# 2013-2015 Large Pelagics Intercept Survey and Large Pelagics Biological Survey

**Statement of Work** 

# **Table of Contents**

	Background	
2.	Large Pelagics Intercept Survey	5
	2.1 Sampling Tasks	6
	2.1.1 Sample Frame	7
	2.1.2 Sample Target Allocations	9
	2.1.3 Sample Draw	
	2.1.4 Sample Distribution	12
	2.1.5 Sample Monitoring	14
	2.2 Assignment Procedures	15
	2.2.1 Before the Assignment	15
	2.2.2 Arriving at the Site	
	2.2.3 Hostile Sites and Refusals	20
	2.2.4 Screening Procedures	21
	2.2.5 Interviewing Procedures	22
	2.2.6 Site Description Form	33
	2.2.7 Assignment Summary Form	39
	2.3 Field Personnel Requirements	40
	2.3.1 Field Supervisor Qualifications, Training and Supervisory Tasks	40
	2.3.2 Interviewer Qualifications, Training and Supervision	40
	2.3.3 Training Documentation	
	2.4 Quality Control of Data Collection	42
	2.4.1 Interview Telephone Validations	42
	2.4.2 LPIS Quality Control Field Visits	44
	2.4.3 Interviewer Performance Measure Reports	45
	2.4.4 Validation of HMS Vessel Permit Numbers	46
	2.5 Survey Data Preparation	46
	2.6 LPIS Reporting Requirements	47
	2.6.1 Monthly Reports and Annual Report	
	2.6.2 Final LPIS Documentation	
	2.7 LPS Meetings	49
	2.7.1 LPS Start-Up Meeting	
	2.7.2 LPS Data Review Meetings	
	2.7.3 LPS Local Interviewer Meeting	
	2.8 LPIS Items Provided by NMFS	
3.	0 Large Pelagics Biological Survey – Optional Item	
	3.1 LPBS Sampling Tasks	
	3.1.1 LPBS Sample Frame	
	3.1.2 LPBS Sampling	
	3.2 LPBS Assignment Procedures	
	3.2.1 Before the LPBS Assignment	
		54

3.2.3 LPBS Site Description Form and Assignment Summary Form	56
3.2.4 LPBS Hostile Sites and Refusals	56
3.3 LPBS Sampler Training and Supervision	56
3.4 LPBS Reporting Requirements	58
3.5 LPBS Data Entry, Editing, and Transmittal	58
4.0 Schedule of Deliverables	59
4.1 LPIS Deliverables	59
4.2 LPBS Deliverables	60
5.0 Data Confidentiality	61

## **Appendices**

- A. Large Pelagics Intercept Survey Questionnaire 2012
- B. LPIS Dataset Formats and Variable Descriptions
- C. LPIS Site Description Form 2012 and Variables List
- D. LPIS Assignment Summary Form 2012
- E. Approximate LPIS Interview Target Allocations
- F. Sample Letter from NMFS
- G. LPIS and LPBS Species Codes and Local Names
- H. LPIS Fishing Area List 2012
- I. Measuring Fish
- J. LPIS Telephone Validation Questionnaire 2012
- K. LPIS Quality Control Evaluation Form 2012
- L. LPS Tournament Codes 2012
- M. LPIS Interviewer Performance Measures Report Example
- N. Large Pelagics Biological Survey Forms 2012
- O. Caudal Peduncle Illustration
- P. NMFS Pelagic Observer Program Bluefin Tuna Sampling Protocols
- Q. NOAA Administrative Order 216-100 / Non-disclosure Form

## 1. Background

The National Marine Fisheries Service (NMFS) is responsible for monitoring and managing U.S. marine fisheries resources. Large pelagic species (e.g., tunas, billfish, swordfish, and sharks) which are caught in offshore oceanic waters are of particular interest to NMFS as these species support socially and economically important recreational and commercial fisheries. NMFS closely monitors directed effort and catch rates for these highly migratory species, and adjusts management measures as needed to maintain stocks and the fisheries that depend on them.

Since 1992, the National Marine Fisheries Service has administered the Large Pelagics Survey (LPS) to collect information about the recreational fishery directed at large pelagic species (e.g., tunas, billfishes, swordfish, sharks, wahoo, dolphinfish, and amberjack) in the offshore waters from Maine through Virginia. Angler participation in the LPS is mandatory and is a condition of obtaining a National Marine Fisheries Service Highly Migratory Species (HMS) permit. The authority to collect LPS data comes from the Atlantic Tunas Convention Act and the Magnuson-Stevens Fishery Conservation and Management Act. The collection of catch and effort information on large pelagics also fulfills U.S. obligations to the International Commission for the Conservation of Atlantic Tunas (ICCAT).

Because large pelagic species are only sought on a relatively small proportion of the total marine recreational angler fishing trips made in the Northeast Region, the fishing effort directed at such species, and the resulting angler catches are generally not estimated very precisely by the Agency's Marine Recreational Fisheries Statistics Survey (MRFSS). Therefore, the LPS was designed as a specialized survey that would focus specifically on the recreational fishery directed at large pelagic species. This specialization has allowed higher levels of sampling needed to provide more precise estimates of pelagic fishing effort and catches of large pelagic species.

The LPS includes two independent, yet complementary, types of surveys which provide the effort and average catch per trip estimates needed to estimate total catch by species. The Large Pelagics Intercept Survey (LPIS) is a dockside survey of fishing access sites, primarily designed to collect catch data from private and charterboat captains who have just completed fishing trips directed at large pelagic species. LPIS data are used to estimate the average recreational catch per large pelagic boat trip by species. The Large Pelagics Telephone Survey (LPTS) collects data used to estimate the total number of boat trips on which anglers fished with rod and reel or handline for large pelagic species. The Large Pelagics Telephone Survey work is conducted under a different contract and is <u>not</u> part of this Statement of Work (SOW). The primary work ordered under this SOW is conduct of the Large Pelagics Intercept Survey from Maine through Virginia. This SOW also includes an option for conduct of the Large Pelagics Biological Survey (LPBS). The LPBS collects additional length and weight information and body parts such as otoliths, caudal vertebrae, dorsal spines, and gonads from bluefin tuna and other large pelagic species.

