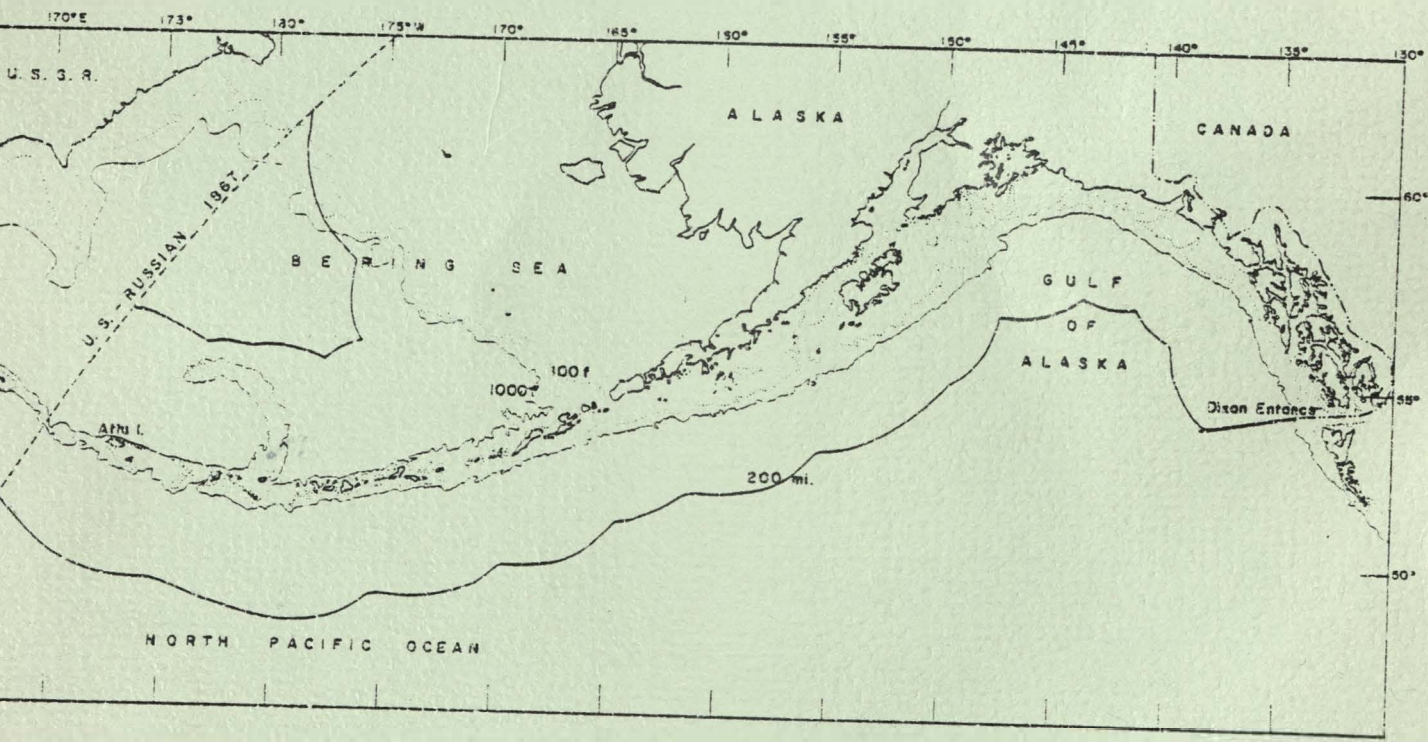


ANNUAL REPORT

1978

ENFORCEMENT AND SURVEILLANCE OF FOREIGN AND DOMESTIC FISHERIES IN ALASKAN WATERS



NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
LAW ENFORCEMENT BRANCH
JUNEAU, ALASKA

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ENFORCEMENT AND SURVEILLANCE OF

FOREIGN AND DOMESTIC FISHERIES

IN ALASKAN WATERS

1978

INTRODUCTION

The Annual Report for the Alaska Law Enforcement Branch of the National Marine Fisheries Service - 1978 is a comprehensive summary of foreign and domestic fisheries surveillance and enforcement activities conducted by the National Marine Fisheries Service and the United States Coast Guard in Alaskan waters. Activities of the Law Enforcement Branch and the fishery laws enforced throughout Alaskan waters are reviewed and summarized.

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Information presented in this Annual Report is from surveillance data, enforcement proceedings, and reports generated by both foreign and domestic sources.

The area covered by this report, and general terms and abbreviations used throughout, are presented in the Appendix.

The author of this report would like to thank the individuals who helped prepare the text, tables, charts, and computer listings used in this report.

Text and Tables

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ALASKA ENFORCEMENT

The Law Enforcement Branch of the National Marine Fisheries Service, Alaska Region, in Juneau, Alaska, has joint responsibility with the U.S. Coast Guard for the enforcement of U.S. fisheries regulations and international fishery treaties as well as monitoring of foreign fishing activity off Alaskan shores. Additionally, the enactment of the Fishery Conservation and Management Act of 1976 (FCMA) extended the enforcement mandate from the limits of the 12-mile Contiguous Fishery Zone to 200 miles off Alaska and established control over the fishery resources along Alaska's 6,500 miles of sea facing coastline and the 550,000 square miles of adjacent Continental Shelf. The long range objectives established by these fisheries laws include:

1. To ensure that foreign and U.S. fishermen comply with regulatory provisions and treaties designed to achieve effective management and conservation of the living marine resources off Alaska. Effective compliance of those regulations would enable the restoration of many fishery resources. The end result will allow U.S. fishermen to harvest more of the resources with safeguards and advantages over the foreign fleets provided by regulations.
2. To provide key fishery officials with continuous detailed data concerning the foreign fisheries off Alaska, to allow proper management of the living marine resources, and to facilitate knowledgeable formulation of national and international fisheries management policies of the United States.

Law Enforcement Branch

The Law Enforcement Branch expanded its activities over 1977 levels to meet increased responsibilities of the Fishery Conservation and Management Act of 1976. Additionally, the National Marine Fisheries Service (NMFS) and the U.S. Coast Guard entered into a joint enforcement agreement with the State of Alaska whereby Special Agents of NMFS and the U.S. Coast Guard were authorized to enforce state fishery regulations and state officers were authorized to enforce federal fishing regulations in areas where fisheries overlap state and federal waters. The joint agreement opened a whole new realm of enforcement capabilities and enabled a blend of federal-state cooperation in Alaska.

At the time of expanding enforcement responsibilities, the Law Enforcement staff for the Alaska Region was reduced from 23 to 21 personnel (Table 1). The central office in Juneau and field stations at Kodiak, Anchorage, and Sitka utilized a budget of \$756,000, a 21 percent increase over 1977.

Agent deployment on fisheries patrols was increased in 1978 (Table 2). Agents patrolled 268,435 miles; two-thirds in the air and one-third aboard ships. Seventy-seven percent of all fishery patrols off Alaska were accompanied by NMFS Special Agents. Agents spent 6,585 hours in the field on Coast Guard patrols, or approximately 470 hours per Agent (59 regular workdays each). Over 60 percent of the 6,159 vessel sightings made off Alaska in 1978 by Coast Guard platforms utilized NMFS Agent expertise. In addition, Special Agents also expended a large

number of shoreside hours patrolling the domestic fishing fleet, investigating marine mammal and endangered species violations, and on deployments to other NMFS regional enforcement programs.

Alaska Fisheries Law

Alaskan involvement in international fisheries law remained similar to 1977. There were seven Governing International Fishery Agreements (GIFAs), four conventions, and two acts and public laws enforced off Alaska (Table 3). All international agreements, except for Canada, continued awaiting the 2-year review milestone not due until 1979. The Canadian agreement was scheduled to expire December 31, 1977, but was extended until April 1, 1978. At that time the agreement expired and, throughout the rest of 1978, remained under negotiation without resolve. There was no activity of note on other fisheries related laws and regulations in 1978.

Under the FCMA management scheme, which operated for the first full calendar year, there were several modifications to Preliminary Fishery Management Plans (PMPs) formulated by NMFS. Domestic groundfish fishermen were included for the first time as the final Fishery Management Plan (FMP) developed by the North Pacific Fisheries Management Council was initiated for the Gulf of Alaska groundfish fishery (see Appendix). This FMP was the first comprehensive management plan to regulate both foreign and domestic fishing off Alaska. This fishing plan was modified near yearend to cover a December 1 to November 30 fishing year, but

otherwise the FMP remained intact. A second FMP, for the Tanner crab fishery (see Appendix), was also adopted. Many of the provisions of the Tanner crab FMP aligned with existing Alaska State regulations and basically extended previously established state regulations to federal waters outside the Alaskan State jurisdictional limit of 3 miles for U.S. fishermen. At the end of 1978, only these two FMPs were in place.

Several restrictions and prohibitions originated from previous bi-lateral agreements for foreign fishing activities off Alaska (Figs. 1 and 2). A combination of closed periods, gear restrictions, and depth limitations were imposed on trawl, longline, and pot vessels. A brief survey of these will exclude additional regulations imposed on the Japanese salmon and crab fleets, which are detailed under fishery sections later in this report.

Foreign trawl vessels throughout Alaska were limited by closed periods and specific trawling restrictions. In the Bering Sea, the Bristol Bay pot sanctuary remained closed to trawling year round. Other areas in the Bering Sea north of Unimak Pass and the Misty Moon grounds were also closed January 1 to May 31 and December 1 to December 31.

The Aleutian Islands were divided into five zones of limited trawling in waters 3 to 12 miles from land. Between 169° W. and 170° W. longitude, trawling was allowed June 1 to November 30. Trawling was permitted year round from 170° W. to 176° W. longitude. South of the Aleutians from 176° W. to $178^{\circ}30'$ W. longitude, trawling was permitted July 1 to October 31. North of the Aleutians west of 176° W. longitude and south of the Aleutians west of $178^{\circ}30'$ W. longitude, trawling was allowed May 1 to December 31.

1978 Foreign Fishing Regulations - Bering Sea / Aleutian Trawl, Longline, Herring Gillnet & Snails Fishery

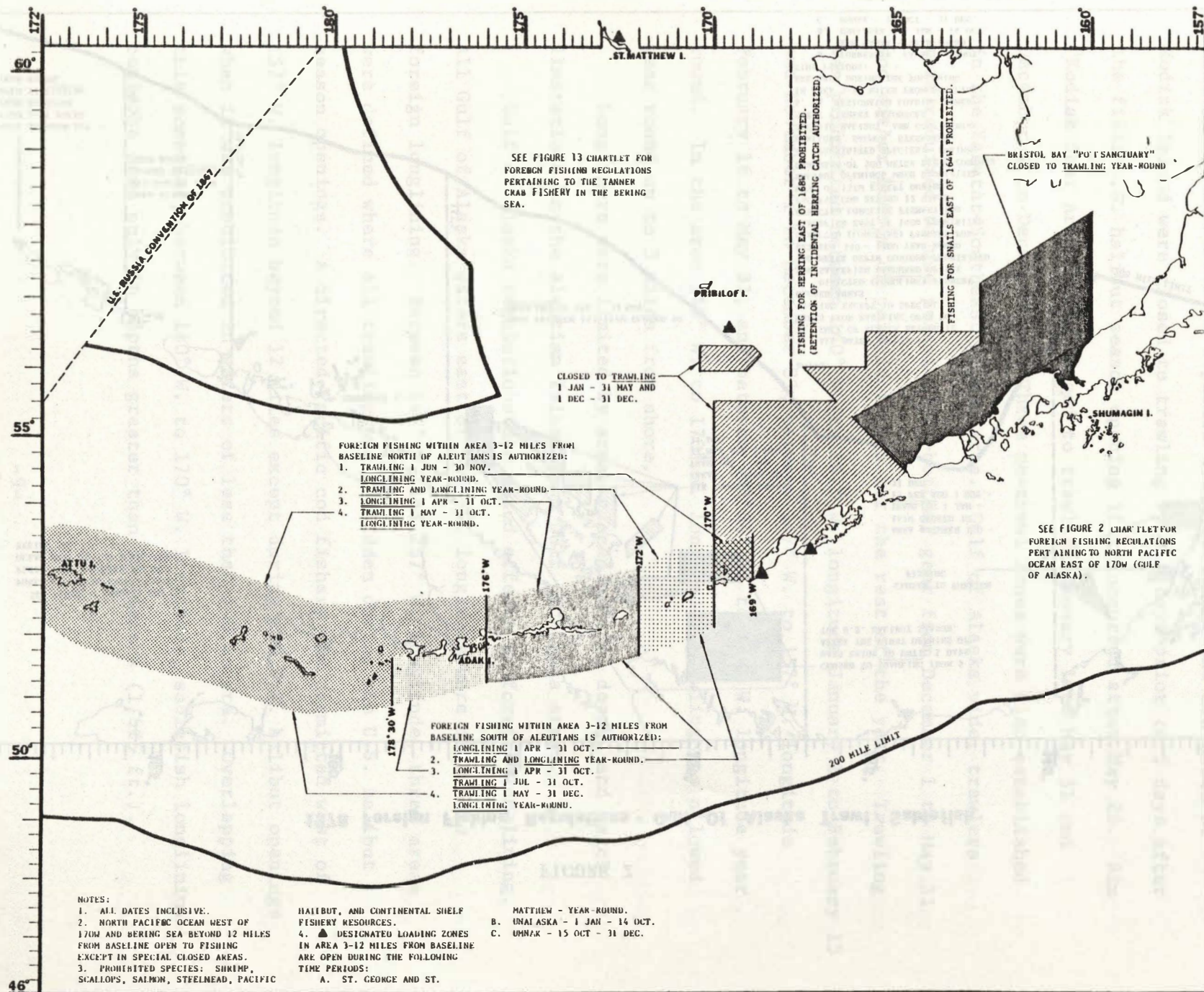
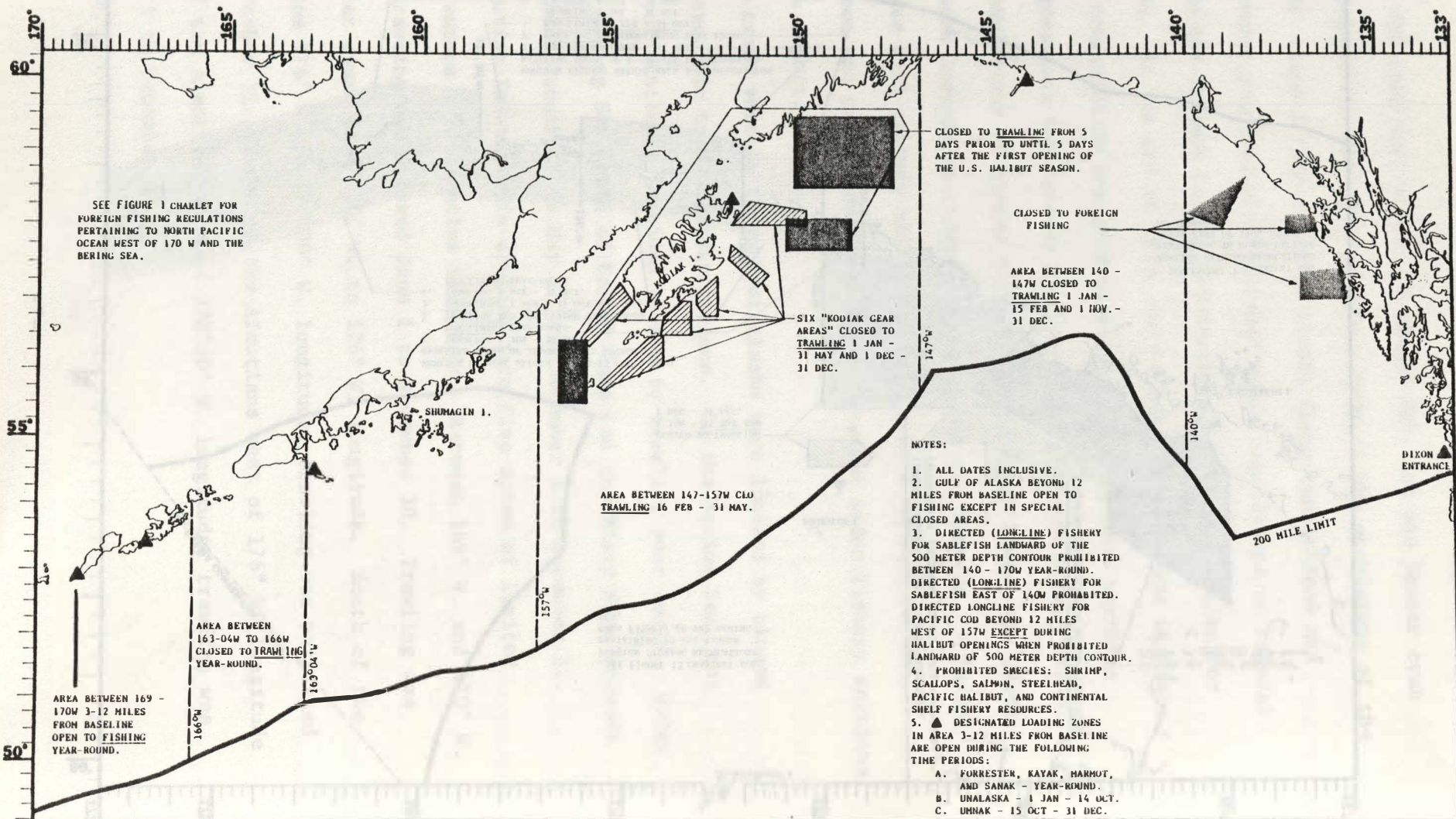


FIGURE 2

1978 Foreign Fishing Regulations - Gulf Of Alaska Trawl / Sablefish



In the Gulf of Alaska, a number of restrictions were placed on foreign trawlers. Three separate areas northeast and southwest of Kodiak Island were closed to trawling from 5 days prior to 5 days after the first U.S. halibut season opening if it occurred after May 26. Six "Kodiak Gear Areas" were closed to trawling January 1 to May 31 and December 1 to December 31. Three no-trawl zones were also established in the Yakutat-Southeast Alaska area. Gulf of Alaska wide, trawlers were required to use pelagic (off-bottom) gear from December 1 to May 31 and either bottom or pelagic trawls for the rest of the year. Trawling was prohibited between 140° W. to 147° W. longitude January 1 to February 15 and November 1 to December 31, between 147° W. to 157° W. longitude February 16 to May 31, and between 163°04' W. to 166° W. longitude year round. In the area 169° W. to 170° W. longitude, trawling was allowed year round up to 3 miles from shore.

Longliners were limited by area, closed period, depth, and catch limitations in the Aleutian Islands and Gulf of Alaska areas.

Gulf of Alaska regulations had mixed effects on foreign longlining. All Gulf of Alaska waters east of 140° W. longitude were closed to foreign longlining. Between 147° W. and 157° W. longitude, three areas were defined where all trawling was forbidden during the U.S. halibut season openings. A directed Pacific cod fishery was permitted west of 157° W. longitude beyond 12 miles except during the U.S. halibut openings when it was prohibited in waters of less than 500 meters. Overlapping this somewhat, between 140° W. to 170° W. longitude, sablefish longlining could be done only in depths greater than 500 meters (1,625 ft.).

Longliners did benefit from trawl closure periods between 140° W. and 147° W. longitude from November 1 to February 15 and between 147° W. and 157° W. longitude from February 16 to May 31. Both longliners and trawlers were permitted to fish in the 3- to 12-mile zone between 169° W. and 170° W. longitude year round.

In the Bering Sea-Aleutian Islands area, regulations were similar to those imposed during 1977. Longlining west of 169° W. longitude on the Bering Sea side and west of 170° W. longitude on the North Pacific side was permitted beyond the territorial sea of 3 miles during open periods. North of the Aleutians, the areas 169° W. to 172° W. longitude and west of 176° W. longitude were open to longline fishing year round beyond 3 miles. South of the Aleutians outside 3 miles, the area 170° W. to 172° W. longitude and west of 178°30' W. longitude were open to longline fishing year round. On both sides of the Aleutians between 172° W. to 176° W. longitude and south of the Aleutians between 176° W. and 178°30' W. longitude, longlining was allowed beyond 3 miles April 1 to October 31. Longliners also received gear protection from trawl closures in both the Bering Sea and Aleutian Islands throughout different times of the year.

Enforcement Activities

Beginning March 1, 1977, enforcement achieved a new degree of flexibility in dealing with infractions of Federal law and fisheries agreements with foreign nations. Prior to then, enforcement units were

somewhat limited in their actions once a violation was detected. If a vessel was detected violating U.S. law, the enforcement unit had the option of giving the vessel a verbal warning or seizing it for further prosecution in U.S. District Court. If a vessel was detected violating a provision of a bilateral agreement, the incident was documented and protest sent to the flag government through diplomatic channels. If infractions of the International North Pacific Fisheries Convention were detected, the alleged violating vessel was often seized but turned over to the flag government for prosecution.

Under the FCMA a variety of enforcement actions were possible for detected infractions of the regulations. The enforcement unit had the option of issuing a Citation for minor infractions of the regulations. This is equivalent to a written warning but may be used as a basis for future enforcement actions against that vessel. For more serious violations of the regulations, the option existed to issue a Report of Violation, which provides for the assessment of civil penalties and possible permit sanctions. For major infractions of the regulations, the vessel could be seized and prosecuted in U.S. court.

Fishery Patrols

The U.S. fishery patrols in the North Pacific Ocean and Bering Sea off Alaska in 1978 were conducted jointly by the National Marine Fisheries Service, Law Enforcement Branch, and the U.S. Coast Guard (Table 4). There were 14 enforcement agents deployed aboard U.S. Coast Guard platforms throughout 1978, with those vessels covering 136,715 miles by

ship, and 265,396 miles by aircraft; a decrease of 26,492 miles from 1977 by ship and an increase of 130,166 miles by aircraft (Tables 5 and 6). This was a total patrol mileage increase of 35 percent over 1977 from 298,437 miles to 402,111 miles. Aircraft made 62 percent of all foreign sightings, while covering 66 percent of the total patrol miles. There were 811 ship days used compared to 893 ship days in 1977. There were 6,159 sightings of foreign fishing vessels--an increase of 1,124 or 22 percent over 1977.

There were 709 boardings made aboard foreign vessels in 1978 compared to 662 boardings in 1977 (Table 7). The number of boardings per nation were broken down as follows:

<u>Japan</u>	<u>U.S.S.R.</u>	<u>South Korea</u>	<u>Taiwan</u>	<u>Poland</u>	<u>Canada</u>
517	132	50	5	0	5

Table 5 gives a complete list of boardings.

As in previous years, these same patrols also enforced provisions of international fishery agreements and associated U.S. laws (Table 3).

The number of airplanes and helicopters available for fisheries patrols remained at the same level in 1978, while the total number of surface patrol vessels was reduced by two from 1977. Aerial patrols were conducted by H-3 helicopters from the Coast Guard air stations at Sitka and Kodiak and by C-130 (Lockheed Hercules) turbo prop aircraft from the Coast Guard Air Station on Kodiak Island. Surface patrols were conducted by Coast Guard Cutters BOUTWELL, CAMPBELL, CAPE CORAL, CAPE JELLISON, CLOVER, CONFIDENCE, IRONWOOD, JARVIS, LAUREL, MELLON, MIDGETT, MORGENTHAU, MUNRO, RESOLUTE, RUSH, STORIS, and SWEETBRIER. Shipborne

helicopters were deployed aboard eight different 378-foot Coast Guard cutters on 12 patrols, making 200 flights for a total of 278 flight hours.

Observer Program

In 1978 the U.S. observer program continued coverage of the foreign fleets off Alaska. A total of 193.1 observer months were used to cover the massive Alaskan foreign fishing effort, for a total of 11.4 percent coverage (Table 8). The Japanese groundfish mothership fleets, crab factory fleets, independent crab pot vessels, and salmon motherships received the most complete coverage, ranging from 40 to 100 percent. Only Polish and Taiwanese trawlers and South Korean longliners did not have observer coverage during 1978. Over the entire Alaska region, 67 percent of the coverage was in the Bering Sea, 11 percent in the Aleutian Islands, and 22 percent in the Gulf of Alaska. The central Bering Sea received the greatest number of observers with 40 percent of all observer activity directed at that area, while the southeastern area used the least with less than 1 percent of the total observer coverage.

Under FCMA, the functions of the Northwest and Alaska Fisheries Center Observer Program are to monitor the catch aboard select foreign vessels, derive species composition, verify the level of effort and amount of catch, collect catch data on prohibited species, and observe foreign fishing techniques. The primary function is to monitor the catch and derive a species composition. When certain criteria for level

of coverage by nation, vessel type, and fishing area is reached, observer data are applied to foreign catch reports submitted to the U.S. Government for corresponding weeks of coverage to derive a "best blend" estimate of the true level of catch for each nation on an area and species basis.

Observer program activity in the Alaska Region also provides catch data on species of crab, halibut, and salmon taken incidentally to other catch. Tanner crab and halibut formed the major portion of the prohibited catch and, with king crab and salmon, this incidental catch is estimated to total 9,924 metric tons or 21.9 million pounds of fish product directly valuable to U.S. fisheries. A total of 17.0 million Tanner crab, 1.2 million king crab, 293,000 halibut and 96,000 salmon was the estimated incidental catch by foreign fleets off Alaska in 1978. Over 50 percent of the incidental catch of prohibited species was taken by Japan. Overall, these figures represent a reduction of the prohibited catch compared to 1977.

Enforcement Actions

The first complete calendar year of FCMA regulation saw an increase to the number of enforcement actions initiated off Alaska. There were 155 separate enforcement actions, 136 which were against foreign vessels (Table 9). This number included 104 Citations, 31 Reports of Violation, and 1 vessel seizure. Enforcement actions against foreign nations included 66 for Japan (49 pct.), 49 for the U.S.S.R. (36 pct.), 14 for

South Korea (10 pct.), and 7 for Taiwan (5 pct.). A total of 19 domestic fishing violations were recorded, all against the International Pacific Halibut Convention.

Foreign Violations

Foreign nations committed 136 violations against the FCMA in 1978 (Table 10). This was a 58 percent increase over 1977. Most of the increase was due to the number of Citations issued, jumping from 51 to 104 in 1 year. The Soviet Union had the largest increase to Citations increasing from 7 to 42 (600 pct.). The more serious Report of Violation category increased 15 percent going from 27 to 31. Only Japan had a vessel seized in 1978.

Japanese vessels committed 66 violations of the FCMA, including 50 Citations, 15 Reports of Violation, and 1 seizure. Almost 40 percent of the fishery infractions were for bad recordkeeping such as untimely recording of catch landed or not logging amounts to the nearest 0.01 metric ton. Twenty-six of these were committed; four as Reports of Violation and 26 actions for the less severe Citation. The 15 Reports of Violation were committed mostly for untimely sorting and returning prohibited species to the ocean and logbook errors. The lone fishery seizure in 1978 was made against the Japanese trawler SACHI MARU No. 22 on February 23 for fishing within a closed area 48 miles southwest of St. George Island in the Bering Sea. Final assessed penalty was \$200,000 paid March 22. Japanese vessels committed 15 more FCMA infractions in 1978 than in 1977.

The Soviet Union committed 49 infractions of the FCMA in 1978. Forty-two of these were for the less serious Citation and seven were Reports of Violation. Over half of the infractions were for minor logbook errors and another third were for improper vessel identification, failure to give 24-hour advance notice of fishing operations, and failure to provide a safe access to the vessel by boarding teams. Three of the seven Reports of Violation were for failure to return prohibited species to the sea in a timely manner, while others were made against the same items as indicated for Citations. Soviet infractions increased from 14 in 1977 to 49 in 1978.

South Korean vessels committed 14 infractions of the FCMA. Nine Citations and five Reports of Violation were issued. Most Citations were issued for improper vessel identification and failure to log catch to the nearest 0.01 metric ton. Three of the five Reports of Violation were for retention of non-allocated species. The total number of infractions was two less than 1977.

Taiwan committed seven infractions of the FCMA in 1978. This was the fewest infractions of any nation, but was a 10 percent increase for Taiwan over 1977 levels. Four infractions were Reports of Violation and three were Citations. Infractions were for improper identification, failure to provide a safe boarding ladder, and logbook errors.

One measure of noncompliance of FCMA regulations is a comparison of the number of infractions compared to the effort exerted by each nation, termed a violation factor (Table 11). This adjusts the total number of infractions to show whether a nation as a whole is complying with U.S.

law and comparisons from year to year can measure the effort by foreign nations to reduce infractions and the ability of the U.S. to detect such infractions. The violation factor refines the gross comparison of total infractions by each nation.

A look at 1978 infractions of FCMA illustrates the violation factor of each nation. Japan committed more infractions than any other foreign nation off Alaska in 1978. Japan also utilized more effort days to land the catch. When Japanese violations are adjusted by effort days, Japan had a violation factor of 0.0010. Compare this to Taiwan who had the fewest infractions of those violating the FCMA. Taiwan committed 0.0378 infractions per effort day, a rate over 340 percent greater than that for Japan. Comparing Japanese infractions for 1977 and 1978, the ratio change of 0.0008 in 1977 to 0.0010 in 1978 (25 pct. increase) is slightly less than the 29 percent increase between the total number of infractions committed between the 2 years. The Soviets, on the other hand, had a 216 percent increase to the ratio from 1.9 to 6.0 while total infractions indicated a 250 percent increase. South Korean ratios dropped 47 percent from 0.0093 to 0.0049 while total infractions reduced 13 percent from 16 to 14. Taiwanese ratios jumped 10 percent from 0.0342 to 0.0378 while total infractions indicated a 40 percent rise. Poland remained the only nation to fish off Alaska that did not receive infraction notices.

Domestic Violations

Domestic violations were reduced in 1978 from 1977 levels. A total of 19 violations were committed against the International Pacific Halibut Convention (IPHC). IPHC violations were reduced 39 percent from 30 in 1977 to 19 in 1978.

Gear Conflicts

Four gear conflicts were reported in 1978. This was a decrease of one over that reported in 1977. In 1978, three conflicts were recorded against Japan and one against the Soviet Union. Gear conflicts are recorded as violations of Section 611.11 of the FCMA.

The first reported gear loss was by the fishing vessel QUEEN against a large Japanese stern trawler. This conflict occurred on November 8, 1977, but was first reported to NMFS in January 1980. The Japanese stern trawler had maneuvered through longline gear set by the QUEEN 20 miles off Cape Fairweather in southeast Alaska. Total damages claimed in the amount of \$3,265.60 were paid by the Japanese vessel in April.

On May 8, the ALOHA reported longline gear loss to a Japanese trawler in a position 52 miles southwest of Cape Addington. Pending further information, the case remained open at the end of 1978.

The third reported conflict was between the U.S. longliner SILVER WAVE and a large Japanese trawler. Five skates of blackcod longline gear were lost on June 19 in a position 34 miles northwest of Cape

Ommaney near Sitka in southeast Alaska. The NIITAKA MARU was the only foreign trawler in the vicinity at the time, but position fixes by the SILVER WAVE indicated that the NIITAKA MARU was underway and steaming, not fishing. The case was subsequently dropped.

The final reported gear conflict was against several Soviet trawlers. Both the NORTHERN ENDEAVOR and ROYAL VIKING reported combined losses of up to 59 crab pots in a position 180 miles east of St. Paul in the Pribilof Islands. Additional undetermined losses were also reported by PACIFIC MARINER and AMERICAN VIKING. Besides the initial at sea reports by U.S. vessels to a NMFS Special Agent aboard the U.S. Coast Guard Cutter JARVIS, no formal complaint, identification of gear loss total, or further action was initiated with NMFS.

DOMESTIC FISHERIES REVIEW

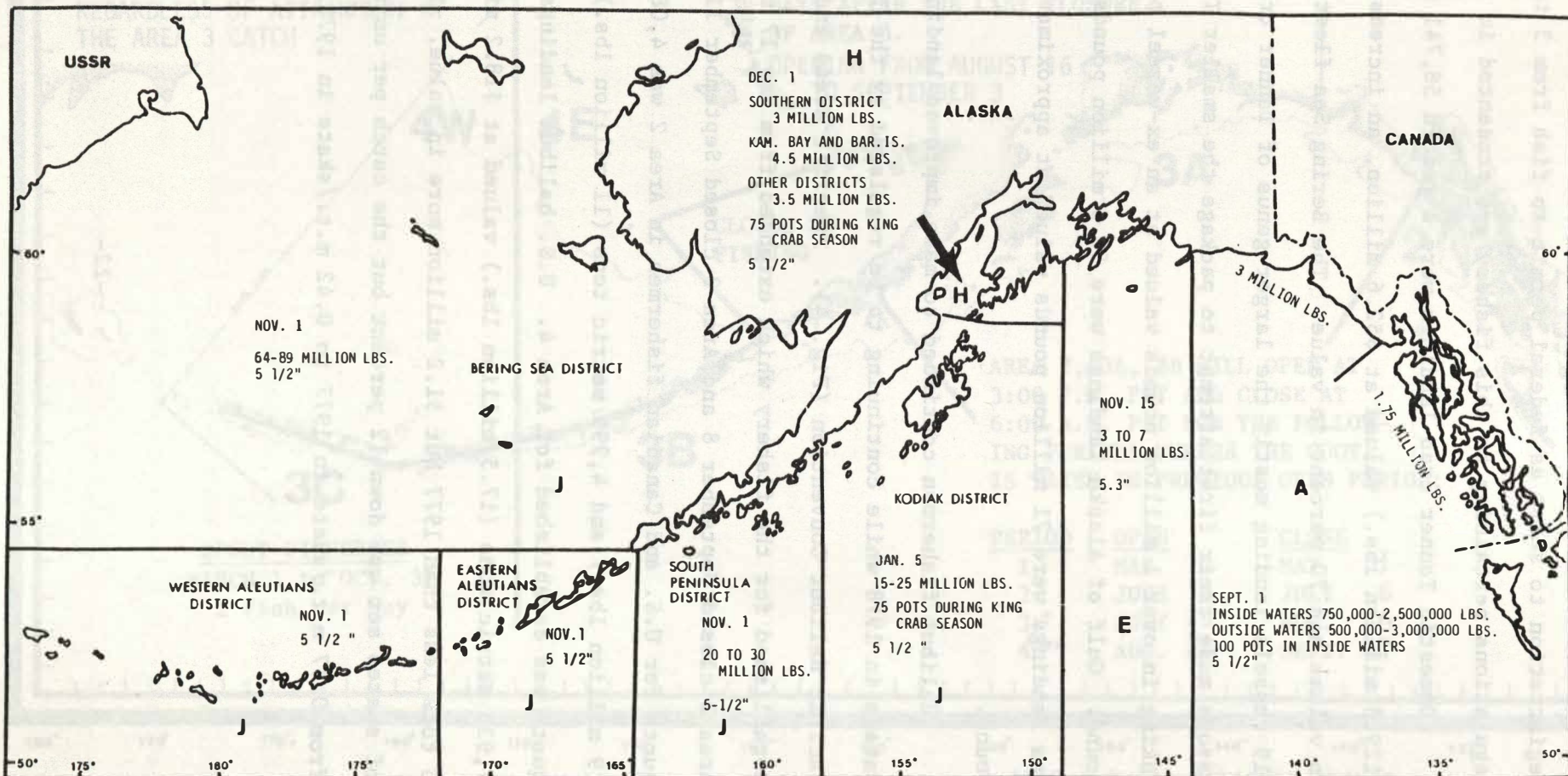
Law enforcement mandates of the FCMA were extended to domestic fishermen in 1978, enlarging the domestic enforcement aspects of the previous year. In 1977, domestic fishermen in federal waters were regulated by the International Pacific Halibut Convention and applicable Alaska State laws. Added to these in 1978 were federal management plans which were finalized for the groundfish fishery in the Gulf of Alaska east of 170° W. longitude and for the Tanner crab fishery for all Alaskan waters.

The Gulf of Alaska groundfish management plan went into effect December 1, 1978. Domestic fishermen landing primarily sablefish were immediately affected. During the final days of 1978, 12 federal permits were issued, although the actual fishery was inactive during the time. Regulations pertaining to this fishery are presented in the Appendix.

Domestic groundfish landings in 1978 for all Alaskan waters were 4,672 metric tons (10.3 million lbs.) valued at \$2.09 million, up 96 percent in quantity and 115 percent in value from 1977. Sablefish comprised 4.8 million pounds, pollock 2.6 million pounds, and the remainder was cod, flounder, rockfish, and miscellaneous species. No breakdown is presented for inside and outside 3 miles off Alaska.

The domestic Tanner crab fishery also received attention in 1978 as final regulations promulgating the Tanner crab fishery management plan off Alaska went into effect December 1 (Fig. 3). This plan adopted Alaska State regulations for federal waters, and allowed Alaska State

FIGURE 3
DOMESTIC TANNER CRAB FISHING
 Areas and Quotas as Established by the National Marine Fisheries Service
 and Alaska State for all Alaskan Waters - 1978



TANNER CRAB FISHERY

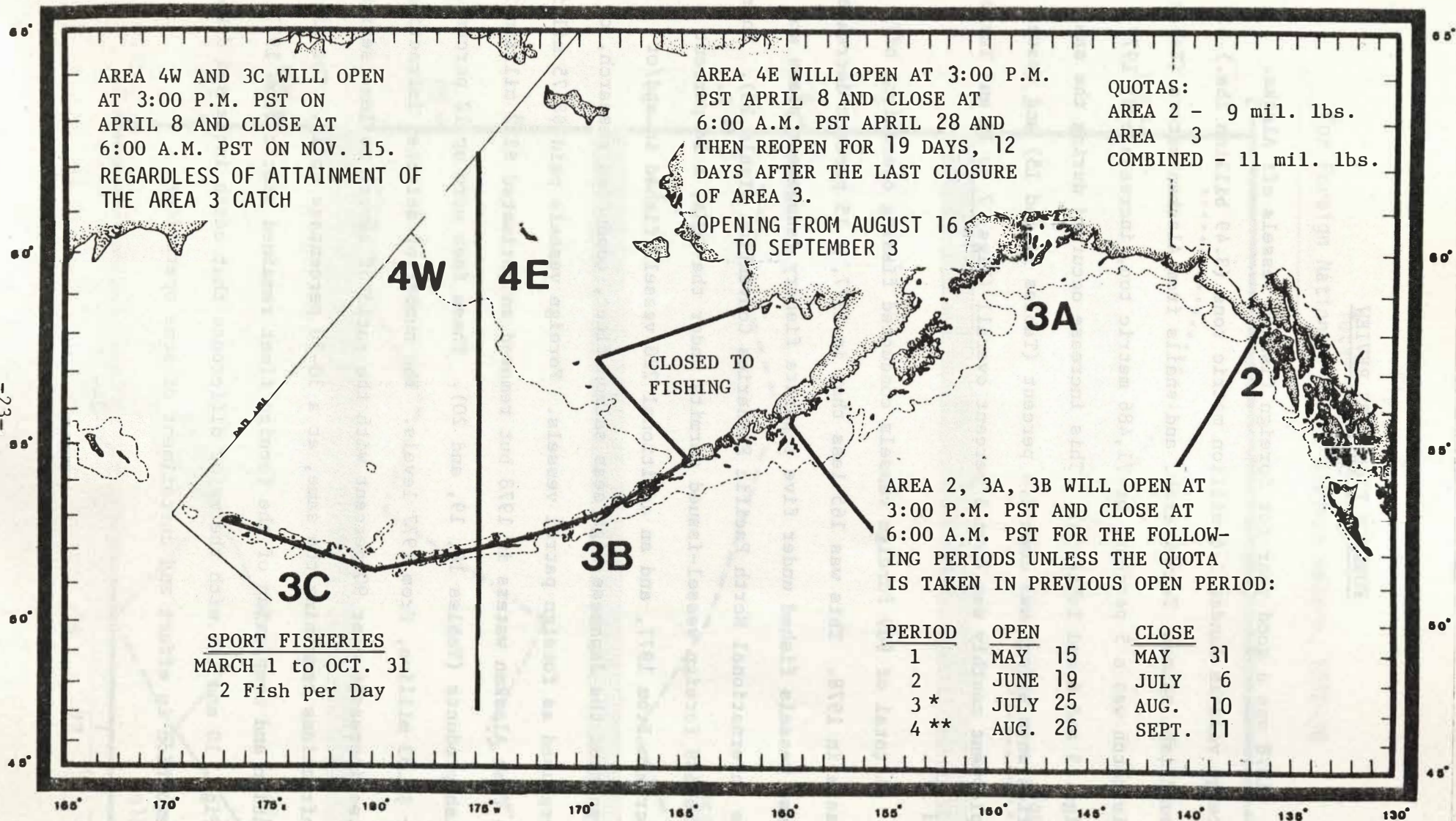
NOTATIONS INDICATE: OPENING DATES
 GUIDELINE HARVEST LEVELS
 POT LIMITS, WHEN APPLICABLE
 MINIMUM LEGAL SIZE

registration to serve as federal permit to fish from 3 to 200 miles. Regulations pertaining to this fishery are presented in the Appendix.

Domestic Tanner crab landings were a record 58,741 metric tons (129.5 million lbs.) valued at \$52.6 million, an increase of 32 percent in volume and 70 percent in value. The Bering Sea fleet expanded to 119 vessels landing mostly the larger genus of Tanner crab. U.S. processors made their first attempt to package the smaller Tanner crab, taking in over 1 million pounds valued at an ex-vessel price of \$.30 per pound. Gulf of Alaska landings were 58.5 million pounds while Bering Sea landings were 71 million pounds valued at approximately \$.38 per pound.

Halibut fishermen continued to make improved landings from Alaskan waters in 1978 while continuing to be regulated by the International Pacific Halibut Convention (Fig. 4). Specific areas and quotas were established for the fishery which extended from May 17 to November 15. Area 2 closed September 8 and Area 3 closed September 11. The catch quota for U.S. and Canadian fishermen in Area 2 was 4,082 metric tons (9 million lbs.) and 4,990 metric tons (11 million lbs.) in Area 3. No quota was established for Area 4. U.S. halibut landings off Alaska were 7,938 metric tons (17.5 million lbs.) valued at \$18.2 million, about 5 tons less than 1977 but \$1.2 million more in value. The total number of skates set was down 12 percent but the catch per unit of effort rose from 0.37 m.t./skate in 1977 to 0.42 m.t./skate in 1978.

FIGURE 4 1978 HALIBUT FISHING SEASONS, QUOTAS, AND AREAS



* AREA 3 QUOTA ATTAINED AUGUST 4

** AREA 2 QUOTA ATTAINED SEPTEMBER 8

FOREIGN FISHERIES REVIEW

1978 was a good year for foreign fishing vessels off Alaska.

Foreign vessels landed 1.6 million metric tons (3.49 billion lbs.) of groundfish, salmon, Tanner crab, and snails from Alaskan waters (Table 12). This catch was a 5 percent, or 71,486 metric ton, increase over 1977 (Figs. 5 and 6 and Table 13). This increase occurred during the same period when effort was down 2.6 percent (Tables 14 and 15) and vessel deployment monthly was down 5 percent overall (Figs. 7 to 11 and Tables 16 and 17).

A total of 909 foreign vessels conducted fishing operations off Alaska in 1978. This was 165 less than in 1977, a 15 percent decrease. These vessels fished under five separate fishery management plans and the International North Pacific Fisheries Convention (Table 18). There were 689 foreign vessel-issued permits under the FCMA, a 14 percent increase from 1977, and an additional 220 vessels fished in and/or supported the Japanese high seas salmon fleet, conducted research, or were used as foreign patrol vessels. Foreign vessels paid \$8.75 million to fish Alaskan waters in 1978 but removed an estimated \$232 million in fish products (Tables 18, 19, and 20). These fees were up 12 percent, or \$1.33 million, from 1977 levels. The number of detected infractions also increased over 90 percent with the ratio of severe to less serious infractions remaining the same, at a 30-70 percentage split. The distribution and complexion of the foreign fleet remained static from 1977 (Figs. 10 and 11) with the major difference that catch increased despite reduction in effort and curtailment of some operations.

Figure 5

Total Catch Trends
For Foreign Nations Fishing Alaskan Waters, 1972-78

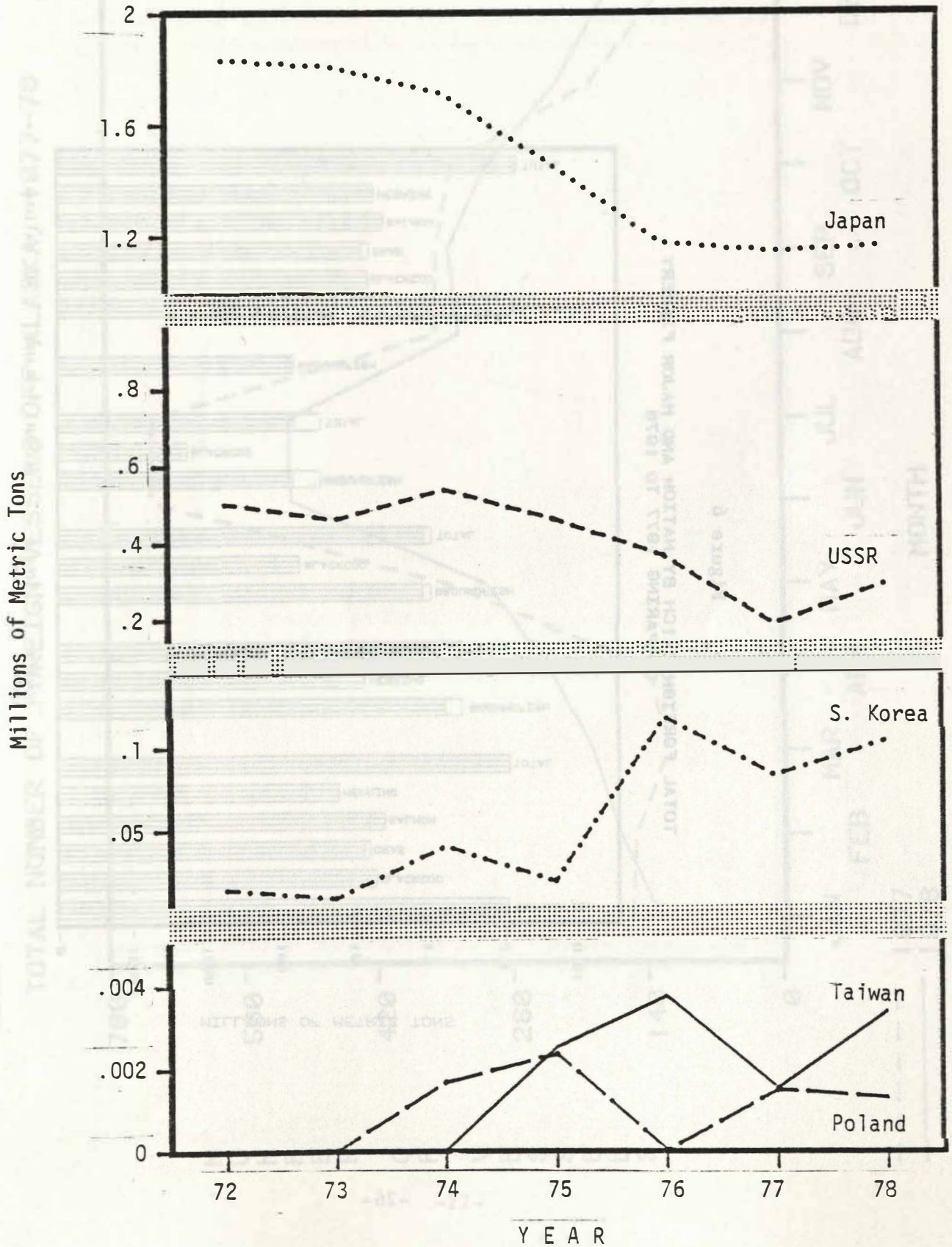
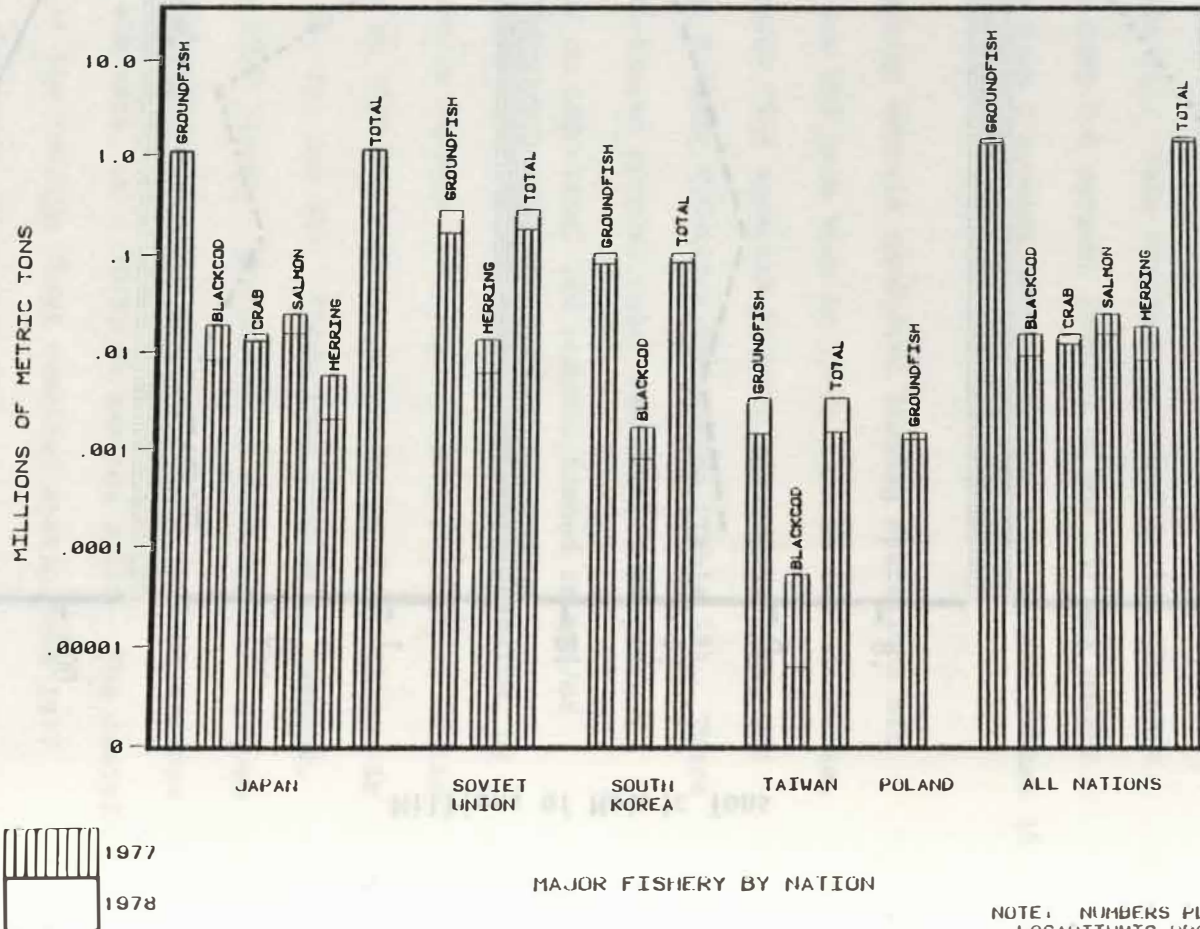


Figure 6

TOTAL FOREIGN CATCH BY NATION AND MAJOR FISHERY
COMPARING 1977 TO 1978



NOTE: NUMBERS PLOTTED IN LOGARITHMIC PROGRESSION.

