

ENVIRONMENTAL ASSESSMENT
and
REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS
OF FISHERY MANAGEMENT PLAN AMENDMENTS TO
ESTABLISH PELAGIC AND BOTTOM TRAWL TEST AREAS
IN THE GULF OF ALASKA

SUMMARY

NOAA proposes regulations to implement proposed Amendment 27 to the Fisheries Management Plan for Groundfish of the Gulf of Alaska (GOA) and proposed Amendment 22 to the FMP for the Groundfish Fishery of the Bering Sea and Aleutian Islands (BSAI) area. These regulations would establish two trawl test areas in the GOA and one trawl test area in the BSAI area for pelagic and bottom trawl fishermen to test their trawl fishing gear. These areas would be available when the GOA or BSAI would otherwise be closed to trawling. This action is necessary to allow these vessels the opportunity to test their trawl gear in preparation for the opening of the fishing seasons, and is intended to promote the goals and objectives of the North Pacific Fishery Management Council (Council) with respect to groundfish management off Alaska.

PURPOSE AND NEED

The domestic and foreign groundfish fisheries in the exclusive economic zone of the GOA and BSAI are managed by the Secretary of Commerce (Secretary) under the FMP for Groundfish of the GOA and the FMP for the Groundfish of the BSAI area. These FMPs were prepared by the Council under the Magnuson Fishery Conservation and Management Act (Magnuson Act) and are implemented by regulations for the foreign fishery at 50 CFR part 611 and for the U.S. fishery at 50 CFR parts 672 and 675, respectively. General regulations that also pertain to the U.S. fishery are implemented at 50 CFR part 620.

At times, amendments to the FMPs and/or their implementing regulations are necessary to resolve problems pertaining to management of the groundfish fisheries. This proposed rule would implement Amendment 27 to the FMP for Groundfish of the GOA and Amendment 22 to the FMP for the Groundfish of the BSAI area. These amendments would establish three specific areas for trawl vessels to test their fishing gear before the fishing season opens, when trawling would otherwise be prohibited in that management area. These FMP amendments were recommended to the Secretary by the Council at its January 13-18, 1992, meeting.

The following are reasons for, and a description of, this proposed rule.

Until recently, the GOA and BSAI have been open to trawling for most of the year, and fishermen were able to test trawl gear in preparation for a season opening. However, in 1992, new regulations (57 FR 382, January 6, 1992) delayed the opening of the trawl season in the GOA and BSAI from January 1 until January 20. A similar delay of the GOA and BSAI trawl fisheries until January 20 is in effect for 1993 and beyond [insert FR reference and publication date of final rule for FMP amendment 19/24], to reduce bycatch rates of chinook salmon and Pacific halibut. Therefore, from January 1 until January 20 of each year, trawl gear may not be deployed in the GOA and BSAI, and fishermen will be unable to test their trawl gear before the trawl season opening.

Fishing with trawl gear is also prohibited at other times of the year in the GOA. If a quarterly allocation of halibut bycatch for trawl gear is taken, non-pelagic trawling is prohibited for the remainder of that quarter. This would prohibit fishermen from testing their bottom trawl gear before the next bottom trawling season begins.

There are several reasons why fishermen need to test trawl gear before season openings. Fisheries are closing earlier because increasingly large fleets are harvesting the TAC more quickly. The establishment of trawl test areas would enable fishermen to test their gear and begin fishing efficiently at the beginning of a season, reducing lost fishing time that might result from gear problems. In a similar trawl test program, Washington state allows vessels to use state waters in Puget Sound for trawl gear testing.

The proposed Amendments 27 and 22 provide the Secretary with the authority to establish gear test areas, with no specific reference to a particular gear type. With this authority, the Secretary could implement any future gear test areas for any gear type by regulatory amendment, without amending the FMP. The proposed Amendments also include the following five criteria with which any gear test area must comply. These criteria were taken from the Council's motion on trawl test areas at the January, 1992, Council meeting.

