# SUPPORTING STATEMENT HIGHLY MIGRATORY SPECIES VESSEL LOGBOOKS AND COST-EARNINGS DATA REPORTS <br> OMB CONTROL NO. 0648-0371 

## 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.

This collection of information will employ statistical methods to reduce the respondent burden and the data processing cost to the government. As indicated in the response to Question12 in Section A, certain fisheries would be subject to a census while others would have a sample drawn at random. The selection rates apply both to the logbook in general (set forms and trip forms) and to the cost-earnings form (attached to trip summary forms).

As indicated in Response 12 in Section A, all swordfish, shark, charter/headboat, and dolphin/wahoo permit holders would be selected for logbook reporting while only 10 percent of Atlantic Tunas and HMS Angling permit holders would be selected for logbook reporting. The larger population of tuna vessels (recreational and commercial combined) affords a representative sample at a 10 percent selection rate for each. In response to comments from fishermen, NMFS is proposing to continue the 20 percent selection rate for the cost-earnings and annual expenditures forms in the commercial shark, commercial swordfish, and charter/headboat fisheries (not required for dolphin/wahoo permit holders). This rate should provide NMFS with a representative sample of the fishery as a whole.

Table 1 in Section A indicates the affected universe. Out of 35,969 permit holders, under this program, 10,216 would be required to submit logbooks and 1,280 would be required to submit the cost-earnings and annual expenditure forms. Compliance with the catch reports or logbooks is high because they are linked to permit renewal. That is, permits cannot be renewed until logbooks are submitted for the year. Often logbooks are not submitted in a timely manner but are submitted prior to renewing the permit. In 2010, compliance with logbook requirements was approximately 89.23 percent. Similarly, compliance with cost-earnings reports is high since they are also linked to permit renewal. In 2010, compliance with cost-earning reports was approximately 77.29 percent.
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.

The sample universe is the fleet for tuna, shark, swordfish, and charter/headboat permit holders, for which we have the entire population or universe of vessels from the HMS permit data file from which to choose. The sample universe also includes any dolphin/wahoo permit holder that does not hold another federal HMS permit.

The random sample for selection from the tuna fishery is stratified according to the following criteria: (1) state of homeport and (2) level of landings (high-liner vs. not active). The HMS logbook form contains sufficient information to determine whether or not a vessel harvested beyond or within the Exclusive Economic Zone, i.e. U.S. offshore or on the high seas. Sampling designs for other commercial fishery surveys suggests that overall vessel length provides a reliable indicator of whether a vessel is capable of fishing on the high seas. A vessel's homeport state is recorded in the HMS permit database. The sample size for selection for tuna vessels is designed to achieve a 95 percent level of precision (significance). For any strata with less than three vessels, the vessel numbers in these strata is increased to three since NMFS' policy is not to disclose aggregated information for anything less than three vessels. The stratified random sample is determined using the Neyman Allocation Method with a finite population correction. This method is being used in the collection "Economic Performance Data Surveys For West Coast Commercial Fisheries Programmatic Clearance (OMB Control Number 0648-0369) for the Cost and Earnings Survey of the Troll Albacore and Swordfish Fisheries."

The random sample for the collection of cost-earnings data from the shark, swordfish, and charter/headboat fleet is stratified according to: (1) location of fishing in the previous year within designated statistical areas and (2) level of activity (landings versus no landings/held a permit or did not hold a permit). The HMS logbook form contains sufficient information to determine where a vessel was fishing and the level of activity in the previous year. Numerous analyses of logbook data have already designated the statistical areas. These same areas would be used in the random sample. Sample size for selection of these vessels is designed to ensure adequate representation across the fleet and across all areas. For areas where few HMS vessels fish (e.g., Sargasso or Northeast Distant areas), areas would be combined to ensure a large enough sample so that data can be disclosed. Sample fleets for selection of the cost-earnings data would then be averaged to produce information representative of the group. There are not expected to be any unusual problems requiring sampling procedures more specialized than those indicated above.
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.

In order to maximize the response rate, brochures have been developed and circulated to educate fishermen in various sectors about reporting requirements. NMFS has also published compliance guides to remind fishermen of their obligations. Non-responders are typically
contacted first by phone and then are notified by the NMFS Office of Law Enforcement of their delinquency and issued a written warning. If there continues to be no response, citations could be issued. For the censused population, a small percentage of non-responders are not likely to decrease the reliability of the data given the number of vessels and trips. For the sampled population, however, the reliability of the data could suffer if delinquency rates prove to be high. In such a case, data between years could be combined to provide biennial estimates.
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 under the Paperwork Reduction Act.

Logbooks have been used in this fishery since the 1980s and have proven an effective method of collecting data when used with observers. Before implementation mandatory collection, NMFS tested a voluntary program. The voluntary program was ineffective for meeting management needs.
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.

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