Any questions or problems not covered in this statement of work should be directed to the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Science and Technology, Fisheries Statistics Division (F/ST1) through the Contract Officer.

## 2. Large Pelagics Intercept Survey

The Large Pelagic Intercept Survey (LPIS) shall be conducted for the purpose of collecting data needed to estimate the average catches of different large pelagic species per boat trip on a monthly basis. Catches of Atlantic bluefin tuna shall be recorded by specific size categories and catches of other large pelagic fishes shall be recorded by species. The LPIS Contractor will cover fishing for large pelagic species from Virginia through New Hampshire. While Maine is covered by the LPS, LPIS sampling in this state is conducted by the state agency under a separate contract with NMFS.

The Contractor shall collect fishing information by intercepting and interviewing charter boat and private boat operators who have just completed fishing trips targeting large pelagic species. The Contractor shall update as necessary an existing list of appropriate sites for dockside interviewing. Sites are differentially weighted for sampling in relation to their usage by boats that fish for large pelagic fishes. The Contractor shall follow specific procedures to group sites into clusters that can be selected for interviewing assignments. Once sites have been appropriately clustered, the Contractor shall randomly select site clusters in relation to their known fishing activity. Site clusters shall be weighted by their total measured large pelagic species fishing activity, such that clusters with greater activity get sampled more frequently than clusters with lesser activity. Site clusters shall be selected independently for each month and day type (weekend or weekday) stratum, and dates for interviewing assignments shall be randomly selected within each temporal stratum. Interviewing assignments shall be distributed among geographic and temporal strata to assure the attainment of both minimum interviewing goals and distributions of interviews that are representative of fishing activity.

Specific procedures shall be followed to intercept and interview captains of returning boats at assigned sites. The questionnaire to be administered during interviews shall be developed by the Contractor in coordination with NMFS. This form should be tailored to facilitate rapid editing and entry of recorded data. The questionnaire used for the 2012 LPIS is included as Appendix A.

The data obtained from respondents shall be checked for errors and entered into SAS databases that are formatted in accordance with NMFS' specifications. Coding and data entry errors shall be corrected and error-free data shall be delivered according to the specified delivery schedule.

The Contractor shall be responsible for conducting the following general tasks:

Hiring, training, deployment, and supervision of interviewers and field supervisors;

- Survey administration, including the determination of appropriate sampling goals, the proper selection of specific locations and dates for interviewing assignments to assure representative sampling, the determination of representative sampling distributions, the determination of the numbers of assignments needed to achieve sampling quotas and distribution goals, the appropriate deployment of interviewers to cover all selected interviewing assignments, the tracking of success in completing interviewing assignments, and the monitoring of success in reaching the sampling quotas and distribution goals;
- Printing and distribution of HMS permit list field books for use by field interviewers.
- Proper conduct of dockside interviews with boat captains, anglers, and/or crew members to collect specified data elements;
- Validation of 10% of all dockside interviews through remote monitoring or through independent follow-up contacts with interviewees;
- Quality control Field Supervisor visits of 5% of all interviewer assignments;
- Checking and editing of every data element to correct coding or data-entry errors;
- Preparation and delivery of weekly monitoring reports, interviewer performance measure reports, and data review materials for use in reviewing and evaluating the sampling results and the collected data;
- Delivery of properly formatted, error-free data sets with all specified variables according to a specified delivery schedule; and
- Review of survey results and preparation of proposals to improve survey procedures.

The contractor must meet the Department of Commerce IT Security Program Policy and Minimum Implementation Standards (found at <a href="http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm">http://www.osec.doc.gov/cio/ITSIT/DOC-IT-Security-Program-Policy.htm</a>). The contractor must also adhere to NOAA and NMFS security policies (found at <a href="https://www.csp.noaa.gov/policies/">https://www.csp.noaa.gov/policies/</a>).

The Contractor shall be responsible for collecting all data under this contract, as well as conducting all data entry and editing according to NMFS' specifications. The Contractor's responsibility shall include coordination of all survey tasks with NMFS, as well as with other entities participating in recreational fishing data collection programs, such as states or other contractors. Any re-allocation decisions will be made by NMFS in consultation with the Contractor. All procedures, questionnaires and forms must be approved by NMFS prior to implementation. Specific requirements are addressed below.

## 2.1 Sampling Tasks

The objective for sampling shall be to identify sites where boats return, randomly select a sample of site/date combinations for interviewing assignments, intercept a sample of returning boat operators at the assigned sites on the assigned dates, and collect data from boat operators that fished for large pelagic species. Sampling for the LPIS in 2013-2014 will be conducted according to a three-stage cluster sampling design, where:

- 1. A specific day and geographic area for returning boats will be selected in the first stage,
- 2. A cluster of fishing trips returning to that area on that day will be selected in the second stage, and
- 3. A subset of those trips will be sampled in the third stage.