FIGURE 7

TOTAL NUMBER OF FOREIGN VESSELS OFF ALASKA, 1977-78

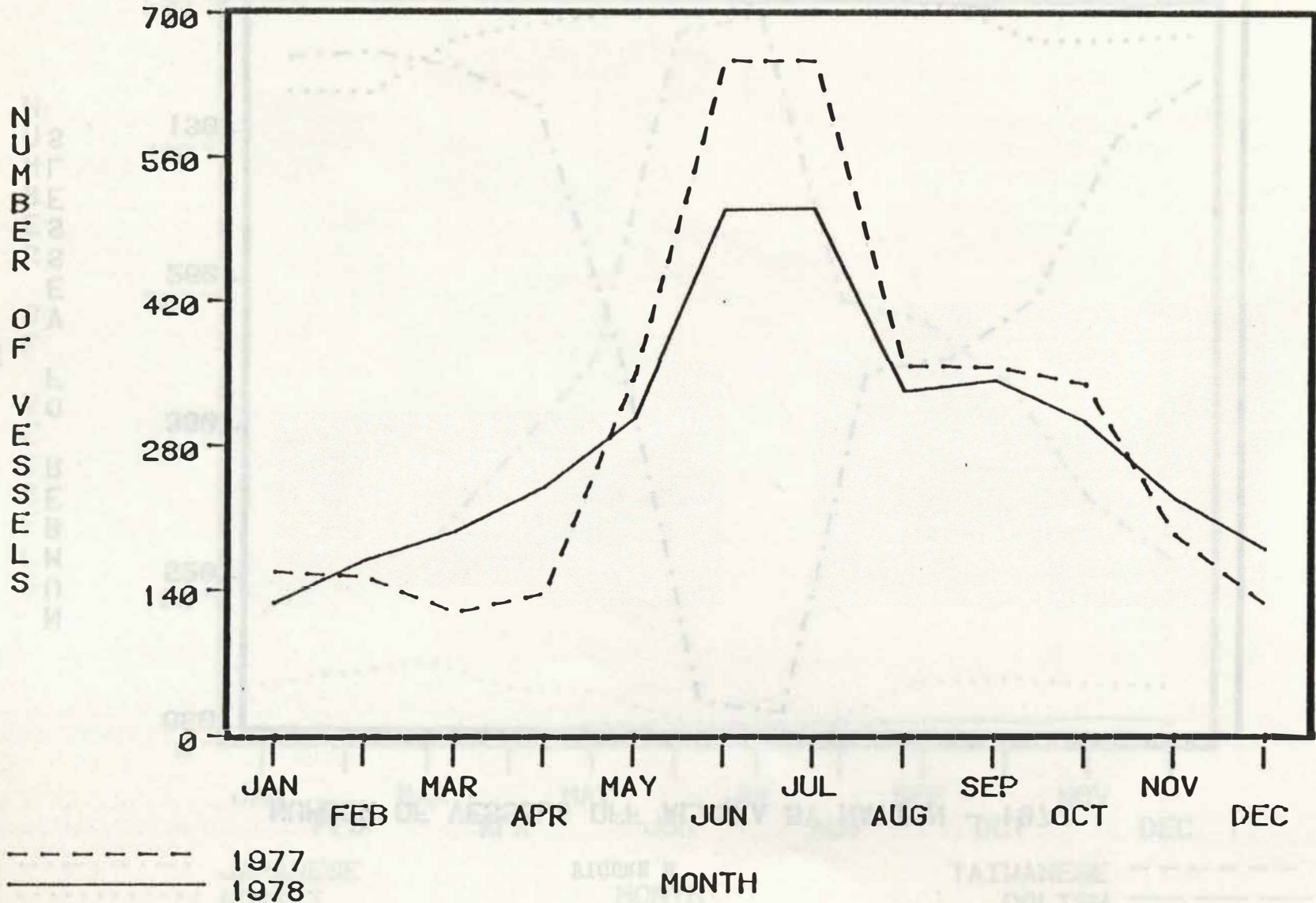


FIGURE 8

NUMBER OF VESSELS OFF ALASKA BY NATION - 1977

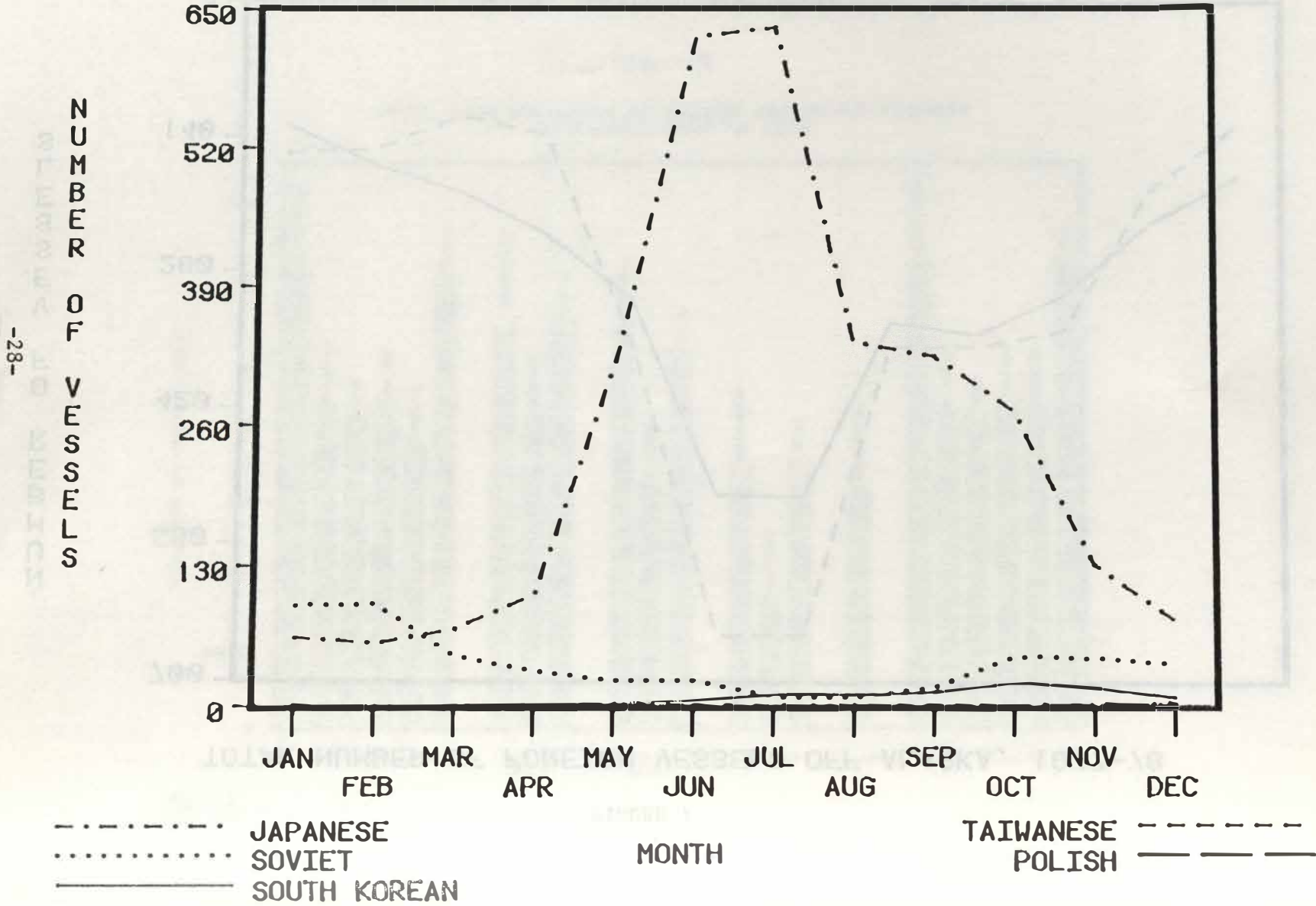
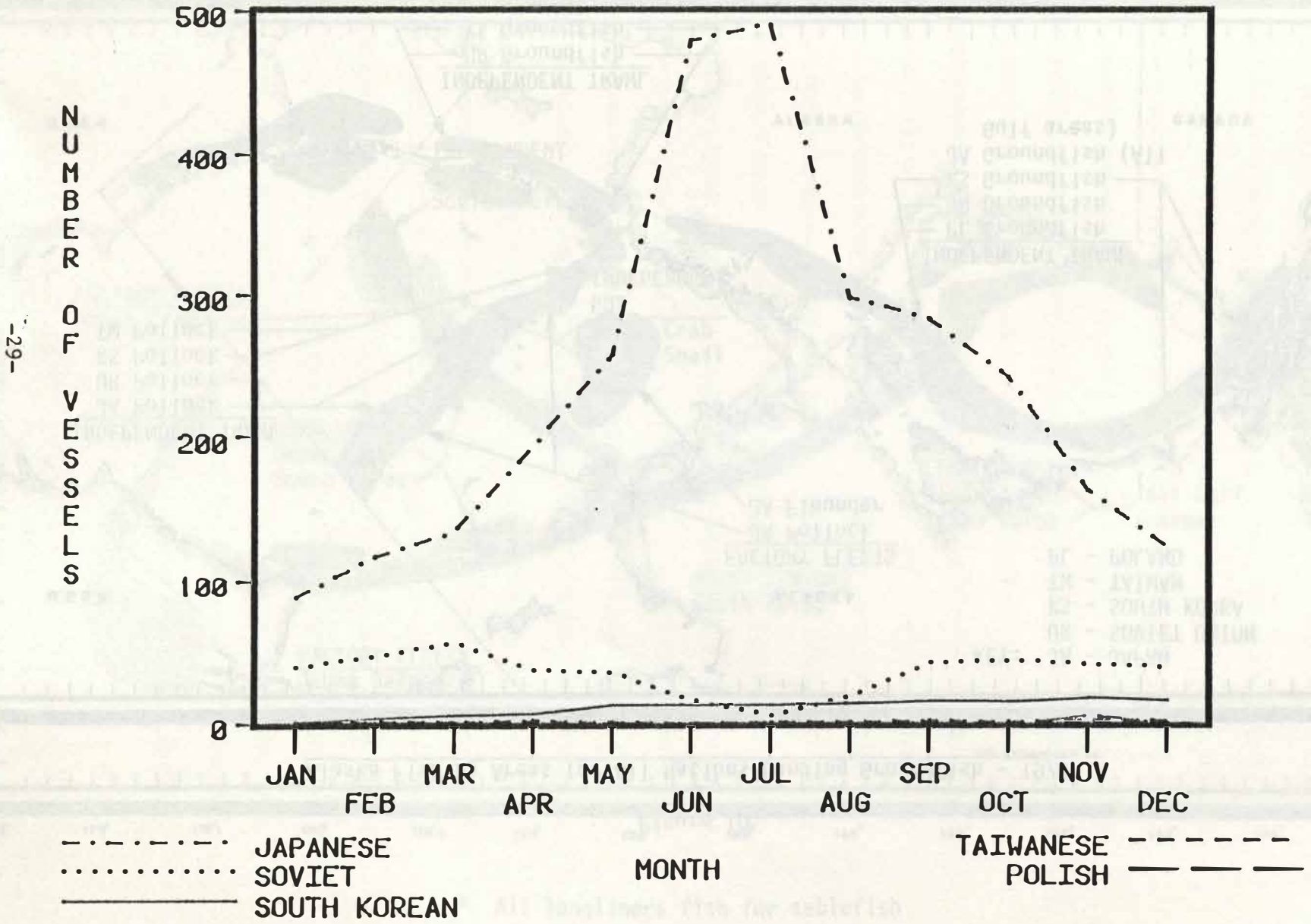


FIGURE 9

NUMBER OF VESSELS OFF ALASKA BY NATION - 1978



-29-

Figure 10

Alaska Fishing Areas for All Nations Landing Groundfish - 1978

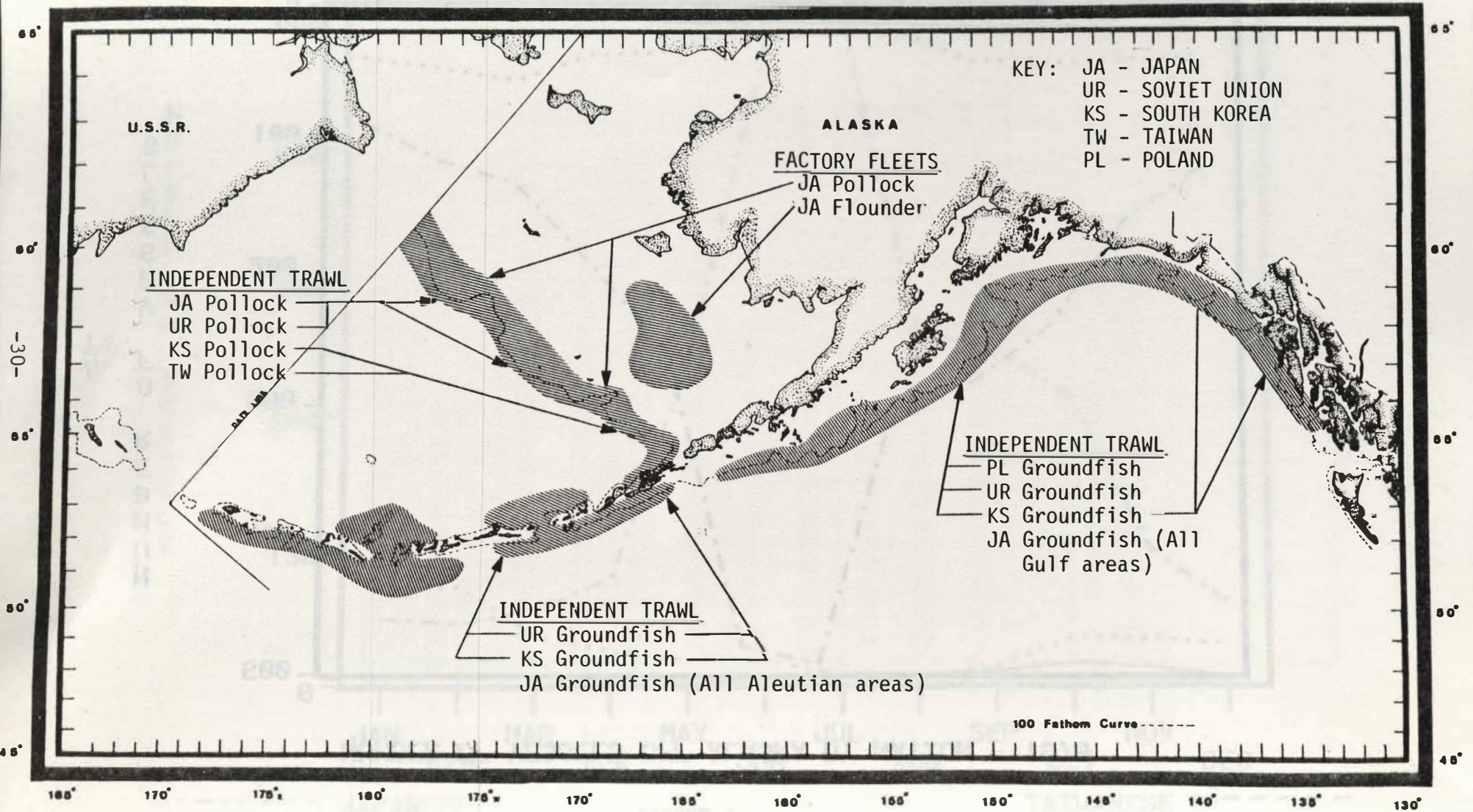
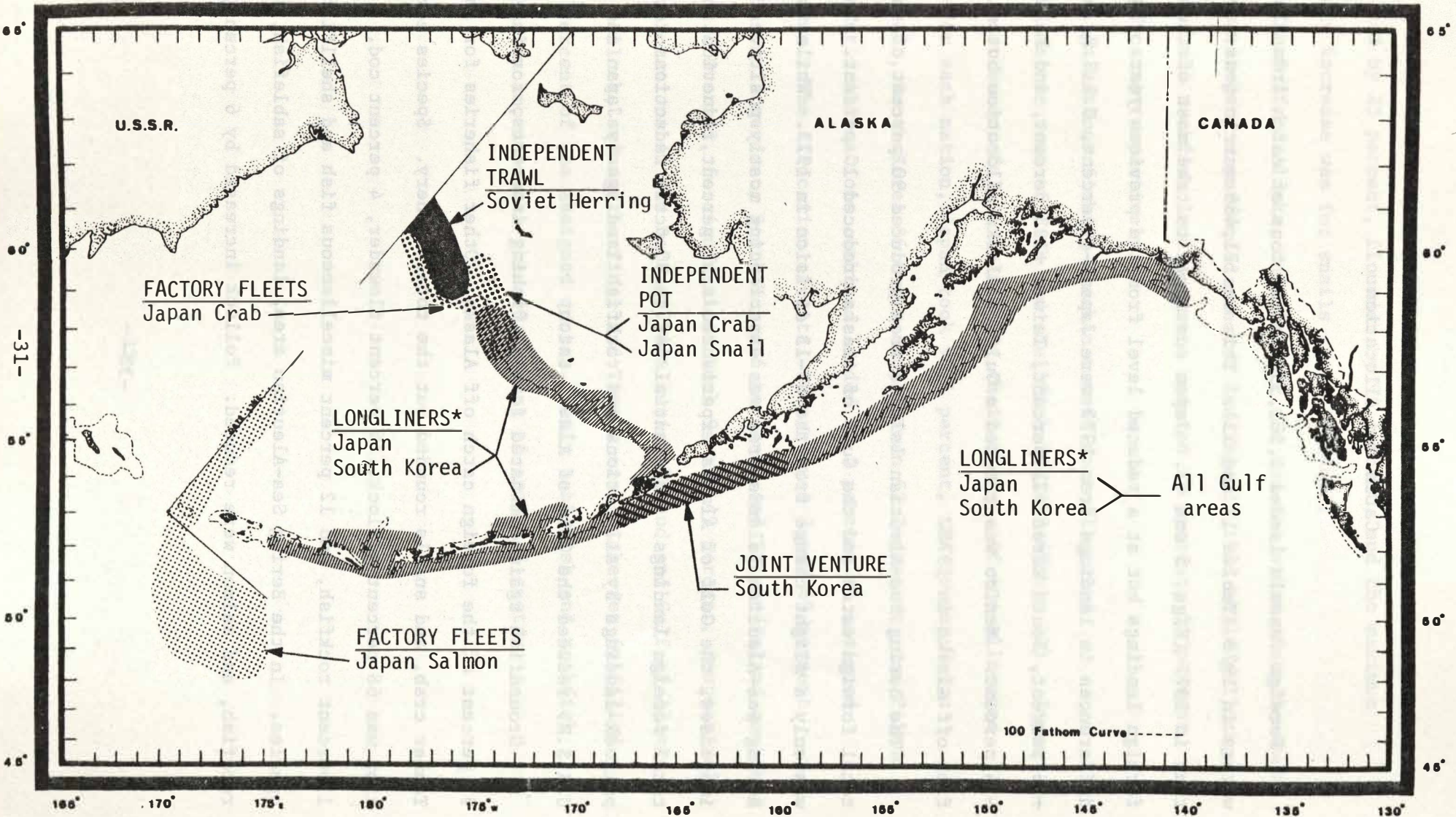


Figure 11

Alaska Fishing Areas for All Nations Landing Non-groundfish Species - 1978



* All longliners fish for sablefish

Catch and Allocation

Foreign vessels landed 1,581,536 metric tons of catch from Alaskan waters in 1978 (Tables 12 and 13). This was 71,486 metric tons more than in 1977 (Figs. 5 and 6). Japan continued to take most of the foreign landings but at a reduced level from the previous year. The differences in landings from 1977 were Japan -4 percent, U.S.S.R. +56 percent, South Korea +21 percent, Taiwan +193 percent, and Poland -14 percent. Mexico was granted a Gulf of Alaska allocation but did not fish off Alaska in 1978.

The Bering Sea-Aleutian Islands area produced 90 percent of the total foreign catch and the Gulf of Alaska produced 10 percent. This was only a slight change from the 87-13 division in 1977. While the Bering Sea-Aleutian Islands area was experiencing mostly positive increases, the Gulf of Alaska experienced a 17 percent reduction to total foreign landings. Substantial (40 to 80 pct.) reductions to pollock landings by all nations and rockfish landings by Japan and the U.S.S.R. reduced the Gulf of Alaska catch.

Groundfish again dominated foreign fishing interests, forming 97 percent of the foreign catch off Alaska. Other fisheries for salmon, Tanner crab, and snails rounded out the total fishery. Species composition was 68 percent pollock, 16 percent flounder, 4 percent cod, 1 percent rockfish, and 12 percent miscellaneous fish and shellfish species. In the Bering Sea-Aleutian area, landings of sablefish, herring, rockfish, and salmon were reduced. Pollock increased by 6 percent,

Pacific cod by 25 percent, flounder by 94 percent, and the maximum percentage increase was for snails at 441 percent.

In the Gulf of Alaska, only Pacific cod and the other miscellaneous fisheries category experienced greater landings in 1978 while pollock, sablefish, and rockfish landings were reduced 19 percent, 51 percent, and 59 percent, respectively.

Foreign nations fishing Alaskan waters were allocated 1,849,404 metric tons of fish and shellfish in 1978 (Table 12). Japan was the most successful in fulfilling their quota. Of the allocated tonnage for each nation, Japan took 93.1 percent, the Soviet Union 66.9 percent, South Korea 86.0 percent, Taiwan 52.2 percent, and Poland 5.0 percent. All nations combined landed 85.5 percent of assigned allocations. The allocation of total tonnage was Japan 69 percent, Soviet Union 23 percent, South Korea 6 percent, and Taiwan/Poland combined 2 percent. Overall, foreign nations took 94 and 49 percent, respectively, of the allocations in the Bering Sea-Aleutian Island and Gulf of Alaska areas. Pollock, salmon, herring, and Tanner crab fisheries fulfilled over 97 percent of the assigned quotas. Only sablefish and rockfish were taken in amounts less than 50 percent of assigned quotas.

Vessel Effort

The number of vessel days spent in Alaskan waters was slightly reduced from 1977 levels while the total catch increased (Tables 14 to 18). Distribution of fewer vessels by several nations aided the reduction (Figs. 7 to 11). Elimination of one factory fleet and reductions to others also contributed. Effort dropped 2.6 percent to 74,759 vessel days, with the distribution of this effort between the Bering Sea-Aleutian Islands and Gulf of Alaska remaining unchanged at 89 and 11 percent, respectively.

Effort was distributed between vessel types and nations similar to previous years. Independent trawlers produced half of the total effort, increasing 13 percent from 1977 levels. Factory effort hovered near 20 percent of the total but was off 1,175 vessel days from the previous year. Shellfish vessels, all operated by Japan, experienced large gains with crab factoryships and independent crab pot and snail pot vessels increasing their total effort role in 1978 by advancing 24, 17, and 618 percent, respectively, over 1977 levels. The average 20 percent increase to the Japanese shellfish effort directly paralleled the catch increase. Japanese independent trawler, longline, and support vessels also had modest increases. The salmon factory fleet was reduced 36 percent. The Soviets reduced their support fleet and eliminated the single factory fleet but expanded the independent trawler effort by 37 percent. This was accomplished by maintaining a traditional Bering Sea fishing season while expanding the level of fishing and, in the Gulf

of Alaska, extending the season through early summer while reducing the late fall effort. South Korea's effort was up 67 percent overall despite cutting longliner effort in half. Trawler effort doubled and the former minute support effort was enlarged to 358 days. Taiwan and Poland also increased their effort by 27 and 80 percent, respectively. The percent of effort distribution was Japan 85 percent, U.S.S.R. 11 percent, South Korea 4 percent, and Taiwan and Poland combined less than 1 percent.

The maximum number of foreign vessels present off Alaska during a given month was reduced in 1978 (Figs. 7 to 9 and Tables 16 and 17). From 128 to 511 vessels were present monthly throughout the year, compared to 118 to 654 in 1977. The peaks were reduced in relationship to the Japanese salmon fleet cutbacks, while minimum numbers were slightly increased due to the shift to more independent trawler activity during the traditionally slower winter months.

Vessel Fees

Foreign vessels paid a record \$8.75 million in catch and vessel fees in 1978 to land, process, and transport all but salmon from Alaskan waters (Tables 19, 20, and 21). In 1978, fees were based on three separate categories:

1. Catch fees were determined by an index based on values of U.S. commercial landing in 1977.
2. Fishing vessels were assessed \$1.00 per registered gross ton.

3. Special fees were established for processing and support vessels. Processors were charged \$.50 per gross ton up to a maximum of \$2,500. Support vessels were charged a flat \$200 per vessel.

Most foreign vessels paid more to fish within the Alaskan FCZ in 1978. Total fees were up 17 percent, or \$1.42 million from 1977. Catch fees alone increased 18 percent to \$8.10 million while vessel fees rose 10 percent to \$647,449. Poland was the only nation to pay less, reducing by 30 percent the fees paid from 1977. Japan again lead the way paying 71 percent of the total fees. The total paid by the Soviet Union increased by 128 percent or \$1.3 million over the fees paid in 1977. The Soviets paid 188 percent more in catch fees while reducing total vessel fees by 15 percent. Mexico paid vessel fees but failed to send vessels to Alaskan waters in 1978.

Fisheries Research

Research vessels from Japan, the Soviet Union, and South Korea worked in U.S. waters during 1978 surveying groundfish, salmon, crab, and snail resources (Table 22). Gear types used included trawl, long-line, pot, and drift gillnet. All research was conducted either through cooperative efforts between U.S. and foreign scientists or under the International North Pacific Fisheries Convention. A total of 14 Japanese, 2 Soviet, and 1 South Korean vessels conducted the research utilizing approximately 1,300 research days. Research activity conducted exclusively inside the U.S. zone is given in Table 22.

JAPANESE FISHING ACTIVITIES

Japan again dominated the foreign fleet statistics off Alaska in 1978. The varied Japanese fleet utilized a number of vessel and gear types to target on pollock, flounder, Tanner crab, salmon, and sablefish (see Appendix). In doing so, Japan dominated the foreign activity by producing 75 percent of the catch, 85 percent of the effort days, and deploying 96 percent of the maximum vessel numbers to the Alaskan area in 1978.

Japan again dominated the foreign landings taken off Alaska. Japan landed 1,190,063.6 metric tons (2.62 billion lbs.), an amount almost three times larger than the combined catch by all other foreign nations fishing Alaskan waters (Figs. 5 and 6 and Tables 12 and 13). Japan's 75 percent of the total Alaskan catch was landed 94 percent from the Bering Sea-Aleutian Islands area and 6 percent from the Gulf of Alaska. Pollock alone comprised 71 percent of the Japanese catch. Other directed fisheries were conducted for Tanner crab, salmon, flounder, and sablefish. Total landings compared to 1977 decreased 4 percent overall and 2 percent in the Bering Sea-Aleutian Islands area while decreasing 32 percent in the Gulf of Alaska. These landings produced a catch valued in excess of \$170 million.

Japan's 1978 fleet ranged in number from 88 to 492 vessels (Fig. 12 and Tables 14 to 18). This fleet of factoryships, trawlers, longliners, gillnetters, independent crab pot and support vessels utilized 63,521 effort days (174 years), a decrease of 4,077 days from 1977. The fishing

FIGURE 12

NUMBER OF JAPANESE VESSELS OFF ALASKA, 1977-78

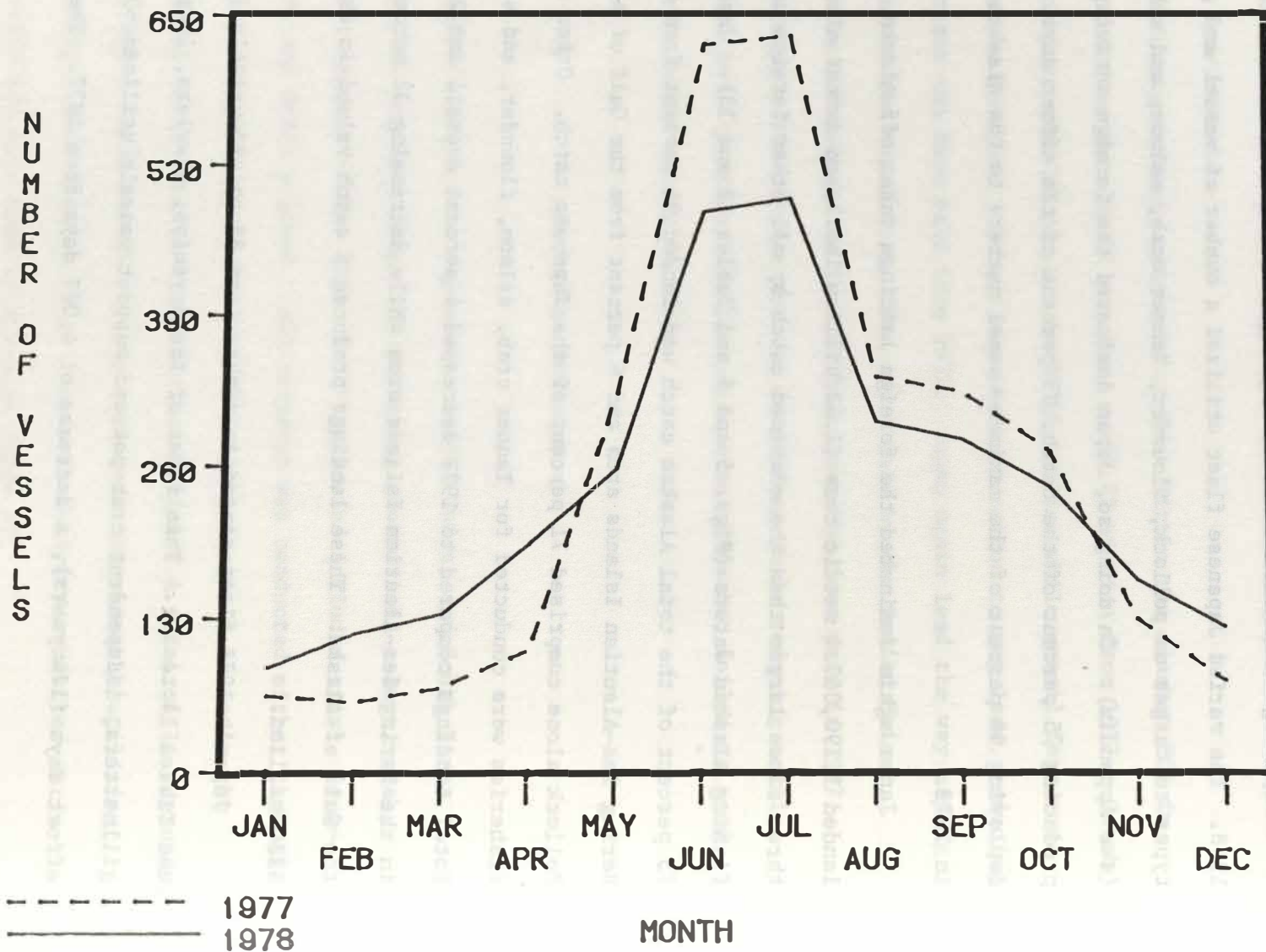
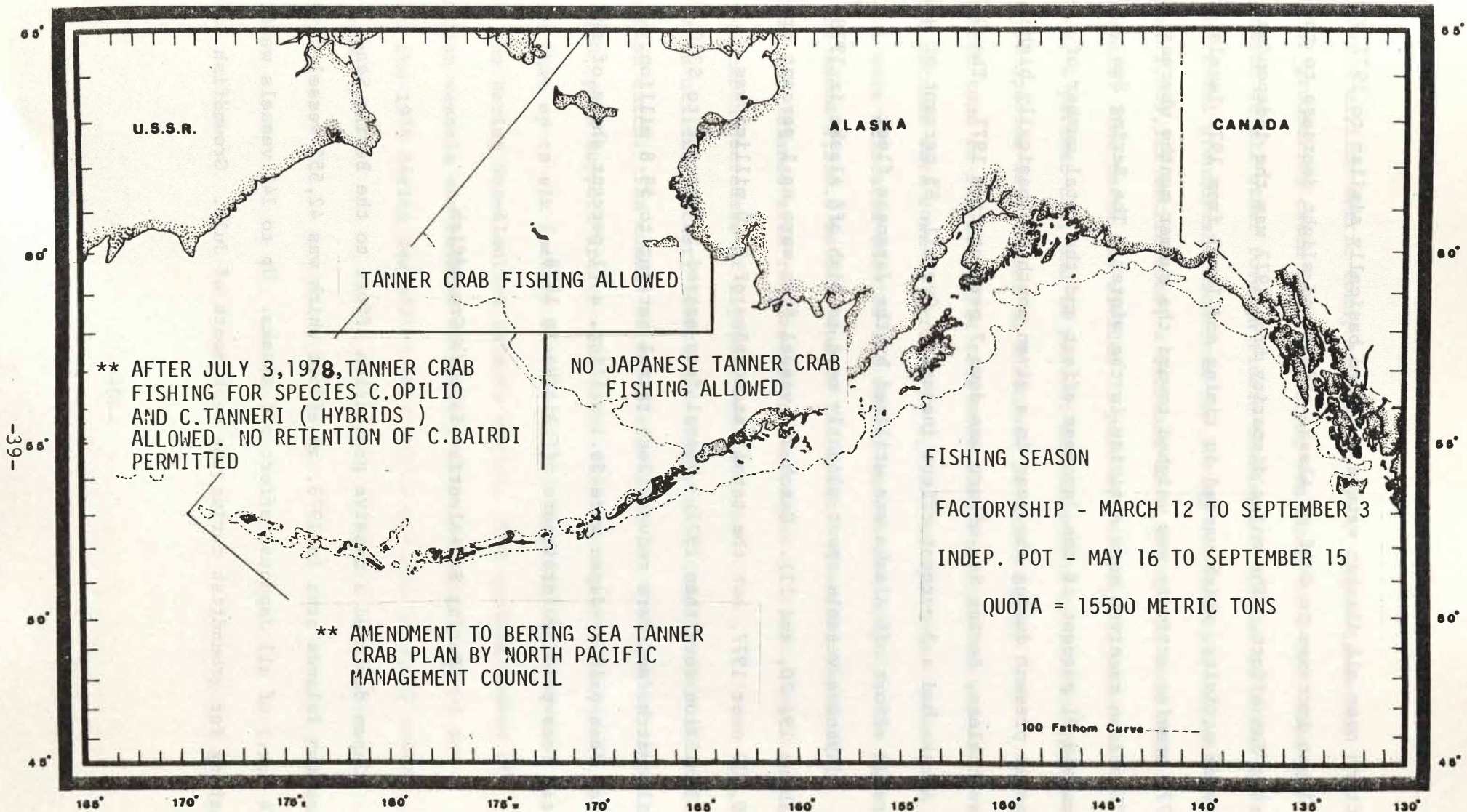


FIGURE 13 JAPANESE TANNER CRAB FISHING AREAS
AND SEASON RESTRICTIONS - 1978



pattern over all Alaskan waters remained basically similar to 1977 with a slight increase to Gulf of Alaska effort and slight decrease to the Bering Sea effort. The major disparity from 1977 was the independent trawler activity, which varied in timing and level from 1977 levels. In 1977, trawler activity was weighed toward the summer months whereas the 1978 season received more activity in the winter. The Bering Sea received 91 percent of the Japanese effort and the total number of vessels present during the year in a given month was basically higher. Nevertheless, Bering Sea effort was down 7 percent from 1977. The Gulf of Alaska had a 2 percent effort increase. Overall, 85 percent of all foreign effort off Alaska was utilized by the Japanese fleet.

Japanese vessels spent slightly more to fish off Alaska in 1978 (Tables 19, 20, and 21). Catch and vessel fees were up 1 percent or \$90,000 over 1977, but the total catch value of \$170 million was \$4.3 million more than 1977. Vessel fees soared 58 percent to \$310,400 while catch fees were reduced less than 1 percent to \$5.8 million. Total fees paid by Japan were \$6.1 million, a 71 percent share of the total fees paid by foreigners off Alaska in 1978.

Bering Sea-Aleutian Islands Groundfish

Japan deployed a massive groundfish effort to the Bering Sea-Aleutian Islands area in 1978, an effort which was 42,552 vessel days (74 pct.) of all Japanese effort off Alaska. Up to 241 vessels were fishing for groundfish during the peak month of July. Groundfish landings

were over 1 million metric tons, similar to 1977. Japan landed an amount of groundfish catch from the Bering Sea equal to 2-1/2 times the total catch of all other foreign fleets fishing off Alaska in 1978.

The total groundfish catch from the Bering Sea-Aleutian Islands area was 1,089,311 metric tons, a decrease of 6,565 metric tons from 1977 levels. The catch was divided 73 percent pollock, 13 percent flounder, 4 percent cod, and 10 percent miscellaneous groundfish species. All major species were landed in increased amounts ranging from 772 metric tons to 32,722 metric tons more than the previous year. Herring catches were down 62 percent to 2,315.3 metric tons. Atka mackerel were allocated outside the miscellaneous grouping for the first time and added 1,531.0 metric tons to the catch. Overall, the Bering Sea-Aleutian Islands area realized catch increases of 2,491.0 metric tons and catch decreases of 21,686.0 metric tons.

Japan utilized factory fleets and independent trawlers to take the groundfish catch. The number of vessels present per month varied from 70 to 200, plus support craft. The prime fishing months were May to October when up to six factory fleets and 117 independent trawlers fished the Bering Sea-Aleutian Islands region. The maximum number of groundfish vessels was reduced 27 percent from 1977 while vessel days used by the 1978 Bering Sea effort were only 7 percent or 4,065 vessel days less.

Factory Fleets

Six groundfish factory fleets fished the central and eastern Bering Sea during 1978 in all months but February and March. This included five pollock fleets and one flounder fleet. In January, the single flounder mothership and the associated six pair trawlers finished the 1977 season 10 days into 1978. The departure of this fleet eliminated mothership effort from the Bering Sea until the last 3 days in April when the first pollock mothership arrived in the central Bering Sea northwest of the Pribilof Islands. The factory effort grew to five motherships by June and expanded southward to southeast of the Pribilof Islands. Two-thirds of the pollock mothership effort continued in the eastern Bering Sea and one-third in the central Bering Sea for the remainder of the 1978 mothership season which slowly decreased until the first week in November when the last pollock mothership fleet departed. The flounder mothership fleet resumed operations on the eastern Bering Sea flats in mid-July and continued operations through the end of 1978. The groundfish factory fleet of 6 motherships, 62 pair trawlers, 17 Danish seiners, and 11 dependent medium trawlers utilized 12,821 effort days accounting for 22 percent of the Bering Sea effort in 1978.

Groundfish mothership fleets produced 42 percent of all catch landed from the Bering Sea in 1978. These factory fleets produced 476,164.7 metric tons, 52 percent pollock, 32 percent flounders, 30 percent Pacific cod, and the remainder miscellaneous species. Over half of the landings were made northwest of the Pribilof Islands in the central Bering Sea. The central Bering Sea also had over half of the

flounder catch although the single flounder mothership fished exclusively on the Bering Sea flats southeast of the Pribilof Islands. The Japanese groundfish fleet landed 31 percent of all foreign catch off Alaska in 1978.

Independent Trawlers

Japan dispatched a fleet of up to 117 independent trawlers to the Bering Sea and Aleutian Islands during 1978. These trawlers alone were 1-1/2 times the number of all other foreign vessels operating off Alaska in 1978. The 26,783 vessel days used by this fleet included 46 percent of the Japanese Bering Sea effort and 35 percent of the total foreign effort off Alaska during the year. Maximum vessel numbers were reduced 39 percent while trawler effort increased 2 percent.

Trawler activity was increased during the winter months of 1978, and the peak summer to early autumn period saw the total vessel activity reduced from 1977 levels. Over the entire year, trawler effort in the Bering Sea was divided 17 percent in the Unimak Pass to Pribilof Islands area, 22 percent along the Aleutian Islands chain, and 61 percent northwest of the Pribilof Islands along the 100-fathom curve to the 1867 U.S.-U.S.S.R. Convention Line.

The central and eastern Bering Sea saw rapid expansion to trawler effort during the first 2 months while slight reductions occurred in the Aleutians. The eastern Bering Sea maintained a moderate level of near 20 trawlers monthly during this time on into mid-September. March and April saw a 20 percent expansion to trawler effort in the central Bering

Sea prior to a decreasing effort trend extending to late August. The Aleutians followed a more typical summer pattern, increasing to a high of 81 vessels and 1,238 vessel days in July. The expansion of trawler activity in the Aleutians began in the western areas and spread through the Unimak Pass area during the peak July period. All three Bering Sea areas increased vessel activity in September. From October to December, effort decreased in the eastern Bering Sea and Aleutian Islands to near early-year lows while the central Bering Sea continued at near maximum levels.

Trawlers landed 613,146 metric tons in the Bering Sea-Aleutian Island region in 1978. This was 56 percent of the areas total catch. Species composition was 65 percent pollock, 5 percent Pacific cod, 17 percent flounder, and the remainder miscellaneous species. Trawlers took over 90 percent of the herring and over 95 percent of the rockfish and mackerel from the total Japanese Bering Sea catch. Rockfish were landed mostly in the Aleutian Island region by medium trawlers. Trawlers in the Bering Sea-Aleutian Islands area provided 37 percent of all foreign landings off Alaska in 1978.

Gulf of Alaska Groundfish

Japan experienced major setbacks to the Gulf of Alaska groundfish fishery despite a 26 percent increase to total allocations. Part of the reduction could be attributed to the change in allocation period for all foreign vessels operating in the Gulf of Alaska and the subsequent loss

of fishing time by Japan. As of December 1, a new fishing year commenced and, as an interim measure prior to the onset of the calendar year, a December quota was established. Japan contended that this 31-day quota was inadequate to support a Japanese fleet and no vessels were deployed to the Gulf of Alaska during the December period. For the year, vessel numbers per month and general fishing patterns in the Gulf of Alaska compared favorably to 1977 and effort was increased but, despite this, there was a 34 percent drop in overall catch.

The Gulf of Alaska groundfish catch was reduced to 59,813.6 metric tons from 100,835.7 metric tons in 1977. This reduction was largely forced by lower pollock, flounder, rockfish, and miscellaneous species landings. A dramatic 448 percent increase in Pacific cod landings (up 6,467 m.t.) was the only significant increase to Gulf of Alaska landings in 1978. Overall, landings decreased by 37,123 metric tons and increased by 6,467 metric tons from 1977. The Gulf of Alaska provided 6 percent of all Japanese landings off Alaska in 1978.

Allocations for the Gulf of Alaska increased to 133,209 metric tons from 105,000 metric tons in 1977 accounting for 10 percent of Japan's total Alaskan quota. Allocations for Pacific cod, flounder, and miscellaneous species were increased but this 37,552 metric ton increase was somewhat offset by the 13,111 metric ton decrease to pollock and rockfish. Other allocation levels remained about the same. Allocations were 96 percent complete by December 1 for all species combined. The December quota of 31,424 metric tons was completely untouched at the close of 1978.

Japan deployed up to 20 trawlers to the Gulf of Alaska in 1978. The fishing season was similar to 1977, except that reduced quotas in a new fishing year commencing December 1 forced all trawlers to depart the area by late November. Although vessel numbers were similar, there was increased effort during most months. An overall 22 percent increase elevated the total Gulf of Alaska trawler effort to 2,761 vessel days. Only November and December showed reduced effort while the peak summer months were doubled compared to 1977. Deployed in the Gulf of Alaska were 15 percent of the trawlers utilizing 9 percent of all Japanese trawler effort off Alaska in 1978.

As in 1977, the 1978 Gulf of Alaska fishing year began with seven trawlers, six west of Kodiak and one in the southeast. This fleet grew to 10 trawlers by June, expanding over the entire Gulf of Alaska. In June, the number of trawlers doubled due to major increases in the western and central Gulf east to Yakutat. Through November, the total number of trawlers present monthly decreased to 15 as effort shifted westward to the Kodiak to Shumagin area. By late November, the last trawlers departed the Shumagin Islands leaving the Gulf of Alaska void of Japanese trawler activity.

Sablefish Longlining

Japanese longliners experienced a poor fishing year in 1978. Sablefish landings were reduced 56 percent from 1977 due to gross reductions to overall longline effort and restrictions to historical fishing

areas. The total 8,263 metric ton catch was one of the lowest Japanese sablefish landings in recent years.

In 1978, regulations restricted the access of foreign longliners to historically productive fishing areas. No longlining for sablefish was permitted east of 140° W. longitude shutting off the entire southeast Alaska region. Since 1974, over 23,000 metric tons had been harvested from the southeast although this total catch has been reduced steadily from a high in 1974 of 8,500 metric tons to 2,600 metric tons just prior to the closure.

The Japanese sablefish catch was reduced 60 and 55 percent from the Bering Sea and Gulf of Alaska regions, respectively. Effort increased 35 percent in the Bering Sea but reduced 16 percent in the Gulf of Alaska. The total Japanese longline effort of 4,539 vessel days produced 1.8 metric tons of sablefish per vessel day compared to 4.1 metric tons for each of the 4,511 vessel days in 1977. The largest decrease was in the Bering Sea-Aleutian Islands area where daily catch rates dropped from 3.1 to 0.9 metric tons per day compared to the Gulf of Alaska where the catch rate declined from 4.5 to 2.7 metric tons per day. The total sablefish catch was weighed more to Gulf of Alaska waters, divided 78 percent to the Gulf and 22 percent to the Bering Sea region compared to a 68 to 32 percent split in 1977.

The total number of vessels deployed during a given month was radically changed in 1978. In the Bering Sea, from 1 to 17 longliners operated in a given month, increasing rapidly through April prior to a slow decrease lasting into early November. Over two-thirds of these

vessels operated near the 100-fathom curve between Unimak Pass and the Pribilof Islands. Up to seven longliners ventured northwest of the Pribilofs during midsummer. In early November with the mass return of longliners from the Gulf of Alaska, the Bering Sea regained mid-April highs. By mid-December, all Japanese longliners had departed Alaska. Longlining in the Aleutian Islands followed historical patterns expanding to midsummer highs in the central and western regions then reducing to zero longliners by December. Late summer to early fall activity was also generated in the eastern sector to Unimak Pass. Longliner activity was divided 42 percent in the Unimak Pass to Pribilof Islands area, 8 percent northwest of the Pribilof Islands, and 50 percent in the Aleutian Islands. Over 28 percent of the total longliner activity occurred from March to May in the Aleutian Islands region between Amutka Pass and Attu Island.

Tanner Crab

Japan deployed two factory fleets and 12 independent crab pot vessels to the Bering Sea during 1978. This fleet expanded both effort and catch totals by 20 percent compared to 1977. There was a total of 20,339,000 Tanner crab landed in 1.87 million pot lifts for an average of 10.87 crab per pot. The fleet used 3,141 vessel days to land 14,962 metric tons of crab. The factory fleets landed 76 percent of the total crab catch landed in 1978. Figure 13 and Table 23 indicate season activities by fleet type.

Crab motherships, KEIKO MARU and KOYO MARU, were again accompanied by six crab pot vessels each. These vessels began operations north of 58° N. latitude in March. In July, the area south of 58° N. latitude was open to C. opilio fishing and one mothership fleet moved south for the remainder of the season. By late August and early September, the fleets completed their quotas and returned to Japan. During 1978, the two factoryship fleets utilized 2,317 effort days, landing 15.8 million Tanner crab for a total catch of 11,731 metric tons.

Japanese crab factory fleets had fewer crab pot lifts producing a smaller catch in 1978. North of 58° N. latitude, there were 14.3 crabs per pot lifted for a total of 14.24 million crab. South of 58° N. latitude, there were 13.1 crabs per pot lifted for a total of 1.59 million crab. The total number of pots lifted by the factory fleet was 1.12 million or approximately 23.1 pounds of crab per pot lifted. The catch per pot was reduced less than 5 percent from 1977 levels.

Eleven independent crab pot vessels fished in the north central Bering Sea north of 58° N. latitude and west of 175° W. longitude from May to September. A total of 750,000 pot lifts yielded approximately six crabs per pot during the 824 days of effort. This amounted to about 10 pounds of crab per pot lift for a total catch of 4.5 million crabs weighing 3,231 metric tons.

Salmon

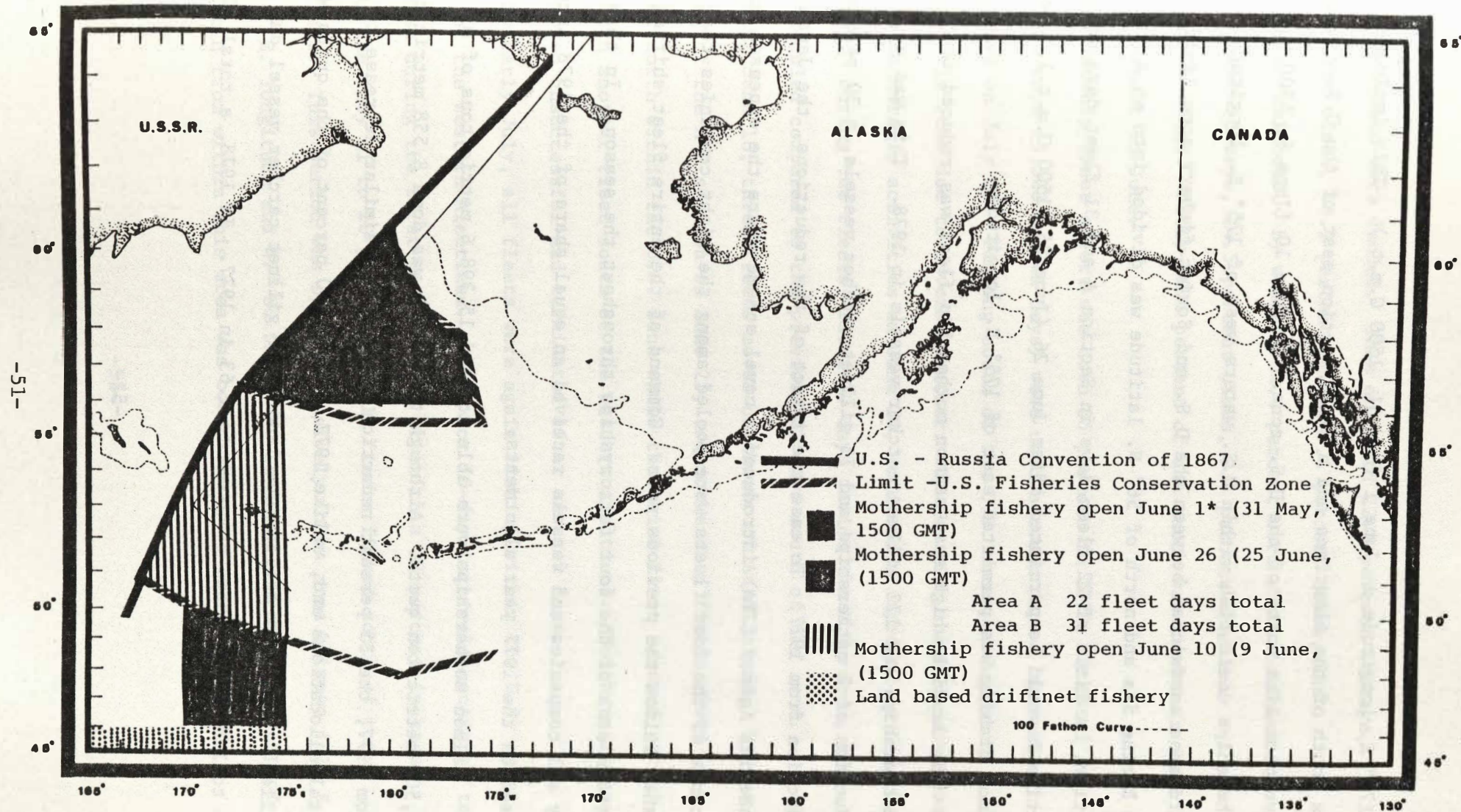
Japan deployed a reduced high seas salmon mothership fleet to Alaskan waters in 1978. Four factoryships accompanied by 172 gillnet catcher vessels formed the fleet. As in 1977, the fishery continued to be regulated by the International North Pacific Fisheries Commission and Japan-Soviet agreements rather than FCMA (Fig. 14). In 1978, regulations governing this fishery became more restrictive. The new Soviet-Japan fisheries pact forced a 30 percent reduction to Japan's North Pacific salmon catch, down to 42,500 metric tons. To overcome the cutbacks, eight Japanese companies, for the first time, pooled their efforts to land the 1978 salmon harvest.

Both INPFC and Soviet-Japanese agreements regulated the salmon fishery for Japan in the North Pacific. A total salmon catch limit of 42,500 metric tons or 32.8 million fish, whichever came first, was negotiated between Japan and the Soviet Union with the additional restriction that outside the U.S., Soviet, and Japanese 200-mile fishery zones only 28,000 metric tons or 19.8 million fish could be landed. Outside the fishery zones, the total number of fish landed could not exceed 4.3 million chum salmon and 1.6 million red salmon with a 10 percent allowance for each. The entire catch was to be landed in a season extending from May 1 and July 31. The Japan-Soviet agreement also included gear restrictions, vessel quotas, and enforcement provisions.

INPFC regulations dealt with time and area closures. Mothership fleets were first permitted to fish outside the U.S. zone between 170° E.

Figure 14

JAPANESE HIGH SEAS SALMON FISHERY INPFC REGULATIONS - 1978



* All opening dates in Japanese Standard Time (-9 GMT)

-51-

to 175° E. longitude on June 1 (May 31, 1500 G.m.t.). This included an area south of the Aleutians and a small section east of the U.S.-Soviet convention line north of the U.S. zone. On June 10 (June 9, 1500 G.m.t.) motherships could fish within U.S. waters west of 175° E. longitude. A third zone sandwiched between the U.S. and Soviet fishery zone limits in the Bering Sea and north of 56° N. latitude was divided into an A and B section. A limit of 22 fleet days in Section A and 31 fleet days in Section B would be permitted after June 26 (June 25, 1500 G.m.t.). No salmon fishing was permitted east of 175° E. longitude.

The Japanese high seas salmon mothership fleet was reduced to 4 motherships and 172 gillnet catcher vessels in 1978. This was a reduction of 2 motherships and 73 gillnet catcher vessels, a 30 percent reduction from 1977. To ease the impact of the reductions, the Japan Fisheries Agency (JFA) introduced a novel scheme where the expenses and incomes of the four fleets were pooled among the eight companies that fished salmon the previous year. Command of the entire fleet shifted between each of the four factoryships throughout the season. In this way all companies and vessels received an equal share of the 1978 income based on the 1977 year allotments.

Salmon motherships were able to land 15,398.6 metric tons of a 15,500 metric ton quota. Although this catch was down 8,558 metric tons from 1977, the 35 percent reduction paralleled a similar decrease to the total allocations and, unlike 1977, almost 100 percent of the quota was filled. The total metric tons landed per gillnet catcher vessel day was up to 1.65 metric tons compared to 1.63 in 1977. In 1978, a total of

8,250,721 salmon were landed. This included 22.8 percent sockeye, 22.5 percent pinks, 46.1 percent chums, 7.4 percent cohos, and 1.2 percent chinooks. By weight, 52.4 percent were chums followed by 21.7 percent sockeye, 14.5 percent pinks, 9.4 percent coho and 2.0 percent kings. Fifty-five percent of the catch was landed in July and 45 percent in June.

Mothership fleet effort was down 35 percent in 1978. A total of 331 fleet days (9,328 vessel days) were used between June 1 and end of activities on July 23. Fishing south of the U.S. zone was hampered during early June due to adverse weather. By the time the U.S. zone was open to mothership activities on June 10, conditions improved as did the landings. During the fleets' first 10 days inside the U.S. zone, the catch doubled compared to the previous 10 days south of the zone. Beginning June 18, three fleets moved northwest of Attu Island. By the opening of the A-B section on June 25, two mothership fleets moved farther north within the U.S. zone while the third fleet resumed activities with another fleet south of the western Aleutians. Northern fisheries proved unsuccessful and terminated after several days.

By early July, all fleets were again fishing within the U.S. zone south of the western Aleutians. Catch for 10-day intervals continued to increase during the first week of July prior to a 38 percent increase during the July 11 to 20 period when all fleets fished south of the Aleutians. This period was spent exclusively in an area between 171° E. to 174° E. longitude and 47° N. to 50° N. latitude. Over 70 percent of the catch from within this area was coho salmon. The season ended

July 23 in the same area of high catches during the adjacent earlier period, although the last 3 fishing days produced mostly chum salmon.

Snail

Japan deployed eight snail pot vessels to the Alaska region in 1978 increasing the amount of effort and catch by 540 and 618 percent, respectively, over 1977 levels. A total of 905 vessel days landed a catch of 2,184.4 metric tons of snails. This was 73 percent of the assigned quota amounting to 0.2 percent of Japan's Alaskan landings. Japan historically never landed greater than 0.04 percent of the Alaskan catch by its snail fishery. The snail fishery also utilized 1.4 percent of Japan's vessel days in 1978 compared to a maximum of 0.20 percent in previous years.

