

**AMENDMENT #1**  
**FOR THE**  
**FISHERY MANAGEMENT PLAN**

**FOR THE**  
**BOTTOMFISH AND SEAMOUNT GROUND FISH FISHERIES**  
**OF THE**  
**WESTERN PACIFIC REGION.**

**JUNE 1987**

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## 1.0. RESPONSIBLE AGENCIES

The Western Pacific Regional Fishery Management Council (the Council) was established under the Magnuson Fishery Conservation and Management Act (MFCMA) to develop Fishery Management Plans (FMPs) and amendments to FMPs for fisheries in the U.S. Exclusive Economic Zone (EEZ) around Hawaii, the territories (American Samoa, Guam) and possessions of the United States in the Pacific Ocean (see Figure 1). After a FMP or an amendment is approved by the Secretary of Commerce, it is implemented by Federal regulations and is enforced by the National Marine Fisheries Service (NMFS) and the U.S. Coast Guard in cooperation with state and territorial agencies.

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## 2.0. EXISTING REGULATIONS

The FMP for Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region was prepared by the Council principally to establish a framework for managing the bottomfish fisheries within the U.S. EEZ around Hawaii, American Samoa, and Guam and the seamount groundfish fisheries in the EEZ around Hancock Seamounts northwest of the Northwestern Hawaiian Islands (NWHI). The FMP became effective on August 27, 1986. The framework FMP is largely an administrative procedure which describes the processes by which the fishery will be managed and which establishes the limits and controls within which regulatory adjustments may be made. A set of heavily-fished bottomfish species is routinely monitored by a Plan Monitoring Team appointed by the Council and a set of indicators provides the basis for further investigation or recommendations for action on the part of the Regional Director through a rule-related notice system. The types of actions that could occur include establishing catch limits, size limits, area/season closures, fishing effort limitations, fishing gear restrictions, permit and/or catch reporting requirements, and access limitation. Of these, the Council is presently focusing most of its attention on an access limitations program for the NWHI. The Plan Monitoring Team is required to conduct an annual review of the bottomfish fisheries in each island area under the jurisdiction of the Council with emphasis on key "performance" indicators which raise management concerns. Annual Reports are due by March 31 of each year.

The framework FMP also established a prohibition of bottom trawl and bottom-set nets for taking bottomfish, a ban on the use of explosives and poisons for harvesting bottomfish, established a federal permit requirement for fishing for bottomfish in the EEZ of the NWHI, and established a moratorium on seamount groundfish fishing activities for an initial period of six years.



### 3.0 ACCESS LIMITATION PROPOSAL FOR THE NWHI

In response to requests from a number of NWHI bottomfish fishermen, the Council initiated planning and research into the possibility of using access management measures for the NWHI bottomfish fishery. The Council also formally established August 7, 1985 as the "cut-off" date, should an access management program be implemented in the NWHI in the future. The "cut-off" date was adopted to prevent an influx of speculative entrants into the NWHI bottomfish fishery while the Council explored adopting a limited access management option. The third round of public hearings and meetings on a limited entry program for the NWHI bottomfish fishery was held in Honolulu, Hawaii on May 18, 1987. The Council subsequently voted (unanimously) to accept this proposal during its 57th meeting on June 4, 1987, and to send it to the Secretary of Commerce for official review and approval.

The first of these is the question of the origin of the human race. It is generally admitted that the human race is descended from a common ancestor, but the question of the exact nature of this ancestor is still a matter of dispute. Some authorities believe that the human race is descended from a single pair of individuals, while others believe that it is descended from a number of different pairs. The second question is the question of the development of the human race. It is generally admitted that the human race has developed from a lower state to a higher state, but the question of the exact nature of this development is still a matter of dispute. Some authorities believe that the human race has developed from a lower state to a higher state, while others believe that it has developed from a higher state to a lower state. The third question is the question of the distribution of the human race. It is generally admitted that the human race is distributed throughout the world, but the question of the exact nature of this distribution is still a matter of dispute. Some authorities believe that the human race is distributed throughout the world, while others believe that it is distributed only in certain parts of the world.

#### 4.0 ACCESS LIMITATION FOR AMERICAN SAMOA AND GUAM

In response to concerns of American Samoa and Guam representatives on the Council regarding maintaining future stability of the fragile bottomfish resources in American Samoa and Guam, the Council approved the development of limited access proposals for these areas and established May 30, 1986 as a "cut-off" date should access management programs be implemented in the future in American Samoa and Guam.



## 5.0 PROPOSED ACTIONS

Amendment #1 for the FMP for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region is intended to:

1. Include limited access measures for controlling fishing for bottomfish in the U.S. EEZ surrounding American Samoa and Guam within the "framework" approach of the FMP as is now the case with the NWHI; and
2. Extend the due date of the Annual Report for the Bottomfish Fisheries of the Western Pacific Region from March 31 to June 30 of each year.





## **6.0 NEED FOR THE PROPOSED ACTIONS**

### **6.1 Include American Samoa and Guam Under the Framework Approach for Limited Access Purposes**

#### **6.1.1 Distribution of Bottomfish Habitat Between the EEZ and Territorial Waters in American Samoa and Guam**

Bottomfish stocks are a primary example of a transboundary resource which occurs in the territorial sea as well as in the EEZ. An estimated 57% of the charted bottomfish habitat in the western Pacific region is within the EEZ and thus is subject to federal management authority. However, most of the bottomfish habitat and most of the catch of bottomfish in American Samoa and Guam at present is harvested in the territorial sea rather than in the EEZ. There are, however, some bottomfish areas in federal waters adjacent to American Samoa and Guam. In American Samoa, for example, there are five recently-charted banks in the EEZ lying some 20 to 35 nautical miles east and south of Tutuila (Figure 5). These banks are being fished at present, and they make up about 20% of the known bottomfish habitat in American Samoa. There are also bottomfish banks 15 to 30 nautical miles south of Guam which are in the EEZ (Figures 7 and 8) and bottomfish have been exploited there in the past and are being exploited there at present. The Galvez and Santa Rosa Banks account for about one third of the bottomfish habitat in Guam.

#### **6.1.2 Provide for Consistency in Territorial/Federal Management for Bottomfish**

The Government of American Samoa is exploring limiting access to fisheries inside its territorial sea, and the proposed action would give the Federal Government the needed flexibility to adopt complementary rules for limiting access to fish for bottomfish on the banks in the EEZ as well. This action would be needed to close a loophole which fishermen could exploit. In the absence of a limited access program for the EEZ, non-permitted fishermen could fish for bottomfish in territorial waters and claim that their catch was made in the unregulated waters of the EEZ thereby circumventing Samoa's limited access program when it becomes established. The Territory of Guam might also adopt a limited access program in the future. This amendment would bring consistency to Territorial and Federal programs for managing transboundary bottomfish resources which occur in the territorial sea of American Samoa and Guam as well as in the U.S. EEZ.

#### **6.1.3 Smallness of the Resources and Their Vulnerability to Overfishing**

Yield estimates in the western Pacific bottomfish fishery can be derived on the basis of a yield per unit of bottomfish habi-

tat. As bottomfish are concentrated along the submarine drop-off zones centered around the 100-fathom isobath, the length of the 100-fathom isobath around an island or bank can be used as an index of bottomfish habitat rather than an area measure which is difficult to compute for the steep sloped Pacific islands.

Based on research conducted by the National Marine Fisheries Service (NMFS) in the Mariana Islands, an estimated yield of 403 lbs. of bottomfish per year per nautical mile of 100-fathom isobath appears to be representative of the maximum sustainable yield (MSY) that can be expected from bottomfish resources of tropical islands in the Pacific. Applying this figure to the estimated length of the bottomfish habitat in American Samoa and Guam, an approximate estimate of maximum sustainable yield of bottomfish can be derived for each area (Table 1).