Activities specific to proper conduct of sampling for the LPIS include:

- Development and monthly maintenance of a comprehensive list of fishing access sites, such as marinas or boat ramps, where interviewers can readily intercept operators of boats returning from offshore fishing trips directed at large pelagic species;
- Monthly revision of site-specific estimates of the expected daily numbers of private boat and charter boat fishing trips directed at large pelagic fishes by month and day type (weekend and weekday);
- Monthly clustering of neighboring access sites as needed to form site clusters with total expected daily numbers of trips that exceed a specified minimum;
- Determination of interviewing goals by state, boat type (private and charter), month, and day type (weekend and weekday);
- Determination of numbers of interviewing assignments needed in each state/boat-type/month/day-type sampling stratum to reach stratum-specific interviewing goals;
- Generation of monthly samples of site-cluster/date assignments for conducting boat trip interviews, using programs provided by NMFS;
- Matching of site-cluster/date assignments with interviewers; and
- Tracking and reporting of interviewer progress in completing assignments and obtaining interviews.

### 2.1.1 Sample Frame

The sample frame for the LPIS consists of a comprehensive list of fishing access sites, such as marinas or boat ramps, to which boats return from fishing trips directed at large pelagic fishes. This list of sites, called the master site register (MSR), will provide information on the geographic location of each site, as well as estimates of the daily expected numbers of private and charter boat large pelagic fishing trips returning to each site for both weekdays and weekend days. Whenever possible, these estimates shall be based on averages of actual counts obtained on prior visits to the site in the same month in previous years. When prior counts are not available, then estimates should be based on a reasonable assessment of the number of boats using the site, the proportion of boats that are used to fish for large pelagic species, and the relative frequency of trips by such boats at nearby sites, where previous counts are available. NMFS will provide the Contractor with the final 2012 LPIS MSR (in SAS format) as a starting point for developing the 2013 MSR. Variable descriptions for the MSR database are included in Appendix B.1 (LPIS Dataset Formats and Variable Descriptions).

To increase interviewing efficiency, individual sites in the MSR shall be grouped together as needed to form site clusters with reasonable total expectations of interviewing productivity.

Sites with expected high numbers of interviews (generally more than 4 per day) shall remain unclustered, while sites with lower expectations of interviewing success shall be grouped together with other nearby sites. Clustering of sites should attempt to raise the total number of expected interviews while minimizing the driving time between sites. Factors to consider in assigning sites to clusters include the relative fishing pressures at each site, the proximity of sites within a cluster and the historical interviewing productivity at sites within a cluster. Sites within a cluster may vary from month to month (i.e., two sites may be part of the same cluster for June but not July). The Contractor will work closely with NMFS to determine which sites should be clustered together and which should stand alone. Contractor decisions regarding clustering of sites must be made at least four weeks prior to sampling for a particular month and will be subject to NMFS approval.

Each site, or site cluster, shall be categorized according to its total expectation of eligible interviews and assigned a weight based on that categorization. The relative weight of each site or site cluster will determine its probability of selection in the random draw conducted as the first stage of LPIS sampling. This probability-proportional-to-size (PPS) approach assures a relatively high level of interviewing productivity because the "high expectation" sites, or site clusters, will be selected for interviewing more frequently than the "low expectation" sites.

Since sites will be selected for interviewing assignments in relation to their estimated fishing pressure, it is imperative that the MSR contain the most accurate and current fishing activity information possible. The MSR should not be static, since fishing activity is constantly changing. The Contractor shall update the MSR at least once each month based on information obtained on interviewing assignments or other visits to the sites during that month. The Contractor shall be responsible for maintaining and updating the MSR continuously during the period of contract award, and for providing updated site lists in SAS format to NMFS each month. The Contractor shall review and update the large pelagic fishing activity estimates for each site before each month, and shall ensure that every site is physically inspected at least once every three months to update the MSR, regardless of whether or not that site was assigned for interviewing. The site register updates must be completed before the assignment draw for each month, which generally occurs approximately three weeks before the month begins. This allows enough time to schedule assignments and inform interviewers of their schedule.

In October of 2012 Hurricane Sandy devastated large sections of coastline in New Jersey and New York. Several fishing access sites were destroyed completely, others were damaged beyond repair, and still others may take several months or years to be functional again. In addition, many boats were destroyed or severely damaged by the storm surge. This extreme weather event will likely result in both short-term and long-term impacts on the LPIS MSR. Some sites will need to be coded as inactive (zero pressure), while others will need fishing pressure adjustments to account for lost boats or partial site destruction. Fishing pressures may also need to be adjusted up at unaffected sites located in proximity to damaged sites due to a "spillover effect." Site clusters in areas affected by Sandy will also need to be reevaluated in light of these changes to the MSR.

The Contractor shall work with NMFS to gather information for adjusting the sample frame in areas affected by Sandy in time for the June assignment draw. The Contractor shall conduct a minimum of four sample frame maintenance assignments (2 in New York; 2 in New Jersey) prior to the June draw. The purpose of these assignments is to assess the damage to LPIS MSR sites, gather first-hand information from site managers or representatives, and adjust MSR pressures and site clusters accordingly. In addition to visiting the sites, the Contractor may gather information from other sources including Internet, state or local government agencies, or by calling the sites.

Sites should <u>never</u> be removed from the MSR. If there is no longer LPS fishing activity at a site the site pressures should be coded as zero but the site should remain on the MSR. Contractor staff, field supervisors and interviewers should also be on the lookout for new sites to add to the MSR that are not currently being sampled. New LPIS sites can be discovered through 1) visual observation while in the field, 2) discussions with captains, mates, anglers, site managers, others, 3) information provided by NMFS to the contractor, and 4) researching fishing magazines, agency and other web sites, and other sources of information.

Certain sites at which interviewers are not welcome by the site management should be coded as "hostile sites." Hostile sites should be excluded from the sample frame (see 2.2.3 "Hostile Sites and Refusals"). However, accurate fishing activity estimates must be maintained for hostile sites. The MSR should serve as a useful database for assessing the geographical and temporal distributions of fishing activity hence it shall be used for determining appropriate distributions of interviews between day types and/or geographic subregions of states. Such information is important for setting appropriate interviewing goals by county, month, and day type (weekend vs. weekday).