The snail fishery began in May and continued until October operating in the central Bering Sea. In mid-May, four vessels began operations 200 miles northwest of the Pribilof Islands. Through June and July, this fleet increased until August and September when all eight snail pot vessels were present. By late September, the fleet began to disperse and by late October the remaining vessels departed the fishery. The general area of operations remained similar to previous years but the total area fished was about doubled.

SOVIET (U.S.S.R.) FISHING ACTIVITIES

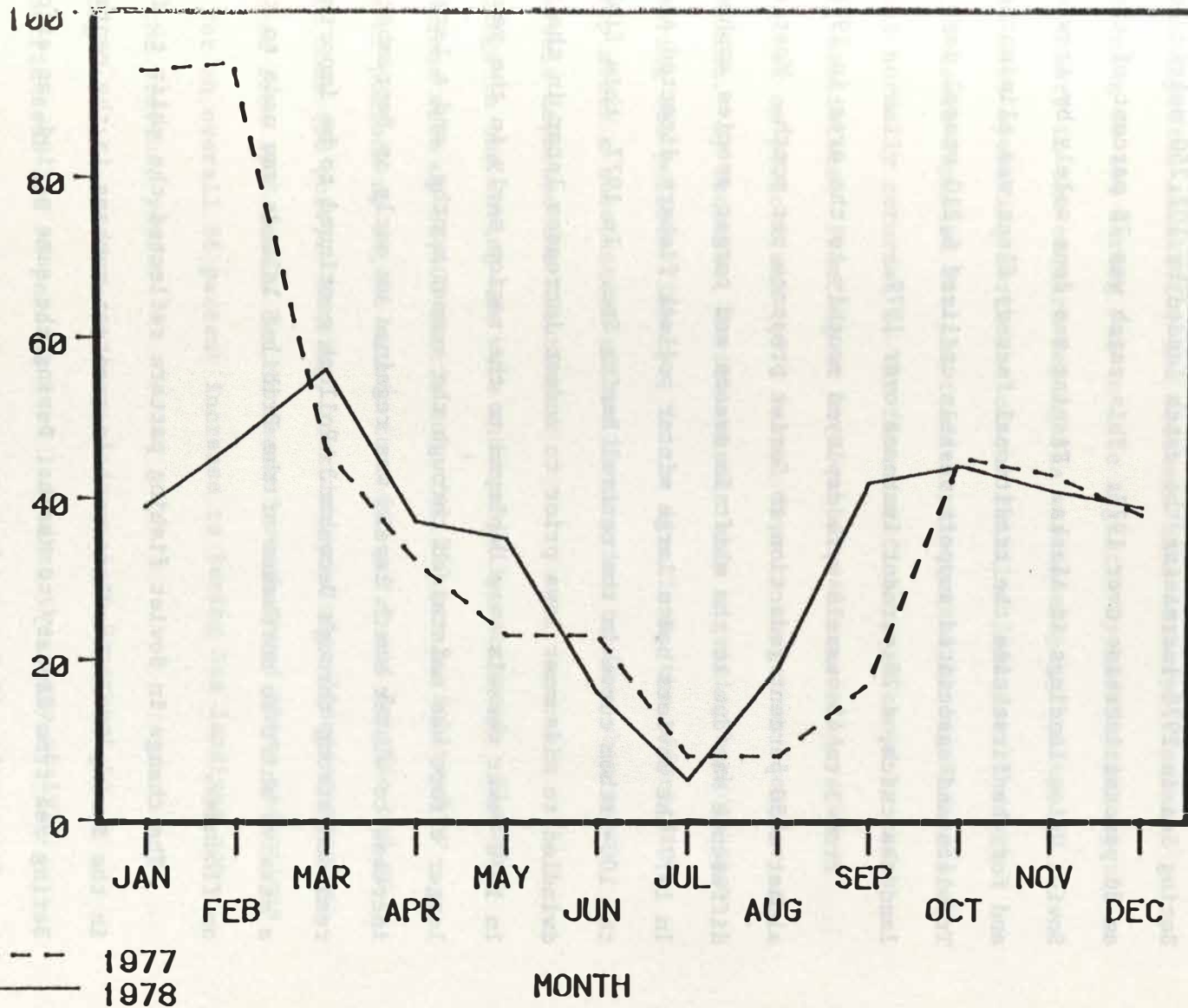
The Soviet Union was the number two foreign fishing power off Alaska in 1978. Landings increased 56 percent from 1977 levels for a total Soviet catch off Alaska of 283,621.4 metric tons (625.3 million lbs.) (Figs. 5 and 6 and Tables 12 and 13). Soviet vessels targeted on pollock, flounder, and Atka mackerel which comprised 47, 31, and 14 percent, respectively, of the total Soviet landings from Alaskan waters. In the Gulf of Alaska, landings decreased less than 1 percent from 1977 shifting the total catch division between the Bering Sea-Aleutian Islands and Gulf of Alaska to 78 and 22 percent, respectively. The same division in 1977 was 65 and 35 percent. Soviet vessels landed 18 percent of all foreign catch taken off Alaska in 1978.

While Soviet landings were markedly increased, allocations were up a modest 13.5 percent to 423,083 metric tons overall. Bering Sea-Aleutian Island allocations were up 9 percent and Gulf of Alaska allocations were up 19 percent. The Soviet fleet was successful at landing more of the total allocations, taking 76 and 47 percent of the totals allocated in the Bering Sea and Gulf of Alaska areas, respectively. During 1977, the same levels were 42 and 60 percent. Only Bering Sea pollock, Atka mackerel, and herring were taken in full with other allocations taken from 1 to 77 percent. Overall, the Soviet fleet took 67 percent of the Soviet total Alaskan allocation in 1978. This catch had an estimated value of \$53 million.

The Soviet Union operated a continuous Alaskan fishery in 1978 having vessels present in all months (Fig. 15 and Tables 14 to 18). The total effort was 8,114 vessel days (22.2 years) and vessel numbers per month varied between 5 and 56. Overall, the number of vessels present and effort exerted was up 10 percent. The total number of vessels present in any month was reduced 16 to 50 percent. For the first time in years, no Soviet factory fleets were present in the Alaska area although one factory processor had been issued an FCMA permit. Bering Sea effort of 6,210 vessel days increased 20 percent while the total number of vessels was reduced almost to half of 1977 levels. Only an increase to trawlers and support vessels in August and September showed monthly increases over 1977. In the Gulf of Alaska, effort was reduced 13 percent to 1,904 vessel days with a similar number of vessels as in 1977. The trawl fishery in the Gulf of Alaska extended into midsummer but the usual late fall and winter fishery never developed. The Soviet fleet generated 11 percent of the total foreign fleet effort off Alaska.

The Soviet Union paid fees well over 1977 levels to fish Alaskan waters in 1978 (Tables 19, 20, and 21). Total fees were up 122 percent to \$2.10 million. While the total catch fees soared upwards 180 percent to \$1.85 million, vessel fees were reduced by 15 percent to \$250,537. The Soviets doubled their share of total fees paid by foreigners to fish off Alaska from 1977 gaining a 24 percent share in 1978.

NUMBER OF MESSAGES



Bering Sea-Aleutian Islands

The Soviet Union continued their major fishing emphasis in the Bering Sea in 1978 increasing the catch landed by 102,250 metric tons, an 86 percent increase over 1977. This catch was 78 percent of the Soviet Union landings in Alaska. Fishing was done solely by trawlers and for the first time the traditional factory fleet was eliminated. Trawlers and associated support vessels utilized 6,210 vessel days to land the catch, a 20 percent increase over 1977.

From 3 to 43 vessels were deployed monthly to the area in 1978, almost a 50 percent reduction to Soviet presence per month. Most of the difference was due to the shift in season and target species emphasis. In 1977 the Soviets had a large winter pollock fishery directed along the 100-fathom curve in the central Bering Sea. In 1977, this fishery dwindled to midsummer lows prior to modest increases later in the year. In 1978 fewer vessels were deployed to the region early in the year, a larger effort was maintained through the summer months, and a large increase to winter month levels was regained as early as September and remained strong through December. Pollock continued to be important but a massive shift to northeast of the Pribilof Islands was made to target on flounder.

The change in Soviet fishing pattern reflected the shift to flounder in the Bering Sea. Trawlers were in greatest numbers in the central Bering Sea from January to March. During the same period, an effort of the same magnitude began in the western Aleutians during January and,

as the fleet increased, spread as far as the eastern Aleutians. By late spring, the central Bering Sea effort dropped from 31 vessels to 2 vessels while the Aleutian fleet continued to increase. By June, most Soviet vessels had departed Alaska for the southern hake fishery. Vessels began returning to the Bering Sea in late August. By mid-September, the flounder fishery in the eastern Bering Sea was developing and up to 35 vessels were operating northeast of the Pribilof Islands. Through November, vessels departed for the traditional central Bering Sea pollock fishery but normally returned to the flounder fishery as shown by catch and effort statistics. From August to November, 493 vessel days were used to target on pollock and 1,972 vessel days to target on flounder; a 80-20 division. By December, Soviet vessels were migrating back to the central Bering Sea pollock fishery. In the Aleutians, the effort did not develop after a substantial effort level prior to June when most Soviet vessels departed the Aleutians.

Landings in the Bering Sea were substantially increased. Flounder landings alone were up 81,403 metric tons (+1,250 pct.), followed by increases of pollock up 29,446 metric tons (46 pct.) and Pacific cod up 277 metric tons (98 pct.). Herring, rockfish, and miscellaneous species were reduced from 1977 levels but increases overshadowed these reductions allowing for an overall 86 percent increase to Bering Sea landings compared to the previous years.

Bering Sea allocations were increased a modest 9 percent to 288,705 metric tons and 76 percent were landed at the close of 1978. Flounder allocations increased 41 percent but the total flounder catch

was only slightly above the 81,200 metric ton quota assigned in 1977. The flounder allocation of 114,300 was 40 percent of the entire Bering Sea quota up 10 percent from 1977. The pollock allocation was reduced from 112,700 metric tons in 1977 to 92,700 metric tons in 1978. This pollock quota was completely landed in 1978 compared to the flounder quota which was 77 percent complete. Additional allocations were made for Atka mackerel, which were almost 100 percent taken. Allocations were reduced for blackcod, rockfish, herring, and miscellaneous species. The total allocation reductions were 31,965 metric tons while increases were 56,270 metric tons.

Gulf of Alaska

The Soviet effort in the Gulf of Alaska produced a minor reduction in catch landed. This was accomplished by elimination of a factory fleet and reduction to the total number of trawlers present monthly. Although the quota was set at 31 percent of the total Soviet allocation, the Gulf of Alaska provided only 22 percent of the catch.

The Soviet Union concentrated in the Shumagin to Kodiak areas of the Gulf of Alaska with minor effort during April in the Yakutat and southeastern areas. Five trawlers continued operations in January throughout the Shumagin to Kodiak areas increasing to 18 vessels by mid-February. In March, the emphasis shifted to the western Gulf of Alaska building to a maximum of 20 vessels. Emphasis shifted to the central Gulf of Alaska prior to the fleets departure in mid-June. A reduced

effort of three vessels was resumed in September and remained unchanged through yearend. The level of effort was up 27 days to 1,779 vessel days, less than a 2 percent increase.

Soviet allocations in the Gulf of Alaska were 134,378 metric tons, 26,178 metric tons more than 1977. Pollock and other species were reduced 10 and 14 percent, respectively, from 1977 levels for a total decrease of 7,638 metric tons. The allocation for Pacific cod jumped from 600 metric tons to 7,018 metric tons with additional increases made for rockfish, flounder, and Atka mackerel. Sablefish and squid were both allocated for the first time. The total increases were 33,816 metric tons and decreases were 7,638 metric tons for a net 19 percent increase. These allocations were only 57 percent complete by the end of the fishing year.

Soviet vessels in the Gulf of Alaska targeted on pollock and Atka mackerel but landed a wide variety of other species for a total catch of 62,636.3 metric tons. This was a reduction of 446.7 metric tons from 1977. Pollock landings increased 1 percent as the Soviets took 73 percent of the Gulf of Alaska pollock quota. Atka mackerel landings remained stable; however, the allocation was doubled resulting in a 48 percent quota completion. Pacific cod landings increased 53 percent but the 1,140 metric tons landed was only 17 percent of the quota. During the previous year, the Soviets exceeded the Pacific cod allocation by 70 percent. Flounder landings were down 66 percent to 196 metric tons while rockfish and miscellaneous species were reduced over 68 percent each. These three species combined amounted to 1,503.5 metric tons, only 5 percent of assigned quotas totaling 31,577 metric tons.

SOUTH KOREAN FISHING ACTIVITIES

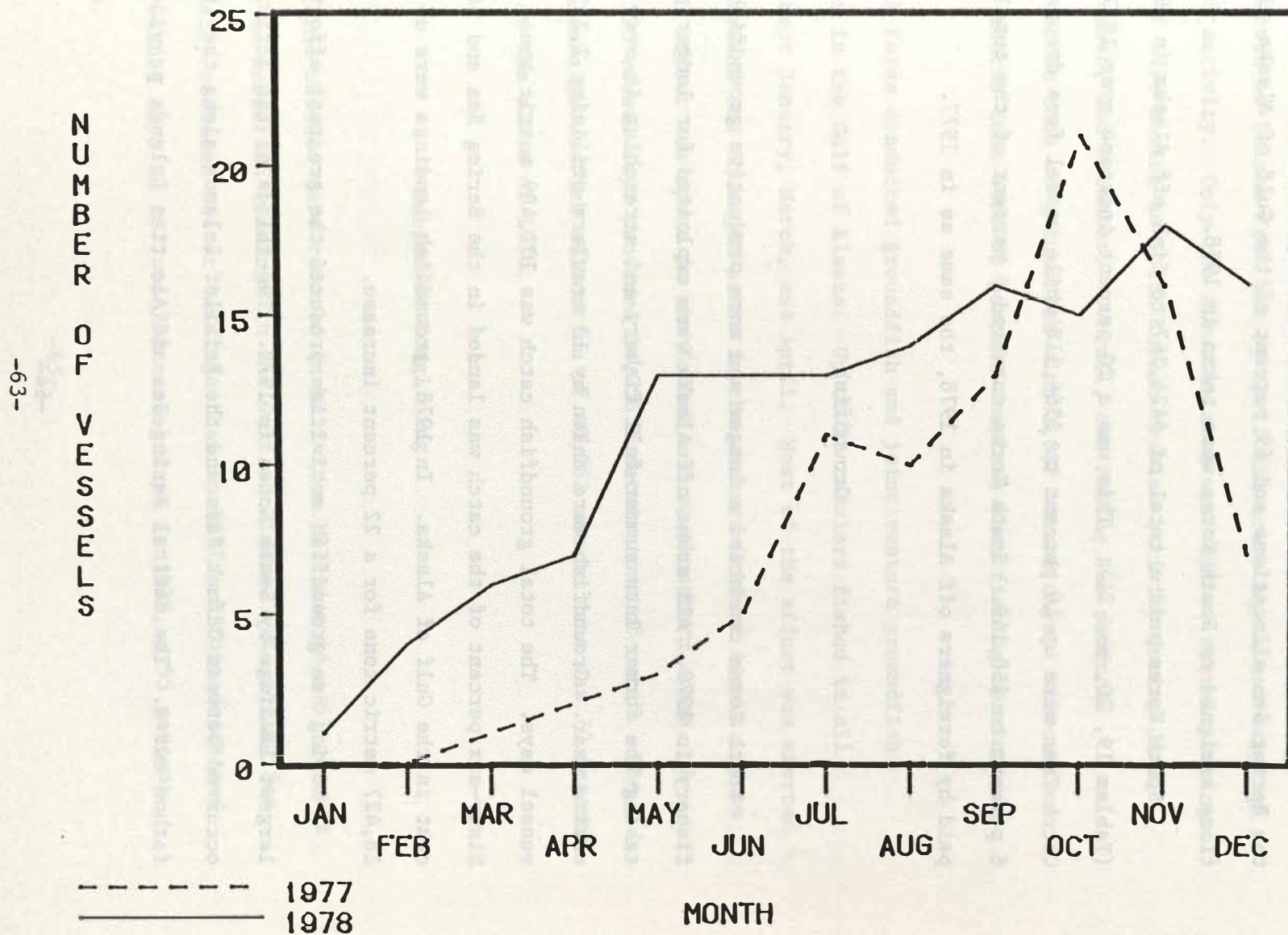
South Korean vessels plied Alaskan waters during every month in 1978 supporting a successful Alaskan fishing effort. A total of 103,358 metric tons of catch was landed, a 21 percent increase from 1977. This was 86 percent of the total allocation assigned to South Korea (Figs. 5 and 6 and Tables 12 and 13). From 1 to 18 vessels were deployed monthly (Figs. 10, 11, and 16 and Tables 16, 17, and 18). This total yearly presence differed from the summer-fall fishery of previous years. Bering Sea effort was up from 62 to 71 percent of South Korean totals. Overall total effort was up 68 percent to 2,856 effort days. This was 4 percent of the total foreign effort off Alaska in 1978 (Tables 14 and 15).

South Korea increased its catch 21 percent over 1977 levels. Reductions to sablefish and pollock landings in the Gulf of Alaska were overshadowed by increases to other Bering Sea and Gulf of Alaska fisheries. The Bering Sea provided 66 percent of South Korean catch off Alaska and the Gulf of Alaska provided 34 percent. A total catch of 103,357.5 metric tons (227.9 million lbs.) was composed primarily of pollock (86 pct.). Miscellaneous species, Pacific cod, and rockfish comprised most of the remaining amount. South Korea provided 7 percent of all foreign catch off Alaska compared to 6 percent in 1977. This catch was valued at \$10.2 million.

Allocations were increased 48 percent in 1978 for a total of 120,182 metric tons. South Korea harvested 86 percent of this allocation.

FIGURE 16

NUMBER OF SOUTH KOREAN VESSELS OFF ALASKA, 1977-78



Primary target species of pollock, sablefish, rockfish, and miscellaneous species categories remained, and additional allocations of flounder, mackerel, herring, and Pacific cod were added. Overall, 98 percent of the Bering Sea allocations and 69 percent of the Gulf of Alaska allocations assigned to South Korea were taken in 1978.

South Korea paid a total of \$424,267 to fish off Alaska in 1978 (Tables 19, 20, and 21). This was a 20 percent increase over 1977. Catch fees were up 16 percent to \$366,118 while vessel fees dropped 6 percent to \$58,149. South Korea cornered 5 percent of the total fees paid by foreigners off Alaska in 1978, the same as in 1977.

Groundfish

South Korea conducted a larger and more productive groundfish fishery in 1978. All areas off Alaska were exploited for longer periods taking the former late summer-fall fishery and stretching it over the entire year. Groundfish were taken by 13 trawlers utilizing 2,213 vessel days. The total groundfish catch was 102,489 metric tons. Sixty-six percent of the catch was landed in the Bering Sea and 34 percent in the Gulf of Alaska. In 1978, groundfish landings were up 18,427 metric tons for a 22 percent increase.

Bering Sea groundfish activities produced the greatest effort and largest landings by South Korea in 1978. Two-thirds of the activity occurred between Unimak Pass and the Pribilof Islands along the 100-fathom curve. The central Bering Sea and Aleutian Islands provided the

remaining one-third. The first trawler arrived in late January in the eastern Aleutians. By mid-February, up to four trawlers were operating from the Aleutians to the central Bering Sea. In March, all activity centered north of Unimak Pass but by April all areas again had varying degrees of activity. Only the Aleutian area was void of vessels during portions of 1978 having no South Korean trawler activity during June, July, November, and December. Overall, the Bering Sea produced 68,232.5 metric tons of groundfish with 1,687 vessel days. Allocations of 69,420 metric tons were 93 percent complete when fishing terminated for 1978.

South Korea conducted groundfish and joint venture groundfish activities in the Gulf of Alaska. Up to 11 trawlers fished in all months except January, March, and April. Most of the effort was exerted in the Chirikof and Shumagin areas in the western Gulf of Alaska. Some additional effort was spent in the Kodiak and southeastern areas. A total of 526 vessel days produced 34,256.1 metric tons of catch. The Gulf of Alaska groundfish allocation of 48,962 metric tons was 70 percent complete at the close of 1978.

Sablefish Longlining

Longline catches were reduced in half from 1977 due to a 61 percent reduction to sablefish landings in the Gulf of Alaska. The Bering Sea area actually produced better landings than in 1977. Effort decreased from 635 vessel days in 1977 to 285 vessel days in 1978, a 55 percent reduction.

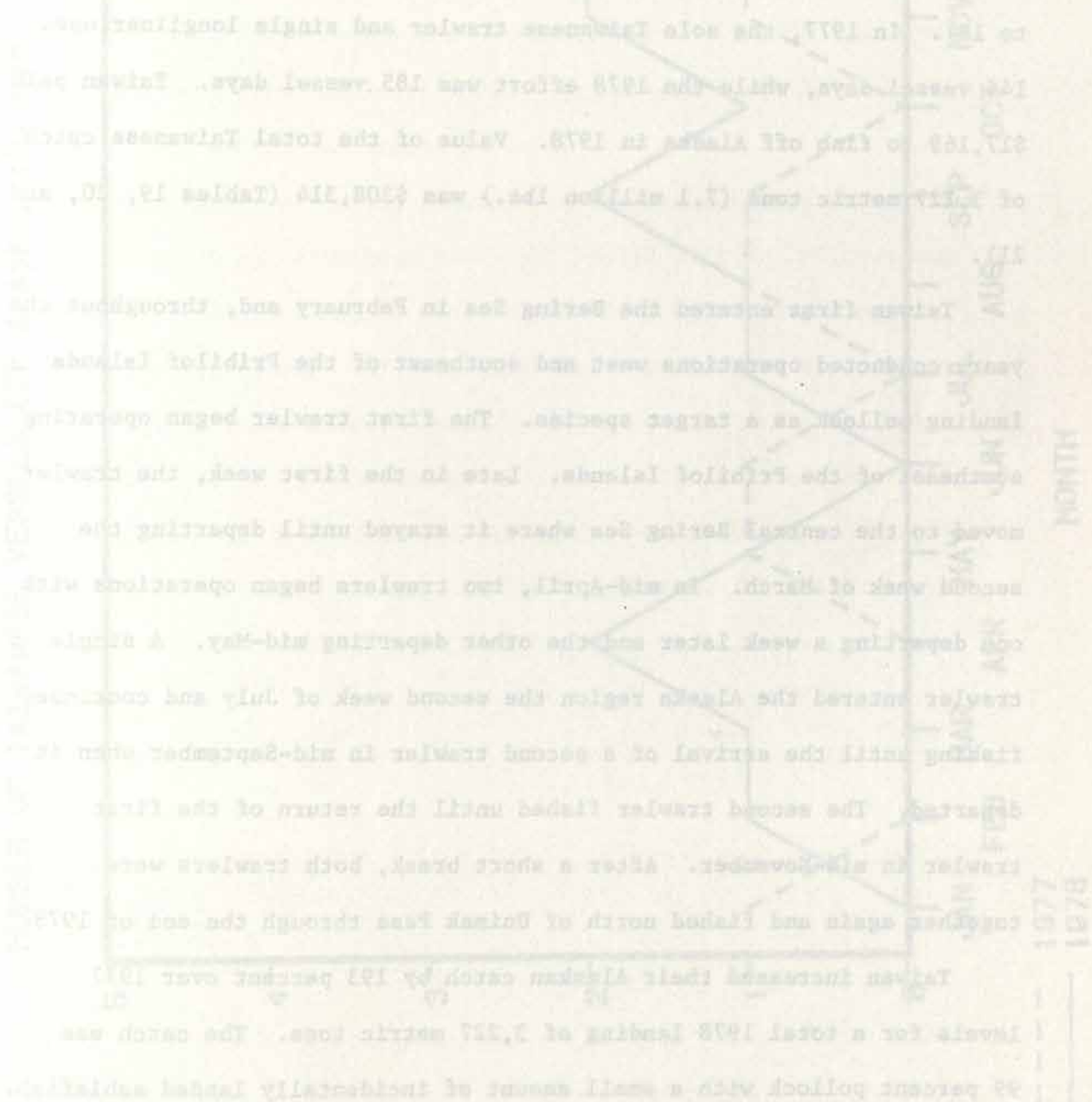
South Korean longlining activity was mostly in the Gulf of Alaska. From one to two longliners fished in all months from May to November, as opposed to a March to December effort in 1977. The 257 vessel days of longliner effort were expended in the Shumagin to Kodiak area with the effort advancing westward from Kodiak throughout the season. This effort was reduced 53 percent from 1977 while the sablefish quota was increased 10 percent to 1,465 metric tons. The sablefish catch for the Gulf of Alaska was 664.8 metric tons. Although reduced in half from 1977, this amount was still over three-fourths of South Korean sablefish landings from Alaskan waters in 1978.

Bering Sea longliner catches were 204.1 metric tons in 1978, an amount 229 percent greater than 1977. These landings were made in November and December by two longliners fishing a total of 28 days. Only 39 percent of the 335 metric ton quota (reduced from 600 m.t. in 1977) was taken by these two vessels which operated between Amukta Pass and Unimak Pass in the Bering Sea.

Joint Venture

A joint U.S.-South Korean fishing venture was conducted for a short period in November 1978. South Korean vessel SOO GONG No. 51 and U.S. vessel JOSEPHINE CAROLYN conducted joint operations where the SOO GONG No. 51 operated as a processing factoryship and the JOSEPHINE CAROLYN the catcher vessel. This was the first such venture approved by the North Pacific Management Council under FCMA regulations since March 1,

1977. Joint venture operations were conducted intermittently for 2 weeks in the Shumagin area during mid-November. The venture was terminated due to bad weather by the end of November. There was no resumption of U.S.-South Korean joint venture activity by the close of 1978. The catch for the 2 weeks was very small and mostly pollock.



TAIWAN FISHING ACTIVITIES

Taiwan dispatched two trawlers to the Alaska region in 1978. Both were dispatched to the Bering Sea and only the months of January and July were void of Taiwanese presence (Figs. 10, 11, and 17 and Tables 12 to 18). In 1977, the sole Taiwanese trawler and single longliner used 146 vessel days, while the 1978 effort was 185 vessel days. Taiwan paid \$17,169 to fish off Alaska in 1978. Value of the total Taiwanese catch of 3,227 metric tons (7.1 million lbs.) was \$308,314 (Tables 19, 20, and 21).

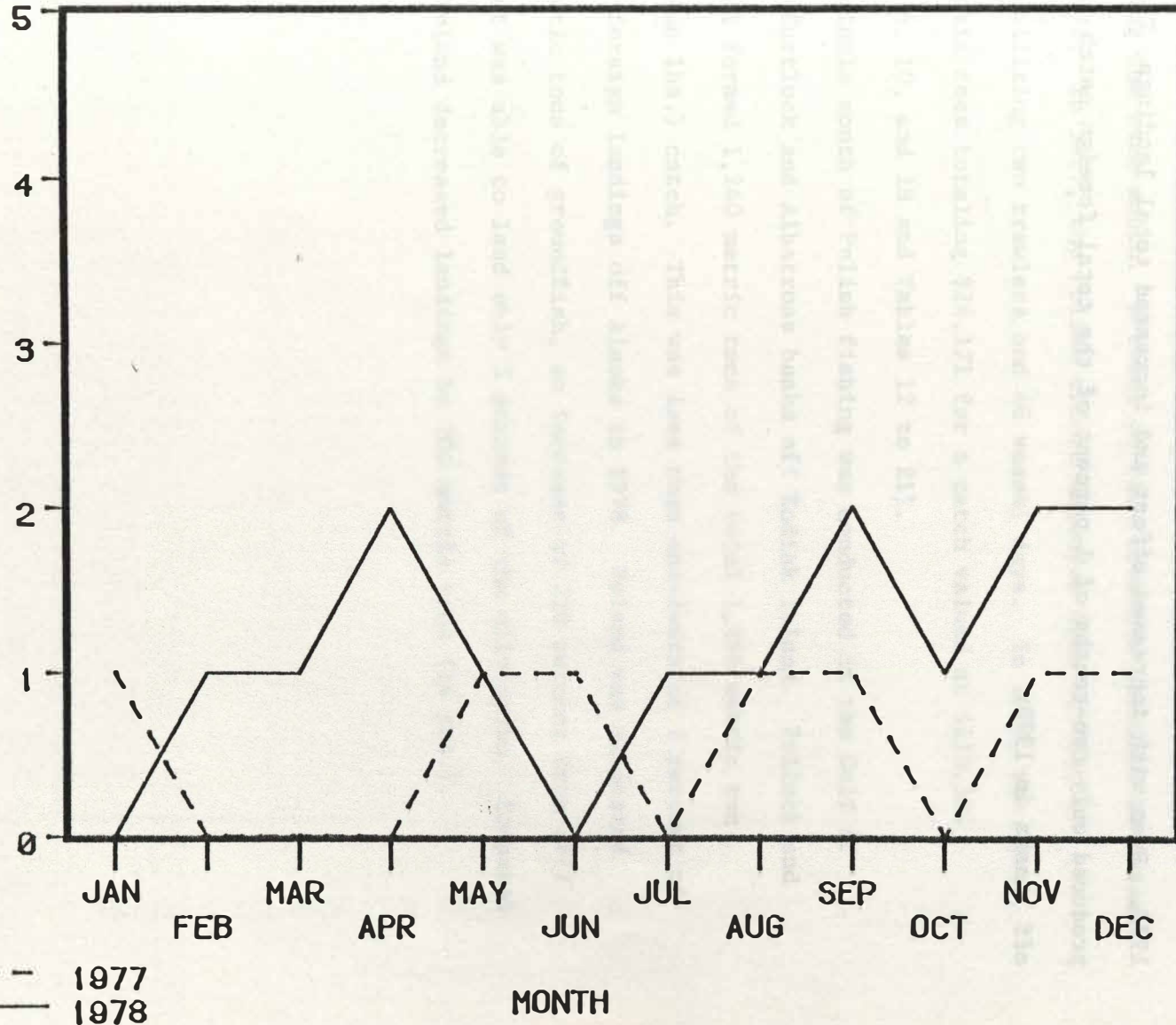
Taiwan first entered the Bering Sea in February and, throughout the year, conducted operations west and southeast of the Pribilof Islands landing pollock as a target species. The first trawler began operating southeast of the Pribilof Islands. Late in the first week, the trawler moved to the central Bering Sea where it stayed until departing the second week of March. In mid-April, two trawlers began operations with one departing a week later and the other departing mid-May. A single trawler entered the Alaska region the second week of July and continued fishing until the arrival of a second trawler in mid-September when it departed. The second trawler fished until the return of the first trawler in mid-November. After a short break, both trawlers were together again and fished north of Unimak Pass through the end of 1978.

Taiwan increased their Alaskan catch by 193 percent over 1977 levels for a total 1978 landing of 3,227 metric tons. The catch was 99 percent pollock with a small amount of incidentally landed sablefish.

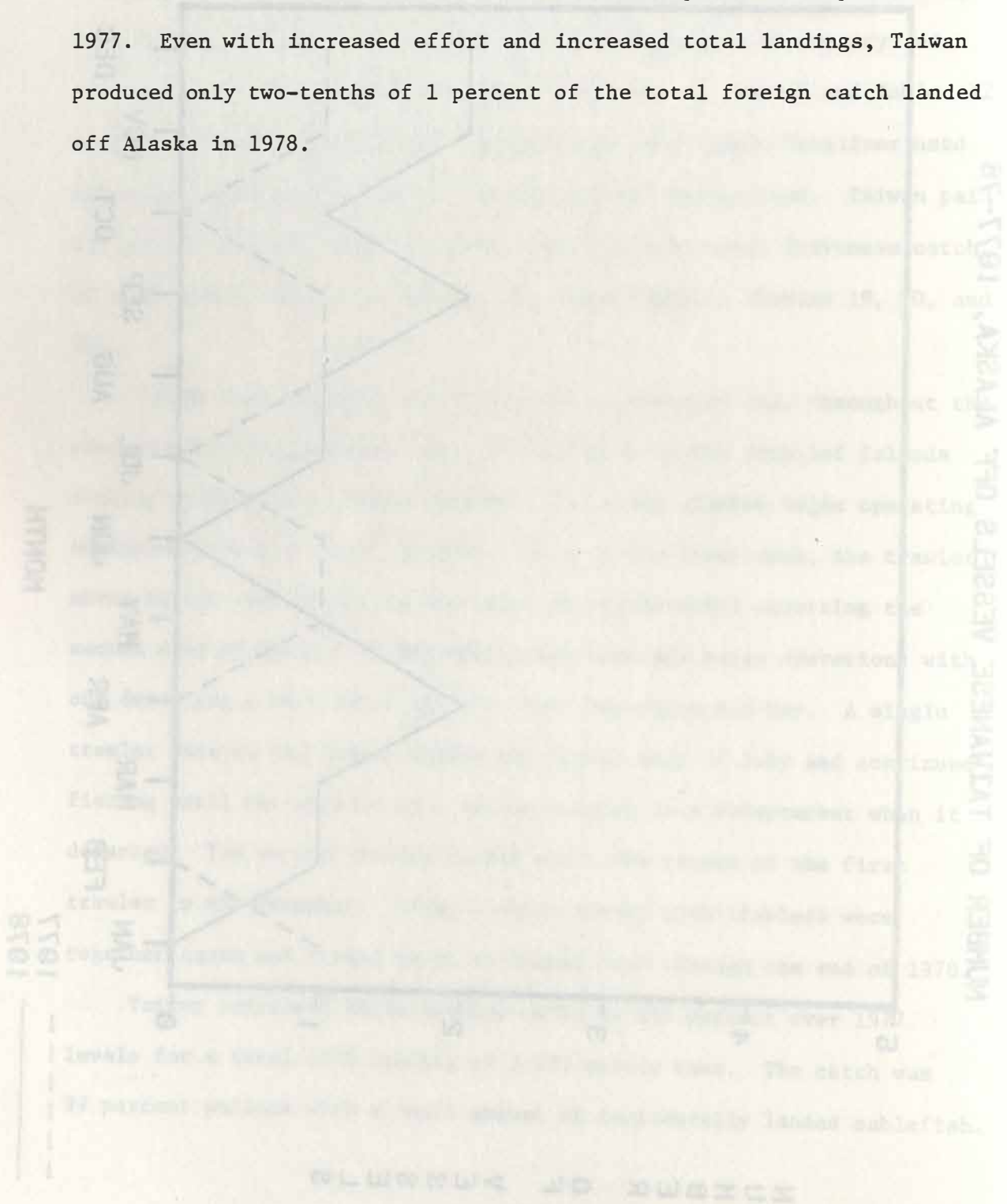
FIGURE 17

NUMBER OF TAIWANESE VESSELS OFF ALASKA, 1977-78

NUMBER OF VESSELS



The doubling of the fishery harvest occurred during the same period when allocations were increased only 12 percent. Overall, 54 percent of Taiwan's total allocation was landed in 1978 compared to 27 percent in 1977. Even with increased effort and increased total landings, Taiwan produced only two-tenths of 1 percent of the total foreign catch landed off Alaska in 1978.



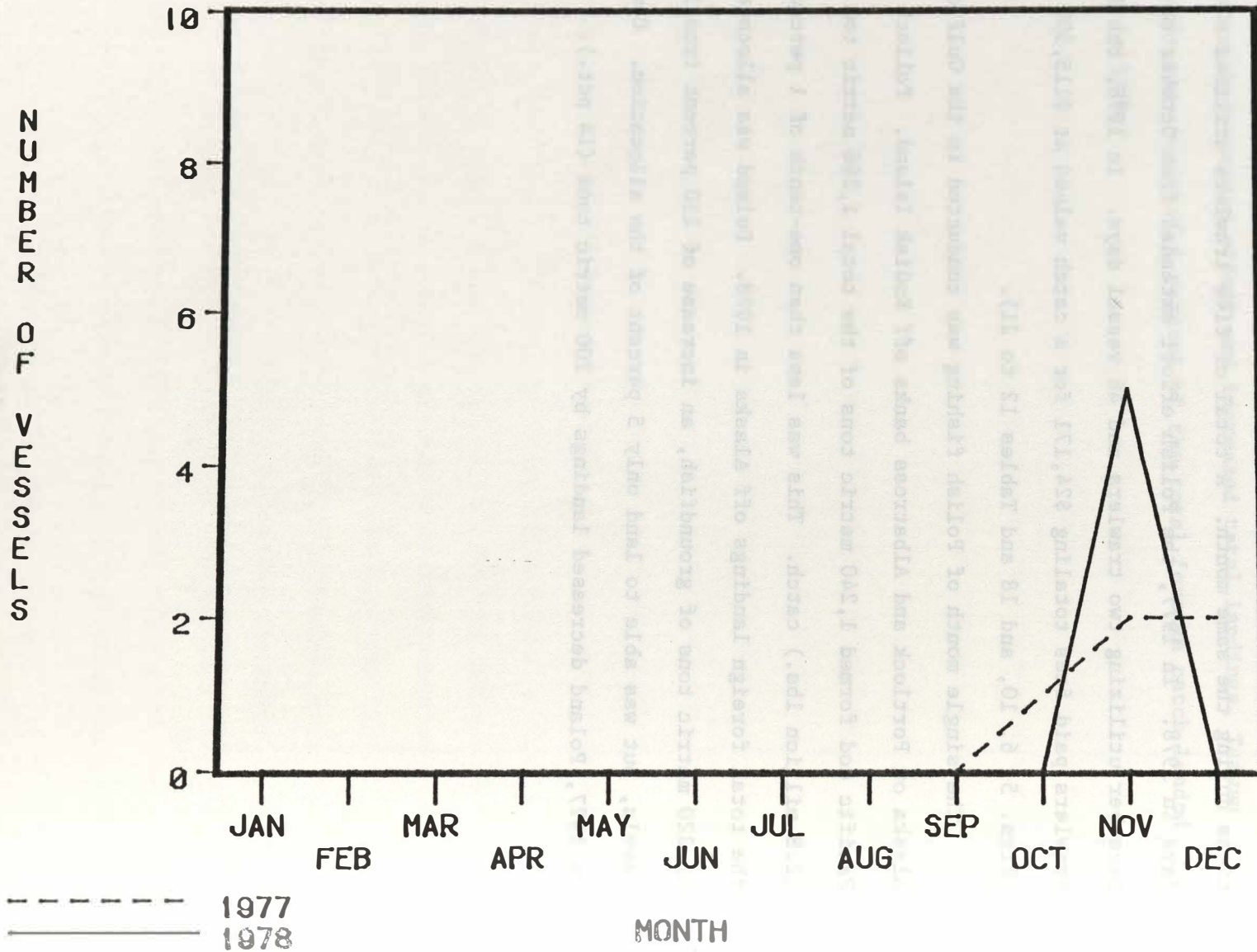
POLISH FISHING ACTIVITIES

Poland resumed Alaskan fishing in early November and ceased operations during the same month. A total of five trawlers utilized 83 vessel days in 1978. In 1977, the Polish effort extended from October to December utilizing two trawlers and 46 vessel days. In 1978, the five trawlers paid fees totaling \$24,171 for a catch valued at \$115,300 (Figs. 5, 6, 10, and 18 and Tables 12 to 21).

The single month of Polish fishing was conducted in the Gulf of Alaska on Portlock and Albatross banks off Kodiak Island. Pollock and Pacific cod formed 1,240 metric tons of the total 1,266 metric ton (2.8 million lbs.) catch. This was less than one-tenth of 1 percent of the total foreign landings off Alaska in 1978. Poland was allocated 25,220 metric tons of groundfish, an increase of 250 percent from 1977 levels, but was able to land only 5 percent of the allocation. Compared to 1977, Poland decreased landings by 200 metric tons (14 pct.).

FIGURE 18

NUMBER OF POLISH VESSELS OFF ALASKA, 1977-78



MEXICAN FISHING ACTIVITIES

The government of Mexico was issued two permits to begin Alaskan operations in December 1978. At the same time, 29,292 metric tons (64.6 million lbs.) of groundfish were allocated to Mexico. At the end of 1978, Mexico had not begun operations in the Alaskan Fishery Conservation Zone.

TABLES

TABLE 1 - Agreements, Conventions, and Laws Enforced by
National Marine Fisheries Service and United
States Coast Guard Off Alaska - 1978

Table 1 - Law Enforcement Branch Staffing - 1978

Special Agent in Charge	1	Review in 2 years
Juneau Office		
Special Agents	3	Review in 2 years
Support/Data Analysis	4	Review in 2 years
Sitka Office		
Special Agents	2	Review in 2 years
Support	1	Review in 2 years
Kodiak Office		
Special Agents	9	Review in 2 years
Support	1	Review in 2 years
Total Staff	21	

Note: Agents enforcing marine mammals and endangered species Acts located in all offices plus in Anchorage not included in this fisheries report.

Table 2 - Special Agent Deployment Aboard Fishery Patrols - 1978

	Miles	Percent	Days		Hours	Percent	Sightings			
			Patrolled	Percent			Foreign	Percent	U.S.	Percent
<u>Surface</u>										
No Agent	89,903	66	562		11,351	68	1,742	75	650	75
Agent	46,812	34	249		5,440	32	594	25	221	25
Total	136,715	(34)	811	--	16,791	(91)	2,336	(37)	871	(44)
<u>Air</u>										
No Agent	43,773	17	--		428	27	665	17	195	31
Agent	221,623	83	--		1,145	73	3,158	83	940	69
Total	265,396	(66)	--	--	1,574	(9)	3,823	(63)	1,135	(56)
<u>Grand Totals</u>										
No Agent	133,676	(33)	--	--	11,780	(64)	2,407	(40)	845	(43)
Agent	268,435	(77)	--	--	6,585	(36)	3,752	(60)	1,161	(57)
Total All	402,111	--	--	--	18,365	--	6,159	--	2,006	--

NOTE: Numbers in () are based on "TOTAL ALL" figures.

Table 3 - Agreements, Conventions, and Laws Enforced by
National Marine Fisheries Service and United
States Coast Guard Off Alaska - 1978

<u>International Agreements</u>	<u>Begin</u>	<u>Signed</u>	<u>Ends</u>
Japan	11/29/77	3/18/77	12/31/82, Review in 2 years
USSR	2/28/77	11/26/76	Review in 2 years
South Korea	3/3/77	1/4/77	7/1/82 Review in 2 years
Taiwan	2/28/77	9/15/76	Review in 2 years
Poland	2/28/77	8/2/76	Review in 2 years
Mexico	12/29/77	8/26/77	7/1/82, Review in 2 years
Canada	7/26/77 (7/26/77 Agreement extended to April 1, 1978)	2/24/77	12/31/77 (Expired April 1 continues to be renegotiated at yearend)

Note: All agreements acknowledge U.S. Fishery Conservation Zone.

<u>Conventions</u>	<u>Originated</u>	<u>Extended</u>	<u>Expires</u>
Fur Seal Convention (Act - 16 USC 1151-1187)	1911	1975	October 1980
Halibut Convention (Act - 16 USC 772-772j)	1924	1953	2 years notice
Whaling Convention (Act - 16 USC 916)	1937	1946	Within any year
INPFC (Act - 16 USC 1021-1032)	1953		1 year notice

<u>Public Laws</u>	<u>Originated</u>	<u>Began</u>	
P.L. 91-135 (Lacey Act Amendment)	Dec. 1969		
P.L. 94-265 (200-Mile Fisheries Zone) (16 USC 1801-1882)	4/13/76	3/1/77	Indefinite

Table 4 - Joint National Marine Fisheries Service-United States Coast Guard Alaska Fisheries Patrols, 1963-1978

Calendar Year	Agreements and Laws Enforced	Number of Agents	Number of Ships	Surface Days	Surface Miles	Aerial Hours	Aerial Miles	Total Miles	Sightings of Foreign Vessels	Vessels Apprehended for Infractions
1963	4	6	6	220	45,274	668	193,274 ^{1/}	238,548	1,087	--
1964	7	7	5	245	48,915	1,040	145,116	194,031	3,105	--
1965	8	7	6	296	54,015	1,428	200,000	254,015	5,785	1
1966	9	7	6	306	59,108	1,345	190,300	249,408	3,638	1
1967	11	8	6	327	81,729	1,373	207,000 ^{2/}	288,729	3,859	5
1968	11	7	10	416	82,264	1,107	156,000 ^{2/}	238,264	4,158	--
1969	11	7	13	332	67,227	841	147,000	214,227	2,764	5
1970	12	8	11	380	69,011	1,135	190,000	259,011	4,300	7
1971	12	10	13	488	89,421	1,375	236,239	325,660	5,125	4
1972	13	10	16	493	96,681	1,815	261,731	358,412	5,865	8
1973	13	9	15	529	113,945	1,974	335,186	449,131	5,473	6
1974	13	15	9	593	114,317	2,472	406,377	520,694	6,211	7
1975	13	14	14	742	142,747	2,162	356,916	499,663	5,450	5
1976	13	15	12	694	125,104	2,764	373,581	498,685	7,143	25
1977	14	16	19	893	163,207	1,327	135,230	298,437	5,035	77
1978	14	14	18	811	136,715	1,574	265,396	402,111	6,159	121

^{1/} 94,274 miles in 668 hours by Annette and Kodiak Air Stations. 99,000 miles by rotational C-130's from other Coast Guard Districts.

^{2/} Patrols by Annette and Kodiak Air Stations augmented by rotational C-130's from other Coast Guard Districts.

Table 5 - Summary of Coast Guard Surface Patrols - 1978*

Vessel Name	Days Patrolled	Miles Patrolled	Foreign Sightings and Boardings										Domestic (USA)		Unidentified	Total			
			Japan		USSR		South Korea		Taiwan		Canada		Total Sightings	Total Boardings	Sightings	Sightings	Boardings		
			S	B	S	B	S	B	S	B	S	B	S	B					
Boutwell	44	7,959	171	21	79	15	16	3	--	--	--	--	266	39	34	--	8	308	39
Campbell	21	4,376	54	18	7	2	1	--	--	--	--	62	20	12	--	7	81	20	
Cape Coral	11	1,856	--	--	--	--	--	--	--	--	--	--	--	--	45	36	--	45	36
Cape Jellison	18	1,170	--	--	--	--	--	--	--	--	2	1	2	1	206	200	2	210	201
Clover	21	2,873	2	--	10	10	--	--	--	--	--	--	12	10	2	--	--	14	10
Confidence	33	6,844	17	8	8	8	2	2	--	--	--	--	27	18	40	6	--	104	24
Ironwood	26	3,821	37	3	--	--	--	--	--	--	--	--	37	3	--	--	--	37	3
Jarvis	87	15,629	154	51	14	2	11	--	--	--	--	--	179	53	48	--	131	358	53
Laurel	20	2,966	12	--	20	--	--	--	--	--	--	--	32	--	10	--	--	42	--
Mellon	56	3,576	223	150	5	5	3	--	--	--	--	--	231	155	29	--	57	317	155
Midgett	43	6,431	67	19	35	9	27	10	--	--	--	--	129	38	72	10	167	368	48
Morgenthau	94	16,834	304	70	85	36	34	15	3	2	1	--	427	123	101	2	161	689	125
Munro	113	20,047	208	44	68	6	3	2	1	--	4	1	288	53	64	--	163	511	53
Resolute	29	4,602	31	21	--	--	--	--	--	--	7	2	38	23	45	5	24	107	28
Rush	97	18,731	251	92	90	27	26	13	2	2	--	--	369	134	45	--	101	515	134
Storis	76	15,112	134	18	78	10	14	5	1	1	2	1	229	35	101	--	32	362	35
Sweetbriar	22	3,888	6	2	2	2	4	--	--	--	--	--	12	4	17	--	22	51	4
TOTAL	811	136,715	1,671	517	501	132	141	50	7	5	16	5	2,336	709	871	259	912	4,119	968

* Sightings - S Boardings - B

Table 4 - Joint National Marine Fisheries Service-Gulf of Alaska Coast Guard Alaska Fisheries Patrols, 1967-1978

Calendar Year	Approximate Area Patrolled	Number of Vessels	Number of Ships	Surface Days	Surface Miles	Air Days	Air Miles	Total Days	Total Miles
1967		10	12	100	100,000	100	100,000	200	200,000
1968		10	12	100	100,000	100	100,000	200	200,000
1969		10	12	100	100,000	100	100,000	200	200,000
1970		10	12	100	100,000	100	100,000	200	200,000
1971		10	12	100	100,000	100	100,000	200	200,000
1972		10	12	100	100,000	100	100,000	200	200,000
1973		10	12	100	100,000	100	100,000	200	200,000
1974		10	12	100	100,000	100	100,000	200	200,000
1975		10	12	100	100,000	100	100,000	200	200,000
1976		10	12	100	100,000	100	100,000	200	200,000
1977		10	12	100	100,000	100	100,000	200	200,000
1978		10	12	100	100,000	100	100,000	200	200,000

Table 6 - Summary of Coast Guard Aerial Patrols - 1978

Location	Days Patrolled	Miles Patrolled	Foreign Sightings by Nation						Total Foreign Sightings	United States Sightings	Unidentified Sightings	Total Sightings
			Japan	USSR	South Korea	Taiwan	Poland	Canada				
Kodiak	215	240,249	2,904	532	292	19	8	17	3,772	518	123	4,413
Sitka	63	25,147	51	--	--	--	--	--	51	617	--	668
Total Air Patrols	278	265,396	2,955	532	292	19	8	17	3,823	1,135	123	5,081
Ship Deployed Helicopters*	200 Missions	20,563 278.4 hours	(285)	(110)	(19)	(3)	(1)	(3)	(421)	(56)	(53)	--
Total Surface and Air Patrols	1,089	402,111	4,626	1,033	433	26	8	33	6,159	2,006	1,035	9,200
Percent by Surface	75	44	36	48	33	27	--	48	38	43	88	45
Percent by Air	25	66	64	52	67	73	100	52	62	57	12	55

*Included in total patrol statistics for surface vessels.

