

FINAL

AMENDMENT #1 TO THE
FISHERY MANAGEMENT PLAN
FOR
AMERICAN LOBSTER

INCORPORATING AN
ENVIRONMENTAL ASSESSMENT
AND
REGULATORY IMPACT REVIEW

Prepared by the
New England Fishery Management Council

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Summary

The New England Fishery Management Council and the Assistant Administrator for Fisheries (NOAA) propose to adopt and implement Amendment #1 to the final rule implementing the American Lobster Fishery Management Plan on September 7, 1983. The major purpose of Amendment #1 is to institute a uniform offshore lobster fishing gear marking system to reduce gear conflicts and to contribute to the orderly prosecution of the lobster fisheries and mobile gear fisheries in the offshore waters of New England and the Mid-Atlantic. This amendment also provides regulatory relief from the escape vent requirement (50 CFR 649.21(b)) for Mid-Atlantic fishermen engaged in a fish trap fishery principally for black sea bass in the area south of Barnegat Light (south of LORAN C 9960-Y-43300) and shoreward of the 30 fathom contour. This action will eliminate the potential for a 15% loss of revenues (i.e., \$239,000) to affected fishermen.

This amendment further provides authority for the Regional Director, with the concurrence of the New England Fishery Management Council, to allow exemptions to any of the specific provisions of the Lobster FMP or to establish closed areas to lobster fishing for the purpose of research beneficial to the lobster resource and fishery. Finally, this amendment provides a clarification to the Lobster FMP final rule that the Council does not consider red crab fishing gear operated in waters deeper than 200 fathoms to be gear capable of catching lobsters, and therefore red crab gear should not be subject to the lobster gear marking, gear length restrictions or trap venting requirements.

The gear marking measures of this amendment consist of a requirement to employ a tetrahedral corner radar reflector (See Section VIII) of not less than 8 inches and a flag on the westernmost end of a lobster trawl and a radar reflector only on the easternmost end of the trawl. Lobster pot trawls of three or less pots must be marked with a single buoy. In addition, this amendment establishes a maximum continuous length of any lobster trawl not to exceed 1-1/2 miles as measured from buoy to buoy. These marking requirements are applicable in specific areas of the EEZ off the New England and Mid-Atlantic coasts which are defined in the proposed regulations and in Section IV. These areas represent the Council's and industry's careful attempt to distinguish the offshore fishery from the inshore fishery. DIA 11/22?

The marking requirements represent a consensus among lobster industry representatives and the New England Fishery Management Council on the minimum standards necessary to provide for the location of the gear in the resource areas and to provide fishermen the ability to identify the approximate compass direction of individual sets. They are consistent with international marking standards (Rule 1, Annex IV, "London Convention"), should incur minimum costs to industry in pursuit of the objectives of this amendment, and should result in a reduction in the number of gear conflicts which occur because of poorly and inconsistently marked lobster gear. To the extent that there is a reduction in the amount of lobster gear lost due to conflict incidents, the marking requirements will have resource conservation benefits stemming from a reduced, although admittedly incalculable, level of 'ghost fishing' mortality.

The costs analysis of the alternative marking requirements indicates that the selected alternative is capable of having a maximum 'worst case' (i.e., assuming all affected fishermen have none of the newly required marking gear) total cost of \$120,791 across the entire offshore lobster industry and that an 'average' offshore fisherman in the 'worst case' scenario may face an initial cost of \$1,173.

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* Key to the Environmental Assessment

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I. INTRODUCTION

With progress towards full utilization of the finfish, squid and shellfish fishery resources off the Northeast Coast of the United States, the need arises for a minimum number of rules which will reduce conflicts and promote efficiency during the simultaneous use of different fishing gears and methods on the available fishing grounds. Since 1977 the New England and Mid-Atlantic Fishery Management Councils have been involved in attempts to address various dimensions of the wide ranging gear conflict problems which occur throughout the Northwest Atlantic. In the early years both Councils sought implementation of a 'generic' Gear Conflict Amendment to all existing East Coast fishery management plans which among many components included detailed mandatory marking and reporting requirements along with specific setting patterns for various fishing areas. In addition, this 'generic' amendment also called for specific 'due care' and conflict incident responsibilities on the part of mobile gear operators. This approach proved far too complex for assimilation by the rapidly changing federal regulatory process and was finally abandoned by the New England Council in April, 1984.

This amendment to the American Lobster FMP proposes simple and uniform minimum marking requirements for the 'offshore' fishery as appropriately defined by region. A maximum trawl length for gear fished in the FCZ not to exceed 1-1/2 miles is also proposed, in part, to allow for visual identification of entire sets, under optimum sea conditions, by mobile gear operators.

This amendment also provides regulatory relief from the escape vent requirement (50 CFR 649.21(b)) for Mid-Atlantic fishermen engaged in a trap fishery principally for black sea bass in the area south of Barnegat Light and shoreward of the 30 fathom contour. The vent requirement would have a negative impact on their fish catch and would not produce significant benefits to the lobster resource. The maximum allowed bycatch of lobsters in these unvented traps will be limited to 100 pounds per trip.

These new management measures are intended to complement the gear marking requirements currently found in Section 649.21 of the American Lobster FMP implementing regulations (48 FR 36266).

This amendment adds a new provision to the Lobster FMP Final Rule which will provide the Regional Director with authority, with the concurrence of the New England Fishery Management Council, to allow exemptions to any and all Lobster FMP regulations and to establish closed areas to lobster fishing for the purpose of scientific research which might enhance understanding of the lobster resource or benefit the lobster fishery. The New England Council does not prescribe any limitations to this authority beyond the necessity of Council concurrence prior to regulatory exemptions or the establishment of closed areas to lobster fishing.

Finally, this amendment makes it clear that red crab fishing gear operated deeper than 200 fathoms should not be subject to the lobster gear marking, gear length restrictions or trap venting requirements. Red crab fishing gear has virtually no by-catch of lobsters and is not generally fished in common offshore lobster grounds. Thus, there is little or no interaction with the offshore lobster fishery or resource and there are no compelling reasons to subject this fishery to regulations designed for the lobster fishery. Attached (See Section VIII) correspondence from the High Seas Corporation and attached corroborating testimony from the Northeast Regional Office of the NMFS compel, further explain and justify this clarification. The Council believes this statement of intent with regard to red crab fishing gear to be sufficient for regulatory clarification and no further discussion is provided.

II. PURPOSE OF AND NEED FOR ACTION

Lobster Gear Marking Requirements

The principal objective of these gear marking requirements is to reduce the number of gear conflicts and, specifically, to reduce the conflicts between mobile gear and lobster gear which occur, in part, as a result of poorly or inconsistently marked gear. Inconsistently marked lobster fixed gear negatively impacts those fixed gear fishermen who adhere to accepted minimum marking standards by causing confusion, disorder, frustration and resulting gear conflicts in resource areas under use by different gear types. Marking requirements are intended to reduce the number of inadvertent conflicts with fixed gear by all users.

Increased utilization of most of the fishery resources off the U.S. by domestic and joint venture users results in intense competition for fishing bottom, and consequently, this produces greater opportunities for gear conflicts. Specifically, available data on participation in the offshore lobster fishery alone indicates that from 1982 to 1984 there has been a 47% increase in the number of offshore lobster vessels. Additional vessels in the fishery results in more traps and fishing gear on the fishing grounds which increases congestion and the likelihood of conflict incidents. In 1981 and 1982 a total of 120 gear conflicts involving fixed gear were reported to the Coast Guard. Industry advisors to the Council suggest that only a small percentage of conflict incidents actually are officially reported.

Implementing lobster trawl marking requirements will result in identifiable benefits to lobster fishermen themselves, as well as benefits to other offshore fishermen and non-fishing offshore transients. The requirements specified in this amendment are intended to allow consistent identification of gear in the water, provide an indicator of the general direction of sets of gear and as a result enhance multiple gear and vessel use of the offshore resource areas through elimination of a major cause of inadvertent gear conflict incidents (i.e., poorly and inconsistently marked lobster gear). Gear conflicts involving fixed gear and mobile gear result in any or all of the following: lost or ruined fishing gear, which is costly to replace and may cause wasted fishing mortality; lost fishing time to both mobile and fixed gear fishermen; and can imperile the safety of crew and vessel. The replacement cost of lobster trap gear reported lost or damaged as a result of gear conflicts, and for which claims were filed, was \$180,444 in 1980, \$503,793 in 1981 and \$106,147 in 1982*. These marking requirements may reduce the amount and number of claims, and to this extent money, which has in the past been expended on the gear compensation program (funded by foreign fishing fees), may be available for other purposes.

The most basic reason for fishermen marking their gear is so that they can relocate and retrieve the gear in an efficient fashion under the variable conditions found at sea. It is also marked so that other fixed gear fishermen will be able to discern where on the ocean bottom gear is already being fished, and consequently, they can avoid setting over and getting tangled with lobster gear in use. Adequate and consistent marking of the gear allows

*SOURCE: Table 3. Gear Conflict Processed Claims by Gear Involved by Year, Gear Conflict Amendments to the Surf Clam and Ocean Quahog, Atlantic Mackerel, Squid and Butterfish, Atlantic Sea Scallop, and Atlantic Groundfish Fishery Management Plans, April 1983, Mid-Atlantic Fishery Management Council, page 27.

numerous fixed gear users to fish in close proximity without costly conflicts. Another reason why gear is marked is so that trawl fishermen will be aware of the presence of fixed gear and consequently will avoid inadvertently towing through and damaging sets of fixed gear. The purpose of requiring distinctive markings on the western and eastern ends of trawl gear is to allow mobile gear operators and other fixed gear fishermen to determine the general direction of the lobster trawl. With this information it becomes possible for mobile operators to fish along the side of individual strings and between multiple strings where the direction is generally identifiable and parallel. Distinctive western and eastern end of set markings will be particularly effective in reducing or eliminating conflicts in areas where most fishermen set predominantly along LORAN lines. Finally, a maximum trawl length will allow mobile operators, under fair to good sea conditions, to determine the direction and location of sets.

The marking requirements proposed herein were developed in close consultation with offshore lobster fishermen who have identified these requirements as the minimum necessary to achieve the stated purposes. Although all fishermen mark their gear in some fashion, a number of fishermen do not mark consistent with the proposed marking requirements for reasons which may include perceived costs, inexperience or other personal preference factors. In order for the marking requirements to serve their intended purpose, it is necessary that all gear be marked consistently and in a standard manner so that fixed gear and mobile gear fishermen can have a reasonable expectation of how to avoid conflict situations upon entering identifiable areas of heavy fixed gear concentrations. The selection of tetrahedral corner reflector is based on the input from industry advisors and on public comment that this type of reflector performs best under the variable conditions found at sea. Public comment and advisory input also indicate that 12 inch corner reflectors are preferred by many offshore lobster fishermen but that some fishermen may prefer the smaller 8 inch reflector.

The areas of applicability concerning the marking requirements represent the Council and industry's careful attempt to distinguish the offshore fishery from the inshore fishery. Local traditions/considerations and the nature of the inshore fishery (e.g., smaller vessels, less gear, seasonality) may result in the need for varying marking systems for the coastal lobster fisheries. Several states already have lobster gear marking requirements to address local contingencies (see Section V).

In sum, the Council believes these marking requirements will reduce gear conflicts, promote safety and efficiency on the fishing grounds, and reduce a source of wasted fishing mortality. The Council is proposing these marking requirements because the affected offshore lobster industry is generally supportive and understanding of the purpose and need for the measures and because organizations representing members of this industry have requested the Council to seek regulatory implementation of industry established minimum marking standards. No serious opposition to the marking requirements have been raised by any offshore lobster fishermen at numerous public hearings or Council and Committee meetings over the last seven years.

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Regulatory Relief from Venting Requirements for Black Sea Bass Fishery

Regulations implementing the American Lobster Fishery Management Plan, as they relate to the requirement for incorporating escape vents in trap gear, became effective on January 1, 1985. The incorporation of escape vents in trap gear is considered to be a sound conservation measure to reduce injury and mortality among sub-legal sized lobsters and has wide public support in the Northeast. Comment received in the Mid-Atlantic area prior to implementation of the escape vent regulations included the concerns expressed by fishermen having significant dependence on by-catches of finfish, principally black sea bass and red hake, taken in lobster traps. The preponderance of evidence, however, at that time indicated that such catches of finfish would not be significantly impacted by an escape vent requirement.

More recently, there has come to light the existence of a fish trap fishery, principally for black sea bass and red hake, in the EEZ off southern New Jersey, Delaware, and Maryland, presently prosecuted by about 25 vessels operating on one day a week trips. The fishermen engaged in this fishery have expressed serious concern that the escape vent requirement would significantly impact their fish catch while conferring virtually no benefit to the lobster resource. Black sea bass trap fishermen operate their gear in an unbaited condition in waters shoaler than 30 fathoms and south of Barnegat Light, NJ, catching insignificant quantities of lobsters (see Tables 4-7). The lobster by-catch in this fish trap fishery amounts to less than 3/100 of 1 percent of lobster landings on a region-wide basis. Comment received from fishermen indicates that lobsters rarely appear in trap catches, usually occurring only following heavy storm conditions.

The purpose of providing regulatory relief from the venting requirement is to eliminate the possibility of a serious disruption in the traditional fish trap fishery without causing any significant deleterious effect on the lobster resource. The Council's analysis indicates that in 1984 the venting requirement could have resulted in a 36% loss of sea bass amounting to 15% of that year's sea bass revenues to the affected fishermen in New Jersey, Maryland and Virginia.* This exemption addresses the concern raised by black sea bass fishermen and the Mid-Atlantic Council, both having formally supported this action. The State of New Jersey has selected (personal communication with Bruce Halgren) LORAN C 9960-Y-43300 as the northern boundary for qualifying for a black sea bass trap venting exemption and the Council endorses this demarcation line. Additional justification, including supporting landings data, for this regulatory relief is provided in the analysis of the 'preferred alternative' and in Section V. Consistency With National Standards, Other Management Institutions and Programs.

Research Exemption and Closure Provision

The Northeast Fisheries Center has informed the New England Fishery Management Council that, from time to time, proposals for scientific research on the lobster resource have been developed and submitted by academic institutions or by other organizations. It has been pointed out that exemptions from existing regulations or establishing areas closed to lobster fishing might be necessary to insure the validity of scientific findings or to facilitate the research program.

*Source: State Landings.

The NEFMC is considering the appropriateness of providing the Regional Director with authority in all FMPs to take action to close areas or to allow exemptions from regulations for the purpose of facilitating research which may provide future benefits to the resource, to resource management, or to the industry.

The Council has decided to seek such authority through this amendment to the American Lobster FMP. The Council believes the following criteria for regulatory exemptions and area closures are appropriate.

Regulatory exemptions:

1. Provided the ^{exemption} closure has no detrimental affect on lobster resource or fishery.
2. Provided the exemption will not cause serious enforcement problems.

Area closures:

1. Provided the closure will not seriously increase gear conflicts.
2. Provided the closure will not significantly interfere with common fishing practices.

The Council further stipulates that the Regional Director seek the concurrence of the New England Fishery Management Council prior to establishing any regulatory exemptions or closed areas. Should the regulatory exemption or closed area involve the lobster fishery within the established Mid-Atlantic Fishery Management Council FCZ area, then the Regional Director shall also seek the concurrence of the Mid-Atlantic Fishery Management Council.

III. DESCRIPTION OF ALTERNATIVES AND THEIR IMPACTS

Range of Alternatives

Since 1978 a substantial number of alternative gear marking systems have been considered by the Council in consultation with fixed gear advisors. These various systems span a range from simple requirements which serve minimum management purposes, to more detailed and complex requirements which achieve additional management objectives. For purposes of this analysis the first alternative considered is the 'no action', the second is a set of simple or basic marking requirements and the third is a set of detailed marking requirements.

With regard to the Black Sea Bass trap fishery and the vent requirement, two alternatives have been considered by the Council: (1) No action; and (2) regulatory relief with precautionary by-catch restrictions.