1. Depth and bottom type must be suitable for testing the particular gear type.
2. Must be outside State waters.

3. Must be in areas not normally closed to fishing with that gear type.
4. Must be in areas that are not usually fished heavily by that gear type.
5. Must not be within a designated Steller sea lion protection area at any time of the year.

This proposed rule would establish three trawl test areas (see Figure 1) bounded by straight lines connecting the following coordinates in the order listed:

Gulf of Alaska - Kodiak	W. longitude	N. latitude
	152° 02'	57° 37'
	151° 25'	57° 37'
	151° 25'	57° 23'
	152° 02'	57° 23'
	152° 02'	57° 37'
Gulf of Alaska - Sand Point	W. longitude	N. latitude
	161° 00'	54° 50'
	160° 30'	54° 50'
	160° 30'	54° 35'
	161° 00'	54° 35'
	161° 00'	54° 50'
Bering Sea	W. longitude	N. latitude
	167° 00'	55° 00'
	166° 00'	55° 00'
	166° 00'	54° 40'
	167° 00'	54° 40'
	167° 00'	55° 00'

Trawl gear may be tested in the areas at times when trawling would otherwise be prohibited in those management areas under the following conditions:

- 1) The codend shall be left unzipped so that the trawl gear will not retain fish.
- 2) Groundfish may not be on board.
- 3) The time vessels spend trawl gear testing in these three areas will not contribute towards observer coverage requirements, and the placement of observers on board these vessels will be at the discretion of the Regional Director.

Criteria for Gear Test Areas

The Council's motion on test areas at the January, 1992, Council meeting listed five criteria with which test areas should comply. The following explains how the three proposed trawl test areas

comply with the criteria:

- 1) Depth and bottom type must be suitable for testing pelagic and bottom trawl nets.

The Kodiak area has depths ranging from approximately 30-80 fathoms, the Sand Point area from 50-65 fathoms, and the Bering Sea area from 70-160 fathoms. These depths are suitable for bottom and pelagic trawling, and the bottom type is suitable for bottom trawling. Therefore, these test areas should be acceptable testing grounds for bottom and pelagic trawl gear. Each of these trawl test areas was chosen with the advice and assistance of trawl industry representatives.

- 2) Be outside Alaska state waters.

All of the trawl test areas are outside state waters.

- 3) Be in areas that are not usually heavily fished by trawling.

None of the three test areas is known to be an area of high trawl catch for groundfish.

- 4) Be in areas not normally closed to trawling.

None of the trawl test areas is in an area that is normally closed to trawling at any time of the year. However, the Bering Sea test area is entirely within the summer Herring Savings Area 2 (HSA 2). Herring Savings Area 2 regulations require that the attainment of a trawl bycatch allowance for herring would close the HSA 2 for the period from July 1 to August 15. The NMFS believes that the Bering Sea test area would be required only from January 1 to January 20 before the trawl season opens. Because trawl bycatch amounts of herring are insignificant in the HSA 2 during January, conflicts should not result from having a trawl test area in HSA 2.

- 5) The trawl test area must not be within a designated Steller sea lion protection area at any time of the year.

None of the three test areas is within a designated Steller sea lion protection area at any time of the year.

At the January, 1992, Council meeting, the Council's Science and Statistical Committee (SSC) and Advisory Panel (AP) recommended that several issues of concern be addressed before this proposed FMP amendment is published in the Federal Register. The following are responses to the SSC and AP's concerns about the implementation of these trawl test areas:

1) Species to be encountered in trawl test areas.

From the GOA and BSAI Stock Assessment and Fishery Evaluation Reports for 1992, the species that are likely to be encountered in these test areas are:

Kodiak and Sand Point Areas - walleye pollock, Pacific cod, flatfish, sablefish, rockfish, halibut, salmon, crab and other species.

Bering Sea Area - walleye pollock, Pacific cod, halibut, greenland turbot, arrowtooth flounder, sablefish, pacific ocean perch, atka mackerel, and small amounts of rock sole, other flatfish, squid, and other species.

2) Accessibility of these areas to fishermen.