TABLE 7. BOARDINGS OF FOREIGN VESSELS IN THE
ALASKA REGION 1978

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VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
ABUGAWA MARU	7/26/78	5607N	16753W	
AKASHI MARU NO. 19	7/29/78	5612N	16427W	
AKASHI MARU NO. 71	7/26/78	5607N	16755W	
AKASHI MARU NO. 72	7/26/78	5607N	16755W	
AKASHI MARU NO. 76	7/26/78	5628N	16805W	
AKASHI MARU NO. 77	7/26/78	5628N	16805W	
AKATSUKI MARU NO. 1	9/10/78	5535N	16705W	FC
AKEBONO MARU NO. 11	5/01/78	5258N	17211W	
AKEBONO MARU NO. 11	7/15/78	5214N	17150W	
AKEBONO MARU NO. 11	15/19/785	6030N	17237W	
AKEBONO MARU NO. 12	10/14/785	5945N	17724W	
AKEBONO MARU NO. 12	12/05/785	5918N	17747W	
AKEBONO MARU NO. 15	5/11/78	5626N	17048W	
AKEBONO MARU NO. 155	9/18/78	5206N	17151W	
AKEBONO MARU NO. 15	12/05/78	5917N	17745W	
AKEBONO MARU NO. 16	5/11/78	5629N	17045W	
AKEBONO MARU NO. 16	9/20/78	5810N	17411W	
AKEBONO MARU NO. 16	12/05/78	5918N	17742W	
AKEBONO MARU NO. 17	4/27/78	5614N	17046W	
AKEBONO MARU NO. 17	9/28/78	5943N	17740W	
AKEBONO MARU NO. 17	12/05/78	5918N	17743W	
AKEBONO MARU NO. 18	4/20/78	5700N	17300W	
AKEBONO MARU NO. 18	9/26/78	5840N	17930W	
AKEBONO MARU NO. 18	12/05/78	5915N	17720W	
AKEBONO MARU NO. 21	4/01/78	5640N	17316W	
AKEBONO MARU NO. 21	9/28/78	5756N	16715W	
AKEBONO MARU NO. 21	11/24/78	5933N	17740W	
AKEBONO MARU NO. 22	6/22/78	5201N	17555E	
AKEBONO MARU NO. 22	7/16/78	5218N	17145W	
AKEBONO MARU NO. 22	8/29/78	5257N	16754W	
AKEBONO MARU NO. 22	11/12/78	5405N	16134W	
AKEBONO MARU NO. 22	12/11/78	5547N	16851W	
AKEBONO MARU NO. 27	5/01/78	5105N	17211W	
AKEBONO MARU NO. 27	5/25/78	5416N	16041W	
AKEBONO MARU NO. 27	7/12/78	5936N	14322W	
AKEBONO MARU NO. 27	11/02/78	5446N	16533W	
AKEBONO MARU NO. 28	5/01/78	5158N	17205W	
AKEBONO MARU NO. 28	7/12/78	5902N	14757W	
AKEBONO MARU NO. 28	11/18/78	5442N	16523W	
AKEBONO MARU NO. 31	1/05/785	5524N	15545W	
AKEBONO MARU NO. 31	4/25/785	5803N	17343W	
AKEBONO MARU NO. 31	6/30/785	5405N	16204W	
AKEBONO MARU NO. 31	7/12/785	5938N	14305W	
AKEBONO MARU NO. 31	11/10/78	5445N	16528W	
AKEBONO MARU NO. 32	4/19/78	5620N	16842W	
AKEBONO MARU NO. 32	7/14/78	5629N	15212W	
AKEBONO MARU NO. 32	8/14/78	5925N	14338W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
AKEBONO MARU NO. 32	11/10/78	5447N	16528W	
AKIHO MARU	7/27/78	5945N	17414W	
ANYO MARU NO. 11	1/11/78			
ANYO MARU NO. 11	7/12/78	5931N	14335W	FC
ANYO MARU NO. 11	10/28/78	5931N	14430W	
ANYO MARU NO. 12	10/09/781	5438N	16552W	
ANYO MARU NO. 15	7/15/781	5244N	17203W	FC
ANYO MARU NO. 21	4/21/781	5840N	17420W	
ANYO MARU NO. 210	7/08/781	5838N	14018W	
ANYO MARU NO. 21	11/26/781	5445N	16621W	
ANYO MARU NO. 22	1/11/78			
ANYO MARU NO. 22	5/27/78	5540N	15506W	
ANYO MARU NO. 8	10/09/78	5436N	16558W	
ANYO MARU NO. 8	11/18/780	5439N	16534W	
AOBA MARU	7/25/781	5911N	17320W	
AZUMA MARU NO. 32	5/15/781	5849N	17505W	FV
AZUMA MARU NO. 32	7/10/781	5849N	17706W	
AZUMA MARU NO. 32	8/11/781	5859N	17732W	
BENTEN MARU NO. 8	7/11/781	5747N	17315W	
CHIKUBU MARU	4/08/781	5908N	17820W1	
CHIKUBU MARU	11/24/781	5927N	17732W1	
CHOJUN MARU NO. 21	2/17/781	5620N	17118W1	FC
CHOJUN MARU NO. 210	12/09/78	5939N	17711W1	
CHOYO MARU NO. 81	5/20/78	5417N	16052W1	
CHOYO MARU NO. 810	7/22/78	5211N	17521W1	
CHOYO MARU NO. 81	9/28/78	5450N	15732W	
CHUYO MARU NO. 220	11/21/78	6035N	17252W	
DAIAN MARU NO. 118	5/17/78	5552N	16846W	
DAIAN MARU NO. 188	12/05/78	5918N	17742W	
DAIAN MARU NO. 88	7/10/78	5732N	17311W	
DAIHO MARU	7/12/78	5934N	14323W	
DAIKICHI MARU NO. 35	2/09/78	6013N	17904W	
DAIKICHI MARU NO. 35	12/07/78	5933N	17725W	
DAIKICHI MARU NO. 37	2/01/78	5618N	17015W	FC
DAIKICHI MARU NO. 37	4/22/78	5850N	17754W	
DAIKICHI MARU NO. 37	7/10/780	5852N	17756W	
DAIKICHI MARU NO. 37	12/07/78	5935N	17725W	
DAINICHI MARU NO. 31	12/07/78	5933N	17721W	
DAIPYO MARU	11/06/78	5353N	16630W	
DAIRIN MARU NO. 28	2/09/78	6013N	17948W	
DAIRIN MARU NO. 28	10/14/78	5950N	17658W	
DAISHIN MARU NO. 12	3/27/78	5417N	16125W1	
DAISHIN MARU NO. 120	6/06/78	5556N	15340W	
DAISHIN MARU NO. 12	8/16/78	5634N	15159W1	
DAISHIN MARU NO. 22	2/13/78	5506N	15643W1	
DAISHIN MARU NO. 22	3/26/78	5359N	16215W	
DAISHIN MARU NO. 22	5/25/78	5416N	16040W1	

TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
DAISHIN MARU NO. 22	7/15/78	5601N	15331W	
DAISHIN MARU NO.1 22	8/17/78	5633N	15157W	
DAISHIN MARU NO. 23	5/13/78	5436N	15832W	
DAISHIN MARU NO. 23	5/26/78	5441N	15806W	
DAISHIN MARU NO. 23	7/05/78	5610N	15328W	
DAITO MARU NO. 38	2/06/78	5957N	17850W	FC
DAITO MARU NO. 38	5/06/78	5233N	17437E	
DAITO MARU NO. 38	7/20/78	5247N	17032W	
DAITO MARU NO. 38	12/09/78	5937N	17712W	
DAITO MARU NO. 55	2/06/78	5946N	17839W	
DAITO MARU NO. 55	7/20/78	5249N	17035W	
EBISU MARU NO. 11	7/26/78	5945N	17414W	
EBISU MARU NO. 21	7/25/78	5911N	17320W	
EBISU MARU NO. 38	5/09/78	5250N	17043W	
EBISU MARU NO. 38	6/26/78	5130N	17836E	
EBISU MARU NO. 38	7/16/78	5221N	17146W	FC
EBISU MARU NO. 38	9/26/78	5935N	17730W	
EBISU MARU NO. 88	6/28/78	5226N	17243W	
EBISU MARU NO. 88	8/21/78	5525N	15544W	FC
EBISU MARU NO. 88	11/02/78	5509N	15705W	
EIHEI MARU	3/17/78	6003N	17851W	
EIKYU MARU	6/30/78	5934N	17749W1	FC
EIKYU MARU NO. 12	1/19/78	5840N	17635W1	
EIKYU MARU NO. 12	11/18/78	5441N	16530W1	
EIKYU MARU NO. 2	11/13/78	5441N	16527W1	
EIKYU MARU NO. 26	10/28/78	5933N	14350W1	
EIKYU MARU NO. 26	12/05/78	5444N	16640W1	
EIKYU MARU NO. 86	7/17/78	5439N	16552W1	
EIKYU MARU NO. 86	9/29/78	5436N	16608W1	
EIYO MARU	6/25/78	5435N	17918W1	
EIYO MARU	7/25/78	5911N	17319W1	
EIYO MARU	7/25/78	5911N	17320W1	
FUJI MARU NO. 1	7/29/78	5611N	16435W1	
FUKUCHO MARU NO. 11	2/06/78	5940N	17804W1	
FUKUHO MARU NO. 18 ¹	3/15/78	5607N	17300W1	
FUKUHO MARU NO. 18	8/22/78	5258N	17028W1	
FUKUI MARU NO. 10	4/04/78	5906N	17825W1	
FUKUI MARU NO. 10	9/28/78	5943N	17739W	FC
FUKUI MARU NO. 10	12/09/78	5940N	17705W	
FUKUI MARU NO. 8	7/10/78	5820N	17430W	
FUKUI MARU NO. 8	11/21/78	6034N	17253W	
FUKUJU MARU NO. 571	7/22/78	5249N	17631E	
FUKUSHIN MARU NO. 5	6/02/78	5227N	17316W	
FUKUSHIN MARU NO. 5	9/27/78	5945N	17725W	
FUKUYO MARU	7/25/78	5911N	17320W	
FUKUYO MARU NO. 8	3/26/78	5818N	17355W	
FUKUYO MARU NO. 8	7/11/78	5747N	17315W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
FUKUYOSHI MARU NO. 38	4/11/78	5609N	17056W	
FUKUYOSHI MARU NO. 38	5/30/78	5913N	14652W	
FUKUYOSHI MARU NO. 38	7/12/78	5830N	14831W	
FUKUYOSHI MARU NO. 38	11/09/785	5436N	16533W5	
FUKUYOSHI MARU NO. 8	3/21/785	5414N	16655W	
FUKUYOSHI MARU NO. 8	5/12/78	5402N	16300W	FC
FUKUYOSHI MARU NO. 8	7/05/785	5616N	15314W	
FUKUYOSHI MARU NO. 8	8/21/78	5609N	15311W	
FUKUYOSHI MARU NO. 85	3/31/78	5555N	16858W5	
HAKODATE MARU NO. 2	5/01/78	5159N	17155W5	
HAKUBASAN MARU	7/22/78	5451N	17925W	
HAKURYU MARU NO. 51	9/27/78	5943N	17741W	
HARUNA MARU	4/07/78	5907N	17740W	
HARUNA MARU	7/19/785	5455N	16729W	
HATSUE MARU NO. 38	2/27/785			
HATSUE MARU NO. 38	3/21/785	5357N	16628W	
HATSUE MARU NO. 38	7/13/78	5400N	15920W	
HATSUE MARU NO. 38	8/16/78	5840N	15808W	FC
HATSUE MARU NO. 38	11/05/78	5331N	16553W	
HATSUE MARU NO. 55	3/26/78	5811N	14948W	
HATSUE MARU NO. 55	4/21/78	5148N	17704E	
HATSUE MARU NO. 62	5/06/78	5233N	17446E	
HEIKYU MARU NO. 25	7/25/78	5911N	17320W	
HOKEN MARU NO. 18	7/29/78	5613N	16427W	
HOKEN MARU NO. 38	5/04/78	5207N	17602E	
HOKKO MARU	7/12/78	5733N	17309W	
HOKKO MARU NO. 17	7/26/78	5945N	17414W	
HOKKO MARU NO. 57	7/25/78	5911N	17320W5	
HOKKO MARU NO. 77	7/25/78	5911N	17320W5	
HOKUTOU MARU NO. 5	7/10/78	5804N	17307W5	FV
HOKUTOU MARU NO. 5	7/27/78	5945N	17414W5	
HOKUYU MARU NO. 32	4/09/78	5834N	17645W5	FC
HOKUYU MARU NO. 32	5/06/78	5230N	17438E	
HOKUYU MARU NO. 32	6/22/78	5214N	17303W5	
HOKUYU MARU NO. 32	8/25/78	5206N	17155W	
HOYO MARU	7/23/78	5849N	17213W	
HOYO MARU	9/08/78	5449N	16530W	
HOYO MARU NO. 63	7/28/78	5907N	17325W	FC
JINYO MARU	5/13/78	5854N	15954W	
JUNYO MARU	7/27/78	5945N	17414W	
KAIKO MARU NO. 2	7/29/78	5612N	16428W	
KAIKO MARU NO. 3	7/29/78	5611N	16428W	
KAIUN MARU NO. 21	7/11/78	5747N	17315W	
KAIUN MARU NO. 52	7/11/78	5832N	17323W	
KAIUN MARU NO. 52	7/26/78	5945N	17414W	
KAIUN MARU NO. 78	7/25/78	5911N	17320W	
KAIYO MARU NO. 53	4/04/78	5939N	17707W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
KAIYO MARU NO. 53	6/08/78	5319N	17040E	
KAIYO MARU NO. 53	9/19/78	5825N	17505W ⁷	
KAIYO MARU NO. 8	5/16/78	5840N	17510W	
KAIYO MARU NO. 8	8/10/78	5849N	17726W	
KAIYO MARU NO. 8	11/18/78	5441N	16530W	
KAKUDAI MARU NO. 25	7/29/78	5617N	16423W	
KAKUYO MARU NO. 1	7/23/78	5849N	17213W	
KAKUYO MARU NO. 11	7/23/78	5849N	17213W	
KAKUYO MARU NO. 12	7/23/78	5849N	17213W	
KAKUYO MARU NO. 2	7/23/78	5849N	17213W	
KAKUYO MARU NO. 3	7/23/78	5849N	17213W	
KAKUYO MARU NO. 5	7/23/78	5849N	17213W	
KAKUYO MARU NO. 7	7/23/78	5849N	17213W	
KAKUYO MARU NO. 8	7/23/78	5849N	17213W	
KASHIMA MARU	11/16/78	5658N	16618W	
KASHIMA MARU NO. 23	7/10/78	5800N	17410W	
KASHIMA MARU NO. 23	10/15/78	5947N	17749W	
KASHIMA MARU NO. 23	12/05/78	5935N	17814W	
KASHIWAHANA MARU	7/24/78	5849N	17213W	
KATORI MARU	7/25/78	5911N	17320W	
KATSUKI MARU	7/25/78	5911N	17320W	
KAZUSHIMA MARU	7/24/78	5901N	17235W	
KEIKO MARU	3/26/78	5813N	17352W	
KEIKO MARU	4/21/78	5839N	17407W ⁷	
KEIKO MARU	5/17/78	5829N	17403W	
KEIKO MARU	7/10/78	5804N	17310W	
KEIYO MARU NO. 28	7/11/78	5747N	17315W	
KEIYO MARU NO. 38	7/10/78	5747N	17315W	
KITAKAMI MARU	11/16/78	5701N	16632W	
KIYO MARU	7/25/78	5615N	16813W	
KIYO MARU NO. 55	5/28/78	5151N	15343W	
KIYO MARU NO. 55	8/13/78	5902N	14136W	
KIYO MARU NO. 55	11/24/78	5457N	15714W	
KOEI MARU NO. 167	5/18/78	5854N	15954W	
KOEI MARU NO. 22	5/19/78	5854N	15954W	
KOEI MARU NO. 25	5/03/78	5140N	17710E	FC
KOFUKU MARU NO. 58	7/10/78	5802N	17315W	
KOHOKU MARU NO. 16	6/22/78	5219N	17510E	
KOHOKU MARU NO. 17	6/20/78	5200N	17443E	
KONGO MARU	11/02/78	5507N	15708W	
KORYO MARU NO. 186	2/23/78	5257N	17031W	FC
KORYO MARU NO. 186	5/02/78	5130N	17953E	FC
KOSHIN MARU NO. 11	3/25/78	5937N	14415W	
KOSHIN MARU NO. 11	7/13/78	5936N	14322W	
KOSHIN MARU NO. 11	8/14/78	5935N	14402W	
KOSHIN MARU NO. 11	10/28/78	5930N	14441W	
KOSHIN MARU NO. 11	11/01/78	5826N	15156W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
KOYO MARU	3/25/78	5806N	17345W	
KOYO MARU	4/21/78	5835N	17416W1	
KOYO MARU	7/10/78	5731N	17307W1	
KOYO MARU	7/25/78	5911N	17320W1	
KOYO MARU	7/27/78	5945N	17414W1	
KOYO MARU NO. 2	2/17/78	5450N	15747W1	FC
KOYO MARU NO. 2	2/25/78	5434N	16252W1	
KOYO MARU NO. 2	3/25/78	5930N	14450W1	
KOYO MARU NO. 2	5/26/78	5445N	15806W1	
KOYO MARU NO. 2	9/30/78	5220N	17038W1	
KOYO MARU NO. 2	11/15/78	5712N	16545W	
KOYO MARU NO. 3	7/09/78	5935N	17742W1	
KOYO MARU NO. 3	7/21/78	5510N	16739W1	
KOYO MARU NO. 3	10/10/78	5449N1	16639W1	
KUMANO MARU NO. 15	4/26/78	5627N1	17155W	
KUMANO MARU NO. 15	7/10/78	5835N	17455W1	
KUMANO MARU NO. 15	10/15/78	5944N	17744W1	
KYOHO MARU	9/30/78	5446N	16543W1	
KYOKKO MARU	7/11/78	5747N	17315W1	
KYOWA MARU NO. 11	3/27/78	5607N	17355W1	FC
KYOWA MARU NO. 11	5/02/78	5132N	17947E1	FC
KYOWA MARU NO. 11	7/16/78	5850N	14805W1	
KYOWA MARU NO. 15	5/09/78	5253N	17047W1	
KYOWA MARU NO. 15	7/15/78	5223N	17146W1	
KYOYO MARU NO. 2	6/21/78	5243N	17130W1	
KYUEI MARU NO. 1	4/04/78	5913N	17819W1	FC
KYUEI MARU NO. 1	11/22/78	5935N	17800W1	
MANRYO MARU NO. 31	2/20/78	5807N	17422W1	FV
MANRYO MARU NO. 31	4/25/78	5820N	17414W1	
MANRYO MARU NO. 31	6/26/78	5130N	17839E1	
MANRYO MARU NO. 31	7/19/78	5139N	17652E1	FC
MANRYO MARU NO. 31	12/09/78	5939N	17710W1	
MANRYO MARU NO. 32	4/25/78	5758N	17355W1	
MANRYO MARU NO. 32	12/09/78	5938N	17712W1	
MATSUEI MARU NO. 88	5/27/78	5525N	15539W1	FC
MATSUEI MARU NO. 88	7/19/78	5213N	17650W1	
MATSUEI MARU NO. 88	8/22/78	5435N	15835W1	
MINESHIMA MARU	5/13/78	5739N	17330W1	
MINESHIMA MARU	7/25/78	5911N	17320W1	
MITO MARU NO. 8	9/16/78	5626N	17121W1	
MITO MARU NO. 82	6/16/78	5441N	15807W1	
MITO MARU NO. 82	7/14/78	5657N	15127W1	
MITSU MARU NO. 50	7/25/78	5911N	17320W1	
MITSU MARU NO. 501	9/19/78	6002N	17543W1	
MIYAJIMA MARU1	7/10/78	5806N	17310W1	
MIZUHO MARU1	7/27/78	5945N	17414W1	
MUTSU MARU NO. 521	7/30/78	5612N	16427W1	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
NANKO MARU	4/21/78	5838N	17414W5	
NARITA MARU NO. 35	5/13/78	5625N	17146W5	
NIITAKA MARU	4/18/78	5605N	16733W5	
NIITAKA MARU	5/26/78	5458N	15800W5	
NIITAKA MARU	6/23/78	5559N	13525W5	
NIITAKA MARU	7/09/78	5855N	14059W5	
NIITAKA MARU	12/07/78	5714N	16451W5	
NISSHIN MARU NO. 2	7/25/78	5615N	16803W5	
NISSHIN MARU NO.5 2	9/23/78	5540N	16706W5	
NITTO MARU NO. 31	7/23/78	5849N	17213W5	
NITTO MARU NO. 32	7/23/78	5849N	17213W5	
NITTO MARU NO. 35	7/23/78	5849N	17213W5	
NITTO MARU NO. 36	7/23/78	5849N	17213W5	
NOJIMA MARU	6/21/78	5259N	17110E5	
NOJIMA MARU	6/27/78	5701N	17700W5	
NOJIMA MARU	6/28/78	5753N	17913E5	
NOJIMA MARU	6/28/78	5717N	17721E5	
OHTORI MARU	4/09/78	5818N	17531W5	
OHTORI MARU	7/24/78	5603N	16952W5	FC
ORIENT MARU NO. 3	9/20/78	5816N	17414W5	
OTOBE MARU	7/10/78	5802N	17315W5	
OYO MARU	7/25/78	5911N	17319W5	
RAKUYO MARU	7/11/78	5806N	17310W5	
RAKUYO MARU	7/27/78	5945N	17414W5	
RIKUZEN MARU	7/19/78	5503N	16728W5	FC
RIKUZEN MARU	9/26/78	5940N	17726W5	
RYOAN MARU NO. 25	8/11/78	5917N	17818W5	
RYOAN MARU NO. 25	12/07/78	5932N	17727W5	
RYOAN MARU NO. 28	4/22/78	5850N	17803W5	
RYOAN MARU NO. 285	7/10/78	5905N	17810W5	FC
RYOYO MARU	9/30/78	5447N	16613W5	
RYUHO MARU NO. 17	5/10/78	5314N	16633W5	
RYUHO MARU NO. 17	7/14/78	5928N	14426W5	
RYUHO MARU NO. 17	8/18/78	5722N	15211W5	
RYUHO MARU NO. 17	11/07/78	5348N	16459W	
RYUHO MARU NO. 31	6/28/78	5225N	17324W	
RYUHO MARU NO. 31	9/28/78	5944N	17717W	
RYUHO MARU NO. 51	4/20/78	5742N	17413W5	FC
RYUHO MARU NO. 51	7/12/78	5632N	17217W	
RYUJIN MARU NO. 11	6/02/78	5227N	17316W	
RYUJIN MARU NO. 11	10/15/78	5940N	17801W5	
RYUJIN MARU NO. 8	6/29/78	5855N	17810W	
RYUSHO MARU NO. 15	4/19/78	5557N	16950W	
RYUSHO MARU NO. 15	6/12/78	5209N	17554W5	FC
RYUSHO MARU NO. 15	8/14/78	5931N	14321W5	FC
RYUSHO MARU NO. 18	3/19/78	5238N	17254W5	
RYUSHO MARU NO. 18	8/16/78	5740N	14934W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
RYUSHO MARU NO. 18	9/29/78	5441N	15810W	
RYUJO MARU	6/01/78	5224N	16958W	FV
RYUJO MARU	6/26/78	5119N	17857E	
RYUJO MARU	7/27/78	5945N	17414W	
RYUJO MARU	8/01/78	5116N	17906E	
RYUJO MARU	10/27/78	5838N	14026W	
RYUJO MARU NO. 27	9/08/78	5446N	16552W	
SACHI MARU NO. 22	2/23/78	5602N	17909W	FS
SACHI MARU NO. 22	5/14/78	5700N	17318W	
SACHI MARU NO. 22	9/27/78	5945N	17730W	
SACHI MARU NO. 22	12/07/78	5935N	17719W	
SANTO MARU	5/13/78	5854N	15954W	
SEIHO MARU NO. 15	7/26/78	5445N	17414W	
SEIJU MARU NO. 20	9/17/78	5928N	17427W	
SEIJU MARU NO. 28	8/14/78	5615N	17117W	
SEIJU MARU NO. 28	11/14/78	5404N	16630W	
SEITOKU MARU NO. 105	6/26/78	5128N	17845W	
SHIKISHIMA MARU	7/10/78	5806N	17310W	
SHIKISHIMA MARU	7/27/78	5945N	17414W	
SHINEI MARU NO. 21	10/26/78	5217N	17031W	
SHINEI MARU NO. 21	11/21/78	6034N	17252W	
SHINEI MARU NO. 53	3/17/78	5933N	17828W	
SHINEI MARU NO. 53	4/04/78	5858N	17820W	
SHINKO MARU NO. 3	5/02/78	5115N	17908E	
SHINKO MARU NO. 3	7/25/78	5559N	16937W	
SHINNICHI MARU NO. 31	6/22/78	5203N	17553E	
SHINNICHI MARU NO. 31	9/29/78	5751N	16643W	
SHINNICHI MARU NO. 31	12/05/78	5917N	17743W	
SHINTOKU MARU	11/01/78	5827N	15158W	
SHINTOKU MARU NO. 25	3/10/78	5143N	17719E	
SHINTOKU MARU NO. 25	5/13/78	5411N	16143W	
SHIZUOKA MARU	5/11/78	5624N	17042W	
SHIZUOKA MARU	6/30/78	5404N	16208W	
SHIZUOKA MARU	7/03/78	5406N	16146N	
SHIZUOKA MARU	11/18/78	5441N	16530W	
SHOEI MARU NO. 2	8/14/78	5633N	17230W	
SHOSHIN MARU NO. 18	7/09/78	5631N	17206W	
SHOSHIN MARU NO. 18	8/14/78	5628N	17146W	FC
SHOSHIN MARU NO. 18	9/26/78	5936N	17735W	
SHOSHIN MARU NO. 18	12/09/78	5938N	17713W	
SHOSHIN MARU NO. 21	5/12/78	5629N	17237W	FV
SHOSHIN MARU NO. 21	8/14/78	5601N	17045W	
SHOYO MARU	6/26/78	5129N	17836E	
SHOYO MARU	9/27/78	5936N	17712W	
SHUNYO MARU NO. 18	12/05/78	5917N	17747W	
SHUYO MARU	7/25/78	5911N	17320W	
SOHO MARU NO. 32	7/23/78	5849N	17213W	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
SOHO MARU NO. 68	7/23/78	5849N	17213W	
SOYO MARU	7/29/78	5612N	16427W	
SOYO MARU	9/07/78	5449N	16530W	
SOYO MARU	9/30/78	5446N	16543W	FV
SUMIYOSHI MARU NO. 53	2/25/78	5438N	16609W	
SUMIYOSHI MARU NO. 53	7/09/78	5901N	14125W	
SYUNYO MARU	7/11/78	5800N	17314W	FC
SYUNYO MARU	7/27/78	5945N	17414W	
TAISAN MARU NO. 1	6/29/78	5859N	17759	
TAISEI MARU NO. 11	7/09/78	5923N	17748W	
TAISEI MARU NO. 16	7/25/78	5901N	17229W	
TAISEI MARU NO. 3	7/10/78	5914N	17749W	FC
TAISEI MARU NO. 3:	9/19/78:	5823N	17504W:	
TAISEI MARU NO. 41:	2/25/78	5434N	16252W:	
TAISEI MARU NO. 41:	7/25/78	5911N	17320W:	
TAISEI MARU NO. 51:	7/29/78	5609N	16430W:	
TAISEI MARU NO. 98	4/05/78	5856N	17730W:	
TAIYO MARU NO. 65	8/01/78	5116N	17906E	
TAKACHIHO MARU	4/20/78	5708N	17344W	
TAKACHIHO MARU	7/06/78	5643N	15149W	FC
TAKACHIHO MARU	8/11/78	5801N	13815W	
TAKACHIHO MARU	11/19/78:	5707N	16545W	
TAKASHIRO MARU NO. 25	3/21/78	5855N	16628W	
TAKASHIRO MARU NO. 31	5/15/78	5848N	17508W	FC
TAKASHIRO MARU NO. 31	7/10/78	5856N	17727W	
TEISHO MARU NO. 18:	7/12/78	5703N	17352W	
TEISHO MARU NO. 18	9/27/78	5945N	17716W	
TEISHO MARU NO. 18:	12/05/78	5934N	17809W:	
TENYO MARU	4/23/78	6006N	17900W:	
TENYO MARU	7/09/78	5648N	17231W:	
TENYO MARU NO. 2	4/05/78	5847N	17740W:	
TENYO MARU NO. 2:	9/08/78	5448N	16552W	
TENYO MARU NO. 2	11/23/78	5934N	17759W	
TENYO MARU NO. 3	3/23/78	5921N	17749W	
TENYO MARU NO. 3	4/05/78	5856N	17730W	
TENYO MARU NO. 3	9/08/78	5445N	16548W	
TENYO MARU NO. 3:	11/22/78	5932N	17759W	
TENYO MARU NO. 5	4/05/78	5847N	17730W	
TENYO MARU NO. 5	7/24/78	5605N	16940W	FC
TENYO MARU NO. 5	9/22/78	5445N	16616W	
TENYO MARU NO. 5	11/23/78	5931N	17739W	
TENYU MARU NO. 18	7/23/78	5849N	17213W	
TENYU MARU NO. 21	7/23/78	5849N	17213W	
TENYU MARU NO. 3	6/01/78	5223N	17313W:	
TENYU MARU NO. 3	9/26/78	5944N	17717W:	
TENYU MARU NO. 37	3/14/78	5606N	16939W:	
TENYU MARU NO. 37	5/07/78	5455N	15729W:	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
TENYU MARU NO. 37	8/13/78	5900N	14122W	
TOMI MARU NO. 53	5/07/78	5209N	17943E5	
TOMI MARU NO. 53	8/28/78	5311N	16948W	
TOMI MARU NO. 55	4/20/78	5216N	17934W5	
TOMI MARU NO. 55	10/21/78	5610N	17052W5	
TOMI MARU NO. 82	6/05/78	5207N	17941W5	FV
TOMI MARU NO. 85	8/31/78	5517N	15621W	
TOMI MARU NO. 88	5/05/78	5751N	14919W	
TOMI MARU NO. 88	7/20/78	5200N	17750E	
TORA MARU NO. 18 ⁸⁵	7/29/78	5612N	16427W5	
TORA MARU NO. 31	4/29/78	5240N	17042W5	
TORA MARU NO. 31	7/20/78	5247N	17037W5	
TORA MARU NO. 31	12/09/78	5939N	17711W5	
TOYOSHIMA MARU	7/25/78	5911N	17320W	
TSUDA MARU	3/23/78	5854N	17755W	
TSUDA MARU	4/07/78	5905N	17822W	
TSUDA MARU	11/23/78	5928N	17732W	
TSUNE MARU NO. 31	1/21/78	5813N	18939W	
TSUNE MARU NO. 31	5/31/78	5223N	16952W	
TSUNE MARU NO. 31	11/22/78	5428N5	15911W	
TSUSHIMA MARU	7/27/78	5945N5	17414W	
UKO MARU	4/09/78	5821N5	17526W	
WAKABA MARUS	7/25/78	5911N	17320W	
WAKASHIO MARUS	5/11/78	5345N	16630W	
WASHIMA MARUS	7/25/78	5911N	17320W	
WAYO MARUS	7/27/78	5945N	17414W	
YACHIYO MARU NO. 26	5/19/78	5854N	15954W	
YAHATA MARU NO. 565	4/25/78	5153N	17608E	
YAHATA MARU NO. 565	5/03/78	5314N	17707E	
YAHATA MARU NO. 565	6/26/78	5129N	17839E	
YAHATA MARU NO. 565	8/26/78	5209N	17149W5	
YAKUSHI MARU NO. 215	7/10/78	5851N	17757W5	
YAKUSHI MARU NO. 215	12/08/78	5935N	17807W5	
YAKUSHI MARU NO. 315	5/04/78	5201N	17657E5	
YAKUSHI MARU NO. 315	12/08/78	5935N	17807W5	
YAMASAN MARU NO. 85	5/01/78	5159N	17204W5	

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TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
YAMASAN MARU NO. 85	7/15/78	5210N	17150W	
YAMASAN MARU NO. 85	8/25/78	5206N	17148W	
YAMATO MARU	3/17/78	6003N	17851W	
YAMATO MARU	4/07/78	5903N	17816W	
YAMATO MARU	7/19/78	5510N	16739W	
YAMATO MARU	9/26/78N	5940N	17727W	
YAMATO MARU	11/23/78	5934N	17756W	
YASHIMA MARU	7/27/78	5945N	17414W	
YASHIMA MARU NO. 2	4/25/78	5822N	17425W	
YASHIMA MARU NO. 2	12/09/78	5940N	17711W	
YASHIMA MARU NO. 3	4/22/78	5918N	17802W	
YASHIMA MARU NO. 3	7/10/78N	5827N	17435W	
YASHIMA MARU NO. 3	12/08/78	5935N	17807W	
YASHIO MARU NO. 11	4/22/78	5926N	17826W	
YASHIO MARU NO. 11	7/13/78	5637N	17255W	FC
YASHIO MARU NO. 11	12/08/78N	5941N	17803W	
YURYO MARU NO. 35	7/23/78	5849N	17213W	
YURYO MARU NO. 8	4/09/78N	5816N	17520W	FC
YURYO MARU NO. 8	6/08/78N	5317N	17036E	
ZENPO MARU NO. 21N	7/29/78	5612N	16427W	
ZUIHO MARU NO. 8	9/29/78N	5758N	16704W	
ZUIHO MARU NO. 8	12/05/78N	5918N	17747W	
ZUIYO MARU NO. 2	6/15/78N	5507N	16629W	
ZUIYO MARU NO. 2	7/18/78	5442N	16535W	
ZUIYO MARU NO. 2	9/30/78N	5443N	16622W	FV
ZUIYO MARU NO. 3	4/23/78N	6008N	17854W	
ZUIYO MARU NO. 3	7/26/78N	5611N	16731W	FV
ZUIYO MARU NO. 3	8/25/78N	5457N	16644W	
ZUIYO MARU NO. 3	10/10/78	5447N	16635W	

TABLE 7 BOARDINGS OF FOREIGN VESSELS IN THE
ALASKA REGION 1978

SOVIET

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
50 LET VLKSM	2/09/78	6000N	17900W	
50 LET VLKSM	3/20/78	5933N	17816W	
50 LET VLKSM	4/24/78	5242N	17923W	
ALEXANDER KRAEV	3/20/78	5935N	17745W	
ALEXANDER KRAEV	9/27/78	5736N	16716W	
ALEXANDER KRAEV	12/11/78	5712N	16630W	
ALEXANDER MAXUTOV	2/19/78	5447N	15805W	FC
ALEXANDER MAXUTOV	4/23/78	5240N	17922W	
ALEXANDER MAXUTOV	5/26/78	5454N	15754W	FC
ALEXANDER MAXUTOV	6/13/78	5623N	15308W	
ALEXANDER MAXUTOV	12/04/78	5939N	17720W	
ALEXEI MAKHALIN	3/25/78	5448N	15758W	FC
ALEXEI MAKHALIN	4/18/78	5447N	15756W	
ARALSK	4/24/78	5240N	17925W	
ARALSK	6/06/78	5455N	15715W	FC
ARALSK	6/13/78	5628N	15300W	
ARALSK	9/27/78	5735N	16700W	
BASARGIN	9/28/78	5741N	16722W	
BASARGIN	12/08/78	5703N	16617W	FC
BORIS GORINSKY	11/20/78	5934N	17654W	
DANKO	2/18/78	5446N	15805W	
DANKO	4/16/78	5434N	16243W	
DANKO	9/28/78	5724N	16721W	
FYODOR KRAINOV	12/11/78	5707N	16620W	
ITELMEN	2/18/78	5444N	15818W	FC
ITELMEN	5/07/78	5443N	15805W	
ITELMEN	5/24/78	5435N	16244W	FC
ITELMEN	6/06/78	5637N	15338W	
IVAN PANDOV	2/17/78	5458N	15750W	
IVAN PANDOV	9/28/78	5741N	16747W	
IVAN PANDOV	11/20/78	5711N	16705W	
KAMCHATSKAYA PRAVDA	2/06/78	5952N	17850W	
KAMYSHIN	2/18/78	5647N	17112W	
KAMYSHIN	5/24/78	5435N	16243W	FC
KARAGACH	2/14/78	5541N	15503W	FC
KARAGACH	4/16/78	5427N	16205W	
KARAGACH	4/17/78	5450N	15750W	
KARAGACH	5/26/78	5452N	15728W	FC
KARAGACH	11/15/78	5511N	15503W	
KARAGACH	11/19/78	5723N	16528W	
KATANGLY	3/29/78	5444N	15807W	
KATANGLY	5/08/78	5445N	15815W	
KATANGLY	5/26/78	5447N	15750W	FC
KATANGLY	10/11/78	5733N	16614W	
KATANGLY	12/05/78	5934N	17808W	
KAZALINSK	3/17/78	5944N	17840W	
KAZATIN	3/15/78	5148N	17557E	

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TABLE 7 con't.

TABLE 7
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VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
KAZATIN	5/07/78	5239N	17927W	
KONTAJKA	9/10/78	5742N	16738W	
KONTAJKA	9/18/78	6020N	17301W	
KORENGA	2/08/78	5918N	17735W	
KORENGA	9/10/78	5738N	16717W	FC
KREMEN	2/17/78	5541N	15820W	
KREMEN	3/27/78	5434N	16302W	
KREMEN	4/17/78	5444N	15759W	
KREMEN	5/13/78	5446N	15759W	
KREMEN	9/11/78	5739N	16718W	
KREMEN	11/19/78	5714N	16514W	
LESOGORSK	3/15/78	5142N	17549E	
LESOGORSK	4/22/78	5214N	17704E	
MARSHAL ROKOSSOVSKY	3/10/78	5435N	16244W	
MEDIK	2/20/78	5652N	17133W	FC
MYS BARANOVA	2/06/78	5955N	17850W7	FC
MYS BARANOVA	3/21/78	6014N	17724W	
MYS BARANOVA	9/11/78	5741N7	16720W	
MYS BARANOVA	11/19/78	5715N7	19529W	
MYS BELKINA	9/11/78	5737N7	16710W7	FC
MYS BELKINA	11/19/78	5657N7	16510W7	
MYS EGOROVA	10/12/787	5742N7	16626W7	
MYS GAMOVA	3/17/787	5936N7	17824W7	
MYS GAMOVA	9/11/787	5739N7	16713W7	
MYS GAMOVA	11/18/78	5701N7	16543W7	
MYS ILMOVY	2/10/78	6000N7	17902W7	
MYS OSIPOVA	9/17/78	6021N7	17258W7	
MYS SINJAVINA	3/29/78	5445N7	15800W7	
MYS SINJAVINA	9/28/78	5743N7	16729W7	
MYS VAIGACH	2/19/78	5400N7	18750W7	
MYS VAIGACH	4/15/78	5445N7	15750W7	
MYS VAIGACH	4/17/78	5442N7	15759W7	
MYS VORONINA	11/15/78	5715N7	16505W7	FC
MYS YELAGINA	10/11/78	5727N7	16715W7	
OKTANT	9/11/78	5747N7	16705W7	
OSTROV LISYANSKOGO	4/16/78	5434N7	16243W7	
OSTROV LISYANSKOGO	6/15/78	5653N	15021W7	
OZERNYE KLYUCHI	3/16/78	5140N	17545E7	FC
OZERNYE KLYUCHI	4/17/78	5450N	15750W7	
OZERNYE KLYUCHI	5/24/78	5435N	16244W7	
OZERNYE KLYUCHI	6/07/78	5505N	15710W7	
OZERNYE KLYUCHI	9/10/78	5737N	16707W7	
OZERNYE KLYUCHI	11/20/78	5733N	16744W	
PASSIONARIJA	2/18/78	5650N	17058W7	
PASSIONARIJA	9/27/78	5736N	16714W7	FC
PIRIT	5/07/78	5240N	17920W7	
PIRIT	5/23/78	5453N	15809W7	

SOVIET

TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION/TYPE
PIRIT	9/28/78	5741N	16730W	
POIMA	4/29/78	5921N	17940W	
PRIAMURIE	2/23/78	5637N	17046W	FC
PRIAMURIE	3/28/78	5446N	15800W/	FC
PRIAMURIE	4/16/78	5234N	16243W	
PRIAMURIE	5/07/78	5442N	15805W/	
PRIAMURIE	5/23/78	5452N	15745W/	FC
PROLIV LAPERUSA	5/21/78	5434N	16302W/	
PROLIV LAPERUSA	5/24/78	5435N	16244W	
PYOTR OVCHINNIKOV	3/29/78	5445N	15806W	
PYOTR OVCHINNIKOV	5/13/78	5449N	15752W	
PYOTR OVCHINNIKOV	5/21/78	5430N	16312W	FV
PYOTR OVCHINNIKOV	10/12/78	5746N	16636W	FC
PYOTR OVCHINNIKOV	12/04/78/	5941N	17725W	
REVOLYUTIONER	9/11/78/	5746N	16718W	
SAKHALIN	2/17/78/	5450N	15801W	
SAKHALIN	9/10/78/	5738N	16717W	FV
SAKHALIN	12/08/78/	5659N	16628W/	
SAKHALINSKIE GORY	3/27/78/	5439N	16301W/	
SAKHALINSKIE GORY	9/17/78/	6021N	17258W/	
SHTURMAN ELAGIN	12/04/78	5933N	17651W/	
SOVGAVAN	3/17/78	5941N	17823W/	
SOYUZ-4	3/17/78	5140N	17540E/	
SOYUZ-4	4/23/78	5236N	17926W/	
SOYUZ-4	6/21/78	5255N	17050E/	
SURGUTNEFT	4/30/78	5230N	17930W/	
SVETLAJA	4/23/78	5238N	17923W/	
SVETLAJA	11/20/78/	5708N	16703W/	
TAJIKISTAN	2/08/78/	5920N	17725W/	
TAJIKISTAN	11/20/78/	5516N/	15608W/	
TAMAN	9/10/78/	5750N/	16722W/	
TAMAN	11/21/78	5738N/	16655W/	
TERNEI	3/16/78	5138N/	17544E	
TIGIL	3/20/78	5935N	17818W/	
TIGIL	3/29/78	5454N	15754W/	
TIGIL	4/17/78	5446N	15748W/	
TIGIL	5/13/78	5450N	15810W/	
TIGIL	5/21/78	5430N	16312W/	
TIGIL	9/29/78	5738N	16728W/	
TIGIL	11/20/78/	5728N	16715W/	
TRETJAKOVO	4/29/78/	5240N	17913W/	
TRETJAKOVO	9/27/78/	5736N	16723W/	
TURKUL	3/16/78/	5138N	17540E/	
TURKUL	4/23/78/	5240N	17917W/	
TURKUL	9/29/78	5735N	16735W/	FC
TURKUL	11/20/78/	5736N	16646W/	
TYMLAT	2/05/78/	6023N	17850W/	

SOVIET
 *****/

TABLE 7 con't.

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
TYMLAT	9/10/78	5732N	16716W	FV
UZBEKISTAN	4/23/78	5238N	17924W	
UZBEKISTAN	12/11/78	5715N	16615W	
VALENTIN KOTELNIKOV	5/13/78	5442N	15803W	
VASILYIY PEROV	3/21/78	6014N	17624W	
ZAGORJANY	3/29/78	5445N	15800W	
ZAGORJANY	4/18/78	5449N	15751W	
ZAGORJANY/	5/26/78	5454N	15737W	FC
ZUBOVO	2/18/78	5453N	15745W	
ZUBOVO	3/10/78	5436N	16244W/	

TABLE 7 BOARDINGS OF FOREIGN VESSELS IN THE ALASKA REGION 1978

KOREAN

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
CHEOG YANG HO	4/04/78	5636N	17245W	
CHEOG YANG HO	5/03/78	5514N	16822W	FV
CHEOG YANG HO	5/25/78	5415N	16055W	
CHEOG YANG HO	10/26/78	5307N	16709W4	
DAE SUNG HO	6/12/78	5447N	16541W4	
DAE SUNG HO	9/15/78	5447N4	16640W4	FC
DAE SUNG HO	9/22/78	5442N4	16614W4	
DAEJIN NO. 52	5/10/78	5542N4	16839W4	
DAEJIN NO. 52	7/18/78	5443N4	16522W4	
DAEJIN NO. 52	8/24/78	5542N4	16850W4	
DAEJIN NO. 52	10/26/78	5307N4	16709W4	
DAEJIN NO. 52	12/14/78	5542N4	16810W4	FV
DONGSAN-HO	5/17/78	5540N4	16840W4	FC
DONGSAN-HO	9/09/78	5432N4	16539W4	FC
DONGSAN-HO	11/21/78	5441N4	16540W	
GAE CHEOG HO NO. 2	7/12/78	6024N4	17257W4	
GAE CHEOG HO NO. 2	9/18/78	6023N4	17259W4	
HEUNG YANG HO	4/04/78	5645N4	17251W4	
HEUNG YANG HO	5/10/78	5549N4	16848W4	
HEUNG YANG HO	6/10/78	5435N4	16531W4	FV
HEUNG YANG HO	7/12/78	6024N4	17258W4	
HEUNG YANG HO	10/01/78	5303N4	16719W4	
HEUNG YANG HO	11/05/78	5328N4	16605W4	
KYUNG YANG HO	6/11/78	5435N4	16532W4	
KYUNG YANG HO	11/21/78	5440N4	16601W4	
NAMBUG	6/11/78	5443N4	16526W4	
NAMBUG	8/30/78	5306N4	16712W4	
NAMBUG	11/06/78	5443N4	16539W4	
NO. 3 CHIL BO SAN HO	10/01/78	5315N4	16720W4	
NO. 31 DONGWON	5/25/78	5415N4	16055W4	
NO. 31 DONGWON	8/20/78	5628N4	15205W4	
NO. 5 CHIL BO SAN HO	5/11/78	5854N4	15954W4	
NO. 6 CHIL BO SAN HO	5/18/78	5854N4	15954W4	
O DAE YANG 212	11/07/784	5347N4	16331W4	FV
PUNG YANG HO	3/14/784	5558N4	16835W4	
PUNG YANG HO	6/21/784	5443N4	16551W4	
PUNG YANG HO	10/01/78	5315N4	16720W4	
SEO YANG HO	4/20/78	5715N4	17333W4	
SEO YANG HO	7/18/78	5439N4	16525W4	
SEO YANG HO	8/23/78	5432N4	16545W4	
SEO YANG HO	9/18/78	6022N4	17309W4	
SEO YANG HO	11/21/784	5441N4	16600W4	
SHIN AN HO	3/15/784	5633N4	17237W4	
SHIN AN HO	4/01/784	5707N4	17336W4	FC
SHIN AN HO	5/09/784	5531N4	16816W4	
SHIN AN HO	6/13/784	5440N4	16526W4	
SHIN AN HO	10/02/78	5328N4	16603W4	

TABLE 7 con't.

KOREAN

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
SHIN AN HO	11/05/78	5326N	16603W2	
800 GONG NO. 51	5/03/78	5514N	16822W2	FV
800 GONG NO. 51	5/10/78	5541N	16842W2	
800 GONG NO. 51	8/30/78	5417N	16051W2	
800 GONG NO. 51	11/04/78	5429N	16214W2	FC

TAIWANESE

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
GOLDEN DRAGON 1	4/20/78	5700N	17347W	FC
GOLDEN DRAGON 1	4/25/78	5212N	17348E	FV
GOLDEN DRAGON 1	9/09/78	5443N	12538W2	
HIGHLY NO. 301	4/21/78	5741N	17409W2	FC
HIGHLY NO. 301	12/11/78	5705N	17344W2	

POLAND

IE
MEXICO

IE
CANADA2
*****2

VESSEL NAME	BOARDING DATE	LATITUDE	LONGITUDE	VIOLATION TYPE
ACEWAY	7/28/78	5936N	14800W	
COOPERATO4	7/07/78	5757N	13614W	
DOUBLE DECKER	5/13/78	6005N	14924W	
JEANNA-MARIE	8/01/78	5137N	17726W	
KAL ANNE	6/24/78	5802N	13802N	
OCEAN WONDER	5/05/78	5510N	13110W2	
SHIRLEY ROSE	8/20/78	5137N	17726W	
ZAPORA	7/07/78	5757N	13614W2	

Table 8 - U.S. Observer Program Coverage of Foreign Fleets off Alaska by Area and Vessel Type - 1978*

Nation and Vessel Type	Bering Sea									Aleutians		
	Area 51			Area 52			Area 53			Area 54		
	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent
<u>JAPAN</u>												
GROUNDFISH FAC	388	472	82.2	283	419	67.5	--	--	--	--	--	--
SMALL TRAWLERS	220	3,978	5.5	648	13,214	4.9	--	37	--	371	5,374	6.9
MED & LARGE TRAWLERS	359	2,086	17.2	257	2,157	11.9	--	--	--	--	292	--
LL	114	917	12.4	2	246	.8	--	--	--	42	849	4.9
SALMON FAC	--	--	--	--	--	--	--	--	--	51	126	40.0
CRAB FAC	--	--	--	345	345	100.0	--	--	--	--	--	--
CRAB INPOT	--	--	--	540	982	55.3	--	--	--	--	--	--
TOTAL	1,081	7,453	14.5	2,075	17,363	12.0	--	37	--	464	6,641	7.0
<u>USSR</u>												
TRAWLER	225	2,307	9.3	79	2,633	3.0	--	52	--	140	835	16.3
<u>SOUTH KOREA</u>												
TRAWLER	126	1,153	10.9	23	568	4.0	--	5	--	--	45	--
LL	--	9	--	--	--	--	--	--	--	--	20	--
<u>POLAND</u>												
TRAWLER	--	--	--	--	--	--	--	--	--	--	--	--
<u>TAIWAN</u>												
TRAWLER	--	97	--	--	129	--	--	--	--	--	--	--
<u>TOTAL</u>												
GROUNDFISH FAC	388	472	82.2	283	419	67.5	--	--	--	--	--	--
SMALL TRAWLERS	220	3,978	5.5	648	13,214	4.9	--	37	--	371	5,374	6.9
MED & LARGE TRAWLERS	710	5,643	12.6	359	5,187	6.9	--	57	--	140	1,172	11.9
LL	114	962	12.3	2	246	.8	--	--	--	42	869	4.8
SALMON FAC	--	--	--	--	--	--	--	--	--	51	126	40.0
CRAB FAC	--	--	--	345	345	100.0	--	--	--	--	--	--
CRAB INPOT	--	--	--	540	982	55.3	--	--	--	--	--	--
TOTAL	1,432	11,019	13.0	2,177	20,393	10.7	--	94	--	604	7,541	3.0
PERCENT OF TOTAL			27.0			40.0						11.0

*Observer days (OD), foreign fishing days (FD), and observer percent coverage by statistical area.

Table 8 - U.S. Observer Program Coverage of Foreign Fleets off Alaska by Area and Vessel Type - 1978 (con.)

Nation and Vessel Type	Gulf of Alaska														
	Area 61			Area 62			Area 63			Area 64			Area 65		
	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent
<u>JAPAN</u>															
GROUND FISH FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SMALL TRAWLERS	56	340	16.5	6	63	9.5	116	541	21.4	91	637	14.3	--	14	--
MED & LARGE TRAWLERS	22	213	10.3	66	190	34.7	158	455	34.7	40	120	33.3	15	173	8.7
LL	127	976	13.0	148	564	26.2	84	429	19.6	65	647	10.0	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRAB FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRAB INFOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	205	1,529	13.4	220	917	26.9	358	1,425	25.1	196	1,404	14.0	15	187	9.0
<u>USSR</u>															
TRAWLER	12	312	3.8	96	1,265	7.6	13	157	8.3	--	10	--	--	6	--
<u>SOUTH KOREA</u>															
TRAWLER	64	491	13.0	4	21	19.0	--	--	--	--	--	--	--	22	--
LL	--	61	--	--	85	--	--	110	--	--	--	--	--	--	--
<u>POLAND</u>															
TRAWLER	--	--	--	--	--	--	--	83	--	--	--	--	--	--	--
<u>TAIWAN</u>															
TRAWLER	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<u>TOTAL</u>															
GROUND FISH FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SMALL TRAWLERS	56	340	16.5	6	63	9.5	116	541	21.4	91	637	14.3	--	14	--
MED & LARGE TRAWLERS	98	1,308	10.7	166	1,476	11.3	171	695	24.6	40	130	30.3	15	201	7.5
LL	127	1,037	12.2	148	649	22.8	84	539	15.6	65	647	10.0	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRAB FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRAB INFOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOTAL	281	2,685	10.5	320	2,188	14.6	371	1,775	20.9	196	1,414	13.9	15	215	7.0
PERCENT OF TOTAL			5.0			6.0			7.0			4.0			<1.0

Table 8 - U.S. Observer Program Coverage of Foreign Fleets off Alaska by Area and Vessel Type - 1978 (con.)

Nation and Vessel Type	Bering Sea			Aleutians			Gulf of Alaska			Total All		
	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent	OD	FD	Percent
<u>JAPAN</u>												
GROUNDFISH FAC	671	891	75.3	--	--	--	--	--	--	671	891	75.3
SMALL TRAWLERS	868	17,229	5.0	371	5,374	6.9	269	1,595	16.9	1,508	24,198	6.2
MED & LARGE TRAWLERS	616	4,243	14.5	--	292	--	301	1,151	26.2	917	5,686	16.1
LL	116	1,163	10.0	42	849	4.9	424	2,616	16.2	582	4,628	12.6
SALMON FAC	--	--	--	51	126	40.0	--	--	--	51	126	40.0
CRAB FAC	345	345	100.0	--	--	--	--	--	--	345	345	100.0
CRAB INPOT	540	982	55.3	--	--	--	--	--	--	540	982	55.3
TOTAL	3,156	24,853	12.7	464	6,641	7.0	994	5,362	18.5	4,614	36,856	12.5
PERCENT OF TOTAL			68.0			10.0			22.0			
<u>USSR</u>												
TRAWLER	304	4,992	6.1	140	835	16.8	121	1,750	6.9	565	7,577	7.5
PERCENT OF TOTAL			54.0			25.0			20.0			
<u>SOUTH KOREA</u>												
TRAWLER	149	1,726	8.6	--	45	--	68	334	20.4	217	2,305	9.4
LL	--	9	--	--	20	--	--	256	--	--	285	--
PERCENT OF TOTAL			69.0			--			31.0			
<u>POLAND</u>												
TRAWLER	--	--	--	--	--	--	--	33	--	--	33	--
<u>TAIWAN</u>												
TRAWLER	--	226	--	--	--	--	--	--	--	--	226	--
<u>TOTAL</u>												
GROUNDFISH FAC	671	891	75.3	--	--	--	--	--	--	671	891	75.3
SMALL TRAWLERS	868	17,229	5.0	371	5,374	6.9	269	1,595	16.9	1,508	24,198	6.2
MED & LARGE TRAWLERS	1,069	11,187	9.6	140	1,172	11.9	490	3,518	13.9	1,699	15,877	10.7
LL	116	1,172	9.9	42	869	4.8	424	2,872	14.8	582	4,913	11.9
SALMON FAC	--	--	--	51	126	40.0	--	--	--	51	126	40.0
CRAB FAC	345	345	100.0	--	--	--	--	--	--	345	345	100.0
CRAB INPOT	540	982	55.3	--	--	--	--	--	--	540	982	55.3
TOTAL	3,609	31,806	11.3	604	7,541	8.0	1,183	7,985	14.8	5,396	47,332	11.4
PERCENT OF TOTAL			67.0			11.0			22.0			

Table 9 - Fishery Law Infractions off Alaska - 1978^{1/}

	FCMA Violations								Total FCMA Violations	Other	Total Infractions	Gear Conflicts ^{2/}
	.4	.5	.6	.7	.8	.9	.13	.93				
<u>JAPAN</u>												
FC	5	10	10	--	--	22	3	--	50			
FV	--	1	1	1	1	4	6	1	15			
FS	--	--	--	--	--	--	--	1	1			
TOTAL	5	11	11	1	1	26	9	2	66	66	3	
<u>USSR</u>												
FC	7	5	4	--	--	23	3	--	42			
FV	1	1	1	--	--	1	3	--	7			
TOTAL	8	6	5	--	--	24	6	--	49	49	1	
<u>SOUTH KOREA</u>												
FC	3	1	--	--	--	5	--	--	9			
FV	--	--	1	--	--	1	--	3	5			
TOTAL	3	1	1	--	--	6	--	3	14	14	--	
<u>TAIWAN</u>												
FC	1	--	--	--	--	2	--	--	3			
FV	2	--	1	--	--	--	1	--	4			
TOTAL	3	--	1	--	--	2	1	--	7	7	--	
<u>TOTAL FOREIGN</u>												
FC	16	16	14	--	--	62	6	--	104			
FV	3	2	4	1	1	6	10	4	31			
FS	--	--	--	--	--	--	--	1	1			
TOTAL	19	18	18	1	1	68	16	5	136	136	4	
<u>USA</u>												
FH	--	--	--	--	--	--	--	--	--	19		
TOTAL	--	--	--	--	--	--	--	--	--	19	19	--

^{1/} See Appendix for violation identification.

^{2/} Gear conflicts are not infractions but are included here because gear conflicts fall under FCMA regulation 611.11.