The Council and NOAA General Counsel consider adding a provision to the Lobster FMP final rule authorizing exemptions to lobster regulations and establishing the authority to close areas to lobster fishing, for the purpose of scientific research, an appropriate administrative provision which will have no negative impact on either the lobster resource or industry. Not adding such a flexibility provision has been considered and rejected by the Council because it would foreclose the possibility of achieving future benefits from research efforts requiring exemptions from the Lobster FMP regulations.

A. Impacts of Gear Marking Alternatives

No Action Alternative

Approximately eight years have passed since the Council initially considered gear marking requirements. The fact that the Council is still considering marking requirements is an indication that the results and impacts of 'no action' are not acceptable. Relying on voluntary compliance to mark lobster gear will not result in the achievement of the benefits the Council and industry advisors perceive are possible through a system of uniform marking. Under the 'no action' alternative, existing gear conflict costs, which could be avoided through the marking measures, continue to be incurred. Existing gear conflict costs are difficult to estimate due to a lack of specific data on total conflict incidents involving lobster fixed gear. However, the Council believes that the 1980 through 1982 average replacement costs of nearly \$264,000 for lost and damaged gear is a reasonable minimum estimate.

Under the 'no action' alternative some other organization and method of achieving the benefits of the measures would have to be sought by the affected industry. Since the offshore lobster fishery occurs in the Fishery Conservation Zone, the Council, rather than individual states, is the most practical institutional vehicle for implementation of coastwide uniform lobster marking requirements.

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Minimum Marking Standards (Preferred Alternative)

This alternative requires lobster fishermen to mark the westernmost end of a lobster trawl with a radar reflector and a single flag or pennant. The intention is to allow visual identification of the westernmost end by the presence of two shapes on the staff. The easternmost end of the trawl is to be marked by a radar reflector only (i.e., to present a single shape appearance). The reflectors must be standard tetrahedral corner reflectors of at least 8 inches. This alternative provides no further gear marking specifications which would result in additional cost to fishermen. It is not possible to quantify any potential cost resulting from a 1-1/2 mile lobster trawl gear restriction since there is no information on the extent of this practice. Industry advisors report that lobster trawls greater than 1-1/2 miles are not common, however.

A "worst case" cost analysis of this alternative assumes that all of the vessels in the offshore fishery currently own none of the gear necessary to comply with the marking requirements. Information from Tables 1, 2 and 3 would indicate that this alternative could potentially cost the offshore vessels individually an average of \$1,173 per vessel, for a total cost of approximately \$120,791 in 1984 dollars. This estimate assumes that this alternative would require the purchase of two poles or staffs, two reflectors, two buoys and one flag per lobster trawl which amounts to \$63.05 per trawl based on 1984 gear marking costs.

Table 1. Number of Offshore Lobster Vessels*

<u>Year</u>	<u>Number of Vessels</u>
1984	103**
1983	84
1982	66

* From NEFC Weigh-Out File Gear 200

**This incorporates 97 vessels from weight out information excluding N.Y. and Conn. Personal communication with N.Y. and Conn. state officials indicated 2 offshore vessels from Conn. and 4 from N.Y.

Table 2. 1981 Offshore Lobster Fishery Characteristics

<u>Year</u>	<u>Number of Vessels</u>	<u>Total Number of Traps</u>	<u>Average Traps Per Vessel</u>	<u>Trawls Per Vessel*</u>
1981	55	51,000	927	18.6

*927 traps divided by an assumed 50 traps per trawl as an industry average.

Table 3. Marking Gear Costs* (11/84)

<u>15 foot pole/staff</u>	<u>9-inch radar reflector</u>	<u>12-inch radar reflector</u>	<u>buoys (8"/14")</u>	<u>flags/pennants</u>
\$8.00-\$16.00	\$8.95	\$10.50	\$4.15	\$1.75

* Costs were provided by two major New England (Providence, New Bedford) gillnet and lobster gear suppliers. Where prices for equivalent gear elements varied an approximate average of the two is used.

The estimates above reflect an initial one time cost to industry and do not include replacement costs resulting from wear due to weather or losses due to conflicts. There would be some level of annual replacement cost as currently exists.

Detailed Marking Standard Alternative

This alternative represents the initial marking requirements designed for lobster trawl gear under the original Gear Conflict Amendment and additional specifications on the size of the radar reflector. They were intended to complement fixed gear setting patterns, mandatory fixed gear reporting and an extensive set of rules of conduct for fixed and mobile gear fishermen designed to reduce conflicts.

This alternative would require that each end of a lobster gear trawl or set be marked with a buoy of sufficient size to support a staff to which a 12 inch or larger standard corner radar reflector must be affixed at a minimum height of 6 feet above the buoy and flags must be displayed as described below. One end of each trawl is called the westernmost end, meaning the half compass circle from south through west to, and including north; while the other end is called the easternmost, meaning the half compass circle from north through east, to and including south.

Pot or trap trawls must display a rectangular flag on the easternmost end which contains a minimum area of 150 square inches with a minimum dimension of 10 inches. Two rectangular flags, each containing a minimum area of 150 square inches must be displayed on the westernmost end of each trawl. Such flags must be dark in color and must be positioned at a minimum of 5 feet above the water.

This alternative would require the use of a larger, more expensive radar reflector and would also require two additional flags per string of gear. Given the larger size of the radar reflector, many fishermen will tend to 'double up' on the buoys. The total additional marking cost per string amounts to \$17.50, or \$69.25 per string. This alternative would result in a 'worst case' start up cost of \$1,288 for the average vessel or a total cost of \$124,940.84 for the entire fishery. This assumes the price of the specified flags are similar to those normally purchased by fishermen.

B. Black Sea Bass Trap Fishery/Vent Requirement Alternatives

No Action Alternative

The 'no action' alternative means that all black sea bass trap fishermen would be required to vent their traps as specified under the current regulations of the Lobster FMP. The Council considered and rejected the 'no action' alternative because it may be expected to result in unacceptable negative impacts on the sea bass fishermen's finfish catches while providing negligible benefits to conservation of the lobster resource.

Exemption to Escape Vent Requirement Alternative (Preferred Alternative)

Black sea bass trap fishermen, operating in the area south of Barnegat Light and shoreward of the 30 fathom curve, may be exempted from the requirement of incorporating escape vents in trap gear capable of taking lobsters, provided;

- that they possess a valid federal lobster permit (current regulation).
- that their total daily (fishing trip) lobster landings not exceed 100 pounds.
- that their trap gear is fished in an unbaited condition, and that all traps are indelibly marked (current regulation) in a manner clearly identifying the owner.

This exemption to the general requirement for escape vents in trap gear used to take lobsters will have virtually no impact on the effectiveness of the measure as an integral part of the overall conservation program for lobster. The lobster by-catch in this fish trap fishery amounts to less than 3/100 of 1 percent of lobster landings on a region-wide basis. Monthly catches (1983), by state, in the black sea bass trap fishery (see Tables 4-6) indicate that such catches are highly seasonal and are comprised of less than 6% (by weight) of lobsters (see Table 5, August catches in Maryland). On an annual basis, the 1983 landings of lobster from fish traps in New Jersey, Maryland, and Virginia (Tables 4-6) constituted 0.3%, 1.4%, and 0.4%, respectively, of the State's landings from black sea bass traps. Table 7, showing the total proportion of State lobster landings which were taken in black sea bass traps, indicates that 9% (3.9%) of the relatively low catch of lobsters landed in Maryland (Virginia) were taken in fish traps. Of the more significant catches of lobster landed in New Jersey in 1983, however, only 1.7% were taken in fish traps. Black sea bass fishermen note that fish-trap-catches of lobster are atypical, occurring only during heavy storm conditions.

Insistence upon requiring escape vents in black sea bass traps may impose significant losses in the catch of finfish, thus this alternative represents a responsive step to redress a potential harm which the original measure in the FMP may have inadvertently and unjustifiably imposed. The results of a study of escapement of by-catch species from vented and non-vented traps (Webber, 1981) indicate that black sea bass as small as 8 inches (the minimum legal size in New York, New Jersey, and Maryland) will be retained. However, most of the fishermen in this fish trap fishery strongly insist that practical fishing experience contradicts the findings of the Webber study and that all black sea bass in the small category may be lost from the traps due to

TABLE 4. BLACK SEA BASS - LOBSTER (BY-CATCH) FISHERY (POUNDS)

NEW JERSEY 1983						
MONTH	GEAR (TRAP)	LOBSTER	BLACK SEA BASS	RED HAKE	OTHER FISH	PERCENT LOBSTER
Jan	fish	113	20	0	200	33.93
	off.lob.	0	0	0	0	0.00
Feb	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Mar	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Apr	fish	0	493	0	0	0.00
	off.lob.	0	0	0	0	0.00
May	fish	177	304953	65433	1722	0.05
	off.lob.	0	0	0	0	0.00
Jun	fish	342	139623	44490	1059	0.18
	off.lob.	0	0	0	0	0.00
Jul	fish	709	64160	12843	1074	0.90
	off.lob.	12	102	0	0	10.53
Aug	fish	22	39442	2427	1080	0.05
	off.lob.	0	0	0	0	0.00
Sep	fish	22	66846	624	1187	0.03
	off.lob.	150	40	100	0	51.72
Oct	fish	804	154803	0	900	0.51
	off.lob.	1475	688	0	0	68.19
Nov	fish	1182	213576	0	6741	0.53
	off.lob.	0	0	0	0	0.00
Dec	fish	96	155925	0	9462	0.06
	off.lob.	0	0	0	0	0.00
TOTAL	fish	3467	1139841	125817	23425	0.27
	off.lob.	1637	830	100	0	63.77

TABLE 5. BLACK SEA BASS - LOBSTER (BY-CATCH) FISHERY (POUNDS)

MARYLAND							1983
MONTH	GEAR (TRAP)	LOBSTER	BLACK SEA BASS	RED HAKE	OTHER FISH	PERCENT LOBSTER	
Jan	fish	0	0	0	0	0.00	
	off.lob.	0	0	0	0	0.00	
Feb	fish	0	0	0	0	0.00	
	off.lob.	0	0	0	0	0.00	
Mar	fish	0	0	0	0	0.00	
	off.lob.	0	0	0	0	0.00	
Apr	fish	0	9927	255	0	0.00	
	off.lob.	0	0	0	0	0.00	
May	fish	0	148050	18381	0	0.00	
	off.lob.	0	0	0	0	0.00	
Jun	fish	879	103167	11670	450	0.76	
	off.lob.	0	0	0	0	0.00	
Jul	fish	2106	56736	5499	0	3.27	
	off.lob.	776	30	0	0	96.28	
Aug	fish	2217	35346	1164	0	5.72	
	off.lob.	0	0	0	0	0.00	
Sep	fish	240	9213	687	0	2.37	
	off.lob.	0	0	0	0	0.00	
Oct	fish	1029	24132	0	0	4.09	
	off.lob.	0	0	0	0	0.00	
Nov	fish	372	36246	0	0	1.02	
	off.lob.	0	0	0	0	0.00	
Dec	fish	0	9555	0	0	0.00	
	off.lob.	0	0	0	0	0.00	
TOTAL	fish	6843	432372	37656	450	1.43	
	off.lob.	776	30	0	0	96.28	

TABLE 6. BLACK SEA BASS - LOBSTER (BY-CATCH) FISHERY (POUNDS)

VIRGINIA				1983		
MONTH	GEAR (TRAP)	LOBSTER	BLACK SEA BASS	RED HAKE	OTHER FISH	PERCENT LOBSTER

Jan	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Feb	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Mar	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Apr	fish	0	8169	0	0	0.00
	off.lob.	0	0	0	0	0.00
May	fish	0	80622	12000	0	0.00
	off.lob.	0	0	0	0	0.00
Jun	fish	303	48189	4200	0	0.58
	off.lob.	0	0	0	0	0.00
Jul	fish	0	29670	5400	0	0.00
	off.lob.	0	0	0	0	0.00
Aug	fish	510	16803	2100	0	2.63
	off.lob.	0	0	0	0	0.00
Sep	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Oct	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Nov	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00
Dec	fish	0	0	0	0	0.00
	off.lob.	0	0	0	0	0.00

TOTAL	fish	813	183453	23700	0	0.39
	off.lob.	0	0	0	0	0.00

TABLE 7. ANNUAL SUMMARY OF THE 1983 LOBSTER AND BLACK SEA BASS (WITH BY-CATCH) FISHERIES

	TOTAL LOBSTER LANDINGS (lbs)		BLACK SEA BASS FISHERY (lbs)		OFFSHORE LOBSTER TRAPS	
	0-3 MILE	3-200 MILE	FISH TRAPS	LOBSTER	FISH	LOBSTER
NEW JERSEY	565000	205000	770000	3467 (1.69%)	1289083	1637 930 (0.07%)
MARYLAND	0	76000	76000	6843 (9.00%)	514580	776 30 (0.01%)
VIRGINIA	0	21000	21000	813 (3.87%)	207153	0 0 (0.00%)

(1) Percentage of State's 3-200 mile 1983 lobster landings taken as by-catch in that State's black sea bass fish trap fishery.

(2) Percentage of trap-caught fish taken in the 1983 offshore lobster trap fishery.

venting. State landings records include a small category for black sea bass, in which fish range from approximately 7 to 11-1/2 inches and average about 9 inches, thus only a portion of landings from that small category should be lost as a result of requiring escape vents. Given this public testimony, the potential total impact (loss) on landings may be up to 36% (875,000 pounds) while revenues may decline by 15% (\$239,000) (small black sea bass receive a relatively lower price; 26¢ per pound) based on 1984 data.

In Council discussion, with detailed input from fishermen representing harvesters operating in the black sea bass trap fishery off southern New Jersey, Delaware, and Maryland, a lobster by-catch allowance of 100 pounds per trip was selected as the preferred alternative. On the basis of testimony from fishermen present, 100 pounds of lobsters per trip represents the modal expectation of lobster by-catch as the fishery is currently prosecuted. The alternative specification, 10% of the trip catch of trap-caught fish, was rejected as being excessive and unrealistic of actual fishing operations. Further testimony by representative fishermen elucidated the fact that, by virtue of the necessary protracted soak time required to successfully prosecute a trap fishery for black sea bass, the lobster trip by-catch allowance would represent a de facto weekly by-catch allowance. Comments received at public hearings in the Mid-Atlantic area corroborated the testimony recorded in plenary session by the Council.

The provision for allowing a lobster by-catch from black sea bass traps of only up to 100 pounds, per trip, is necessary to close a potential loophole but will have an immeasurably small impact on black sea bass trap fishermen and the resource. It essentially allows such fishermen to retain their current catches (which rarely approach 100 lbs. per day) while ensuring that fishing exclusively for lobster with unbaited traps without vents would be an unprofitable enterprise.

From all available information it is expected that total landings of lobsters under the preferred alternative by-catch allowance of the black sea bass fishery from unvented fish traps will not be significantly different from those recorded in previous years. As indicated in Table 7, in 1983, a combined total of 11,123 pounds of lobsters, taken in fish traps, were landed in New Jersey, Maryland, and Virginia, representing only 1.3% of the total lobster landings in the three states. Therefore, it is expected that the catch of fish-trap-caught lobsters, taken under the by-catch allowance in the black sea bass fish trap fishery, will have an insignificant impact on the conservation benefits expected to accrue to the lobster resource as a consequence of the requirement for trap vents in other resource areas.

Rationale for Selecting Preferred Alternative

1. Benefits

The principal objective of these gear marking requirements is to reduce the number of gear conflicts and as a result enhance multiple gear and vessel use of the offshore resource areas through elimination of a major cause of inadvertent gear conflict incidents (i.e., poorly and inconsistently marked lobster gear). In 1981 and 1982 a total of 120 gear conflicts involving fixed gear were reported to the Coast Guard. Gear conflicts involving fixed gear and mobile gear result in any or all of the following: lost or ruined fishing gear, which is costly to replace and may cause wasted fishing mortality; lost

fishing time to both mobile and fixed gear fishermen; and can imperile the safety of crew and vessel. The replacement cost of gear reported lost or damaged as a result of gear conflicts, and for which claims were filed, averaged almost \$264,000.00 from 1980 to 1982. These marking requirements may reduce the amount and number of claims, and to this extent money, which has in the past been expended on the gear compensation program (funded by foreign fishing fees), may be available for other purposes.

