



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

263 13<sup>th</sup> Avenue South

St. Petersburg, Florida 33701-5505

(727) 824-5305; FAX (727) 824-5308

<http://sero.nmfs.noaa.gov>

F/SER25:PH

Dr. Steve Bortone  
Gulf of Mexico Fishery Management Council  
2203 North Lois Avenue  
Suite 1100  
Tampa, Florida 33607

JAN 15 2010

*Steve*  
Dear ~~Dr.~~ Bortone:

NOAA's National Marine Fisheries Service requests the Gulf of Mexico Fishery Management Council (Council) review the enclosed Exempted Fishing Permit (EFP) application for review at the February 2010 Council meeting. The EFP proposal was submitted by Mr. Thomas Haugen, a commercial reef fish fisherman, to study the effectiveness of a size-selective fish trap of his design. The EFP, if approved by the Council, would allow the applicant to harvest fish under his commercial reef fish permit and individual fishing quota allocation for one year when testing his fish trap.

The primary purpose of this gear testing is to provide detailed information of the selectivity of captures using Mr. Haugen's size-selective fish trap. This trap has an adjustable entrance and exit. By adjusting the width of these openings, fish wider than the entrance should be excluded from the trap and undersized fish can leave the trap before or during the time the trap is retrieved through the exit. Should this gear prove effective, fishermen may be able to selectively harvest certain sizes or species of reef fish and reduce the bycatch associated with reef fish fishing.

Sincerely,

A handwritten signature in black ink, appearing to read "Ry", written over a faint grid background.

Roy E. Crabtree, Ph.D.  
Regional Administrator

Enclosure

RECEIVED

JAN 21 2010

GULF FISHERIES COUNCIL



Thomas A. Haugen

P.O. Box 32

St. Marks, FL 32355

Dear Dr. Crabtree:

Please find enclosed the application for my exempted fishing permit. I have also included my documentation certificates for my vessels and copies of current federal reef fish permits. In addition, I have attached an illustration of my patented "Excluding Fish Device" I plan to study.

Sincerely,

Thomas Haugen

A handwritten signature in black ink, appearing to read "Thomas Haugen", with a long horizontal flourish extending to the right.

## **Application for an Exempted Fishing Permit**

December 28, 2009

### **APPLICANT**

Thomas Haugen  
P.O. Box 32  
St. Marks, FL 32355  
[littledipperboats@yahoo.com](mailto:littledipperboats@yahoo.com)  
850/228-8862 Phone  
850/925-6766 Fax

### **LONG TERM GOALS**

Develop Excluding Fishing Devices (EFDs) for the red grouper fishery in the eastern Gulf of Mexico.

Prove the effectiveness of EFDs and show the potential for increasing the average size of red grouper on a reef while allowing a sustainable commercial harvest with low bycatch.

### **PURPOSE FOR EXEMPTED FISHING PERMIT**

Collect quantitative data on bycatch reduction levels for my newly designed and patent pending "Excluding Fishing Device" (EFD).

The goal of the study is to improve the prototype design and collect scientific data on a fishing device that can catch a slot sized red grouper without the usual bycatch of juvenile red grouper, forage fish, sea turtles and sharks associated with hook and line fisheries.

### **HOW IT WORKS**

An EFD comprises a catching device composed of a wire cage with an entrance and exit funnel opening that form conduits between the body of water and the interior of catching device. The width and shape of the entrance funnel opening and the exit funnel opening are identical but they are set inside excluding bars that are of different widths, the exit being slightly smaller than the entrance. The excluding bars limit the maximum expandable width of entrance and exit openings. Those fish which are smaller than the maximum expandable width will swim through the opening and those fish that are larger than the maximum expandable width will not be able to enter (or exit). It is in this manner that a specific sized fish can be captured. (See attached patent application)

## TARGET SPECIES

The targeted species will be red grouper. I intend to use my own IFQs to land the fish I catch in the study so there will be no added impact on the red grouper TAC. I am only seeking a gear exemption to land fish with EFDs instead of traditional gear. I am funding this study myself and will work with SEFSC in Pascagoula, Mississippi to insure a viable study.

## AREAS TO BE FISHED AND AMOUNT OF GEAR

I plan on fishing the Eastern Gulf of Mexico, inside the 20 fathom curve, in the area specified in the laws that last applied to the permitted trap boats. (2007). This bottom will not cause a gear conflict with the long line boats, and allow me to compare my data of over 20 years of fishing red grouper on this bottom. The sets in this study will be in two areas, one in the north trap bottom and one in the south trap bottom. The north trap bottom area is bounded by rhumb lines connecting in order the following points.

