SUPPORTING STATEMENT
MAIL SURVEY TO COLLECT ECONOMIC DATA FROM FEDERAL GULF OF MEXICO AND SOUTH ATLANTIC FOR-HIRE PERMIT HOLDERS
OMB CONTROL NO. 0648-XXXX

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

The population of interest is all federal charter/headboat permit holders in the South Atlantic and Gulf of Mexico, i.e., North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas, during one calendar year. An excellent sampling frame is available for this survey effort, because vessels taking paying passengers on a for-hire fishing trip into the federal waters of the Gulf and South Atlantic are required to have at least one or more federal permits. The sampling frame consist of all permit holders holding at least one of seven federal charter/headboat permits at any time during the previous calendar year (including individuals whose permits might have expired but are still legally renewable, i.e. "latent permit holder").

Roughly, we aim to randomly sample without replacement about a third of the whole population each year, covering the population once every three years. As of December 2015, the total population was 2,715 unique vessels with one or more federal charter/headboat permits. Due to the management and political importance attributed to delineation by state, we will stratify the total population by state. Within each stratum we will randomly sample vessels in proportion to each stratum's weight in the total population. After removing those vessels deemed not fit to operate with paying passengers, we were left with a total of 2651 total vessel for sampling. Tables 1-3 show the sampling frame categorized into 3 major vessel types based upon a self-identifying "primary vessel use" question on all federal charter/headboat permit applications. The tables break down the sampling frames into the respective strata, lists the permits held, offer some descriptive data for the vessels in each, and provide the number of respondents sampled. An expected response rate is given; however, the actual response rate is unknown at this time.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

For sampling, we first will stratify the population by state as this is a policy relevant variable. Second we will stratify the population by a self-identified "primary vessel use" question on charter/headboat permits applications. This is relevant as vessel characteristics and operation behavior vary quite drastically between the vessel types.

We will then randomly sample in each strata proportional to each strata's weight in the population. Each year, we will sample approximately a third of the population. The very tractable proportional random sampling approach should require only simple adjustments to the inclusion probabilities used for the estimation of vessel population means and other aggregate statistics if non-response is significant and skewed across the strata.

Descriptive statistical analyses will be conducted on the relevant vessel-level variables. Results will be reported for different definitions of the fleet (all permitted, vessels, active, inactive, etc.), by state and by vessel type (charter, headboat, commercial). For trip-level results, our survey will be combined with the NMFS For-Hire Telephone Survey data to make appropriate extrapolations to the population. The accuracy for the population level estimates totals and means of the important variables should exceed the standard +/- 10% confidence interval at a 95% significance level for the larger groups. Given the overall uncertainty inherent to policy assessments of economic conditions in fisheries and given the quality and accuracy of other data used, the standard accuracy should suffice.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

To maximize the response rate, a minimalistic approach is taken in designing the survey's instrument. Given the southeast regions past experiences with voluntary surveys of this population, a very low burden approach is necessary to obtain permit holders cooperation, hence the need for a concise, simple, and non-intrusive survey design.

The owner of each vessel selected will be contacted by mail in early August of each year, first by a selection postcard, followed by the survey package. The package will contain a cover letter, information material, instructions, the two-page survey instrument and a return envelope. Owners will be asked to return the completed survey instrument to us in the enclosed, pre-paid envelope. If no response is received by August 30, up to two further letters will be sent (including additional survey instruments). We will also attempt to contact the non-responders by phone and urge them to return the survey. Information will not be collected during the phone call, and a further survey instrument will be sent – by mail, fax, or email – if requested.

A third method of increasing the potential response rate is the use of a web-based survey response option. We choose to include a web response option to supplement the primary mail instrument because permit holders in both focus groups voiced desire to have this option included. Respondents will be notified of this option in the second follow up letter as an alternative method to complete the survey, and an email with a unique hyperlink will be sent directing the respondent to a passcode protected survey. Survey Monkey Inc. will be used to design and host the web-based survey response option.