Additionally, adequate and consistent marking of the gear allows numerous fixed gear users to fish in close proximity without costly conflicts. As described above gear is marked is so that trawl fishermen will be aware of the presence of fixed gear and consequently will avoid inadvertently towing through and damaging sets of fixed gear.

The purpose of the exemption from the venting requirement for the black sea bass fishery is to eliminate the possibility of a serious disruption in the traditional trap fishery without causing any significant deleterious effect on the lobster resource. The exemption will eliminate the potential for an annual 15% loss of revenue from the sea bass fishery due to the unnecessary vent. The benefits associated with this exemption include the elimination of burdensome and unnecessary regulations in the black bass fishery, which is part of neither the management unit nor the objectives of the lobster FMP.

2. Costs

Relying on voluntary compliance to mark lobster gear will not result in the achievement of the benefits the Council and industry advisors perceive are possible through a system of uniform marking. Under the 'no action' alternative, existing gear conflict costs, which could be avoided through the marking measures, continue to be incurred. The Council believes that the average replacement costs of almost \$264,000 for lost and damaged gear is a reasonable minimum estimate. Minimum marking standards (the preferred alternative) could potentially cost the offshore vessels individually an average of \$1,173 per vessel, for a total cost of approximately \$120,791 in 1984 dollars. Detailed marking standards would result in a 'worst case' start up cost of \$1,213 for the average vessel or a total cost of \$124,940.84 for the entire fishery. There would be some level of annual replacement cost, 5% to 10% was mentioned by fishermen during the public hearings, from wear due to weather as currently exists with either alternative.

The exemption in the black sea bass fishery to the general requirement for escape vents in trap gear used to take lobsters will have virtually no impact on the effectiveness of the measure as an integral part of the overall conservation program for lobster. The total proportion of State lobster landings which were taken in black sea bass traps was 9% (3.9%) of the relatively low catch of lobsters landed in Maryland (Virginia). Of the more significant catches of lobster landed in New Jersey in 1983, however, only 1.7% were taken in fish traps. The provision for allowing a lobster by-catch from black sea bass traps of only up to 100 pounds daily essentially allows such fishermen to retain their current catches (which rarely approach 100 lbs. per trip) while ensuring that fishing exclusively for lobster with unbaited traps without vents would be an unprofitable enterprise.

3. Cost-Benefit Conclusion

The Council has selected the gear marking preferred alternative because it is the least costly alternative. The cost analysis of the preferred alternative is recognized as an overestimation since it is well known that a substantial portion of the offshore industry already owns and employs much of the gear required under the alternative. Table 8 indicates that the preferred alternative will result in a net benefit of \$143,000.00. More importantly, this alternative will achieve the Council's objectives enumerated under Benefits above including the desire to encourage efficient multiple gear use of important and valuable fishing grounds.

Table 8: Summary of Benefits and Costs of Alternative Marking Requirements

	\$1,000		
	<u>Benefits</u>	<u>Costs</u>	<u>Benefits-Costs</u>
No Action	0	264	(264)
Simple	264	121	143
Detailed	264	125	139

Finally, the Council has chosen the preferred alternative because it is widely supported by the industry which means there should be a relatively high compliance rate, while enforcement and administrative costs incurred will likely be minimal.

The Council has decided to exempt black sea bass fishermen from the venting requirement to avoid imposing negative impacts on that fishery. In the Council's judgement, imposing a venting requirement on the black sea bass fishery would not provide significant benefits to the lobster resource.

4. Other E.O. 12291 Requirements

E.O. 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 US based enterprises to compete with foreign based enterprises in domestic or export markets?

As indicated above the proposed action will result in a net benefit of \$143,000 to the affected (lobster) industry every year, assuming that all of the marking gear is replaced each year. Any amount of marking gear which can be reused during successive years will increase the net benefit estimate. For instance net benefits of \$252,000 would accrue annually after the first year if replacement costs were only 10% (\$12,000) due to weather as mentioned above. Although some increases in landings may occur due to increased efficiency, price changes at any level are not expected. Administrative, enforcement, and paperwork & recordkeeping requirements are expected to remain unchanged, thus there are no impacts on Federal, State, or local government agencies. Repeated complaints concerning gear not complying with the marking requirements of this amendment should be investigated at sea during routine multiple mission cruises. The Council has chosen the preferred alternative because it is widely supported by the industry which means there should be a relatively high compliance rate, therefore enforcement and administrative costs incurred will likely be minimal. No employment impacts are expected. The purpose of the Amendment is to enhance competition and productivity, and thus potentially promote investment and innovation in the fishery. There is no export market for US landed lobster, which are currently all sold domestically. As a consequence, the foregoing analysis results in a finding that the proposed action does not constitute a "major rule" requiring a regulatory impact analysis vis-a-vis E.O. 12291.

5. Impacts of the Amendment relative to the Regulatory Flexibility Act and the Paperwork Reduction Act of 1980

The proposed action is not expected to have a significant effect on small entities in relation to the Regulatory Flexibility Act. Minimum marking standards (the preferred alternative) could potentially cost the offshore vessels individually an average of \$1,173 per vessel, compared to average expected benefits for gear not lost of \$2,563 per vessel and average gross revenues of \$227,757 per vessel in the offshore lobster fleet in 1984. There were 103 offshore lobster vessels operating in 1984. It is expected that all vessels operating in the fishery will be affected in the same way, and that no differential effects should occur relative to competitive position, cash flow and liquidity, and ability to remain in the market. There will be no change in paperwork and recordkeeping requirements.

Finding of No Significant Environmental Impact

The Council is of the opinion that an amendment to the Lobster FMP to institute lobster gear marking requirements in order to reduce user group gear conflicts and to exempt black sea bass fishermen from the venting requirement will not significantly affect the quality of the human environment with specific reference to the criteria contained in NDM 02-10 implementing the National Environmental Policy Act. The Council's view of the proposed action is that the biological affect will be positive and beneficial, which would relate to the reduction in lost fishing gear and the consequential reduction of potential 'ghost fishing' mortality. The exemption to the venting requirement will have neither significant positive nor negative impact on the resource and is taken to avoid negative economic impacts.

The Council seeks the concurrence of the Assistant Administrator of NOAA to the above finding of "no significant environmental impact" and in the decision that preparation of a supplement EIS on the proposed action is not necessary.

Assistant Administrator

Date

1/3/86

IV. SPECIFICATION OF THE REGULATORY ADDITIONS TO THE FINAL RULE IMPLEMENTING THE LOBSTER FMP

In addition to the marking requirements found in Section 649.21 of the American Lobster FMP implementing regulations (48 FR 36266), the following gear marking and other gear restriction are proposed.

Marking Requirements

In the areas of the FCZ detailed herein lobster pot trawls are to be marked as follows:

1. Lobster pot trawls of three or less pots must be marked with a single buoy.
2. Lobster pot trawls consisting of more than three traps must have a radar reflector and single flag or pennant on the westernmost end (meaning the half compass circle from magnetic south through west to and including north) while the easternmost end (meaning the half compass circle from magnetic north through east to and including south) of a lobster trawl must be marked with a radar reflector only. Standard tetrahedral corner reflectors of at least 8 inches must be employed.
3. No lobster trawl shall exceed 1-1/2 miles in length as measured from buoy to buoy.

Areas of Applicability

Gulf of Maine. All waters of the FCZ north of 42°20'N seaward of a line drawn 12 miles from the line from which the territorial sea is measured.

Georges Bank and Nantucket Area. All waters of the FCZ south of 42°20'N, and east of 70°00'W or the outer boundary of the territorial sea, whichever lies further east.

Southern New England (i.e., South of Cape Cod to Long Island). All waters of the FCZ west of 70°00'W, east of 71°30'W and seaward of a boundary approximately along the 25 fathom curve.

Mid-Atlantic (i.e., Long Island to Cape Hatteras). All waters of the FCZ west of 71°30'W; and in those waters of the FCZ seaward of a boundary approximately along the 40 fathom contour.

Venting Exemption

The Regional Director may exempt traps, either being fished or in possession, from the venting requirement under the following conditions:

- (1) The traps are fished in an unbaited condition;

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(ii) The traps are deployed in the area south of Barnegat Light, NJ (i.e., LORAN C 9960-Y-43300), seaward of the outer boundary of the territorial sea, and within the 30 fathom depth contour; and

(iii) The by-catch of lobster may not exceed 100 pounds per trip.

Research and Educational Exemption

(1) The Regional Director with the concurrence of the New England Fishery Management Council may exempt any person or vessel from the requirements of this part for the conduct of research or education beneficial to the lobster resource or lobster fishery. The Regional Director may not grant such exemption unless he determines that it is consistent with the objectives of the American Lobster Fishery Management Plan and with provisions of the Magnuson Act and other applicable law and that granting the exemption will not:

(i) have a detrimental affect on the lobster resource and fishery.

(ii) create significant enforcement problems.

(2) The Regional Director with the concurrence of the New England Fishery Management Council may close an area of the FCZ to lobster fishing for the conduct of scientific research.

(i) The Regional Director will publish a final notice in the Federal Register to close any area taking into account all public comments and relevant data and after determining that the closure will not

(A) increase gear conflicts

(B) interfere significantly with common fishing practices.

(3) If an exemption under (a)(1) or an area closure under (2)(i) is under consideration for an area within the Mid-Atlantic Fishery Management Council fishery conservation zone, then the Regional Director will seek the concurrence of the Mid-Atlantic Fishery Management Council prior to authorizing any regulatory exemption or establishing any closed area to lobster fishing.

Red Crab Fishing Gear Exemption

The following statement will be included in an appropriate section of the preamble to the final rule. For the purpose of these regulations, the New England Fishery Management Council does not consider red crab fishing gear set in waters deeper than 200 fathoms to be gear capable of catching lobsters; therefore, red crab fishing gear should not be subject to the lobster gear marking requirements, length restrictions or venting requirements.

V. CONSISTENCY WITH NATIONAL STANDARDS, OTHER MANAGEMENT INSTITUTIONS AND PROGRAMS

Consistency with National Standards

1. Conservation and management measures shall prevent overfishing while achieving, on a continuous basis, the optimum yield from each fishery.

Marking requirements have no direct effect on overfishing. To the extent that marking requirements contribute to the orderly use of resource areas and fishing gear, a positive impact on the lobster industry's ability to efficiently achieve the optimum yield specified within the Lobster FMP will result.

The proposed exemption to the trap venting requirements for fishermen operating in the black sea bass fishery that takes place south of LORAN C 9960-Y-43300 in the EEZ shoreward of the 30fm contour will not compromise optimum yield, because the by-catch of lobsters in this fishery is less than 1.7% and 9.0% of the total landings of lobster in New Jersey and Maryland, respectively, and less than 3/100 of 1 percent of lobster landings on a region-wide basis.

2. Conservation and management measures shall be based upon the best scientific information available.

This amendment considered all available scientific information in the formulation of its proposal on the trap venting exemption in a portion of the black sea bass fishery. Although the Weber and Briggs (1983) study indicated that there is no difference between vented and unvented traps in the retention of black sea bass over 210 mm (8.3 inches), relative to a 2-1/4 inch circular vent specified in the FMP, the substantial weight of public testimony indicates otherwise. Although the technical issue of sea bass retention in vented fish traps remains unresolved, the fact is that with the low incidence of lobster by-catch in the fish trap fishery off New Jersey and DELMARVA, and the negligible risk to the lobster resource, the Council could not justify the continued extension of venting requirements to this fishery as necessary and appropriate for lobster management.

Throughout development and analysis of the alternatives considered with respect to both the proposed gear marking and vent exception measures, expert industry advisory input has been carefully considered and incorporated.

3. To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

The marking requirements within this amendment were designed specifically to address problems affecting the offshore lobster fishery. Consequently, the areas of applicability of the marking requirements amounts to the Council and industry's delineation of where the offshore fishery exists throughout the management unit.

4. Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

The marking requirements of this FMP apply equally to all areas where offshore fishery characteristics prevail. The proposed marking requirements in this amendment do not discriminate between residents of different states and do not allocate or assign fishing privileges either explicitly or implicitly.

The trap vent exemption does not discriminate between residents of different states. It is adopted in recognition of the unnecessary and inappropriate extension of lobster management measures to a fish trap fishery that does not measurably impact the lobster resource.

5. Conservation and management measures shall, where practicable, promote efficiency in the utilization of the fishery resources; except that no such measure shall have economic allocation as its sole purpose.

The expressed purpose of this amendment is to promote efficiency in the utilization of the lobster resource and in the utilization of the offshore fishing grounds by different gear types. Marking requirements are not intended or believed to be capable of resulting in economic allocation.

Irrespective of the actual extent of the loss of black sea bass through trap venting requirements, any consequent loss of product from the New Jersey/Delmarva black sea bass fishery (shoreward of 30 fm), and as a consequence, any imposed inefficiency in this specific fishery, cannot be justified in the interest of lobster management. Further, the actual size of individual fish lost through vents is not a relevant matter since the original purpose of escape vents was for lobster conservation.

6. Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

The areas of applicability of the marking requirements are designed to allow for variations among and contingencies in the offshore lobster fisheries throughout the management unit.

The proposed trap vent exemption is made in recognition that not all trap fisheries directly impact the lobster resource, and therefore, the proposed measure exactly responds to variations and contingencies among fisheries.

7. Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

The amendment points out that the expected cost of implementing both the gear marking and vent exemption measures are outweighed by the costs of gear loss and lost black sea bass revenue that would likely occur in the absence of the proposed FMP amendment.

Other Management Institutions and Programs

State Laws, Regulations and Policies Concerning Lobster Fisheries

Maine has a minimum size regulation of 3-3/16 inches and a maximum size limit of 5 inches. All traps must be clearly marked with license number. All traps must have escape vents located next to the bottom edge in the parlor section. They may consist of one rectangular portal with unobstructed opening not less than 1-3/4 inches x 6 inches or two circular portals with unobstructed openings of 2-1/4 inches in diameter. It is illegal to take egg bearing or V-notched lobsters. There is a prohibition on night fishing.

New Hampshire requires that the name of the owner be on all gear. Pots must be color coded and the vessel fishing the pots must display the colors of the buoy. The minimum lobster size is 3-3/16 inches.

Massachusetts allows its towns to regulate most of the fixed gear fished in town waters. In general, buoys are required for pots and traps and they must display the permit number in at least 0.5 inch high numbers with 1/8 inch thickness. Minimum size is 3-3/16 inches.

Rhode Island requires that traps be marked with the owner's name and/or commercial license number. Escape vent requirements consistent with the Council plan (either one 1-3/4 inches x 6 inches rectangular or lath spacing and 2 circular 2-1/4 inches in diameter escape vents in the parlor). Hauling gear at night is prohibited and there is a minimum size of 3-3/16 inches.

Connecticut is currently holding regulatory hearings on the state lobster fishery. There may be some changes in regulations by January 1986. Presently state statute dictates 3-3/16 inch minimum length. Prohibition on keeping egg bearing lobsters. No night fishing. Trawlers in the Western part of the state have 100 lobster limit. Escape vent provisions are consistent with the Council plan. Lobster pots need to display the license number of the fisherman on both the buoy and the pot in a conspicuous place.

New York has a minimum size regulation of 3-3/16 inches and a prohibition against taking spawners and parts. Use of spears, gigs, and gaffs are prohibited. Night fishing is prohibited. Lobster traps must have markers with visible permit numbers not less than 2 inches in height.

New Jersey has a minimum size which increases annually. Presently it is a 3 inch carapace. In January of 1986 it will be 3-1/8 inches and in January of 1987 it will be 3-3/16 inches. There is an allowance for landing lobster parts. The size limit on a six segment part is 15/16 inch. In January 1986 it will be 1 inch and in January of 1987 it will be 1-1/16 inches (consistent with the 3-3/16 inch carapace limit). No females with eggs or eggs removed are legal. Licenses are required. As of January 1986 pots and buoys must be displayed with license number I.D. In January of 1987 all traps must have escape vents in the parlor section, one rectangular portal with unobstructed opening not less than 1-3/4 inches x 6 inches or two circular portals with unobstructed opening 2-1/4 inches in diameter. There is a prohibition of spears and gaffs. Non-residents may purchase licenses.