TABLE 10 VIOLATIONS OF FOREIGN VESSELS IN THE ALASKA REGION 1978

JAPAN

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
1/03/78	EIO MARU	FC	5635N 16810W	611.4	**
2/01/78	DAIKICHI MARU NO. 37	FC	5618N 17015W	611.4(B)(3)	**
2/06/78	DAITO MARU NO. 38	FC	5957N 17850W	611.13(B)	**
2/09/78	KOEI MARU NO. 25	FC	6005N 17905W	611.5(B)1	**
2/17/78	CHOUN MARU NO. 21	FC	5619N 17058W	611.6(C)(3)	**
2/17/78	KOYO MARU NO. 2	FC	5450N 15747W	611.5(B)	**
2/17/78	KOYO MARU NO. 2	FC	5450N 15747W	611.5(C)(2)	**
2/21/78	SHINKO MARU NO. 3	FC	5202N 17201W	611.4(C)	**
2/21/78	MANRYO MARU NO. 31	FV	5813N 17418W	611.7(A)(7)	2500
2/23/78	KORYO MARU NO. 186	FC	5301N 17032W	611.6(C)(3)	**
2/23/78	SACHI MARU NO. 22	FS	5602N 17009W	611.93(B)(3)(B)	200000
3/26/78	KYOWA MARU NO. 11	FC	5606N 16845W	611.13	**
3/27/78	KYOWA MARU NO. 11	FV	5606N 16845W	611.9	**
4/04/78	KYUEI MARU NO. 1	FC	5913N 17819W	611.6(C)(3)	**
4/08/78	HOKUYU MARU NO. 32	FC	5834N 17645W	611.6(C)(3)	**

* CASE PENDING
** NO MONETARY PENALTY

JAPAN

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
4/09/78	YURYO MARU NO. 8	FC	5817N 17530W	611.9(A)	**
4/18/78	MATSUKAZE MARU	FC	5623N 15740W	611.5(A)	**
4/21/78	RYUHO MARU NO. 51	FC	5742N 17413W	611.9(D)	**
5/02/78	KORYO MARU NO. 186	FC	5130N 17953E	611.13(B)	**
5/02/78	KYOWA MARU NO. 11	FC	5130N 17943E	611.9(D)	**
5/03/78	KOEI MARU NO. 25	FC	5140N 17710E	611.9(D)	**
5/08/78	KOYO MARU NO. 2	GC	5515N 13420W	611.11	*
5/12/78	SHOSHIN MARU NO. 21	FV	5631N 17230W	611.13(C)	**
5/12/78	SHOSHIN MARU NO. 21	FV	5631N 17230W	611.13(B)	**
5/12/78	FUKUYOSHI MARU NO. 8	FC	5401N 16257W	611.9(D)	**
5/14/78	NIITAKA MARU	GC	5620N 13537W	611.11	*
5/15/78	TAKASHIRO MARU NO. 3	FC	5855N 17512W	611.6(C)(3)	**
5/15/78	AZUMA MARU NO. 32	FV	5848N 17446W	611.5(E)	1250
5/26/78	MATSUEI MARU NO. 88	FC	5525N 15539W	611.9(D)(2)(VII)	**1
5/31/78	RYUYO MARU	FC	5224N 17000W	611.4(A)(3)	**
5/31/78	RYUYO MARU	FV	5224N 17000W	611.13(B)	3770

* CASE PENDING
** NO MONETARY PENALTY

JAPAN

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
6/05/78	TOMI MARU NO. 82	FV	5210N 17935W	611.9(D)(2)(IV)	8500
6/08/78	ZUIYO MARU NO. 3	FV	5203N 17436W	611.8(C)	**
6/12/78	RYUSHO MARU NO. 15	FC	5209N 17554W	611.9(D)(2)(VII)	*
6/22/78	DAITO MARU NO. 55	FC	5255N 17045W	611.4	**
6/22/78	DAITO MARU NO. 55	FC	5255N 17045W	611.5(B)	**
6/30/78	EIKYU MARU	FC	5934N 17749W	611.5(A)(1)	**
7/06/78	TAKACHIHO MARU	FC	5643N 15149W	611.9(D)	**
7/09/78	SHOSHIN MARU NO. 18	FC	5631N 17207W	611.5(D)	**
7/09/78	SHOSHIN MARU NO. 18	FC	5631N 17207W	611.9(D)(2)(VII)	**
7/09/78	SHOSHIN MARU NO. 18 ^D	FC	5631N 17207W	611.9(D)(2)(IV)	**
7/10/78	SYUNYO MARU	FC	5800N 17314W	611.6(C)3)	*
7/10/78	HOKUTOU MARU NO. 5	FV	5804N 17307W	611.6(C)(3)	**
7/10/78	HOKUTOU MARU NO. 5	FV	5804N 17307W	611.13(B)	2250
7/10/78	TAISEI MARU NO. 3	FC	5914N 17749W	611.9(D)	**
7/10/78	RYOAN MARU NO. 28	FC	5905N 17810W	611.6(C)(3)	**
7/12/78	ANYO MARU NO. 11	FC	5931N 14335W	611.6(C)(3)	**

* CASE PENDING
** NO MONETARY PENALTY

JAPAN

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
7/13/78	YASHIO MARU NO. 11	FC	5637N 17302W	611.9(D)(IV)	**
7/15/78	ANYO MARU NO. 15	FC	5244N 17203W	611.9(D)(2)(VII)	**
7/16/78	EBISU MARU NO. 38	FC	5221N 17146W	611.9(D)(2)(VII)	**
7/19/78	RIKUZEN MARU	FC	5504N 16728W	611.9	**
7/20/78	MANRYO MARU NO. 31	FC	5140N 17651E	611.9(D)	**
7/24/78	OHTORI MARU	FC	5603N 16952W1	611.9(D)	**
7/25/78	TENYO MARU NO. 5	FC	5605N 16940W	611.13	**
7/26/78	ZUIYO MARU NO. 3	FV	5607N 16807W	611.13	**
7/28/78	HOYO MARU NO. 63	FC	5905N 17339W	611.5(C)(1)	**
7/28/78	HOYO MARU NO. 63	FC	5905N 17339W	611.6(C)(3)	**
8/14/78	RYUSHO MARU NO. 15	FC	5932N 14322W	611.9(D)(2)(VII)	**
8/14/78	RYUSHO MARU NO. 15	FC	5932N 14322W	611.9(D)(2)(VI)	**
8/16/78	HATSUE MARU NO. 38	FC	5840N 14810W	611.9(D)(2)(VII)	**
8/21/78	EBISU MARU NO. 88	FC	5524N 15548W	611.9(D)(2)(VII)	**
9/10/78	AKATSUKI MARU NO. 1	FC	5835N 16705W	611.6(C)(3)	**
9/10/78	AKATSUKI MARU NO. 1	FC	5835N 16705W	611.5(B)1	**

* CASE PENDING1
** NO MONETARY PENALTY

JAPAN

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
9/10/78	AKATSUKI MARU NO. 1	FC	5835N 16705W	611.5(C)(1)	**
9/28/78	FUKUI MARU NO. 10	FC	5945N 17741W	611.9(D)(2)(VII)	**
9/29/78	ZUIYO MARU NO. 2	FV	5450N 16637W	611.9(D)(1)	**
9/30/78	SOYO MARU	FV	5452N 16532W	611.9(D)(1)	**
12/15/78	KONGO MARU	GC	5736N 16518W	611.11	*
12/27/78	KOYO MARU NO. 2	FV	5623N 16557W	611.93(B)(3)(I)	**

TABLE 10 VIOLATIONS OF FOREIGN VESSELS IN THE ALASKA REGION 1978

SOVIET

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
1/14/78	KAMCHATSKIE GORY	FC	6000N 17800W	611.4(D)	**
1/15/78	SOVGAVAN	FC	6053N 17855W	611.5(A)(1)	**
1/17/78	NADEZHINSK	FC	5927N 17730W	611.5(A)(1)	**
2/04/78	TAJIKISTAN	FV	5935N 17732W	611.6(B)	2500
2/04/78	TAJIKISTAN	FV	5935N 17732W	611.5(A)(1)	2500
2/06/78	MYS BARANOVA	FC	5955N 17850W	611.9(D)(2)(VI)	**
2/14/78	KARAGACH	FC	5142N 15503W	611.9(D)(2)(VI)	**
2/14/78	KARAGACH	FC	5142N 15503W	611.6(E)	**
2/17/78	ITELMEN	FC	5444N 15818W	611.9(D)	**
2/19/78	ALEXANDER MAXUTOV	FC	5448N 15805W	611.6(C)(3)	**
2/20/78	MEDIK	FC	5652N 17133W	611.13(B)	**
2/23/78	PRIAMURIE	FC	5633N 17047W	611.9(D)(2)(VI)	**
3/16/78	OZERNYE KLYUCHI	FC	5141N 17550E	611.9	**
3/26/78	ALEXEI MAKHALIN	FC	5448N 15758W	611.6(A)	**
3/26/78	ALEXEI MAKHALIN	FC	5448N 15758W	611.9(D)(2)(IV)	**

* CASE PENDING
** NO MONETARY PENALTY

SOVIET

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
3/26/78	ALEXEI MAKHALIN	FC	5448N 15756W	611.9(D)(2)(VI)	**
3/28/78	PRIAMURIE	FC	5446N 15800W	611.13(B)	**
3/28/78	PRIAMURIE	FC	5446N 15800W	611.4(A)(2)	**
3/28/78	PRIAMURIE	FC	5446N 15800W	611.3(E)(3)(II)	**
3/28/78	PRIAMURIE	FC	5446N 15800W	611.4(A)(3)	**
4/14/78	TIGIL	FC	5440N 15800W	611.4(A)(3)	**
4/24/78	TAJIKISTAN	FC	5800N 13700W	611.4(D)	**
5/20/78	PYOTOR OVCHINNIKOV	FV	5434N 16312W	611.13(B)	1500
5/23/78	PRIAMURIE	FC	5454N 15743W	611.9(D)(2)(VII)	**
5/24/78	KAMYSHIN	FC	5435N 16243W	611.9(D)(2)(VII)	**
5/24/78	KAMYSHIN	FC	5437N 16243W	611.9(C)	**
5/24/78	ITELMEN	FC	5436N 16244W	611.9(D)(2)(VII)	**
5/26/78	KATANGLI	FC	5447N 15740W	611.9(D)(2)(VII)	**
5/26/78	ZAGORJANY	FC	5453N 15745W	611.9(D)(2)(VII)	**
5/26/78	ALEXANDER MAXUTOV	FC	5451N 15752W	611.5(C)(1)	**
5/26/78	KARAGACH	FC	5452N 15728W	611.5(C)(1)	**

* CASE PENDING
** NO MONETARY PENALTY

SOVIET

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
5/26/78	KARAGACH	FC	5452N 15728W	611.9(D)(2)(IV)	**
5/26/78	KARAGACH	FC	5452N 15728W	611.9(D)(2)(VII)	**
5/26/78	KARAGACH	FC	5452N 15728W	611.5(B)	**
6/07/78	ARALSK	FC	5514N 15642W	611.6(C)(3)	*
6/07/78	ARALSK	FC	5514N 15642W	611.4(D)	*
6/20/78	ZAGORJANY	FV	5819N 17716W	611.4(B)(1)	**
9/10/78	KORENGA	FC	5750N 16648W	611.4(A)(1)	**
9/10/78	KORENGA	FC	5750N 16648W	611.9(D)(2)(VI)	**
9/10/78	SAKHALIN	FV	5740N 16659W	611.13(B)	5000
9/11/78	MYS BELKINA	FC	5737N 16710W	611.9(D)611.9(D)	**
9/11/78	TYMLAT	FV	5728N 16712W	611.13(B)	7500
9/27/78	PASSIONARIJA	FC	5732N 16720W	611.9(D)(1)	**
9/29/78	TURKUL	FC	5743N 16721W	611.9(D)(1)	**
10/12/78	PYOTR OVCHINNIKOV	FC	5751N 16629W	611.9(D)(1)	**
10/22/78	UNIDENTIFIED SOVIET	GC	5700N 16526W	611.11	*
11/15/78	MYS VORONINA	FC	5720N 16436W	611.9(D)(2)	**

* CASE PENDING
** NO MONETARY PENALTY

SOVIET

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
11/15/78	MYS VORONINA	FC	5720N 16436W	611.9(D)(3)	**
11/20/78	TAJIKISTAN	FV	5519N 15617W	611.9(D)(2)(VII)	4000
12/08/78	BASARGIN	FC	5703N 16617W	611.13(B)	**
1/20/79					
2/25/79					
4/14/79					
5/24/79					
6/20/79					
7/26/79					
8/08/79					
8/24/79					
9/25/79					
10/20/79					
11/24/79					
12/24/79					

TABLE 10 VIOLATIONS OF FOREIGN VESSELS IN THE ALASKA REGION 1978

KOREAN

KOREAN

DATE OF
VIOLATION

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
2/24/78	PUNG YANG HO	FC	5550N 16849W	611.4	**
3/02/78	HEUNG YANG HO	FC	5533N 16832W	611.5(A)(1)	**
4/01/78	SHIN AN HO	FC	5706N 17340W	611.9(D)	**
5/02/78	CHEOG YANG HO	FV	5528N 16815W	611.93(3)(I)(B)	**
5/02/78	SOO GONG NO. 51	FV	5528N 16815W	611.93(3)(I)(B)	**
5/18/78	DONGSAN-HO	FC	5550N 16845W	611.4(C)	**
6/10/78	HEUNG YANG HO	FV	5435N 16531W	611.9(D)	*
8/11/78	DONGWON NO. 31	FC	5446N 15742W	611.4(C)	**
9/09/78	DONG SAN-HO	FC	5432N 16539W	611.9(D)(2)(VII)	**
9/15/78	DAE SUNG HO	FC	5447N 16640W	611.9(D)(2)(VII)	**
9/22/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
9/23/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
9/26/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/04/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/05/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*

* CASE PENDING
** NO. MONETARY PENALTY
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KOREAN

TABLE 10 con't.

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
10/06/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/07/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/19/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/20/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/21/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/26/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/27/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
10/28/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
11/03/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
11/04/78	SOO GONG NO. 51	FC	5426N 16207W	611.9(D)(3)	*
11/04/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
11/07/78	O DAE YANG 212	FV	5351N 16310W	611.9(D)	*
11/07/78	O DAE YANG 212	FV	5351N 16310W	611.6(D)(3)	**
12/14/78	DAEJIN NO. 52	FV	5528N 16812W	611.93(B)(3)(I)	**

TABLE 10 VIOLATIONS OF FOREIGN VESSELS IN THE
ALASKA REGION 1978

TAIWANESE

DATE OF VIOLATION	VESSEL NAME	TYPE	LOCATION	VIOLATION	PENALTY
2/01/78	HIGHLY NO. 301	FC	5633N 17305W	611.4	**
4/20/78	GOLDEN DRAGON NO. 1	FC	5700N 17347W	611.9(D)	**
4/21/78	HIGHLY NO. 301	FC	5741N 17409W	611.9(D)	**
4/25/78	GOLDEN DRAGON NO. 1	FV	5212N 17407W	611.4(A)(1)	**
4/25/78	GOLDEN DRAGON NO. 1	FV	5212N 17407W	611.4(A)(3)	**
4/25/78	GOLDEN DRAGON NO. 1	FV	5154N 17333W	611.6(A)	**
4/25/78	GOLDEN DRAGON NO. 1	FV	5148N 17316W	611.13(B)	**

Table 11 - Violation Factors Based on Amount of Effort by Nation - 1977-1978

Nation	Effort		Percent Change
	1977	1978	
Japan	67,598	63,521	-7
USSR	7,374	8,114	+10
South Korea	1,712	2,856	+67
Taiwan	146	185	+27
Poland	46	83	+80

Nation	Number of FCMA Violations Detected								
	FC			FV			Total		
	1977	1978	Percent Change	1977	1978	Percent Change	1977	1978	Percent Change
Japan	31	50	+61	16	15	-6	51	66	+29
USSR	7	42	+642	5	7	+40	14	49	+250
South Korea	11	9	-18	4	5	+25	16	14	-13
Taiwan	2	3	+50	5	4	-20	5	7	+40
Poland	No Violations Detected								

Nation	Violation Factors Based on Total Effort (x10-3) ^{1/}								
	FC			FV			Total		
	1977	1978	Percent Change	1977	1978	Percent Change	1977	1978	Percent Change
Japan	.5	.8	+60	.2	.3	+50	.8	1.0	+25
USSR	.9	5.1	+467	.7	.9	+29	1.9	6.0	+216
South Korea	6.4	3.2	-50	2.3	1.8	-22	9.3	4.9	-47
Taiwan	13.7	16.2	+18	20.5	21.6	+5	34.2	37.8	+11
Poland	No Violations Detected								

^{1/} Ratio based on number of FCMA violations per number of vessel days fished in U.S. Zone. Number x .001 gives total violations per effort day for all vessels combined.

Table 12 - 1978 Foreign Catch (m.t.) and Catch Allocations (m.t.)
for the Alaska Region

	<u>JAPAN</u>			<u>USSR</u>		
	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>
<u>BERING SEA/ALEU</u>						
Pollock	821,306.5	792,300.0	103.7	92,713.8	92,700.0	100.0
Pacific Cod	45,015.0	49,680.0	90.6	560.4	17,650.0	31.8
Sablefish	1,805.2	3,510.0	51.4	.2	440.0	--
Flounder	147,503.2	169,490.0	87.0	87,911.1	114,300.0	76.9
Rockfish	6,776.0	9,300.0	72.9	242.3	11,125.0	21.8
Mackerel	1,531.0	2,000.0	76.6	22,622.0	22,600.0	100.0
Crab	14,961.9	15,000.0	99.7	--	--	--
Herring	2,315.3	2,580.0	90.7	6,106.4	6,060.0	100.6
*Salmon	15,398.6	15,550.0	99.3	--	--	--
Squid	9,138.3	10,350.0	88.3	22.8	120.0	19.0
Other	58,040.7	71,815.0	80.1	10,806.1	23,710.0	45.3
TOTAL	1,123,791.7	1,144,525.0	98.2	220,985.1	288,705.0	76.5
<u>GULF OF ALASKA</u>						
Pollock	26,093.0	40,972.0	63.7	41,955.9	57,055.0	73.5
Pacific Cod	8,845.8	17,922.0	49.4	1,140.1	7,018.0	16.2
Sablefish	6,458.3	12,935.0	49.9	4.0	200.0	2.0
Flounder	13,809.4	36,268.0	38.1	196.4	3,432.0	5.7
Rockfish	5,824.8	12,517.0	46.5	570.7	17,938.0	31.8
Mackerel	1,135.7	3,528.0	32.2	18,386.5	38,378.0	47.9
Squid	185.8	1,205.0	15.4	1.6	150.0	1.0
Other	3,919.1	7,862.0	49.8	381.1	10,207.0	3.7
TOTAL	66,271.9	133,209.0	49.8	62,636.3	134,378.0	46.6
<u>ALL AREAS</u>						
Pollock	847,399.5	833,272.0	101.7	134,669.7	149,755.0	89.5
Pacific Cod	53,860.8	67,602.0	79.6	1,700.5	24,668.0	6.9
Sablefish	8,263.5	16,445.0	50.2	4.2	640.0	.7
Flounder	161,312.6	205,758.0	78.4	88,107.5	117,732.0	74.8
Rockfish	12,600.8	21,817.0	57.8	813.0	20,963.0	3.9
Mackerel	2,666.7	5,528.0	48.2	41,008.5	60,978.0	67.3
Crab	14,961.9	15,000.0	99.7	--	--	--
Herring	2,315.3	2,580.0	90.7	6,106.4	6,060.0	100.6
Salmon	15,398.6	15,500.0	99.3	--	--	--
Squid	9,324.1	11,555.0	80.7	24.4	270.0	9.0
Other	61,959.8	79,677.0	77.8	11,187.2	33,917.0	32.9
TOTAL	1,190,063.6	1,277,734.0	93.1	283,621.4	423,083.0	66.9

*Japanese salmon allocation arranged through Japan-Soviet agreement, not FCMA.

Table 12 - 1978 Foreign Catch (m.t.) and Catch Allocations (m.t.)
for the Alaska Region (con.)

	<u>SOUTH KOREA</u>			<u>TAIWAN</u>		
	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>
<u>BERING SEA/ALEU</u>						
Pollock	62,370.6	60,000.0	104.0	3,039.9	5,000.0	60.8
Pacific Cod	1,752.8	2,520.0	69.5	70.4	100.0	70.4
Sablefish	204.1	335.0	39.1	5.2	115.0	4.5
Flounder	374.8	910.0	41.2	69.7	250.0	27.8
Rockfish	491.3	1,000.0	49.1	6.6	75.0	8.8
Mackerel	96.6	100.0	96.6	.3	100.0	.3
Crab	--	--	--	--	--	--
Herring	19.1	20.0	95.5	--	10.0	--
Salmon	--	--	--	--	--	--
Squid	215.0	270.0	79.6	35.0	60.0	58.3
Other	2,912.3	4,600.0	63.3	--	475.0	--
TOTAL	68,436.6	69,755.0	98.1	3,227.1	6,185.0	52.2
<u>GULF OF ALASKA</u>						
Pollock	27,051.9	31,980.0	84.6	--	--	--
Pacific Cod	1,369.0	1,762.0	77.6	--	--	--
Sablefish	664.8	1,465.0	45.4	--	--	--
Flounder	295.5	450.0	65.6	--	--	--
Rockfish	3,657.4	9,778.0	37.4	--	--	--
Mackerel	63.0	200.0	31.0	--	--	--
Squid	132.7	195.0	68.1	--	--	--
Other	1,686.6	4,597.0	36.7	--	--	--
TOTAL	34,920.9	50,427.0	69.3	--	--	--
<u>ALL AREAS</u>						
Pollock	89,422.5	91,980.0	97.2	3,039.9	5,000.0	60.8
Pacific Cod	3,121.8	4,282.0	72.9	70.4	100.0	70.4
Sablefish	868.9	1,800.0	48.3	5.2	115.0	4.5
Flounder	670.3	1,360.0	49.3	69.7	250.0	27.8
Rockfish	4,148.7	10,778.0	38.5	6.6	75.0	8.8
Mackerel	159.6	300.0	53.2	.3	100.0	.3
Crab	--	--	--	--	--	--
Herring	19.1	20.0	95.5	--	10.0	--
Salmon	--	--	--	--	--	--
Squid	347.7	465.0	74.8	35.0	60.0	58.3
Other	4,598.9	9,197.0	50.0	--	475.0	--
TOTAL	103,357.5	120,182.0	86.0	3,227.1	6,185.0	52.2

Table 12 - 1978 Foreign Catch (m.t.) and Catch Allocations (m.t.)
for the Alaska Region (con.)

	<u>POLAND</u>			<u>MEXICO</u>		
	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>
<u>BERING SEA/ALEU</u>						
Pollock	--	--	--	--	--	--
Pacific Cod	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--
Flounder	--	--	--	--	--	--
Rockfish	--	--	--	--	--	--
Mackerel	--	--	--	--	--	--
Crab	--	--	--	--	--	--
Herring	--	--	--	--	--	--
Salmon	--	--	--	--	--	--
Squid	--	--	--	--	--	--
Other	--	--	--	--	--	--
TOTAL	--	--	--	--	--	--
<u>GULF OF ALASKA</u>						
Pollock	1,226.5	15,893.0	7.7	--	26,000.0	--
Pacific Cod	13.6	898.0	1.5	--	6,900.0	--
Sablefish	--	100.0	--	--	200.0	--
Flounder	12.6	200.0	6.3	--	200.0	--
Rockfish	12.3	4,131.0	.3	--	3,586.0	--
Mackerel	--	1,794.0	--	--	200.0	--
Squid	1.0	100.0	1.0	--	1,250.0	--
Other	--	2,104.0	--	--	1,930.0	--
TOTAL	1,266.0	25,220.0	5.0	--	40,166.0	--
<u>ALL AREAS</u>						
Pollock	1,226.5	15,893.0	7.7	--	26,000.0	--
Pacific Cod	13.6	898.0	1.5	--	6,900.0	--
Sablefish	--	100.0	--	--	200.0	--
Flounder	12.6	200.0	6.3	--	200.0	--
Rockfish	12.3	4,131.0	.3	--	3,586.0	--
Mackerel	--	1,794.0	--	--	200.0	--
Crab	--	--	--	--	--	--
Herring	--	--	--	--	--	--
Salmon	--	--	--	--	--	--
Squid	1.0	100.0	1.0	--	1,250.0	--
Other	--	2,104.0	--	--	1,930.0	--
TOTAL	1,266.0	25,220.0	5.0	--	40,166.0	--

Table 12 - 1978 Foreign Catch (m.t.) and Catch Allocations (m.t.)
for the Alaska Region (con.)

	<u>TOTALS</u>		
	<u>Catch</u>	<u>Allocation</u>	<u>Percent</u>
<u>BERING SEA/ALEU</u>			
Pollock	979,430.8	950,000.0	103.1
Pacific Cod	47,398.6	69,950.0	67.8
Sablefish	2,014.7	4,400.0	45.7
Flounder	235,858.8	284,950.0	82.8
Rockfish	7,516.2	21,500.0	35.0
Mackerel	24,249.9	24,800.0	97.8
Crab	14,961.9	15,000.0	99.7
Herring	8,440.8	8,670.0	97.5
*Salmon	15,398.6	15,500.0	99.3
Squid	9,411.1	10,800.0	87.1
Other	71,759.1	100,600.0	71.3
TOTAL	1,416,440.5	1,506,170.0	94.0
<u>GULF OF ALASKA</u>			
Pollock	96,327.3	145,900.0	66.0
Pacific Cod	11,368.5	27,600.0	41.2
Sablefish	7,127.1	14,700.0	48.5
Flounder	14,313.9	40,350.0	35.5
Rockfish	10,065.2	44,364.0	22.7
Mackerel	19,585.2	43,900.0	44.6
Squid	321.1	1,650.0	19.5
Other	5,986.8	24,770.0	24.2
TOTAL	165,095.1	343,234.0	48.1
<u>ALL AREAS</u>			
Pollock	1,075,758.1	1,095,900.0	98.2
Pacific Cod	58,767.1	97,550.0	60.2
Sablefish	9,141.8	19,100.0	47.9
Flounder	250,172.7	325,300.0	76.9
Rockfish	17,581.4	65,864.0	26.6
Mackerel	43,835.1	68,700.0	63.8
Crab	14,961.9	15,000.0	99.7
Herring	8,440.8	8,670.0	97.5
*Salmon	15,398.6	15,500.0	99.3
Squid	9,732.2	12,450.0	78.2
Other	77,745.9	125,370.0	62.0
TOTAL	1,581,535.6	1,849,404.0	85.5

Table 13 - Comparison of Foreign Catch (m.t.) by Species, Nation and Area - 1977-1978

	1977			1978			Total Foreign Catch				
	Bering Sea/ Aleutians	Gulf of Alaska	Total	Bering Sea/ Aleutians	Gulf of Alaska	Total	Percent By Nation		Percent All Nations		Percent Change 1977 to 1978
							1977	1978	1977	1978	
<u>JAPAN</u>											
Groundfish	1,095,376	32,572	1,178,448	1,089,311	59,814	1,149,125	95	97	78	73	-3
Blackcod	4,502	14,356	18,858	1,805	6,458	8,263	2	<1	1	<1	-56
Crab	12,471	--	12,471	14,962	--	14,962	1	1	1	1	+20
Salmon	23,957	--	23,957	15,399	--	15,399	2	1	2	1	-36
Herring	6,181	--	6,181	2,315	--	2,315	<1	<1	<1	<1	-62
Total	1,142,987	96,928	1,239,915	1,123,792	66,272	1,190,064	--	--	82	75	-4
<u>SOVIET</u>											
Groundfish	105,590	63,083	168,673	214,879	62,636	277,515	93	98	11	18	+65
Herring	13,145	--	13,145	6,106	--	6,106	7	2	<1	<1	-34
Total	118,735	63,083	181,818	220,985	62,636	283,621	--	--	12	18	+56
<u>SOUTH KOREA</u>											
Groundfish	47,604	16,458	84,062	68,233	14,256	102,489	98	99	6	6	+22
Blackcod	39	1,600	1,689	204	665	969	2	1	<1	<1	-49
Total	47,693	38,058	85,751	68,437	14,921	103,358	--	--	6	6	+21
<u>TAIWAN</u>											
Groundfish	1,047	--	1,047	3,222	--	3,222	95	100	<1	<1	+208
Blackcod	54	--	54	5	--	5	5	--	<1	<1	-91
Total	1,101	--	1,101	3,227	--	3,227	--	--	<1	<1	+193
<u>POLAND</u>											
Groundfish	--	1,465	1,465	--	1,266	1,266	--	100	<1	<1	-14
<u>TOTALS</u>											
Groundfish	1,250,117	183,569	1,433,686	1,375,645	157,972	1,533,617	--	--	95	97	+7
Blackcod	4,545	15,765	20,610	2,014	7,123	9,137	--	--	1	<1	-56
Crab	12,471	--	12,471	14,962	--	14,962	--	--	<1	1	+20
Salmon	23,957	--	23,957	15,399	--	15,399	--	--	2	1	-36
Herring	19,326	--	19,326	8,421	--	8,421	--	--	1	<1	-56
<u>ALL CATCH</u>	1,310,516	199,534	1,510,050	1,416,441	165,095	1,581,536	--	--	--	--	+5
Percent of Catch by Area	87	13	--	90	10	--	--	--	--	--	--

Table 14 - Effort (Vessel Days) by Foreign Vessels Off Alaska by Month and Nation - 1978

Bering Sea/Aleutian Islands

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL	
<u>JAPAN</u>														
FAC	10	--	--	3	79	170	158	186	143	102	45	31	927	2
FAC TRAWL	60	--	--	68	1,552	2,225	2,225	2,387	2,011	960	193	186	11,894	21
INDEP TRAWL	820	2,088	1,719	2,292	2,739	2,376	3,094	2,596	2,017	2,652	2,635	1,755	26,783	46
LL	1	157	294	392	124	130	190	200	55	28	33	358	1,962	3
CFAC	--	--	43	60	62	60	62	41	3	--	--	--	351	<1
CPOT	--	--	258	360	372	360	372	246	18	--	--	--	1,986	3
INPOT	--	--	--	--	161	290	213	145	15	--	--	--	324	1
SNPOT	--	--	--	--	47	155	187	266	170	80	--	--	905	2
SALMON FAC	--	--	--	--	--	120	92	--	--	--	--	--	212	<1
SALMON GNT	--	--	--	--	--	5,160	3,956	--	--	--	--	--	9,116	16
SUPPORT	70	57	101	172	252	383	419	416	341	315	238	184	2,948	3
TOTAL	961	2,302	2,415	3,347	5,388	11,456	10,968	6,483	4,773	4,137	3,144	2,514	57,888	(37)
<u>USSR</u>														
INDEP TRAWL	603	785	749	343	162	46	33	315	657	885	670	561	5,309	94
SUPPORT	46	62	62	3	5	3	--	15	47	63	39	34	401	6
TOTAL	649	847	811	348	167	49	33	330	704	948	709	515	6,210	(9)
<u>SOUTH KOREA</u>														
INDEP TRAWL	2	60	141	63	230	256	146	198	131	136	135	190	1,687	33
LL	--	--	--	--	--	--	--	--	--	--	11	17	28	1
SUPPORT	--	--	13	12	15	3	21	43	24	39	82	66	313	16
TOTAL	2	60	153	75	246	259	167	241	155	175	228	273	2,034	(3)
<u>TAIWAN</u>														
INDEP TRAWL	--	25	8	2	13	--	26	20	2	15	15	59	135	(1)
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<u>TOTALS</u>														
FAC	10	--	--	3	79	170	158	186	143	102	45	31	927	1
FAC TRAWL	60	--	--	68	1,552	2,252	2,225	2,387	2,011	960	193	186	11,894	15
INDEP TRAWL	1,425	2,958	2,616	2,700	3,144	2,678	3,299	3,129	2,807	3,688	3,435	2,565	34,464	52
LL	1	157	294	392	125	130	190	200	55	28	44	375	1,991	3
CFAC	--	--	43	60	62	60	62	41	3	--	--	--	331	<1
CPOT	--	--	258	360	372	360	372	246	18	--	--	--	1,986	3
INPOT	--	--	--	--	161	290	213	145	15	--	--	--	324	1
SNPOT	--	--	--	--	47	155	187	266	170	80	--	--	905	1
SALMON FAC	--	--	--	--	--	120	92	--	--	--	--	--	212	<1
SALMON GNT	--	--	--	--	--	5,160	3,956	--	--	--	--	--	9,116	14
SUPPORT	116	119	176	189	272	389	440	474	412	417	359	304	3,667	7
TOTAL	1,612	3,234	3,387	3,772	5,814	11,764	11,194	7,074	5,634	5,275	4,096	3,461	66,317	--
Percent by Month (All Areas)	2	4	5	5	8	15	15	9	8	7	5	5	--	--
Percent of Total (All Nations by Area)														88.7

NOTE: Numbers in parentheses are national percentages per total for all nations per area.

Table 14 - Effort (Vessel Days) by Foreign Vessels Off Alaska by Month and Nation - 1978 (con.)

Gulf of Alaska

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL	%
<u>JAPAN</u>														
FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDEP TRAWL	134	128	142	161	249	423	464	307	294	359	100	--	2,761	49
LL	47	84	176	168	299	199	245	262	424	417	256	--	2,577	46
CFAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SNPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON GNT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SUPPORT	8	10	2	13	25	38	53	41	38	33	34	--	295	5
TOTAL	189	222	320	342	573	660	762	610	756	809	390	--	5,633	(67)
<u>USSR</u>														
INDEP TRAWL	67	252	357	420	407	174	--	--	33	9	39	21	1,779	93
SUPPORT	--	11	32	27	24	23	2	--	--	--	6	--	125	7
TOTAL	67	263	389	447	431	197	2	--	33	9	45	21	1,904	(23)
<u>SOUTH KOREA</u>														
INDEP TRAWL	--	4	1	15	41	16	36	91	102	121	99	--	526	64
LL	--	--	--	--	9	30	31	31	45	62	49	--	257	32
SUPPORT	--	--	--	--	--	22	--	--	5	--	13	--	40	5
TOTAL	--	4	1	15	50	68	67	122	152	183	161	--	823	(9)
<u>TAIWAN</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	83	--	83	(1)
<u>TOTALS</u>														
FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDEP TRAWL	201	384	500	596	697	613	500	398	429	489	121	21	5,149	61
LL	47	84	176	168	308	229	276	293	469	479	305	--	2,333	34
CFAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SNPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON GNT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SUPPORT	8	21	34	40	49	83	35	41	43	33	53	--	460	5
TOTAL	248	489	710	804	1,054	925	831	732	941	1,001	679	21	8,442	--
Percent by Month (All Areas)	1	1	1	1	1	1	1	1	1	1	1	1	--	--
Percent of Total (All Nations by Area)														11.3

Table 14 - Effort (Vessel Days) by Foreign Vessels Off Alaska by Month and Nation - 1978 (con.)

<u>Totals</u>														
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL	%
<u>JAPAN</u>														
FAC	10	--	--	3	79	170	158	186	143	102	45	31	927	1
FAC TRAWL	60	--	--	68	1,552	2,252	2,225	2,387	2,011	960	193	186	11,394	19
IND TRAWL	954	2,216	1,361	2,453	2,988	2,799	3,558	2,903	2,311	3,011	2,735	1,755	29,544	47
LL	48	241	470	560	423	329	435	462	479	445	289	358	4,539	7
CFAC	--	--	43	60	62	60	62	41	3	--	--	--	331	<1
CPOT	--	--	258	360	372	360	372	246	18	--	--	--	1,986	3
INFOT	--	--	--	--	161	290	213	145	15	--	--	--	324	1
SNPOT	--	--	--	--	47	155	187	266	170	80	--	--	905	1
SALMON FAC	--	--	--	--	--	120	92	--	--	--	--	--	212	<1
SALMON GNT	--	--	--	--	--	5,160	3,956	--	--	--	--	--	9,116	14
SUPPORT	78	67	103	185	277	421	472	457	379	348	272	184	3,243	5
TOTAL	1,150	2,524	2,735	3,689	5,961	12,116	11,730	7,093	5,529	4,946	3,534	2,514	53,521	(85)
<u>USSR</u>														
INDEP TRAWL	670	1,037	1,106	763	569	220	33	315	690	894	709	582	7,588	94
SUPPORT	46	73	94	32	29	26	2	15	47	63	45	54	326	6
TOTAL	716	1,110	1,200	795	598	246	35	330	737	957	754	636	3,114	(11)
<u>SOUTH KOREA</u>														
INDEP TRAWL	--	64	141	78	271	272	182	289	233	257	234	190	2,213	77
LL	--	--	--	--	9	30	31	31	45	52	60	17	385	10
SUPPORT	--	--	13	12	15	25	21	43	29	39	35	66	358	13
TOT. AL	2	64	154	90	295	327	234	363	307	358	389	273	2,356	(4)
<u>TAIWAN</u>														
INDEP TRAWL	--	25	8	2	13	--	26	20	2	15	15	59	185	<1
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	83	--	83	<1
<u>TOTALS</u>														
FAC	10	--	--	3	79	170	158	186	143	102	45	31	927	1
FAC TRAWL	60	--	--	68	1,552	2,252	2,225	2,387	2,011	960	193	186	11,394	16
INDEP TRAWL	1,626	3,342	3,116	3,296	3,841	3,291	3,799	3,527	3,236	4,177	3,776	2,586	39,613	53
LL	48	241	470	560	433	359	466	493	524	507	349	375	4,324	6
CFAC	--	--	43	60	62	60	62	41	3	--	--	--	331	<1
CPOT	--	--	258	360	372	360	372	246	18	--	--	--	1,986	3
INFOT	--	--	--	--	161	290	213	145	15	--	--	--	324	1
SNPOT	--	--	--	--	47	155	187	266	170	80	--	--	905	1
SALMON FAC	--	--	--	--	--	120	92	--	--	--	--	--	212	<1
SALMON GNT	--	--	--	--	--	5,160	3,956	--	--	--	--	--	9,116	12
SUPPORT	124	140	210	229	321	472	495	515	455	450	412	304	4,127	6
TOTAL	1,868	3,723	4,097	4,576	6,868	12,689	12,025	7,806	6,575	6,276	4,775	3,482	74,759	--
Percent by Month (All Areas)	2	5	5	6	9	17	16	10	9	9	6	5	--	--
Percent of Total (All Nations by Area)														(100)

Table 15 - Foreign Effort (Vessel Days) Comparisons by Vessel Type and Area - 1977-1978

Nation and Vessel Type	1977			1978			Percent of Catch Composition				Percent Change 1977 to 1978
	Bering Sea/ Aleutians	Gulf of Alaska	Total	Bering Sea/ Aleutians	Gulf of Alaska	Total	Per Nation		All Nations		
							1977	1978	1977	1978	
<u>JAPAN</u>											
Groundfish FAC	13,996	--	13,996	12,821	--	12,821	21	20	18	17	-8
Crab FAC	1,863	--	1,863	2,317	--	2,317	3	4	2	3	+24
Salmon FAC	14,616	--	14,616	9,328	--	9,328	22	15	19	12	-36
Indep Trawl	26,182	2,260	28,547	26,783	2,761	29,544	42	47	37	40	+3
LL	1,449	3,062	4,511	1,962	2,577	4,539	7	7	6	6	+1
Inpot	706	--	706	824	--	824	1	1	1	1	+16
Snail Pot	126	--	126	905	--	905	<1	1	<1	1	+618
Support/Others	3,015	218	3,233	2,948	295	3,243	5	5	4	4	<+1
Total	61,953	5,540	67,598	57,888	5,633	63,521	--	--	88	85	<-1
<u>SOVIET</u>											
Groundfish FAC	1,045	27	1,072	--	--	--	14	--	2	--	-100
Indep Trawl	3,764	1,752	5,516	5,809	1,779	7,588	75	94	7	10	+37
Support	367	419	786	401	125	526	11	6	1	1	-33
Total	5,176	2,198	7,374	6,210	1,904	8,114	--	--	10	11	+10
<u>SOUTH KOREA</u>											
Indep Trawl	946	91	1,047	1,687	526	2,213	61	77	1	3	+11
LL	83	552	635	29	256	285	37	10	1	<1	-55
Support	30	--	30	318	40	358	2	13	<1	<1	+1,093
Total	1,059	643	1,712	2,034	822	2,856	--	--	2	4	+67
<u>TAIWAN</u>											
Indep Trawl	125	--	125	185	--	185	86	100	<1	<1	+48
LL	--	21	21	--	--	--	14	--	<1	--	-100
Total	125	21	146	185	--	185	--	--	<1	<1	+27
<u>POLAND</u>											
Indep Trawl	--	46	46	--	83	83	100	100	<1	<1	+80
<u>TOTALS</u>											
Groundfish FAC	15,041	27	15,068	12,821	--	12,821	--	--	20	17	-15
Crab FAC	1,863	--	1,863	2,317	--	2,317	--	--	2	3	+24
Salmon FAC	14,616	--	14,616	9,328	--	9,328	--	--	19	12	-36
Indep Trawl	31,017	4,149	35,166	34,464	5,149	39,613	--	--	46	53	+13
LL	1,532	3,635	5,167	1,991	2,833	4,824	--	--	7	6	-7
Inpot	706	--	706	824	--	824	--	--	1	1	+17
Snail Pot	126	--	126	905	--	905	--	--	<1	1	+618
Support/Other	3,412	637	4,049	3,667	460	4,127	--	--	5	6	+2
Total	68,313	8,448	76,761	66,317	8,442	74,759	--	--	--	--	-2.6

Table 16 - Foreign Vessels Operating off Alaska - 1978

Bering Sea/Aleutian Islands

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	MIN	MAX
<u>JAPAN</u>														
FAC	1	--	--	1	4	5	6	6	6	5	2	1	--	6
FAC TRAWL	6	--	--	24	58	77	77	77	77	60	7	6	--	77
INDEP TRAWL	63	90	82	107	111	113	117	110	107	107	109	87	63	117
LL	1	8	13	15	9	8	9	6	2	2	2	17	1	17
CFAC	--	--	2	2	2	2	2	2	1	--	--	--	--	2
CPOT	--	--	12	12	12	12	12	12	6	--	--	--	--	12
INPOT	--	--	--	--	10	11	11	8	1	--	--	--	--	11
SNPOT	--	--	--	--	4	6	7	8	8	4	--	--	--	8
SALMON FAC	--	--	--	--	--	4	4	--	--	--	--	--	--	4
SALMON GNT	--	--	--	--	--	172	172	--	--	--	--	--	--	172
SUPPORT	7	8	10	19	23	35	41	39	36	26	18	12	7	41
TOTAL	78	106	119	180	233	445	458	268	244	204	138	123	78	458
<u>USSR</u>														
INDEP TRAWL	30	31	33	14	9	3	3	17	35	36	35	34	3	36
SUPPORT	6	5	5	1	1	1	--	2	5	7	3	4	--	7
TOTAL	36	36	38	15	10	4	3	19	40	43	38	38	3	43
<u>SOUTH KOREA</u>														
INDEP TRAWL	1	3	5	5	9	10	9	8	6	6	6	10	1	10
LL	--	--	--	--	--	--	--	--	--	--	1	2	--	2
SUPPORT	--	--	1	1	1	--	1	2	3	2	3	4	--	4
TOTAL	1	3	6	6	10	10	10	10	9	8	10	16	1	16
<u>TAIWAN</u>														
INDEP TRAWL	--	1	1	2	1	--	1	1	2	1	2	2	--	2
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<u>TOTALS</u>														
FAC	1	--	--	1	4	5	6	6	6	5	2	1	--	6
FAC TRAWL	6	--	--	24	58	77	77	77	77	60	7	6	--	77
INDEP TRAWL	94	125	121	128	130	126	130	136	150	150	152	133	94	152
LL	1	8	13	15	9	8	9	6	2	2	3	19	1	19
CFAC	--	--	2	2	2	2	2	2	1	--	--	--	--	2
CPOT	--	--	12	12	12	12	12	12	6	--	--	--	--	12
INPOT	--	--	--	--	10	11	11	8	1	--	--	--	--	11
SNPOT	--	--	--	--	4	6	7	8	8	4	--	--	--	8
SALMON FAC	--	--	--	--	--	4	4	--	--	--	--	--	--	4
SALMON GNT	--	--	--	--	--	172	172	--	--	--	--	--	--	172
SUPPORT	13	13	16	21	25	36	42	43	44	35	24	20	13	44
TOTAL	115	146	164	203	254	459	472	298	295	256	188	179	115	472

Table 16 - Foreign Vessels Operating off Alaska - 1978 (con.)

Gulf of Alaska

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	MIN	MAX
<u>JAPAN</u>														
FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDEP TRAWL	7	6	7	7	10	20	18	13	16	15	4	--	--	20
LL	3	4	7	6	13	12	11	13	19	20	18	--	--	20
CFAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SNPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON GNT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SUPPORT	--	1	1	1	2	3	5	4	4	3	3	--	--	5
TOTAL	10	11	15	14	25	35	34	30	39	38	25	--	11	39
<u>USSR</u>														
INDEP TRAWL	3	10	15	18	21	10	--	--	2	1	2	1	--	21
SUPPORT	--	1	3	4	4	2	2	--	--	--	1	--	--	4
TOTAL	3	11	18	22	25	12	2	--	2	1	3	1	--	25
<u>SOUTH KOREA</u>														
INDEP TRAWL	--	1	--	1	2	1	2	3	5	5	5	--	--	5
LL	--	--	--	--	1	1	1	1	2	2	1	--	--	2
SUPPORT	--	--	--	--	--	1	--	--	1	--	1	--	--	1
TOTAL	--	1	--	1	3	3	3	4	8	7	7	--	--	8
<u>TAIWAN</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	5	--	--	5
<u>TOTALS</u>														
FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FAC TRAWL	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDEP TRAWL	10	17	22	26	33	31	20	16	23	21	16	1	1	33
LL	3	4	7	6	14	13	12	14	21	22	19	--	--	22
CFAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SNPOT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON FAC	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SALMON GNT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SUPPORT	--	2	4	5	6	6	7	4	5	3	5	--	--	7
TOTAL	13	23	33	37	53	50	39	34	49	46	40	1	1	49

Table 16 - Foreign Vessels Operating off Alaska - 1978 (con.)

Totals

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	MIN	MAX
<u>JAPAN</u>														
FAC	1	--	--	1	4	5	6	6	6	5	2	1	--	6
FAC TRAWL	6	--	--	24	58	77	77	77	77	60	7	6	--	77
INDEP TRAWL	70	96	89	114	121	133	135	123	123	122	113	87	70	135
LL	4	12	20	21	22	20	20	19	21	22	20	17	4	22
CFAC	--	--	2	2	2	2	2	2	1	--	--	--	--	2
CPOT	--	--	12	12	12	12	12	12	6	--	--	--	--	12
INPOT	--	--	--	--	10	11	11	8	1	--	--	--	--	11
SNPOT	--	--	--	--	4	6	7	8	8	4	--	--	--	8
SALMON FAC	--	--	--	--	--	4	4	--	--	--	--	--	--	4
SALMON GNT	--	--	--	--	--	172	172	--	--	--	--	--	--	172
SUPPORT	7	9	11	20	25	38	46	43	40	29	21	12	7	46
TOTAL	88	117	134	194	258	480	492	298	283	242	163	123	88	492
<u>USSR</u>														
INDEP TRAWL	33	41	48	32	30	17	3	13	37	37	37	35	3	48
SUPPORT	6	6	8	5	5	3	2	2	5	7	4	4	2	8
TOTAL	39	47	56	37	35	16	5	19	42	44	41	39	5	56
<u>SOUTH KOREA</u>														
INDEP TRAWL	1	4	5	6	11	11	11	11	11	11	11	10	1	11
LL	--	--	--	--	1	1	1	1	2	2	2	2	--	2
SUPPORT	--	--	1	1	1	1	1	2	3	2	4	4	--	4
TOTAL	1	4	6	7	13	13	13	14	16	15	18	16	1	18
<u>TAIWAN</u>														
INDEP TRAWL	--	1	1	2	1	--	1	1	2	1	2	2	--	2
<u>POLAND</u>														
INDEP TRAWL	--	--	--	--	--	--	--	--	--	--	5	--	--	5
<u>TOTALS</u>														
FAC	1	--	--	1	4	5	6	6	6	5	2	1	--	6
FAC TRAWL	6	--	--	24	58	77	77	77	77	60	7	6	--	77
INDEP TRAWL	104	142	143	154	163	157	150	152	173	171	168	134	104	173
LL	4	12	20	21	23	21	21	20	23	24	22	19	4	24
CFAC	--	--	2	2	2	2	2	2	1	--	--	--	--	2
CPOT	--	--	12	12	12	12	12	12	6	--	--	--	--	12
INPOT	--	--	--	--	10	11	11	8	1	--	--	--	--	11
SNPOT	--	--	--	--	4	6	7	8	8	4	--	--	--	8
SALMON FAC	--	--	--	--	--	4	4	--	--	--	--	--	--	4
SALMON GNT	--	--	--	--	--	172	172	--	--	--	--	--	--	172
SUPPORT	13	15	20	26	31	42	49	47	48	38	29	20	13	49
TOTAL	128	169	197	240	307	509	511	332	344	302	228	180	128	511

Table 17 - Total Number of Foreign Vessels By Month Comparing 1977 - 1978

	Japan		USSR		South Korea		Taiwan		Poland		All Nations		Percent Change
	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	1977	1978	
Jan	63	88	93	39	--	1	1	--	--	--	157	128	-18
Feb	58	117	94	47	--	4	--	1	--	--	152	169	+11
Mar	71	134	46	56	1	6	--	1	--	--	118	197	+67
Apr	103	194	32	37	2	7	--	2	--	--	137	240	+75
May	320	258	23	35	3	13	1	1	--	--	349	307	-12
June	625	480	23	16	5	13	1	--	--	--	654	509	-22
July	634	492	8	5	11	13	--	1	--	--	653	511	-22
Aug	337	298	8	19	10	14	1	1	--	--	356	332	-7
Sept	324	283	17	42	13	16	1	2	--	--	355	343	-3
Oct	273	242	45	44	21	15	--	1	1	--	339	302	-11
Nov	129	163	43	41	16	18	1	2	2	5	194	229	+18
Dec	77	123	38	39	7	16	1	2	2	--	126	180	+43

Table 18 - Number of Foreign Vessels Operating Off Alaska in 1978 by Nation, Vessel Type, and Fishery Plan

Country and Vessel Type	Number of Permits Issued					Total No. Vessels Operating	Salmon/FAC and GNT	Salmon Support (without FCMA permit)	Other ^{1/}	Total No. Vessels Operating off Alaska
	BSA	GOA	CRB	SBL	SNA					
<u>JAPAN</u>										
FAC	6									
PTRL	62									
DS	17									
STRL/F	11									
STRL/L	26	26								
STRL/M	159	17								
LL	23	22	1	23						
REF	90	90	77	84	77					
CGO	41	39	13	39	11					
TKR	5	5	5	5	3					
CFAC	2									
CPOT	12									
INPOT	1	1	11	1	7					
SNPOT					14					
TOTAL	455	200	107	152	112	484	176	20	21	701
<u>USSR</u>										
FAC	1	1								
STRL/L	85	85								
STRL/M	6	6								
REF	48	48								
CGO	2	2								
TKR	18	18								
RESC	3									
TOTAL	163	160				163			2	165
<u>SOUTH KOREA</u>										
FAC	1									
STRL/L	12	12								
LL				3						
REF	4	4		3						
CGO	1	2		1						
TOTAL	18	18		7		22			1	23
<u>TAIWAN</u>										
STRL/L	4									
PTRL	4									
REF	1	1								
TOTAL	9	1				9				9
<u>POLAND</u>										
STRL/L		8								
REF		3								
TOTAL		11				11				11
<u>MEXICO</u>										
STRL/L		2								
TOTAL ALL	645	392	107	159	112	689	176	20	24	909

^{1/} Other category vessels including research, patrol, and miscellaneous vessels.

Table 19 - Gross Tonnage Fees Paid by Foreign Vessels Operating Off Alaska - 1978

	Fishing/Processing			Support			Total			
	No.	Tonnage	Fee	No.	Tonnage	Fee	No.	Tonnage	Fee	Percent
Japan*	351	388,599	\$282,600	133	340,033	\$27,800	484	728,632	\$310,400	48
USSR	91	251,648	236,137	72	398,970	14,400	163	650,618	250,537	39
South Korea	16	62,849	56,749	6	16,914	1,400	22	79,763	58,149	9
Taiwan	8	6,178	6,178	1	977	200	9	7,155	6,378	1
Poland	8	19,527	19,527	3	16,070	600	11	35,597	20,127	3
Mexico	2	1,858	1,858	--	--	--	2	1,858	1,858	1
Total	476	1,333,708	\$603,049	215	772,964	\$44,400	691	1,503,623	\$647,449	--

*Does not include salmon fleets.

Table 20 - Catch and Catch Fees by Nation and Allocated Species Paid by Foreign Vessels Operating off Alaska - 1978

	Pollock	Pacific Cod	Black Cod	Flounders	Rockfish	Atka Mackerel	Herring	Squid	Salmon	Crabs	Snails	Misc.	Totals	Percent By Nation
JAPAN														
C	847,400	53,861	8,264	161,313	12,601	2,667	2,315	9,324	15,399	14,962	2,184	59,776	1,190,064	75
\$	2,491,357	531,614	115,447	2,185,790	127,390	12,882	8,100	17,995	NO FEE	100,423	231,012	45,872	5,867,882	(72)
USSR														
C	134,670	1,700	4	88,107	813	41,009	6,106	24	--	--	--	11,187	283,621	18
\$	395,930	16,779	56	1,193,849	8,219	198,072	21,365	46	--	--	--	18,794	1,853,110	(23)
SOUTH KOREA														
C	89,423	3,122	869	670	4,149	160	19	348	--	--	--	4,599	103,358	6
\$	262,904	30,814	12,140	9,078	41,945	773	66	672	--	--	--	7,726	366,118	(5)
TAIWAN														
C	3,040	70	5	70	7	1	--	35	--	--	--	--	3,227	<1
\$	8,938	691	70	948	71	5	--	68	--	--	--	--	10,791	(<1)
POLAND														
C	1,227	14	--	13	12	--	--	1	--	--	--	--	1,266	<1
\$	3,607	138	--	176	121	--	--	2	--	--	--	--	4,044	(<1)
TOTAL ALL.														
C	1,075,760	58,767	9,142	250,173	17,582	43,837	8,440	9,732	15,399	14,962	2,184	75,562	1,581,536	--
CZ	68	4	1	15	1	3	1	1	1	1	1	5	--	--
\$	3,162,736	580,036	127,713	3,389,841	177,746	211,732	29,531	18,783	NO FEE	231,012	45,872	126,943	8,101,945	--
\$%	39	7	2	42	2	3	1	1	--	3	1	2	--	--

NOTE: C is TOTAL CATCH (differences from catch table due to rounding).
 \$ is CATCH FEE ASSESSED BASED ON ACTUAL CATCH LANDED.
 CZ is PERCENTAGE OF TOTAL CATCH FOR EACH SPECIES.
 \$% is PERCENTAGE OF TOTAL FEE FOR EACH SPECIES.