<p style="text-align: center;"><b>TABLE 1</b></p> <p style="text-align: center;"><b>EXTENT OF APPROXIMATE BOTTOMFISH HABITAT AND YIELD FOR AMERICAN SAMOA AND GUAM</b></p>		
Island Area	Approximate Length of 100-Fathom Isobath	Approximate Maximum Sustainable Yield (MSY) of Bottomfish
	<u>nautical miles</u>	<u>lbs</u>
American Samoa and offshore Banks	196	78,988
Guam and offshore Banks	138	55,614

Thus, American Samoa, with an approximate length of 100-fathom isobath of 196 nautical miles, can expect a MSY of 79,000 lbs. per year from its deep slope bottomfish fishery. Similarly, the fishery for bottomfish in Guam could expect an MSY of 56,000 pounds per year. It would take less than eight boats in American Samoa and less than half a dozen in Guam to fish the bottomfish resources beyond their MSY levels with each vessel averaging less than only 10,000 pounds of bottomfish catches per year. Due to the limited habitat area for bottomfish in Guam and American Samoa, it is easy to heavily fish the deep slope bottomfish resources, and it will probably be necessary to regulate entry into the bottomfish fisheries in American Samoa and Guam with the influx of new vessels. Adopting the proposed action would give the Council needed flexibility to explore and design limited access proposals for the bottomfish

fisheries in the EEZ of American Samoa and Guam in concert with limited access programs developed by the Territories for their territorial waters.

#### 6.1.4 Harvest Capacity of Long-Range Boats

About a decade ago there was a concerted push in Hawaii to develop a high seas albacore tuna troll fishery in the north west Pacific beyond Midway Island. Very good albacore catches were made, but the experiment, nevertheless, failed because the cannery in Honolulu closed. Quite a few of the West Coast albacore vessels decided to stay in Hawaii and some of them are now fishing for bottomfish.

Fishing trials for albacore tuna were conducted last year in the South Pacific. Eight West Coast trollers collaborated with the Honolulu Laboratory of the NMFS and with the New Zealand Government fisheries agency in carrying out the fishing trials. The results were phenomenal. Some of the boats reported making the best catches ever. There are rumors that as many as 40 albacore boats will be coming down to the South Pacific next year. This has spawned fears in American Samoa that some of these boats will fish for bottomfish after the albacore season is over. An approximate MSY of only 79,000 lbs of bottomfish in American Samoa really cannot be shared much beyond the Samoans. At a price of \$2.25 per pound for bottomfish in American Samoa, the MSY would be valued at slightly more than \$175,000, which is not very much money to spread among American Samoa fishermen, much less to share with outsiders. The fear among Samoan fishermen is heightened when they learn that some long-range bottomfishing boats in the Northwestern Hawaiian Islands have a capacity to harvest 60,000 - 100,000 pounds of bottomfish per year. If this is so, then it is conceivable that a single boat can take the entire MSY of bottomfish in American Samoa. Likewise for Guam. Viewed in these stark terms, limited access has much appeal.

#### 6.2 Extend the Due Date of the Annual Report

Regulations presently in effect require the Bottomfish Monitoring Team to prepare an annual report on the fishery by March 31 of each year containing information on the previous year covering the bottomfish fisheries operating in the Northwestern Hawaiian Islands, the main Hawaiian Islands, American Samoa and Guam. It has not been possible for the Bottomfish Monitoring Team to prepare an Annual Report by the March 31 deadline because a reasonably large portion of the fisheries data regarding bottomfish is not yet available in a format suitable for computer "crunching" by March 31. The "data availability" problem would be solved in large part by extending the due date of the Annual Report by a quarter -- from March 31 to June 30 of each year.



## 7.0 PUBLIC REVIEW AND COMMENT

The Council conducted public hearings on this Amendment as follows:

<u>Date</u>	<u>Time</u>	<u>Location</u>
May 11, 1987	4:30 p.m.	Office of Marine and Wildlife Resources of American Samoa Pago Pago, American Samoa
May 18, 1987	7:00 p.m.	National Marine Fisheries Service Kewalo Basin Facility 1125 B Ala Moana Blvd. Honolulu, Hawaii
May 20, 1987	7:00 p.m.	Guam Legislative Session Hall 165 Chalan Santo Papa Juan Pablo Des (Jon Paul II Street)

The consensus opinion among fishermen who spoke up at the public hearings favored adopting Amendment #1. American Samoan fishermen, in particular, supported the amendment as a precautionary measure. The bottomfishing grounds in the EEZ around American Samoa are extremely limited, and entry of large boats could quickly overfish bottomfish in the area.



## 8.0 ALTERNATIVE CONSIDERED BUT REJECTED

### 8.1 Do Nothing

There is nothing in the FMP or in the implementing regulations that would prevent the Council from developing an amendment for a limited access program for bottomfish in the EEZ surrounding American Samoa and Guam. The Council has this option, and this amendment will not affect this option in any way. The Council, however, also wants more flexibility in instituting limited access programs for the EEZ of American Samoa and Guam should the need arise rapidly to do so. The framework scheme established by the FMP should provide the timeliness and flexibility of response the Council believes necessary for effective management of bottomfish resources in these areas. The framework process allows the Council and the Regional Director to implement regulatory measures more rapidly than would be possible through the plan amendment process. The Council therefore, has prepared this amendment to give it more flexibility for action. Because limited entry for American Samoa and Guam was not specifically presented as an issue in the FMP and regulations, the Council's legal counsel advised that a plan amendment would be needed to bring American Samoa and Guam into the framework process for limited entry purposes. Doing nothing would not give the Council the flexibility that it wants on this issue.

Doing nothing would also result in a technical violation of the regulations with regard to the due date of the Annual Report on the fishery.





## **9.0 RELATIONSHIP TO OTHER LAWS AND POLICIES**

This amendment is purely procedural and is simply a fine-tuning or a minor adjustment of the framework FMP. The amendment does not relate in any way to other laws and policies nor does it affect any agency beyond the Council in any way.



## 10.0 LIST OF PREPARERS

This amendment was prepared by Council staff. It was reviewed by the Plan Monitoring Team and the Scientific and Statistical Committee and it was approved by the Council. All have recommended that the amendment go forward.

1

## 11.0 PROPOSED AMENDMENT OF FMP REGULATIONS

Subpart B - Management Measures of Section 11.0, Rules and Regulations, of the FMP (March 1986) is revised to read as shown below. The symbol        means deleted. Bold print means inserted.

### 683.24 Framework for Regulatory Adjustments

#### (d) Access Limitation Procedures ~~(limited to NWHI only)~~

- (1) If access limitation is proposed for adoption or subsequent modification through the process described in this subsection, the following requirements must be met:
  - (i) The bottomfish monitoring team must consider and report to the Council on present participation in the fishery; historical fishing practices in, and dependence on, the fishery; economics of the fishery; capability of fishing vessels using the fishery to engage in other fisheries; cultural and social framework relevant to the fishery; and any other relevant considerations;
  - (ii) Public hearings held specifically addressing the limited access proposal(s);
  - (iii) Creation ~~in the limited access limitation system~~ of a specific advisory subpanel of persons experienced in the ~~Hawaii~~ fishing industry ~~(for Hawaii measures)~~ to advise the Council and the Regional Director on administrative decisions; and
  - (iv) Council's recommendation to the Regional Director must be approved by a two-thirds majority of the voting members.
- (2) If prior participation in the fishery is used as a factor in any access limitation system recommended by the council, August 7, 1985 is the date selected by the Council as the date to be used for the NWHI and May 30, 1986 for American Samoa and Guam.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
JANUARY 1950

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES  
OF THE UNIVERSITY OF CHICAGO

Very respectfully,  
Yours truly,  
[Signature]  
[Name]  
[Address]  
[City, State, Zip]

Enclosed for the Board of Trustees are two copies of a report  
on the progress of the work of the Department of Chemistry  
during the year 1949-1950. The report is in two parts,  
one of which is a summary of the work of the Department  
and the other is a detailed account of the work of the  
Department during the year.

I am, Sir, very respectfully,  
Yours truly,  
[Signature]  
[Name]  
[Address]  
[City, State, Zip]

## 12.0 LIST OF FIGURES

Figure 1: Boundaries of the Exclusive Economic Zone (EEZ) around Hawaii, American Samoa, Guam, and the Northern Mariana Islands, and U.S. Possessions in the Pacific.

Figure 2: Boundaries of the Exclusive Economic Zone (EEZ) Around American Samoa.

Figure 3: Principle Banks and Fisheries of Tutuila Island and the Manua Islands, American Samoa.