Delaware does not allow lobster trawls in state waters. Individual pots must be marked by a buoy color coded and license number must be on the buoy. Vessels must display a 2 foot x 2 foot color coded panel on the vessel.

Maryland regulations are compatible with the FMP. There is a prohibition on lobster parts, 3-3/16 inch minimum size, and vent requirements. However, there is no trap marking requirement in state waters. The fishery is primarily offshore and there are only approximately 7 lobster fishermen (who actually land in Maryland).

Virginia requires that sunken gillnets, crab pots, and fish pots be marked by a buoy with the fisherman's license number on it.

No other relevant State laws, regulations, or policies are known to exist specifically for these fisheries.

Federal Laws, Regulations and Policies

Currently, no regulations are in effect that relate to lobster gear marking in the FCZ beyond the regulations in the current lobster FMP. These are as follows:

§649.21 Gear marking and escape vent requirements.

(a) Marking. Effective January 1, 1985, all lobster gear deployed in the FCZ or possessed by a person whose vessel is permitted for fishing in the FCZ, and not permanently attached to the vessel, must be legibly and indelibly marked with one of the following codes of identification:

(1) The vessel's Federal fishery permit number; and/or

(2) Whatever positive identification marking is required by the vessel's homeport State.

(b) Escape vents.

(c) Enforcement action. Unmarked, unvented, or improperly vented traps will be seized and disposed of at the discretion of the Regional Director.

The Coast Guard operates a program whereby U.S. fishermen may report the location of their fixed gear. These locations are broadcast by the Coast Guard.

The regulations which govern the foreign trawl fishery in the Atlantic FCZ limit foreign fishing activity to five designated foreign fishing areas. They require that foreign vessels maintain a plot of all broadcast fixed gear locations (50 CFR 611.11(b)). Foreign vessels are required to "take special care to minimize the possibility of conflict with, and damage to, fixed fishing gear" (50 CFR 611.11(a)).

The regulations described above for the foreign trawl fishery do not apply to the foreign longline fishery carried out pursuant to the Atlantic Billfishes and Sharks Preliminary Fishery Management Plan (PMP). Foreign fishermen fishing pursuant to that PMP are not restricted to the foreign fishing areas. However, a recent amendment to that PMP was designed to reduce gear conflicts between foreign and U.S. fishermen while also preventing foreign longliners from capturing billfish incidentally to tuna. From 1 June to 30 November foreign longlining is prohibited in a zone roughly 100 miles from the coast and extending northeast from Cape Lookout, NC, almost to the Canadian border on Georges Bank. This restricted zone, extending in most areas out to at least the 1,000 fathom curve, includes the most productive waters of the continental shelf and is, therefore, an area with great potential for conflicts.

No Indian treaty rights are known to exist relative to these species.

The Amendment is not expected to have any impact on marine mammals or endangered species present in the affected resource areas. The Lobster FMP presents a full discussion of the marine mammals and endangered species which frequent the New England and Mid-Atlantic fishery conservation zone.

VI. LIST OF AGENCIES AND PERSONS TO WHOM THIS AMENDMENT IS BEING DISTRIBUTED

Federal Agencies

U.S. Environmental Protection Agency (Regions I, II, III)
Department of State
U.S. Coast Guard
Department of Interior
 Bureau of Land Management
 Fish and Wildlife Service
 Bureau of Indian Affairs
Department of Commerce
 NOAA, Office of Coastal Zone Management
U.S. Army Corps of Engineers
Marine Mammal Commission
Mid-Atlantic Fishery Management Council
South Atlantic Fishery Management Council
Atlantic States Marine Fisheries Commission

State Agencies

Maine Department of Marine Resources
Maine State Planning Office (Maine Coastal Program)
New Hampshire Department of Fish and Game
Massachusetts Division of Marine Fisheries
Massachusetts Office of Coastal Zone Management
Rhode Island Department of Environmental Management - Division of
 Marine Fisheries
Rhode Island Statewide Planning Program
Connecticut Department of Environmental Protection
New York Division of Marine and Coastal Resources
New Jersey Division of Fish, Game and Shellfisheries
Pennsylvania Fish Commission
Maryland Department of Natural Resources
Virginia Marine Resources Commission
Delaware Division of Fish and Wildlife
North Carolina Division of Commercial and Sport Fisheries

Council's Lobster Advisors

William Adler	James Morgan
Richard Allen	Leo Murphy
Richard Barry	Raymond Noyes
Norman Bender	Robin Peters
Edward Blackmore	Rodney Sullivan
W. Leigh Bridges	Joseph Vachon, Jr.
Earl Briggs	
Maynard Graffam	
Bruce Kopf	
George Main	
Francis Manchester	
Irving McConchie	
Robert McDonough	

VII. LIST OF PREPARERS OF ENVIRONMENTAL ASSESSMENT AND PLAN AMENDMENT

Louis Goodreau, Fishery Analyst M.S., Marine Resource Economics	Responsibility for fishery operations analysis and economic impact analysis of the management program and its alternatives.
Ann Hochberg, Fishery Specialist M.S., Resource Management	Editorial responsibility, updating of cost data.
Guy Marchesseault, Dep. Exec. Director Ph.D., Fishery Science	Principal responsibility for FMP development, including policy, objectives, management program and all supporting analysis.
Douglas G. Marshall, Executive Director	Overall responsibility for FMP development.
Richard Ruais, Fishery Analyst M.P.A., Public Administration	Responsible for policy development, recreational fishery analysis and user group interactions.
Howard J. Russell, Jr., Fishery Analyst M.S., Marine Biology	Responsible for resource impact analysis.

1/3/86

VIII. SUMMARIES OF PUBLIC HEARINGS AND WRITTEN COMMENTS

Public Hearings

Lewes, Delaware	June 18, 1985
Peabody, Massachusetts	June 18, 1985
South Kingston, Rhode Island	June 19, 1985
Ellsworth, Maine	June 19, 1985
Toms River, New Jersey	June 19, 1985
Portland, Maine	June 20, 1985
Buzzards Bay, Massachusetts	June 20, 1985

Public Hearing on Research Closure Provision

Danvers, Massachusetts	December 10, 1985
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* Letter and technical document relating to tetrahedral corner radar reflector design construction.



ATLANTIC OFFSHORE FISHERMEN'S ASSOCIATION

221 Third Street

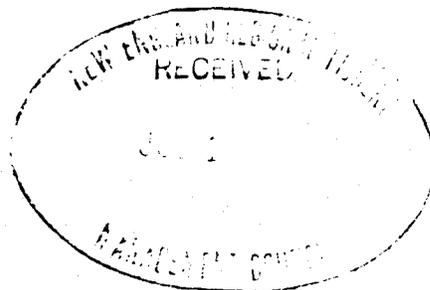
P.O. Box 3001

Newport, RI 02840

(401) 849-3232

24 June 1985

Mr. Douglas G. Marshall
Executive Director
New England Fishery Management Council
Suntaug Office Park
5 Broadway (Route 1)
Saugus, MA 01906



Re: Ammendment #1 to the American Lobster FMP

Dear Mr. Marshall,

We believe that in order to alleviate gear conflicts between mobile and fixed gear fishermen, a uniform gear marking system must be set up. It is our belief that Ammendment #1 to the American Lobster FMP would accomplish such a task and our membership wholeheartedly endorses the ammdement.

Gear conflicts that could otherwise be avoided will occur if this ammdement is not passed. Lets make things a little easier for all fishermen.

Sincerely,

John G. Catena



Phone:
(617) 675-1551
State Pier
Fall River, MA 02721

June 24, 1985

Mr. Douglas G. Marshall, Executive Director
New England Fishery Management Council
Suntaug Office Park
5 Broadway (Route 1)
Saugus, Massachusetts 01906

SUBJECT: Compliance of red crab gear with requirements
set forth in the Lobster Management Plan and
amendments.

Dear Doug,

I have recently spoken at some length with Guy Marchesseault regarding a concern I have had since the beginning of Council committee discussions several years ago dealing with requirements for the lobster industry for gear marking, trawl lengths, mid-markers, location reporting, setting patterns, vents and similar issues. If care is not taken in drafting proper language, requirements which are reasonable for the lobster fishery can unintentionally be made to apply to the red crab fishery, where they would be neither reasonable nor appropriate.

The red crab fishery is conducted entirely in depths greater than 200 fathoms, and normally in depths between 340 and 450 fathoms. In these depths there is no possibility for conflict with mobile gear, and the by catch of lobsters is zero. High Seas Corporation has operated in the fishery for over eleven years and never had a conflict with mobile gear or lobster gear, never had gear molested or stolen, and never landed any lobsters. You may also be aware that we land virtually 100% of the red crabs caught between the Canadian boundary and Cape Hatteras. There are occasionally one or two small (45 to 65 foot) boats from Ocean City, Maryland and environs which venture into the fishery on a part-time basis for a few months in the summer, but their activity is limited to a very small section of the total grounds and landings are about 1% of red crab production.

Many of the proposals which have been raised over the years for regulating lobster gear would cause severe disruption of our fishery. I will list several examples.

Douglas G. Marshall

-2-

June 24, 1985

1) Effective use of fishing time in 400 fathom depths precludes spending unnecessary time hauling 600 fathom endlines. Limiting trawl length to one and a half miles serves no practical purpose in this lonely territory and would severely reduce the number of traps which could be hauled each day.

2) Mid-markers, given the lengths of line required and the wild wind, sea, and current conditions under which we routinely operate would be an invitation to disaster. Mid-marker lines would often lead under the vessel and toward propellers. On a 180' boat guarding propellers from this menace during severe weather conditions is not reasonable.

3) Reporting location of gear to the Coast Guard in forms previously suggested in committee meetings is counter-productive. To do so would require reporting about sixteen loran bearings per day, all of which would be grossly inaccurate by the time they were relayed by the Coast Guard to interested parties. Lobster gear is normally hauled about once every five days and reset close by. Red crab gear is hauled daily and reset several miles away. High Seas has worked out a system for reporting areas to the Coast Guard, a system which is simple and straightforward for both parties and effective in protecting the fixed gear; but it is not consistent with reporting procedures proposed thus far for lobster gear.

4) In no case is it feasible, given the fact that red crab depths place us on the steep edges of the continental slope, to set gear in a straight line. We must follow contours in order to keep the gear within manageable depth ranges, let alone within productive crab grounds. Any requirements which did not permit contour sets would be unacceptable and unnecessary.

5) Vents are equally inappropriate since lobsters are not a by catch. We do not fish the upper range of the red crab resource, where at certain seasons the crabs and lobsters interface, because this area does not produce quantities of commercial crabs. Even if we did fish these shoaler depths lobsters would not be a by catch since red crabs, being much more active, enter the traps first and keep any interested lobsters from entering. Red crabs and lobsters do not enter the same gear. However, the issue is speculative at best since our gear is typically 150 to 300 fathoms deeper, and over an eleven year history we have never landed lobsters while engaged in the red crab fishery.

Some of these issues are not now in the forefront of discussion, but they have been in the past and may be again. Rather than address each issue on a case by case basis as it appears, it would seem far simpler and more appropriate to exempt red crab gear from the requirements of the lobster plan

Douglas G. Marshall

-3-

June 24, 1985

and amendments. I suggest this for two reasons: first, because the lobster fishery is radically different from the red crab fishery with regard to areas fished, fishing gear and procedures, and problems of conducting the fishery in relation to others; and second, because the problems addressed by the requirements for gear marking, vents and so forth do not exist in the red crab fishery.

Accordingly, I suggest, Doug, that the red crab fishery be exempted from all the requirements, either as a specific fishery, or as a result of exempting all traps set in 200 fathoms or greater depths.

I appreciate the favorable attitude which the Council and its committees have shown toward my concern for these issues in the past and trust that attitude may continue to prevail.

Thank you for your attention to this matter.

Best regards,



William D. Whipple
President

WDW/hmw

**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE**

Foreign Fisheries Observer Program
Post Office Building
P.O. Box 1285
Dale Avenue
Gloucester, Massachusetts 01931-1285



5 August 1985

F/NER75:PG

TO: Carol Kilbride
Resource Policy Analyst
FROM: *Pat Gerrion*
Patricia Gerrion
Foreign Fisheries Program Manager

SUBJECT: Bill Whipple's letter on red crab fishery

I shall preface my comments on Mr. Whipple's letter by saying I made three trips (in total) aboard two of his red crab boats while working on my master's thesis. I believe his fishing techniques have remained virtually the same with additional improvements made in automating hauling and gear handling operations.

Mr. Whipple has given two reasons and several examples why red crab gear should be exempted from the requirements of the lobster plan. I shall comment first on his reasons and secondly on his examples.

Reason 1: Strings of baited pots, or trawls, are utilized in both the red crab and offshore lobster fisheries. However, the similarities end there. Mr. Whipple's two boats are the red crab fishery on the East Coast. Over the last 12 years, several boats have entered and left this deep water fishery. Red crabs are generally fished at depths from 250-550 fathoms which is significantly deeper than the lobster fishery is prosecuted. There is no overlap of red crab and lobster gear on grounds and thus no competition for bottom. Typically red crab fishermen set and haul daily about three to four trawls of 85-190 pots per trawl. When each trawled is hauled, it is generally moved to a new location regardless of catch. Catches are usually 100% red crab with an occasional hake or cusk as the only by-catch. Gear conflicts in this fishery have occurred with Japanese tuna longline gear and may occur with U.S. longline gear.

Reason 2: Not being thoroughly familiar with the plan requirements for gear marking, vents etc., I shall limit my comments. Whipple's red crab pots are quite distinct from offshore lobster pots since he has modified both the pot and the gangion for this fishery to improve catches and to expedite gear handling. There is one central collared entrance on the top of the pot which was designed by Whipple specifically to keep the crabs in the pot. Although no significant differences were found in soak times (Gerrion 1981), Whipple continues to haul all trawls daily except between fishing trips. Due to the depth fished, lack of competition for grounds and "uniqueness" of the red crab gear, I would agree that there is no need to comply with the lobster requirements.



Example 1: I do not feel that limiting red crab trawls lengths to one and half miles would serve any purpose.

Example 2: Mid-Markers are good in concept to reduce gear conflicts etc. However, as previously mentioned, red crab gear is not competing with any other gear for bottom, but is occasionally set in waters that the Japanese and U.S. longliners work in. From my own experiences, the Japanese should be setting more high flyers and buoys to prevent gear conflicts, not the red crab fishermen. Additionally, mid-trawl markers at those depths fished by red crab fishermen are impractical and probably very time consuming.

Example 3: To my knowledge and experience, High Seas has faithfully reported their gear locations to the U.S. Coast Guard. Reporting all trawl locations on a daily basis to the Coast Guard is not practical and/or useful. Most of the positions would be out of date before dissemination.

Example 4: Much of the red crab gear is set in and around submarine canyons at specific depths. Review of a NOAA Bathymetric Map (sample attached) of the continental shelf edge and canyons will quickly reveal that red crab gear can not be set in a straight line if one is following a particular depth contour. This requirement, if enforced, would preclude an economically feasible red crab fishery.

Example 5: The red crab fishery is an extremely clean fishery with virtually no by-catch. Red crab explorations using pots (Anonymous, 1971. Shellfish Resource Assessment Cruise Report, Delaware II Cruise 70-8; Meade and Gray 1973) and my own observations fully corroborate the distribution of commercially harvestable red crabs and Mr. Whipple's comments that his gear is typically 150 to 300 fathoms deeper than lobster gear.