We will also follow the *Tailored Design Method*[1] by Dr. Don Dillman. The first cover letter will emphasize the need for and objective of the data collection. If no response is received, a second and third reminder letter will be sent with additional copies of the survey urging respondents to participate. A follow up telephone call will follow the second and third mail outs. A telephone call has the further advantage of being a different mode of contact and should discover non-response due to an incorrect address. Since the data will be used primarily for assessments and predictions about future developments, under-reporting by individuals leaving the fishery is less problematic.

A good sampling frame, with annually updated contact information (through the ongoing permit renewal), will help to reduce the non-contact component of non-response. If necessary due to low response, nearing the conclusion of the survey, we will employ a non-response telephone survey of non-responders to inquire about reasons for not responding in order to establish potential non-response biases.

Beyond the above, we will take every action available to us to facilitate completing and returning the survey by the fishermen drawing upon experience from previous surveys. Noteworthy actions include:

- Timing of the survey during the slow for-hire season
- Disseminating together with the survey effort-specific outreach material
- Using plain language and vernacular spoken by southeast for-hire owners and captains

The statistical design and size of this sample survey will allow for valid generalizations of the results to the population and larger subpopulation levels. The anticipated accuracy of the results is discussed in more detail in the previous question (Part B, Question 2).

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

Other than refining the Dillman Method for our local population, we will not undertake any test of procedures or methods.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Individual consulted on the statistical aspects of the design:

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[1] Dillman, Don A. *Mail and Internet Surveys: The Tailored Design Method: 2007 Update with New Internet, Visual and Mixed-mode Guide*. Hoboken, N.J: John Wiley, 2007. Print.

Persons who will actually collect and analyze the information:

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Table 1 – For-Hire-Permitted Vessels self-identifying as Charter Vessels

Open Access Charter/Headboat Permits				Limited Access Charter/Headboat Permits			
Permit	**Count**	**Sample**	**Permit Description**	**Permit**	**Count**	**Sample**	**Permit Description**
CHS	997	332	South Atlantic: Coastal Migratory Pelagic	**CHG**	1038	346	Gulf of Mexico: Coastal Migratory Pelagics
SC	964	321	South Atlantic: Snapper-Grouper	**RCG**	1030	343	Gulf of Mexico: Reef Fish
CDW	56	19	Atlantic: Dolphin-Wahoo	**HCHG**	28	9	Gulf of Mexico: Historical Captain for Pelagic Fish
				HRCG	27	9	Gulf of Mexico: Historical Captain for Reef Fish

		Permits						Characteristics						
	Population	**CHS**	**SC**	**CDW**	**CHG**	**RCG**	**HCHG**	**HRCG**	**Length**	**HP**	**Year Built**	**Diesel**	**Sample**	**Response Rate**	**E(completed)**
NC	184	92%	91%	98%	5%	1%	0%	0%	41	867	1992	72%	61	80%	49
SC	127	97%	96%	84%	0%	0%	0%	0%	34	644	1998	43%	42	80%	34
GA	41	73%	71%	49%	39%	40%	0%	0%	34	515	1997	49%	14	80%	11
FL	960	56%	56%	56%	60%	60%	1%	1%	34	548	1993	52%	320	80%	256
AL	112	20%	19%	17%	94%	97%	3%	3%	38	652	1991	70%	37	80%	30
MS	38	5%	3%	3%	90%	89%	8%	8%	37	667	1988	66%	13	80%	10
LA	103	7%	6%	7%	89%	91%	5%	5%	32	661	2003	13%	34	80%	27
TX	200	12%	11%	13%	94%	92%	3%	3%	36	736	1993	48%	67	80%	53
Other	205	40%	28%	94%	88%	88%	0%	0%	40	1260	1993	80%	68	80%	55
Total	**1970**												656		525