Interviewers shall be responsible for recording total fishing activity by boat type during each interviewing visit to each site. They should collect data on the total number of boats returning from fishing trips that targeted large pelagic species. In addition, they should obtain anecdotal information on fishing activity levels from marina operators and other personnel working on-site at bait and tackle shops or fuel docks. Newspapers and weekly magazine fishing reports also provide useful background on fishing activity. Fishing activity information should be recorded on the Site Description Form (SDF, Appendix C Site Description Form). Data collected on visits to sites that are not assigned for interviewing during a given month should also be recorded on the SDF.

#### 2.1.2 Sample Target Allocations

The goal of intercept sampling shall be to collect specified minimum numbers of private and charter boat interviews in each month in each state or multi-state stratum. The Contractor shall be responsible for ensuring that the temporal and geographic distributions of sampling within a

given state, month and fishing mode strata are representative of the true distributions of marine recreational fishing effort directed at large pelagic fishes. Therefore, interviews should be distributed in a representative manner across weeks within a month, among the different day types of each month (i.e., weekday versus weekend/holiday) and among different geographic areas within each state or multi-state stratum.

NMFS will set target interview allocations for each state (or multi-state area), boat type, and month stratum. The number of samples per stratum will be distributed in an effort to attain statistical and data collection goals as determined by NMFS. Generally, interviews are allocated among strata to reflect the expected distribution of fishing effort and/or catch for select species.

The approximate LPIS 2013 allocations of intercept survey interviews by state, boat type, and month are shown in Appendix E. The allocations in Appendix E are considered approximate and NMFS may choose to order more or fewer interviews in any particular strata based on changes in the fishery, management priorities or statistical considerations. NMFS will issue delivery orders providing the target sampling allocations by state, boat type and month, prior to the first month of 2013 sampling.

The interviewing goals for the week days and weekend/holiday days of each month for each boat type should reflect the distribution of total angler fishing trips between the two day-types. This distribution can be approximated by using the distribution of total weekend/holiday and weekday fishing activity estimates as categorized over all sites in the MSR for each month. NMFS will provide the Contractor with a SAS program that uses the weekend and weekday pressure ratings in the MSR to determine the appropriate distribution of interviews for each state/boat-type/month sampling stratum.

#### 2.1.3 Sample Draw

The Contractor is responsible for determining the appropriate numbers and distributions of site/date interviewing assignments needed to achieve interviewing goals. An assignment is defined as a 2-8 hour effort to intercept and interview anglers at one or more sites in an assigned site cluster on an assigned date. Assignments should be drawn separately for each state (or multi-state area), boat type, month, and day type strata. The Contractor shall estimate the number of sampling assignments required to obtain the interviewing goals in each state/boat type/month/day type sampling stratum and then draw assignments accordingly. Historical interviewer productivity data should be used for this purpose. Such data are available in past LPIS datasets and monthly reports which will be provided by NMFS to the Contractor.

Assignments shall be distributed between weekend days (and holidays) and weekdays to target a weekend/weekday distribution of interviews that matches historical distributions of large pelagic fishing trips. The day for each weekend or weekday site assignment shall be drawn at random.

The actual number of completed assignments needed to reach the sampling goal may be higher

or lower than the minimum estimate based on historical productivity, because levels and distributions of actual interviewing productivity can vary from year to year for a variety of reasons. Therefore, it may be necessary to draw some additional assignments above the estimated minimum needed to assure that all interviewing goals can be reached. Conversely, drawing too many assignments can lead to a situation where interviewing goals would be greatly exceeded and unnecessary costs incurred that NMFS would not cover (i.e., NMFS will not pay for interview target overages). NMFS will only pay for actual completed interviews with eligible respondents up to the target allocation within a state (or multi-state)/month/boat type sampling strata. NMFS will not allow the Contractor to make-up for interview shortfalls experienced in one state (or multi-state)/month/boat type sampling strata with overages attained in another state (or multi-state)/month/boat type sampling strata. Therefore, it is important to balance the potential costs/risks of too many assignments against the potential costs/risks of too few.

Once the minimum number of assignments has been estimated, this number should be increased by some amount to set the number of assignments to be drawn and issued to interviewers. The site-sampling program will draw this number of assignments in the first two separate rounds of sampling, with each site assignment coded to reflect the round in which it was selected. Assignments drawn in the first round will be "fixed assignments" that will be given priority over the "flexible assignments" drawn in the second round. The fixed assignments must be completed even if interviewing goals are reached before the end of the month. The flexible assignments should always be completed unless interviewing goals for the particular state (or multistate)/month/boat type sampling stratum have already been reached. Therefore, once interviewing goals for a stratum have been reached, the Contractor may cancel all remaining flexible assignments for that stratum.

The Contractor should avoid drawing so many assignments that sampling goals are exceeded within the first couple of weeks of a month. Such an approach would likely result in temporal distributions of interviews that would not be representative of true distributions of fishing effort. Excessive "front-loading" of survey sampling without any consideration for the accuracy of resulting sampling distributions will be considered unacceptable by NMFS.

The Contractor should determine an additional number of assignments to draw for each month beyond the minimum number estimated to meet the sampling goals. These additional assignments can then be drawn during the third round of the assignment draw and held in reserve. If interviewing productivity is running lower than expected during the first two weeks of the month, "reserve assignments" can be issued to provide additional sampling coverage for the remainder of the month. Overuse of reserve assignments could also lead to temporal distributions of interviews that would not be representative of true distributions of fishing effort. Therefore, the number of reserve assignments drawn should be minimized and should not exceed 50% of the total assignments (fixed + flexible) originally issued.