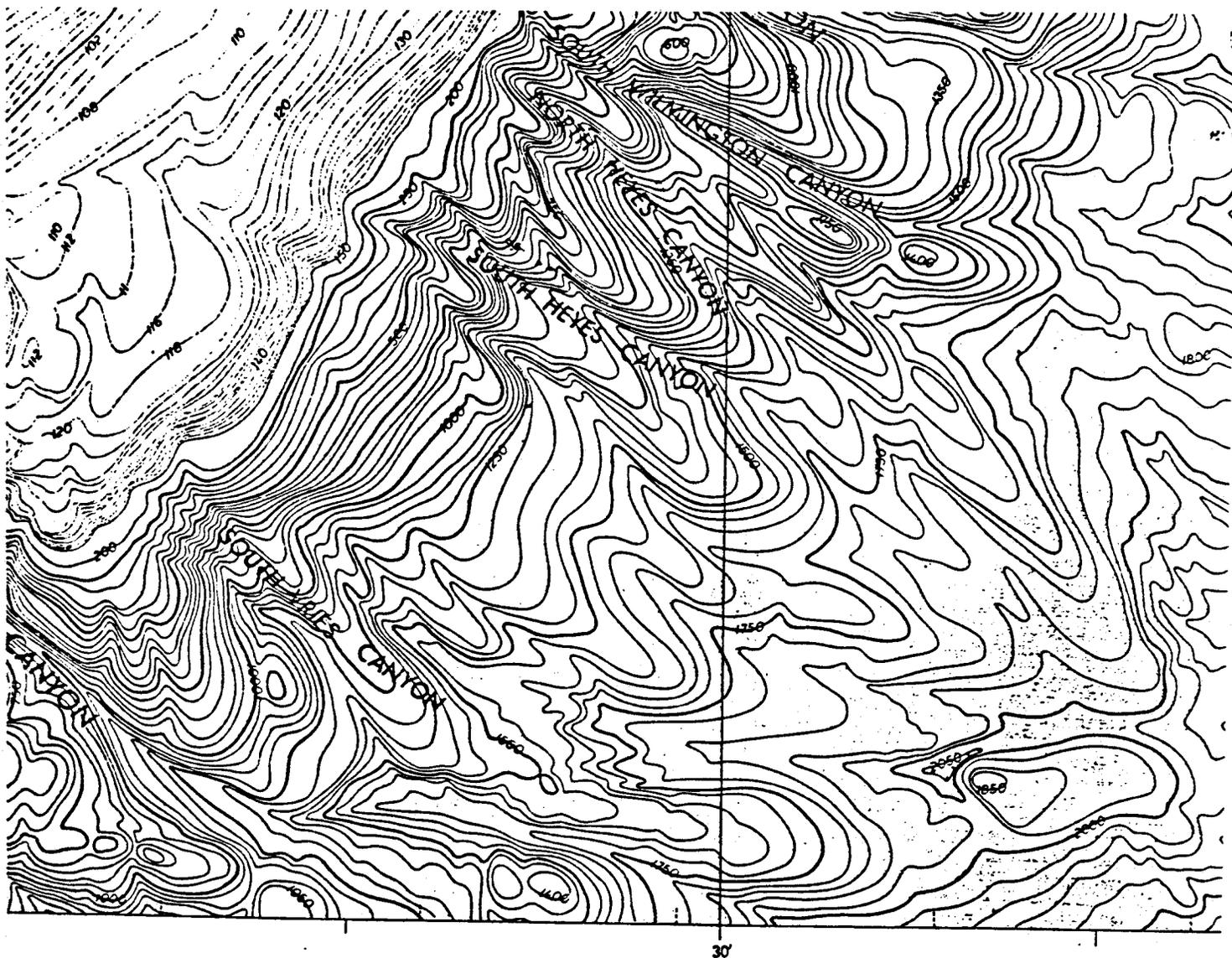
I hope my comments will be of some help to you and if you need additional information or references let me know.

Anonymous. 1971. Shellfish resource assessment. Cruise Rept., Delaware II Cruise 70-8. December 18, 1970 - February 26, 1971. U.S. Department of Commerce, NOAA, National Marine Fisheries Service, Woods Hole, MA 10p.

Gerrior. 1981. The distribution and effects of fishing on the deep sea red crab, Geryon quinquegens Smith, off Southern New England. MS Thesis, 130p.

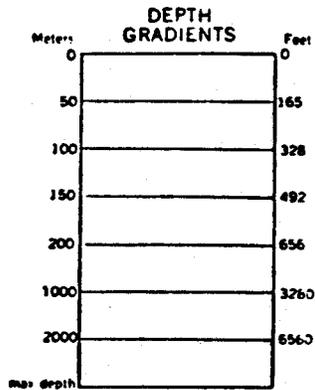
Meade, T.L. and G.W. Gray, Jr. 1973. The red crab. Univer. of R.I. Mar. Tech. Rep. 11:21p.

Attachment



HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILE)
M-5350	1933	120,000	1.0-4.0
M-5713	1934	120,000	1.0-5.0
M-6192	1936	120,000	.50-4.5
M-6219	1937	120,000	.40-2.3
M-6220	1937	120,000	.50-5.0
M-6345	1938	80,000	.50-1.0
M-9556	1975	40,000	.20-.80



NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
University of Delaware, Lewes, Delaware
June 18, 1985

Summary Minutes

A public hearing on Amendment #1 to the Lobster FMP was held on June 18 at the College of Marine Studies Complex, University of Delaware, Lewes, Delaware. Mr. Ron Smith (Mid-Atlantic Council) chaired the meeting and Bill Rice, Carl Meixner (lobster fishermen) and John LeCates (black sea bass fisherman) were present. Mr. Jim Salevan (University of Delaware) and Mr. Sern Rojas from the Coast Press also attended the meeting. Rich Ruais (NEFMC staff) presented the amendment. The hearing was opened at 6:00 p.m.

Mr. Rice and Mr. LeCates both indicated support for the marking requirements and the exemption from the venting requirement for sea bass fishermen. No objections were raised to any portion of the amendment. Mr. Rice stated that he could support requiring a 12 inch corner reflector as a further specification on the radar requirement. He stated that requiring radar reflectors would also help trawler fishermen. Mr. Meixner stated that it didn't make any difference whether we further specified the size of the reflector since any size would not stop trawlers from going through the gear if they wanted to.

Mr. LeCates and Mr. Meixner stated clearly that radar reflectors should not be required inside 40 fathoms because of the amount of shipping traffic. They stated it would be costly to replace frequently lost reflectors from this traffic. Mr. Rice noted that there was really no problem with draggers in the inshore areas since inshore fixed gear is set on the hard bottom. Mr. Smith also pointed out that reflectors inshore would make it difficult for the ships to distinguish between small recreational boats and fixed gear.

On the exemption from the venting requirement, Mr. Rice asked how it would work for those sea bass fishermen who also targeted lobster at times. Mr. LeCates responded that the sea bass fishermen agreed to fish only for sea bass or lobsters (with appropriately vented traps) at any given time. He said the sea bass fishermen felt this compromise was reasonable to get the exemption for the sea bass traps and not provide a loophole.

The hearing was closed at about 7:00 p.m. Those present were informed that written comments would be accepted until June 24 and that there would be an additional comment period when the "proposed rulemaking" appeared in the Federal Register.

RR.0479I

Lobster Public Hearing
Lewes, Delaware-6/18/85

Public Attendance

Name

Address and/or Affiliation

Sean Rojas

Coast Press

Bill Rice

RD#2 Box 169 Lewes, DE

CARL MEIXNER

903 S. MAIN ST. CHINCOTEAGUE, VA.

John Le Cates

222 Ann Ave Rehoboth, DL

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Holiday Inn - Peabody, MA
June 18, 1985

Summary Minutes

A public hearing was scheduled on June 18, 1985 at 7:00 p.m. to receive comments on Amendment #1 to the Lobster FMP. Mr. David Pierce, Massachusetts Division of Marine Fisheries, was prepared to chair the hearing and Mr. Christopher Kellogg, Council staff, was to present the specific marking requirements and the proposed exemption to the venting requirement for sea bass fishermen. Ms. Carol Kilbride of the National Marine Fisheries Service was also present. No one from the general public attended the hearing so it was adjourned at approximately 7:30 PM.

CK:04861
6/24/85

Lobster Public Hearing
Peabody, MA-6/18/85

Public Attendance

Name Address and/or Affiliation

Chris Klogg

NEFMC staff

Carol Keltude

DMF

David Dune

MASS DMF

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Holiday Inn, South Kingston, RI
June 19, 1985

Summary Minutes

A public hearing was scheduled on July 19, 1985 at 7:00 p.m. to receive comments on Amendment #1 to the Lobster FMP. Mr. David Borden was prepared to chair the hearing and Mr. Rich Ruais was to present the specific marking requirements and the proposed exemption to venting requirement for sea bass fishermen. No fishermen attended the scheduled hearing. Ms. Linda Gunn (CT-DEP) was present as well as Mr. John Cantena, a port agent for Atlantic Offshore Fishermen's Association. Mr. Cantena stated that AOFA supported the amendment and would comment to that effect in writing by June 24.

Messers. Borden, Ruais and Cantena left the Holiday Inn at 7:50 p.m. and as of this time no fishermen had arrived.

RR.0480I

Lobster Public Hearing
Kingston, RI-6/19/85

Public Attendance

Name

Address and/or Affiliation

Linda Gunn

CT DEP

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Holiday Inn, Ellsworth, ME
June 19, 1985

Summary Minutes

A public hearing was scheduled on June 19, 1985 at 7:00 p.m. to receive comments on Amendment #1 to the Lobster FMP. Mr. Kenneth Honey, Maine DMR, was prepared to chair the hearing and Mr. Howard Russell, Council staff, was to present the specific marking requirements and the proposed exemption to venting requirement for sea bass fishermen. Only one person attended the scheduled hearing, Mr. Earl D. Briggs of Corea, Maine, lobster fisherman and past Director of the Maine Lobstermen's Association.

Mr. Briggs indicated that the terms of Amendment #1 relative to gear marking were acceptable and suggested that the most appropriate way to address gear marking in the area shoreward of the offshore fishery and seaward of the territorial sea (3-12 miles in the Gulf of Maine) would be to extend the area of coverage of the appropriate state regulations. Mr. Briggs also suggested that the amendment not include a specific definition of the type of radar reflector to be required for the offshore lobster fishery.

With regard to the exception to the escape vent requirement for fishermen taking black sea bass in traps in the Mid-Atlantic area, Mr. Briggs had no specific comment. He did indicate, however, that if an exception were to be granted to sea bass fishermen, then why could not an exception be granted in the northern Gulf of Maine for v-notch lobsters ?

The public hearing was adjourned at approximately 7:40 PM.

HR:0484I
6/24/85

Lobster Public Hearing
Ellsworth, ME-6/19/85

Public Attendance

Name

Address and/or Affiliation

Earl D. Briggs

HCB60 Box 11 Carle Maine 046
Lobster Fisherman YMA Director

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Howard Johnson's Motor Lodge, Toms River, NJ
June 19, 1985

Summary Minutes

A public hearing was held on Amendment #1 to the Lobster FMP on June 19, 1985, at the Howard Johnson's Motor Lodge in Toms River, New Jersey. The hearing was chaired by Mr. Barry Parker (Mid-Atlantic Council) and began at 10:00 a.m. Mr. Bruce Halgren (New Jersey Division of Fish and Game) attended the hearing. Mr. Richard Ruais (NEFMC Staff) presented the specific measures of the amendment. Fourteen individuals signed the attendance roster.

Mr. Bruce Banneck stated that he supported the marking requirements contained in the amendment and that he was already marking his gear in this fashion. He noted that the major gear conflict problem in the offshore Mid-Atlantic lobster area was with scallop gear. He pointed out that this amendment, in his view, would not solve the conflicts with scallop gear. Mr. Banneck stated that he could support a further requirement for 12 inch corner reflectors (which he currently uses) because this would enable him to see other people's gear. He stated that these reflectors were the best around but that it was difficult to find even these at times. He noted that he was losing anywhere from 200 to 400 pots per year to gear conflicts with domestic and foreign vessels.

Mr. Gregory Winguiter and Mr. Royce Winguiter (both lobster fishermen) were supportive of the amendment and stated that they were having serious conflicts with primarily one scallop boat working around the Mud Hole. They stated that they are losing about 200 traps annually due to conflicts.

Mr. George Garbarine (lobster fisherman) also stated that he was having a serious problem with one scallop fisherman, and it was threatening to put him out of business.

These lobster fishermen request action from the Councils to reduce the conflicts with scallop gear and other mobile fisheries. Mr. Banneck suggested that this current amendment could be modified to require, at a minimum, that mobile operators be required to carry onboard the Coast Guard Notice to Mariners where sets of lobster gear could be routinely published. He stated that although a buffer zone around published fixed gear sets would be helpful that it was not essential. He stated that vessels found in these published fixed gear areas could be held accountable for damage to the fixed gear.

Mr. Banneck stated that he would be willing to work with Committees from either Council to develop additional measures to reduce conflicts.

No objections were raised to any of the marking requirements or on the exemption to the venting requirement for sea bass traps. Mr. Bruce Halgren suggested that a LORAN line be used to define the area South of Barnegat Light for the venting exemption. He agreed to forward a recommendation on this shortly.

Lobster Public Hearing

-2-

June 19, 1985

Mr. Parker read into the record a letter (attached) from James E. Furlong, III (New Jersey Farm Bureau) indicating support for the New England and Mid-Atlantic Councils' proposed exemption to the venting requirement with a 100 pound or 10% bycatch trip limitation.

Mr. Ruais pointed out that the the New England Council decided to drop the 10% bycatch provision.

Mr. Parker closed the hearing at approximately 12:00 noon.

RR.1125C



168 West State St., Trenton, New Jersey, 08608 tel. (609) 393-7163

June 14, 1985

Barry Parker, Esquire
Route #73 & Greentree Road
Suite 401
Marlton, New Jersey 08053

Dear Barry:

As we discussed, the New England Fishery Management Council will hold a series of public meetings on proposed amendments to the American Lobster Fishery Management Plan one of which impacts heavily on New Jersey's black sea bass fishery. This amendment provides an exemption from the trap vending requirements.

During the March Mid-Atlantic Fisheries Council meeting, I testified on behalf of New Jersey Farm Bureau's sea bass fishermen. The Mid-Atlantic Council is sympathetic to the concerns of the fishermen as stated in their recommendation to the New England Council.

On Tuesday, June 11th, I received a call from Doug Marshall, Executive Director of the New England Fishery Management Council. He informed me that the New England Council approved the proposed amendment based on the recommendations of the Mid-Atlantic Council and that the public hearing will be held in Toms River on June 19th and is required by law to allow public comment. He further informed me that you will be chairing this public meeting and suggested that I on behalf of our sea bass fishermen members provide you with comments to be read into the record. These comments are as follows:



Page 2.

The New Jersey Farm Bureau on behalf of its black sea bass fishermen members support the findings of the Mid-Atlantic and New England Fishery Management Councils which amends the American Lobster Fishery Management Plan, specifically that an optional settlement be allowed so that the sea bass fishermen can specify that they are fishing for sea bass and their pots do not have to have vents; but they are restricted to landing only 100 pounds or 10% of their total catch in lobster per trip, whichever value is least, with one trip per day. It is also requested that until the amendment is written into the Lobster Management Plan, that there be some forbearance in application of the enforcement provisions.

If you have any questions, please contact me at your convenience.

Sincerely,


James E. Furlong, III
Director of Member Relations

JEF:pac
Enclosure
cc: Captain Joe Wagner
Walter Ellis, Jr.
Peter J. Furey
NJFB Commercial Fisheries Cttee.

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Holiday Inn - West, Portland, ME
June 20, 1985

Summary Minutes

A public hearing was scheduled on June 20, 1985 at 7:00 p.m. to receive comments on Amendment #1 to the Lobster FMP. Mr. Spencer Appollonio, Maine DMR, was prepared to chair the hearing and Mr. Howard Russell, Council staff, was to present the specific marking requirements and the proposed exemption to the venting requirement for sea bass fishermen. No one attended the scheduled hearing. The only communication received from the public was in the form of a long-distance telephone call from a Rhode Island fisherman who had been unable to attend the South Kingstown, RI public hearing. The major concern expressed by the caller was that since he was departing immediately for sea, he would not be able to submit written comment prior to June 24, 1985. He was informed that there will be a public comment period subsequent to filing the draft amendment and he was encouraged to mail his written comment despite the June 24th deadline. He had received a copy of the public hearing document.

