous Fisheries Commission (Japan, Canada, Russia). Under a US - China (PRC) agreement the Coast Guard will have three PRC shipriders on cutters this summer.

4. DIXON ENTRANCE. The Coast Guard is working with our Canadian DFO/CG counterparts in preparation for the 1997 season. We will have a preseason joint meeting in early June to discuss projected openings, levels of fishing effort, patrol schedules, and in season points of contact for information exchange. Consistent with previous years, the Coast Guard will provide patrol boat and helicopter patrols of Dixon Entrance.

B. DOMESTIC FISHERIES.

1. GROUND FISH.

A. Coast Guard patrol efforts focused on monitoring

major groundfish openings; Pollock and Pcod in the Bering Sea, Pollock and Pcod in the Central and Western Gulf, and Atka Mackerel in the Aleutians, as well as the Rookeries throughout the GOA and BSAI. Time and area closures received highest priority, with particular emphasis on the Bristol Bay Red King Crab Savings Areas, and the trawl closure area around the Pribilofs, for habitat protection. No closed area violations were noted. The majority of violations during the period were for substantive logkeeping errors.

2. IFQ HALIBUT/SABLEFISH. The 1996 Coast Guard Safety Summary, as reported to NMFS RAM and the IPHC, is attached. Buoy tender crews are being used to carry out IFQ enforcement in conjunction with their aids to navigation mission. To date in 1997 the 110' Patrol boats have provided the majority of the coverage in the GOA and SEAK, with support from larger cutters transiting the Central and Western GOA. Coast Guard IFQ effort will include increasing our presence at remote dockside locations through cutter visits.

3. BERING SEA CRAB. The Coast Guard continuously maintained a flight deck equipped cutter underway in the Bering Sea during the recent Opilio crab opening. The primary mission for these resources was to be pre-positioned to provide a Search and Rescue (SAR) response in this major fishery involving over 220 boats. The Coast Guard also carried Food and Drug Administration Inspectors, Immigration and Naturalization Officers and OSHA representatives to conduct boardings of floating processors during the Opilio crab fishery.

C. SAFETY.

1. Safety trends to date, as compared to 1996 are extremely encouraging. As of 07 April 1997, with the Bering Sea Opilio crab fishery now closed, there have been 10 fishing vessels and one life lost, as compared to 11 lives lost over this same period last year. No lives were lost due to vessel sinkings; a credit to the industry for ensuring critical life saving equipment was onboard, and that the crews were trained and prepared to use it.

2. The interim rule requiring Survival craft on vessels greater than 36 feet which carry 4 or more individuals on board goes into effect on 05 May. Questions may be addressed to LT John Bryant or Sue Jorgensen at (907) 463-2286 or 2292. Copies of the rule are available on the table.

2. ADMINISTRATION.

A. The Coast Guard will continue to participate as a member of the U.S. delegation dealing with the US/RU Convention Line issue.

B. The Coast Guard will participate in the Donut Hole Enforcement Experts meeting next month in Seattle to continue work on the details for a monitoring and compliance program in the event that the fishery opens in the future.

C. The Coast Guard had a fishing vessels safety booth at Comfish to provide information packages and answer questions. In addition, the North Pacific Regional Fishery Training Center at Kodiak offered classes to fishers during Comfish to help train and explain how to avoid common log keeping errors we are finding on the grounds. The Commanding Officer of MSO Anchorage was scheduled to provide a vessel stability safety seminar as well, but this was cancelled due to lack of interest.

D. In preparation for the implementation of the Seabird Avoidance regulations, Coast Guard boarding teams have been instructed to advise vessels of the forthcoming regulations and gather information regarding the fleet's use of avoidance measures.

PATROL STATISTICS
01 DEC - 31 MARCH 1997

- a. 6 High Endurance cutters (HEC) patrolled for 207 days.
- b. 1 Medium Endurance cutters (MEC) patrolled for 39 days.
- c. 5 Patrol boats patrolled for 81 days.
- d. C-130 aircraft conducted 129 long-range surveillance flights for 911 hours.
- e. HH60/65 aircraft conducted 221 surveillance flights for 311 hours.
- f. Domestic vessels:
 - 6567 = Sightings
 - 110 = Boardings
 - 12 = Fishery Violations

VESSELS BOARDED WITH NO FISHERY VIOLATIONS

AGGRESSIVE	030897
ADVANTAGE	021797
ALASKA I	011697
ALASKA JURIS	021597
ALASKA RANGER	021597
ALASKAN LEADER	022897
ALASKA PATRIOT	011597
ALEUTIAN FALCON	012497
ALEUTIAN DAWN	030397
AMERICAN ENTERPRISE	030897
AMERICAN NO. 1	021897
ARCTIC EAGLE	120296
ARCTIC STAR	012597
ARCTIC III	022597
ARCTIC IV	022597
ARCTURUS	022597
AUTUMN DAWN	120296
BAILY	032697
BROWNS POINT	030797
CAMERON	012497
CAPE CAUTION	012497
CAROLINA BOY	021297
CAROLINA GIRL I	021297
CELTIC	012097
CELTIC	020697
CINDRIA GENE	020597
CLIPPER EPIC	032497
COHO	020797
DANCING LIZZY	022097
DEFENDER	022497
DOMINATOR	022597
DUSK	020797
ENTERPRISE	021897
FIRE FOX	030897
FLYING CLOUD	032997
FRONTIER MARINER	022397
FRONTIER SPIRIT	022397
GOLD RUSH	013097
HEIDI K	020697
HI SEAS I	022597
HI SEAS I	030497
INDEPENDENCE	011697
ISLAND TRADER	030897
JEANOAH	011897
KING FISHER	010897
KITTYWAKE 2	020397
LADY LINDSAY	020597
LADY JESSIE	012497
LEGACY	022497

LESLIE LEE	020697
LIBERTY BAY	022797
MARATHON	020697
MARCY J	020697
MARK I	021797
MARY LOU	020697
MIKARTA K	012597
MONRAD FARSTAD	021797
NIGHT WATCH	012397
NORTHERN DAWN	012497
NORTHERN EXPLORER	011697
NORTHERN EAGEL	030897
NORTHERN MARINE	031997
NORTON SOUND	031497
OCEAN ENTERPRis	021797
PACIFIC	022097
PACIFIC EXPLORER	022597
PACIFIC MONARCH	030597
PACIFIC RAM	021897
PATHFINDER	011497
PACIFIC VIKING	012397
PARKS NO 19	021497
PEGGY JO	013097
POINT OMEGA	030497
PROVIDENCE	021297
PURSUIT	021197
RED	020697
RELIANCE	020697
RELLANCE	030897
SEA DAWN	033197
SEA KING	012497
SEA MAC	021297
SERENITY	030897
SLAVA	021397
ST PATRICK	021797
STOREFJORD	030797
T-MIKE	021397
TIME BANDIT	012597
TRINA	011697
TYEE	021297
UNISEA	011797
US	021297
VESTERAALEN	021797
WINONA J	021797
YARDARM KNOT	020197

VESSELS BOARDED WITH FISHERY VIOLATIONS

ALASKAN ROSE 1. EXCEEDED DIRECTED FISHING. 2. IMPROPER LOG KEEPING.	RUSH	11MAR97
ARCTIC III 1. NO VESSEL ACTIVITY REPORT ON BOARD.	JARVIS	26FEB97
BLUE NORTH 1. NO FEDERAL FISHERIES PERMIT ON BOARD. 2. FAILURE TO SUBMIT VESSEL ACTIVITY REPORT.	JARVIS	18FEB97
CAPE KIWANDA 1. FAILURE TO SUBMIT VESSEL ACTIVITY REPORT.	ACUSHNET	05FEB97
COLLIER BROTHERS 1. IMPROPER LOG KEEPING.	ACUSHNET	07FEB97
DEFENDER 1. NO FEDERAL FISHERIES PERMIT ON BOARD. 2. FAILURE TO SUBMIT VESSEL ACTIVITY REPORT.	JARVIS	25FEB97
JEANOAH 1. IMPROPER LOG KEEPING.	ACUSHNET	20JAN97
LISA MELINDA 1. FAILURE TO SUBMIT VESSEL ACTIVITY REPORT.	ACUSHNET	05FEB97
MILKY WAY 1. FAILURE TO LOG DISCARDS.	ACUSHNET	25JAN97
WESTERN QUEEN 1. FAILURE TO SUBMIT VESSEL ACTIVITY REPORT.	MORGENTHAU	28MAR97
PACIFIC MONARCH 1. IMPROPER LOG KEEPING.	RUSH	05MAR97
PACIFIC MARINER 1. IMPROPER LOG KEEPING.	MIDGETT	04DEC97
PERSISTENCE 1. NO VESSEL ACTIVITY REPORT ON BOARD.	ACUSHNET	07FEB97

46 CFR PART 28

28.120 SURVIVAL CRAFT (Effective 05 May 1997)

(a) Except as provided in paragraphs (b) through (h) of this section and 28.305, each vessel must carry the survival craft specified in Table 28.120(a), Table 28.120(b), or Table 28.120(c), as appropriate for the vessel, in an aggregate capacity to accommodate the total number of individuals on board.

(b) The requirements of this section do not apply to vessels less than 10.97 meters (36 feet) in length with 3 or fewer individuals on board which operate within 12 miles of the coastline.

(c) A buoyant apparatus may be substituted instead of the requirements in this section for vessels 10.97 meters (36 feet) or more in length with 3 or fewer individuals on board which operate within 12 miles of the coastline.

(d) Each survival craft installed on board a vessel before September 15, 1991, may continue to be used to meet the requirements of this section provided the survival craft is:

(1) Of the same type as required in Table 28.120(a), Table 28.120(b), or Table 28.120(c), as appropriate for the vessel type; and

(2) Maintained in good and serviceable condition.

(e) Each inflatable liferaft installed on board a vessel before September 15, 1991 may continue to be used to meet the requirements for an approved inflatable liferaft, provided the existing liferaft is:

(1) Maintained in good and serviceable condition as required by Table 28.140; and

(2) Equipped with the equipment pack required by Tables 28.120(a), Table 28.120(b), Table 28.120(c), as appropriate for the vessel type. Where no equipment pack is specified in Tables 28.120(a), Table 28.120(b), Table 28.120(c), a coastal service pack is the minimum required.

(f) A lifeboat may be substituted for any survival craft required by this section, provided it is arranged and equipped in accordance with part 199 of this chapter.

(g) The capacity of an auxiliary craft carried on board a vessel that is integral to and necessary for normal fishing operations will satisfy the requirements of this section for survival craft, except for an inflatable liferaft, provided the craft is readily accessible during an emergency and is capable of safely holding all individuals on board the vessel. If the auxiliary craft is equipped with a Coast guard required capacity plate, the boat must not be loaded so as to exceed the rated capacity.

(h) A vessel less than 10.97 meters (36 feet) in length that meets the flotation provisions of 33 CFR part 183 is exempt from the requirement for survival craft in paragraphs (a) of this section for operation on:

(1) Any waters within 12 miles of the coastline.

(2) Rivers.

SURVIVAL CRAFT REQUIREMENTS COLD WATERS

DOCUMENTED FISHING VESSELS

Table (a)

		Boundary Line	12 Mile Line	20 Mile Line	50 Mile Line	
LESS THAN 36'	<u>3 or less people</u>	NONE REQUIRED			INFLATABLE LIFERAFT	INFLATABLE LIFERAFT WITH SOLAS "B"
	<u>More than 3 people</u>	BUOYANT APPARATUS*				
36' OR MORE	<u>3 or less people</u>	BUOYANT APPARATUS*			INFLATABLE LIFERAFT	INFLATABLE LIFERAFT WITH SOLAS "A"
	<u>More than 3 people</u>	INFLATABLE BUOYANT APPARATUS*				

UNDOCUMENTED FISHING VESSELS

Table (b) & (c)

		Boundary Line	12 Mile Line
LESS THAN 36'	<u>3 or less people</u>	NONE REQUIRED	
	<u>More than 3 people</u>	BUOYANT APPARATUS*	
36' OR MORE	<u>Regardless of number of people on board</u>	BUOYANT APPARATUS*	

*An auxiliary craft (i.e. seine skiff) which is integral to the fishing operation may be substituted

NOTE: Vessels less than 36 feet which meet flotation provisions of 33 CFR Part 183 are not required to carry a survival craft as long as they operate within 12 miles of the coastline or on rivers.