POINT	NORTH LAT	WEST LONG
A	2905.0	8447.0
B	2842.5	8424.8
C	2842.5	8416.3
D	2811.0	8400.0
E	2810.0	8345.0
F	2810.0	8314.0
G	2937.0	8400.0
H	2935.0	8438.0

The south trap bottom area is bounded by rhumb lines connecting in order the following points.

POINT	NORTH LAT	WEST LONG
A	2626.0	8259.0
B	2626.0	8229.0
C	2515.0	8202.0
D	2448.0	8206.0
E	2445.0	8242.0
F	2448.0	8248.0
G	2507.5	8234.0
H	2626.0	8259.0

The number of traps per set=100. The minimum number of sets to complete a sample=30. The number of samples will depend on performance variables achieved on EFDs. Number of vessels=2. Amount of

gear per vessel=100 traps. Some of the many variables involved in this project are; excluder bar width, bait well position and size; type of bait (EFDs will not self bait like traditional traps); height of device off bottom; negative buoyancy of device; position of bridle effecting (a. ) the direction device is hauled back, (b.) the angle of ascent (I believe this will be one of the most important factors and it will take many samples to verify the different excluding properties as it is related to the angle of ascent), (c.) the speed the device is hauled back; wire mesh size; excluder bar composition (metallic, non-metallic); soak time; time of year; type of bottom. Two vessels will provide a better study as no two captains fish exactly the same and comparison of data is essential to prove validity. It will be time consuming to prove these gear modifications with design samples but some of our results should help other researchers around the world to design specific fish catching traps. I am a full time commercial fisherman and I participate in several other fisheries so there may be times when I will have to pull one or both boats off the study to fulfill their economic contributions in other fisheries.

#### APPROXIMATE TIME FOR EFP

One year. The more research and development we complete the better design prototype we will achieve.

#### DATE TO BEGIN

April 1, 2010

#### VESSELS PARTICIPATING IN STUDY

"Little Dipper II" Documentation no. 633990. This is a 49 ft trawler fitted for pulling EFDs and capable of prolonged offshore research with a crew of 6.

"Nancy Lou" documentation no. 645260. This is a 50 ft lobster type vessel fitted to pull EFDs. This vessel is capable of cruising at 24 knots thus carrying divers, video crews, scientists and supplies to research site and returning home the same day if need be.

#### SAMPLING DESIGN

First phase: A short trip (1 to 5 days) with a limited number of EFDs (aprox. 5) and traditional fish traps (aprox. 5) to calibrate excluder bars and experiment with design of prototype.

Second phase: Establish bycatch reduction levels of EFDs vs. traditional traps. Each vessel will have one set of traps consisting of 50 3' x 2' traditional traps (which I will fit with galvanic time releases to prevent ghost fishing) and 50 EFD's (This device was presented at the Workshop on Fish Traps in the Gulf of

Mexico Reef Fish Fishery on December 15, 2009). The traps will be deployed individually on single lines connected to a buoy. They will be set in a random order and the data will be recorded on a data sheet which will consist of the following: fishing location, depth, species identification and count for bycatch species, count and length frequency for target and commercially important species.

1 set = 100 traps

Soak time = 4 hrs

Sets per day= 1to2 depending on weather conditions

Minimum number of sets to begin data evaluation = 30

Third phase: Analyze second phase data results and modify design of prototype to optimize performance and specific excluding properties.

Fourth phase: Fish only EFDs to further improve and document modifications with scientific samples.

#### IMPACT ON MAMMALS

The impact on mammals should be a positive one. The non-targeted fish should be excluded while the device is still on the bottom, thus preventing dolphins from feeding on discarded fish. The result is no new feeding behavior modification of new generation dolphins.

#### IMPACT ON TURTLES AND SHARKS

There should be no encounters with turtles or sharks.

#### EXPECTED INTERACTION WITH NON-TARGETED SPECIES

The EFD has been tailored to catch a legal sized red grouper with little and sometimes no by catch. I expect low interaction with non-targeted species.