TABLE 21: TOTAL FEES PAID BY FOREIGN VESSELS
OPERATING OFF ALASKA - 1978

NATION	CATCH FEE	VESSEL FEE	TOTAL FEE	CATCH FEE % OF TOTAL	VESSEL FEE % OF TOTAL	TOTAL FEE % OF TOTAL ALL NATIONS
JAPAN	5,867,882	310,400	6,178,282	72	48	71
USSR	1,853,110	250,537	2,103,647	23	39	24
SOUTH KOREA	366,118	58,149	424,267	6	9	5
TAIWAN	10,791	6,378	17,169	<1	<1	<1
POLAND	4,044	20,127	24,171	<1	3	<1
MEXICO	0	1,858	1,858	0	<1	<1
TOTAL	8,101,945	647,449	8,749,394	-	-	-

TABLE 22 - FOREIGN SCIENTIFIC RESEARCH VESSELS
WITHIN FCZ OFF ALASKA - 1978

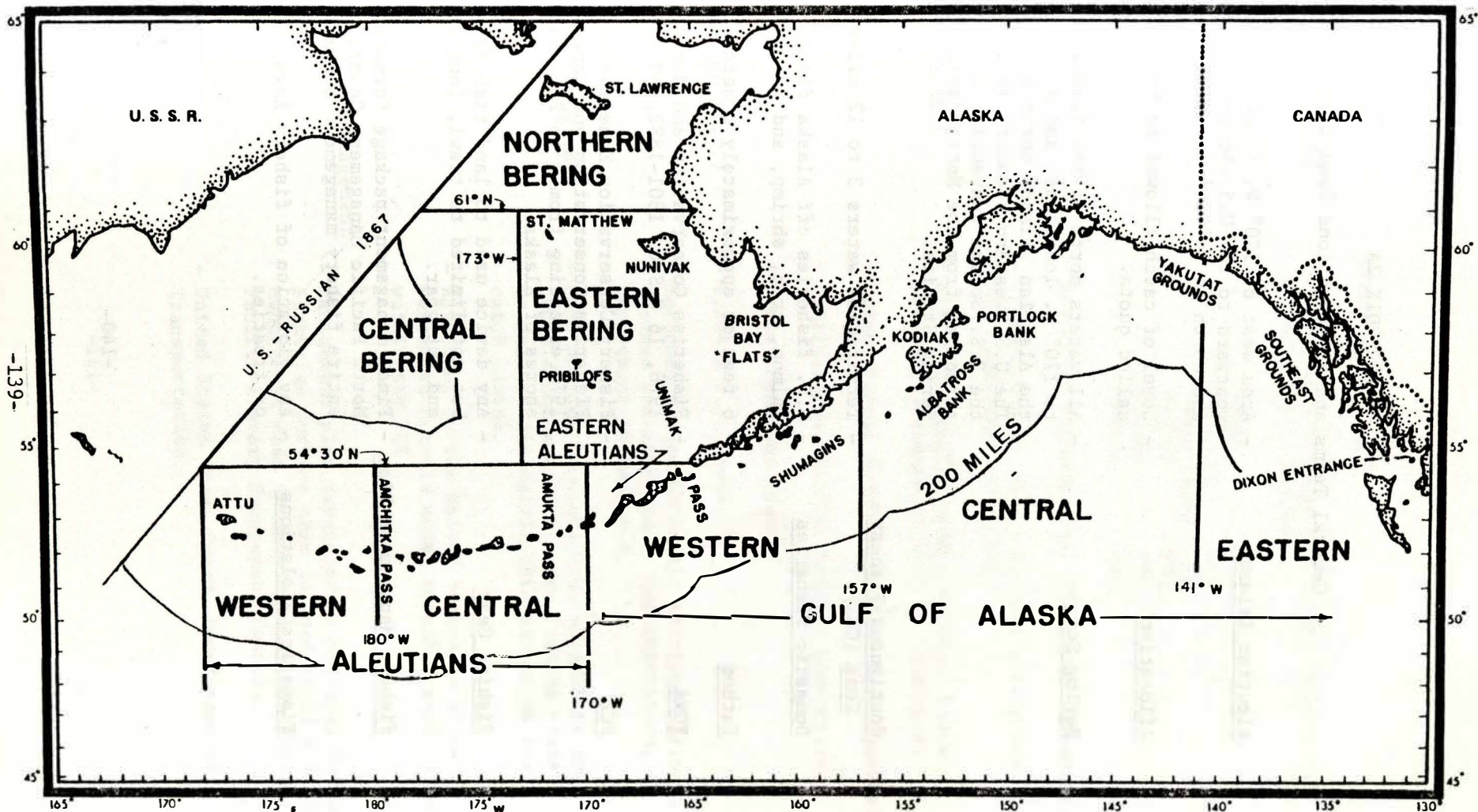
NAME OF VESSEL	NATION	SPECIES STUDIED	BEGIN DATE	END DATE	UNDER WHAT CONTROL	GEAR	TONNAGE	CALL
HUKUHO MARU	JA	Salmon	5/25	8/20	INPFC	LL/GNT	436.4	JBBA
HOKUSEI MARU	JA	Salmon	6/1	7/15	INPFC	GNT	892.9	JKCQ
HOKUSHIN MARU	JA	Salmon	5/12	8/4	INPFC	LL/GNT	219.5	JCPV
IWAKI MARU	JA	Salmon	5/10	8/7	INPFC	LL/GNT	220.1	JCIC
IWATE MARU	JA	Salmon	5/15	7/23	INPFC	LL/GNT	242.6	JQZW
KUMAMATO MARU	JA	Salmon	5/11	8/3	INPFC	LL/GNT	295.5	JFET
OSHORU MARU	JA	Salmon	6/1	7/15	INPFC	GNT	1119.7	JCDN
RIASU MARU NO. 2	JA	Salmon	5/10	9/13	INPFC	LL/GNT	424.9	JKIL
TOUOU MARU	JA	Salmon	5/10	8/4	INPFC	GNT	134.5	
HATSUE MARU NO. 55	JA	Blackcod	7/14	8/15	CO-OP	LL	499.0	JLIB
SHUNYO MARU	JA	Groundfish	5/4	7/10	CO-OP	Trawl	393.0	8JIF
TOMI MARU	JA	Pollock	7/22	8/23	CO-OP	Trawl	349.0	8JBD
MEIHO MARU NO. 7	JA	Snails	-	-	CO-OP	Pot	349.0	7LGU
WAKATAKE MARU	JA	King and Tanner Crab	5/21	8/23	INPFC	Pot and Trawl	494.0	JHEU
AKADEMIC BERG	UR	Groundfish	8/13	9/20	CO-OP	Trawl	3170.0	UQAE
SESKAR	UR	Groundfish	4/10	8/1	CO-OP	Trawl	685.0	UJPA
ODE SAN HO	KS	Groundfish	7/21	11/30	CO-OP	Trawl	1120.0	6MKM

Table 23 - Japanese Tanner Crab Summary - 1978

	Factory Fleets	Independent Crab Pot	Total Crab Fleet
Effort days			
Mothership	331		
Catcher Boats	1,986		
Total	2,317	824	3,141
Tanner crab landed (m.t.) by type			
C. opilio	10,210	2,537	12,747
C. bairdi	1,179	557	1,736
C. Tanneri	342	137	479
Total	11,731	3,231	14,962
Number of crabs landed	15,837,000	4,502,000	20,339,000
Season mean catch per day	36.2	26.5	79.6
Average catch per day per catcher vessel	5.91	3.92	5.32
Number of vessels			
Factoryships			2
Catcher Boats			12
Independent Crab Pot			11

APPENDIX

GENERAL CHART OF AREAS REFERRED TO IN TEXT



APPENDIX 2A

General Terms and Abbreviations Used in Text

- Aleutian Islands - Area west of 170° W. longitude extending westward to the U.S./Soviet Convention Line and north to 54° 30' N.
- Allocation - Level of catch allowed to be taken. Also called quota.
- Bering Sea - All waters north of the Alaska Peninsula west to 170° W. longitude, and all waters north of the Aleutian Islands north of latitude 54° 30' N. The U.S. western boundary of the Bering Sea is the U.S./Soviet Convention Line of 1867 extending from the North Pacific Ocean to the Bering Straits.
- Contiguous Fishery Zone (CFZ) - Territorial waters 3 to 12 miles off the Coast.
- Domestic Fisheries - U.S. fisheries off Alaska fishing for halibut, salmon, crab, shrimp, and groundfish.
- Fathom - 6 feet or approximately 2 meters.
- FCMA - Fisheries Conservation and Management Act of 1976, 16 U.S.C. 1801-1882, 90 Stat. 331 (1976).
- FCZ - Fishery Conservation Zone established by the Fisheries Conservation and Management Act of 1976 extending from 3 to 200 miles off the shores of Alaska.
- Fishing Gear - Any device used to land fish species including but not limited to trawl, longline, pot, troll, and net gear.
- Fishery Management Plan - Final management package formulated by the North Pacific Management Council covering an entire fishery management scheme.
- Fisheries Violations - Any violation of fishery laws, acts, conventions, or treaties.

APPENDIX 2A (con.)

- Foreign Fisheries - Fisheries conducted by foreign vessels off Alaska which include:
- Japan (JA)
 - U.S.S.R. (UR)
 - South Korea (KS)
 - Taiwan (TW)
 - Poland (PL)
 - Mexico (MX)
- GIFA - Governing International Fisheries Agreement.
- GMT - Greenwich Mean Time - Alaskan waters are in GMT time zones +8 to +11.
- Gulf of Alaska - All North Pacific waters north of Dixon Entrance westward to 170° W. longitude.
- INPFC - International North Pacific Fishery Convention.
- IPHC - International Pacific Halibut Convention.
- JFA - Japan Fisheries Agency.
- Metric Ton (m.t.) - 2,204.6 U.S. pounds.
- NMFS - National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce.
- Observer Program - NMFS program to place U.S. scientists and technicians aboard foreign fishing vessels to collect biological information on the catch landed.
- Permit - Agreement by the United States to allow a vessel to operate under specific guidelines within the FCZ.
- Preliminary Management Plan - Management plan developed by National Marine Fisheries Service that is used until a Fishery Management Plan is developed by the North Pacific Fishery Management Council.
- USCG - United States Coast Guard, Department of Transportation.

APPENDIX 2A (con.)

U.S./Soviet Convention

Line

- Common boundary demarcation line between the U.S. and Soviet Union in the Bering Sea.

Vessel Day

- Effort by a single vessel conducting fishing operations for 1 day.

Vessel Type

- Category of ship used to land, process, or transport catch taken in waters off Alaska, including:

FAC - Groundfish factoryship.

FAC TRAWL - Groundfish factoryship catcher boats. Three types:

DS - Danish seiner

PTRL - pair trawler

STRL/F - Dependent stern trawler

INDEP TRAWL - Independent trawler that can land, process, and transport fishery products. Three types:

STRL/S - small trawler, less than 500 gross tons

STRL/M - medium trawler ranging between 500 to 1,500 gross tons

STRL/L - Large trawler greater than 1,500 gross tons

LL - Longliner

CFAC - Crab factoryship

CPOT - Crab factoryship catcher boat

INPOT - Independent crab pot

SNPOT - Snailpot

SALMON FAC - Salmon factoryship

APPENDIX 2B

Fishery Violation Terms and Abbreviations
Used in Text

- FC - Fishery Citation - Enforcement action taken to indicate a minor infraction of the FCMA. No monetary penalty assessed.
- FV - Report of Fishery Violation - Serious violation of the FCMA. Monetary penalty assessed.
- FS - Fishery Seizure - Serious and flagrant violation of the FCMA resulting in seizure and detainment of the violating vessel, plus possible monetary and permit sanction penalties.
- FO - Fishery Other - Non-FCMA violations.
- FH - International Pacific Halibut Convention violations.

FCMA Fishery Regulations By Numeric Order (50 CFR 611)

- 611.3 Conducting fishing activities without a valid permit.
- 611.4 Failure to properly report the time fishing operations began or ceased.
- 611.5 Failure to properly mark fishing vessel or fishing gear.
- 611.6 Failure to facilitate an inspection in a timely and safe manner.
- 611.7 Prohibitions against the FCMA, including interference with enforcement activities, fishing illegally inside 3 miles or within closed areas, or possession of fish taken illegally.
- 611.8 Interference with a U.S. observer placed aboard a foreign vessel.
- 611.9 Failure to maintain catch records in correct order or failure to report catch in proper manner.
- 611.11 Gear conflicts involving loss of domestic gear to foreign fishing vessels.
- 611.13 Retention of or slow return of prohibited species.
- 611.93 Failure to properly record catch landed or violation of closed areas identified in the Bering Sea or Aleutian Islands area.

APPENDIX 3 - Gulf of Alaska Groundfish Final Management Plan

U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL MARINE FISHERIES SERVICE
 ALASKA REGION

COMMERCIAL FISHING REGULATIONS FOR U.S. FISHERMEN
 FISHING IN THE FISHERY CONSERVATION ZONE IN THE
 GULF OF ALASKA

The following regulations have been reprinted from Federal Register, Vol. 43, No. 220 - Tuesday, November 14, 1978. They pertain to all fishing by U. S. fishermen fishing in the Fishery Conservation Zone in the Gulf of Alaska and are effective December 1, 1978.

Title 50—Wildlife and Fisheries

CHAPTER VI—FISHERY CONSERVATION AND MANAGEMENT, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

PART 611—FOREIGN FISHING
 (Not Included Here)

Part 672—GROUNDFISH OF THE GULF OF ALASKA

Final Regulations

AGENCY: National Oceanic and Atmospheric Administration (NOAA)/Commerce.

ACTION: Final regulations.

SUMMARY: Final regulations are promulgated to implement the fishery management plan for groundfish of the Gulf of Alaska under the Fishery Conservation and Management Act of 1976. The regulations are applicable to vessels of the United States and foreign nations fishing for groundfish in the fishery conservation zone in the Gulf of Alaska and supersede the regulations implementing the preliminary fishery management plan (PMP) for the Gulf of Alaska trawl fishery, as amended, and that portion of the PMP for sablefish of the Bering Sea and northeastern Pacific Ocean, as amended, applicable to the Gulf of Alaska (50 CFR 611.92 and 611.94).

EFFECTIVE DATE: December 1, 1978.

FOR FURTHER INFORMATION CONTACT:

Harry Rietze, Director, Alaska Region, National Marine Fisheries Service Box 1668, Juneau, Alaska 99802, telephone 907-586-7221.

PART 672—GROUNDFISH OF THE GULF OF ALASKA

Subpart A—General

- Sec.
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 672.2 Definitions.
 672.3 Relation to other laws.
 672.4 Permits.
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- 672.20 General limitations.
 672.21 (Reserved)
 672.22 Time and area closures.
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 672.25 Effort limitations
 672.26 (Reserved)
 672.27 Observers.

AUTHORITY: 16 U.S.C. 1801, et seq.

Subpart A—General

§ 672.1 Purpose and scope.

(a) Regulations in this part govern fishing for groundfish by vessels of the United States within that portion of the Gulf of Alaska over which the United States exercises exclusive fishery management authority.

(b) For regulations governing fishing in the Gulf of Alaska groundfish fishery by fishing vessels other than vessels of the United States, see 50 CFR 611.92.

(c) These regulations implement the Gulf of Alaska groundfish fishery management plan developed by the North Pacific Fishery Management Council.

§ 672.2 Definitions.

In addition to the definitions in the Act, and unless the context requires otherwise, the terms used in this part shall have the following meanings (some definitions in the Act have been

repeated here to aid understanding of the regulations):

Act means the Fishery Conservation and Management Act of 1976, 16 U.S.C. 1801-1882, as amended.

A.D.P. & G. means the Alaska Department of Fish and Game.

Assistant Administrator means the Assistant Administrator for Fisheries, National Oceanic and Atmospheric Administration, or an individual to whom appropriate authority has been delegated.

Authorized officer means: (1) Any commissioned, warrant, or petty officer of the Coast Guard;

(2) Any certified enforcement or special agent of the National Marine Fisheries Service;

(3) Any officer designated by the head of any Federal or State agency which has entered into an agreement with the Secretary and the Commandant of the Coast Guard to enforce the provisions of the Act; or

(4) Any Coast Guard personnel accompanying and acting under the direction of any person described in paragraph (1) of this definition.

Fishery conservation zone (FCZ) means that area adjacent to the United States which, except where modified to accommodate international boundaries, encompasses all waters from the seaward boundary of each of the coastal states to a line on which each point is 200 nautical miles from the baseline from which the territorial sea of the United States is measured.

Fishing means any activity, other than scientific research activity conducted by a scientific research vessel, which involves:

(1) The catching, taking, or harvesting of fish;

(2) The attempted catching, taking, or harvesting of fish;

(3) Any other activity which can reasonably be expected to result in the catching, taking, or harvesting of fish; or

(4) Any operations at sea in support of, or in preparation for, any activity described in subparagraphs (1), (2), or (3) above.

Fishing area means any area of the FCZ seaward of the State of Alaska, previously established under the International North Pacific Fisheries Commission for the general purposes of research, reporting and/or regulation. The five fishing areas in the Gulf of Alaska are described as follows:

Area and Location

Stimnagin between 170 159 West Longitude

Chirikof between 159 154 West Longitude.

Kodiak between 154 147 West Longitude.

Yakutat between 147 137 West Longitude.

Southeastern between 137 132 40 West Longitude.

Fishing vessel means any vessel, boat, ship, or other craft which is used for, equipped to be used for, or of a type which is normally used for: (1) Fishing, or (2) aiding or assisting one or more vessels at sea in the performance of any activity relating to fishing, including, but not limited to, preparation, supply, storage, refrigeration, transportation or processing.

Groundfish means pollock, cod, any species of flounder and sole, Pacific Ocean perch, other rockfish, sablefish, Atka mackerel, squid, and other finfish, except salmon, steelhead trout, and Pacific halibut. The scientific names of these species are as follows:

Pollock means *Theragra chalcogrammus*.

Cod means *Gadus macrocephalus*.

Arrowtooth flounder means *Atheresthes stomias*.

Other flounder means *Pleuronectes* (order) not specifically defined.

Rock sole means *Lepidopsetta bilineata*.

Flathead sole means *Hippoglossoides elassodon*.

Pacific ocean perch means *Sebastes atulus*.

Atka mackerel means *Pleurogrammus monoptyerygius*.

Other rockfish means *Scorpaenidae* (family) not specifically defined.

Sablefish means *Anoplopoma fimbria*.

Squid means *sepioid* and *teuthoid* squid.

Salmon means of the family *Salmonidae*.

Pacific halibut means *Hippoglossus stercoratus*.

Steelhead trout means *Salmo gairdneri*.

Gulf of Alaska means that portion of the fishery conservation zone in the North Pacific Ocean exclusive of the Bering Sea, between 132° 40' W. longitude and 170° 00' W. longitude seaward of the State of Alaska.

Landing means off loading fish.

Longline means a stationary, buoyed, and anchored line with hooks or pots attached, or the taking of fish by means of such a device.

Off-bottom trawl means a trawl in which the otter boards may be in contact with the seabed but the ground rope of the net remains above the seabed.

Operator, with respect to any vessel, means the master or other individual on board and in charge of that vessel.

Owner, with respect to any vessel, means:

(1) Any person who owns that vessel in whole or in part;

(2) Any charterer of the vessel, whether bareboat, time, or voyage;

(3) Any person who acts in the capacity of a charterer, including but not limited to parties to a management agreement, operating agreement, or any similar agreement that bestows control over the destination, function, or operation of the vessel; or

(4) Any agent designated as such by any person in subparagraph (1), (2), or (3) a

Person means any individual (whether or not a citizen or national of the United States), corporation, partnership, association, or other entity (whether or not organized or existing under the laws of any State), and any Federal, State, local, or foreign government or any entity of any such government.

Regional director means Director, Alaska Region, National Marine Fisheries Service, Box 1668, Juneau, Alaska 99802, or an individual to whom appropriate authority has been delegated.

Vessel of the United States means: (1) A vessel documented or numbered by the Coast Guard under U.S. law; or (2) A vessel, under 5 net tons, which is registered under the laws of any State.

§ 672.3 Relation to other laws.

(a) *Federal law.* For other regulations concerning the conservation of halibut see the regulations of the International Pacific Halibut Commission, or any regulations implementing any halibut fishery management plan approved under the Act. For other regulations concerning fishing for Tanner crab see 50 CFR Part 671.

(b) *State law.* Certain data collection and enforcement activities under this part will be performed by personnel of the State of Alaska under the terms of an agreement with NOAA/NMFS and the U.S. Coast Guard.

(c) *Delegation.* The Assistant Administrator has delegated to the regional director authority to take actions pursuant to § 672.22 of this part, and to apportion reserves pursuant to § 672.20(c) of this part.

§ 672.4 Permits.

(a) *General.* No vessel of the United States may fish for groundfish in the Gulf of Alaska without first obtaining a permit issued under this Part. Permits shall be issued without charge.

(b) *Application.* An applicant may obtain a permit by submitting to the regional director a written request containing the following information: (1) The applicant's name, mailing address, and telephone number; (2) The name of the vessel; (3) The vessel's U.S. Coast Guard documentation number or State registration number; (4) The home port of the vessel; (5) The type of fishing gear to be used; and (6) The signature of the applicant.

(c) *Issuance.* (1) Upon receipt of a properly completed application, the regional director shall issue a permit.

(2) Upon receipt of an incomplete or improperly completed application, the

regional director shall notify the applicant of the deficiency in the application. If the applicant fails to correct the deficiency within 10 days following the date of notification, the application shall be considered abandoned.

(d) *Notification of change.* Any person who has applied for and received a permit under this section shall give written notification of any change in the information provided under paragraph (b) of this section to the regional director within 30 days of the date of that change.

(e) *Duration.* A permit shall continue in full force and effect until it is revoked, suspended, or modified pursuant to 50 CFR Part 621 (Civil procedures).

(f) *Alteration.* No person shall alter, erase, or mutilate any permit. Any permit that has been intentionally altered, erased, or mutilated shall be invalid.

(g) *Transfer.* Permits issued under this part are not transferable or assignable. A permit shall be valid only for the vessel for which it is issued.

(h) *Inspection.* Any permit issued under this part must be carried aboard the vessel whenever the vessel is fishing for groundfish. The permit shall be presented for inspection upon request of any authorized officer.

(i) *Sanctions.* Subpart D of 50 CFR 621 (Civil procedures) shall govern the imposition of permit sanctions against a permit issued under this part. As specified in that subpart D, a permit may be revoked, modified, or suspended if the permitted vessel is used in the commission of an offense prohibited by the Act or these regulations; or if a civil penalty or criminal fine imposed under the Act and pertaining to a permitted vessel is not paid.

§ 672.5 Reporting requirements.

(a) The operator of any fishing vessel regulated by this part whose port of landing is in the State of Alaska shall, for each sale or delivery of groundfish, be responsible for the submission of an accurately completed State of Alaska fish ticket.

(b) At the election of the vessel operator, the fish ticket shall be either: (1) Submitted by the vessel operator directly to the A.D.F. & G. within 72 hours after such fish are sold or delivered; or (2) prepared, at the request of the operator, by the purchaser (i.e., any person who receives fish for a commercial purpose from a fishing vessel subject to this part) and submitted by the purchaser to the A.D.F. & G. within 72 hours after such fish are received by the purchaser. (A.D.F. & G. address: Director, Commercial Fish Division, Alaska Department of Fish

and Game Headquarters, Support Building Juneau, Alaska 99801.)

(c) In addition to the requirements of paragraphs (a) and (b) of this section, each operator (or purchaser, if the fish ticket is submitted, in accordance with paragraph (b)(2)) shall also accurately state on each such fish ticket: (1) Total time fished; (2) total number of hauls; and (3) quantity and type of gear used.

(d) The operator of any vessel of the United States subject to this part whose port of landing is in the United States but outside the State of Alaska shall comply with the provisions of this section by submitting a completed Alaska fish ticket, or an equivalent document containing all of the information required on an Alaska fish ticket, to the A.D.F. & G. within 72 hours after the date of each sale or delivery of any species of fish covered by these regulations. (For the address of the A.D.F. & G., see § 672.5(b).) (Sample alternative document reserved.)

§ 672.6 [Reserved]

§ 672.7 General prohibitions.

It shall be unlawful for any person to:

(a) Fish for groundfish with a vessel of the United States which does not have aboard a valid permit issued pursuant to this part;

(b) Possess, have custody or control of, ship, transport, import, export, offer for sale, sell, or purchase any fish taken or retained in violation of the Act, this part, or any other regulation or permit issued under the Act;

(c) Refuse to permit an authorized officer to board a fishing vessel subject to such person's control for purposes of conducting any search or inspection in connection with the enforcement of this Act, this part, or any other regulation or permit issued under the Act;

(d) Forcibly assault, resist, oppose, impede, intimidate, or interfere with any authorized officer in the conduct of any search or inspection described in paragraph (c) of this section;

(e) Resist a lawful arrest for any act prohibited by this part;

(f) Interfere with, delay, or prevent, by any means, the apprehension or arrest of another person knowing that such other person has committed any act prohibited by this part;

(g) Forcibly assault, resist, impede, intimidate, or interfere with an observer placed aboard a fishing vessel pursuant to this part;

(h) Violate any other provision of this part, the Act, or any regulation or permit issued under the Act.

§ 672.8 Enforcement.

(a) *General.* The owner or operator of any fishing vessel subject to these regulations shall immediately comply with instructions issued by an authorized officer to facilitate safe boarding and inspection of the fishing vessel, its gear, equipment, and catch for purposes of enforcing the Act and this part.

(b) *Signals.* Upon being approached by a Coast Guard cutter or aircraft, or other vessel or aircraft authorized to enforce the Act, the operator of a fishing vessel shall be alert for signals conveying enforcement instructions. The following signals extracted from the International Code of Signals are among those which may be used:

(1) "L" meaning "You should stop your vessel instantly."

(2) "SQ3" meaning "You should stop or heave to; I am going to board you," and

(3) "AA AA AA etc." which is the call to an unknown station.

(c) *Boarding.* A vessel signaled to stop or heave to for boarding shall:

(1) Stop immediately and lay to or maneuver in such a way as to permit the authorized officer and his party to come aboard;

(2) If requested, provide a safe ladder for the authorized officer and his party;

(3) When necessary to facilitate the boarding, provide a man rope, safety line, and illumination for any ladder; and

(4) Take such other actions as necessary to insure the safety of the authorized officer and his party and to facilitate the boarding.

§ 672.9 Penalties.

Any person or fishing vessel found to be in violation of this part will be subject to the civil and criminal penalty provisions and forfeiture provisions prescribed in the Act, and 50 CFR Parts 620 (Citations) and 621 (Civil Procedures), and other applicable law.

Subpart B—Management Measures

§ 672.20 General limitations.

(a) *Optimum yield.* (1) The optimum yield (OY) and reserves for species regulated under this part in the five fishing areas are set forth in table I. These specifications of OY and reserves are effective for a fishing year beginning on December 1, 1978, and ending on October 31, 1979. The OY of each species in table I is the maximum amount of that species which may be caught or harvested during the fishing year by vessels of the United States and foreign nations in each fishing area.

APPENDIX 3 (CONTINUED)

(b) *Field orders.* (1) If the Regional Director determines that the OY for any species in any fishing area in table I of paragraph (a) will be reached, he shall issue a field order pursuant to § 672.22(a) prohibiting fishing for all species in that fishing area, except that the Regional Director shall not prohibit, under this section, fishing for sablefish by fishing vessels using longline gear unless he determines that the OY for sablefish in that fishing area will be reached.

(2) Fishing for species of groundfish by vessels of the United States in the applicable fishing area contrary to any field order issued under this paragraph is prohibited from the effective date of such field order except that fishing for sablefish with longline gear is not prohibited until the effective date of a field order prohibiting longline fishing for sablefish in that fishing area.

(c) (Reserved)

(d) *Prohibited species.* (1) Prohibited species, for the purpose of this part, means any species of fish caught while fishing for groundfish, the retention of which is prohibited by other applicable law, including regulations implementing any fishery management plan for that species.

(1)eAny catch of halibut by fishing vessels regulated by this part is catch of a prohibited species, unless retention is authorized by the regulations of the International Pacific Halibut Commission.

(ii) Any catch of Tanner crab (*C. bairdi* or *C. opilio*) by fishing vessels regulated by this part is catch of a prohibited species after the effective date of regulations implementing the Fishery Management Plan for Tanner crab off Alaska (see 50 CFR 674).

(2) Each vessel subject to this part shall minimize its catch of prohibited species.

(3) Each vessel shall sort its catch as soon as possible after retrieval of the catch and, after allowing for sampling by an observer (if any), shall return any catch of prohibited species or parts thereof to the sea immediately with a minimum of injury regardless of its condition.

(4) It shall be a rebuttable presumption that any prohibited species found onboard a fishing vessel regulated by this part was caught and retained in violation of this part.

(5) In any fishing area where the OY in table I of paragraph (a) for any species is "0" (zero), any catch of that

species by a vessel regulated by this part in that fishing area shall be considered catch of a "prohibited species" and shall be treated in accordance with this paragraph.

(e) *Halibut.* (1) If, during the period between December 1 and May 31, the Regional Director determines that the estimated total catch of halibut in any fishing area by vessels regulated by this part will reach the amount listed below, he shall issue a field order pursuant to § 672.22(a) prohibiting, until June 1, groundfish fishing with trawl gear in that fishing area by vessels regulated by this part.

Fishing Area and Catch Amount

Shumagin—29 metric tons (mt).
Chirikof—18 mt.
Kodiak—34 mt.
Yakutat—17 mt.
Southeast—14 mt.

(2) Fishing for groundfish with trawl gear by vessels regulated by this Part in the applicable fishing area is prohibited from the effective date of any field order issued pursuant to this paragraph, until June 1, e

§ 672.21 (Reserved)

§ 672.22 Time and area closures.

(a) *Field orders.* (1) Field orders issued by the Regional Director under this part shall include the following information: (i) A description of the area to be opened or closed, (ii) the effective date and any termination date of such opening or closure; and (iii) the reason for the opening or closure.

(2) No field order issued under this paragraph shall be effective until:

(i) It is filed for publication in the FEDERAL REGISTER,

(ii) It has been posted and otherwise made available to the public, in accordance with procedures customarily used by the A.D.F. & G. for the posting and publicizing of similar notices of closure, for 48 hours prior to its effective date; and

(iii) It has been broadcast at those time intervals, channels and frequencies customarily used by the A.D.F. & G. to broadcast similar notices of closure, for 48 hours prior to its effective date.

(3) Field orders issued pursuant to this section shall remain in effect until the earlier of the following dates:

(i) Annularization date stated in the field order; or

(ii) If the effective date of the field order which modifies, rescinds, or supersedes the initial field order.

(b) *Inseason adjustments.* (1) *General.* The Regional Director may, following consultation with the A.D.F. & G., prohibit fishing by vessels regulated by this part, for any species of groundfish in any portion of the Gulf of Alaska during the fishing year.

(2) *Determinations.* Any adjustment under this paragraph shall be based on a determination by the Regional Director that: (i) The condition of any groundfish or halibut stock in any portion of the Gulf of Alaska is substantially different from the condition anticipated at the beginning of the fishing year, and (ii) such differences reasonably support the need for inseason conservation measures to protect groundfish or halibut stocks.

(3) *Data.* Fishery and observer data reported inseason which relates to one or more of the following factors may be considered in making this determination:

(i) The effect of overall fishing effort within a fishing area;

(ii) Catch per unit of effort and rate of harvest;

(iii) Relative abundance of stocks within the area;

(iv) Amount of halibut being caught;

(v) Condition of stocks within the area; and

(vi) Any other factors relevant to the conservation and management of the groundfish or halibut resource.

(4) *Procedure.* (i) The Regional Director shall publish proposed adjustments in the FEDERAL REGISTER for public comment before they are made final, unless the Regional Director finds for good cause that such notice and public procedure are impracticable, unnecessary, or contrary to the public interest.

(ii) If the Regional Director decides, for good cause, that an adjustment is to be made without affording a prior opportunity for public comment, public comments on the necessity for, and extent of, the adjustment shall be received by the Regional Director for a period of 15 days after the effective date of the field order. (Address: Director, Alaska Region, National Marine Fisheries Service, Box 1668, Juneau, Alaska 99802.)

(iii) During any such 15-day period, the Regional Director shall make available for public inspection, during business hours, the aggregate data upon which an adjustment was based. (Address: National Marine Fisheries Service, Alaska Regional Office, Federal Building, Room 453, 709 West Ninth Street, Juneau, Alaska 99802.)

(iv) If comments are received during the 15-day period, the Regional Director shall reconsider the necessity for the adjustment and, as soon as practicable after that reconsideration, shall either: (A) publish in the FEDERAL REGISTER a notice of continued effectiveness of the adjustment, responding to comments received; or (B) modify or rescind the adjustment.

(5) *Notice of adjustments.* The Regional Director shall give notice of inseason adjustments by issuance of a field order in accordance with the procedures in paragraph (a) of this section.

(6) *Optimum yield.* No action which has the effect of raising the optimum yield for any species as specified in table I of § 672.20(a) is authorized under this paragraph.

(c) *Prohibition.* Any fishing contrary to a field order issued under this section is prohibited.

§ 672.23 (Reserved)

§ 672.24 Gear Limitations.

(a) *Trawl.* During the period from December 1 through May 31, only off-bottom trawls may be used by fishing vessels subject to this Part.

(b) (Reserved)

§ 672.25 Effort limitations.

The duration of individual tows of fishing vessels subject to this part using off-bottom trawls shall not exceed 1 hour.

§ 672.26 (Reserved)

§ 672.27 Observers.

All fishing vessels subject to this part must, when so requested by the Regional Director, take aboard an observer.

(FR Doc 78-31958 Filed 11-13-78; 8:45 am)

* * * * *

FEDERAL REGISTER, VOL 42, NO. 95—TUESDAY, MAY 16, 1

OPERATIONAL DEFINITIONS OF TERMS USED

The North Pacific Fisheries Management Council has adopted the following working definitions of terms used in the development of management plans.

A. DETERMINANTS OF CATCH LEVELS

1. *Maximum Sustainable Yield (MSY)* is an average over a reasonable length of time of the largest catch which can be taken continuously from a stock under current environmental conditions. It should normally be

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APPENDIX 3 (CONTINUED)

presented with a range of values around its point estimate.

Where sufficient scientific data as to the biological characteristics of the stock do not exist or the period of exploitation or investigation has not been long enough for adequate understanding of stock dynamics, the MSY will be estimated from the best information available.

2. *Equilibrium Yield (EY)*. The annual or seasonal harvest which maintains the resource at approximately the same level of abundance (apart from the effects of environmental variation) in succeeding seasons or years.

3. *Acceptable Biological Catch (ABC)* is a seasonally determined catch that may differ from MSY for biological reasons. It may be lower or higher than MSY in some years for species with fluctuating recruitment. It may be set lower than MSY in order to rebuild overfished stocks.

4. *Optimum Yield (OY)* may be obtained by a plus or minus deviation from ABC for purposes of promoting economic, social or ecological objectives as established by law and public participation processes. Ecological objectives, where they primarily relate to biological purposes and factors, are included in the determination of ABC. Where ecological objectives relate to resolving conflicts and accommodating competing uses and values, they are included as appropriate with economic and/or social objectives.

OY may be set higher than ABC in order to produce higher yields from other more desirable species in a multi-species fishery. It might be set lower than ABC in order to provide larger sized individuals or a higher average catch per unit effort.

B. DETERMINATION OF DOMESTIC ANNUAL CAPACITY AND EXPECTED HARVEST

1. *Domestic Annual Fishing Capacity (DAC)* is the total potential physical capacity of the fleets, modified by logistic factors. The components of the concept are:

- a. An inventory of total potential physical capacity, defined in terms of appropriate vessel and gear characteristics (e.g., size, horsepower, hold capacity, gear design, etc.)
- b. Logistic factors determining total annual fishing capacity, (e.g., variation in vessel and gear performance, trip length between fishing locations and landing points, weather constraints, etc.)

2. *Expected Domestic Annual Fisheries Harvest (DAH)* is the domestic annual fishing capacity modified by other factors which will determine estimates of what the fleets will harvest (e.g., how fishermen will respond to price changes in the subject species and other species, etc.)

These concepts should be placed in a dynamic context of past trends and future projections. For example, physical fleet capacity should not simply be last season's inventory of vessels and hold measurements (although this is appropriate for present interim planning), but also next year's projected movement into and out of the fishery. Vessels under construction should be included and an estimate of attrition made.

The determination of domestic annual fishing capacity and expected harvest should be made on the best available information.

3. *Determination of Foreign Allowable Catch (FAC)*. The foreign allowable catch is determined by deducting the domestic annual expected harvest from the optimum yield (OY-DAH=FAC).

APPENDIX 4 Domestic Tanner Crab Fishing Regulations

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE
ALASKA REGION

COMMERCIAL FISHING REGULATIONS FOR U.S. FISHERMEN
FISHING FOR TANNER CRAB
IN THE FISHERY CONSERVATION ZONE OFF ALASKA

The following regulations have been reprinted from Federal Register, Vol. 43, No. 235 - Wednesday, December 6, 1978. They pertain to all U.S. fishermen fishing for Tanner crab in the Fishery Conservation Zone off Alaska and are effective December 1, 1978.

**PART 671—TANNER CRAB OFF
ALASKA**

Final Regulations

AGENCY: National Oceanic and Atmospheric Administration/Commerce.

ACTION: Final regulations.

SUMMARY: These final regulations govern vessels of the United States fishing for Tanner crab in the Fishery Conservation Zone (FCZ) off Alaska and implement the Fishery Management Plan for Tanner crab off Alaska (FMP) which was adopted by the North Pacific Fishery Management Council (Council), and approved by the Secretary of Commerce on April 18, 1978. Proposed regulations governing foreign fishing for Tanner crab were published on November 24, 1978 (43 FR 54964) for an additional public comment period and do not appear as final regulations at this time.

EFFECTIVE DATE: December 1, 1978.

FOR FURTHER INFORMATION CONTACT:

Mr. Harry L. Rietze, Director, Alaska Region, National Marine Fisheries Service, Box 1668, Juneau, Alaska 99802, telephone: (907) 586-7221.

Subpart A—General

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671.4	Reporting requirements.
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671.6	Enforcement.
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671.21	Optimum yield table
671.22	Size and sex restrictions.
671.23	Vessel registration.
671.24	Vessel inspection
671.25	Landing requirements.
671.26	Season and gear restrictions.
671.27	Time and area closures.

AUTHORITY: Sec. 305, Fishery Conservation and Management Act of 1976, as amended; 16 U.S.C. 1801 *et seq.*

Subpart A—General

§ 671.1 Purpose and scope.

(a) This part regulates fishing for Tanner crab by vessels of the United States within that portion of the Bering Sea and Gulf of Alaska over which the United States exercises exclusive fishery management authority. These regulations implement the Tanner crab fishery management plan developed by the North Pacific Fishery Management Council.

(b) For regulations governing fishing for Tanner crab in the Gulf of Alaska and Bering Sea by fishing vessels other than vessels of the United States see 50 CFR 611.91.

§ 671.2 Definitions.

In addition to the definitions in the Act, and unless the context requires otherwise, the terms used in this part shall have the following meanings (some definitions in the Act have been repeated here to aid understanding of the regulations):

Act means the Fishery Conservation and Management Act of 1976, 16 U.S.C. 1801 *et seq.*, as amended.

ADF&G means the Alaska Department of Fish and Game.

Assistant Administrator means the Assistant Administrator for Fisheries, National Marine Fisheries Service

(NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, or an individual to whom appropriate authority has been delegated.

Authorized Officer means:

(1) Any commissioned, warrant, or petty officer of the United States Coast Guard;

(2) Any certified enforcement agent or special agent of the National Marine Fisheries Service;

(3) Any officer designated by the head of any Federal or State agency which has entered into an agreement with the Secretary of Commerce or the Commandant of the Coast Guard to enforce the provisions of the Act; or

(4) Any Coast Guard personnel accompanying and acting under the direction of any person described in paragraph (1) of this definition.

Fishery Conservation Zone (FCZ) means that area adjacent to the United States which, except where modified to accommodate international boundaries, encompasses all waters from the seaward boundary of each of the coastal States to a line on which each point is 200 nautical miles from the baseline from which the territorial sea of the United States is measured.

Fishing means any activity, other than scientific research, which involves:

(1) The catching, taking or harvesting of fish;

(2) The attempted catching, taking or harvesting of fish;

(3) Any other activity which can reasonably be expected to result in the catching, taking or harvesting of fish; or

(4) Any operations at sea in support of, or in preparation for, any activity described in paragraphs (1), (2), or (3) of this definition.

Fishing Vessel means any vessel, boat, ship, or other craft which is used for, equipped to be used for, or of a type which is normally used for (1) fishing or (2) aiding or assisting one or more vessels at sea in the performance of any activity relating to fishing, including, but not limited to, preparation, supply, storage, refrigeration, transportation, or processing.

Landing means off-loading fish (including Tanner crab).

Operator, with respect to any vessel, means the master or other individual on board and in charge of that vessel.

Owner, with respect to any vessel, means:

(1) Any person who owns that vessel in whole or in part;

(2) Any charterer of the vessel.

whether bareboat, time or voyage;

(3) Any person who acts in the capacity of a charterer, including but not limited to parties to a management agreement, operating agreement, or any similar agreement that bestows control over the destination, function or operation of the vessel; or

(4) Any agent designated as such by any person in subparagraph (1), (2), or (3).

Person means any individual (whether or not a citizen or national of the United States), corporation, partnership, association, or other entity (whether or not organized or existing under the laws of any State), and any Federal, State, local, or foreign government or any entity of any such government.

Regional Director means the Director, Alaska Region, National Marine Fisheries Service, Box 1668, Juneau, Alaska, 99802 or an individual to whom appropriate authority has been delegated.

Registration Area A (Southeastern Alaska-Yakutat) is that portion of the FCZ in the Gulf of Alaska east of 143°53'36" W. longitude (Cape Suckling).

Registration Area E (Prince William Sound) is that portion of the FCZ between 143°53'36" W. longitude (Cape Suckling) and 148°53' W. longitude (Cape Fairfield).

Registration Area H (Cook Inlet) is that portion of the FCZ lying west of 148°53' W. longitude (Cape Fairfield) and north of 58°52' N. latitude (Cape Douglas).

Registration Area J (Westward) includes the FCZ in the Bering Sea, and that part of the FCZ in the Gulf of Alaska between 148°53' W. longitude (Cape Fairfield) and 172° E. longitude south of 58°52' N. latitude (Cape Douglas).

Ring Net means a bag-shaped net suspended from a circular or rectangular frame.

Tanner Crab means all species of the genus *Chionoecetes* including *C. bairdi* and *C. opilio*.

Tanner Crab Pot means a portable structure designed and constructed to capture and retain fish and shellfish alive in the water. The Tanner crab pot has rigid tunnel eye openings which individually are a maximum of five (5) inches (13 cm) in one dimension, and tunnel eye opening perimeters which individually are larger than thirty (30) inches (76 cm); or the pot tapers inward from its base to a top consisting of one horizontal opening of undescribed size.

Vessel of the United States means:

(1) A vessel documented or non-

bered by the Coast Guard under United States law; or

(2) A vessel, under five net tons, which is registered under the laws of any State.

§ 671.3 Relation to other laws.

(a) *Delegation.* The Assistant Administrator has delegated to the Regional Director authority to make in-season adjustments pursuant to § 671.27.

(b) *Other Agreements.* Certain responsibilities relating to the administration of this Part will be performed by personnel of the State of Alaska under the terms of an agreement with NOAA/NMFS and the United States Coast Guard.

§ 671.4 Reporting requirements.

(a) The operator of any fishing vessel subject to this Part whose port of landing is in the United States is responsible for the submission of an accurately completed State of Alaska fish ticket for each sale or delivery of any Tanner crab covered by this part.

(b) At the election of the vessel operator, the fish ticket shall be either: (1) Submitted by the vessel operator directly to the ADF&G within 72 hours after such Tanner crab are sold or delivered; or (2) prepared, at the request of the operator, by the purchaser (i.e., any person who receives Tanner crab for a commercial purpose from a fishing vessel subject to this part) and submitted by the purchaser to the ADF&G within 72 hours after such Tanner crab are received by the purchaser.

(c) In addition to the requirements of paragraphs (a) and (b) of this section, each operator (or purchaser, if the fish ticket is submitted in accordance with paragraph (b)(2) of this section) shall also accurately state on each such fish ticket: (1) Total time fished; (2) total number of pot lifts; and (3) quantity and type of gear used.

(d) The operator of any fishing vessel subject to this part whose port of landing is outside the State of Alaska shall submit a completed State of Alaska fish ticket, or an equivalent document containing all of the information required on an Alaska fish ticket and in § 671.4(c), to the ADF&G within 72 hours after the date of each sale or delivery of any Tanner crab. (Sample alternative document reserved.)

§ 671.5 General prohibitions.

It is unlawful for any person to:

(a) Fish for, take, or retain Tanner crab in violation of the Act, this part, or any regulation or permit issued under the Act, including but not limit-

ed to the following: During closed seasons or in closed areas specified in Subpart B of this part; after closure of an area when a catch limitation is reached, or as otherwise announced by a field order issued under this part; or by means of gear or methods prohibited by this part;

(b) Take and retain Tanner crab in violation of § 671.22;

(c) Possess, have custody or control of, ship, transport, offer for sale, sell, purchase, import, land or export any Tanner crab taken in violation of the Act, this part, or any other regulation or permit issued under the Act;

(d) Refuse to permit an Authorized Officer to board a fishing vessel subject to such person's control for purposes of conducting any search or inspection in connection with the enforcement of the Act, this part, or any other regulation or permit issued under the Act;

(e) Forcibly assault, resist, oppose, impede, intimidate or interfere with any Authorized Officer in the conduct of any search or inspection described in paragraph (d) of this section;

(f) Resist a lawful arrest for any act prohibited by this part; or

(g) Interfere with, delay, or prevent, by any means, the apprehension or arrest of another person knowing that such other person has committed any act prohibited by this part.

§ 671.6 Enforcement.

(a) *General.* The owner or operator of any fishing vessel subject to this part shall immediately comply with instructions issued by an Authorized Officer to facilitate safe boarding and inspection of the fishing vessel, its gear, equipment, and catch for purposes of enforcing the Act and this part.

(b) *Signals.* Upon being approached by a Coast Guard cutter or aircraft, or other vessel or aircraft authorized to enforce the Act, the operator of a fishing vessel shall be alert for signals conveying enforcement instructions. The following signals extracted from the International Code of Signals are among those which may be used:

(1) "L" meaning "You should stop your vessel instantly."

(2) "SQ3" meaning "You should stop or heave to; I am going to board you," and

(3) "AA AA AA etc." which is the call to an unknown station.

(c) *Boarding.* A fishing vessel signaled to stop or heave to for boarding shall:

(1) Stop immediately and lay to or maneuver in such a way as to permit

the Authorized Officer and his party to come aboard;

(2) If requested, provide a safe ladder for the Authorized Officer and party;

(3) When necessary to facilitate the boarding, provide a man rope, safety line and illumination for the ladder; and

(4) Take such other actions as necessary to ensure the safety of the Authorized Officer and party and to facilitate the boarding.

§ 671.7 Penalties.

Any person or fishing vessel found to be in violation of this part will be subject to the civil and criminal penalty provisions and forfeiture provisions prescribed in the Act, and 50 CFR Parts 620 (Citations) and 621 (Civil Procedures), and other applicable law.

Subpart B—Management Measures

§ 671.21 Optimum yield.

(a) *Table.* The optimum yield for Tanner crab for each Federal registration area is set forth in Table I. These specifications of optimum yield are effective for the fishing year beginning on January 1 and ending on December 31, 1979.

TABLE I

Registration area	Optimum yield (in metric tons) ¹	Species
Registration Area A (Southeast Yakutat)	2,495	All.
Registration Area E (Prince William Sound)	3,175	All.
Registration Area H (Cook Inlet)	2,404	All.
Registration Area J:		
Kodiak district	11,240	All.
South Peninsula district	13,608	All.
Aleutian district	907	All.
Bering Sea district:		
South of 58°	40,281	C. bairdi
North of 58°, west of 164°	110,000	C. opiflo.
	17,268	All.

¹Catches of Tanner crab in State of Alaska registration areas will be counted as part of the optimum yield specified for the contiguous Federal registration area.

(b) *Limitation.* The optimum yield for Tanner crab in each of the eight geographic areas in Table I is the maximum amount of Tanner crab which may be caught or harvested by fishing vessels subject to this Part in each respective area.

(c) *Field Orders.* If the Regional Director determines that the optimum yield in any geographic area specified in Table I will be reached, he shall issue a field order pursuant to

§ 672.27(a) prohibiting fishing for Tanner crab in that geographic area. Fishing for Tanner crab by vessels of the United States in the applicable geographic area is prohibited from the effective date of the field order.

§ 671.22 Size and sex restrictions.

(a) *Female Tanner crabs.* No female Tanner crab may be retained.

(b) *Male Tanner crabs.* No male Tanner crab of the species *C. bairdi* measuring less than 5½ inches (140 mm) across the greatest width of the carapace may be retained, except that male Tanner crabs of the species *C. bairdi* in Federal registration area E (Prince William Sound) may be retained if they measure 5.3 inches (135 mm) or greater, across the greatest width of the carapace. The width measurement of Tanner crab is determined by measuring the greatest straight line distance across the carapace, including the spines, perpendicular to an imaginary line drawn between a point midway between the eyes and the midpoint of the posterior portion of the carapace.

(c) *General.* All female and undersized male Tanner crabs of the species *C. bairdi* must be returned to the sea immediately with a minimum of injury, regardless of their condition.

§ 671.23 Vessel registration.

(a) *Requirement.* Any vessel of the United States fishing for Tanner crab in any Federal registration area must be registered for fishing in such area pursuant to this section.

(b) *Applications.*

(1) The owner (or the owner's authorized agent) of a fishing vessel desiring to fish for Tanner crab in a Federal registration area, not registered for a State of Alaska registration area contiguous with such Federal registration area must submit to the Regional Director, within 30 days prior to the scheduled opening of fishing in the Federal registration area, a completed State of Alaska registration form to be used as a Federal form.

(2) A fishing vessel registered for a State of Alaska registration area will be deemed to be registered for the contiguous Federal registration area.

(c) *Registration certificate.* The registration certificate shall be signed by the owner (or the owner's authorized agent), shall be kept onboard by the operator at all times during fishing operations, and shall be shown by the operator upon request to any Authorized Officer.

(d) *Registration validation.* A registration certificate is not valid until the fishing vessel has complied with the inspection requirements contained in

§ 671.24. A valid registration certificate becomes invalid:

(1) Upon landing Tanner crab in a Federal registration area other than the area for which the vessel is registered (or other than the contiguous State of Alaska registration area); or

(2) Seventy-two (72) hours after the close of the season for the applicable Federal registration area, whichever occurs first.

(e) *Late registration.* The late registration of any fishing vessel may be permitted by the Regional Director in the case of the loss of a registered fishing vessel. For purposes of this paragraph, "loss of a registered fishing vessel" means that the fishing vessel is incapable of being used to take Tanner crab during the open Tanner crab season in the area for which it is registered. An application for late registration under this paragraph shall be documented by submission of adequate proof, in writing, concerning the loss of the vessel. The late registration shall be for the Federal registration area in which the lost fishing vessel was registered.

(f) *Expiration.* A registration certificate expires on the last day of the registration year. Registration for any subsequent year shall be obtained by re-application in accordance with the procedure set forth in this section.

(g) *Registration year.* The registration year shall be August 1 through July 31.

(h) *Exclusive registration areas.* (1) Federal registration areas E and H are exclusive registration areas. No fishing vessel registered for an exclusive Federal registration area may be registered for any other Federal registration area (exclusive or non-exclusive) during a registration year.

(2) A fishing vessel registered for an exclusive State of Alaska registration area may register only in the contiguous Federal exclusive registration area during that registration year.

(3) No operator of a fishing vessel registered for an exclusive Federal registration area may operate any other fishing vessel registered for any other exclusive Federal registration area.

(i) *Non-exclusive registration areas.* Federal registration areas A and J are non-exclusive registration areas. A fishing vessel may be registered for any or all of the non-exclusive Federal registration areas during any registration year.

§ 671.24 Vessel inspection.

(a) *Inspection.* (1) Within 72 hours prior to fishing for Tanner crab for the first time during an open season, each registered fishing vessel must have its holds and live tanks, if any,

inspected by an Authorized Officer at an inspection point specified in paragraph (b) of this section.

(2) *Requirement.* A registration certificate will not be validated if there are Tanner crab on board the fishing vessel at the time of inspection.

(3) *Certificate.* No fishing vessel will be issued an inspection certificate unless a current registration certificate for the contiguous Federal registration area is displayed to the Authorized Officer conducting the inspection. The inspection certificate shall be signed by the current fishing vessel operator, shall be kept onboard by the operator at all times during fishing operations, and shall be shown by the operator upon request to any Authorized Officer.

(4) *Landings.* The operator of a fishing vessel landing Tanner crab in a Federal registration area other than the area for which the fishing vessel is registered (or other than in the contiguous State of Alaska registration area) must attach the inspection certificate to the back of the ADF&G copy (yellow copy) of the State of Alaska fish ticket at the time the Tanner crab are landed.

(b) *Inspection points.* Inspection points are those established by the ADF&G for State of Alaska purposes and by these regulations for Federal purposes. Additional inspection points may be authorized by the Regional Director if the Regional Director finds that:

(1) Existing inspection points are imposing an unusual and material hardship which affected fishermen cannot themselves mitigate; or

(2) The ADF&G has no practical means of making special administrative accommodations regarding existing inspection points; and

(3) Authorization of additional inspection points would not result in a significant likelihood of unauthorized fishing or other management or enforcement problems.