Table 2 – For-Hire-Permitted Vessels self-identifying as Headboats

Open Access Charter/Headboat Permits				Limited Access Charter/Headboat Permits			
Permit	**Count**	**Sample**	**Permit Description**	**Permit**	**Count**	**Sample**	**Permit Description**
CHS	81	27	South Atlantic: Coastal Migratory Pelagic	**CHG**	91	30	Gulf of Mexico: Coastal Migratory Pelagics
SC	77	26	South Atlantic: Snapper-Grouper	**RCG**	89	30	Gulf of Mexico: Reef Fish
CDW	84	28	Atlantic: Dolphin-Wahoo	**HCHG**	1	1	Gulf of Mexico: Historical Captain for Pelagic Fish
				HRCG	1	1	Gulf of Mexico: Historical Captain for Reef Fish

		Permits							Characteristics						
	Population	**CHS**	**SC**	**CDW**	**CHG**	**RCG**	**HCHG**	**HRCG**	**Length**	**HP**	**Year Built**	**Diesel**	**Sample**	**Response Rate**	**E(completed)**
NC	15	100%	93%	100%	7%	0%	0%	0%	59	1137	1985	93%	5	80%	4
SC	6	100%	100%	83%	0%	0%	0%	0%	57	1084	1982	83%	2	80%	2
GA	2	100%	100%	100%	0%	0%	0%	0%	43	560	1990	100%	1	80%	1
FL	85	48%	42%	46%	63%	65%	12%	12%	60	1015	1988	95%	28	80%	23
AL	12	42%	33%	8%	100%	100%	0%	0%	58	1094	1988	100%	4	80%	3
MS	2	0%	0%	0%	100%	100%	0%	0%	59	955	2004	100%	1	80%	1
LA	2	0%	0%	0%	100%	100%	0%	0%	55	655	1992	100%	1	80%	1
TX	18	17%	17%	22%	89%	83%	0%	0%	65	1028	1984	100%	6	80%	5
Other	21	57%	57%	86%	24%	14%	0%	0%	61	1357	1988	100%	7	80%	6
Total	**163**												**54**		**43**

Table 3 – For-Hire-Permitted Vessels self-identifying as Commercial Vessels

Open Access Charter/Headboat Permits				Limited Access Charter/Headboat Permits			
Permit	**Count**	**Sample**	**Permit Description**	**Permit**	**Count**	**Sample**	**Permit Description**
CHS	343	114	South Atlantic: Coastal Migratory Pelagic	**CHG**	105	35	Gulf of Mexico: Coastal Migratory Pelagics
SC	383	128	South Atlantic: Snapper-Grouper	**RCG**	99	33	Gulf of Mexico: Reef Fish
CDW	378	11	Atlantic: Dolphin-Wahoo	**HCHG**	3	1	Gulf of Mexico: Historical Captain for Pelagic Fish
				HRCG	3	1	Gulf of Mexico: Historical Captain for Reef Fish

		Permits							Characteristics						
	Population	**CHS**	**SC**	**CDW**	**CHG**	**RCG**	**HCHG**	**HRCG**	**Length**	**HP**	**Year Built**	**Diesel**	**Sample**	**Response Rate**	**E(completed)**
NC	84	90%	87%	92%	5%	0%	0%	0%	33	506	1997	50%	28	80%	22
SC	20	100%	100%	90%	0%	0%	0%	0%	32	414	1995	50%	7	80%	5
GA	2	100%	100%	100%	0%	0%	0%	0%	45	568	1998	100%	1	80%	1
FL	336	67%	80%	71%	23%	22%	1%	1%	31	440	1991	51%	112	80%	90
AL	6	0%	0%	0%	83%	100%	0%	0%	41	463	1987	50%	2	80%	2
LA	9	0%	0%	0%	100%	100%	0	0	34	667	1999	22%	3	80%	2
TX	10	10%	20%	20%	80%	80%	0%	0%	36	568	1992	60%	3	80%	3
Other	41	49%	44%	95%	5%	5%	0%	0%	36	588	1994	71%	14	80%	11
Total	**508**												**169**		**135**