NMFS will provide a SAS program to be used for drawing site cluster/date assignments prior to

the first month of interviewing. This program will draw sites clusters using systematic sampling of a list of clusters ordered by county and sorted randomly within counties. Each site cluster will be replicated in the list as many times as needed to reflect its relative probability of selection. The complete list of replicated site clusters will be ordered by county and randomly sorted by cluster within counties. The replicate entries of the same site remain clustered together within the random sorting of all sites in a county. For each round of site sampling, a sampling interval n, equal to the size of the total list divided by the number of site assignments to be drawn, will be used, and systematic sampling of the list will start at a randomly selected start point between 0 and n. The sample will then be drawn by selecting every nth entry on one complete pass through the list. If there are any sites that are replicated in the list more than n times the number of available assignment dates, they will be removed from the list prior to the draw and automatically selected for the maximum number of times. The remaining site assignments would then be drawn from the remaining list of sites after adjusting the sample size and recalculating the sampling interval.

The sampling distribution and schedule shall be the responsibility of the Contractor and subject to approval by NMFS. The complete schedule of site cluster/date interviewing assignments for each month must be submitted to NMFS prior to its distribution to interviewers. NMFS will have three working days to review and approve the schedule.

The draw of fixed, flexible, and reserve assignments should be conducted at least three weeks prior to the start of a given month of sampling. The assignment-sampling program will require inputs of the numbers of initial (fixed and flexible) and reserve assignments to be drawn for each state/boat-type/month/day-type stratum. Individual site cluster/date assignments will be assigned a unique control number that reflects the type of assignment (fixed, flexible, or reserve). The control number can be used in tracking the ultimate outcome of the assignment.

#### 2.1.4 Sample Distribution

Once the sample of site cluster/date interviewing assignments has been drawn for a given month of interviewing, the Contractor is responsible for issuing those assignments to individual interviewers, tracking the completion of those assignments, and reporting progress made toward meeting the established interviewing goals.

The first step of implementing the sampling schedule is matching the schedule of assignments with individual interviewers. "Fixed" assignments should always be given priority over "flexible" assignments, and both fixed and flexible assignments should be given priority over any "reserve" assignments issued during the month. Assignments may be matched with interviewers to minimize travel costs, but all issued assignments must be covered regardless of interviewer proximity or availability. The staffing of trained interviewers must assure coverage of all fixed and flexible site/date assignments.

Assignments should not be rescheduled to accommodate the preferred schedules of interviewers.

If necessary, new interviewers must be hired and trained to assure that assignments are covered on the assigned dates. The interviewing staff should be geographically distributed such that coverage of all sites is assured. Under no circumstances should fixed or flexible assignments not be issued because "no interviewer is available" to cover the assignment. If an interviewer quits, gets fired, or otherwise becomes unavailable, then assignments issued to that interviewer must be reassigned to another interviewer as soon as possible to assure that no gaps occur in the temporal and geographic distributions of sampling. If necessary, such re-assigned assignments may be rescheduled as described below for "bad weather" assignments. A record should always be kept of the originally assigned date of each assignment as well as any rescheduled dates.

When matching assignments to available interviewers for a given day the following priority ranking list should be used to determine which assignment takes precedence. These are ranked from highest to lowest priority.

#### **Highest Rank**

- 1. fixed assignment on originally drawn date
- 2. flexible assignment on originally drawn date (assuming interview target for that stratum has not yet been reached)
- 3. rescheduled fixed assignment not on originally drawn date
- 4. rescheduled flexible assignment not on originally drawn date
- 5. reserve assignment drawn after the first two weeks of the month and conducted on originally drawn date
- 6. rescheduled reserve assignment that was originally drawn after the first two weeks of the month
- 7. rescheduled reserve assignment drawn during the first two weeks of the month but issued after the first two weeks of the month

#### **Lowest Rank**

Within each month, sampling effort should be distributed evenly and monitored on a weekly and sometimes daily basis to prevent clustering of samples at the beginning or end of the month. Clustering could be caused by meeting monthly goals too early in a month, or by trying to catch up and finish the sampling goals at the end of a month. Monthly allocations of interviews are set as sampling goals and are not to be treated as monthly quotas. Small deviations of the actual distribution of interviews from these monthly goals will not determine the Contractor's success in meeting minimum sampling levels set at the state/month/boat type level. However, large deviations from monthly sampling goals could potentially be viewed as an indication of poor performance, particularly if the reasons for missing goals are within the Contractor's control.

During periods of low fishing activity, it may be feasible to schedule two assignments for one interviewer on the same day. Employment of this strategy would depend on NMFS prior approval of a workable implementation plan proposed by the Contractor. Such a proposal should attempt to minimize potential clustering effects in the temporal and geographic distributions of sampling.

Site assignments may never be changed once the assignment has been drawn. The date of an assignment may only be changed if the assignment has been cancelled due to "bad weather" or due to unexpected interviewer problems, such as illness or car trouble. If the weather on the assigned date is so bad that no fishing is likely to occur within the assigned cluster, then the assignment may be rescheduled for the next available day of the same day type (i.e., weekend/holiday or weekday) within the same month. Rescheduled assignments should not take precedence over fixed or flexible assignments that were originally scheduled for that day. Rescheduled fixed and flexible assignments do take precedence over reserve assignments that were originally scheduled for that day. If the assignment could not be completed on the assigned date because the assigned interviewer became ill, had car trouble, or failed to complete the assignment for some other reason, then the assignment may also be rescheduled according to the same procedures. Interviewer failures to complete issued assignments on the assigned dates should be minimized and unreliable interviewers should be replaced as needed.