Vessels fishing in the Gulf of Alaska could use the Kodiak and Sand Point test areas. Vessels fishing in the Bering Sea are primarily based in Dutch Harbor and Akutan, making the Bering Sea test area most convenient for them. These test areas have been positioned to provide the best access to a test area by the majority of trawl vessels, and were chosen with input and consultation with the trawl fishing industry.

3) The trawl test area should not be larger than is necessary to test the gear.

Kodiak Area - The approximate size for this area is 14 nautical miles (nm) by 18 nm, or 252 square nm. This is approximately the minimum size needed for a test area to allow vessels enough straight line distance and room to maneuver. For example, if a vessel is moving through a test area, and begins gear testing at a normal trawling speed of 3-4 knots, the vessel could move in the same direction for about four hours. This should be enough time to solve most gear problems. Also, making the area nearly square provides room for vessels to use the test area without interfering with each other. This is important because vessels working on gear problems are less able to maneuver.

Sand Point Area - This area is approximately 15 nm by 15 nm, or 225 square nm, about the same size as the Kodiak area.

Bering Sea Area - This area is approximately 20 nm by 30 nm, or 600 square nm. This area is larger than the other two areas, because vessels that operate in the BSAI are larger. These larger vessels tow larger nets and are less capable of maneuvering because of their size. These factors contribute

towards the need for a larger area in the BSAI.

- 4) Enforcement requirements for trawl test areas. Check in/check out or notification of trawl test area use may be required in the future in order to aid enforcement.
- 5) Trawl testing and crab opening conflicts. Crab fishing with pot gear or halibut fishing with hook and line gear are classified as a stationary gear. Sometimes, moveable gear such as trawl gear can conflict with stationary gear if both gear types are using the same fishing areas. If pot or hook and line gear is especially abundant, for example on a season opening, it may be difficult for trawlers to avoid the fixed gear, resulting in conflict between fishermen using fixed and movable gear types.

For 1991, the king crab openings in all three test areas are late in the calendar year, on September 1, September 25, and/or November 1. This could result in conflicts if a third quarter halibut bycatch closure prompted heavy use of the GOA trawl test areas.

For 1991, the Tanner crab opening for all three areas occurred on November 15. Trawl testing would be required from January 1 to January 20 when trawling is prohibited in the GOA and BSAI. Therefore, heavy use of the trawl test areas could potentially conflict with the Tanner crab opening on 1/15. Conflicts are not expected to occur to a great extent in the Bering Sea or the Sand Point test areas, because few crab resources exist there. Crab resources in the Kodiak area are abundant, and the potential therefore exists for conflict. NMFS is requesting comments on this subject.

- 6) Trawl testing and halibut opening conflicts. The Bering Sea test area falls within the International Pacific Halibut Commission (IPHC) fishing area 4A. For 1992, area 4A halibut fishing periods are from June 8 to June 9, from August 6 to announced closure, and from September 22 to announced closure. Trawl testing should not conflict with the halibut opening in the Bering Sea area, because the time of year that the Bering Sea trawl test area would normally be used would be from January 1 to January 20, when fishing with trawl gear in the BSAI is prohibited.

The Sand Point test area is in the IPHC area 3B, where the 1992 halibut fishing periods will be from June 8 to June 9, from September 7 to September 8, and from October 5 to announced closure. The Gulf of Alaska is closed to trawling from January 1 to January 20, and possibly near the end of each quarter if the quarterly allocation of halibut bycatch is exhausted. Halibut openings from June 8 to June 9 and September 7 to September 8 are near the end of the second and third quarters, respectively, so it is possible that the halibut bycatch for the trawl fleet would be taken and trawling would be prohibited; resulting in use of the trawl test areas, and conflicting with the area 3B halibut opening.

The Kodiak test area is in IPHC area 3A, and has the same 1992 halibut fishing periods as the Sand Point area. The Kodiak test area, therefore, is in the same situation with regard to conflicts with halibut openings as the Sand Point area in the above paragraph.

ALTERNATIVES

Alternative 1 (Status Quo) - Under this alternative, no trawl test areas would be designated. The present situation would continue whereby the FMPs would not be amended and trawl fishermen would not be allowed to test their trawl gear when trawling is prohibited.