Figure 4(A): Generalized Map of Major Bottomfish Grounds of Tutuila Island, American Samoa.

Figure 4(B): Generalized Map of Major Bottomfish Grounds of Ofu and Olosenga Islands, American Samoa.

Figure 4(C): Generalized Map of Major Bottomfish Grounds of Tau Island, American Samoa.

Figure 4(D): Generalized Map of Major Bottomfish Grounds of Swains Island, American Samoa.

Figure 4(E): Generalized Map of Major Bottomfish Grounds of Rose Island, American Samoa.

Figure 5: Location of Banks Relative to Tutuila and the Islands of the Manua Group, American Samoa.

Figure 6: Boundaries of the Exclusive Economic Zone (EEZ) Around Guam and the Mariana Islands.

Figure 7: Principal Banks and Fisheries of Guam.

Figure 8(A): Generalized Map of Major Bottomfish Grounds of Guam.

Figure 8(B): Generalized Map of Major Bottomfish Grounds of Galvez Bank and Santa Rosa Bank, Guam.





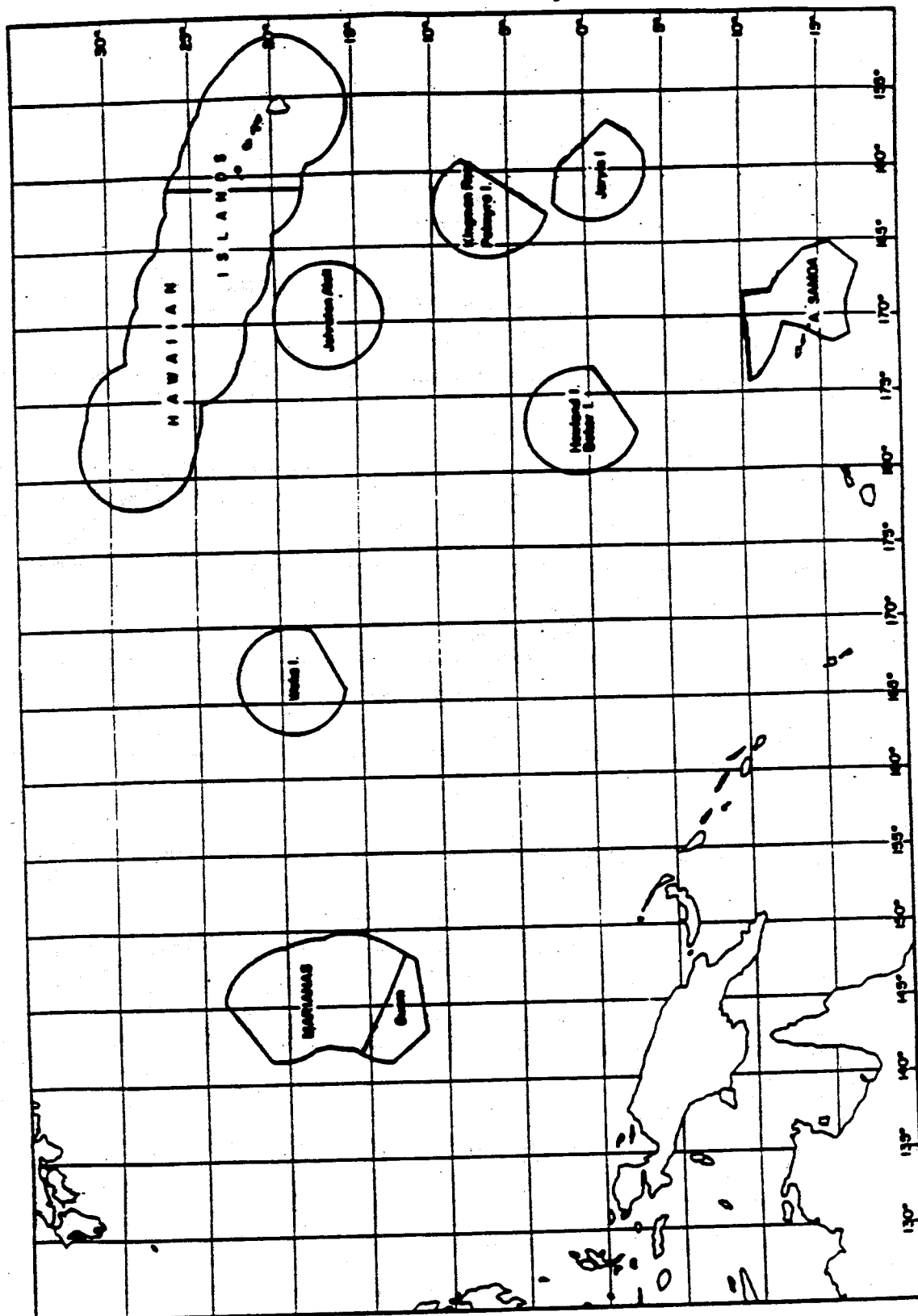


FIGURE 1. Boundaries of the U.S. Exclusive Economic Zone (EEZ) around Hawaii, American Samoa, Guam, the Northern Mariana Islands, and U.S. possessions.

(Source: National Marine Fisheries Service, NOAA Technical Memorandum, May 1980).

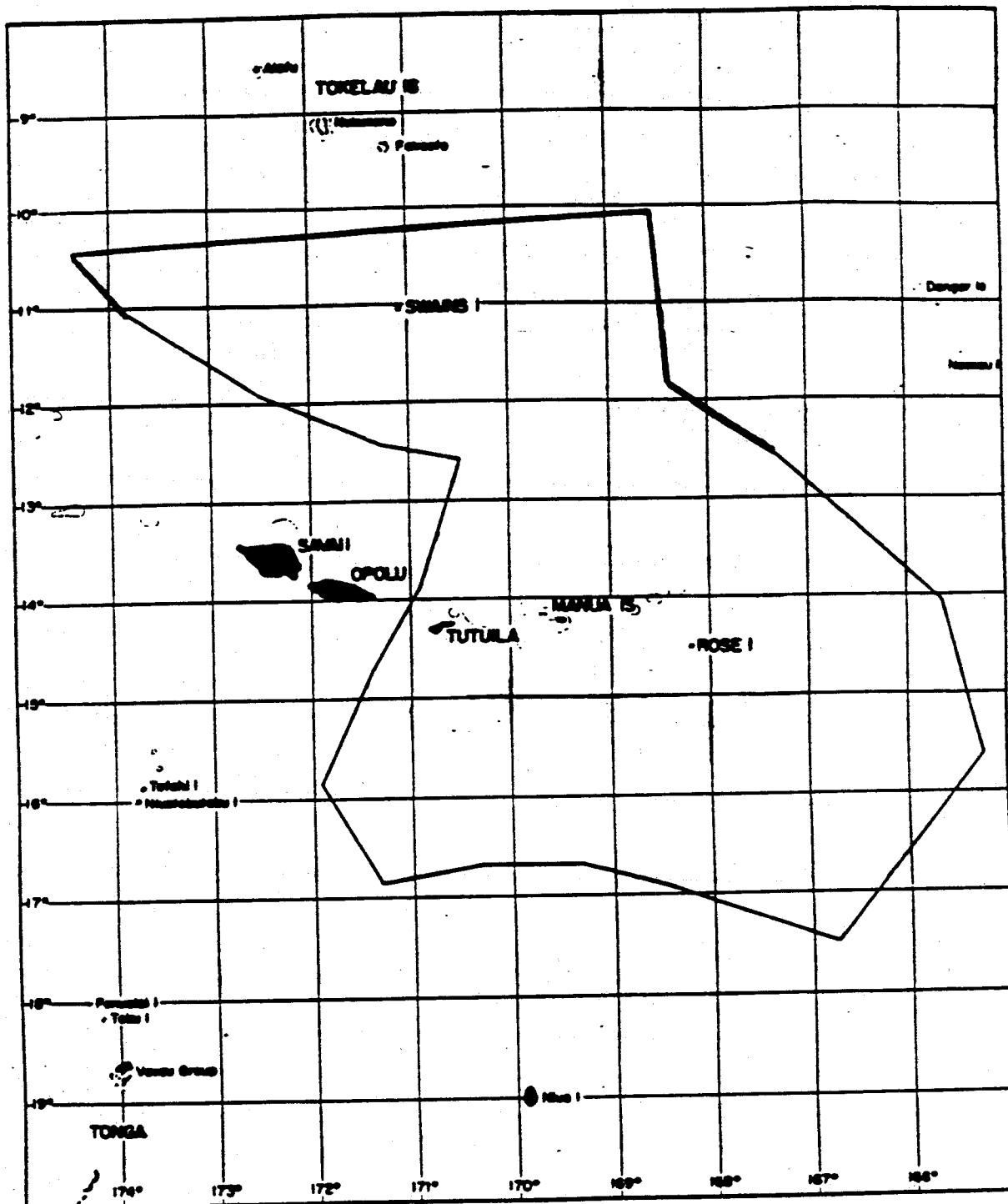


FIGURE 2. Boundary of the U.S. Exclusive Economic Zone (EEZ) around American Samoa

(Source: National Marine Fisheries Service, NOAA Technical Memorandum, May 1980).