THESE BECOME EFFECTIVE MAY 5, 1997

Revised March 5, 1997

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COAST GUARD DISTRICT 17



1996

Fisheries Law Enforcement
Operations

BERING SEA

- **CONVENTION LINE ENFORCEMENT**
 - June - December
- **CRAB SAR STANDBY**
 - November - March
- **POLLOCK/PACIFIC COD**
- **MAJOR CUTTERS: 223 DAYS**
- **C130: 776 HOURS**



EASTERN BERING SEA

A map of the Eastern Bering Sea region, showing the coastline of Alaska and the surrounding waters. The map is rendered in a halftone or dotted pattern. The title 'EASTERN BERING SEA' is printed across the top of the map area.

- **POLLOCK**
- **PACIFIC COD**
- **YELLOWFIN/ROCK SOLE**
- **CLOSED AREAS**
- **ROOKERIES**



MAJOR CUTTERS: 572 DAYS

- **C130: 1803 HOURS**

A map of Alaska and the Gulf of Alaska is shown in the background. The title 'GULF OF ALASKA' is overlaid on the map. The map shows the outline of Alaska, with the Gulf of Alaska to the south and the Aleutian Islands to the west. The text is in a bold, serif font.


GULF OF ALASKA

- IFQ HALIBUT/SABLEFISH
- PACIFIC COD
- ROCK & FLAT FISH
- POLLOCK
- MAJOR CUTTERS: 351 DAYS
- PATROL BOATS: 50 DAYS
- C130: 700 HOURS
- HELO: 591 HOURS





SOUTHEAST ALASKA

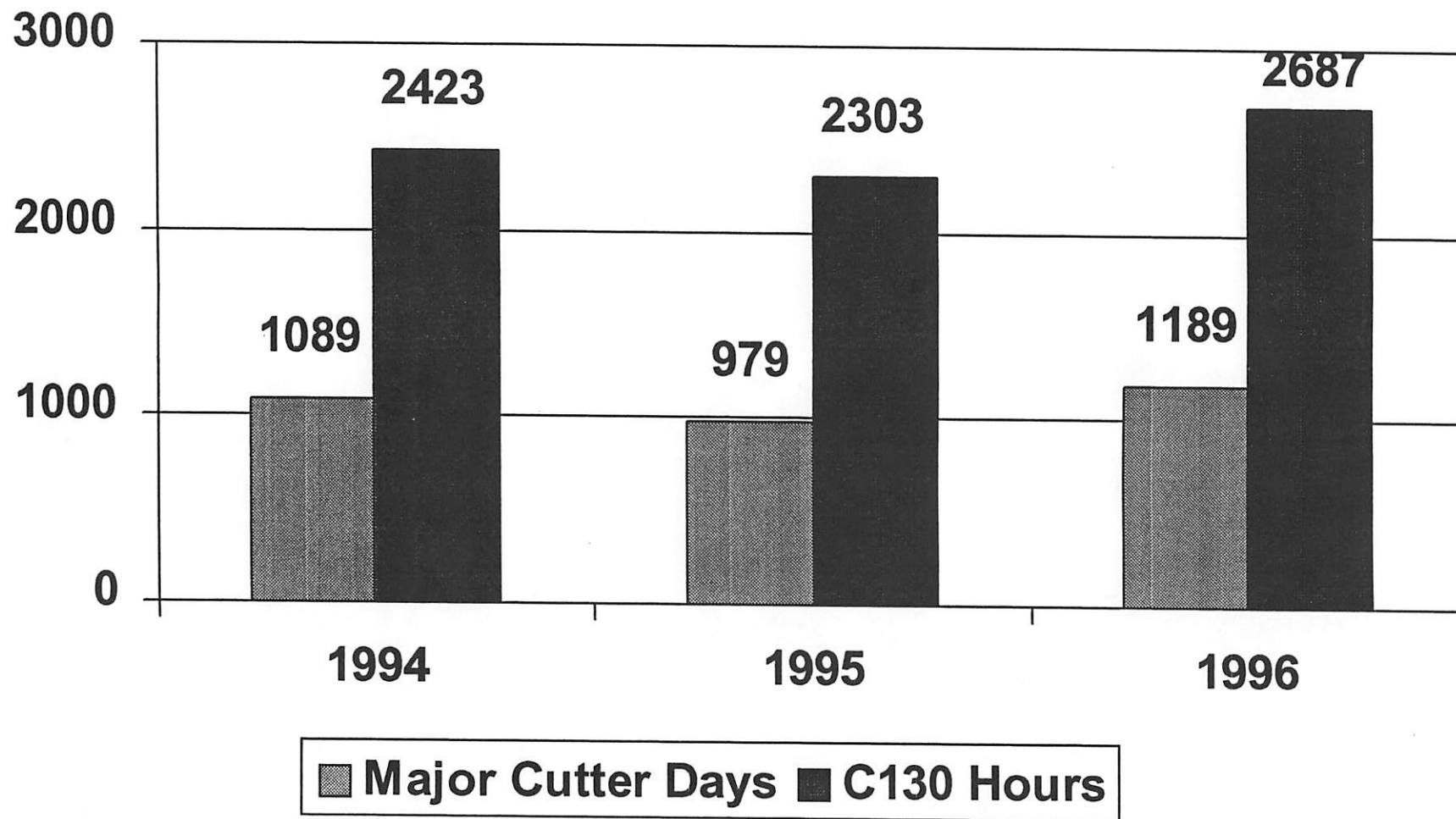
- **DIXON ENTRANCE**
 - US/CA Salmon
 - June - July
- **IFQ HALIBUT/SABLEFISH**
 - March - November
-  **PATROL BOATS: 134 DAYS**
- **HELO: 220 HOURS**