#### CONCLUSION

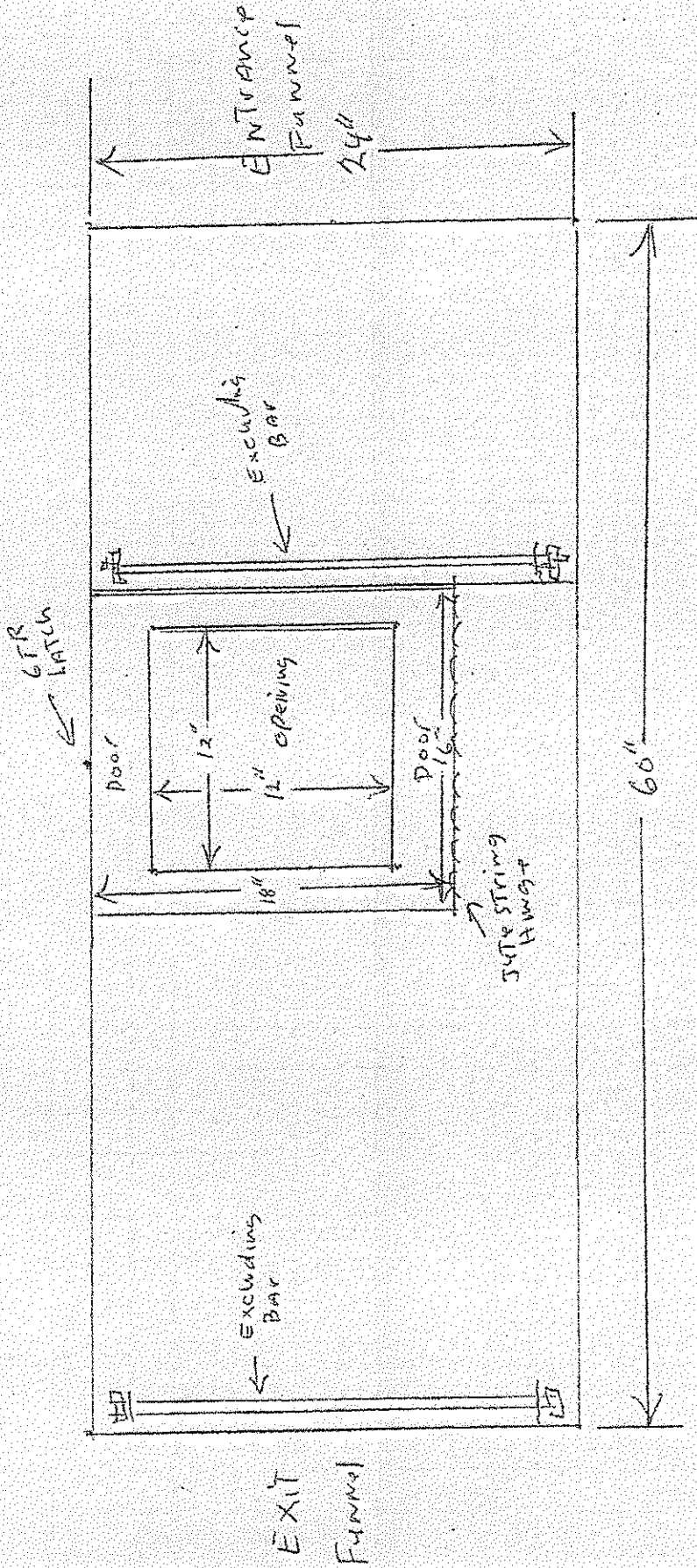
Research and development of the EFD will be expensive and time consuming but I believe it will provide valuable data on a tailor made fishing gear that will not interact with the larger breeder sized red grouper, or the smaller juvenile red grouper, while still allowing a commercial harvest with a very small amount of bycatch and have no turtle or shark interaction. The development of an effective EFD could

prove invaluable to the fishermen who make a living from this resource and those responsible for managing and maintaining this sustainable fishery.

E.F.D.