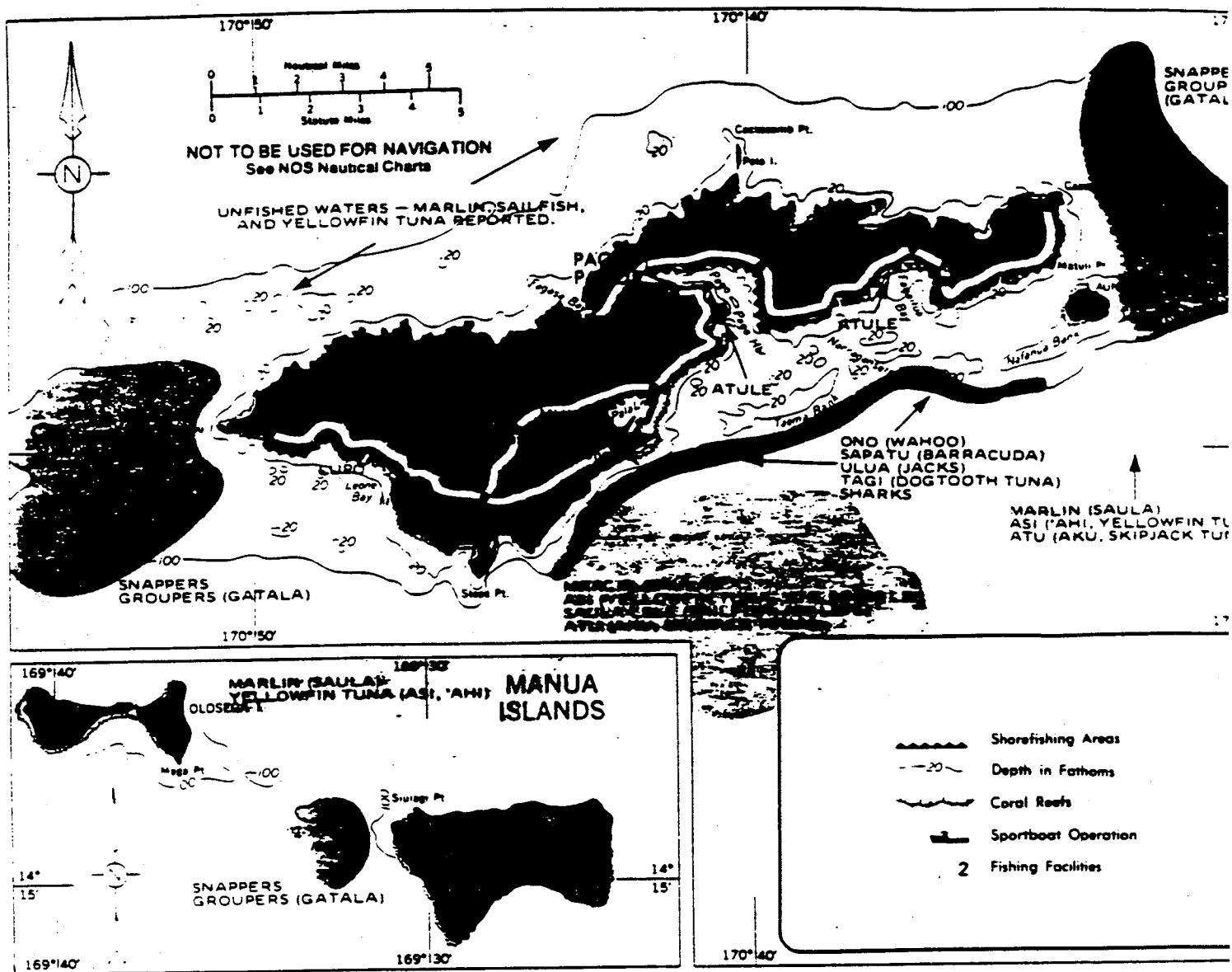


FIGURE 3. Principal Banks and Fisheries of Tutuila Islands and the Manua Islands, American Samoa

(Source: National Marine Fisheries Service, Anglers' Guide to the U.S. Pacific Coast November 1977).

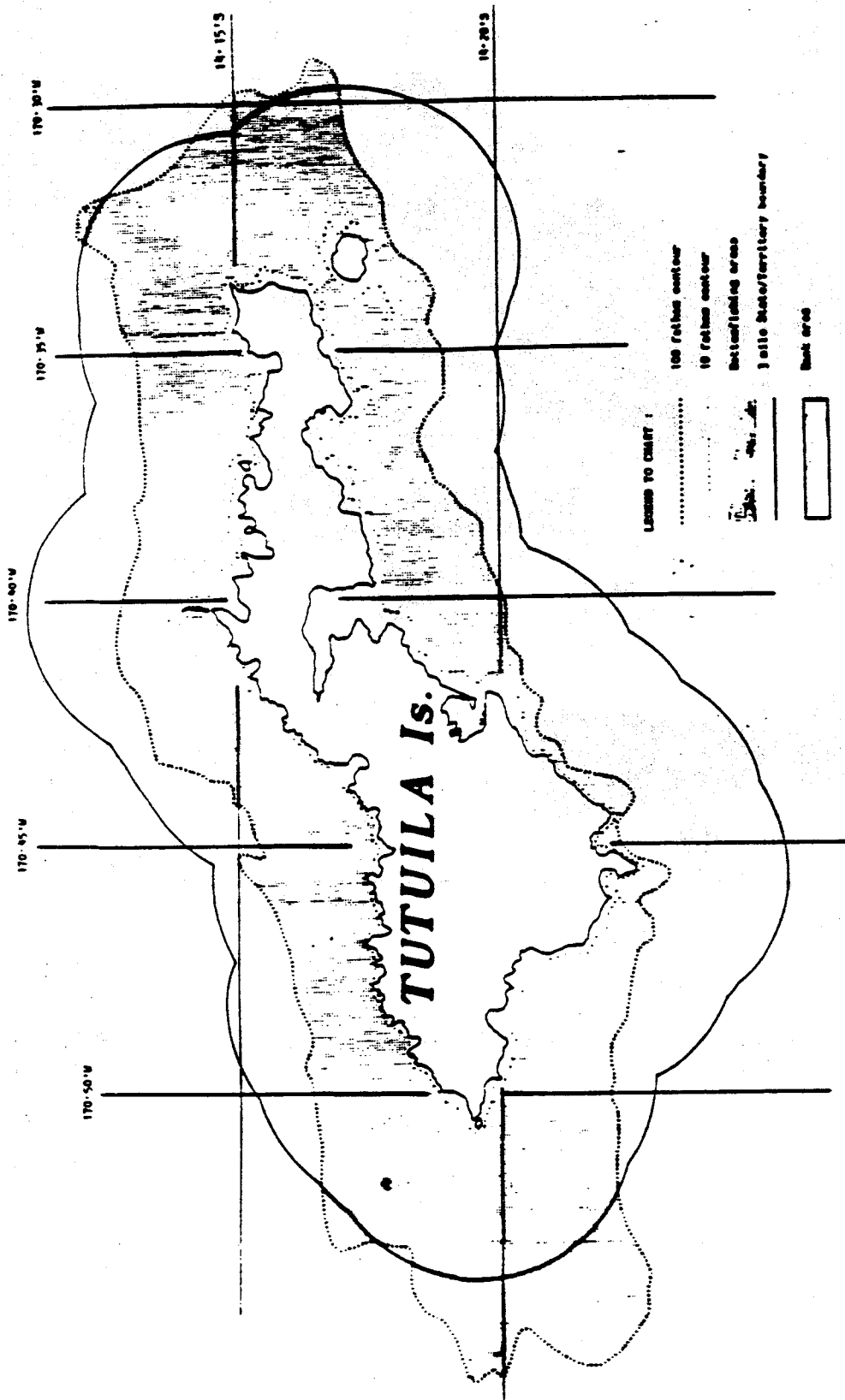


FIGURE 4.A. Generalized Map of Major Bottomfish Grounds of Tutuila Island, American Samoa  
 (Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, March 1986).