HIGH SEAS

- HIGH SEA DRIFT NET -
- MAJOR CUTTERS: 46 DAYS
- BUOY TENDERS: 55 DAYS
- C130: 66 HOURS



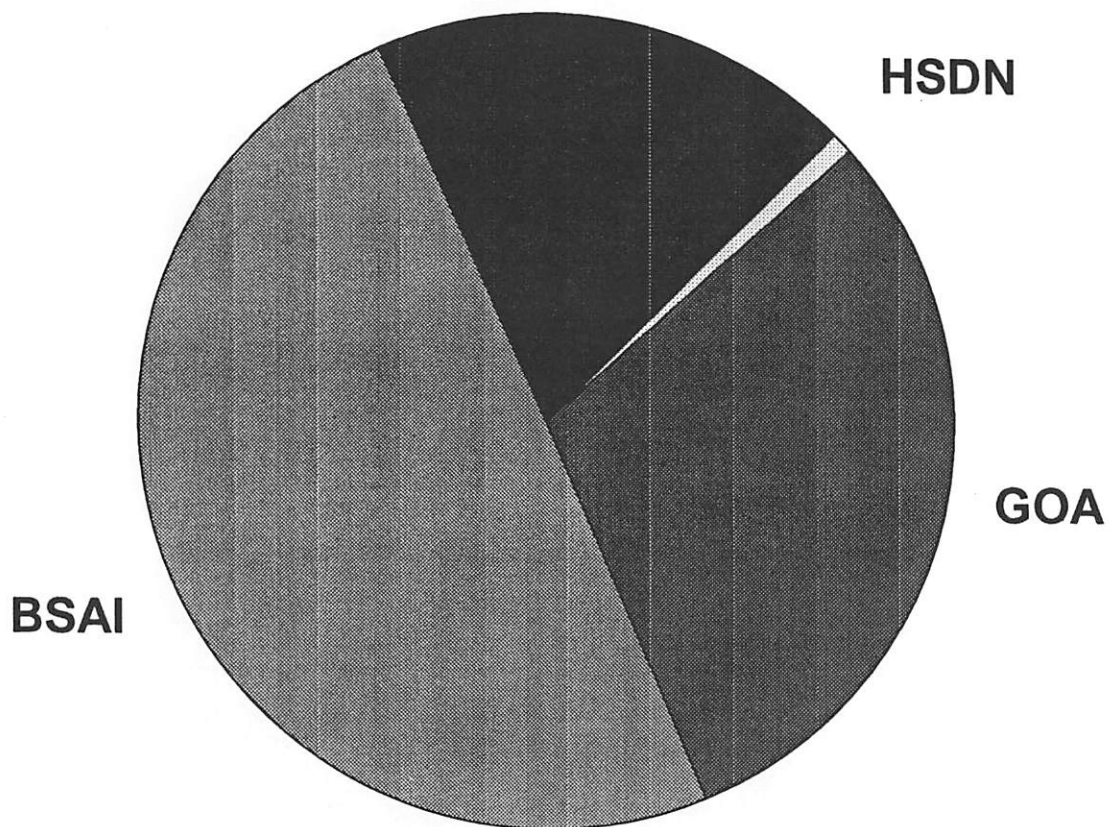
Historical Overview



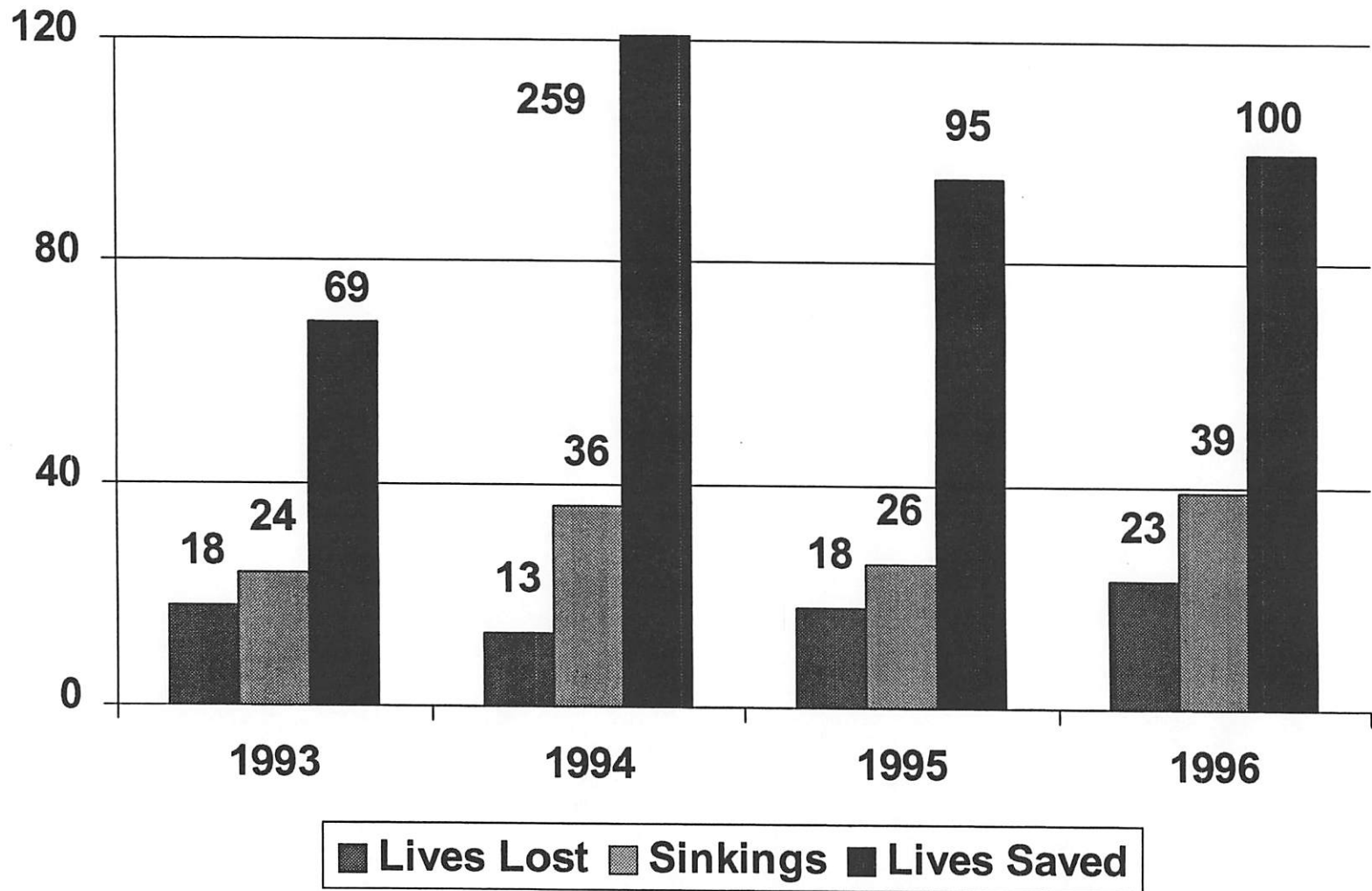
1996 FORCE RECAP

CUTTER DAYS

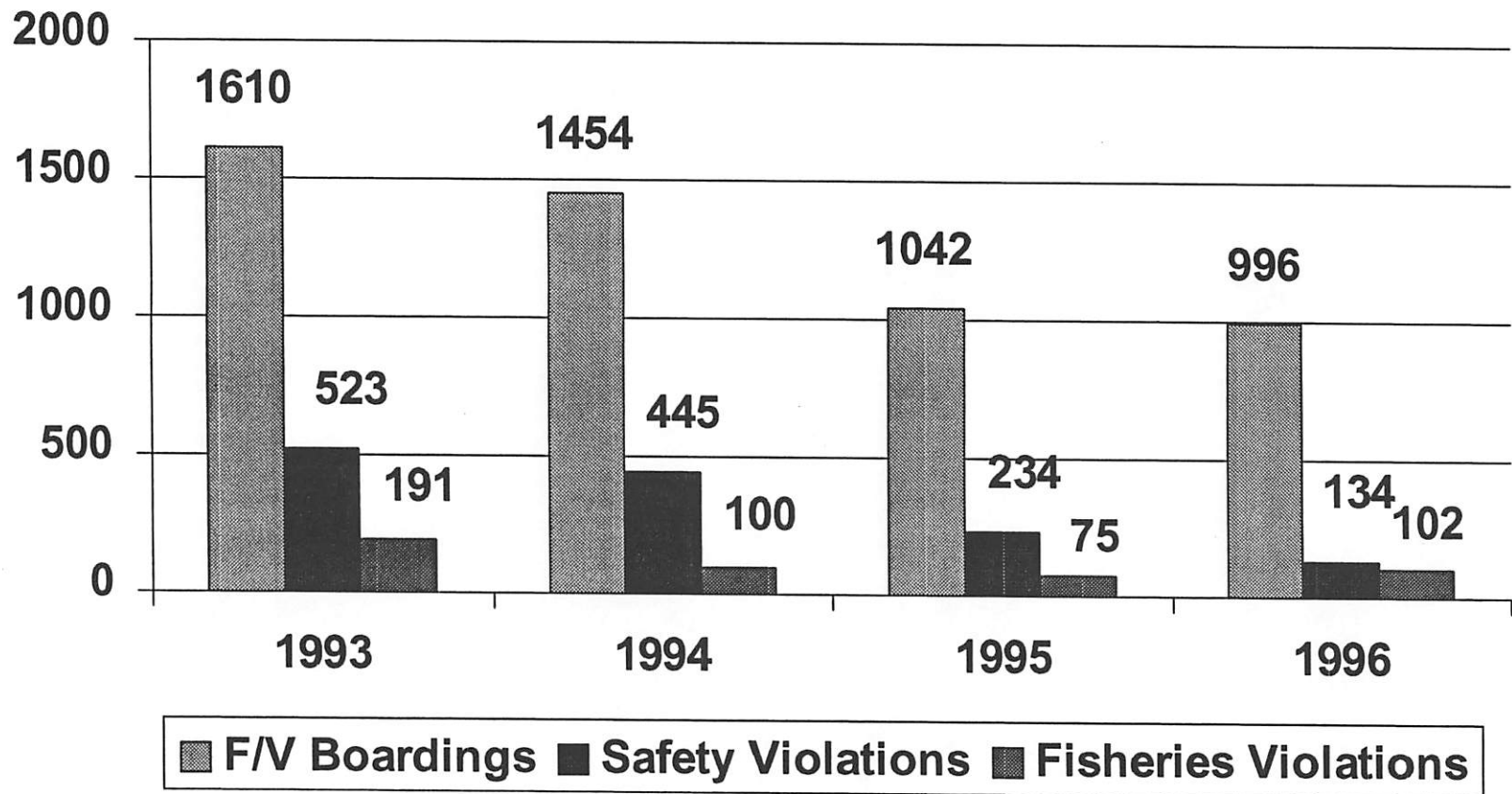
CONV LINE



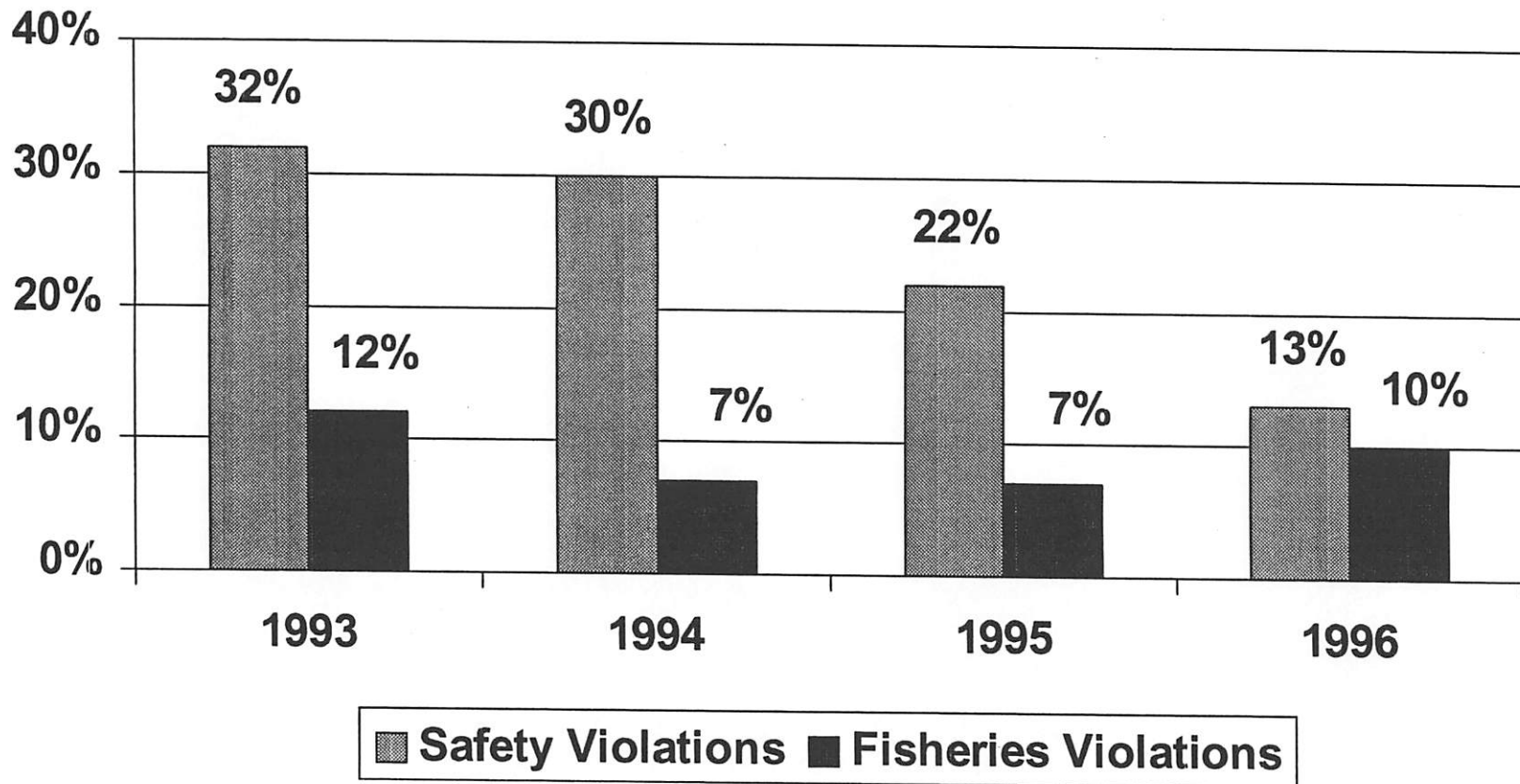
Safety Statistics



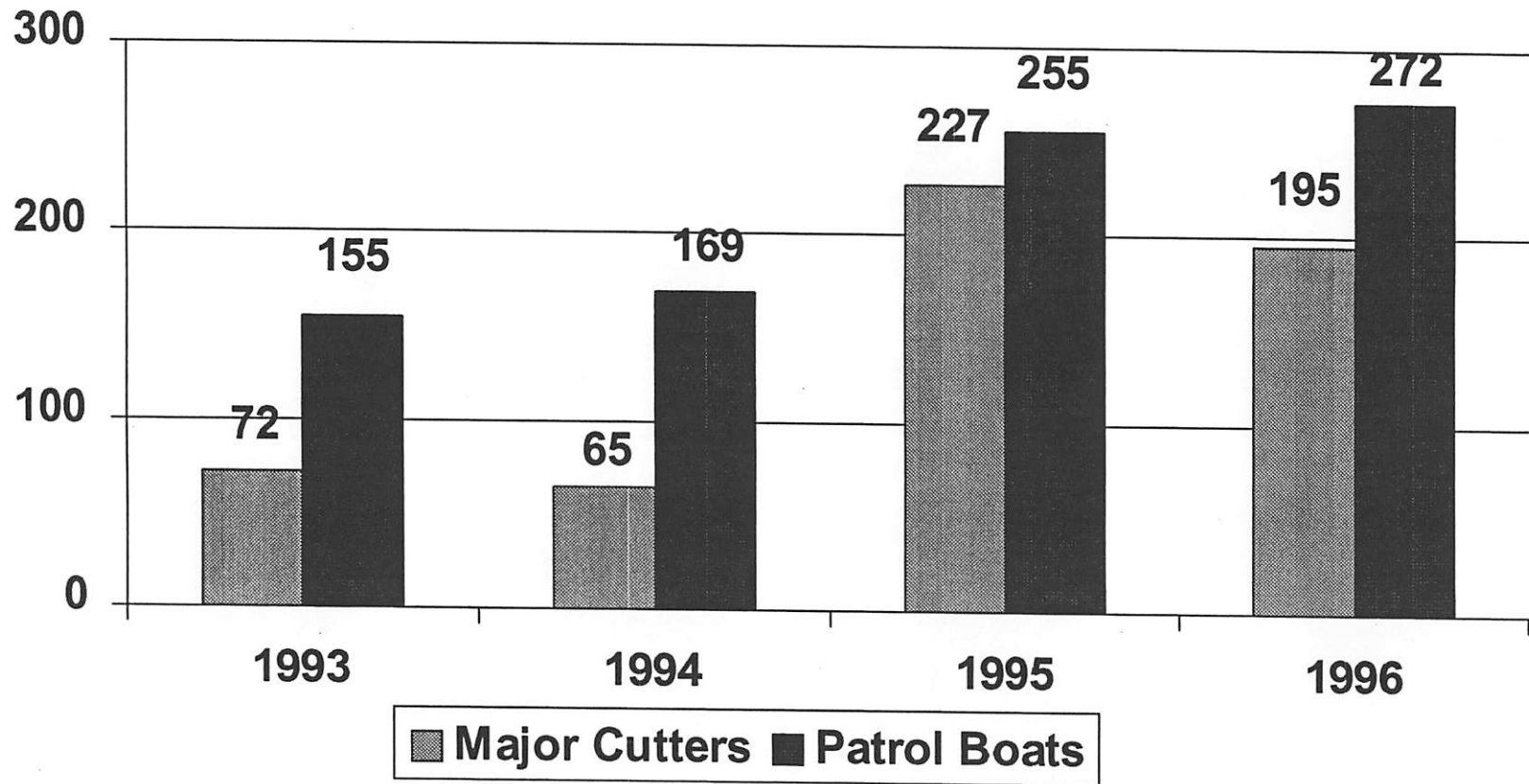
Boarding Statistics



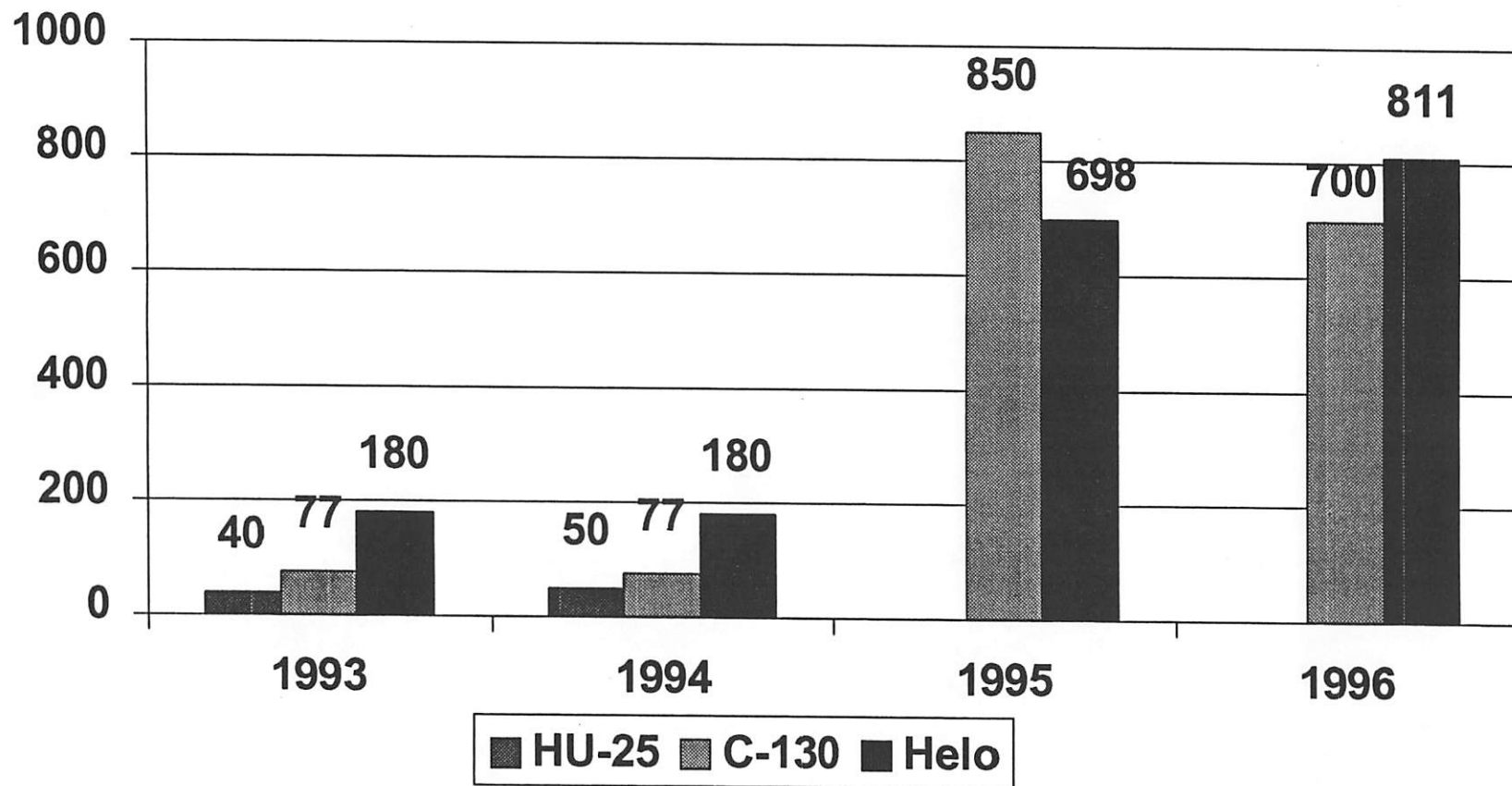
Percent of Boardings with Violations



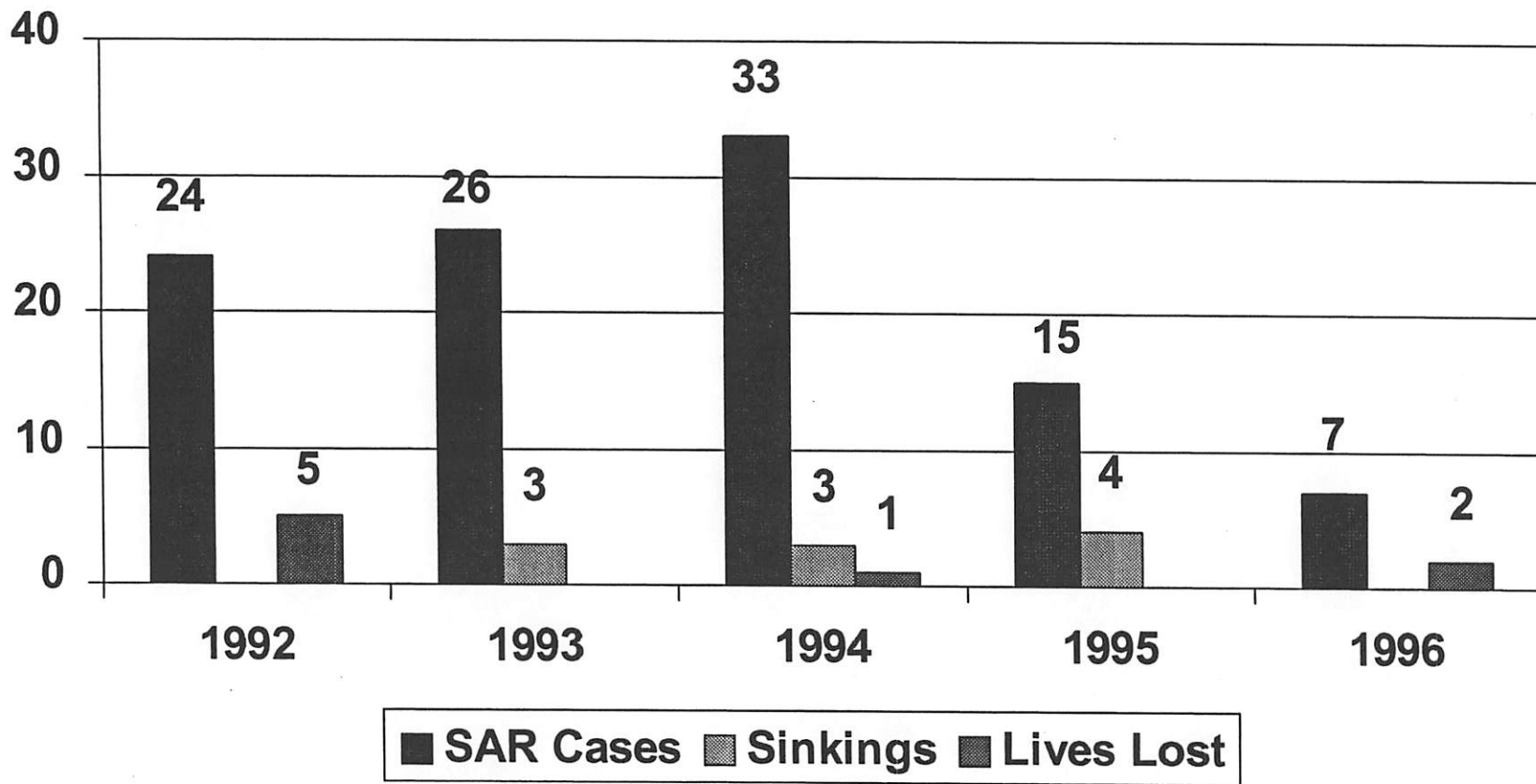
Derby/IFQ Cutter Days



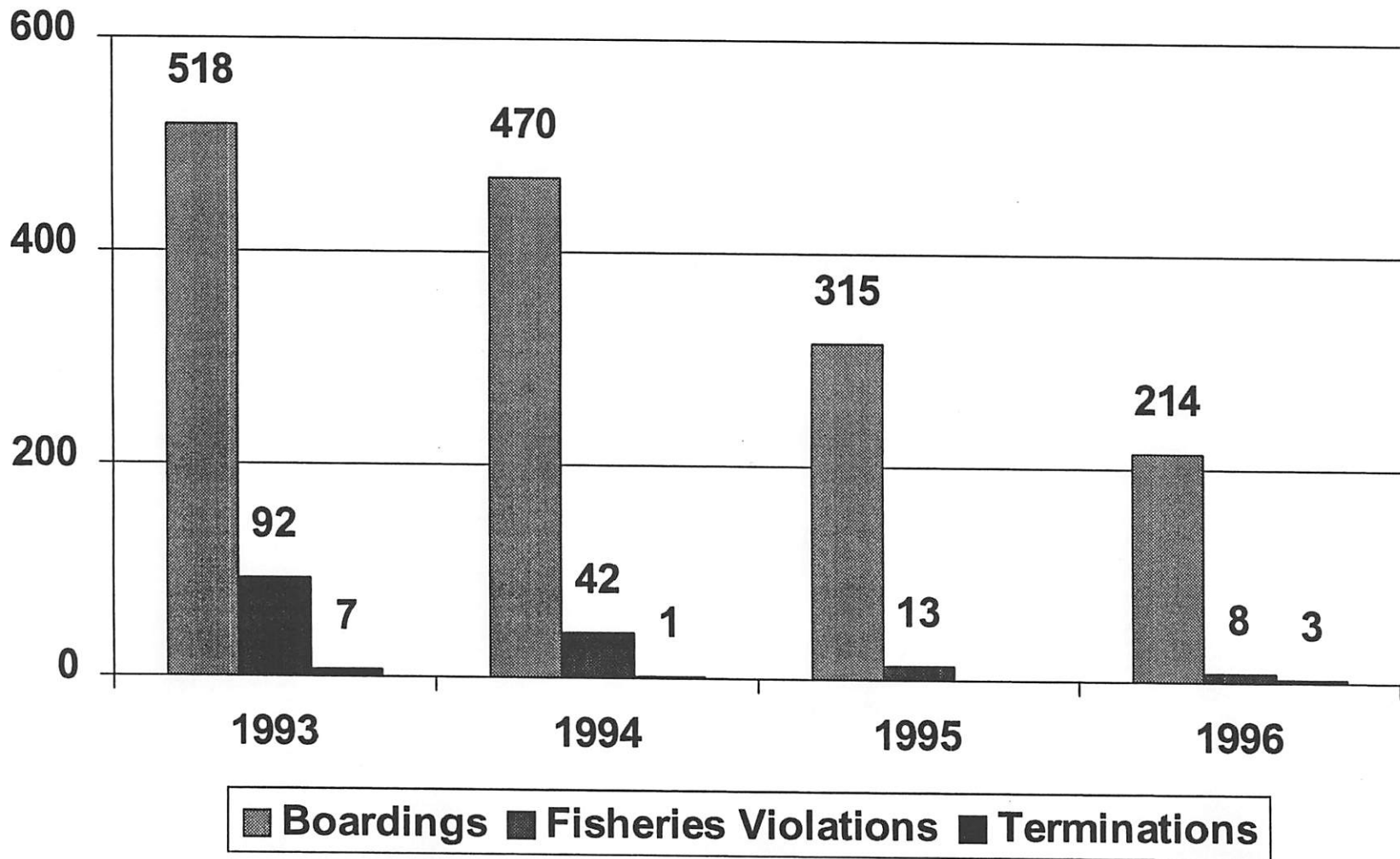
Derby/IFQ Aircraft Hours



Derby/IFQ Safety Statistics



Derby/IFQ Boarding Statistics





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Council Briefing on the IFQ study, *Beyond IFQ Implementation: A Study of Enforcement Issues in the Alaska Individual Fishing Quota Program*. Presented to the North Pacific Fisheries Council on April 15, 1997, by study author Dayna Matthews.

Introduction

Individual Quotas (IQ) are currently used in three different Federal fisheries, under the jurisdiction of three different Fishery Management Councils. Other Councils have debated their merits. The implementation of IQ programs has proven to be complex, controversial, and radical. Given the national interest in IQ fishery management, David McKinney, Chief of Enforcement for the National Oceanic and Atmospheric Administration, National Marine Fisheries Service made a commitment to the Joint Fishery Council Chairs to evaluate the enforceability, compliance, security, and integrity of IQ programs nationwide. That commitment is the genesis of this report.

Rather than trying to measure compliance by creating a compliance index or violation ratio through rigorous statistical review, this study used a qualitative approach using responsive and utilization-focused evaluation techniques.

For this study, a literature review was conducted to examine the economic and fishery management theories of IQs, and to identify the necessary criteria for achieving an "acceptable level" of compliance. Second, the development, implementation, and outcome of the first two years of the Alaska IFQ Program were examined. Finally, relevant stakeholders from industry, the North Pacific Fishery Management Council, and state and federal government were interviewed. Each of the three research methods were used to validate, compare, or contradict the relevant, pertinent information obtained by the other two approaches.