### 2.1.5 Sample Monitoring

The Contractor is responsible for tracking and reporting the fates of all issued interviewing assignments according to the delivery schedule. The Contractor shall be responsible for taking appropriate control and administrative measures to ensure that the sampling goals set by NMFS are met for each and every sampling stratum. The Contractor shall require all interviewers to report the numbers of assignments completed and the numbers of interviews obtained on those assignments each week.

The Contractor must track the success of interviewers in completing assignments so that any failed assignments due to "bad weather" or "interviewer problems" can be successfully rescheduled and/or re-assigned in a timely manner. A record must be maintained of any re-assignments of interviewers or re-scheduling of dates such that the fates of all originally issued assignments can be reliably tracked through to completion or cancellation. Reasons must be recorded and provided to NMFS for all failed assignments that are either rescheduled or cancelled. The Contractor should maintain a complete accounting of the fates of all assignments drawn for each month. This information should be provided to the NMFS in a SAS dataset at the end of the month in an Assignment Completion File (see Appendix B.5 for Assignment Completion File variables). NMFS will provide the Contractor with an example Assignment Completion File SAS dataset from 2012.

The Contractor shall track the distributions of interviews obtained relative to the established sampling goals by month, day type and state to determine whether or not it may be necessary to either issue reserve assignments to assure that sampling goals and/or interview distribution goals will be met, or to cancel remaining flexible assignments to prevent unnecessary overages. Reserve assignments must only be issued in the last two weeks of a month to assure the attainment of minimum sampling goals.

The Contractor shall prepare and deliver (to NMFS) weekly monitoring reports by Tuesday of the following week to allow accurate tracking of progress toward reaching monthly sampling goals. Weekly monitoring reports shall include the following information:

- 1. Report showing the fate of each assignment drawn (e.g., completed, rescheduled, cancelled) and the tally of interviews obtained by mode.
- 2. Summed tallies of interviews obtained so far during the month by state and mode, assignments completed, interviews per assignments, assignments left, and progress towards quota attainment.
- 3. Report of any refusals for the month along with any additional information regarding reason for refusal, captain behavior, and type of refusal ("hard" versus "soft").
- 4. Report on any assignments where interviewer did not visit all sites within the cluster.
- 5. Report on any assignments where interviewer did not get initials from site manager.

NMFS may request a weekly conference call with the Contractor to discuss sampling progress and any other issues that may arise.

### 2.2 Assignment Procedures

#### 2.2.1 Before the Assignment

Each interviewer should make sure that he/she knows his/her interviewing schedule. The Contractor home office or the designated field supervisor shall schedule interviewers for assignments on a monthly basis. Before accepting each assignment, each interviewer should know the site codes, names and locations of all sites within the assigned interviewing cluster. Interviewers should consult the most current LPIS Master Site Register to obtain this information and contact their field supervisor if they have any questions. Interviewers should not try to memorize the sites within a cluster since sites within a cluster may vary from month to month. The only reason for not completing a scheduled assignment is if weather conditions do not allow for offshore game fishing and no boats are out that might be targeting a large pelagic species. This type of cancelled assignment is referred to as "weathered-out." Interviewers should obtain offshore weather reports to determine if an assignment should be "weathered out." If there are small craft warnings on the assigned date, the interviewer should check the fishing activity at the assigned site(s) to confirm that no vessels are out fishing. Interviewers shall notify their field supervisors within 24 hours if an assignment has been "weathered out." Likewise, field supervisors should be contacted immediately if an interviewer determines that he/she cannot do an assignment due to unforeseen circumstances or emergencies. If possible, another interviewer should complete the assignment on the date for which it was originally drawn. Rescheduling of "weathered out" or other canceled assignments shall only be done in coordination with the Field Supervisor and/or the Contractor's home office staff according to proper procedures (refer to 2.1.4 Sample Distribution).

Each LPIS interviewing assignment shall specify a cluster of sites (or a single high-pressure

site), a date, and a boat type. Interviewers must always start their assignments at one of the sites in the assigned cluster of sites, and they should give priority to interviewing operators of boats of the assigned type (charter or private). The starting time on the specified date for each assignment shall be determined based on the understanding that an assignment may last no longer than eight hours and that interviewers should be present at the corresponding interviewing access points at the time of day when boats that fish for large pelagic fishes are most likely to return from fishing. In order to determine the optimal time of day, interviewers must gather information on the temporal distribution of returning boats at assigned sites prior to each assignment. Sources of information include but are not limited to:

- Master Site Register The MSR has a field for "best time to interview" based on historical visits to each site. This is a good starting point but should not be relied upon solely as this can change from one year to the next.
- Call the site(s) Determine if a person that works at the site(s), such as the Dockmaster, will provide reliable information concerning the number of boats that went out and the time that they are expected back. Phone numbers for contact persons are provided in the MSR. While calling ahead can help the interviewer determine when to visit a site it should not be used to determine if a site should be visited. Interviewers should physically visit all sites within a cluster to determine firsthand if there is fishing activity or not. Under no circumstances should an assignment be canceled based solely on information obtained by calling the sites within a cluster.
- Ask the Field Supervisor When accepting assignments interviewers may consult with their supervisor regarding the best sampling times and which site in a cluster to visit first.
- Newspaper articles, weekly magazine fishing reports, and large pelagic fishing related web sites may be useful for monitoring activity levels, upcoming tournaments, and seasonal openings and closures of marinas and/or charter boat operations.
- State natural resource agency personnel, NMFS regional personnel, and NMFS port agents may also be good sources of information on the patterns of offshore pelagic fishing at specific sites.