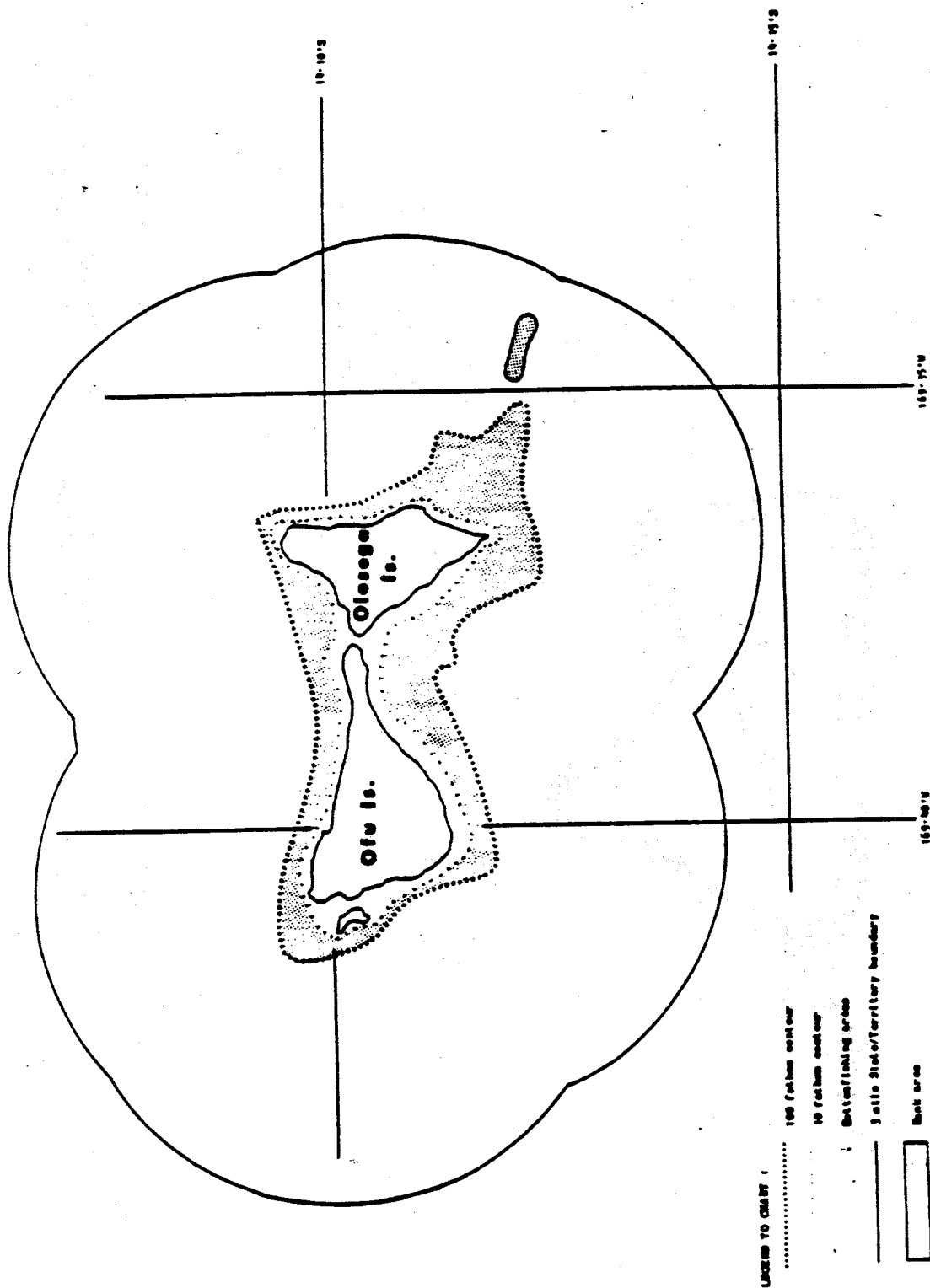


FIGURE 4.B. Generalized Map of Major Bottomfish Grounds of Ofu and Olosega Islands, American Samoa

(Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish

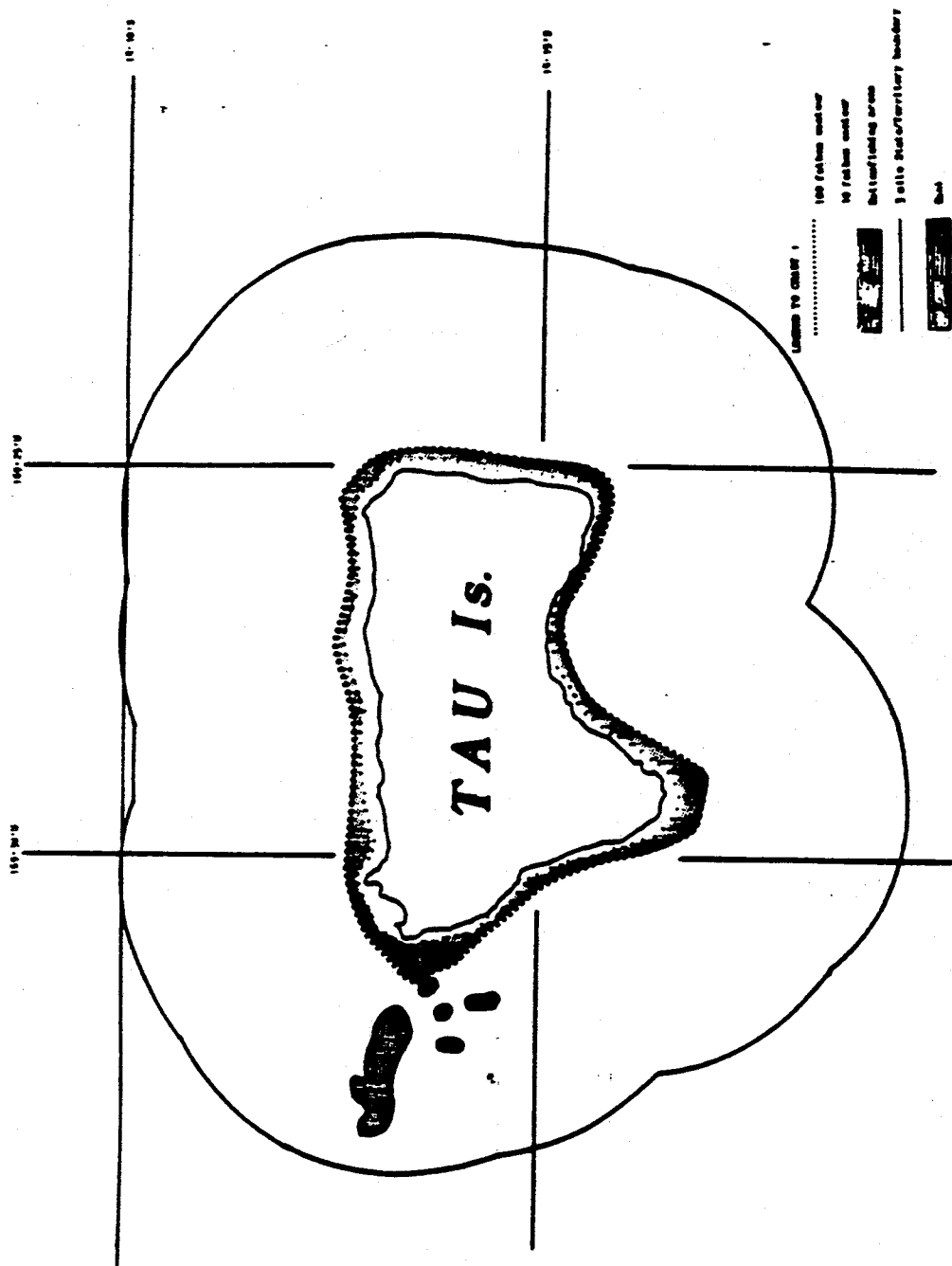


FIGURE 4.C. Generalized Map of Major Bottomfish Grounds of Tau Island, American Samoa

(Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, March 1986).