§ 671.25 Landing requirements.

(a) Except as provided in paragraph (b) of this section, all Tanner crab must be landed in the State of Alaska registration area contiguous to a Federal registration area for which the fishing vessel is registered.

(b) The operator of a fishing vessel who desires to land Tanner crab outside the State of Alaska, or in a State registration area other than the State registration area contiguous to a Federal registration area for which the fishing vessel is registered, shall contact the State of Alaska Department of Fish and Game to obtain an Authorized Officer's permit to leave the Federal registration area for which

the fishing vessel is registered, and shall state to the Authorized Officer the amount of Tanner crab onboard at the time. A fishing vessel operator acting pursuant to this paragraph shall submit the vessel to inspection at such location as the Authorized Officer may require. The operator shall not land an amount of Tanner crab which is more than one hundred and ten (110) percent or less than ninety (90) percent of the amount stated to be present onboard upon leaving the Federal registration area, or observed to be present onboard at the time of any inspection.

(c) *Certificate validity.* If a fishing vessel lands Tanner crab pursuant to paragraph (b) of this section, the registration certificate of the fishing vessel becomes invalid. To again become validly registered for a Federal registration area, the fishing vessel must be reinspected pursuant to the procedures of § 671.24.

§ 671.26 Season and gear restrictions.

(a) *Season dates.* All season dates in this section are inclusive. Time periods begin at 12:01 a.m. and end at 11:59 p.m. on the dates specified, based on local zone time, unless otherwise specified.

(b) *General requirements.* (1) At least one buoy on each Tanner crab pot or ring net shall be legibly marked with the permanent ADF&G vessel license number of the fishing vessel using the gear or, if a fishing vessel does not have a permanent ADF&G vessel license number, with the official documentation number of the fishing vessel operating the gear. Identification numbers shall be painted on the top one-third of the buoy in numerals at least 4 inches in height and ½ inch in width in contrasting color to that of the buoy. The buoy markings shall be legible and visible on the buoy above the water surface when attached to the Tanner crab pot, and maintained in a legible condition.

(2) All Tanner crab pots shall contain an opening in the webbing of a side wall of the pot which has been laced, sewn or secured together by untreated cotton twine or other natural fiber no larger than 120 thread, which upon deterioration or parting of the twine produces an opening in the web with a perimeter equal to or exceeding one half of the tunnel eye opening perimeter.

(3) During a closed season for Tanner crab in any Federal registration area, Tanner crab pots shall either be removed from the water or stored in less than 25 fathoms (46 m)

of water, with all doors secured fully open and all bait and bait containers removed, with the following exceptions:

(i) In the Kamishak Bay and Southern districts of the Cook Inlet area, the maximum pot storage depth is 15 fathoms (27 m);

(ii) Tanner crab pots with all doors secured fully open and with all bait and bait containers removed may be stored in water depth greater than the maximum permissible storage depth for 72 hours prior to the opening of the Tanner crab season, and for 72 hours after the season closure where the pots are fished;

(iii) Tanner crab pots may be stored in waters deeper than 25 fathoms (46 m) if specifically allowed by this section.

(c) *Registration Area A.* Tanner crab may be taken in Registration Area A from September 1 through May 1 only, subject to adjustment by the Regional Director pursuant to § 671.27.

(d) *Registration Area E—(1) Districts.* The following districts within Federal Registration Area E are established:

(i) *Western District:* All waters east of the longitude of Cape Fairfield (148°53' W. longitude) south of line from the southern entrance of Port Nelle Juan at 60°38' N. latitude to Point Eleanor (60°34'42" N. latitude, 147°34'6" W. longitude) to the eastern tip of Smith Island (60°31'54" N. latitude, 147°19' W. longitude) to Montague Point (60°22'18" N. latitude, 147°08'0" W. longitude), west of a line from Zalkof Point (60°18'12" N. latitude, 146°55'42" W. longitude) to Seal Rocks (60°10' N. latitude, 146°50' W. longitude) and west of the longitude of Seal Rocks.

(ii) *Eastern District:* All waters east of the longitude of Seal Rocks (60°10' N. latitude, 146°50' W. longitude), east of a line from Seal Rocks, to Cape Hinchinbrook (60°15'54" N. latitude, 146°37'18" W. longitude), south of a line from Point Bentinck (60°23'24" N. latitude, 146°05'36" W. longitude) to Point Whitshed (60°26'36" N. latitude, 145°53'12" W. longitude), and west of the longitude of Cape Suckling (51°59' N. latitude, 143°53'36" W. longitude).

(iii) *Hinchinbrook District:* All waters east of a line from Montague Point to the eastern tip of Smith Island, south of a line from the eastern tip of Smith Island to Johnstone Point (60°28'48" N. latitude, 146°37'16" W. longitude), north and east of a line from Cape Hinchinbrook to Seal Rocks (60°10' N. latitude, 146°50' W. longitude).

longitude), and east of a line from Seal Rocks to Zalkof Point.

(2) *Seasons.* Tanner crab may be taken in Registration Area E from November 15 through May 31 only, subject to adjustment by the Regional Director pursuant to § 671.27.

(3) *Gear.* (i) Only Tanner crab pots may be used to fish for Tanner crab. Tanner crab taken by any other means must be returned immediately to the sea, with a minimum of injury, regardless of their condition.

(ii) Two escape rings, 3/4 inches (121 mm) in minimum inside diameter, so located on the vertical plane to permit the escape of undersized crabs, shall be provided for each Tanner crab pot.

(e) *Registration Area H—(1) Districts.* The following districts within Registration area H are established:

(i) *Central District.* All waters between a line extending from Boulder Point at 60°46'23" N. latitude, to Shell Platform C (60°45'50" N. latitude, 151°30'06" W. longitude), then to a point on the west shore at 60°46'23" N. latitude, and the latitude of Anchor Point Light (59°40'12" N. latitude, 151°52' W. longitude).

(ii) *Southern District.* All waters within a line from Anchor Point Light west to 59°46'15" N. latitude, 152°20' W. longitude, then south to 59°04'15" N. latitude, 152°20' W. longitude, then in a northeasterly direction to Cape Elizabeth (59°9'12" N. latitude; 151°53'18" W. longitude), then from Cape Elizabeth to Point Adam (59°15'12" N. latitude; 151°58'48" W. longitude), including Kachemak Bay.

(iii) *Kamishak Bay District.* All waters within a line from 59°46'15" N. latitude, 153°00'30" W. longitude, then east to 59°46'15" N. latitude, 152°20' W. longitude, then south to 59°04'15" N. latitude, 152°20' W. longitude, then southwesterly to Cape Douglas (58°50'54" N. latitude, 153°16'24" W. longitude), including Kamishak Bay.

(iv) *Barrier Islands District.* All waters within a line from Cape Douglas to Cape Elizabeth, then south to 58°52' N. latitude, 151°53' W. longitude, then west to Cape Douglas.

(v) *Outer District.* All waters with a line from Point Adam to Cape Elizabeth, then south to 58°52' N. latitude, 151°53' W. longitude, then east to the longitude of Allgo Point (149°44'33" W. longitude), then north to the mainland of Alaska.

(vi) *Eastern District.* All waters east of the longitude of Allgo Point (149°44'33" W. longitude), west of the longitude of Cape Fairfield (148°53' W. longitude), and north of 58°52' N. latitude.

(2) *Seasons.* (i) Tanner crab may be taken in the Southern district from December 1 through April 30 only, subject to adjustment by the Regional Director pursuant to § 671.27.

(ii) Tanner crab may be taken in the Central, Kamishak Bay, Barren Islands, and Outer and Eastern Districts from December 1 through May 31 only, subject to adjustment by the Regional Director pursuant to § 671.27.

(3) *Gear.* During any king crab season established by the State of Alaska an aggregate of not more than 75 king and Tanner crab pots (including Tanner crab pots used in State waters) may be fished in Registration Area H from any registered tanner crab vessel.

(f) *Registration Area J—(1) Districts.* The following districts within registration area J are established:

(i) *Kodiak District.* South of 58°52' N. latitude, west of 150° longitude and east of the longitude of Cape Kumlik (157°27' W. longitude).

(ii) *South Peninsula District.* Between the longitude of Cape Kumlik and the longitude of Scotch Cap Light (164°44'6" W. longitude).

(iii) *Aleutian District.* Between the longitude of Scotch Cap Light (164°44'6" W. longitude) and 172° E. longitude, and south of 54°36' N. latitude.

(iv) *Bering Sea District.* Bering Sea waters north of 54°36' N. latitude. The following subdistricts within the Bering Sea District are established:

(A) *Southeastern Subdistrict.* East of 168° W. longitude, and south of the latitude of Cape Newenham (58°39' N. latitude), and all Bristol Bay waters.

(B) *Pribilof Subdistrict.* West of 188° W. longitude and south of the latitude of Cape Newenham (58°39' N. latitude).

(C) *Northern Subdistrict.* North of the latitude of Cape Newenham (58°39' N. latitude). The following sections within the Northern Subdistrict are established:

(1) *Nome Section.* All waters of Norton Sound between the longitude of Penny River and the longitude of Topkok Head.

(2) *General Section.* All other waters of the northern subdistrict.

(3) *Seasons.* Subject to adjustment by the Regional Director pursuant to § 671.27. Tanner crab may be taken in Federal Registration Area J:

(i) In the Kodiak district from January 5 through April 30 only, except that in that portion of the Kodiak district between 156°20'13" W. longitude (Kilokak Rocks) to 157°27' W. longitude (Cape Kumlik) Tanner crab may

be taken from January 5 through May 15 only.

(ii) In the South Peninsula district from November 1 to 12:00 noon, May 15 only;

(iii) In the Aleutian district from November 1 to 12:00 noon, June 15 only; and

(iv) In the Bering Sea district from 12:00 noon November 1 to 12:00 noon June 15 only, except that Tanner crab other than *C. bairdi* may be taken or possessed from 12:00 noon November 1 to 12:00 noon September 3 only.

(4) *Storage of Gear.* During the closed season for Tanner crab in the applicable geographic area, Tanner crab pots may be stored in the water only if stored:

(i) In the waters which are both west of 172° W. longitude and 30 fathoms (55 meters) or less in depth; or

(ii) In the Southeastern Subdistrict, in the waters which are bounded on the north by 58° N. latitude, on the south by 57° N. latitude, on the east by 164° W. longitude and on the west by 166° W. longitude.

§ 671.27 Time and area closures.

(a) *Field orders.* (i) Field orders issued by the Regional Director under this part shall include the following information: (i) A description of the area to be opened or closed; (ii) the effective date and any termination date of such opening or closure; and (iii) the reason for the opening or closure.

(2) No field order issued under this section shall be effective until:

(i) It is filed for publication with the FEDERAL REGISTER;

(ii) It has been posted and otherwise made available to the public, in accordance with procedures customarily used by the ADF&G for posting and publicizing of similar notices of closure for 48 hours prior to its effective date; and

(iii) It has been broadcast, at those time intervals, channels and frequencies customarily used by the ADF&G to broadcast similar notices of closure, for 48 hours prior to its effective date.

(3) Field orders issued pursuant to this section shall remain in effect until the earlier of the following dates: (i) Any expiration date stated in the field order; or (ii) the effective date of any field order which modifies, rescinds, or supersedes the initial field order.

(b) *In-season adjustments—(1) General.* The Regional Director may, following consultation with the ADF&G, adjust the opening and closing dates for the Federal registration areas, districts, subdistricts, and sections specified in § 671.26.

(2) *Determinations.* Any adjustment under this section shall be based on a determination by the Regional Director that (i) the condition of Tanner crab stocks in any such geographic area is substantially different from the condition anticipated at the beginning of the fishing year, and (ii) such differences reasonably support the need for in-season conservation measures to protect such Tanner crab stocks.

(3) *Data.* Fishery data reported in-season which relate to one or more of the following factors may be considered in making this determination:

(i) The effect of overall fishing effort within the area;

(ii) Catch per unit of effort and rate of harvest;

(iii) Relative abundance of Tanner crab within the area in comparison with pre-season prediction;

(iv) The proportion of immature or softshell Tanner crab being handled;

(v) General information on the condition of Tanner crab within the area; and

(vi) Any other factors relevant to the conservation and management of Tanner crab.

(4) *Procedures.* (i) The Regional Director shall publish proposed adjustments in the FEDERAL REGISTER for public comment before they are made final, unless the Regional Director finds for good cause that such advance notice and public procedure are impracticable, unnecessary, or contrary to the public interest.

(ii) If the Regional Director decides, for good cause, that any in-season adjustment is to be made without affording a prior opportunity for public comment, public comments on the necessity for, and extent of, the adjustment will be received by the Regional Director for a period of 15 days after the effective date of the adjustment.

(iii) During any such 15-day period, the Regional Director shall make available for public inspection, during business hours, the aggregate data upon which the adjustment was based. (Address: National Marine Fisheries Service, Alaska Regional Office, Federal Building, Room 453, 709 West Ninth Street, Juneau, Alaska 99802).

(iv) If comments are received during the 15-day period, the Regional Director shall reconsider the necessity for the adjustment and, as soon as practicable after that reconsideration, shall either: (A) Publish in the FEDERAL REGISTER a notice of continued effectiveness of the adjustment, responding to comments received; or (B) modify or rescind the adjustment.

(5) *Notice of adjustments.* The Re-

gional Director shall give notice of in-season adjustments by issuance of field orders in accordance with the procedures in paragraph (a) of this section.

(c) *Optimum yield.* No action which has the effect of raising the optimum yield for Tanner crab in any geographic area as specified in Table I of § 671.21(a) is authorized under this section.

(d) *Prohibition.* Any fishing for Tanner crab contrary to a field order issued under this section is prohibited.

(PR Doc 78-33966 Filed 12-1-78; 3:36 pm)

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FEDERAL REGISTER, VOL 43, NO. 95—TUESDAY, MAY 16, 1978

OPERATIONAL DEFINITIONS OF TERMS USED

The North Pacific Fisheries Management Council has adopted the following working definitions of terms used in the development of management plans.

A. DETERMINANTS OF CATCH LEVELS

1. *Maximum Sustainable Yield (MSY)* is an average over a reasonable length of time of the largest catch which can be taken continuously from a stock under current environmental conditions. It should normally be presented with a range of values around its point estimate.

Where sufficient scientific data as to the biological characteristics of the stock do not exist or the period of exploitation or investigation has not been long enough for adequate understanding of stock dynamics, the MSY will be estimated from the best information available.

2. *Equilibrium Yield (EY).* The annual or seasonal harvest which maintains the resource at approximately the same level of abundance (apart from the effects of environmental variation) in succeeding seasons or years.

3. *Acceptable Biological Catch (ABC)* is a seasonally determined catch that may differ from MSY for biological reasons. It may be lower or higher than MSY in some years for species with fluctuating recruitment. It may be set lower than MSY in order to rebuild overfished stocks.

4. *Optimum Yield (OY)* may be obtained by a plus or minus deviation from ABC for purposes of promoting economic, social or ecological objectives as established by law and public participation processes. Ecological objectives, where they primarily relate to biological purposes and factors, are included in the determination of ABC. Where ecological objectives relate to resolving conflicts and accommodating competing uses and values, they are included as appropriate with economic and/or social objectives.

OY may be set higher than ABC in order to produce higher yields from other more desirable species in a multi-species fishery. It might be set lower than ABC in order to provide larger sized individuals or a higher average catch per unit effort.

B. DETERMINATION OF DOMESTIC ANNUAL CAPACITY AND EXPECTED HARVEST

1. *Domestic Annual Fishing Capacity (DAC)* is the total potential physical capacity of the fleets, modified by logistic factors. The components of the concept are:

a. An inventory of total potential physical capacity, defined in terms of appropriate vessel and gear characteristics (e.g., size, horsepower, hold capacity, gear design, etc.)

b. Logistic factors determining total annual fishing capacity, (e.g., variation in vessel and gear performance, trip length between fishing locations and landing points, weather constraints, etc.)

2. *Expected Domestic Annual Fisheries Harvest (DAH)* is the domestic annual fishing capacity modified by other factors which will determine estimates of what the fleets will harvest (e.g., how fishermen will respond to price changes in the subject species and other species, etc.).

These concepts should be placed in a dynamic context of past trends and future projections. For example, physical fleet capacity should not simply be last season's inventory of vessels and hold measurements (although this is appropriate for present interim planning), but also next year's projected movement into and out of the fishery. Vessels under construction should be included and an estimate of attrition made.

The determination of domestic annual fishing capacity and expected harvest should be made on the best available information.

C. *Determination of Foreign Allowable Catch (FAC).* The foreign allowable catch is determined by deducting the domestic annual expected harvest from the optimum yield (OY-DAH=FAC).

APPENDICES 5 TO 10 - FOREIGN VESSELS FISHING OFF ALASKA - 1978

LETTER CODES FOR THIS SECTION ARE:

- B BERING SEA AND ALEUTIAN ISLAND TRAWL AND HERRING GILLNET FISHERY
- G GULF OF ALASKA GROUND FISH FISHERY
- S SABLEFISH FISHERY
- C CRAB FISHERY
- N SNAIL FISHERY

FOREIGN PATROL AND RESEARCH VESSELS, AND JAPANESE HIGH SEAS SALMON VESSELS ARE NOT ISSUED FCMA PERMITS BUT ARE RECORDED FOR REFERENCES IN THESE LISTINGS.

APPENDIX 5

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

GROUND FISH FACTORY FLEET

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
HOYO MARU FLEET									

JA-78-0190	HOYO MARU	TKI-331	FAC	JQQV					X
JA-78-2007	SOHO MARU NO. 32		DS/L	7KTA					X
JA-78-0204	SOHO MARU NO. 68	AMI-150	DS/L	JADF					X
JA-78-0202	TENYU MARU NO. 18	HKI-454	DS/L	JQQC					X
JA-78-0200	TENYU MARU NO. 21	HKI-295	DS/L	JDFH*					X
JA-78-0201	YURYO MARU NO. 35	AMI-218	DS/L	JCPD					X
JA-78-0210	KAKUYO MARU NO. 1	NSI-431	PTRL	JFQM					X
JA-78-2008	KAKUYO MARU NO. 11		PTRL	JQMN					X
JA-78-2009	KAKUYO MARU NO. 12*		PTRL	JQMN-1					X
JA-78-0211*	KAKUYO MARU NO. 2	NSI-432	PTRL	JFQM-1					X
JA-78-0212	KAKUYO MARU NO. 3	NSI-437	PTRL	JFRF					X
JA-78-0213	KAKUYO MARU NO. 5	NSI-438	PTRL	JFRF-1					X
JA-78-0214	KAKUYO MARU NO.* 7	NSI-543	PTRL	JKZS					X
JA-78-0215	KAKUYO MARU NO. 8	NSI-544	PTRL	JKZS-1					X
JA-78-0218	NITTO MARU NO. 31	YGI-276	PTRL	JKOB					X
JA-78-0219	NITTO MARU NO. 32	YGI-277	PTRL	JKOB-1					X
JA-78-0220	NITTO MARU NO. 35	YGI-278	PTRL	JLZE					X
JA-78-0221	NITTO MARU NO. 36	YGI-279	PTRL	JLZE-1					X
JA-78-0466*	SEIJU MARU NO. 20	AMI-216	STR/L/M	JCQK	X*				X

KASHIMA MARU FLEET

JA-78-0001	KASHIMA MARU	TKI-181	FAC	JNTM	X	X		X	X
JA-78-0013	HAKUREI MARU	NSI-534*	PTRL	JCLP-1	X				
JA-78-0012*	HOKKAI MARU	NSI-535	PTRL	JCLP	X				
JA-78-0014	HOKUSHIN MARU	NSI-537	PTRL	JCMP	X				
JA-78-0015	HOKUTO MARU	NSI-538	PTRL	JCMP-1	X				
JA-78-0011	KUREHA MARU	FOI-294	PTRL	JKLK-1	X				

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

GROUND FISH FACTORY FLEET

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
MINESHIMA MARU FLEET *****					
JA-78-0080	MINESHIMA MARU	TKI-716	FAC	JP00	X
JA-78-0091	EBISU MARU NO. 21	HKI-383	DS/L	JROU	X
JA-78-0093	HEIKYU MARU NO. 25	HKI-453	DS/L	JAKK	X
JA-78-0090	KAIKO MARU NO. 8	AMI-163	DS/L	JRHM	X
JA-78-0092	KAIUN MARU NO. 78	HKI-575	DS/L	JLMY	X
JA-78-0095	MITSU MARU NO. 50	AMI-158	DS/L	JRGJ	X
JA-78-2006	SHOSEI MARU NO. 25		DS/L	JLDB	X
JA-78-0116	AOBA MARU	NSI-492	PTRL	JBGC	X
JA-78-0121	EIYO MARU	NSI-310	PTRL	JDYY-1	X
JA-78-0111	EIYO MARU	FOI-285	PTRL	JBTY-1	X
JA-78-0113	FUKUYO MARU	FOI-279	PTRL	JCXP-1	X
JA-78-0013 *	HAKUREI MARU	NSI-534	PTRL	JCLP-1	X
JA-78-0012 *	HOKKAI MARU	NSI-535	PTRL	JCLP	X
JA-78-0014 *	HOKUSHIN MARU	NSI-537	PTRL	JCMP	X
JA-78-0015 *	HOKUTO MARU	NSI-538	PTRL	JCMP-1	X
JA-78-0114	KATORI MARU	NSI-485	PTRL	JBFO	X
JA-78-0115	KATSUKI MARU	NSI-486	PTRL	JBFO-1	X
JA-78-0112	KOYO MARU	FOI-278	PTRL	JCXP	X
JA-78-0011 *T	KUREHA MARU	FOI-294	PTRL	JKLK-1	X
JA-78-0010	OTOHA MARU	FOI-293	PTRL	JKLX	X
JA-78-0120	OYO MARU	NSI-309	PTRL	JDYY	X
JA-78-0110	SHUYO MARU	FOI-284	PTRL	JBTY	X
JA-78-0123	TOYOSHIMA MARU	FOI-297	PTRL	JCXL-1	X
JA-78-0117	WAKABA MARU	NSI-493	PTRL	JBGC-1	X
JA-78-0122	WASHIMA MARU	FOI-296	PTRL	JCXL	X

* LATER FISHED WITH KASHIMA FLEET FOR FLOUNDER

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978GROUND FISH FACTORY FLEET

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
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NISSHIN MARU NO. 2 FLEET

JA-78-0140	NISSHIN MARU NO. 2	TKI-280	FAC	JBKS	X
JA-78-1129	AKATSUKI MARU NO. 1		DS/L	JOLO	X
JA-78-0151	SHOKEN MARU NO. 8	HKZ-11902	DS/S	JBKS-1	X
JA-78-0160	AKASHI MARU NO. 16	YGI-232	PTRL	JBWJ	X
JA-78-0161	AKASHI MARU NO. 17	YGI-233	PTRL	JBWJ-1	X2
JA-78-0178	AKASHI MARU NO. 18	YGI-239	PTRL	JAAX	X
JA-78-0162	AKASHI MARU NO. 51	YGI-241	PTRL	JABL	X
JA-78-0163	AKASHI MARU NO. 52	YGI-242	PTRL	JABL-1	X
JA-78-0164	AKASHI MARU NO. 58	YGI-259	PTRL	JKGU	X
JA-78-0165	AKASHI MARU NO. 59	YGI-260	PTRL	JKGU-1	X
JA-78-0166	AKASHI MARU NO. 63	YGI-266	PTRL	JKHW	X
JA-78-0167	AKASHI MARU NO. 65	YGI-267	PTRL	JKHW-1	X2
JA-78-0168	AKASHI MARU NO. 66	YGI-273	PTRL	JKIJ	X
JA-78-0169	AKASHI MARU NO. 67	YGI-275	PTRL	JKIJ-1	X
JA-78-0170	AKASHI MARU NO. 68	YGI-280	PTRL	JKJB	X
JA-78-0171	AKASHI MARU NO. 69	YGI-281	PTRL	JKJB-1	X
JA-78-0172	AKASHI MARU NO. 71	YGI-289	PTRL	JKKC	X
JA-78-0173	AKASHI MARU NO. 72	YGI-290	PTRL	JKKC-1	X
JA-78-0174	AKASHI MARU NO. 73	YGI-299	PTRL	JMCR	X
JA-78-0175	AKASHI MARU NO. 75	YGI-300	PTRL	JMCR-1	X
JA-78-0176	AKASHI MARU NO. 76	YGI-304	PTRL	JMCI	X
JA-78-0177	AKASHI MARU NO. 77	YGI-305	PTRL	JMCI-1	X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978GROUND FISH FACTORY FLEET

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
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SHIKISHIMA MARU FLEET

JA-78-0030	SHIKISHIMA MARU	TKI-648	FAC	JQRU	X
JA-78-0042	EBISU MARU NO. 11	HKI-560	DS/L	JLKM	X
JA-78-0050	HOKKO MARU NO. 17	HKI-612	DS/L	BLNT	X
JA-78-0040	KAIUN MARU NO. 52	HKI-389	DS/L	JARF	X
JA-78-0043	SEIHO MARU NO. 15T	HKI-558	DS/L	JLJY	X
JA-78-0061	AKIHO MARU	NSI-430	PTRL	JFPF-1	X
JA-78-0065	JUNYO MARU	FOI-257	PTRL	JFOF-1	X
JA-78-0066	KOYO MARU	NSI-296	PTRL	JPIA	X
JA-78-0060	MIZUHO MARU	NSI-429	PTRL	JFPF	X
JA-78-0063	RAKUYO MARU	FOI-261	PTRL	JFWF-1	X
JA-78-0067	RYUJO MARU		PTRL	JPIA-1	X
JA-78-0062	SYUNYO MARU	FOI-260	PTRL	JFWF	X
JA-78-0071	TSUSHIMA MARU	NSI-420	PTRL	JFOM-1	X
JA-78-0064	WAYO MARUT	FOI-256	PTRL	JFOF	X
JA-78-0070	YASHIMA MARUT	NSI-362	PTRL	JFOM	X
JA-78-2010	HOKUTOU MARU NO. 5T		STRL/M	JMVK	X

SOYO MARU FLEET

JA-78-0240	SOYO MARU	TKI-330	FAC	JMFX	X
JA-78-1136	AKASHI MARU NO. 19		PTRL	JRKO	X
JA-78-0255	FUJI MARU NO. 1	IGI-230	STRL/M	JHDV	X
JA-78-0256	HOKEN MARU NO. 18	HKI-202	STRL/M	JDNL	X
JA-78-0257	KAIKO MARU NO. 2	HKI-165	STRL/M	BLCS	X
JA-78-0258	KAIKO MARU NO. 3	HKI-223	STRL/M	JNSW	X
JA-78-0254	KAKUDAI MARU NO. 25	ATI-015	STRL/M	JAYA	X
JA-78-0251	MUTSU MARU NO. 52	HKI-184	STRL/M	JDDA	X
JA-78-0250	TAISEI MARU NO. 51	HKI-183	STRL/M	JEUH	X
JA-78-0252	TORA MARU NO. 18	HKI-213	STRL/M	JPGA	X
JA-78-0253	ZENPO MARU NO. 21	HKI-179	STRL/M	JEWC	X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
FACTORY VESSELS									

JA-78-0190	HOYO MARU	TKI-331	FAC	JQQV	X				
JA-78-0001	KASHIMA MARU	TKI-181	FAC	JNTM-	X	X		X	X
JA-78-0080	MINESHIMA MARU	TKI-716	FAC	JPQQ	X				
JA-78-0140	NISSHIN MARU NO. 2	TKI-280	FAC	JBKS	X				
JA-78-0030	SHIKISHIMA MARU	TKI-648	FAC	JQRU	X				
JA-78-0240	SOYO MARU	TKI-330	FAC	JMFX	X				

APPENDIX 5 (CONTINUED)
 JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
 WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
PAIR TRAWLERS					

JA-78-0160	AKASHI MARU NO. 16	YGI-232	PTRL	JBWJ	X
JA-78-0161	AKASHI MARU NO. 17	YGI-233	PTRL	JBWJ-1	X
JA-78-0178-	AKASHI MARU NO. 18	YGI-239	PTRL	JAAX	X
JA-78-1134-	AKASHI MARU NO. 19		PTRL	JRKD	X
JA-78-0162-	AKASHI MARU NO. 51	YGI-241	PTRL	JABL	X
JA-78-0163-	AKASHI MARU NO. 52	YGI-242	PTRL	JABL-1	X
JA-78-0164-	AKASHI MARU NO. 58	YGI-259	PTRL	JKGU	X
JA-78-0165-	AKASHI MARU NO. 59	YGI-260	PTRL	JKGU-1	X
JA-78-0166-	AKASHI MARU NO. 63	YGI-266	PTRL	JKHW	X
JA-78-0167	AKASHI MARU NO. 65	YGI-267	PTRL	JKHW-1	X
JA-78-0168-	AKASHI MARU NO. 66	YGI-273	PTRL	JKIJ	X
JA-78-0169-	AKASHI MARU NO. 67	YGI-275	PTRL	JKIJ-1	X
JA-78-0170-	AKASHI MARU NO. 68	YGI-280	PTRL	JKJB	X
JA-78-0171-	AKASHI MARU NO. 69	YGI-281	PTRL	JKJB-1	X
JA-78-0172	AKASHI MARU NO. 71	YGI-289	PTRL	JKKC	X
JA-78-0173-	AKASHI MARU NO. 72	YGI-290	PTRL	JKKC-1	X
JA-78-0174-	AKASHI MARU NO. 73	YGI-299	PTRL	JMCR	X
JA-78-0175	AKASHI MARU NO. 75	YGI-300	PTRL	JMCR-1	X
JA-78-0176	AKASHI MARU NO. 76	YGI-304	PTRL	JMCU	X
JA-78-0177	AKASHI MARU NO. 77	YGI-305	PTRL	JMCU-1	X
JA-78-0061-	AKIHO MARU	NSI-430	PTRL	JFPF-1	X
JA-78-0116-	AOBA MARU	NSI-492	PTRL	JBGC	X
JA-78-0121	EIYO MARU	NSI-310	PTRL	JDYY-1	X
JA-78-0111	EIYO MARU	FOI-285	PTRL	JBTY-1	X
JA-78-0113	FUKUYO MARU	FOI-279	PTRL	JCXP-1	X
JA-78-0013	HAKUREI MARU	NSI-534	PTRL	JCLP-1	X
JA-78-0012	HOKKAI MARU	NSI-535	PTRL	JCLP	X
JA-78-0014	HOKUSHIN MARU	NSI-537	PTRL	JCMP	X
JA-78-0015	HOKUTO MARU	NSI-538	PTRL	JCMP-1	X
JA-78-0065	JUNYO MARU	FOI-257	PTRL	JFOF-1	X
JA-78-0210	KAKUYO MARU NO. 1	NSI-431	PTRL	JFQM	X
JA-78-2008	KAKUYO MARU NO. 11		PTRL	JGMN	X
JA-78-2009	KAKUYO MARU NO. 12		PTRL	JGMN-1	X
JA-78-0211	KAKUYO MARU NO. 2	NSI-432	PTRL	JFQM-1	X
JA-78-0212	KAKUYO MARU NO. 3	NSI-437	PTRL	JFRF	X
JA-78-0213	KAKUYO MARU NO. 5	NSI-438	PTRL	JFRF-1	X
JA-78-0214	KAKUYO MARU NO. 7	NSI-543	PTRL	JKZS	X
JA-78-0215	KAKUYO MARU NO. 8	NSI-544	PTRL	JKZS-1	X
JA-78-0114	KATORI MARU	NSI-485	PTRL	JBFO	X
JA-78-0115	KATSUKI MARU	NSI-486	PTRL	JBFO-1	X
JA-78-0066	KOYO MARU	NSI-296	PTRL	JPIA	X
JA-78-0112	KOYO MARU	FOI-278	PTRL	JCXP	X
JA-78-0011	KUREHA MARU	FOI-294	PTRL	JKLK-1	X
JA-78-0216	MEIGEN MARU NO. 36	YGI-320	PTRL	JADE	X
JA-78-0217	MEIGEN MARU NO. 37	YGI-321	PTRL	JADE-1	X

APPENDIX 5 (CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
PAIR TRAWLERS					

JA-78-0060	MIZUHO MARU	NSI-429	PTRL	JFPF	X
JA-78-0218	NITTO MARU NO. 31	YGI-276	PTRL	JKOB	X
JA-78-0219	NITTO MARU NO. 32 ⁰	YGI-277	PTRL	JKOB-1	X
JA-78-0220	NITTO MARU NO. 35	YGI-278	PTRL	JLZE	X
JA-78-0221	NITTO MARU NO. 36	YGI-279	PTRL	JLZE-1	X
JA-78-0010	OTOHA MARU	FOI-293	PTRL	JKLX	X
JA-78-0120	OYO MARU	NSI-309	PTRL	JDYY	X
JA-78-0063	RAKUYO MARU	FOI-261	PTRL	JFWF-1	X
JA-78-0067	RYUYO MARU		PTRL	JPIA-1	X
JA-78-0110	SHUYO MARU	FOI-284	PTRL	JBTY	X
JA-78-0062	SYUNYO MARU	FOI-260	PTRL	JFWF	X
JA-78-0123	TOYOSHIMA MARU	FOI-297	PTRL	JCXL-1	X
JA-78-0071	TSUSHIMA MARU	NSI-420	PTRL	JFOM-1	X
JA-78-0117	WAKABA MARU	NSI-493	PTRL	JBGC-1	X
JA-78-0122	WASHIMA MARU	FOI-296	PTRL	JCXL	X
JA-78-0064	WAYO MARU	FOI-256	PTRL	JFOF	X
JA-78-0070	YASHIMA MARU	NSI-362	PTRL	JFOM	X

LARGE DANISH SEINERS

JA-78-1129	AKATSUKI MARU NO. 10		DS/L	JQUD	X
JA-78-0042	EBISU MARU NO. 11	HKI-560	DS/L	JLKM	X
JA-78-0091	EBISU MARU NO. 21	HKI-383	DS/L	JROU	X
JA-78-0093	HEIKYU MARU NO. 25	HKI-453	DS/L	JAKK	X
JA-78-0050	HOKKO MARU NO. 17	HKI-612	DS/L	SLNT	X
JA-78-0090	KAIKO MARU NO. 8	AMI-163	DS/L	JRHM	X
JA-78-0040	KAIUN MARU NO. 52	HKI-389	DS/L	JARF	X
JA-78-0092	KAIUN MARU NO. 78	HKI-575	DS/L	JLMY	X
JA-78-0095	MITSU MARU NO. 50	AMI-158	DS/L	JRGJ	X
JA-78-0043	SEIHO MARU NO. 15	HKI-558	DS/L	JLJY	X
JA-78-2006	SHOSEI MARU NO. 25		DS/L	JLDB	X
JA-78-2007	SOHO MARU NO. 32		DS/L	7KTA	X
JA-78-0204	SOHO MARU NO. 68	AMI-150	DS/L	JADF	X
JA-78-0202	TENYU MARU NO. 18	HKI-454	DS/L	JQOC	X
JA-78-0200	TENYU MARU NO. 21	HKI-295	DS/L	JDFH	X
JA-78-0201	YURYO MARU NO. 35	AMI-218	DS/L	JCPD	X

SMALL DANISH SEINERS

JA-78-0150	AKATSUKI MARU	HKZ-11541	DS/S	JDLN	X
JA-78-0151	SHOKEN MARU NO. 8	HKZ-11902	DS/S	JBKS-1	X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

CRAB FACTORY FLEET

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
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KOYO MARU FLEET

JA-78-0731	KOYO MARU	TKI-163	CFAC	JHVK	X	X	X	X	
JA-78-0718	DAIAN MARU NO. 88		CPOT	JICZD					X
JA-78-0719	KOFUKU MARU NO. 58		CPOT	8LDQ					X
JA-78-0723	KAKUDAI MARU NO. 31		CPOT	JPGE					X
JA-78-0731	BENTEN MARU NO. 58		CPOT	JNUT					X
JA-78-0732	TOMI MARU NO. 18		CPOT	8LHC					X
JA-78-0734	OTOBE MARU		CPOT	8LDX					X

KEIKO MARU FLEET

JA-78-0701	KEIKO MARU	TKI-157	CFAC	JNAP	X	X	X	X	
JA-78-07100	KEIYO MARU NO. 28		CPOT	JRBS					X
JA-78-07110	KEIYO MARU NO. 38		CPOT	JDOM					X
JA-78-07130	FUKUYO MARU NO. 8		CPOT	8JUB					X
JA-78-0714	BENTEN MARU NO. 8		CPOT	8JUX					X
JA-78-0716	KYOKKO MARU		CPOT	JPYP					X
JA-78-07170	KAIUN MARU NO. 21		CPOT	JDMC					X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
CRAB FACTORY VESSELS									

JA-78-0701	KEIKO MARU	HKI-157	CFAC	JNAP	X	X	X	X	X
JA-78-0720	KOYO MARU	TKI-163	CFAC	JHVK	X	X	X	X	X
CRAB POT VESSELS									

JA-78-0731	BENTEN MARU NO. 58		CPOT	JNIJ					X
JA-78-0714	BENTEN MARU NO. 8		CPOT	8JUX					X
JA-78-0718	DAIAN MARU NO. 88		CPOT	JCZD					X
JA-78-0713	FUKUYO MARU NO. 8		CPOT	8JUB					X
JA-78-0717	KAIJUN MARU NO. 21		CPOT	JDMC					X
JA-78-0723	KAKUDAI MARU NO. 31		CPOT	JPGE					X
JA-78-0710	KEIYO MARU NO. 28		CPOT	JRBS					X
JA-78-0711	KEIYO MARU NO. 38		CPOT	JDOM					X
JA-78-0719	KOFUKU MARU NO. 58		CPOT	8LDQ					X
JA-78-0716	KYOKKO MARU		CPOT	JPYP					X
JA-78-0734	OTOBE MARU		CPOT	8LDX					X
JA-78-0732	TOMI MARU NO. 18		CPOT	8LHC					X
INDEPENDENT CRAB POT VESSELS									

JA-78-0824	AZUMA MARU NO. 32	KNI-409	INPOT	JDZP					X
JA-78-0817	EIKYU MARU	YMI-11	INPOT	7JDA					X
JA-78-0820	EIWA MARU NO. 28	TYI-51	INPOT	7JIJ					X X
JA-78-0819	HOKUTO MARU NO. 33	HKI-146	INPOT	JEFQ					X
JA-78-9999	INDEPENDENT VESSELS		INPOT	INPOTS					X
JA-78-1137	KAIYO MARU NO. 8		INPOT	JPJK					X X
JA-78-0812	KOYO MARU NO. 3	TKI-462	INPOT	8LYD					X
JA-78-0828	KUROSHIO MARU NO. 38	KNI-423	INPOT	JIDX	X	X	X	X	X
JA-78-0815	KYOWA MARU NO. 7	TYI-27	INPOT	7LFH					X X
JA-78-0821	MATSUEI MARU NO. 72	HKI-278	INPOT	JGPB					X
JA-78-0810	SUE MARU NO. 11	HKI-634	INPOT	JKRM					X
JA-78-0851	TAISAN MARU NO. 1	TKI-825	INPOT	JAXN					X X
JA-78-0856	TAKASHIRO MARU NO. 31	MEI-653	INPOT	JFTL					X X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
LARGE STERN TRAWLERS					

JA-78-0338	AKEBONO MARU NO. 72	TKI-496	STRL/L	BLZR	X X
JA-78-0288	ASO MARU	FOI-81	STRL/L	JMVD	XL X
JA-78-0336	CHIKUBU MARU	TKI-796	STRL/L	JCTA	X X
JA-78-0285	DAISHIN MARU NO. 12	TKI-466	STRL/L	ELYN	X X
JA-78-0386	DAISHIN MARU NO. 22	TKI-500	STRL/L	JMGO	X X
JA-78-0287	DAISHIN MARU NO. 23	TKI-555	STRL/L	JFRL	X X
JA-78-0350	HARUNA MARU	FOI-220	STRL/L	JKJL	X X
JA-78-0321	KITAKAMI MARU		STRL/L	JMLB	X X
JA-78-0341	KONGO MARU	FOI-221	STRL/L	JJSM	X X
JA-78-0297	KOYO MARU NO. 2	TKI-629	STRL/L	JHSW	X X
JA-78-0343	KOYO MARU NO. 3	TKI-829	STRL/L	JDXF	X X
JA-78-0289	NIITAKA MARU	FOI-168	STRL/L	JDZN	X X
JA-78-0342	OHTORI MARU	TKI-759	STRL/L	JDMJ	X X
JA-78-0340	RIKUZEN MARU	TKI-755	STRL/L	JDSB	X X
JA-78-0280	RYUYO MARU	TKI-546	STRL/L	JQET	X X
JA-78-0330	RYUYO MARU NO. 2	TKI-837	STRL/L	JGYV	X X
JA-78-1131	SHINSEI MARU NO. 3		STRL/L	JMAX	X X
JA-78-0291	TAKACHIHO MARU	FOI-90	STRL/L	JPBU	X X
JA-78-0352	TENYO MARU	YGI-370	STRL/L	JCEC	X X
JA-78-0332	TENYO MARU NO. 2L	YGI-376	STRL/L	JETD	X X
JA-78-0333	TENYO MARU NO. 3	YGI-377	STRL/L	JFJO	X X
JA-78-0334	TENYO MARU NO. 5	YGI-390	STRL/L	JGVD	X X
JA-78-0337L	TSUDA MARU	TKI-852	STRL/L	JFTB	X X
JA-78-0339	YAMATO MARU	FOI-280	STRL/L	JBGF	X X
JA-78-0351	ZUIYO MARU NO. 2	TKI-568	STRL/L	JFWT	X X
JA-78-0331	ZUIYO MARU NO. 3	TKI-685	STRL/L	JKFO	X X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
MEDIUM STERN TRAWLERS					

JA-78-0310	AKEBONO MARU NO. 11	HKI-196	STRL/M	JHZZ	X X
JA-78-0311	AKEBONO MARU NO. 12	YGI-297	STRL/M	JHUF	X
JA-78-0312	AKEBONO MARU NO. 15	YGI-298	STRL/M	JNJU	X
JA-78-0313	AKEBONO MARU NO. 16	YGI-406	STRL/M	JNKH	X X
JA-78-0314	AKEBONO MARU NO. 17	HKI-206	STRL/M	JNME	X
JA-78-0315	AKEBONO MARU NO. 18	HKI-207	STRL/M	JNMI	X X
JA-78-0316	AKEBONO MARU NO. 21	YGI-407	STRL/M	JDJR	X
JA-78-0317	AKEBONO MARU NO. 22	TKI-688	STRL/M	JEES	X X
JA-78-0308	AKEBONO MARU NO. 27	TKI-907	STRL/M	JBST	X X
JA-78-0309	AKEBONO MARU NO. 28	TKI-916	STRL/M	JRKC	X X
JA-78-0306	AKEBONO MARU NO. 31	TKI-908	STRL/M	JBVU	X X
JA-78-0307	AKEBONO MARU NO. 32	TKI-917	STRL/M	JRLW	X X
JA-78-0541	ANYO MARU NO. 11	TKI-910	STRL/M	JBUA	X X
JA-78-0500	ANYO MARU NO. 12	MGI-723	STRL/M	JPWK	X
JA-78-0504	ANYO MARU NO. 15	MGI-627	STRL/M	7KGG	X
JA-78-0283	ANYO MARU NO. 8	TKI-809	STRL/M	JCXA	X
JA-78-0519	CHOUN MARU NO. 21	MGI-837	STRL/M	JNSU	X
JA-78-0418	CHUYO MARU NO. 21	HKI-455	STRL/M	JREK	X
JA-78-0419	CHUYO MARU NO. 22 ^I	HKI-458	STRL/M	JREZ	X
JA-78-0295	DAIAN MARU NO. 118 ^I	HKI-257	STRL/M	JCYE	X
JA-78-0553	DAIAN MARU NO. 188		STRL/M	JAFV	X
JA-78-0544	DAIEI MARU NO. 2	TKI-121	STRL/M	JENE	X
JA-78-0545	DAIEI MARU NO. 8	TKI-53	STRL/M	JITU	X
JA-78-0481	DAIKICHI MARU NO. 31	MGI-456	STRL/M	JNCU	X
JA-78-0482	DAIKICHI MARU NO. 32	MGI-528	STRL/M	JHMJ	X
JA-78-0494	DAIKICHI MARU NO. 35	MGI-593	STRL/M	7KDX	X
JA-78-0483	DAIKICHI MARU NO. 37	MGI-630	STRL/M	7KDJ	X
JA-78-0484	DAIKICHI MARU NO. 51	MGI-806	STRL/M	JFUK	X
JA-78-0514	DAINICHI MARU NO. 31	MGI-622	STRL/M	7KEY	X
JA-78-0524	DAIRIN MARU NO. 28	MGI-798	STRL/M	JFQK	X
JA-78-0377	DAISHIN MARU NO. 18		STRL/M	JGTD	X X
JA-78-0413	DAITO MARU NO. 38	HKI-506	STRL/M	7JSY	X
JA-78-0414	DAITO MARU NO. 55	HKI-589	STRL/M	JLQK	X
JA-78-0521	DAITOKU MARU	MGI-517	STRL/M	JHNU	X
JA-78-0423	EBISU MARU NO. 38	HKI-538	STRL/M	JRCI	X
JA-78-0300	EIKYU MARU NO. 11	HKI-495	STRL/M	JFES	X
JA-78-0411	EIKYU MARU NO. 12	HKI-547	STRL/M	JLGU	X
JA-78-0299	EIKYU MARU NO. 2	HKI-513	STRL/M	JJTH	X
JA-78-0511	EIKYU MARU NO. 35	MGI-751	STRL/M	JGYS	X
JA-78-0301	EIKYU MARU NO. 81	HKI-281	STRL/M	JCWV	X
JA-78-0302	EIKYU MARU NO. 86	HKI-476	STRL/M	JLNU	X
JA-78-0255	FUJI MARU NO. 11	YGI-230	STRL/M	JHDV	X
JA-78-0540	FUKUCHO MARU NO. 111	TKI-972	STRL/M	JNFD	X
JA-78-0495	FUKUCHO MARU NO. 23	MGI-865	STRL/M	JRZW	X
JA-78-0528	FUKUCHO MARU NO. 18	FSI-235	STRL/M	JGEI	X

APPENDIX 5 (CONTINUED)R

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
MEDIUM STERN TRAWLERS					

JA-78-0543	FUKUI MARU NO. 10	FKI-110	STRL/M	JDYV	X
JA-78-0542	FUKUI MARU NO. 80	FKI-103	STRL/M	JDYN	X
JA-78-0531	FUKUSHIN MARU NO. 50	FSI-233	STRL/M	JGET	X
JA-78-0472	FUKUYOSHI MARU NO. 28	MGI-465	STRL/M	JNCR	X
JA-78-0304	FUKUYOSHI MARU NO. 38	MGI-778	STRL/M	JFCK	X X
JA-78-0515	HACHIRYU MARU NO. 31	MGI-52334	STRL/M	JHRC	X
JA-78-0510	HAKKO MARU NO. 57	MGI-616	STRL/M	JQRC	X
JA-78-0505	HAKURYU MARU NO. 51	MGI-557	STRL/M	JNYY	X
JA-78-0461	HAMAZEN MARU NO. 35	AMI-183	STRL/M	JRJA0	X
JA-78-0403	HATSUE MARU NO. 62	HKI-562	STRL/M	7JXS0	X
JA-78-0256	HOKEN MARU NO. 18	HKI-202	STRL/M	JDNLO	X
JA-78-0425	HOKEN MARU NO. 38	HKI-440	STRL/M	JLBG	X
JA-78-0407	HOKKO MARU NO. 57	HKI-566	STRL/M	JLMT	X
JA-78-0100	HOKKO MARU NO. 77	HKI-636	STRL/M	8LVB	X
JA-78-0457	HOKUO MARU NO. 25	AMI-308	STRL/M	7KBQ	X
JA-78-0051	HOKUTOU MARU NO. 3	HKI-241	STRL/M	JPS0	X
JA-78-2010	HOKUTOU MARU NO. 5		STRL/M	JMVK	X
JA-78-0405	HOKUYU MARU NO. 32	HKI-411	STRL/M	JAKYO	X
JA-78-0401R	JUKYU MARU NO. 17	HKI-573	STRL/M	7JZC	X
JA-78-0402	JUKYU MARU NO. 18	HKI-590	STRL/M	7JZS	X
JA-78-0257	KAIKO MARU NO. 20	HKI-165	STRL/M	8LCS	X
JA-78-0258	KAIKO MARU NO. 30	HKI-223	STRL/M	JNSW	X
JA-78-0533	KAIUN MARU NO. 38	FSI-226	STRL/M	JBED	X
JA-78-0724	KAIYO MARU NO. 12		STRL/M	JPVK	X
JA-78-0464	KAIYO MARU NO. 53	AMI-205	STRL/M	JCAY	X
JA-78-0431	KAIYO MARU NO. 7	HKI-557	STRL/M	7JYJ	X
JA-78-0432	KAIYO MARU NO. 8	HKI-563	STRL/M	7KCE	X
JA-78-0254	KAKUDAI MARU NO. 25	ATI-015	STRL/M	JAYA	X
JA-78-0509	KASHIMA MARU NO. 15	MGI-526	STRL/M	JHVB	X
JA-78-0508	KASHIMA MARU NO. 23	MGI-777	STRL/M	JPW0	X
JA-78-0493	KOEI MARU NO. 15	MGI-440	STRL/M	JCAC	X
JA-78-0490R	KOEI MARU NO. 25	MGI-558	STRL/M	JQBND	X
JA-78-0489R	KOEI MARU NO. 35	MGI-801	STRL/M	JF0G	X
JA-78-0488R	KOEI MARU NO. 51	MGI-717	STRL/M	JQAM	X
JA-78-0547R	KOFUKU MARU NO. 28	YMI-12	STRL/M	JMIJX	X
JA-78-0442R	KOHOKU MARU NO. 16	HKI-576	STRL/M	8JEI	X
JA-78-0443R	KOHOKU MARU NO. 17	HKI-592	STRL/M	8JEE	X
JA-78-0421R	KORYO MARU NO. 108	HKI-599	STRL/M	8KPH	X
JA-78-0420R	KORYO MARU NO. 186	HKI-502	STRL/M	JJIE	X
JA-78-0303R	KOSHIN MARU NO. 11	MGI-668	STRL/M	7KPE	X X
JA-78-0525R	KOSHIN MARU NO. 21	MGI-836	STRL/M	JLVY	X
JA-78-0502R	KOTOBUKI MARU NO. 25	MGI-741	STRL/M	JENM	X
JA-78-0292	KOYO MARU NO. 21	TKI-640	STRL/M	JPOE	X X
JA-78-0534	KUMANO MARU NO. 15	FSI-15	STRL/M	7KLX	X
JA-78-0530	KYOWA MARU NO. 11	FSI-206	STRL/M	7KMN	X X

APPENDIX 5 (CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
MEDIUM STERN TRAWLERS									

JA-78-0305	KYOWA MARU NO. 15	FSI-10	STRL/M	JFZP					X
JA-78-0514	KYOWA MARU NO. 23	MGI-661	STRL/M	7KPR					X
JA-78-0424	KYOYO MARU NO. 2	HKI-472U	STRL/M	JHCN					X
JA-78-0459	KYUEI MARU NO. 1	AMI-203	STRL/M	JCCV					X
JA-78-0445	MANRYO MARU NO. 31	HKI-571U	STRL/M	JKTH					X
JA-78-0446	MANRYO MARU NO. 32	HKI-519U	STRL/M	JRNB					X
JA-78-0522	MEISHO MARU NO. 15	MGI-598	STRL/M	JQXJ					X
JA-78-0458	MINATO MARU NO. 85	AMI-222	STRL/M	JNVO					X
JA-78-0435	MITO MARU NO. 8	HKI-508	STRL/M	JJMD					X
JA-78-0251	MUTSU MARU NO. 52	HKI-184	STRL/M	JDDA					X
JA-78-0460	MYOEI MARU NO. 38	AMI-192	STRL/M	JNOB					X
JA-78-0456	NARITA MARU NO. 35	AMI-220	STRL/M	JICNGU					X
JA-78-0020	NITTO MARU NO. 71	HKI-173	STRL/M	JEVWU					X
JA-78-0406	NITTO MARU NO. 75	HKI-451	STRL/M	JANNU					X
JA-78-0551	ORIENT MARU NO. 3	FOI-324	STRL/M	JKGFU					X
JA-78-0474	RYOAN MARU NO. 23	MGI-568	STRL/M	JQLD					X
JA-78-0475	RYOAN MARU NO. 25	MGI-642	STRL/M	7KOUU					X
JA-78-0426	RYOAN MARU NO. 28	MGI-860	STRL/M	JLQEU					X
JA-78-0517	RYOEI MARU NO. 38	MGI-602	STRL/M	JQWWU					X
JA-78-0532	RYOFUKU MARU NO. 15	FSI-177	STRL/M	JGSVU					X
JA-78-0507	RYUHO MARU NO. 15	MGI-495	STRL/M	JHBUU					X
JA-78-0506	RYUHO MARU NO. 31	MGI-713	STRL/M	JFUZU					X
JA-78-0480	RYUHO MARU NO. 37	MGI-792	STRL/M	JFKMU					X
JA-78-0479	RYUHO MARU NO. 51	MGI-608	STRL/M	7KDE					X
JA-78-0499	RYUJIN MARU NO. 11	MGI-576	STRL/M	JPEOU					X
JA-78-0486	RYUJIN MARU NO. 8	MGI-612	STRL/M	7KEDU					X
JA-78-0477	SACHI MARU NO. 22	MGI-847	STRL/M	JRZLU					X
JA-78-0466	SEIJU MARU NO. 20	AMI-216	STRL/M	JCGKU				X	X
JA-78-0465	SEIJU MARU NO. 28	AMI-231	STRL/M	JNIJH				XU	
JA-78-0447	SEITOKU MARU NO. 105	HKI-460	STRL/M	JLJA					X
JA-78-1138	SEKISHU MARU		STRL/M	8KZF				XU	X
JA-78-0537	SHINEI MARU NO. 21	FSI-227	STRL/M	JBCU					X
JA-78-0487	SHINEI MARU NO. 53	MGI-520	STRL/M	JHPG					X
JA-78-0293	SHINNICHI MARU NO. 31	TKI-673	STRL/M	JFDC					X
JA-78-0318	SHIZUOKA MARU	TKI-814	STRL/M	JNHD				X	X
JA-78-0539	SHOEI MARU NO. 2	TKI-743	STRL/M	JCTH					X
JA-78-0512	SHOFUKU MARU NO. 61	MGI-566	STRL/M	JGZF					X
JA-78-0454	SHOSHIN MARU NO. 18	AMI-226	STRL/M	JCSP					X
JA-78-0453	SHOSHIN MARU NO. 21	AMI-217	STRL/M	JCNY					X
JA-78-0455	SHOSHIN MARU NO. 80	AMI-132	STRL/M	JGFZ					X
JA-78-0438	SHOTOKU MARU NO. 35	HKI-544	STRL/M	JKSO					X
JA-78-0439	SHOTOKU MARU NO. 36	HKI-450	STRL/M	JHCG					X
JA-78-0546	SHOUN MARU NO. 11	ITI-81	STRL/M	JPWZ					X
JA-78-0429	SHOYO MARU	HKI-475	STRL/M	JACK					X
JA-78-0294	SHUNYO MARU NO. 18	HKI-258	STRL/M	JNUE					X