Findings

At first glance, the Alaskan IFQ program appears paradoxical. Theorists assert that IFQs are appropriate for fisheries whose characteristics include simple regulations, a limited number of participating vessels, narrow markets, and restricted access points. These characteristics do not describe the Alaska halibut and sablefish IFQ fishery. Yet, the program is working, able to overcome the onerous hurdles of fleet configuration, vast geographics, regulatory complexity, and mammoth social impacts. So why do IFQs work in Alaska? Three words. . . process, process, and process.

The administrative process used to scope, develop, and implement the IFQ Program was critical in achieving initial program success. Strong fisher involvement, policy maker commitment, and technical staff expertise combined to create a dynamic public process for scoping, developing, and implementing the Alaska IFQ Program. Exhaustive research discovered and examined the pitfalls and successes of previous IFQ programs. Countless meetings focused on educating and communicating with impacted stakeholders, creating a problem resolution environment, and achieving industry buy in and good will. Establishing the IFQ Implementation

Workgroup provided a forum for identifying issues, evaluating solutions, and enhancing the political will necessary for successful implementation.

The process established communication links that paid huge dividends when the technology failed. During this period, industry demonstrated great patience and cooperation, which was rewarded by NMFS diligence and commitment to "get it right." Although there have been problems, NMFS has acted responsibly in evaluating, documenting and resolving problems as they occur.

Unlike some previous Fishery Management Plans, evaluating enforcement issues was not an after thought. Many enforcement concerns were addressed early on, receiving a thorough review, with industry involvement, and strong support from the Council when the Enforcement Plan was presented. The outcome, the tiered enforcement model, represents a well thought out strategy designed to address enforcement concerns identified through experience, consultation with industry, and evaluation of fishery enforcement programs worldwide.

Initial program acceptance and satisfaction indicators are numerous in the Alaska IFQ Program. The small number of appeals generated by RAM's quota share issuance process is a strong indicator of the high level of acceptance and satisfaction within the program. Contrary to initial fears of increased illegal activity, voluntary compliance appears to be the demonstrated norm. Violations, although categorically numerous, are frequently voluntarily reported and of a minor or technical nature. Civil disobedience and gross violations are not representative of the program. As a commodity, quota share and product prices are up. Congratulations are in order. By these valid indicators, the IFQ program appears to be working, with voluntary compliance and industry acceptance and satisfaction continuing to rise.

Risk Assessment

The initial success of the IFQ Program has come at a high cost. First to be considered are the direct costs incurred by the NMFS and the processors. These costs were large and [reportedly] underestimated. Next are the foregone opportunity costs. Given the preoccupation of the Council and NMFS with IFQs, other pressing fishery management concerns had to be put aside or delayed. And finally, the social costs. The Alaskan halibut and sablefish fisheries have been changed forever, for better or worse, with the final verdict still in the balance.

I have used the term "initial success" to reflect the tenuous nature of the success achieved in the IFQ fishery. IFQ management is radical and fraught with risk. Foremost on the list of risk indicators is the potential loss of confidence in AED's ability to achieve an "acceptable level of compliance." Industry confidence in AED and AED's ability to do the "entire job" is inexorably linked to the success of the IFQ Program. With the ongoing implementation of the IFQ Program, Council enforcement expectations and regulatory complexity continue to escalate. These increasing demands, have caused some to fear AED may already be overwhelmed, putting at risk the integrity of all AED Fishery Management Plan (FMP) enforcement efforts.

The decline in enforcement staff has caused enormous concern and contributed greatly to the erosion of industry confidence. Industry supports the enforcement theory of deterrence through presence, timely prosecution, and sanctions that elicit compliance behavior. Their willingness to adopt the radical management approach of IFQs was influenced by assurances that NMFS and AED could deliver these compliance elements. Failure to deliver will result in increased violations against the resource and lost industry confidence, putting this program in serious jeopardy.

Although identified as an element in the tiered model, the importance of monitoring may have been underestimated. The industry, particularly the processors, are thoroughly vested in the necessity of monitoring. The current monitoring strategy of AED does not necessarily result in inspection of the entire individual landing. The 25% overall monitoring level achieved in the first year was viewed by industry as minimally acceptable. The second year level of less than 20% was troubling. The projected 1997 monitoring effort, with only eight FPOs (one third of the original staffing proposal), has been met with great alarm, and is viewed by some in the industry as unacceptable.

Industry is notably concerned about the hailing, landing, and reporting requirements of the IFQ program. The reporting regulations generate huge volumes of paperwork and, reportedly interfere with product flow. If true, one of the stated goals of the IFQ Enforcement Plan is being forsaken. The hailing requirements and landing restrictions were developed with large, traditional sablefish deliveries in mind. This "one size fits all" approach to regulation development does not serve the small boat halibut fleet or processors receiving their deliveries. AED has demonstrated some flexibility in trying to address this issue. Tidal and weather conditions often preclude Western Alaska skiff fishermen from fishing and landing product within the designated 6 am to 6 pm fishing window. AED has used its waiver authority, and has extended selected waivers to affected areas, allowing fishing and landing of product to occur until midnight.

The goal of consistent, simple regulations is noble, but unattainable in this program. The Alaska fishery is too diverse, both in terms of geographic area and fleet demographics. Evolution of regulations and streamlining of process must continue for this program to be successful. Failure to address the concerns of small vessels and processors is failure to maximize the benefits of the resource. Failure to maximize the benefits of the resource is failure to achieve the goals of IFQ management, an outcome that will ultimately alienate NMFS and AED from their clients.

The predicted violations of high grading, under reporting, data fouling, and quota busting are occurring. Although currently at "acceptable levels", there are reasons to believe that these violations will increase as the program matures. When the program was first initiated, industry participants were influenced by a number of factors. Many who received IFQs were euphoric with their new found wealth and new operating parameters. Others were thoroughly disillusioned and emotionally drained by the loss of their livelihood. Most were confused by the complexity of the regulations imposed under IFQ management. The industry as a whole was on its best behavior, vested in IFQ management, wanting to make IFQs work.

Since implementation, fishers have traded and purchased shares, some at great expense, further marginalizing their economic situation. Given a conditional set of circumstances, some fishers will look to cheating as a means for meeting their financial obligations. Those who were initially confused have had "time to figure it out", and are no longer confused. As a result, ways of circumventing the program are emerging. The ice and slime and recovery rate scams are the first examples, but unfortunately, will not be the last. Those who were disillusioned have had time to recover, and as part of that recovery, may have rationalized that "two wrongs make a right." They may now be willing to incur the risk of poaching to secure lucrative financial gains. These scenarios give rise to the conclusion that the initial grace period of compliance in the IFQ fishery may be waning, with a more prolific and onerous violation pattern yet to emerge. Therefore, failure to demonstrate strong prosecutorial resolve and administer harsh sanctions for gross violations will only exacerbate this potential outcome.

As a risk indicator, inadequate GCEL staffing is only surpassed by the concern for declining enforcement staff. The failure to adequately address GCEL staffing in light of anticipated increases in enforcement cases was a fundamental flaw of implementing the IFQ Program. The staffing needs of GCEL must be addressed if any valid compliance goals are to be achieved.

When interviewed, industry participants consistently voiced fear of permit sanctions as a prime compliance incentive. The lack of NOAA GC authority to sanction halibut share permits effectively eliminates any ability to maintain the perceived threat of permit sanctions in the halibut fishery. Left unaddressed, the level of compliance that currently exists in the fishery will be seriously eroded.

Industry confidence and prosecutorial success are also dependent upon the integrity of the RAM system. Whether tracking and recording day to day landing activity, validating share transactions, or supplying documents for prosecution, as the official record, the RAM system and the supporting technology must not only perform admirably, but be above reproach. Failure to meet these expectations will negate effective prosecutions, and jeopardize program integrity.

The initial concerns over leakage of product into Canada and the "lower forty eight" are not justified by the landing data which indicates less than 4% of IFQ landings occur outside of Alaska. One should not, however, be lulled into complacency by data generated by those in compliance. The concern for illegal product deliveries into Canada and across the border into the United States is real. Sablefish are not immune from scams. As has been demonstrated in other high value fisheries, black markets are alive and well in the fishing industry. There is no reason to believe halibut and sablefish are exceptions.

There are no surprises in the findings or risk assessment. Rather, the conclusions reached reconfirmed the literature search and stakeholder comments. The fact that there are no surprises is another indicator that the administrative process used to implement IFQs in Alaska is the strength of the program. Congratulations to all involved and responsible.

In concluding this briefing, the following recommendations are offered to encourage continued success of the IFQ Program in Alaska.

Recommendations

1. Implement a Weighmaster Monitoring Program. There are three reasons for this recommendation: the heavy emphasis and importance industry places on the monitoring of offloads; the success of the Canadian Validator Program; and NMFS, Office for Law Enforcement (OLE) staffing limitations. The federal government has implemented a national policy calling for the downsizing of government. NMFS has no option other than to comply and is projecting sizeable staff reductions over the next five years. Maintaining the proposed staffing levels of 1995 in support of IFQs is not feasible under this policy directive. Budget constraints are of lesser consideration in this situation than staffing constraints. Given this situation, contracting out is a viable alternative for addressing the monitoring needs of the IFQ Program. The recently reauthorized Magnuson-Stevens Act allows for rents of up to 3% to be extracted from the fishery. This authority provides the mechanism for industry to pay for the monitoring program.

Implementation of a contracted, third-party weighmaster program would allow for evaluation of the FPO positions and administrative responsibilities of AED, without the burdensome responsibility of substantial monitoring of IFQ landings. Redeployment could follow, assuring officers are available and appropriately located to "look in the right place." The monitoring and patrol components of the tiered enforcement model would be substantially bolstered by the implementation of a weighmaster program. A scale certification component should be incorporated into the development of the weighmaster program. Quota allocations can be effectively circumvented or enhanced by an inaccurate scale.

In endorsing a weighmaster program, one is reminded of monitoring programs that have failed. Therefore, the Canadian model should be evaluated in its entirety. This program has succeeded where others have failed. The success of the Canadian program is dependent upon the interrelationships of all the elements of the package, including the third party contractor, all the inducements, subtle affiliations, and total independence from industry.

A subordinate recommendation is to use the IFQ Implementation Workgroup in conjunction with NMFS, AED and RAM, to explore, evaluate, and make recommendations for implementing a weighmaster program. That evaluation should include review of the current hailing, landing and reporting requirements, to ensure these regulations are consistent with the goals of a weighmaster program. Currently, small independent processors are not represented on the IFQ Workgroup. To ensure all concerns are represented, a recommendation is made to expand the makeup of the IFQ Workgroup to include a small independent processor. Work on retooling and upgrading the RAM computer system should continue, with the intent of possibly implementing a weighmaster program.

2. Implement Role and Deployment Studies. The National Marine Fisheries Service, Office of Enforcement (OLE) is facing double digit staff reductions while confronted with increasing demands and responsibilities, not only in Alaska, but nationwide. Therefore, OLE should implement role and deployment studies at a national level to define its role and evaluate the deployment of commissioned support staff. Traditionally, these studies are done to evaluate staffing needs in an effort to defend requests for increased staffing and budgets. Here, the recommendation is to implement studies using conservative projected staffing levels, and not optimum or requested levels.

3. Increase Efficiency through Interagency Communication, Information Sharing, and Contracting. AED, with its vast geographic and jurisdictional responsibility, can increase efficiency by using other law enforcement agencies as its "eyes and ears." AED should extend and embrace its planning and coordination efforts with the United States Coast Guard. A contractual arrangement with the Alaska Division of Fish and Wildlife Protection should be explored as a means to expand AED coverage, especially in the remote reaches of Western Alaska. Proper training of Coast Guard and ADFWP enforcement staff should be considered an essential element of any expanded effort to ensure all involved enforcement personnel have the necessary "tools" for enforcing complex FMP regulations.

A forum to develop and implement enforcement strategies should be established involving AED, the Northwest Enforcement Division (NED) in Seattle, and the Canadian Department of Fisheries and Oceans (DFO), Enforcement Division. Strategies for monitoring border crossings of IFQ product and discovery of illegal activity should be developed and implemented. Any jurisdictional or regulatory restrictions on information sharing should be evaluated and addressed. Information on Canadian and Alaskan IFQ landings should be routinely shared.

Additional opportunities for expanding the "eyes and ears" of AED should be examined. One possibility is the Village Patrol Safety Officers (VPSO), found in the Native Alaskan communities of Western Alaska. Two ideas for implementing this proposal are to enter into a contract with the State of Alaska to pay for enforcement services delivered by the VPSO, and to develop an orientation course on IFQ enforcement, for presentation by AED staff at the VPSO Academy in Sitka.