SCALE  $\frac{1}{8}'' = 1''$

side

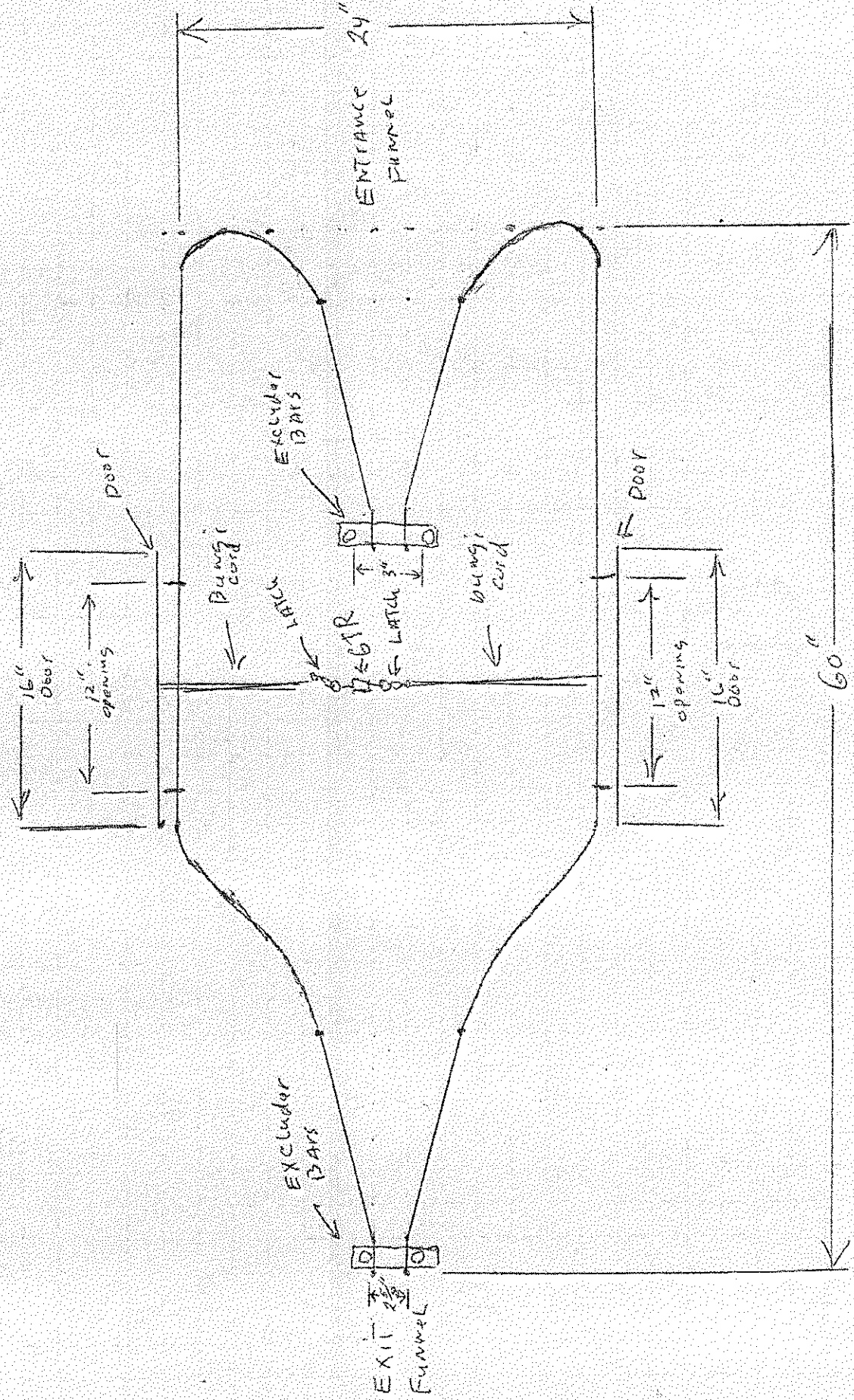


E.F.D

SCALE INCHES  $\frac{1}{8}'' = 1''$



TOP



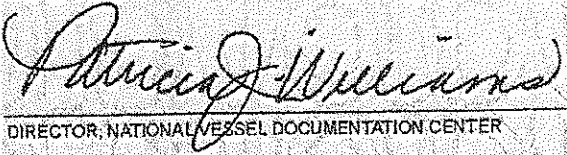



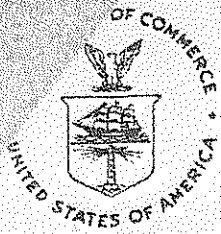
# UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

## CERTIFICATE OF DOCUMENTATION

VESSEL NAME NANCY LOU		OFFICIAL NUMBER 645280	IMO OR OTHER NUMBER TBP000600182	YEAR COMPLETED 1982
HAILING PORT ST MARKS, FL		HULL MATERIAL FRP (FIBERGLASS)		MECHANICAL PROPULSION YES
GROSS TONNAGE 22 GRT	NET TONNAGE 18 NRT	LENGTH 47.0	BREADTH 15.8	DEPTH 4.6
PLACE BUILT KEY WEST, FL				
OWNERS THOMAS A HAUGEN		OPERATIONAL ENDORSEMENTS COASTWISE FISHERY REGISTRY RECREATION		
MANAGING OWNER THOMAS A HAUGEN 7900 COASTAL HWY P.O. BOX 32 ST MARKS, FL 32355				
RESTRICTIONS NONE				
ENTITLEMENTS NONE				
REMARKS NONE				
ISSUE DATE MAY 05, 2009		 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER		
THIS CERTIFICATE EXPIRES MAY 31, 2010				
VDS 10408735				



**United States of America**  
**Department of Commerce**  
**National Oceanic and Atmospheric Administration**  
**National Marine Fisheries Service**  
 263 13th Avenue S.  
 St. Petersburg, FL 33701