The public hearing was adjourned at approximately 7:45 PM.

HR:0485I
6/24/85

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Lobster Public Hearing
Massachusetts Maritime Academy, Buzzards Bay, MA
June 20, 1985

Summary Minutes

A public hearing on Amendment #1 to the Lobster FMP was held on June 20 at the Harrington Lecture Hall, Massachusetts Maritime Academy, Buzzards Bay, MA. Mr. Phillip Coates chaired the meeting with technical support from Guy Marchesseault of the Council Staff. The hearing was attended by four members of the interested public. Mr. Coates opened the hearing at 7:10 p.m.

Mr. Coates reviewed the basis for the amendment and highlighted the two elements of the proposed action. Mr. Coates first requested specific comments on the gear marking proposal. He pointed out the history of the proposal and explained that the proposed action would leave a regulatory void in some cases between the jurisdiction of the states out to three miles and the shoreward boundary of the proposed gear marking area. Mr. Anderson, a lobsterman in the offshore fishery, commented in support of the marking requirements as proposed. Mr. Anderson further indicated his opinion that radar reflectors should be of a standard design (he referred to the tetrahedral design that is commercially available); however, he also indicated that it would not be necessary to impose a minimum size requirement on the reflector. He noted that his operation had just begun to use 8 inch standard corner reflectors, and it would be costly to change to the 12 inch corner reflector proposed for gillnet and longline gear in the Multi-Species FMP.

Mr. Coates reviewed the basis for the proposed exemption to trap venting in the fishery for black sea bass off the coast of New Jersey and DELMARVA and solicited comments. No comments were received specific to the proposal; however, Mr. Anderson did express concern over the retention of 8 inch black sea bass in the exempted fishery, suggesting that they were too small for either marketing or biological reasons. Mr. Coates pointed out that the exemption was only considered in the area described because the incidence of lobster by-catch is so small, and the lobster resource would not be negatively affected.

Mr. Coates noted that the public comment period closes June 24 for consideration of the draft amendment, but that other opportunity for comment would be available during the secretarial review of the amendment. Absent any further comment, Mr. Coates closed the hearing at approximately 8:00 p.m.

GM.0482I

Lobster Public Hearing
Buzzards Bay, MA - 6/20/85

Public Attendance

Name

Address and/or Affiliation

Charles J. Connor
J. GREGORY ANDERSON
Jack Sullivan
Judith M. Capuzzo

P. M. F.
1378 BRIDGE ST., SOUTH YARMOUTH
Yarmouth, MA. Starbuck Lane
MSAC / Galmauch, MA

New England Fishery Management Council

Lobster Public Hearing
Kings Grant Inn, Danvers, Ma.
December 10, 1985

Summary of the Hearing

An additional public hearing was held on Amendment #1 to the Lobster FMP to allow public review of the Council's proposal to establish authority within the FMP to close areas to lobster fishing for the purpose of allowing scientific research which may result in future benefits to the resource and fishery. This hearing was held on the afternoon of the regular Council meeting held on December 10 and was chaired by Edward Spurr (N.H.). The public hearing summary document is attached as well as a copy of the attendance list from the Council meeting.

Mr. Spurr reviewed the specifics of the Council's proposal to establish the authority for research closures by the Regional Director of NMFS with the concurrence of the Council(s) and then asked for any public comments.

Mr. Richard Allen commented that it seemed to him that if an area were to be closed for lobster research that it would be necessary that the area be closed to all types of fishing gears for the results to be valid. He suggested that such closure authority should be well defined in terms of the objectives of the research and that it would seem that the authority for closures should exist in all existing plans and not just the Lobster FMP.

Mr. Edward Blackmore stated that he strongly supported the concept of research areas to answer many of the questions on the lobster resource which have existed for years. He suggested however, that it might be appropriate to have some upper limit on the number of areas which might be closed at any given time.

There being no further public comments Mr. Spurr closed the public hearing.

Following the public hearing the Council passed a motion to include the reasearch closure provision within Amendment 1 to the Lobster FMP.

RR. Doc. # 0059N 01/02/86

King's Grant Inn, Danvers, MA
December 10, 1985

Public Attendance

Name

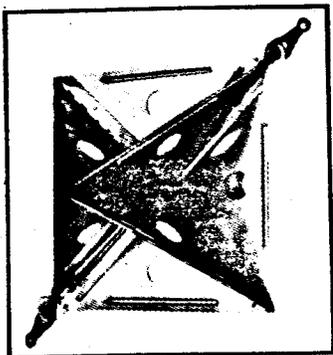
Address and/or Affiliation

Ken Coons	NEFDF Boston
Ed Blackmore	Maine Fisheries Assoc.
Dave Ellinger	JOAN CLEAN INC.
Dermil Cohen	SEA HARVEST INC.
Sharon MacLean	NMFS Woods Hole
Ronald [unclear]	Port [unclear] Forum
END DEBORAH BLAKEWELL	USCGC [unclear] NEW BEDFORD MA
Richard B Allen	
M J Smith	SUNY - WHOI
[unclear]	USCGC [unclear]
Jean R. McCaulley	Port [unclear] [unclear] [unclear]
Linda [unclear]	CT DCP [unclear] Fisheries
THOR LASSEN	NFE
Susan Peterson	Boston University
Helenie Hill Carter	MIT Sea Grant
Bob Williams	NMFS
A. Kelbride	UNIB
R. L. Stake	USCGC [unclear]
Charles [unclear]	NOAA GC
Frank Stevens	Commercial Fisheries News
Paul Bradford	Port [unclear] [unclear] [unclear]
Wally [unclear]	Gloucester
W. [unclear]	SR
C. Kellogg	NEFMC Staff
H. KATAYAMA	JAPAN FISHERIES ASSOCIATION
John [unclear]	New England [unclear]
	Conference [unclear]

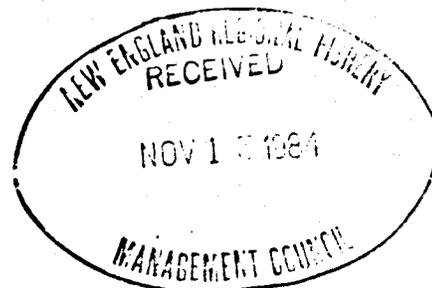
RADARK INC.

P.O. BOX 1514
PAWTUCKET, R. I. 02860

TEL. (401) 722-5067



Nov. 9, 1984



NEW ENGLAND FISHERIES & MANAGEMENT COUNCIL.
SUNTAUG OFFICE PARK
5 BROADWAY
SAUGUS, MA. 01906

ATT: Mr. Richard Ruais

Thank you for calling Radark.

In response to your inquiry, the total surface area of a tetrahedral corner reflector measuring 9" is approximately $2 \times 9 \times 9 \times 3 = 486$ sq. in. ; 12" is approx. $2 \times 12 \times 12 \times 3 = 864$ sq. in.

Please allow me to give you a few words of caution with regard to Radar Reflectors and the "Numbers Game".

Corner reflectors must be accurately constructed. The corners must be square. A deviation of 1° in squareness of the corner can significantly reduce effectiveness.

The height at which the reflector is displayed greatly affects performance. The higher the better.

As you know, Reflectors used in the commercial fishing industry are displayed at one end of a pole. These poles are supported with a system of floats and ballast to keep them upright in the water.

RADARK INC.

P.O. BOX 1514
PAWTUCKET, R. I. 02860

TEL. (401) 722-5067

Therefore, fishermen must use adequate floatation to allow the unit to be properly displayed.

Obviously, the lighter the weight of the reflector, the less the flotation that is needed to counter it.

For this reason we at Radark use only aluminum sheet metal made of a special alloy. Aluminum provides light weight and the alloy made to our specification provides the strength and rigidity which are necessary.

Also enclosed with this letter is the Oregon State University article I promised to send. Although, the title is "Radar Reflectors For Boats", the principles discussed apply equally to reflectors used by commercial fishermen.

It has been a pleasure to serve you. Please call if you have any questions or if we can be of assistance.

Sincerely



Jim Kaszyk

Radar reflectors for boats

by Edward J. Condon
Extension Oceanographer, Oregon State University
and Edward Kolbe
Commercial Fisheries Engineer, Oregon State University

Radar (*radio detecting and ranging*) is an electronic navigational aid used for determining the distance and direction to objects around your craft. It offers the advantages of being able to detect objects too small or distant for the eye to see and to do so in any weather (including fog) and in daylight or darkness. Most ships and many smaller working watercraft rely on radar to navigate and to avoid collisions. Therefore, if you are a small-boat skipper, you need to be concerned about the image your own vessel makes on other radar screens. A good radar reflector may be the cheapest anticollision insurance you can buy (see figure 1).

How radar works

A radar screen, or display, presents a TV-like plot of the directions and distances to surrounding solid objects, out to the maximum operating range for that set. The set determines direction of an object from the direction that the antenna points, and distance by timing the interval between the transmission of a pulse of ultrahigh frequency radio energy and the return of the pulse when reflected by a solid object, or target. The reflected signal is commonly called the "echo." The echo is displayed on the dark radar screen as an outline or a small blob of light.

Every radar set is—by design—limited in range by the maximum operating range of the set (12, 16, 24 nautical miles, etc.). The range of shipboard radar is additionally limited by:

1. the height above sea level of the radar antenna and
2. the height above sea level of the object to be detected.

Figure 2 illustrates how a 24-mile radar on a boat may not be able to see all objects within that range. Because radar (radio) waves travel essentially in a straight line (by line of sight), they will not detect an object that is below the horizon, such as the buoy (C) and the large rock (D). The mountain (E), on the other hand, rises far enough above the horizon, at the set's maximum range, to return an echo.

The distance to the horizon changes as the height above sea level increases (a factor of real importance when you plan where, and how high, to mount your antenna—and your radar reflector). Table 1 shows this variation.

Besides being limited by the range of the set itself and by the distance-to-horizon, the ability of the radar set to "see" a target is limited by the characteristics of that target—that is, by the target's material and shape.

Almost all solid objects reflect radar signals, but some materials reflect more of the signal (and are more discernible on the screen) than others. For instance, wood or fiberglass hulls do not consistently return echoes as strong as those from steel or aluminum hulls of like size. In general, a material that is a good conductor of electricity will make a good radar reflector.

A second factor necessary for a large echo from a target is that the reflecting surface of the target be perpendicular to the path of the radar signal (pulse). A vessel traveling broadside to the radar's line of sight returns a stronger echo than one heading toward or away from the transmitting set. For the same reason, a gently sloping shore usually is not detectable by radar—but large rocks, cliffs, and mountains are.

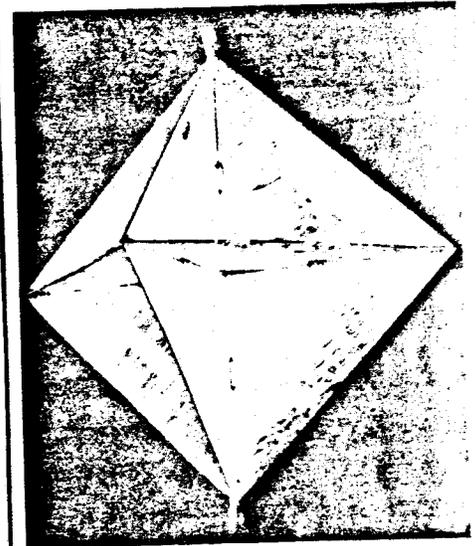


Figure 1.—Radar signals reflect best from materials that conduct electricity. Small boats—especially wood hulls—may not show on radar receivers. Displaying a metal reflector like this in the superstructure of a small boat greatly increases the probability of its being detectable by radar. Instructions for making this radar reflector are given on pages 4 and 5.



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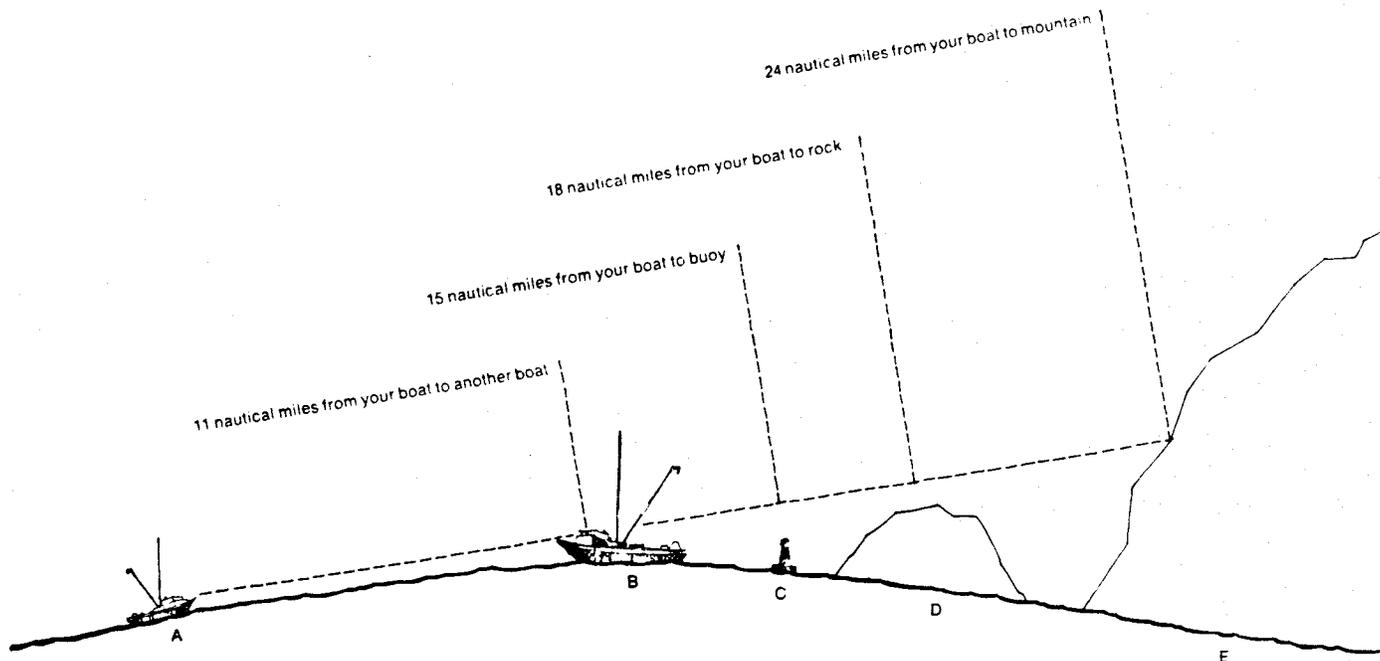


Figure 2.—What your boat radar's horizon might be: A, your boat with 24-nautical-mile radar; B, another boat; C, buoy; D, large rock; E, mountain. Remember: When you position your radar antenna or

reflector, mount one or both as high as possible, to maximize your chances of seeing other craft—and of being seen by them.

Table 1.—Maximum effective range of radar, as affected by height of antenna above sea level (adapted from *American Practical Navigator* ["Bowditch"], U.S. Navy Hydrographic Office, Washington, 1962)

Antenna height (meters)	Distance to horizon (nautical miles)	Antenna height (meters)	Distance to horizon (nautical miles)
1	2.1	44	13.7
2	2.9	46	14.0
3	3.5	48	14.3
4	4.1	50	14.6
5	4.6	55	15.3
6	5.0	60	16.0
7	5.5	65	16.7
8	5.8	70	17.3
9	6.2	75	17.9
10	6.5	80	18.5
12	7.1	85	19.0
14	7.8	90	19.6
16	8.2	95	20.1
18	8.8	100	20.7
20	9.2	200	29.2
22	9.7	300	35.9
24	10.1	400	41.2
26	10.5	500	45.9
28	11.0	600	51.1
30	11.3	700	54.9
32	11.7	800	58.5
34	12.1	900	62.1
36	12.4	1000	65.5
38	12.7	1500	80.2
40	13.0	2000	92.1
42	13.4	3000	112.0

How a radar reflector works

Since small wood and fiberglass boats do not return strong radar echoes, operators of boats built of these materials can greatly reduce risk of collision with radar-equipped vessels by installing reflectors high in rigging or on the masts. The corner reflector is a common type.