4. Improve Fisheries Patrol Officer Support. Given the Office for Law Enforcement's continued interest in maintaining a uniformed Fisheries Patrol Officer program, the infrastructure to support this program needs to be further developed and refined. As highly visible, uniformed, and often entry level officers, FPOs require more support and closer supervision than special agents. The current supervisory structure of AED has FPOs working in geographic isolation from their supervisors. Upon evaluation, a supervisory structure, focusing on the FPOs' need for close, effective supervision should be implemented.

Currently, FPOs receive Federal Law Enforcement Training Center (FLETC) entry level officer training, in addition to specific training on programs and regulations pertaining to their jurisdictional specialty. A Field Training Officer (FTO) program designed to provide hands on training, experience, and evaluation is part of the FPOs' training and development. The program

was initially handicapped by the timing of FPO hiring and training, the infancy of the FTO training and evaluation module, and in dealing with the paradigm shift of incorporating a uniformed officer program into an organization which was solely a plain clothes investigative program.

As the FPO program matures, OLE should continually evaluate and improve its FTO training program to ensure the needs of the FPOs are being met. More lead time needs to be given to the hiring and training of FPOs to ensure proper training, both in and out of the class room, and to maximize the investment being made. Consultation and affiliation with state enforcement agencies in Alaska and other coastal states provide an excellent resource opportunity for development and implementation of an effective and efficient FTO program.

5. Expand Community Oriented Policing Strategies. As part of implementing role and deployment studies, Community Oriented Policing (COP) strategies should be expanded to involve all officers and special agents. In developing and implementing COP strategies, multiple interaction strategies, as opposed to one on one strategies, should be given priority. Training on Community Oriented Policing should be fully incorporated into the FTO training module to sensitize new officers to the importance of respecting and reflecting community values.

Industry and government generated inducements are under used COP strategies. Performance inducements for license issuance, an aggressive public relations program, recognition of compliers through reward certificates or published acknowledgement, and admonishment of violators through publications are all examples of low cost government inducements. Industry should be encouraged to identify and implement their own package of incentives and inducements. Maximizing volunteer compliance through these types of strategies is inexpensive, practical, and worthy of pursuit.

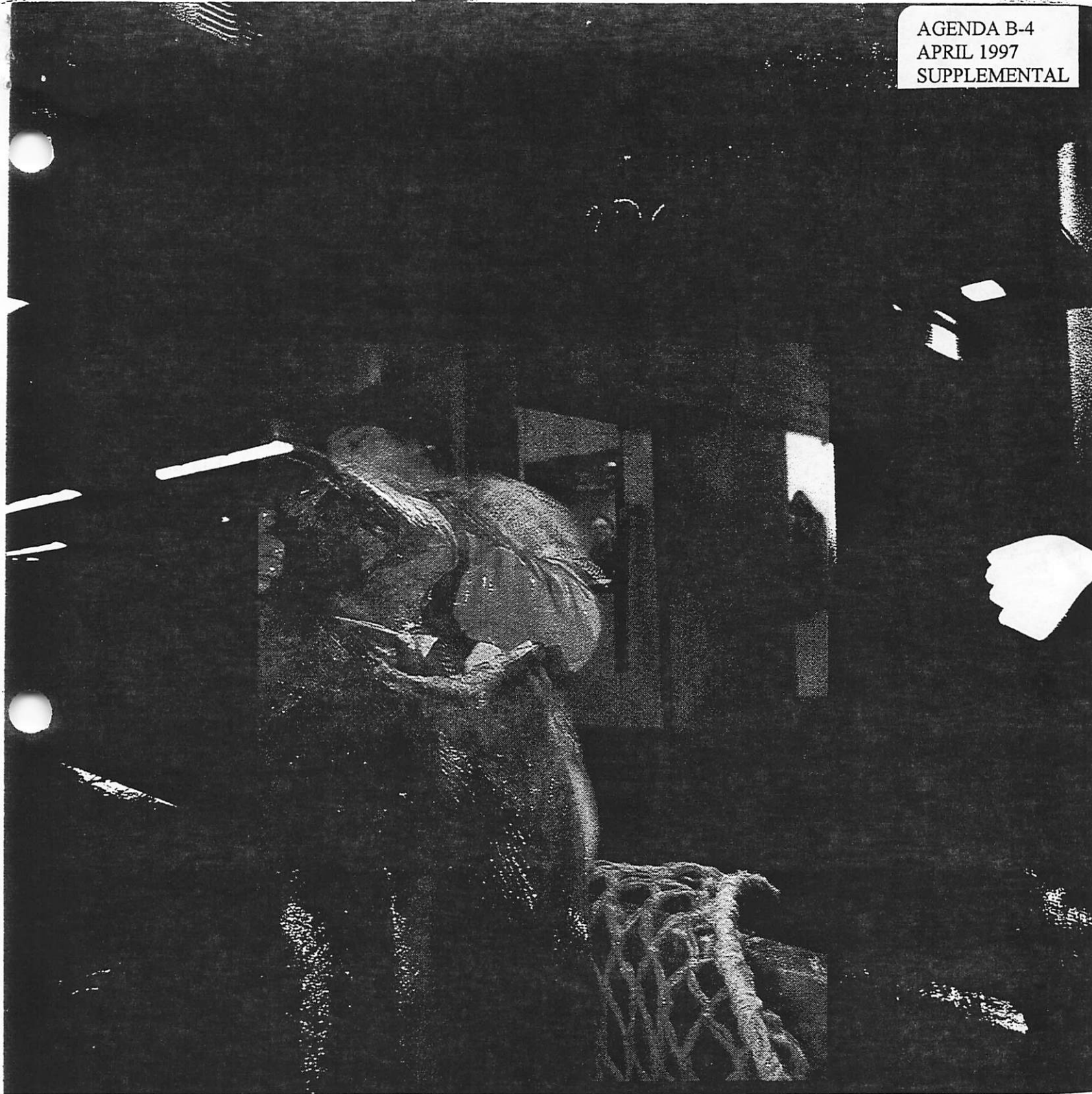
6. Formalize Policies and Procedures. Currently, AED generated policies and procedures for the Alaska IFQ Program consist of memos, categorized and bound in a three ring note book by the IFQ Investigation Unit ASAC at AED headquarters in Juneau. Whether other officers and SAs are similarly organized is not known. How this information is communicated beyond the original memo or e-mail is also unclear. Given the complexity of the IFQ program, the turn-over in staff, the necessity to train new staff, and the managerial responsibility to hold all staff accountable, AED should formalize the development, updating, and publishing of all IFQ policies and procedures to ensure the effective communication and implementation of these important documents is achieved.

7. Maximize Behavioral Incentives The achievement of compliance goals is reliant upon detection, apprehension, prosecution, and sanctions. AED is dependent upon NOAA General Council to provide effective prosecution and sanctions. Recognizing the efforts of GCEL to hire one additional staff attorney for the Juneau office, this author concludes that two enforcement attorneys operating under the current organizational structure are not adequate to perform the prosecutorial role in achieving an acceptable level of compliance in the IFQ Program or other FMP enforcement efforts. Additional, appropriate levels of staff should be assigned to GCEL, in Juneau to provide timely, effective prosecution of AED enforcement cases. Concurrently, organizational options should be developed and considered as enhanced or alternative solutions to

staffing problems.

Effective sanctions to deter illegal behavior are essential for achieving an acceptable level of compliance. Legislation needs to be crafted and passed providing NOAA General Council with the specific authority to sanction halibut permits as an essential means for addressing a perceived risk and deterring illegal behavior.

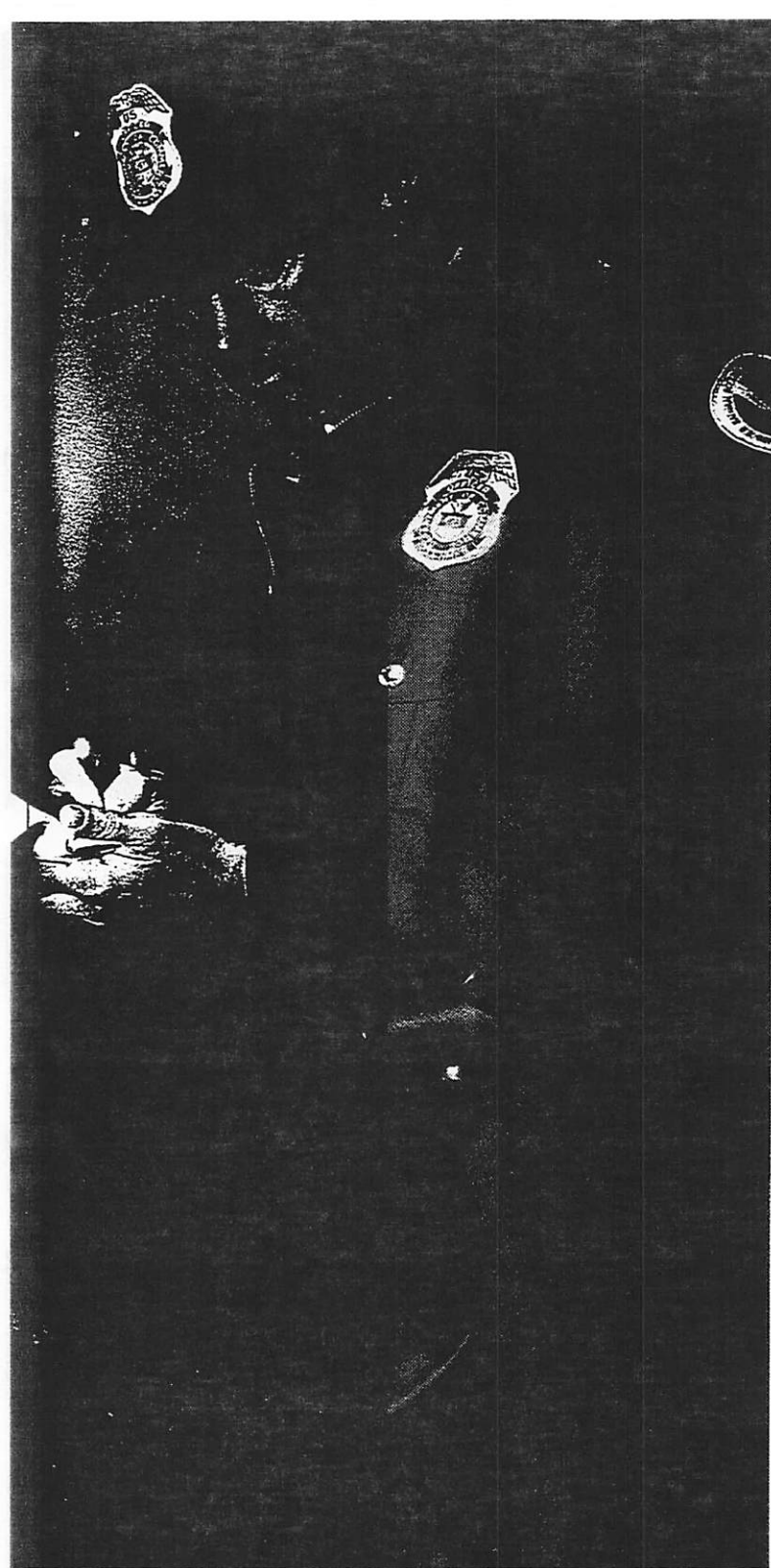
8. Future Study Recommendation. The prediction of a more widespread violation pattern evolving in the IFQ Program was postulated in the risk assessment section. To evaluate the evolution of violations occurring in the IFQ program, a study should be conducted on the Alaska IFQ Program, similar to the study done by Jon Sutinen and associates in evaluating non-compliance in the Northeast groundfish and lobster fisheries. The recommended time frame of the study is the spring of 1999, which is the fifth year of the IFQ Program, and one year prior to the end of the currently imposed Magnuson-Stevens Act prohibition on IFQ programs nationwide. A study using the methodology employed by Sutinen would survey hired skippers and crew, as well as fishers holding IFQs, and provide a measurement of non-compliance and evolution of violations in the IFQ Program. The 1999 time frame would serve the needs of the Alaska IFQ Program, and be valuable for evaluation and consideration of proposed IFQ programs nationwide.



By David Helvarg

When Uncle Sam's 'fish cops' reel in a suspect, he's usually a keeper

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At a dockside inspection in Bellingham, Washington, NMFS officer Pat Guilfoil monitors weighing of halibut.