Alternative 2 - Under this alternative, the Secretary of Commerce, in consultation with the Council, would be authorized to amend the GOA and BSAI FMPs to allow trawl net test areas to be designated for testing pelagic and bottom trawl nets when trawling is prohibited. These trawl test areas would occur in specifically designated areas that conform to certain criteria, and all trawling in these areas would be done under conditions #1-6 on page 3 of this paper.

ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

This analysis considers the environmental impacts of the alternatives listed above. In particular, the physical, biological, and socioeconomic impacts are addressed in this analysis. Based on the analysis provided below, none of the alternatives are expected to have significant impacts on the environment within the meaning of the National Environmental

Policy Act.

Physical and biological impacts - Alternative 1 (status quo) is the "no action" Alternative, which would not result in any additional physical or biological effect on the GOA.

Alternative 2 would have some physical and biological impacts due to the establishment of two trawl test areas in the GOA and one in the Bering Sea. The physical effects would be primarily due to increased bottom trawl activity in the trawl test areas when they are in use. The trawl testing would disturb the sea floor sediment, creating some turbidity. No physical effects due to pelagic trawl testing would be expected.

The biological effects are related to the physical effects, in that the bottom trawls would disturb the benthic communities and their ecology due to the effects of the two otter trawl doors, foot rope and chafing gear. In particular, crab resources could be impacted by the physical effects of the otter trawls. The northern boundary of the Kodiak test area is on the southern boundary of the Marmot flats closed area. Marmot flats is a crab protection area that is closed to non-pelagic trawl gear. The Kodiak test area is in the Chiniak Gully, which is good crab habitat. Crab resources are most vulnerable in this area during January-April for king crab and during March-June for Tanner crab. These are the months when crab are soft shelled and experience high mortality due to the physical effects of bottom trawl gear. January 1-January 20 is the time of the year when the trawl test areas would probably see their heaviest use because of a trawling ban in the GOA and BSAI. Also, there may be usage of this trawl test area at the end of each quarter if the bycatch allocation of halibut is exhausted and the GOA is subsequently closed to trawling. Therefore, a conflict may occur, because this test area would be in use when king crab are most vulnerable to bottom trawl gear during the 1/1-1/20 trawling closing, and the possible quarterly use of the trawl test area could impact both king and Tanner crab when they are most vulnerable. The Sand Point and Bering Sea areas have few crab resources, so any impact on crab resources ought to be negative in these areas.

Another biological impact would be some incidental catch of fish in the trawl net even though the cod end would remain open. As fish attempt to evade a bottom or pelagic trawl net, they may try to go through the sides of the net and be "gilled" by the net. However, this should be a small amount of fish, limited to

fish of a size that could get a part of their body trapped in the trawl mesh. Larger fish and marine mammals would be funnelled through the net and out the cod end. Larger marine mammals that would be too large to pass through the cod end should have the ability to move fast enough to escape a trawl being towed at 3-4 knots.

Finally, fish aggregate and they must be located using remote sensing gear or found in particularly productive areas to fish for them successfully. During trawl testing, the trawls are not towed through identified aggregations of fish, but are being towed at random in trawl test areas that are not known for high trawl catches. Trawls being tested in this way would not likely come into contact with many fish.

The magnitude of these physical and biological effects would depend upon how many fishermen use the trawl test areas, how long it takes to test a trawl, and how many months of the year trawl test areas would be necessary. Approximately 343 trawl vessels are permitted to fish in Federal waters of the GOA and Bering Sea in 1991 that would possibly have had the need to test their trawl gear. The amount of time that these vessels would spend trawl testing would be quite short because they would not be fishing, but only testing gear to make sure that it was functioning correctly. Once the gear is observed to be functioning correctly, the vessel would move away from the area with its objectives completed.