On each interviewing assignment, the interviewer must carry a complete set of all necessary manuals and forms, as well as all needed equipment in useable condition. Prior to the assignment date, each interviewer should make certain that he/she has all of the required materials and equipment for conducting interviews, including:

- Name Tag
- LPIS Procedures Manual
- Fish identification field guide(s)
- Tape Measures two kinds for measuring straight lengths and curved lengths
- Letter from NMFS a letter on NMFS letterhead that provides a brief description of the LPIS, information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for a NMFS representative (see Appendix E for 2012 example letter)

- LPS brochures, fish identification guides, and other informational materials that will be provided periodically by NMFS in volumes suitable for wide-spread distribution to all interested respondents
- LPIS Master Site Register the list of clusters/sites with location and fishing activity information for the state or region
- Site Description Form (SDF) the form used to update site fishing activity information, and to summarize completed interviews, incomplete interviews, interviews refused, interviews not possible due to language problem, and ineligible persons encountered by reason of ineligibility (see Appendix C for 2012 example)
- Assignment Summary Form (ASF) the form used to summarize labor hours and completed interviews, and to check-in with the on-site manager or dockmaster (see Appendix D for 2012 example)
- Screening Introduction the series of questions used to determine the eligibility of an intercepted boat operator for the survey (see 2.2.4 Screening Procedures below)
- LPIS Questionnaire/Coding Form the form which includes the questions used for collecting data from eligible respondents and the check-boxes or spaces used for recording respondent data (Appendix A)
- List of Boats with an HMS Permit the list of boats with the NMFS HMS permits sorted by permit category (charter/headboat vs. angling or general) and sorted alphabetically by boat name within the permit category for the state or region. The list should include the actual permit number for each boat. NMFS will provide electronic versions of the permit databases to the Contractor at three different times: mid-May for June sampling, mid-June for July/August sampling, and mid-August for September/October sampling. The Contractor is responsible for creating field books from these permit lists and for distribution to interviewers. Interviewers should be sent field books that include all vessels within their interviewing area (i.e., "principle port state" field matches), plus vessels from nearby or adjacent states (e.g., Massachusetts interviewer's field books include vessels from CT, RI, and NH, in addition to MA). The permit lists distributed to field interviewers should match the LPTS sampling frames.

### 2.2.2 Arriving at the Site

All interviewers must have the required materials listed above in their physical possession when on site. Interviewers should not leave required materials in the car. Interviewers should dress casually but neatly. Shorts are acceptable, but bathing suits are not. T-shirts are acceptable. Shoes or sandals should be worn while interviewing. Alcohol or illegal drug use or intoxication on assignment is strictly prohibited. Fishing while on-assignment is prohibited.

If interviewing is to be conducted at a site where there is a site manager (i.e., dockmaster, marina operator or some other contact person) present, interviewers must "check-in" with that person upon arrival at the site. Interviewers must introduce themselves to the contact person, ask and record the person's name and contact number on the Assignment Summary Form (ASF), and ask if they would verify the interviewer's presence at the site by initialing the ASF. The ASF

includes a brief statement explaining why the interviewer is at that site. Interviewers must explain the nature of the survey, its objectives, and how they will be performing their work that day. Interviewers should provide copies of the letter from NMFS (see Appendix F for an example letter) and any NMFS brochures to the site manager, as available. If the manager wants more information than is immediately available, he/she should be encouraged to contact the NMFS person listed on the letter.

The interviewers should then check to see if any boats that fish for large pelagic species have gone out that day and, if possible, determine when those boats are likely to return. Such information is important for assessing the potential number of interviews that may be obtained at the site, as well as the appropriate interviewing schedule for that day. The interviewer may then proceed to visit other sites in the assigned site cluster to assess the interviewing potential and appropriate interviewing times at all sites assigned for that day. Once the interviewer has assessed the interviewing potential at all sites in the assigned cluster, he/she should use a strategy for moving from site to site that maximizes the number of potential completed interviews for the assignment. Interviewers should move from site to site with the intent of maximizing sampling of returning boats at all access points within the defined cluster. In determining where to locate, the interviewer should give priority to the site, or sites, with the most expected offshore pelagic fishing trips by boats of the assigned boat type on that day. Interviewers should strive for efficiency and should not sit at sites where there is no expectation of intercepting and interviewing an eligible boat operator. The interviewer may obtain interviews at any or all of the assigned sites and may move from site to site in whatever manner is appropriate to maximize the number of interviews obtained on the assignment. Under no circumstances should an interviewer move to another marina or ramp that is not within the boundaries of the assigned site, or site cluster.

Interviewers should position themselves so that they can observe as much activity as possible at the site(s). The goal is to intercept as many eligible respondents as possible. The best locations to be positioned will vary from site to site. Interviewers should consult with their Field Supervisors regarding the best location to wait at for a given site. Interviewers should be careful not to station themselves next to a fish cleaning station, weigh station, or hoist if that would prevent them from intercepting returning boats with little or no catch. This could result in biased catch estimates. It is important to pick an access point for interviewing that maximizes the chance of intercepting all returning boat operators, regardless of catch.

Although priority shall be given to a specific boat type on any given interviewing assignment, interviewers may obtain interviews with operators of both charter boats and private boats on all assignments. However, priority should always be given to getting interviews for the assigned boat type. For example, if "charter" is the assigned boat type and both a charter boat and a private boat return at about the same time, priority should be given to intercepting and interviewing the operator of the charter boat rather than the private boat.

Interviewers are not prohibited from interviewing at a site where a fishing tournament is in

progress. However, when interviewing at a tournament site the interviewer should be sure to record information identifying the tournament, and whether or not the reporting vessel was participating in the tournament.