A corner reflector is a device with flat metallic reflective surfaces that meet perpendicularly. The shape of the reflector is such that it reflects a radar signal from any direction back toward its source. Corner reflectors are fitted to a number of navigational buoys (labeled "Ra Ref" on charts); mariners having radar on their craft can note how much stronger the echo is from one of these buoys compared to a buoy of a similar size but not equipped with a radar reflector.

Factors affecting echo strength

The size of a corner reflector greatly determines its echo strength. In November 1971, the subcommittee on safety of navigation, Intergovernmental Maritime Consultative Organization (IMCO), recommended that a vessel smaller than 90 metric tons (t)—the displacement of a 26-m dragger, roughly—should carry a reflector that would make it look like a 90-t vessel. (IMCO further recommended that lifeboats and liferafts should carry even larger reflectors.)

Other studies agree; they further show that the reflection of a 90-t vessel can be achieved by hanging a 23-cm corner reflector (on its shortest side) 4 m or higher above the water.

If this height is not possible on your boat, you can achieve the "90-t" image by constructing and mounting a 30-cm corner reflector (see "Making your own" below) at a lower height. And if you can mount this 30-cm reflector 4 m or higher on your craft—you will return an echo even stronger than IMCO's 90-t example!

In addition to the corner reflector's size, its squareness is extremely important. If the sides of the corner are out of square by more than about 1°, its reflective strength will be seriously reduced.

Finally, the reflector's height above sea level is important: the higher it is, the greater the range at which your craft is detectable by radar (see table 1 again).

For example, for a reflector on a mast 9 m above sea level, the line-of-sight range to the horizon is 6.2 nautical miles. If a ship passing through the area has a radar 22 m above sea level, its horizon range is 9.7 nautical miles. Adding the two gives the maximum range at which the ship's radar can detect the reflector: 15.9 nautical miles. Under adverse weather conditions, a ship running at cruising speed needs a strong echo from at least 10 nautical miles away to guarantee enough reaction time to alter course and steer clear.

Keep in mind that a ship moving at 20 knots traverses one nautical mile every three minutes. For a wood or fiberglass boat dead on its bow in dense fog, an effective radar reflector greatly increases the boat's chances of being "seen" and avoided.

To summarize: If yours is a small boat, get an accurately constructed metal corner reflector that has short sides of at least 23 cm; hang it at least 4 m above the water. And remember that all corners must be within approximately 1° of square.

How reliable are corner reflectors?

In 1976, Oregon State University conducted some experiments to compare radar visibility of several different devices (including a collapsible corner reflector and special cloths) that could be used on liferafts. Results of this initial testing showed that some of these devices advertised to be radar-reflective are less reflective than is the corner reflector described below ("Making your own"). In some cases, the devices tested offered only slight improvement in radar detectability over the raft alone (without any reflective device).

Although these tests were of a preliminary nature—and were not exhaustive—they, as well as other tests, do show the corner reflector to be a good type to use.

Which reflector to buy?

There are a number of commercial reflectors with a wide range of prices. Some of the cheaper corner reflectors are cardboard covered with aluminum foil (satisfactory but not very long-lived in the damp saltwater atmosphere). Reflectors then increase in price as they become more refined; one of the more complex is the dielectric type (figure 3), which was not included in the Oregon State University tests described above.

Let the buyer beware, however: Not all high-priced radar reflectors are better than those that are more reasonable in price. Increased cost does not necessarily translate into increased reflectivity.

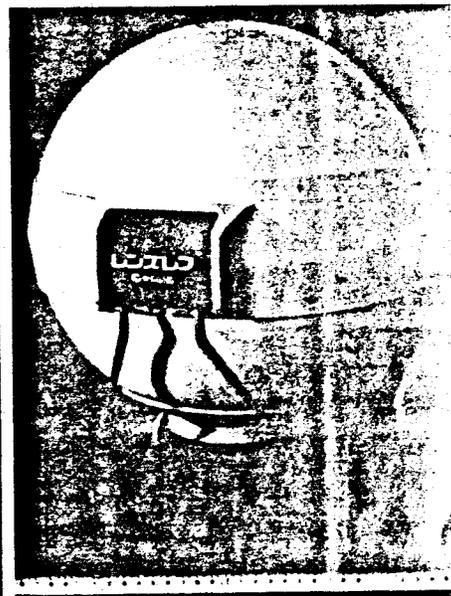


Figure 3.—A dielectric radar reflector.

Making your own

If you decide to construct your own, you can build a 30-cm reflector from a sheet of 42-cm by 126-cm rectangular aluminum or steel. Thickness is up to you. Aluminum about 3 mm thick, or steel about 1.5 mm thick, should be adequate for most reflectors under average conditions. You can use thicker steel—but consider the damage to your rigging and deck if a reflector that heavy should break loose in rough seas! OSU recommends using aluminum.

Figures 4 through 6 show a plan for producing this reflector—or you could take this bulletin to a machine shop and order one like it. Figures 7 and 8 illustrate various methods of mounting your reflector.

(Text continues on page 6.)

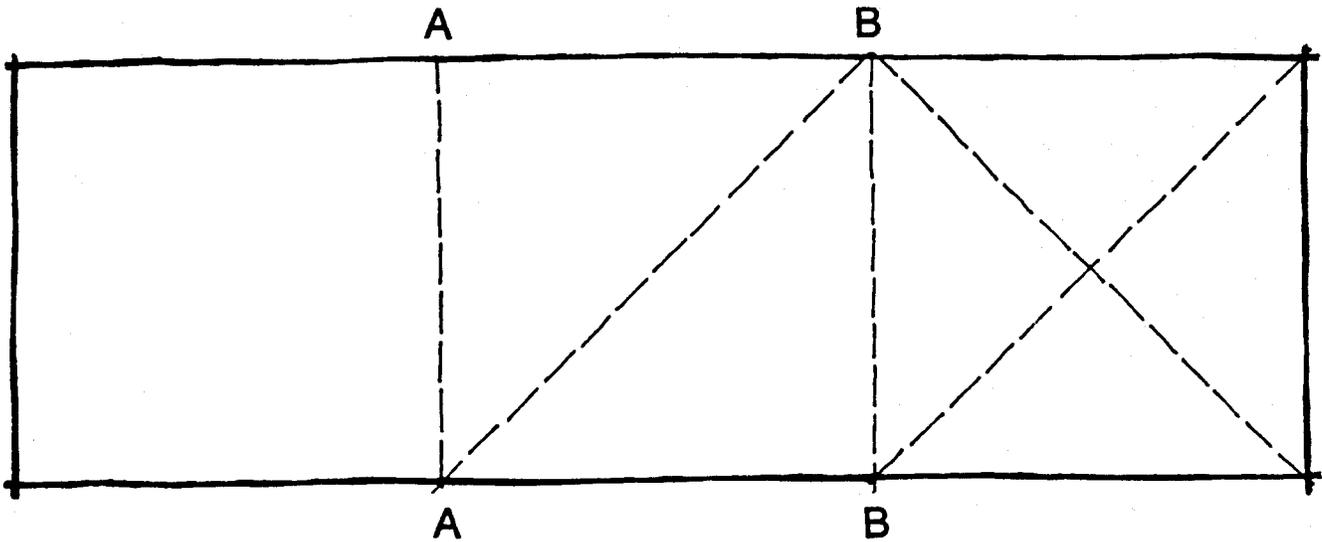


Figure 4.—To make your own 30-cm corner reflector, start with a 42-cm by 126-cm rectangular sheet of aluminum or galvanized steel; thickness is up to you (3 mm should be adequate for aluminum; 1.5 mm, for steel). For maximum reflection of radar signals, all surfaces of the radar reflector must meet at right angles. Before starting, check the rectangular sheet. All corners must be square. Cut the sheet into three 42-cm squares by making vertical cuts A and B, shown in the diagram. Mark one diagonal on the second square, and mark both diagonals on the third square.

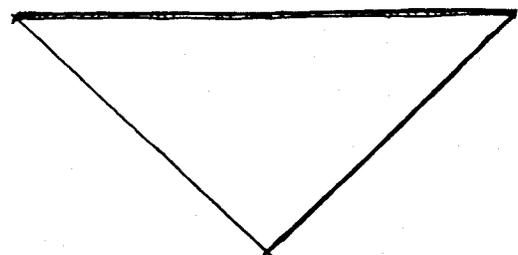
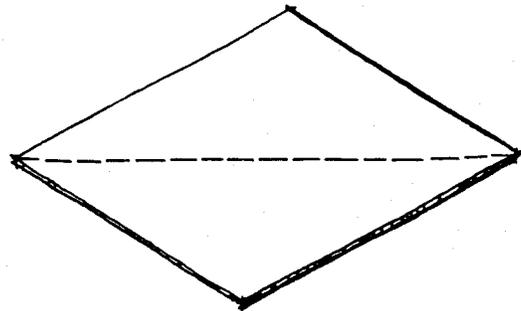
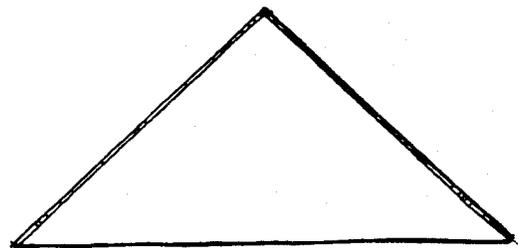
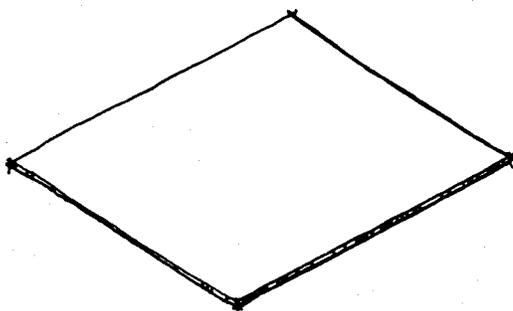


Figure 5.—Cut the second square into halves along the marked diagonal. Tack weld these two triangular halves to the top and bottom of the first square along a diagonal. Use tack welds because long or continuous beads can (and usually do) warp sheet metal, making it very difficult to join the pieces at right angles. Use a carpenter's framing square to achieve right angles between adjacent pieces.

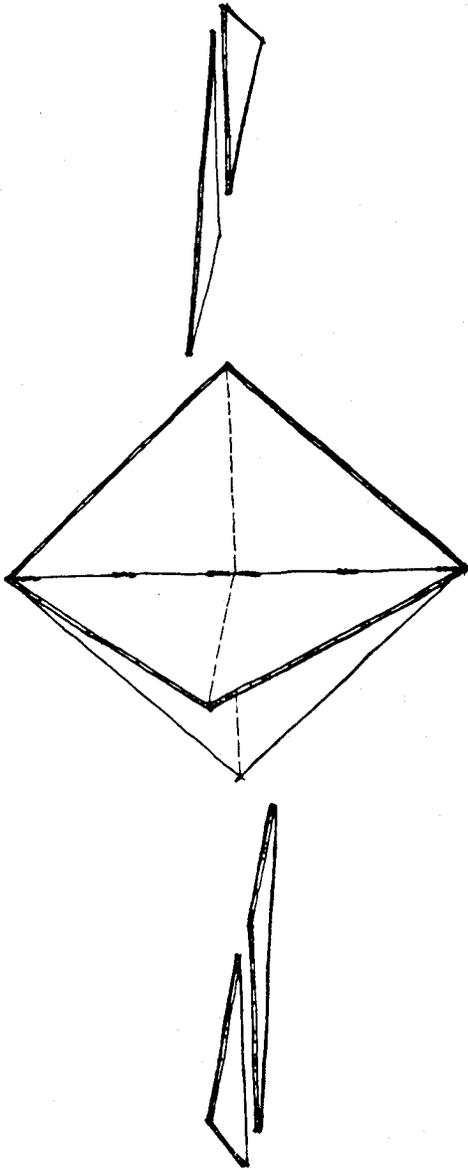


Figure 6.—Cut the remaining square along one diagonal and then cut both resulting triangles in half along the scribed lines. The result should be four smaller right triangles of identical size. Tack weld one small right triangle between each pair of adjacent surfaces, as indicated in the drawing. Use the framing square to insure that every small triangle lines up at right angles to its adjacent surfaces.

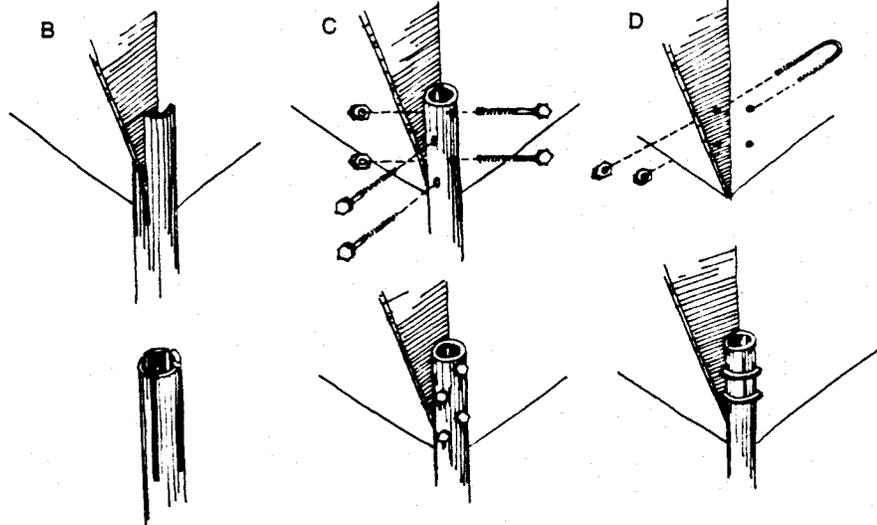
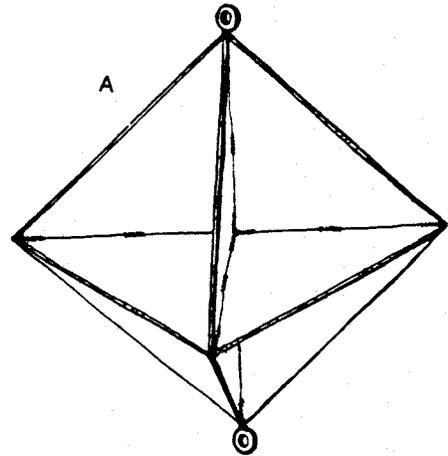


Figure 7.—The assembled reflector should look like this. You can mount the reflector by any of the schemes suggested here. You can weld heavy rings, or grommets (A), on two opposite corners and hang it in the rigging. You can weld it into a slotted length of pipe (B) that fits over the end of a pole or mast. Or you can bolt it to a pole or mast (C) by drilling pairs of holes through adjacent surfaces at appropriate distances from a weld where two sides join. You can use U-bolts (D) of the type sold for attaching TV antennas to metal masts.

The "rain-catching" position

Investigators in Japan and England have tested a theory that skippers can obtain more complete coverage by installing the corner reflector described above in the "rain-catching" position (figure 8), that is, its orientation when resting on a horizontal surface. The point here is that, with the reflector installed in this position, more angles should be available to reflect radar signals, from all around the horizon.

Oregon State University has conducted a limited evaluation (March 1978) of two installations, vertical (figure 7) and "rain-catching." The tests did not prove conclusively that either was better than the other, but they did appear to indicate that the "rain-catching" position provided fewer areas of weak-echo return.

The tests also confirmed these basic points:

- The higher you mount a corner reflector, the better echo you receive.
- If you mount a corner reflector on your boat—whatever its position—you increase your chances of being seen by a radar-equipped vessel.
- The small investment required when you make or buy a corner reflector is very cheap insurance toward the safety of your craft!