**FEDERAL FISHERIES PERMIT**  
**GULF OF MEXICO REEF FISH COMMERCIAL**

<b>Date Issued:</b> 09/22/2009	<b>Expiration Date:</b> 10/31/2010	<b>Effective Date:</b> 11/01/2009	<b>Permit Number:</b> RR-317
<b>Vessel Name:</b> NANCY LOU	<b>Official Number:</b> 645260	<b>Homeport:</b> ST MARKS, FL	<b>Passenger Capacity:</b> 0
<b>Length:</b> 47ft 0in	<b>Horsepower:</b> 700.0	<b>Gross Tons:</b> 22.0	<b>Net Tons:</b> 18.0

**Permit Holders/Vessel Lessees Name and Address:**  
  
 THOMAS ARTHUR HAUGEN  
 PO BOX 32  
 SAINT MARKS, FL 32355

**Vessel Owners Name and Address:**  
  
 THOMAS ARTHUR HAUGEN  
 PO BOX 32  
 SAINT MARKS, FL 32355

**Fishery for which this vessel is permitted:**  
 GULF OF MEXICO REEF FISH COMMERCIAL

**Reminders:**  
 Permit Expires 10/31/2010  
 Permit renewal information will be mailed approximately 60 days prior to the permit expiration date. It is your responsibility to renew your permit whether or not you receive prior notification.  
 This permit must be renewed within one year of the expiration date or it will not be renewed. A complete application to renew this permit must be received by NMFS by 10/31/2011 or this permit will be non-renewable.  
 This permit requires a working VMS unit.  
 You will need to possess shares or allocation to participate in the IFQ program. If you need assistance, please call the IFQ Customer Support line at (866) 425-7627 from 8:00 a.m. to 4:30 p.m., Eastern time, Monday-Friday, excluding federal holidays.  
 Report any fishery violation to the Southeast Regional Office Law Enforcement hotline (800) 853-1964 or Gulf of Mexico wide call 866.WE.ENFORCE (866) 933-6367.

**RENEW**

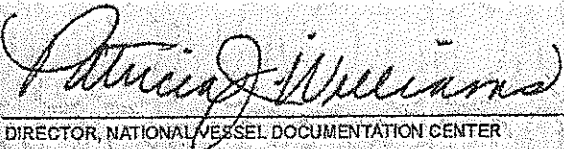



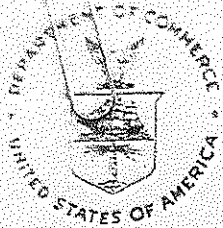
# UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY  
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

## CERTIFICATE OF DOCUMENTATION

VESSEL NAME LITTLE DIPPER II		OFFICIAL NUMBER 613990	IMO OR OTHER NUMBER	YEAR COMPLETED 1979
HAILING PORT ST MARKS, FL		HULL MATERIAL FRP (FIBERGLASS)		MECHANICAL PROPULSION YES
GROSS TONNAGE 36 GRT	NET TONNAGE 28 NRT	LENGTH 49.5	BREADTH 16.5	DEPTH 6.6
PLACE BUILT MIAMI FL				
OWNERS THOMAS A HAUGEN		OPERATIONAL ENDORSEMENTS FISHERY		
MANAGING OWNER THOMAS A HAUGEN 7900 COASTAL HWY P.O. BOX 32 ST MARKS, FL 32355				
RESTRICTIONS NONE				
ENTITLEMENTS NONE				
REMARKS NONE				
ISSUE DATE DECEMBER 08, 2009		 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER		
THIS CERTIFICATE EXPIRES DECEMBER 31, 2010				
VDS 11339337				



United States of America  
Department of Commerce  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
263 13th Avenue S.  
St. Petersburg, FL 33701



# FEDERAL FISHERIES PERMIT

## GULF OF MEXICO REEF FISH COMMERCIAL

Date Issued: 09/22/2009	Expiration Date: 10/31/2010	Effective Date: 11/01/2009	Permit Number: RR-234
Vessel Name: LITTLE DIPPER II	Official Number: 613990	Homeport: ST MARKS, FL	Passenger Capacity: 0
Length: 49ft 6in	Horsepower: 270.0	Gross Tons: 36.0	Net Tons: 28.0

**Permit Holders/Vessel Lessees Name and Address:**

THOMAS ARTHUR HAUGEN  
PO BOX 32  
SAINT MARKS, FL 32355

**Vessel Owners Name and Address:**

THOMAS ARTHUR HAUGEN  
PO BOX 32  
SAINT MARKS, FL 32355

**Fishery for which this vessel is permitted:**  
GULF OF MEXICO REEF FISH COMMERCIAL

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**RENEW**