Agents of the National Marine Fisheries Service often work undercover gathering the evidence needed to make arrests stick

Welcome to the bridge of the *Gauntlet*, a 46-foot patrol boat owned by the state of Washington's Department of Fish and Wildlife. Meet Pete Chorney, an agent of the National Marine Fisheries Service (NMFS); Craig Carlile, a state wildlife officer; and David James, an enforcement officer from the Lummi Indian reservation. We're churning across Boundary Bay a few miles off Birch Point at the northernmost reach of the Washington coast. My companions are on a routine patrol about a quarter-mile south of 49 degrees 10 seconds north latitude, the invisible line in the water that separates the United States from Canada, when they spot three fishing boats they suspect of crab poaching. Suddenly, the boats scatter. "They're taking off!" Chorney hollers. Now, with Carlile at the wheel, we are pursuing the closest one, a skiff with two men aboard. "This is a typical day out here," Chorney tells me, half shouting to make himself heard.

The fleeing skiff, powered by two big outboard engines, throws up a huge rooster tail as it heads for the safety of Canadian waters. After crossing the line, Carlile powers down and turns the *Gauntlet* around. Back on the American side, we begin pulling up pirate pots. The second one holds a surprise, a small plastic Canadian crabbing license attached to its frame. "Pure stupidity," Chorney says as he removes several sandy-colored crabs and tosses them over the side. "We'll file a report with Canada under our joint-enforcement agreement, but the owners will probably claim their pots were stolen or lost."

"What would you have done if you'd caught them?" I ask. "We would have seized their boat and put them in jail," says Carlile.

Knowing the NMFS means business makes poachers uncooperative. Several years ago the *Gauntlet*, with another state officer and NMFS agent Andy Cohen aboard, successfully chased down another suspicious crab boat. "I stepped on and moved to turn off their engine," recalls Cohen, a dark-haired father of two. "That's when one of them grabbed a meat cleaver off the transom. I pulled out my revolver from my shoulder holster, backing up against the wheel. He moved forward, lifting the cleaver over his head. The state officer had his gun aimed from the other heaving boat, and I remember thinking, 'If he fires, it could hit any of us.' Then, the guy with the cleaver decided to drop it."

Chorney and Cohen are two of 112 federal "fish cops" who enforce the laws that protect our threatened fisheries and endangered marine mammals. These include the Magnuson Act, which bans foreign fishing fleets from United States waters and authorizes regional fisheries-management councils; the Marine Mammal Protection Act; the Endangered Species Act; and the Lacey Act, which, among other things, outlaws transporting illegal marine products across state or international bor-

Photographs by Richard Schultz



A suspect is taken away in handcuffs after a raid on contaminated mudflats in Massachusetts by NMFS and

state officers. Seven people were apprehended for digging clams and allegedly selling them to eateries.

ders. NMFS agents are also responsible for making sure shrimpers install devices that prevent sea turtles from drowning in their nets in the Atlantic and the Gulf of Mexico, dealing with New Englanders who are frustrated over the collapse of the Georges Bank fishery and mediating conflicts over salmon in the Pacific Northwest. As part of their endangered-species work, they patrol (often on horseback) 900 miles of the Columbia River basin where salmon are threatened by dams, clear-cutting and cattle grazing.

It's dangerous work. NMFS agents worry about being outnumbered or outgunned by angry ranchers and anti-government militias, or ambushed by wary poachers. Dave Johnson, a white-bearded veteran who looks like an old cowboy, has been shot at three times while pulling illegal gill nets out of rivers. Rich Severtson, a kind of seafood Serpico who runs undercover operations out of NMFS's Seattle office, was pulling a gill net on the Columbia River with an Oregon trooper a few years ago when someone fired five rounds at them with a high-powered rifle. "After the firing stopped we couldn't find anyone," Severtson says.

Tom Shuler is presently in charge of NMFS's North-

west region, but through the years he has been involved in some pretty scary situations all over the country. An ex-professional football player, Shuler weighs 300 pounds and stands 6 feet 6 inches tall. His bulk has come in handy more than once.

His strength certainly helped during his years in Alaska, when he had to tunnel through huge blocks of frozen fish in the hulls of foreign factory trawlers, checking for prohibited species. It didn't hurt when he was winching up 1,000-pound crab pots in closed areas of the Bering Sea during winter gales, when seas were running 10 to 12 feet. It was definitely an asset when he was coiling ropes, throwing grappling hooks and tossing 15-pound king crabs around on the icy deck of a 96-foot Alaskan enforcement boat.

When Shuler was working in NMFS's Southeastern region, he and other agents created a network of informants who helped break up a number of poaching rings that were illegally taking bluefin tuna, red snapper and

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red drum. The three species were being overfished to the point where their survival was threatened. "Japanese buyers on the docks in Venice, Louisiana, would bid as much as \$55 a pound for bluefin," Shuler explains. "The fish would be flown out that day and be sushi in Tokyo the next day. Some of these tuna can weigh more than a thousand pounds apiece, so you could be talking tens of thousands of dollars for just one fish. Because of this, fishermen were taking more than the law allowed. Sometimes they'd tie up to an oil rig or a buoy in the Gulf of Mexico and transfer the illegal fish to another boat, which would claim it had caught them."

Once, responding to an informant's tip, Shuler and a state agent spent most of a night fogbound in a small open boat near an oil rig at the mouth of the Mississippi River. They could hear big fish being transferred from one boat to another but couldn't see anything. They had to wait until morning to move in and make their bust, seizing two fish worth more than \$70,000.

Following another tip, Shuler was able to track down several trucks carrying illegal shipments of red drum from Louisiana to Mississippi. When they rendezvoused at a farm with another truck that was supposed to take the contraband to a processor in Texas, Shuler showed up. Pretending to be an itinerant laborer, he convinced the drivers to hire him as "muscle." As he transferred the heavy crates of fish, he marked them with Xs, clipped some fish tails as evidence and sprayed invisible dyes on the cargo that would show up under black light. When warrants were later served in Texas, the hands, arms and aprons of the workers on the processing line glowed scarlet-blue under examination. More than a dozen people were indicted; the ringleader was sentenced to a year in jail and fined \$50,000.

NMFS agents gather periodically off New England, the West Coast and Hawaii to protect whales during their seasonal migrations. Using fast boats, spotting scopes and tourist disguises, they monitor commercial and recreational whale watchers to make sure they don't harass the leviathans. They once caught a windsurfer off Maui who was using a whale's back as a launching ramp to do aerial tricks. In another case now being reviewed for possible prosecution, a seaplane landed on Puget Sound and chased a killer whale for a half-hour.

NMFS is understaffed and little known outside of its parent agency, the National Oceanic and Atmospheric Administration in the Department of Commerce. Fish cops are criticized for not doing enough by their allies in the environmental movement and pressured to do less by the industries they monitor. The work is often tedious and exacting.

Lisa Querin's beat includes the salmon boats and groundfish trawlers that operate out of the scenic coastal town of Bodega Bay, in Northern California. This is where Alfred Hitchcock filmed *The Birds*, and the

noisy gulls on the roofline of the Eureka Fisheries warehouse do their best to keep up appearances. Querin is responsible for enforcing an ever-expanding list of federal fishery rules and regulations on size limits, pounds per trip, type of gear and closed seasons. Today she is watching a trawler pump thousands of pounds of black cod, thornyheads, Dover sole, and various species of rockfish into large plastic crates. As the crates are fork-lifted onto a scale, she makes sure the figures being recorded by Eureka's "weigh master" reflect both what the scale is showing and what the law allows.

Down on the Bodega Bay municipal pier, second-generation fisherman Andy Phillips is overseeing his two crew members as they fix the net on his trawler, the *Jo Ellen*. A big man with a gray beard, Phillips has a swagger from 35 years on the ocean and a voice as rough as



NMFS agent Pete Chorney looks for identification on a Canadian crab pot discovered in American waters.

gravel. "I've gotten a couple of tickets from this gal," he says, referring to Querin, "but I got no beef. I was over the limit. The real problem is, the regulations aren't doing the job. Back around 1986, you'd just head out and when the boat was full of fish the trip was over."

"But you agree the fishing's gotten worse?" I ask him.

"Of course the fishing's worse," he replies. "We killed them all. Places where I used to get 20,000 pounds, I get 100 pounds now. 'Decimated' is the word."

Does Phillips see any hope? "Just stop fishing for about 20 years and the fish'll come back—but that's not practical. I couldn't do any other kind of work myself."

Zeke Grader is the executive director of the Pacific Coast Federation of Fishermen's Associations, a group that represents commercial fishermen in California, Oregon and Washington. "Our catching capacity far exceeds our knowledge of the fish," he says. "We have to protect habitat and endangered species to protect the resource. The biggest problem I see with these enforcement people is there aren't enough of them."

The problem is not just overfishing. Pollution has caused many of America's shellfish beds to be closed to commercial use, but the closures are often violated. That's why I'm sitting in a surveillance vehicle in a restaurant parking lot outside Portsmouth, New Hampshire. Next to me is Frank Italia who, with his lanky frame, jeans and worn green shirt, looks more like a grunge rocker than a federal agent. Behind us Bob Stone, the agent in charge of special operations for NMFS's Northeast re-

gion, is adjusting an array of video cameras and microphones. Stone used to work as an investigator for the Florida state gambling commission. "I traded horses and dogs for fishes and whales," he tells me.

Across the lot, a shady-looking seafood buyer is leaning against his Chevy Blazer, waiting for his contact to show up. After an hour and a half, a gray station wagon pulls up and a neatly dressed woman gets out. In our vehicle, thanks to NMFS's surveillance gear, we can hear their conversation.

"He couldn't come," she says. "He's digging now."

"He was giving me eight altogether," the buyer says as he inspects the two 50-pound sacks of clams in her car. "So he'll give me the other six this evening?"

"I don't know," she says. "I got these and left."

The buyer transfers the wet bags onto the tailgate of his vehicle. "He must have just dug these. Looks pretty good," he says, tilting his cap back. Suddenly, three green vans glide into the lot. Before the suspects can react, a team of New Hampshire and Massachusetts law enforcement officers have them up against their cars and are handcuffing them. The buyer is complaining that the cuffs are too tight as he's put in a police van. We can still hear everything he says because there's a microphone hidden on his body. The "buyer" is really Chris Schoppmeyer, a NMFS agent who has been working undercover on this case, which involves a conspiracy to sell polluted clams, for three months. That night the woman's source will be arrested as he leaves the mud-



flats off Revere, Massachusetts, just north of Boston.

The following morning, I accompany a joint task force of 27 state and federal officers as they sweep the flats below a landing approach to Boston's Logan Airport, where poisonous industrial wastes mix with sewage and landfill overflows. They arrest seven mostly older clambers, confiscating their shellfish and several vehicles. Criminal summons will be served on some 25 other diggers. Although fishermen are allowed to dig a small number of clams for use as bait, this crew allegedly has been selling some 18,000 pounds a week for human consumption to stores and restaurants in northern Massachusetts and southern New Hampshire.

Clams absorb sewage, heavy metals and other toxins in the water. If they are dug up from polluted areas like this one, they can spread hepatitis, cholera and salmonella. The legally allowed fecal coliform count for edible clams is 230 parts per 100 grams. These clams test around 20,000 parts per 100. The day after the bust, Massachusetts responds by announcing that it will no longer allow "bait clamming" in its polluted shellfish flats.

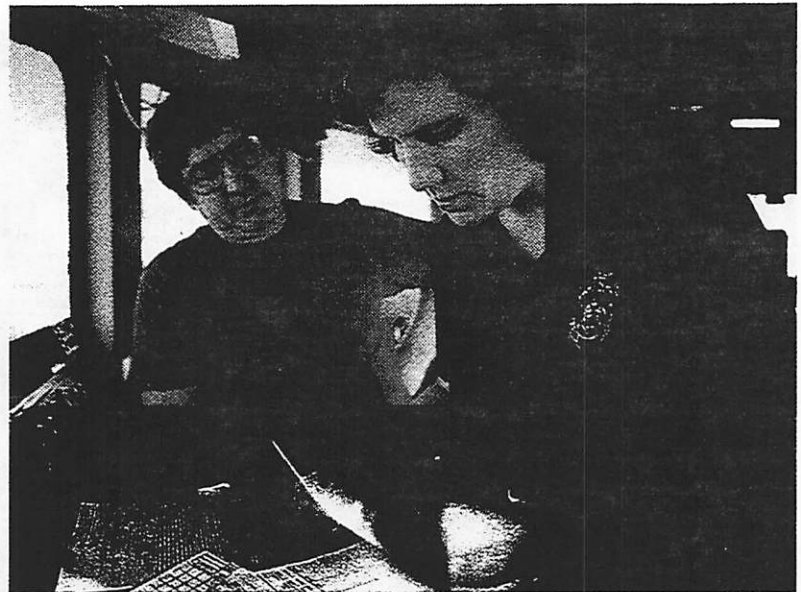
Sometimes NMFS scores a major environmental victory, as it did a few years ago with a series of stings that helped bring about an international ban on high-seas drift nets. The nets, made of fine nylon mesh, stretch 30 to 40 miles in length and reach from the ocean's surface to a depth of 35 feet. Any bird, fish or mammal that becomes entangled in them is doomed.