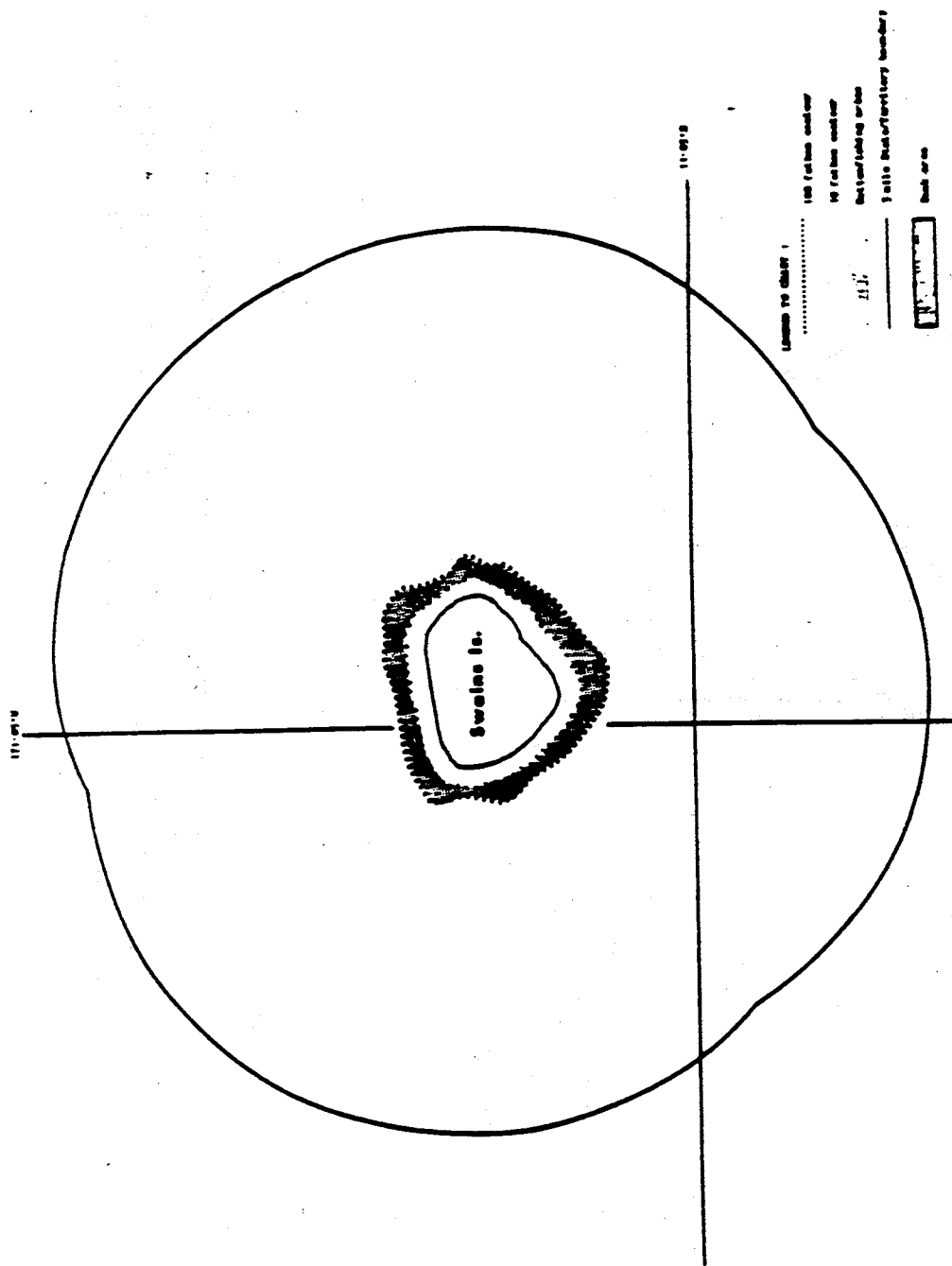


FIGURE 4.D. Generalized Map of Major Bottomfish Grounds of Swains Island, American Samoa  
 (Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish  
 and Seamount Groundfish Fisheries of the Western Pacific Region, March 1986).

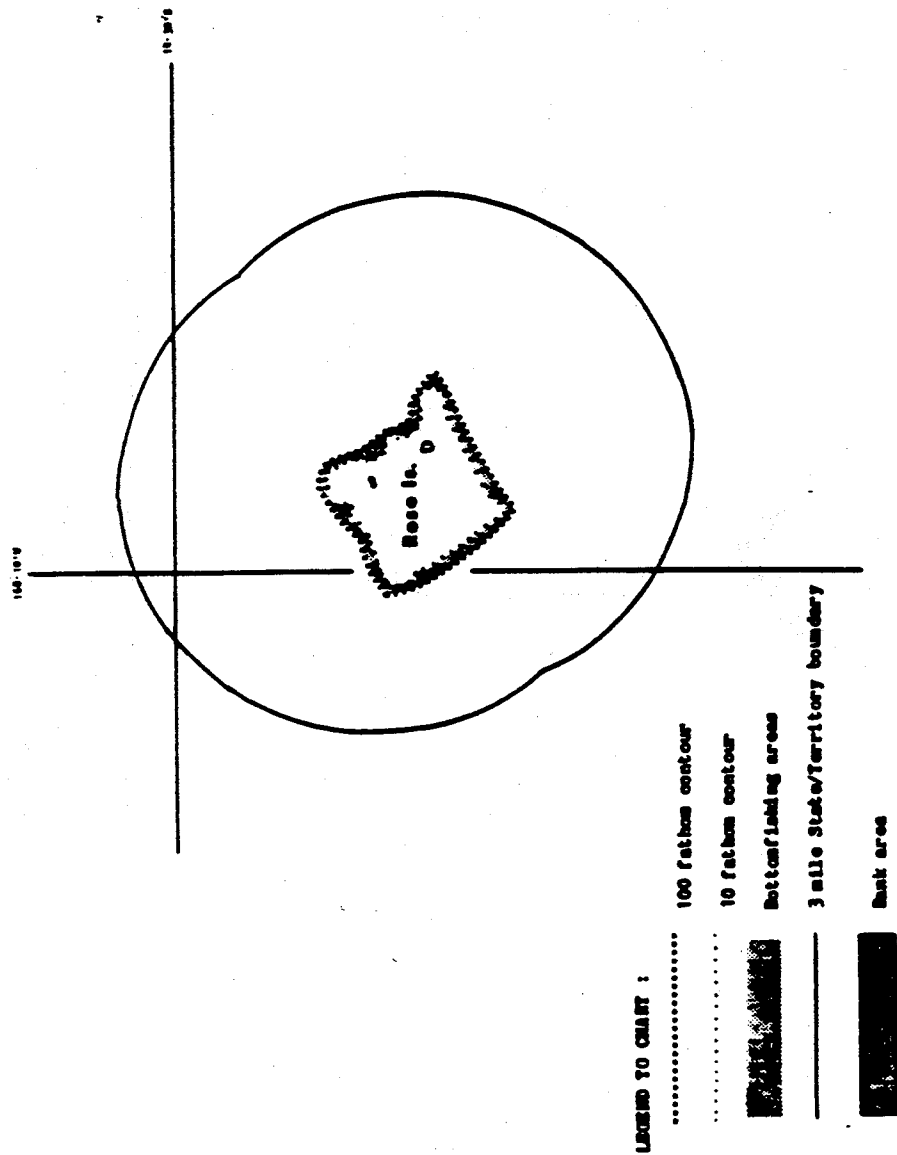


FIGURE 4.E. Generalized Map of Bottomfish Grounds of Rose Island, American Samoa.

(Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, March 1986).



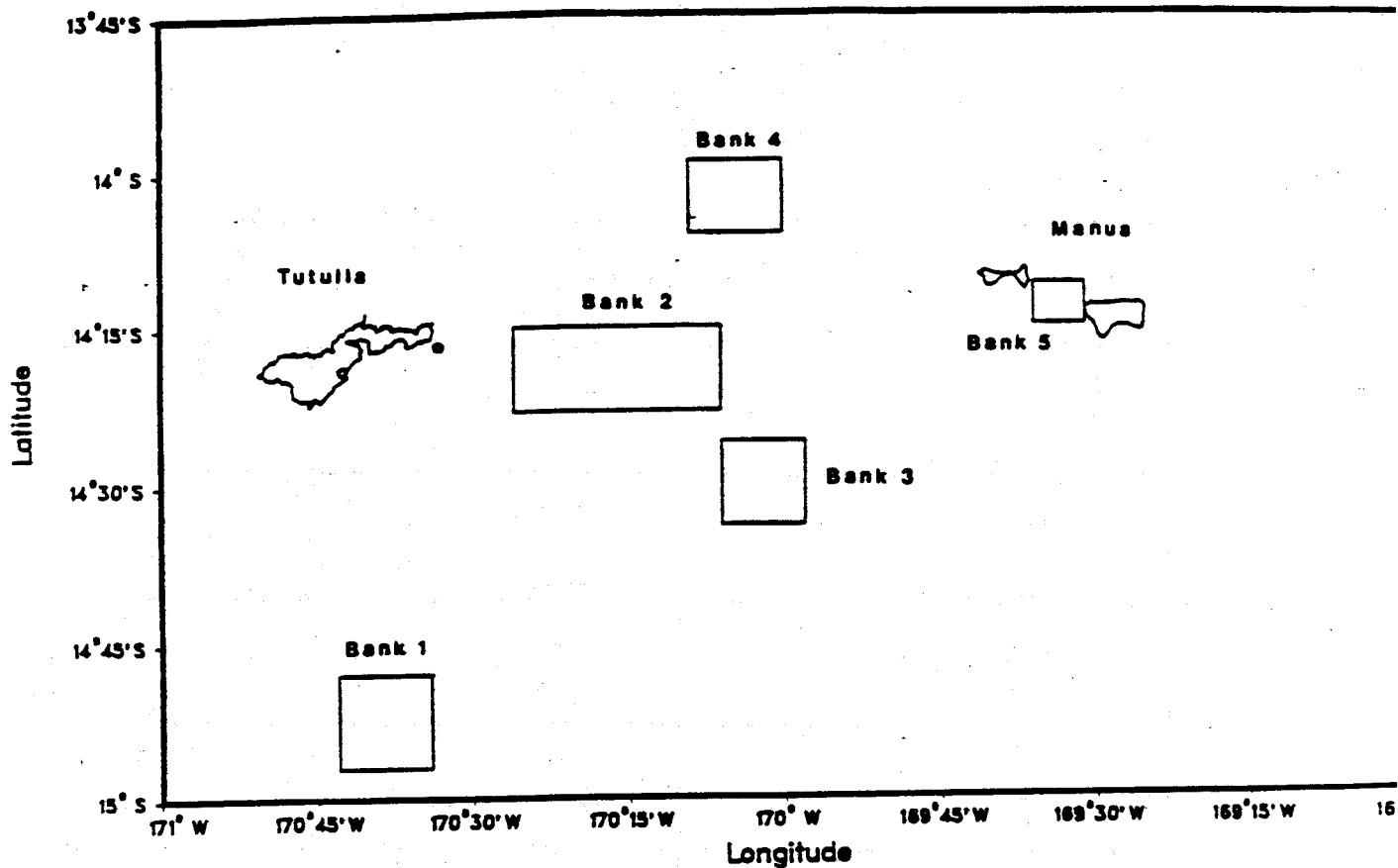


FIGURE 5. Location of Banks Relative to Tutuila Island and the Islands of the Manua Group, American Samoa

(Source: National Marine Fisheries Service, Administrative Report W-86-15, August 1986).

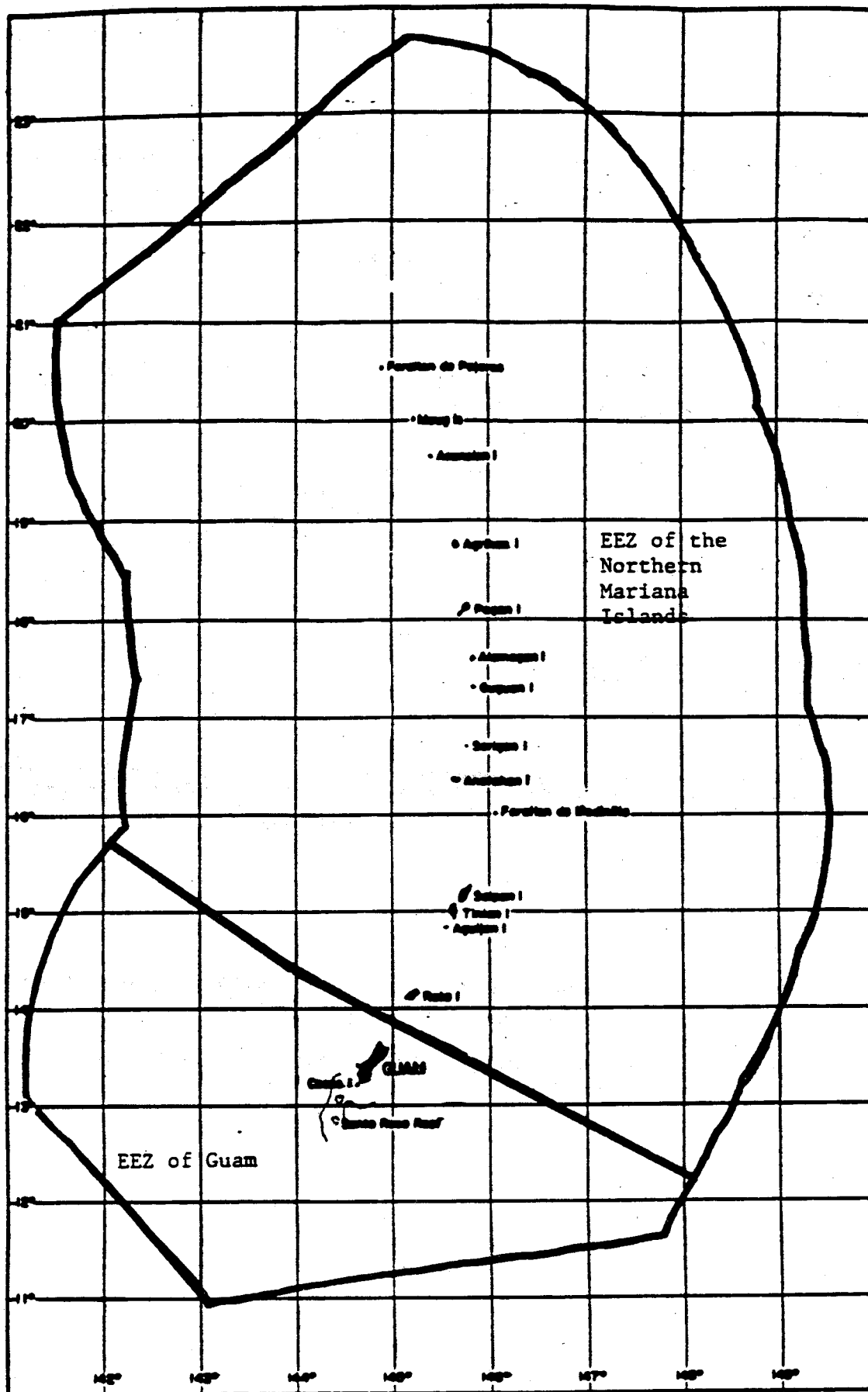


FIGURE 6. Boundaries of the U.S. Exclusive Economic Zone (EEZ) around Guam and the Northern Mariana Islands.

(Source: National Marine Fisheries Service, NOAA Technical Memorandum, May 1981).