APPENDIX 5 (CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
MEDIUM STERN TRAWLERS					

JA-78-0469	SOHO MARU NO. 83	AMI-127	STRL/M	JQDJ	X
JA-78-0230	SOHO MARU NO. 85	AMI-128	STRL/M	JQEV	X
JA-78-0518	TAIHEI MARU NO. 11	MGI-577	STRL/M	JQCC	X
JA-78-0451	TAISEI MARU NO. 11	AMI-249	STRL/M	JLHT	X
JA-78-0450	TAISEI MARU NO. 16	AMI-211	STRL/M	JNRS	X
JA-78-0449	TAISEI MARU NO. 3	AMI-168	STRL/M	7KJZ	X
JA-78-0250	TAISEI MARU NO. 51	HKI-183	STRL/M	JEUH	X
JA-78-0428	TAISEI MARU NO. 68	HKI-459	STRL/M	JLKA	X
JA-78-0535	TEISHO MARU NO. 18	FSI-228	STRL/M	JBCH	X
JA-78-0523	TENYU MARU NO. 12	MGI-618	STRL/M	7KEF	X
JA-78-0497	TENYU MARU NO. 3	MGI-617	STRL/M	JQRR	X
JA-78-0498	TENYU MARU NO. 38	MGI-572	STRL/M	JPCY	X
JA-78-0415	TOMI MARU NO. 52	HKI-572	STRL/M	8JBD	X
JA-78-0433	TOMI MARU NO. 53	HKI-585	STRL/M	8KFN	X
JA-78-0437	TOMI MARU NO. 55	HKI-501	STRL/M	JRGB	X
JA-78-0418	TOMI MARU NO. 81		STRL/M	JHLV	X
JA-78-0434	TOMI MARU NO. 82	HKI-432	STRL/M	JAWD	X
JA-78-0282	TOMI MARU NO. 85	HKI-485	STRL/M	JLQD	X X
JA-78-0252	TORA MARU NO. 18	HKI-213	STRL/M	JPGA	X
JA-78-0422	TORA MARU NO. 31	HKI-550	STRL/M	JLKS	X
JA-78-0467	YAHATA MARU NO. 35	AMI-232	STRL/M	JCSN	X
JA-78-0440	YAHATA MARU NO. 53	HKI-446	STRL/M	JLGC	X
JA-78-0441	YAHATA MARU NO. 56	HKI-546	STRL/M	JKMS	X
JA-78-0491	YAKUSHI MARU NO. 21	MGI-615	STRL/M	7KEH	X
JA-78-0496	YAKUSHI MARU NO. 31	MGI-505	STRL/M	JHLL	X
JA-78-0549	YAKUSHI MARU NO. 31		STRL/M	JJFL	X
JA-78-0409	YAMASAN MARU NO. 81	HKI-486	STRL/M	7JSK	X
JA-78-0410	YAMASAN MARU NO. 85	HKI-488	STRL/M	7JSP	X
JA-78-0550	YASHIMA MARU NO. 2	EHI-317	STRL/M	JJDS	X
JA-78-0548	YASHIMA MARU NO. 3	EHI-316	STRL/M	JJDG	X
JA-78-0452	YASHIO MARU NO. 11	AMI-141	STRL/M	JRDQ	X
JA-78-0536	YOSHI MARU NO. 55	FSI-225	STRL/M	JQSY	X
JA-78-0463	YURYO MARU NO. 8	AMI-147	STRL/M	JQHT	X
JA-78-0253	ZENPO MARU NO. 21	HKI-179	STRL/M	JEWC	X
JA-78-0296R	ZUIHO MARU NO. 8	TKI-609	STRL/M	JNED	X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
LONGLINER									

JA-78-0621	ANYO MARU NO. 21	TKI-891	LL	JAOF	X	X	X		
JA-78-0622	ANYO MARU NO. 22	TKI-949	LL	JIXS	X	X	X		
JA-78-0615	CHOYO MARU NO. 81	HKI-503	LL	7JST	X	X	X		
JA-78-0610	EBISU MARU NO. 88	HKI-308	LL	JPZQ	X	X	X		
JA-78-0822	EIKYU MARU NO. 26	HKI-603	LL	8KPN	X		X	X	
JA-78-0607	EIKYU MARU NO. 82	HKI-311	LL	JGUV	X	X	X		
JA-78-0624	FUKUYOSHI MARU NO. 8		LL	JAPO	X	X	X		
JA-78-0603	FUKUYOSHI MARU NO. 85	HKI-343	LL	JGXT	X	X	X		
JA-78-0605	HATSUE MARU NO. 38	HKI-313	LL	JGVE	X	X	X		
JA-78-0606	HATSUE MARU NO. 55	HKI-456	LL	JLIB	X	X	X		
JA-78-0602	KIYO MARU NO. 55	HKI-539	LL	JKRL	X	X	X		
JA-78-0609	MATSUEI MARU NO. 88	HKI-548	LL	JKSK	X	X	X		
JA-78-0611	MITO MARU NO. 82	HKI-298	LL	JGSN	X	X	X		
JA-78-0617	RYUHO MARU NO. 17	MGI-547	LL	JIDN	X	X	X		
JA-78-0619	RYUSHO MARU NO. 15	TKI-922	LL	JIES	X	X	X		
JA-78-0620	RYUSHO MARU NO. 18	TKI-925	LL	JIXH	X	X	X		
JA-78-0614	SHINKO MARU NO. 3	HKI-318	LL	JGVM	X	X	X		
JA-78-0613	SHINTOKU MARU NO. 25	HKI-461	LL	JLLU	X	X	X		
JA-78-0608	SUMIYOSHI MARU NO. 53	HKI-564	LL	JLIFJ	X	X	X		
JA-78-0618	TENYO MARU NO. 25	MGI-502	LL	JQNZ	X	X	X		
JA-78-0616	TENYU MARU NO. 37	MGI-473	LL	JMOT	X	X	X		
JA-78-0612	TOMI MARU NO. 88	HKI-465	LL	JLKO	X	X	X		
JA-78-0601	TSUNE MARU NO. 31	HKI-378	LL	JHNT	X	X	X		

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
SNAILPOT					

JA-78-0871	AZUMA MARU NO. 11		SNPOT	JFPL	X
JA-78-0872	HAKKAI MARU NO. 11		SNPOT	JJAB	X
JA-78-0873	HIGO MARU		SNPOT	JHPD	X
JA-78-1141	HOKUSEN MARU NO. 10		SNPOT	JAAT	X
JA-78-0862	HOYO MARU NO. 63	MGI-737	SNPOT	JMXA	X
JA-78-0870	HOYO MARU NO. 67		SNPOT	JJKW	X
JA-78-0874	KOHOKU MARU NO. 7		SNPOT	JDRU	X
JA-78-0875	KOTOYOSHI MARU NO. 21		SNPOT	7KJR	X
JA-78-0860	MARUNAKA MARU NO. 68	HKI-623	SNPOT	JDMD	X
JA-78-0859	MEIHO MARU NO. 7	HKI-512	SNPOT	7LGU	X
JA-78-0876	MITO MARU NO. 52		SNPOT	JDPE	X
JA-78-0877	RYOUN MARU NO. 2		SNPOT	7JKE	X
JA-78-0878	RYUSHO MARU NO. 1		SNPOT	8LLJ	X
JA-78-0879	TAKI MARU NO. 2		SNPOT	JFIT	X

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
REFRIGERATED TRANSPORT									

JA-78-1032	ABUGAWA MARU	TKI-784	REF	JAWI	X	X	X	X	X
JA-78-1089	ASAKAZE MARU		REF	JFFZ	X	X	X	X	X
JA-78-1134	CHIYO MARU		REF	JHKF	X	X	X	X	X
JA-78-1074	DAIEN MARU NO. 18	TKI-767	REF	8LLH	X	X	X		
JA-78-1000	DAIHO MARU	TKI-623	REF	JEUQ	X	X	X	X	X
JA-78-1002	DAIPYO MARU	TKI-895	REF	JCHA	X	X	X		
JA-78-1130	DAISHIN MARU NO. 11		REF	7LMV	X	X	X		
JA-78-1003	DAITOKU MARU NO. 16	TKI-964	REF	JNVA	X	X	X	X	X
JA-78-1016	DAITOKU MARU NO. 17	TKI-870	REF	JGLJ	X	X	X	X	X
JA-78-1092	DAITOKU MARU NO. 31		REF	JAWP	X	X	X	X	X
JA-78-1039	EIHEI MARU	TKI-441	REF	7LZX	X	X	X	X	X
JA-78-1062	EIHO MARU	TKI-355	REF	JEAM	X	X	X	X	X
JA-78-1095	FUKUTOKU MARU		REF	JBWP	X	X	X	X	X
JA-78-1025	FUKUYO MARU	EH1-201	REF	JNSV	X	X	X	X	X
JA-78-1027	HAKUBASAN MARU	TKI-884	REF	JALH	X	X	X	X	X
JA-78-1070	HAKUYO MARU		REF	JNXO	X	X	X	X	X
JA-78-1049	HARUKAZE MARU	TKI-653	REF	JPEU	X	X	X	X	X
JA-78-1102	HAYASHIKANE MARU NO. 1		REF	JAEO	X	X	X	X	X
JA-78-1103	HAYASHIKANE MARU NO. 2		REF	JKKG	X	X	X	X	X
JA-78-1037	HAYATSUKI MARU	TKI-858	REF	JGFI	X	X	X	X	X
JA-78-1097	HIROSHIMA MARU		REF	JDSP	X	X	X	X	X
JA-78-1044	HOKKO MARU	TKI-396	REF	JQOU	X	X	X	X	X
JA-78-1083	HOKO MARU NO. 31	KNI-233	REF	JDUV	X	X	X		
JA-78-1029	HOYO MARU	TKI-639	REF	JDRG	X	X	X	X	X
JA-78-1038	ISOKAZE MARU	TKI-881	REF	JGIF	X	X	X	X	X
JA-78-1072	ITOHAM MARU	TKI-676	REF	JKCP	X	X	X	X	X
JA-78-1111	ITU MARU NO. 18		REF	7JJT	X	X	X	X	X
JA-78-1066	JINYO MARU	SOI-793	REF	JQDS	X	X	X	X	X
JA-78-1132	JINYO MARU		REF	JKBM	X	X	X	X	X
JA-78-1068	JUYO MARU	TKI-692	REF	JJNX	X	X	X	X	X
JA-78-1099	KAIJIN MARU NO. 28		REF	JCFE	X	X	X	X	X
JA-78-1019	KAIKO MARU	TKI-872	REF	JGSO	X	X	X	X	X
JA-78-1015	KAISEI MARU NO. 5	TKI-967	REF	JHOO	X	X	X		
JA-78-1031	KAKOGAWA MARU	TKI-786	REF	JAVO	X	X	X	X	X
JA-78-1116	KAKURYO MARU		REF	7LMS	X	X	X	X	X
JA-78-1011	KARASAKI MARU	OTI-8	REF	JJOK	X	X	X		
JA-78-1046	KAZUSHIMA MARU	TKI-437	REF	JQTX	X	X	X	X	X
JA-78-1021	KENTOKU MARU	TKI-905	REF	JBLN	X	X	X	X	X
JA-78-1026	KIYO MARU	EH1-32	REF	JNTY	X	X	X	X	X
JA-78-1088	KIZAN MARU	TKI-432	REF	JBRH	X	X	X	X	X
JA-78-1078	KOEI MARU NO. 22		REF	JJRF	X	X	X	X	X
JA-78-1035	KOTOKU MARU	TKI-932	REF	8JQH	X	X	X	X	X
JA-78-1045	MATSUKAZE MARU	TKI-763	REF	JDTE	X	X	X	X	X
JA-78-1112	MATSUYAMA MARU NO. 12		REF	7LTR	X	X	X	X	X
JA-78-1100	MEISEI MARU		REF	JBNM	X	X	X	X	X

APPENDIX 5 (-CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
REFRIGERATED TRANSPORT									

JA-78-1133	MEIYO-MARU		REF	JAJC	X	X	X	X	X
JA-78-1080	MIE MARU NO. 7	TKI-832	REF	BJFR	X	X	X	X	X
JA-78-1069	MIHO MARU		REF	JHDY	X	X	X		
JA-78-1023	MISHIMA MARU	TKI-701	REF	JKVO-	X	X	X	X	X
JA-78-1101	MIYAJIMA MARU		REF	JDAB-	X	X	X	X	X
JA-78-1041	NANKO MARU	TKI-385	REF	JQMC-	X	X	X	X	X
JA-78-1082	NIPPONHAM MARU NO. 1		REF	JFRC-	X	X	X	X	X
JA-78-1096	NOJIMA MARU		REF	JMKU	X	X	X	X	X
JA-78-2011	OSAKA REEFER		REF	JAQM	X	X	X	X	X
JA-78-1067	REIYO MARU	TKI-691	REF	JEHH	X	X	X	X	X
JA-78-1024	RYOYO MARU	TKI-834	REF	JESC	X	X	X	X	X
JA-78-0853	RYUSHO MARU NO. 5	FOI-358	REF	JACC	X	X	X		
JA-78-1077	RYUTOKU MARU	TKI-918	REF	JGAL	X	X	X	X	X
JA-78-1001	SAKURA MARU	HSI-003	REF	JIAG	X	X	X		
JA-78-1075	SANTO MARU		REF	JFDY	X	X	X		
JA-78-1004	SATSUKI MARU	TKI-883	REF	JGWF	X	X	X		
JA-78-1043	SEIKO MARU	TKI-418	REF	JACP	X	X	X	X	X
JA-78-1076	SEIKO MARU NO. 18	KNI-577	REF	JMDW	X	X	X		
JA-78-1109	SEIRYU MARU		REF	JRIV	X	X	X	X	X
JA-78-1014	SEIWA MARU	TKI-935	REF	JENC	X	X	X	X	X
JA-78-1010	SETA MARU	100909	REF	JHWT	X	X	X		
JA-78-1012	SHIGA MARU	118070	REF	JJQQ	X	X	X		
JA-78-1087-	SHINANO MARU	TKI-518	REF	JPEV	X	X	X	X	X
JA-78-1081	SHINPRIMA MARU		REF	JHXB	X	X	X	X	X
JA-78-1008	SHINTOKU MARU	TKI-856	REF	JFPP	X	X	X	X	X
JA-78-1028	SHUYO MARU	TKI-592	REF	JHTD	X	X	X	X	X
JA-78-1040	SOYOKAZE MARU	TKI-831	REF	JDVT	X	X	X	X	X
JA-78-1115	SUWA MARU		REF	JFAY	X	X	X	X	X
JA-78-1052	TAISEI MARU NO. 16	MEI-361	REF	JNPA	X	X	X	X	X
JA-78-1051	TAISEI MARU NO. 39	MEI-327	REF	JINB	X	X	X	X	X
JA-78-1053	TAISEI MARU NO. 87	MEI-560	REF	BJLD	X	X	X	X	X
JA-78-1054	TAISEI MARU NO. 98	MEI-661	REF	JHKE	X	X	X	X	X
JA-78-1030	TAMAGAWA MARU	TKI-787	REF	JAUM	X	X	X	X	X
JA-78-1022	TIYODA MARU NO. 2	HKI-529	REF	JJTA	X	X	X	X	X
JA-78-1042	TOKO MARU	TKI-415	REF	JRKA	X	X	X	X	X
JA-78-1135	TOKYO REEFER		REF	JQLS	X	X	X	X	X
JA-78-1071	TOSA MARU	TKI-414	REF	7KYB	X	X	X	X	X
JA-78-1013	WAKASHIO MARU	TKI-366	REF	JKMD	X	X	X	X	X
JA-78-1122	WAKASHIO MARU NO. 27		REF	JFTM	X	X	X	X	X
JA-78-1121-	WAKASHIO MARU NO. 32		REF	JKPR	X	X	X	X	X
JA-78-1105	WAKATOKU MARU		REF	JBLQ	X	X	X	X	X
JA-78-1123	YACHIYO MARU NO. 15		REF	JMRH	X	X	X	X	X
JA-78-1079	YACHIYO MARU NO. 26	HKI-637	REF	JRKE	X	X	X	X	X
JA-78-1018	YOHU MARU	TKI-689	REF	JNUV	X	X	X	X	X
JA-78-1106-	YOTOKU MARU		REF	JAOD	X	X	X	X	X

APPENDIX 5 (CONTINUEDM)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
CARGO									

JA-78-1060	AWASHIMA MARU	OTI-11	CGO	JKZN	X	X	X		
JA-78-0623	AZUMA MARU NO. 18		CGO	JQEO	X	X	X		
JA-78-1036	BUSAN		CGO	JROI	X	X	X	X	
JA-78-1090	DAIEI MARU		CGO	JBTW	X	X	X	X	
JA-78-1091	DAITO MARU		CGO	JNMV	X	X	X	X	
JA-78-1063	EIO MARU	TKI-336	CGO	JMDM	X	X	X	X	X
JA-78-1093	EIRYU MARU		CGO	JRWK	X	X	X		
JA-78-2012	EIRYU MARU NO. 2		CGO	JPZH	X				
JA-78-1050	FUKUJU MARU NO. 57	SOT-766	CGO	JLOI	X	X	X	X	X
JA-78-1017	HAKODATE MARU NO. 2	HKI-185M	CGO	SLDD	X	X	X	X	X
JA-78-1126	HOHYOH MARU		CGO	JROG	X	X	X		
JA-78-1142	JIN PO MARU NO. 65		CGO	7KUI	X	X	X	X	
JA-78-1143	KAISEI MARU NO. 7		CGO	JLHF	X	X	X		
JA-78-1059	KASHIWAHANA MARU	HSI-2	CGO	JBHU	X	X	X		
JA-78-1117	KOEI MARU NO. 16		CGO	JASE	X	X	X	X	X
JA-78-1128	KURUSHIMA MARU		CGO	JFRY	X				
JA-78-1034	KYOHO MARU		CGO	JFAA	X	X	X	X	
JA-78-1061	NAGISA MARU	TKI-826	CGO	JJLX	X	X	X		
JA-78-1113	NANAYO MARU		CGO	JFVI	X	X	X		
JA-78-2013	NISSHO MARU		CGO	JMTI	X	X	X	X	
JA-78-1108	OIKAZE MARU		CGO	JFPI	X	X	X	X	
JA-78-1098	OKITSU MARU		CGO	JILK	X	X	X		
JA-78-1110	REIHO MARU		CGO	JAWY	X	X	X	X	M
JA-78-1057	SACHIKAZE MARU	TKI-695	CGO	JKSY	X	X	X	X	
JA-78-1073	SANPUKU MARU		CGO	JLKW	X	X	X	X	
JA-78-1058	SUZUKAZE MARU	TKI-723	CGO	JBVI	X	X	X	X	
JA-78-1056	TAISEI MARU NO. 41	MEI-372	CGO	JKQK	X	X	X	X	X
JA-78-1055	TAISEI MARU NO. 52	MEI-537	CGO	SJIN	X	X	X	X	X
JA-78-1107	TAISHO MARU		CGO	JFWL	X	X	X	X	
JA-78-1139	TAIYO MARU NO. 65		CGO	JOLN	X	X	X	X	X
JA-78-1140	TAIYO MARU NO. 66		CGO	JPJA	X	X	X	X	X
JA-78-1114	TAJIMA MARU		CGO	JQOI	X	X	X	X	
JA-78-1127	TAKASHIRO MARU NO. 25		CGO	7JHQ	X	X	X	X	X
JA-78-1064	TAKASHIRO MARU NO. 28	MFL-657	CGO	JELR	X	X	X	X	X
JA-78-1104	TENRYU MARU		CGO	SJUM	X	X	X		
JA-78-1119	TOMOSHIMA MARU		CGO	JLMD	X	X	X	X	
JA-78-1085	TSURU MARU		CGO	JLKG	X	X	X	X	
JA-78-1120	UNO MARU NO. 1		CGO	JCWY	X	X	X		
JA-78-1118	WAKASHIO MARU NO. 26		CGO	JHHV	X	X	X	X	X
JA-78-1124	YUSHIN MARU		CGO	JICU	X	X	X	X	
JA-78-1125	YUWASU MARU		CGO	JFRU	X	X	X	X	

APPENDIX 5 (CONTINUED)

JAPANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
TANKERS									

JA-78-2002	CHIGUSA MARU		TKR	JBBG	X	X	X	X	X
JA-78-2004	KANAZURU MARU		TKR	JPFI	X	X	X	X	
JA-78-2000	TENKAI MARU		TKR	SKBM	X	X	X	X	X
JA-78-2003	TENRYO MARU		TKR	JJXN	X	X	X	X	
JA-78-2001	UKO MARU		TKR	JPJP	X	X	X	X	X

APPENDIX 5 (CONTINUED)

SALMON FLEET SUPPORT VESSELS
(NOT PERMITTED UNDER FCMA)

VESSEL NAME	HULL NO	CALL
REFRIGERATED TRANSPORT		

CHIYODA MARU NO. 2	HKI-529	JJTA
DAIEN MARU NO. 18	TKI-767	8LLH
EIRYU MARU	TKI-306	JRWK
EIRYU MARU NO. 2	TKI-909	JPZH
FUKIJUJU MARU NO. 57	501-766	JLDI
HAKODATE MARU NO. 2	HKI-185	8LDD
OKITSU MARU	501-612	JILK
SHEIWA MARU	TKI-935	JENC
SHEIRYU MARU	TKI-912	JRIV
TAIHO MARU	TKI-623	JEUQ
TAISEI MARU NO. 41	MEI-372	JKOK
TAISEI MARU NO. 52	MEI-560	8JIN
TAKASHIRO MARU NO. 25	MEI-602	7JHQ
TAKASHIRO MARU NO. 28	MEI-657	JSLR
TENRYU MARU	115077	8JUM
TANKERS		

KARURYO MARU	89252	7LMS
MATSUYAMA MARU	117370	7LTR
SACHIKAZE MARU	TKI-695	JKSY
SUWA MARU	117976	JFAY
SUZUKAZE MARU	TKI-723	JBVI
PATROL		

HOYO MARU NO. 77		7LYI
KONAN MARU NO. 27		JPKD
TOKO MARU		
TOSHI MARU NO. 11		
TOSHI MARU NO. 12		
TOSHI MARU NO. 17		

APPENDIX 5 (CONTINUED)

VESSEL NAME

HULL NO

CALL

RESEARCH VESSEL
SALMON

HOKURO MARU
HOKUSEI MARU
HOKUSHIN MARU
IWAKI MARU
IWATE MARU
KUMAMATO MARU
LIAS MARU NO. 21
OSHORO MARU
RIASU MARU NO. 21
TOUJOU MARU

JBBA
JKOO
JCPV
JCIO
JQZW
JFET
7KIL
JCON
JKIL

GROUND FISH

HATSUE MARU NO. 55
SHUNYO MARU
TOMI MARU NO. 52

JLIB
SJIF
SJBD

SHELLFISH

MEIHO MARU NO. 7
WAKATAKE MARU

JLJU
JHEU

APPENDIX 5 (CONTINUED)

JAPANESE HIGH SEAS SALMON
MOTHERSHIP FLEETS

VESSEL NAME	HULL NO	CALL
JINYO MARU FLEET *****		
JINYO MARU	TKI-293	JKBM
CHOEI MARU NO. 11	HK2-13696	JFTK
CHOYO MARU NO. 75	HK2-17016	JGMY
DAIKICHI MARU NO. 18	HK2-11981	JPRF
DAIRIN MARU NO. 10	HK2-13940	8KGG
EIFUKU MARU NO. 11	MG2-3150	JQQA
EIKYU MARU NO. 63	HK2-17000	8LGA
HABOMAI MARU NO. 8	HK2-13813H	JJLD
HAKUCHO MARU NO. 21	AM2-3632	JMWW
HANASAKI MARU NO. 52	HK2-13600	JGUI
HEIAN MARU NO. 61	HK2-13959	JLRN
HEIKYU MARU NO. 32	HK2-13964	8LLD
HOKEN MARU NO. 28	HK2-13704	JHRJ
ISHIIN MARU NO. 31	HK2-13884	JRNE
KAIJUN MARU NO. 75	HK2-13950	JLIW
KEIYO MARU NO. 17	HK2-13988	JDKS
KEIYO MARU NO. 8	HK2-13877H	JBBT
KINTOMI MARU NO. 35	HK2-13875H	JJWK
KOEI MARU NO. 8	HK2-13980H	8LOV
KOSHIN MARU NO. 38	HK2-13818	JRGH
KOSHIN MARU NO. 58	HK2-17013H	8KGF
MUTSU MARU NO. 53	HK2-11989H	JCME
NIKAPPU MARU	HK2-13550H	JHAG
NOBORIBETSU MARU NO. 2	HK2-13740H	JHBL
OTO MARU NO. 58	HK2-13675H	JHMQ
RAUSU MARU NO. 15	HK2-13703H	JMRX
RYUHO MARU NO. 5	HK2-13816H	JQXH
SACHI MARU NO. 18	HK2-13555H	JPHY
SACHI MARU NO. 25	HK2-13700H	JASY
SHUNYO MARU NO. 52	HK2-13942H	JBEN
SHUNYO MARU NO. 68	HK2-13999H	8LFV
TOKAI MARU NO. 65	HK2-13823H	JJOF
TOMI MARU NO. 15	HK2-13965H	8KKT
TOMI MARU NO. 18	HK2-17075H	JRDA
TOMI MARU NO. 31	HK2-13967H	8KPA
TOMI MARU NO. 65	AM2-4801H	JGST
TOYO MARU NO. 18	HK2-13976H	8LEH
TOYOSHI MARU NO. 21	HK2-13749H	JATH
TOYOSHI MARU NO. 38	HK2-13894H	JRCK
ZEMPO MARU NO. 68	HK2-13966H	JLPH
ZENRYU MARU NO. 51	HK2-13958	JLRY
ZUIHO MARU NO. 15	HK2-13983	JMEY

APPENDIX 5 (CONTINUED)

JAPANESE HIGH SEAS SALMON
MOTHERSHIP FLEETS

VESSEL NAME	HULL NO	CALL
MEIYO MARU FLEET *****		
MEIYO MARU	TKI-381	JAJO
CHIDORI MARU NO. 82	MG2-3450	JNAD
CHOJU MARU NO. 20	MG2-3415	JNDR
CHOKYU MARU NO. 23	FS2-2201	JHYH
DAIKICHI MARU NO. 27	MG2-3240	7KQG
HACHIRYU MARU NO. 55	MG2-3485	7KXW
HAKUO MARU NO. 18	YG2-766	JNXF
HAKURYU MARU NO. 52	MG2-3241	7KTZ
HOKUYU MARU NO. 38	HK2-13931	8JDU
HOTOKU MARU NO. 32	IT2-3208	JPHX
KAIYO MARU NO. 30	AM2-3768	JQWM
KASHIMA MARU NO. 18	MG2-3062	JICS
KASHIMA MARU NO. 21	MG2-3128	JPEN
KIN EI MARU NO. 118	IT2-3005	JRCG
KIN EI MARU NO. 88	IT2-2928	JQZD
KINEI MARU NO. 58	FS2-58	7KLN
KINJU MARU NO. 58	HK2-13585	JCRF
KOEI MARU NO. 68	MG2-3466	JNDB
KOTOBUKI MARU NO. 32	IT2-2848	JFXH
KYOEI MARU NO. 18	IG2-1941U	JRKL
KYOKKO MARU NO. 27	AM2-4280U	7KKN
KYOKKO MARU NO. 32	AM2-4502U	JNSB
KYOSHO MARU NO. 3	MG2-3127U	JPCO
MATSU MARU NO. 35	IT2-2868	JQYR
MUTSU MARU NO. 62	HK2-13678	JHLN
MYOJIN MARU NO. 18	MG2-3496	JQIJ
NITO MARU NO. 7	HK2-13843	7JTA
OKUNI MARU NO. 3	IT2-1077	JFGR
RYOKAI MARU NO. 25	AM2-3806	JGYL
SAKAE MARU NO. 12	MG2-3482	JGWP
SANYO MARU NO. 12	HK2-13903	JRFI
SHINSEI MARU NO. 3	MG2-3133	JOLQ
SHOFUKU MARU NO. 88	MG2-3488	JNFW
SHOICHI MARU NO. 18	MG2-3546	JNKU
SHOSEI MARU NO. 20	HK2-13944	JLJT
TENYU MARU NO. 25	HK2-17089	JNIV
TOMI MARU NO. 5	HK2-13687	JHRV
UME MARU NO. 23	MG2-3038	JPAJ
YAMASEN MARU NO. 51	IG2-2043	JDUQ
YUEI MARU NO. 28	FS2-28	JGOR
YURYO MARU NO. 50	MG2-3001	JMFL

APPENDIX 5 (CONTINUED)

JAPANESE HIGH SEAS SALMON
MOTHERSHIP FLEETS

VESSEL NAME	HULL NO	CALL
NOJIMA MARU FLEET *****		
NOJIMA MARU	TKI-320	JMKU
AKITA MARU NO. 51	AT2-878	JPJM
DAIEI MARU NO. 18	HK2-13752	JJUI
FUKUYOSHI MARU NO. 28	FS2-2334	7KOF
HOKKO MARU NO. 7	HK2-13918	JLUW
HOKUYO MARU NO. 32	FS2-2098	JBQT
HOYOSHI MARU NO. 58	TY2-953	JMYA
JIN EI MARU NO. 12	HK2-139352	JLOG
KAIJUN MARU NO. 58	HK2-139012	JLJS
KAIYO MARU NO. 28	FS2-567	JNNG
KAN EI MARU NO. 18	IG2-19502	JRNA
KASUGA MARU NO. 35	FS2-2650	JNZI
KATSURA MARU NO. 31	HK2-13916	JLNB
KINSEI MARU NO. 53	IT2-2801	JBLN
KINTOKU MARU NO. 7	MG2-3242	7KTX
KIYO MARU NO. 213	NG2-1423	JITB
KOEI MARU NO. 11	MG2-3231	7KPS
KOFUKU MARU NO. 18	YM2-640	JFGA
KORYO MARU NO. 8	TY2-1254	JDDQ
KOUN MARU NO. 35	FS2-2338	7KOB
KOYO MARU NO. 38	FS2-2346	JQMZ
MATSU MARU NO. 55	FS2-2382	JNJO
MINATO MARU NO. 8	MG2-3328	JEFP
NAKAYOSHI MARU NO. 5	CB2-6178	JDGS
NIKKO MARU NO. 65	FS2-251	JGJO
NITTO MARU NO. 25	HK2-17074	JMWR
RYOYOSHI MARU NO. 8	MG2-3186	JRLQ
SAKAE MARU NO. 28	FS2-2668	JFAD
SEISHO MARU NO. 28	CB2-6188	JDIR
SHINCHO MARU NO. 18	KA2-1158	JQWX
SHOEI MARU NO. 3	MG2-3156	JQWL
SUMIEI MARU NO. 21	KA2-1178	JQXP
SUWA MARU NO. 21	FS2-123	JGHK
TATSU MARU NO. 28	IT2-3213	JFVS
TATSUMI MARU NO. 22	FS2-2200	JHYD
TOYAMA MARU NO. 38	TY2-1178	JDCV
TOYOTOMI MARU NO. 53	IT2-3043	JMKX
YAHATA MARU NO. 3	IT2-2938	JRAA
YOSHI MARU NO. 58	FS2-2651	JNZQ
YUSHO MARU NO. 28	KA2-1128	JPOY
ZENSEI MARU NO. 21	IG2-20212	JEMN
ZUIHO MARU NO. 38	FS2-2205	JIKN

APPENDIX 5 (CONTINUED)

JAPANESE HIGH SEA SALMON
MOTHERSHIP FLEETS

VESSEL NAME	HULL NO	CALL
SHINANO MARU FLEET *****		
SHINANO MARU	TKI-518	JPEV
ASAHI MARU NO. 10	FS2-27	JGKE
CHOEI MARU NO. 7	FS2-234	JGBO
DAIICHI MARU NO. 10	IG2-1840	JKDY
EBISU MARU NO. 23	IT2-3214	JFXF
FUKUYOSHI MARU NO. 31	MG2-2977	JHLK
HOKUSEN MARU NO. 3	HK2-13978	JKAV
HOKUSHU MARU NO. 35	FS2-38	JNPB2
INARI MARU NO. 8	IT2-3177	JMKY
KAIKO MARU NO. 18	AM2-4295	JNUM
KIKU MARU NO. 11	FS2-1657	JNIR
KIN EI MARU NO. 3	IT2-3256	JMNH
KINSEI MARU NO. 21	NG2-1213	JIWR
KINSEI MARU NO. 63	IT2-3222	JMNB
KONPIRA MARU NO. 35	IT2-2933	JNLY
KOSEI MARU NO. 2	FS2-2655	JNZP
KUROMORI MARU NO. 25	IT2-2753	JBMM
MANSEI MARU NO. 21	IG2-2019	JEMR
MONJU MARU NO. 21	FS2-2215	JILX
OBATA MARU NO. 25	IG2-1907	JRYJ
RISO MARU NO. 36	CB2-6227	JIKV2
RYOFUKU MARU NO. 18	FS2-18	7KLL2
RYOUN MARU NO. 12	HK2-17023	JLBA
SEIFUKU MARU NO. 25	IT2-3218	JFXQ
SEIKYO MARU NO. 18	IG2-1908	JRZU
SEIUN MARU NO. 28	AM2-6075	JCXI
SHINNICHI MARU NO. 32	YM2-673	JMTX
SHINTOKU MARU NO. 11	HK2-13880	JJRO
SHOICHI MARU NO. 21	FS2-2645	JB1H
SHOSHIN MARU NO. 1	AM2-6035	JCXH
TAIHO MARU NO. 35	MG2-3243	7KKH2
TAISEI MARU NO. 25	FS2-52	JNKX2
TAIYO MARIJ NO. 21	FS2-2375	JCLS
TAKAYA MARU NO. 28	IT2-3015	JDLW
TATSUJ MARU NO. 31	IT2-3313	JFZB
TENYU MARU NO. 8	MG2-3326	JEFU
TORA MARIJ NO. 22	HK2-13671	JQCL
YAYOI MARU NO. 32	FS2-2656	JPAE
YOSHI MARU NO. 28	FS2-31	JNNL
YOSHI MARU NO. 3	FS2-3	JGJX
YOSHICHO MARU NO. 51	FS2-51	JNLM
YURYO MARU NO. 38	AM2-4402	JCMR2

APPENDIX 6

SOVIETS VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
FACTORY VESSELS					

UR-78-0238	SULAK	0868	FAC	UPTD	X X
TRAWLERS					

UR-78-0103	OGON	PG-4242	TRL	UOPM	X X
UR-78-0033	SEBEZH		TRL	UZEF	X X
UR-78-0134	SELETS	PE-0221	TRL	UIKM	X X
UR-78-0135	SOKOLOVKA	PE-0220	TRL	UIKL	X X
UR-78-0136	STOLIN	PE-0222	TRL	UITN*	X X
UR-78-0029	SURAZH		TRL	UPGY*	X X

APPENDIX 6 (CONTINUED)

SOVIETS VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
LARGE STERN TRAWLERS					

UR-78-0617	18 SIEZD VLKSM		STRL/L	EMZP	X X
UR-78-0067	50 LET VLKSM	PB-0997	STRL/L	ESCB	X X
UR-78-0554	ACADEMIC BERG	PB-4877	STRL/L	UGAE	X X
UR-78-0094	AGATOVY	PV-0238	STRL/L	UVIK	X X
UR-78-0003	ALEXANDER KRAEV	PB-0939	STRL/L	UOEF	X X
UR-78-0553	ALEXANDER MAXUTOV		STRL/L	ULQA	X X
UR-78-0232	ALEXEJ MAKHALIN	TB-0956	STRL/L	UYEO	X X
UR-78-0224	ARAGONIT	PV-0251	STRL/L	EKNL	X X
UR-78-0112	ARALSK	PB-0824	STRL/L	UMQC	X X
UR-78-0552	BASARGIN		STRL/L	UTFW	X X
UR-78-0551	BORIS GORINSKY		STRL/L	UYDKT	X X
UR-78-0001	DANKO	PB-0961	STRL/L	UUDG	X X
UR-78-0550T	DOLOMIT		STRL/L	UIWZ	X X
UR-78-0206T	FYODOR KRAINOV	PB-0949	STRL/L	UYDH	X X
UR-78-0205	ITELMEN	TB-0899	STRL/L	IJTI	X X
UR-78-0006	IVAN PANDV	SB-0923	STRL/L	USSH	X X
UR-78-0191	KALAR	TB-0236	STRL/L	UENG	X X
UR-78-0113	KALITVA	TB-0269	STRL/L	UFEF	X X
UR-78-0066	KAMCHATSKAYA PRAVDA	TB-0985	STRL/L	UMEO	X X
UR-78-0231	KAMYSHIN	TB-0285	STRL/L	ESKT	X X
UR-78-0028	KARAGACH	PV-0244	STRL/L	UWYG	X X
UR-78-0018	KATANGLY	SB-0991	STRL/L	ESBV	X X
UR-78-0614	KAVALEROVD		STRL/L	EWVY	X X
UR-78-0171	KAZALINSK	TB-0290	STRL/L	ESKY	X X
UR-78-0116	KAZATIN	TB-0291	STRL/L	ESKZ	X X
UR-78-0114	KHAIRYUZOV	TB-0266	STRL/L	EWYX	X X
UR-78-0076	KONTAJKA	SB-0912	STRL/L	EWMS	X X
UR-78-0215	KORENGA	SB-0914	STRL/L	EWZB	X X
UR-78-0161	KREMEN	PB-0258	STRL/L	UIXM	X X
UR-78-0230	LESOGORSK	SB-0983	STRL/L	UMBS	X X
UR-78-0181	LUCHEGORSK	TB-0254	STRL/L	ESIR	X X
UR-78-0068	MATEMATIK	TB-0260	STRL/L	EVRN	X X
UR-78-0107	MEDIK	KHB-0261	STRL/L	EWEX	X X
UR-78-0177	MYS BARANOVA	PB-0350	STRL/L	UNZP	X X
UR-78-0214	MYS BELKINA	PB-0352	STRL/L	IJAM	X X
UR-78-0229	MYS CHAIKOVSKOGO	SB-0804	STRL/L	EUDU	X X
UR-78-0097	MYS EGOROVA		STRL/L	UOFI	X X
UR-78-0173	MYS GAMOVA	PB-0340	STRL/L	UIDW	X X
UR-78-0169T	MYS GRINA	PB-0355	STRL/L	UOOT	X X
UR-78-0185	MYS GROZNY	SB-0802	STRL/L	EUDS	X X
UR-78-0204	MYS ILMOVY	KHB-0398	STRL/L	UESV	X X
UR-78-0545	MYS JUDINA	SB-0858	STRL/L	UUPA	X X
UR-78-0017	MYS OREKHOVA	TB-0357	STRL/L	UJGX	XTX
UR-78-0565	MYS OSIPOVA		STRL/L	USGN	X X
UR-78-0227	MYS SINJAVINA	SB-0334	STRL/L	UONW	X X

APPENDIX A (CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
LARGE STERN TRAWLERS									

UR-78-0168	MYS SKALISTY	SB-0807	STRL/L	EUEZ	X	X			
UR-78-0544	MYS SVOBODNY		STRL/L	UJPG	X	X			
UR-78-0166	MYS TAIMYR	TB-0374	STRL/L	EVBV	X	X			
UR-78-0196	MYS VAIGACH	PB-0379	STRL/L	EVCA	X	X			
UR-78-0209E	MYS VORONINA	PB-0373	STRL/L	EVBS	X	X			
UR-78-0543E	MYS YELAGINA		STRL/L	UIAR	X	X			
UR-78-0061E	NADEZHDA	PV-0203	STRL/L	EVQQ	X	X			
UR-78-0002E	NADEZHDIINSK	PB-0995	STRL/L	ESRZ	X	X			
UR-78-0065E	NOVAJA ERA	SB-0966	STRL/L	UEKTE	X	X			
UR-78-0564E	OKTANT		STRL/L	EVQPE	X	X			
UR-78-0228E	OPALA	TB-0866	STRL/L	UVYYE	X	X			
UR-78-0223E	OZERNYE KLYUCHI	PB-0278	STRL/L	ESCE	X	X			
UR-78-0060E	PASSIONARIJA	SB-0960	STRL/L	UTVLE	X	X			
UR-78-0079E	PIRIT	PV-0256	STRL/L	UIXE	X	X			
UR-78-0561E	PISATEL		STRL/L	EWWE	X	X			
UR-78-0201E	POIMA	PB-0986	STRL/L	UMOE	X	X			
UR-78-0108E	PRIAMURIE	TB-0951	STRL/L	ESUN	X	X			
UR-78-0562E	PYOTR OVCHINNIKOV	TB-0948	STRL/L	UYDF	X	X			
UR-78-0187E	REVOLYUTSIONER	PB-0968	STRL/L	UEMNE	X	X			
UR-78-0163E	SAKHALIN	SB-0883	STRL/L	UTDAE	X	X			
UR-78-0011E	SHTURMAN ELAGIN	TB-0969	STRL/L	UERIE	X	X			
UR-78-0234E	SOVGAVAN	PB-0984	STRL/L	UMBE	X	X			
UR-78-0560E	SOVGAVANSKY KOMSOMOLETS		STRL/L	UWWE	X	X			
UR-78-0110E	SOYUZ-4	TB-0283	STRL/L	ESKR	X	X			
UR-78-0080E	SVETLAJA	SB-0980	STRL/L	ULZHE	X	X			
UR-78-0102E	TAISHET	PB-0921	STRL/L	LESTYE	X	X			
UR-78-0557E	TAJIKISTAN		STRL/L	USZE	X	X			
UR-78-0188E	TAMAN	SB-0897	STRL/L	USVE	X	X			
UR-78-0202E	TERNEI	PB-0987	STRL/L	UMWE	X	X			
UR-78-0162E	TIGIL	SB-0911	STRL/L	EVRE	X	X			
UR-78-0556E	TIKHOOKEANSKY		STRL/L	EUEME	X	X			
UR-78-0070E	TIRASPOL	TB-0271	STRL/L	UZSLE	X	X			
UR-78-0111E	TRETJAKOVO	PV-0926	STRL/L	UJUJE	X	X			
UR-78-0172E	TURKUL	SB-0913	STRL/L	EWZE	X	X			
UR-78-0558E	TYMLAT		STRL/L	EWZE	X	X			
UR-78-0077E	UZBEKISTAN	TB-0880	STRL/L	UTCPE	X	X			
UR-78-0189E	VALENTIN KOTELNIKOV	SB-0942	STRL/L	UOEE	X	X			
UR-78-0009E	VOSKHOD	TB-0937	STRL/L	UNWZ	X	X			
UR-78-0051E	ZAGORJANY	SSH-0821	STRL/L	EDCR	X	X			
UR-78-0226E	ZUBOVO	SSH-0887	STRL/L	UVBE	X	X			

APPENDIX 6 (CONTINUED)

SOVIETS VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
REFRIGERATED TRANSPORT									

UR-78-0264	ALMAZNY		REF	ULPG	X	X			
UR-78-0259	ALTAJSKIE GORYT	PT-3088	REF	UFJW	X	X			
UR-78-0263	ARKHIP KUINDGI	PT-3007	REF	UJIR	X	X			
UR-78-0284	ARSENEV	PT-3532	REF	UBMZ	X	X			
UR-78-0523	BALTIYSK		REF	UUFF	X	X			
UR-78-0522	CHERNIAKHOVSK		REF	UUFE	X	X			
UR-78-0289	CHURKIN	PR-3534	REF	UYNZ	X	X			
UR-78-0288	EGERSHELD	PR-3533	REF	UYNV	X	X			
UR-78-0269	GORETS	PT-3140	REF	EWWM	X	X			
UR-78-0268	GRANITNYY	PT-3047	REF	LILPL	X	X			
UR-78-0521	GVARDEYSK		REF	UNGV	X	X			
UR-78-0520	INDIGIRKA		REF	UUUE	X	X			
UR-78-0271	IVAN KRAMSKOY	PT-3009	REF	UMVO	X	X			
UR-78-0519	JANA		REF	UUET	X	X			
UR-78-0260	KAMCHATSKIE GORY	PT-3085	REF	UFRY	X	X			
UR-78-0280	KAMENOGORSK	PT-3476	REF	LIJDL	X	X			
UR-78-0246	KARSKOE MORE	PT-3117	REF	EWPK	X	X			
UR-78-0278	KHUDOZNIK DEYNEKA	PT-3038	REF	EWAI	X	X			
UR-78-0277	KHUDOZNIK S. GERASIMOV	PT-3022	REF	UFKS	X	X			
UR-78-0276	KHUDOZNIK VRUBEL	PT-3025	REF	EWTJ	X	X			
UR-78-0518	KULOV		REF	UNJG	X	X			
UR-78-0282	KURGAN	PT-3466	REF	UUEF	X	X			
UR-78-0273	MARSHAL MALINOVSKIY	PT-3036	REF	EWAH	X	X			
UR-78-0274	MARSHAL ROKOSSOVSKY	PT-3033	REF	EWAG	X	X			
UR-78-0516	NEVER		REF	UTZF	X	X			
UR-78-0252	OKHOTSKOE MORE	PT-3124	REF	EWFJ	X	X			
UR-78-0255	OSTROV KARAGINSKIY	PT-3116	REF	ESVM	X	X			
UR-78-0254	OSTROV LISYANSKOGO	PT-3114	REF	ESVK	X	X			
UR-78-0256	OSTROV SHMIDTA	PT-3112	REF	ESSP	X	X			
UR-78-0257	OSTROV SHOKALSKOGO	PT-3109	REF	ESKL	X	X			
UR-78-0258	OSTROV USHAKOVA	PT-3111	REF	ESKN	X	X			
UR-78-0253	PROLIV LAPERUSA	PT-3103	REF	USED	X	X			
UR-78-0303	RECHITSA	TT-0805	REF	EVVV	X	X			
UR-78-0262	SAJANSKIE GORY	PT-3087	REF	UFNKT	X	X			
UR-78-0261	SAKHALINSKIE GORY	PT-3086	REF	UFOXT	X	X			
UR-78-0275	SIBIR	PT-3001	REF	UEEYT	X	X			
UR-78-0515	SVETLOGORSK		REF	UUFDT	X	X			
UR-78-0283	TSELINOGRAD	PT-3464	REF	UUEDT	X	X			
UR-78-0514	TUI OMA		REF	UNJDT	X	X			
UR-78-0513	UMAN		REF	UNJBT	X	X			
UR-78-0266	VASILIY PEROV	PT-3011	REF	UYZUT	X	X			
UR-78-0265	VASILIIY VERESHCHAGIN	PT-3003	REF	UHAZT	X	X			
UR-78-0286	VOLCHANSK	PR-3583	REF	UWTGT	X	X			
UR-78-0279	VOLOCHAEVSK	PT-3473	REF	UJDK	X	X			
UR-78-0285	VOLOGDA	PR-3582	REF	UWTFT	X	X			

APPENDIX 6 (CONTINUED)

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
REFRIGERATED TRANSPORT									

UR-78-0251	YAROSLAVL	PT-3523	REF	UJLD	X	X			
UR-78-0512	ZELENOGORSK		REF	UJFG	X	X			
UR-78-0270	ZOLOTOY ROG	PT-3018	REF	EDOS	X	X			

CARGO

UR-78-0619	FLOTINSPEKTSIJA-01		CGO	EWEO	X	X			
UR-78-0517	NARVAL		CGO	UJQB	X	X			

TANKERS

UR-78-0529	ABAGUR		TKR	EWDL	X	X			
UR-78-0530	ABAKAN		TKR	USIL	X	X			
UR-78-0528	ALEJSK		TKR	UYSY	X	X			
UR-78-0510	AMBARCIK		TKR	UZIQ	X	X			
UR-78-0524	AMURSK		TKR	UJXX	X	X			
UR-78-0527	ANAPKA		TKR	UYEP	X	X			
UR-78-0526	ANIVA		TKR	UEMP	X	X			
UR-78-0525	ARAKS		TKR	UEJT	X	X			
UR-78-0295	BIRJUSA	PN-3180	TKR	ESTU	X	X			
UR-78-0307	EGORJEVSK		TKR	UJYH	X	X			
UR-78-0294	EREBUS	PN-3137	TKR	UIZS	X	X			
UR-78-0304	KOMSOMOLETS UKRAINY		TKR	UJYL	X	X			
UR-78-0305	MOLODECHNO		TKR	UFJS	X	X			
UR-78-0308	MOSKALVO		TKR	URDL	X	X			
UR-78-0296	OMSK	PN-3175	TKR	ESOP	X	X			
UR-78-0298	SIBIRNEFT	PN-3222	TKR	USMJ	X	X			
UR-78-0306	SLAVGOROD		TKR	UODR	X*	X*			
UR-78-0297	SURGUTNEFT	PN-3202	TKR	EWRK	X	X*			

RESCUE VESSELS

UR-78-0311	BDITELNIJ	PCH-0234	RESC	UJKB	X	X			
UR-78-0612	DIOKL	P4-0818	RESC	URHJ	X	X			
UR-78-0613	PRIMERNIJ	PCH-0600	RESC	UJUG	X	X			

APPENDIX 7

SOUTH KOREAN VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
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FACTORY VESSELS

KS-78-0079	BOOK NEUNG		FAC	BF3613					X
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LARGE STERN TRAWLERS

KS-78-0003	CHEOG YANG HO	SS-1156	STRL/L	6LZV			X	X	
KS-78-0051	DAE SUNG HO	N-1313*	STRL/L	6NER			X	X	
KS-78-0037	DAEJIN NO. 52	N-1308*	STRL/L	6NAZ			X	X	
KS-78-0039	DONGSAN-HO		STRL/L	6NDW			X	X	
KS-78-0001	GAE YANG HO	SN-753	STRL/L	6LZT			X	X	
KS-78-0006	HEUNG YANG HO	SN-839	STRL/L	6MXD			X	X	
KS-78-0085	KYUNG YANG HO		STRL/L	6NBI			X	X	
KS-78-0033	NAMBUG		STRL/L	6MXT			X	X	
KS-78-0004	PUNG YANG HO	SN-839	STRL/L	6MLB			X	X	
KS-78-0002	SEO YANG HO	SN-820	STRL/L	6MME			X	X	
KS-78-0047	SHIN AN HO		STRL/L	6NAX			X	X	
KS-78-0042	SOO GONG NO. 51		STRL/L	6NEJ			X	X*	

LONGLINER

KS-78-0055	NO. 11 SAMHE		LL	6MXS					X
KS-78-0053	NO. 31 DONGWON		LL	6LSV					X
KS-78-0063*	Q DAE YANG 212		LL	6MUZ					X

APPENDIX 8

TAIWANESE VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B G S C N
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LARGE STERN TRAWLERS

TW-78-0004	GOLDEN DRAGON 1	CT8-0004	STRL/L	BVHY	X
TW-78-0003	HIGHLY 302	CT7-0005	STRL/L	BYGM	X
TW-78-0002	HIGHLY NO. 301	CT7-0004	STRL/L	BVMV	X
TW-78-0001	TAI CHANG 1	CT8-0004	STRL/L	BYIX	X

PAIR TRAWLERS

TW-78-0050	CHI LUNG 1		PTRL	BYME	X
TW-78-0051	CHI LUNG 2		PTRL	BYME-1	X
TW-78-0048	CHIEN CHUAN 1		PTRL	BYCO	X
TW-78-0049	CHIEN CHUAN 2		PTRL	BYCO-1	X

REFRIGERATED TRANSPORT

TW-78-0054	HIGHLY NO. 303		REF	BMCS	X X
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APPENDIX 9

POLISH VESSELS ISSUED

PERMITS TO FISH WITHIN UNITED STATES
WATERS 1978

APP NUMBER	VESSEL NAME	HULL NO	TYPE	CALL	B	G	S	C	N
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LARGE STERN TRAWLERS

PL-78-0043	CENTAURUS		STRL/L	SPVM					X
PL-78-0042	COLUMBIA		STRL/L	SPXO					X
PL-78-0044	CRATER		STRL/L	SPXA					X
PL-78-0019	HUMBAK		STRL/L	SQBA					X
PL-78-0039	KALMAR		STRL/L	SQAJ					X
PL-78-0004	PERSEUS		STRL/L	SQDW					X
PL-78-0045	TUNEK		STRL/L	SQGS					X
PL-78-0009	WALEN		STRL/L	SQDI					X

REFRIGERATED TRANSPORT

PL-78-0033	BURAN		REF	SQDK					X
PL-78-0029	HALNIAK		REF	SQBI					X
PL-78-0027	KASZUBY 2		REF	SQGG					X