Trawl test areas would be needed to test pelagic or bottom trawl gear in the GOA and BSAI would be from January 1 - January 20. This prohibited trawling season was in place for 1992, as a sea lion protection measure. A similar closure for 1993 and beyond is proposed in order to reduce prohibited species bycatch amounts early in the fishing year. For the remainder of the year, there is another way that may trigger periodic closures of the GOA to non-pelagic trawling. If a quarterly allocation of halibut bycatch is taken, non-pelagic trawling will be prohibited for the remainder of that quarter. This occurred twice in 1991 from 5/8-7/1 and 10/14-12/31.

Therefore, the physical and biological impacts should be small considering the number of vessels in the BSAI and GOA that might test trawl gear in the test areas from January 1-January 20, and during the periodic closures to non-pelagic trawling in the GOA. However, the GOA and BSAI possibly could be closed to trawling for a greater proportion of the year in the future, resulting in more use of the trawl test areas.

Socioeconomic impacts - The status quo Alternative 1 places an economic burden on fishermen. With the increased number of vessels, the length of the fishing season is decreasing. Vessels need to have their trawl gear in good working order from the first day of the opening to compete successfully with the other vessels for the TAC. Any delays due to gear problems could be very expensive in terms of opportunity lost. In addition, the postponement of the GOA trawl season from January 1, 1992, to January 20, 1992, had the effect of postponing the opening until the time when pollock roe was in premium condition, and considering the value of the roe, any delay due to gear problems would have had a significant economic impact on individual vessels.

A potential socioeconomic impact relates to the possibility that fishermen sometimes test their trawl nets as needed regardless of regulations, especially vessels smaller than 60' that do not carry observers. This activity could impact fishermen if they were caught illegally testing their nets, because the law defines "fishing" as putting gear in the water.

The socioeconomic impacts of Alternative 2 are positive, and are the justification for this proposed FMP Amendment. Alternative 2 would address the negative socioeconomic impacts of Alternative 1 by allowing fishermen to test their trawl gear when needed.

EFFECTS ON ENDANGERED AND THREATENED SPECIES AND ON THE ALASKA COASTAL ZONE

Permitting vessels to test trawl gear within these zones is not expected to have any effect on endangered or threatened species within the purview of NMFS. Cod ends will be open during testing, and thus, no significant fishery removal or incidental take of listed species is expected. Since trawl test areas are located more than 20 nm from listed Steller sea lion rookeries, disturbance of these essential habitat areas during gear testing will not occur.

Based on the available information, we conclude that these amendments are not likely to affect listed species, and that further consultation pursuant to Section 7 of the Endangered Species Act is not required.

Also, each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the

Alaska Coastal Management Program within the meaning of Section 333307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

OTHER EXECUTIVE ORDER 12291 REQUIREMENTS

Executive Order 12291 requires that the following three issues be considered:

- (a) Will the amendment have an annual effect on the economy of \$100 million or more?
- (b) Will the amendment lead to an increase in the costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions?
- (c) Will the amendment have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets?

These regulations do not impose costs and cause redistribution of costs and benefits. If the proposed regulations are implemented to the extent anticipated, these costs are not expected to be significant relative to total operational costs.

The amendments would not have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets.

The amendments should not lead to a substantial increase in the price paid by consumers, local governments, or geographic regions since no significant quantity changes are expected in the groundfish markets. Where more enforcement and management effort are required, costs to state and federal fishery management agencies will increase.

These amendments should not have an annual effect of \$100 million, since although the total value of the domestic catch of all groundfish species is over \$100 million, these amendments are not expected to substantially alter the amount of distribution of this catch.

IMPACT OF THIS AMENDMENT RELATIVE TO THE REGULATORY FLEXIBILITY ACT

The Regulatory Flexibility Act (RFA) requires that impacts of regulatory measures imposed on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions with limited resources) be examined to determine whether a substantial number of such small entities will be significantly impacted by the measures. Fishing vessels are considered to be small businesses. Over 2,000 vessels may fish for groundfish off Alaska in 1992, based on Federal groundfish permits issued by NMFS. While these numbers of vessels are considered substantial, regulatory measures will only affect a smaller proportion of the fleet.