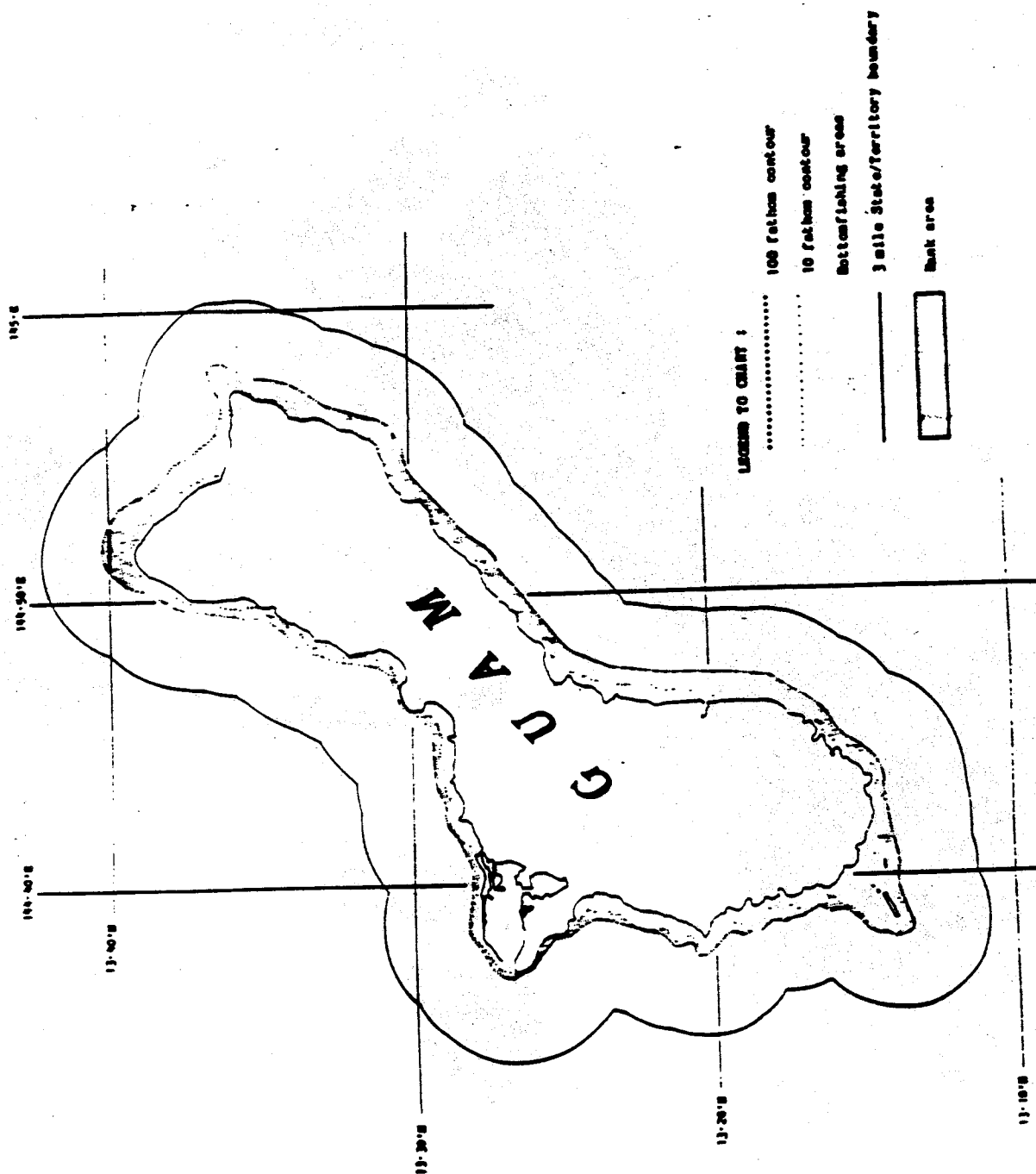


FIGURE 8.A. Generalized Map of Bottomfish Grounds of Guam.

(Source: Western Pacific Fisheries Management Council Fisheries Management Plan for the Bottomfish and Seamount Roundfish Fisheries of the Western Pacific Region)

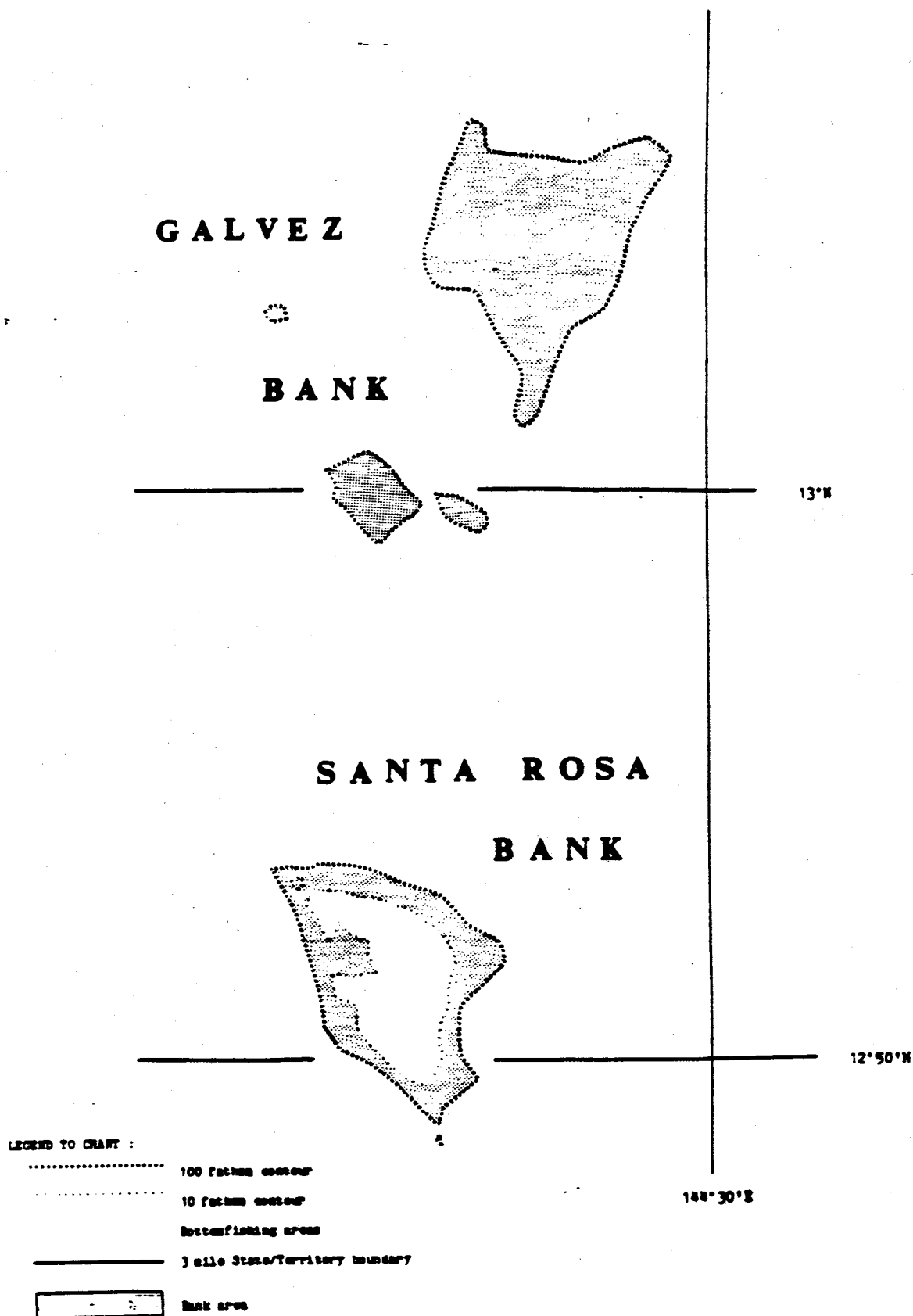


FIGURE 8.B. Generalized Map of Bottomfish Grounds of Galvez Bank and Santa Rosa Bank, Guam.

(Source: Western Pacific Fishery Management Council Fishery Management Plan for the Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, March 1986).