During the 1980s, around 1,000 boats from Japan,

Korea and Taiwan operated a drift-net fishery in the north Pacific. They claimed they were fishing for squid, but early in 1987 a NMFS agent inspecting a cold-storage facility in Bellingham, Washington, found 45,000 pounds of illegal salmon with strange slash markings on their skins. They belonged to a fish trading company outside San Francisco. The investigation led to the seizure of half a million pounds of drift-net-marked salmon that had been shipped through certain Asian ports to San Francisco. The fish were trucked from there to Bellingham, relabeled as products of the United States and shipped to Japan, where sales of drift-net-caught salmon were illegal, but American salmon fetched a high price. Variations on this international smuggling scheme, using transit ports in Asia and Latin America, became known as the salmon laundry.

NMFS agents were soon involved in a series of undercover buys from the laundry. In one video taken by a hidden NMFS camera, a Seattle smuggler and his Japanese partner are shown offering two undercover agents 12 tons of salmon caught in Taiwanese drift nets. The haul is worth \$46 million wholesale. The American was later arrested and sentenced to six months in jail; his partner put up \$150,000 in cash for bail and fled to Japan.

Agents then negotiated directly with a Taiwanese salmon smuggler for an at-sea delivery of 1,000 tons of hot fish from one of the drift-net pirate fleets. The undercover operatives agreed to pay the smuggler \$1.3 million. NMFS rented a large transport ship, the *Redfin*,



Three faces of the NMFS (from left to right): Bob Stone watches a sting operation from surveillance vehicle; officers log in a scrimshawed whale's tooth that was confiscated in a raid; Lisa Querin checks a boat captain's documentation.



Native American fisherman shows a salmon he took legally out of the Columbia River to NMFS agent Dave

Johnson, who's usually accompanied on his salmon-fishing patrols by officers from the Intertribal Fishery.

from a local fish company, and that summer it sailed out of Dutch Harbor in the Aleutians with undercover agents Dave Johnson and Andy Cohen onboard. After two weeks at sea, the *Redfin* met up with several Taiwanese pirate ships full of salmon. Just as two of the Taiwanese captains were coming aboard, the *Morgenthau*, a Coast Guard cutter that had been lying in wait just over the horizon, came surging into view, its klaxon sounding. Then a pair of big Coast Guard patrol planes came roaring out of the clouds, dropping smoke bombs around the startled pirates.

The Taiwanese vessels made a run for it. As the *Morgenthau* and the *Redfin* gave chase, one pirate crew threw netting over the side to try to foul their propellers. When that failed, the pirates rammed the *Redfin* amidships. "It was like a Wild West chase on the high seas," one of the *Redfin*'s crew later recalled. At almost that same moment in Seattle, the head man and a cohort were being placed under arrest as they left a bank carrying \$330,000 of Uncle Sam's cash. The smuggler was later sentenced to five years in prison.

Agents on the *Morgenthau* were eventually allowed to board one of the pirate ships just off the coast of Taiwan. They found 110 metric tons of illegal salmon in its hold. Environmental groups had been complaining for years about the destruction of the Pacific ecosystem by

drift nets. The NMFS exposé of the salmon laundry lent crucial support to the campaign by the United States, New Zealand and other Pacific nations for a United Nations moratorium on large-scale drift nets—a ban that went into effect four years ago.

In recent years, NMFS has made good use of technological advances. Foreign fishing vessels that have been caught violating America's offshore territorial limits can now be required, as part of their penalty, to carry satellite transponders that allow NMFS to track their movements. Another device, called Forward Looking Infrared Radar (FLIR), has played a crucial role in policing salmon poachers on the lower Columbia. Mounted on a small plane, FLIR is so sensitive "it can read the heat signature of a guy who's turned off his boat engine and pulled into a cove to hide," Dave Johnson explains. "It can even see the float lines of his nets."

Gadgets are useful but they're no substitute for people. The NMFS doesn't have nearly enough fish cops to keep up with its growing responsibilities. As a result, agents often have to work alone in unmarked vehicles and with little prospect of immediate backup if they get into trouble. Agent Kevin Flanagan was working with Pete Chorney in New Bedford, Massachusetts, not long ago when they spotted a boat unloading undersized scallops at 1 o'clock in the morning. As they ap-

proached the dock, they were confronted by a dozen angry crewmen. Flanagan and Chorney ordered the captain to take charge of his crew, which he did, but not before four of the men trashed the agents' vehicle, smashing its windows and slashing its tires.

Now we're in the necropsy room of the Marine Mammal Center, a private research, rescue and educational facility located just north of the Golden Gate Bridge in California. Three people have just rolled the body of a 215-pound sea lion onto the metal dissection table. The animal was brought in alive two days ago after it was discovered suffering from a suspected gunshot wound on an isolated beach. It died within a matter of hours. Veterinarian Frances Gulland performs the necropsy, using a scalpel to trace a bullet's track through the animal's neck and body until she finds and extracts a slug.

NMFS agent Joe Koczur, who is based in San Francisco, rolls the small, copper-colored object in the palm of his hand. Under the Marine Mammal Protection Act, killing a sea lion can be a criminal offense. Koczur has worked on fisheries enforcement from Guam to Alaska. "We might be able to match this slug if we could get hold of the firearm," he says. "But we just don't have enough information in this case to set up the right kind of surveillance operation."

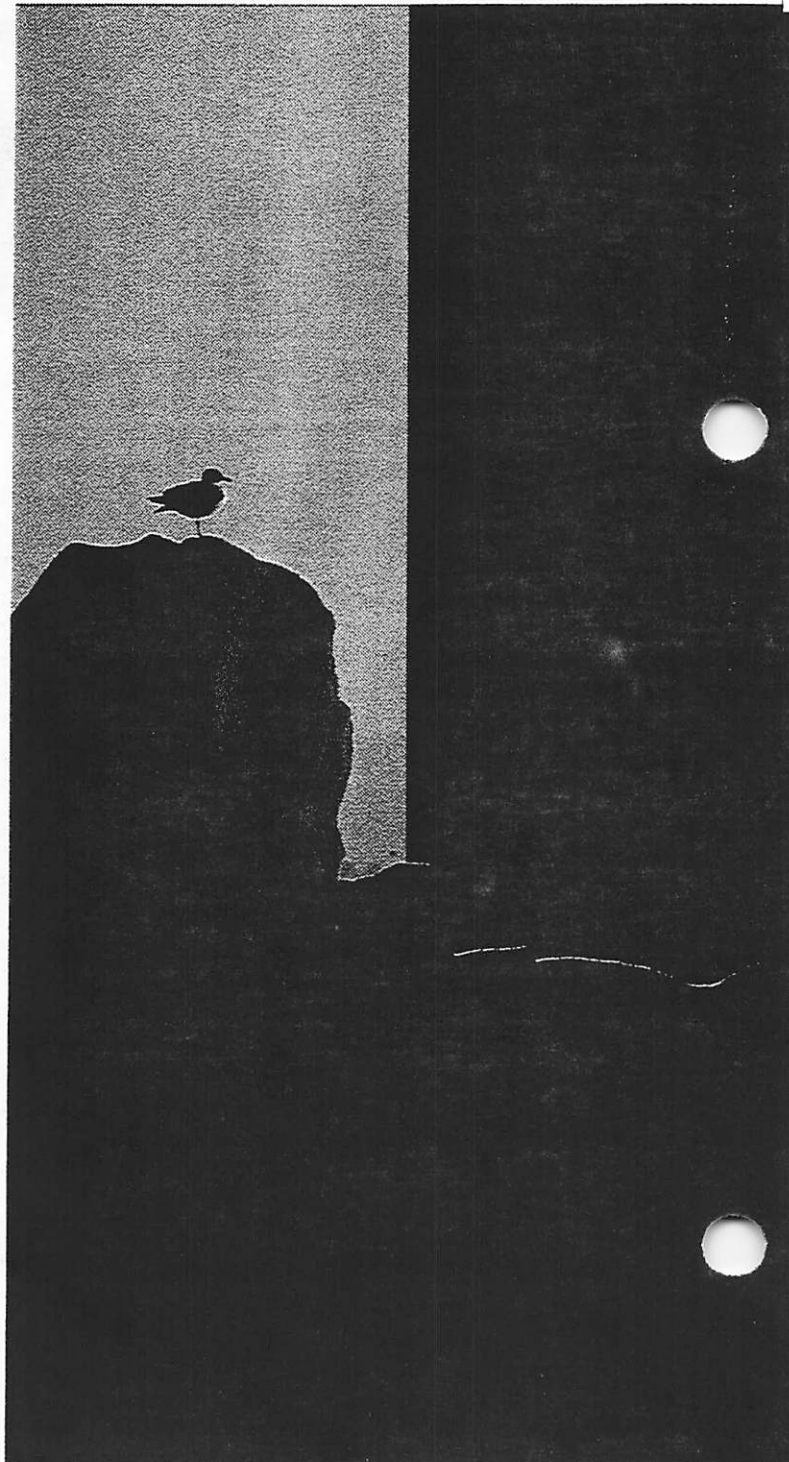
Four years ago, the NMFS did set up the right kind of surveillance operation after a number of dead sea lions were found in Monterey, California. "We learned where the killing was taking place," agent Dan Torquemada tells me, "so we were on the scene with spotting scopes and binoculars when the shooting began one night around 2 A.M. It continued until daylight. We were able to focus on this one squid boat about 300 yards out. It was all lit up so that we could actually see the guy who was doing the shooting." The man was prosecuted and fined \$40,000.

Roy Torres, the NMFS agent presently stationed in Pacific Grove, California, is responsible for covering 100,000 square miles of ocean and coastline, from Half Moon Bay, just south of San Francisco, all the way down to the Mexican border, where tons of turtle meat, illegal fish and dangerous clams are smuggled into this country. The day before the sea-lion necropsy, he served a search warrant on a local man who was advertising whale ivory for sale on the Internet. Nearly two dozen sperm-whale teeth were confiscated in the raid.

In the Gulf of Mexico, a single NMFS agent is responsible for three states. Another agent is responsible for the entire west coast of Florida. In Dutch Harbor, Alaska, a desolate rock in the Aleutian chain, agent Meta

Mendenhall works alone monitoring the transfer of thousands of tons of Bering Sea pollack from huge factory ships to foreign freighters.

Back in San Francisco, Joe Koczur is reviewing piles of documents seized from a local processing company whose boats are suspected of underreporting their catches. He is also trying to get a handle on a "mosquito fleet" of some 30 small boats that are using cell phones and panel trucks to move unreported fish around the state. He also has a meeting scheduled with a federal task force that's looking into the poaching of marine



Agent Roy Torres surveys the coastline in Pacific Grove, California, for unlawful sea-lion and sea-otter killing.

mammals for the folk-medicine trade. Oh, yes—he has also been asked to help police two nearby National Marine Sanctuaries.

Despite the pressures and problems, NMFS agents enjoy an occasional lighter moment. Pete Chorney recalls doing an airport search for contraband in San Francisco one day. "We opened this crate of harmless eels and about 60 of them slithered onto the floor. 'What's that?' one of the airport workers asked. 'Black mambas,' I said, and that warehouse cleared out in about two seconds flat." Agent Bob Jones tells of an offi-

cer being called out one stormy night to check on reports of a possibly sick or injured seal hauled up on a local boat ramp. When the officer got down there, he turned on his flashlight to find the town drunk curled up sleeping next to the seal with his raincoat thrown over it for protection.

"We're the commandos of the conservation movement," says Andy Cohen. "It's tough work and it's not always rewarding. But when my kids grow up and ask me what I do, I'll be able to tell them I'm saving the world. It's a job you can feel good about." ■