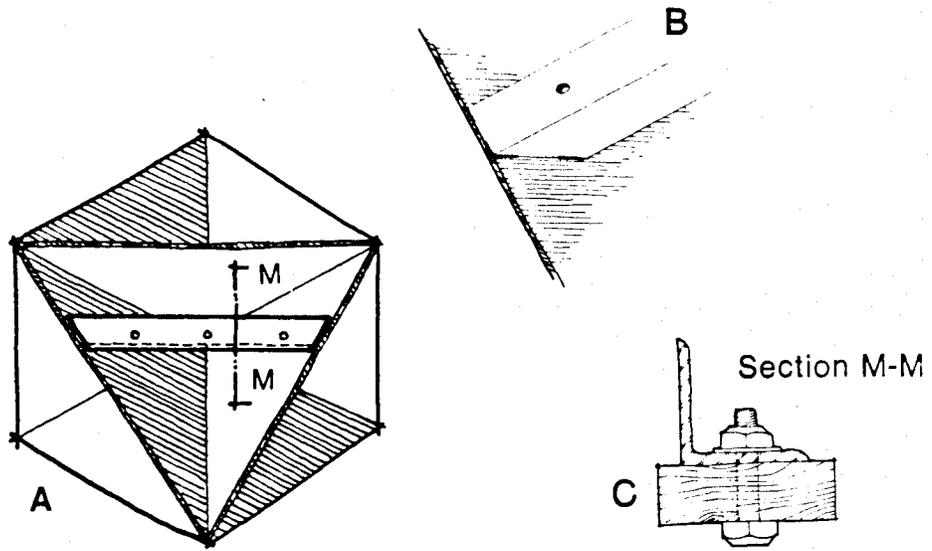


Figure 8.—One method of mounting a reflector in the "rain-catching" position is to tack weld an angle or channel between two adjacent surfaces, as suggested in details A and B. Drill the angle and crossbar, and bolt the reflector atop the crossbar, as suggested in detail C. Or tie the reflector into a stay that forms an approximately 45° angle with the horizontal.

Appendix.—Metric/customary conversion factors (approximate) for the units cited in this bulletin

To convert	to	multiply by
meters (m)	feet	3.28
feet	meters	0.30
centimeters (cm)	inches	0.39
inches	centimeters	2.54
millimeters (mm)	inches	0.04
inches	millimeters	25.40
metric tons (t)	tons, 2000-lb.	1.10
tons, 2000-lb.	metric tons	0.91

Note: A nautical mile is not a fixed unit of length and, therefore, cannot be converted to meters, as a land mile can. A nautical mile is an arc of a meridian of longitude between two places whose geographic latitude differs by 0°1', so its length varies from about 1844 m at the equator to about 1863 m at the geographic poles. For calibration purposes, where a fixed unit is necessary, use the approximate mean value of 1852 m—its value at latitude 45°. This is known as the International Nautical Mile (almost identical to the 2000-yd value traditionally given to a nautical mile).

From a practical point of view, a navigator need not ponder the variable because the nautical mile on a Mercator chart has been, and always will be, one minute of latitude at the latitude of the observer. (This note is adapted from Harry Rogers' "The mile goes to sea," *Australian Fisheries*, April 1977).



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Billing Code

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

51 CFR Part 649

[Docket No.]

American Lobster Fishery

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce

ACTION: Proposed rule and request for public comment.

SUMMARY: The New England Fishery Management Council has submitted for Secretarial Review Amendment 1 to the American Lobster Fishery Management Plan (FMP). NOAA issues this proposed rule to implement the Amendment which institutes a uniform lobster fishing gear marking requirement for all offshore lobster fishing gear, exempts Mid-Atlantic black sea bass fishing gear from the escape vent requirement, provides the Regional Director the authority to grant research exemptions from any lobster FMP regulations and/or establish closed areas for research purposes, and finally, distinguishes red crab fishing gear from gear capable of taking lobster. The purpose of the Amendment is to promote fishing efficiency by reducing the incidence of gear conflicts and ensuring that black sea bass and red crab gear are not unnecessarily included in measures intended for the lobster fishery.

DATES: Comments on the proposed rule must be received on or before [insert date 45 days after publication].

ADDRESSES: Comments on the proposed rule, the Amendment 1, or supporting documents should be sent to Mr. Richard Schaefer, Acting Regional Director, National Marine Fisheries Service, Northeast Regional Office, 14 Elm Street, Gloucester, MA 01930-3799. Mark the outside of the envelope "Comments on

Amendment 1 to the Lobster FMP." Copies are available from Mr. Douglas G. Marshall, Executive Director, New England Fishery Management Council, Suntaug Office Park, 5 Broadway, Saugus, MA 01906.

FOR FURTHER INFORMATION CONTACT: Kathi L. Rodrigues, Resource Management Specialist, 617-281-3600, ext. 324.

SUPPLEMENTARY INFORMATION: Background. The FMP was developed by the New England Fishery Management Council in consultation with the Mid-Atlantic Fishery Management Council. The FMP was approved by the Northeast Regional Director of the National Marine Fisheries Service on July 8, 1983. Final regulations to implement the plan were published in the Federal Register on August 10, 1983 (48 FR 36266). A notice of availability for the proposed Amendment was published in the Federal Register on _____, 1986 (51 FR _____).

Amendment 1 proposes to establish a consistent and identifiable gear marking system that will afford mobile gear operators a chance to avoid fixed lobster gear. The need for a gear marking system arises from the increase in utilization of fishery resources by different gear types which, in turn, increases competition and congestion on fishing grounds and results in greater incidence of gear conflicts. The number of vessels participating in the offshore lobster fishery alone has increased by 47% from 1982 to 1984.

Gear conflicts are costly in terms of lost fishing gear and fishing time. The replacement cost of pot/trap gear reported lost or damaged as a result of gear conflicts, and for which claims were filed, averaged almost \$264,000 from 1980 to 1982. Attempts to retrieve and disentangle gear can be dangerous to the vessel and crew.

The minimum marking standards consist of the following: (1) the westernmost end of a lobster trawl must be marked by at least an eight inch standard tetrahedral corner radar reflector and a single flag or pennant; (2)

the easternmost end of a trawl must be marked by at least an 8 inch standard tetrahedral corner radar reflector only. In addition, lobster trawls would be limited to a length of 1-1/2 miles.

Also included in the Amendment is an exemption designed to redress what the Council considers an unnecessary restriction that may have the effect of reducing revenues for the black sea bass fishery. As the current Lobster FMP stands, sea bass traps must be vented according to the same specifications for lobster traps as provided in the lobster FMP. The exemption, limited to black sea bass trap fishermen operating south of Barnegat Light, NJ, and shoreward of the 30 fathom contour, would alleviate the unintended and potentially negative impact of the lobster FMP on a fishery outside of the management unit. The Council has determined that this exemption would have no significant effect on the conservation of the lobster resource.

The Council's determination in favor of this exemption is based on landings data that show that the lobster by-catch from sea bass traps is 1.3% of the total lobster landings taken for the three states involved (New Jersey, Maryland and Virginia). The Council believes that because the amount of lobster by-catch is insignificant compared to directed lobster fishery landings, the impact of the lobster resource as a whole would also be insignificant were black sea bass fishermen allowed to retain their by-catches as before.

Calculations of potential revenue losses to the sea bass fishery are primarily derived from public testimony and state landings records from New York, New Jersey, and Maryland. The landings records reveal a small market category of black sea bass of 7 to 11-1/2 inches that represents 24% of the landings and 8% of the revenue of this fishery. Public testimony from black

sea bass fishermen suggests that this entire small market category would be lost if the venting requirement were to be imposed on the fishery.

The exemption as proposed would allow black sea bass trap fishermen, operating south of Barnegat Light and shoreward of the 30 fathom contour, to become exempt from the escape vent requirement provided that (1) they possess a valid federal lobster permit; (2) their total fishing trap lobster landings do not exceed 100 pounds; and (3) their traps gear is fished in an unbaited condition and all traps are marked so as to identify the owner.

The Amendment further provides authority to the Regional Director, in consultation with the New England Fishery Management Council, to allow exemptions to any of the provisions of the Lobster FMP or to establish closed areas for the purpose of research that will be beneficial to the lobster resource.

The Amendment also draws a distinction between red crab fishing gear operated deeper than 200 fathoms, and gear capable of taking lobsters. All available evidence indicates that the red crab fishery is devoid of any lobster by-catch and operates in an area where there is no mobile gear. Therefore, it should not be subject to the regulations of the lobster FMP. Such restrictions would preclude the operation of an economically viable red crab fishery.

Classification

Section 304(a)(1)(C)(ii) of the Magnuson Act, as amended, requires the Secretary of Commerce (Secretary) to publish regulations proposed by the Council within 30 days of receipt of an amendment and proposed regulations. At this time the Secretary has not determined that the Amendment proposed to implemented by these rules is consistent with the National Standards, other provisions of the Magnuson Act, and other applicable law. The Secretary, in

making that determination, will take into account the data, views and comments received during the comment period.

The Council prepared an environmental assessment for this Amendment and concluded that there will be no significant impact on the environment as a result of this rule. A copy of the environmental assessment may be obtained from the Council at the address given above.

The NOAA Administrator determined that the proposed rule is not a "major rule" requiring a regulatory impact analysis under Executive Order 12291. The proposed rule will result in a net benefit of \$143,000 or more to the lobster industry each year. This figure was obtained by subtracting the worst case fishery-wide initial cost of \$121,000 from the \$264,000 average replacement cost of gear reported lost or damaged in gear conflicts. The venting exemption for sea bass fishermen will prevent an 8% decline to that fishery's revenue. The lobster fishery may experience an increase in landings due to increased efficiency, however, prices and employment should remain the same. Administrative, enforcement, paperwork and recordkeeping requirements are also expected to remain unchanged; and, therefore, there will be no increase in costs to Federal, State, or local government agencies. The Council prepared a regulatory impact review that concludes that the industry will not be adversely affected by the proposed rule. Instead, the Council believes that the rule will enhance competition, productivity, and thus potentially promote investment and innovation in the fishery. A copy of this review may be obtained from the Council at the address listed above.

This proposed rule is exempt from the review procedures of E.O. 12291 under section 8(a)(2) of that order. Deadlines imposed under the Magnuson Act, as amended by P.L. 97-453, require the Secretary to publish this proposed rule within 30 days of its receipt. The proposed rule is being reported to

the Director of the Office of Management and Budget with an explanation why it is not possible to follow the review procedures of the order.

The General Counsel of the Department of Commerce certified to the Small Business Administration that this proposed rule, if adopted, will not have a significant economic impact on a substantial number of small entities because all vessels operating in the fishery will be affected in the same way, and there will be no differential effects. As a result, a regulatory flexibility analysis was not prepared.

This proposed rule does not contain a collection of information requirement for the purposes of the Paperwork Reduction Act.

The Council determined that this rule will be implemented in a manner that is consistent to the maximum extent practicable with the approved coastal zone management program of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Delaware, Maryland, North Carolina, and Virginia. This determination has been submitted for review by the responsible State agencies under Section 307 of the Coastal Zone Management Act.

List of Subjects in 50 CFR Part 649.

Fish, Fisheries, Gear Conflicts

Dated

For the reasons set out in the preamble, 50 CFR Part 649 is proposed to be amended as follows:

PART 649 - [AMENDED]

1. The Authority citation for 50 CFR Part 649 is as follows:

Authority: 16 U.S.C. 1801 et seq.

2. In §649.2, the definition of "Exclusive Economic Zone" (EEZ) is added alphabetically as follows:

§649.2 Definitions.

* * * * *

Exclusive Economic Zone (EEZ) 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 each point of which is 200 nautical miles from the baseline from which the territorial sea is measured.

* * * * *

3. The section heading for §649.21 is revised to read as follows:

§649.21 Gear identification, marking and escape vent requirements.

4. Section 649.21(a) is revised by replacing the paragraph heading "Marking" with "Identification", and by deleting the phrase "Effective January 1, 1985.."

5. Section 649.21 is revised by inserting a new paragraph (b) to read as follows:

(b) **Marking.** In the areas of the EEZ described in subparagraph (b)(4) below, lobster pot trawls are to be marked as follows:

- (1) Lobster pot trawls of three or less pots must be marked with a single buoy;

(2) Lobster pot trawls consisting of more than three pots must have a radar reflector and a single flag or pennant on the westernmost end (marking the half compass circle from magnetic south through west to and including north), while the easternmost end (meaning the half compass circle from magnetic north through east to and including south) of a lobster trawl must be marked with a radar reflector only. Standard tetrahedral corner reflectors (Figure 1) of at least 8 inches must be employed;

(3) No lobster pot trawl shall exceed 1.5 miles in length as measured from buoy to buoy.

(4) Gear marking requirements apply in the following areas:

(1) Gulf of Maine. All waters of the EEZ north of 42°20'N latitude seaward of a line drawn 12 miles from the baseline of the territorial sea;

(ii) Georges Bank. All waters of the EEZ south of 42°20'N latitude and east of 70°00'W longitude or the outer boundary of the territorial sea, whichever lies further east;

(iii) Southern New England. All waters of the EEZ west of 70°00'W longitude, east of 71°30'W longitude and seaward of the 25 fathom depth contour; and

(iv) Mid-Atlantic. All waters of the EEZ west of 71°30'W longitude and seaward of the 40 fathom depth contour.

6. Section 649.21(b) is now designated paragraph (c) and is revised to include the vent exemption provisions. Paragraph symbols have been renumbered accordingly. The text of this paragraph reads as follows:

(c) Escape Vents. (1) All lobster traps or traps capable of taking lobster that are deployed in the EEZ or possessed by a person whose vessel is fishing in the EEZ, unless exempted as described in (2) below, must be constructed to include one of the following escape vents in the parlor section

of the trap. The vent must be located in such a manner that it would not be blocked or obstructed by any portion of the trap, associated gear, or the sea floor in normal use.

(1) A rectangular portal with an unobstructed opening not less than 1-3/4 inches (44.5 mm) by 6 inches (152.5 mm);

(ii) Two circular portals with unobstructed openings not less than 2-1/4 inches (57.2 mm) in diameter; or

(iii) Any other vent certified by the Regional Director to release a substantial number of lobsters under 3-3/16 inches carapace length from the trap.

(2) The Regional Director may exempt traps capable of taking lobsters, either being fished or in possession, from the venting requirement under the following conditions:

(i) The traps are fished in a unbaited condition;

(ii) The traps are deployed in the area south of Barnegat Light, NJ (south of LORAN C 9960-Y-43300), seaward of the outer boundary of the territorial sea, and within the 30 fathom depth contour; and

(iii) The by-catch of lobster may not exceed 100 pounds per trip.

7. Section 649.21(c) is now designated paragraph (d) and revised as follows:

(d) Enforcement Action. Unmarked, unvented, or improperly vented traps, unless exempted under the terms of §(c)(2) of this Section, will be seized and disposed of at the discretion of the Regional Director.

8. A new §649.22 is added and reads as follows:

§649.22 Research and Educational Exemption.

(a)(1) The Regional Director with the concurrence of the New England Fishery Management Council may exempt any person or vessel from the

requirements of this part for the conduct of research or education beneficial to the lobster resource or lobster fishery. The Regional Director may not grant such exemption unless he determines that it is consistent with the objectives of the American Lobster Fishery Management Plan and with provisions of the Magnuson Act and other applicable law and that granting the exemption will not:

(1) have a detrimental affect on the lobster resource and fishery.

(ii) create significant enforcement problems.

(2)(i) The Regional Director with the concurrence of the New England Fishery Management Council may close an area of the FCZ to lobster fishing for the conduct of scientific research provided that such closure will not

(A) increase gear conflicts

(B) interfere significantly with common fishing practices.

(3)(i) If an exemption under (a)(1) or an area closure under (2)(i) is under consideration for an area within the Mid-Atlantic Fishery Management Council fishery conservation zone, then the Regional Director will seek the concurrence of the Mid-Atlantic Fishery Management Council prior to authorizing any regulatory exemption or establishing any closed area to lobster fishing.