FINDINGS OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

For the reasons discussed above, neither implementation of the proposed action nor any of the alternatives to that action would significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the preferred action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

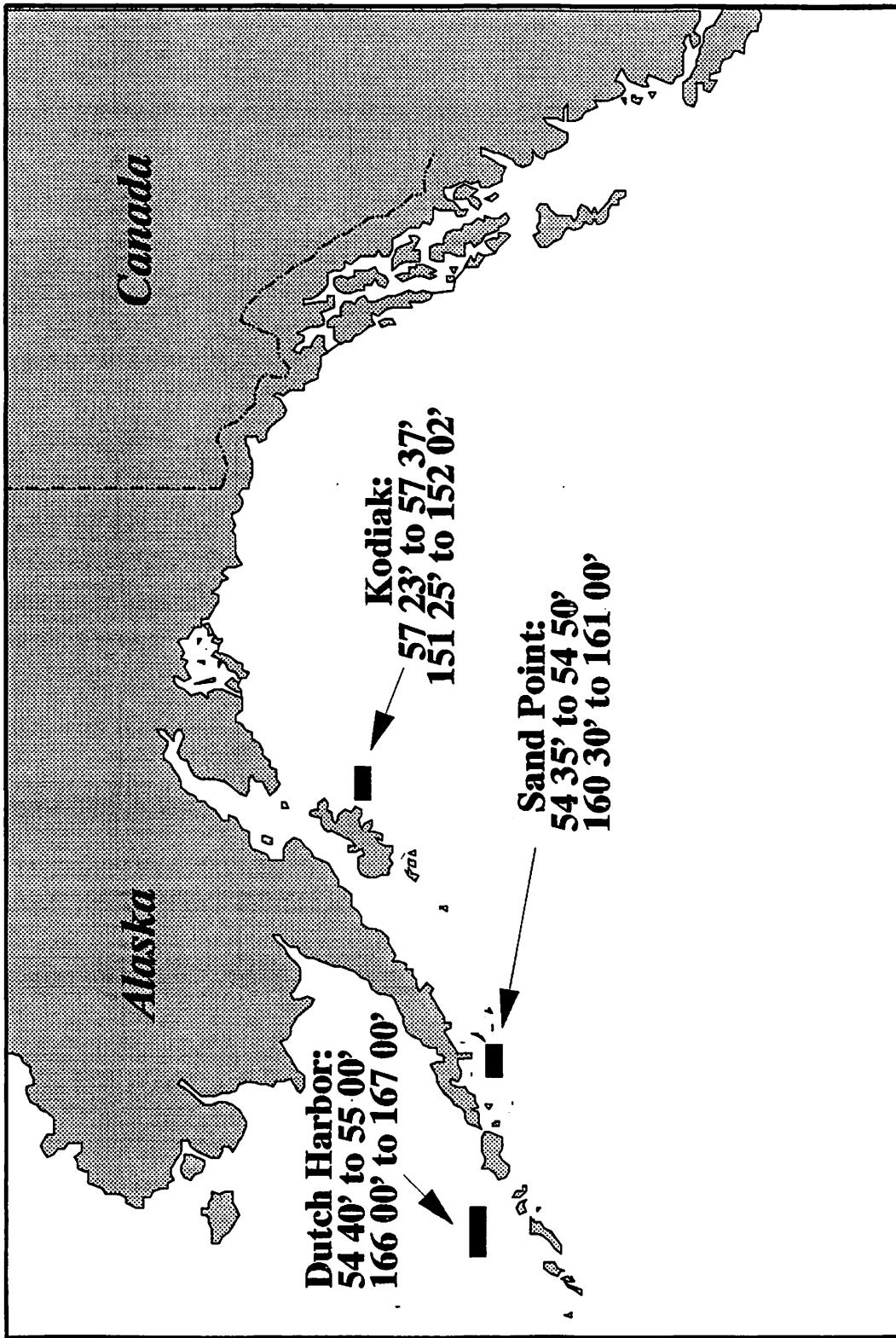
DATE

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**FIG 1 - LOCATION OF PROPOSED TRAWL TEST AREAS
IN THE GULF OF ALASKA AND BERING SEA**