At some sites it is possible and advisable to build rapport with the potential respondents present prior to conducting any interviews. Those who have had the opportunity to meet the interviewer and discuss the survey tend to be more cooperative when asked for an interview. A key factor in gaining the respondent's initial cooperation and confidence in the study lies in assuring him/her of the non-enforcement nature of the survey. Respondents often need to be reassured that the information they provide is confidential under NOAA Administrative order 216-100 and the Privacy Act. Interviewers should always remind them they are not there to issue citations or fines, and that the purpose is to collect accurate fishery data. When explicitly given the true purpose of the survey very early in the introduction, respondents tend to be much more willing to cooperate with the survey.

The canvassing process should be very informal and as unobtrusive as possible. The conversation might begin with "Good Afternoon" or "How's it going?" While canvassing, the interviewer should introduce themselves and be respectful. The interviewer should be polite at all times, regardless of any complaints that he or she may receive. Under no circumstances should an interviewer identify him/herself as an employee of the National Marine Fisheries Service.

Assignments drawn for LPIS sampling may occasionally overlap with assignments drawn on the same day and site for the MRIP Access Point Angler Intercept Survey (APAIS). Under a new intercept survey design, starting in 2013 APAIS interviewers will follow strict procedures regarding which sites to visits, what times of day to sample at particular sites, and how long to stay at each assigned site. Under the new design the location and on-site times of APAIS interviewers should be predictable since interviewer discretion regarding alternate site selection and interviewing times is eliminated.

To avoid overlap with APAIS interviewers in the field, NMFS will provide the LPIS Contractor with a list of potential overlap assignments at least 10 days prior to the start of each month. NMFS and the Contractor will work together to determine 1) which potential overlap assignments should be classified as "overlap" and not issued, 2) which should be classified as "work around" assignment and still be issued, and 3) strategies for avoiding overlap with APAIS interviewers on "work around" issued assignments. For "work around" assignments, the Contractor shall provide LPIS interviewers with specific overlap information in the assignment package indicating where and when the APAIS interviewer is expected to be within the LPIS assigned cluster. The LPIS Contractor shall reschedule "overlap" assignments following rescheduling procedures described in Section 2.1.4 above. NMFS may also opt to address APAIS overlap through modifications to the LPIS assignment draw program to avoid drawing overlap assignments in the first place.

#### 2.2.3 Hostile Sites and Refusals

Sites where interviewers are impeded or prohibited from interviewing are referred to as "hostile" sites. When an interviewer encounters a hostile site as part of their assigned cluster they should take the following action:

- Avoid confrontation with the site manager or any other persons at the site and leave the "hostile" site immediately.
- Record that the site was "hostile" on their Site Description Form (SDF) and record the reason why (e.g., the owner or manager refused to allow LPIS interviewers on their dock).
- Notify their Field Supervisor as soon as possible.

When drawing LPIS assignments "hostile" sites should not be included in the sample frame. Interviewers should know which sites are "hostile" in their area and should not visit such sites on future assignments. The Contractor should attempt to convert "hostile" sites to cooperative sites so that they can be visited by interviewers and included in future assignment draws. NMFS should be notified, in advance, of all attempts to persuade hostile sites to cooperate. Field Supervisors should visit the "hostile" site and speak with the manager/operator to try to remedy the situation. Field Supervisors can politely remind the manager of a "hostile" site of the mandatory LPS reporting requirements. However, they must never threaten law enforcement nor should they defend the NMFS or its policies. If the Field Supervisor cannot convince the site manager to allow interviewing at the site, the Contractor's LPIS program manager should follow-up with a phone call (or visit) to further try to remedy the situation.

At other sites LPIS interviewers may be allowed to interview but only at certain locations within the site as determined by the site manager (e.g., interviewing allowed at slips but not at the fuel dock). Interviewers should note this on the SDF but can continue to interview at the site in the locations allowed.

Interviewers may encounter captains who refuse to participate in the survey because they are in a rush, don't agree with NMFS policies or a variety of other reasons. Captains who don't agree with NMFS policies should be encouraged to contact NMFS directly to air their complaints (using the address or phone number on the To Whom letter). It is not appropriate for an interviewer or Field Supervisor to defend or attack NMFS or its policies. If individual captains or owners of eligible vessels refuse the survey they should be informed that they could designate a proxy (e.g., mate) to participate. If they continue to refuse the survey and will not designate a proxy as the respondent the interviewer should do the following:

- Politely ask the captain the reason for their refusal and record their response in the comments field.
- Avoid confrontation with the captain and walk away from the vessel.
- Tally as either initial or mid-interview refusal on the SDF and record as much of the

following information as possible: name of the vessel, HMS permit number, state registration number, Coast Guard documentation number, name of person refusing, any LPS fish seen, the reason for refusal, and any other relevant details in the comments section.

The Contractor should provide NMFS with weekly "hostile" site / refusals status updates that include but are not limited to the following:

- Site name and location
- Date and detailed description of incident including persons/vessels involved
- Attempts to remedy situation and resulting outcomes

### 2.2.4 Screening Procedures

When an interviewer encounters an operator of a returning boat, he/she should use the screening introduction to introduce himself/herself, state the purpose of the survey, and ask questions which will determine whether the respondent is eligible for an LPIS interview. The interviewer should give his/her name and state that the study is sponsored by NMFS. If the intercepted boat operator is willing to cooperate, the interviewer should then ask the series of questions used to determine eligibility. To be eligible for the survey, the potential respondent must be the captain or owner of a boat that has just completed an offshore fishing trip that targeted large pelagic species. For the purposes of the screening introduction, large pelagics include all of the species listed under the "LPS" column in Appendix G. Boat operators returning from fishing trips that used hand-gear (rod and reel or handline) and specifically targeted, but did not catch any of the specified large pelagic species would be considered eligible. Therefore, data are desired for all hand-gear fishing trips that targeted at least one large pelagic fish species regardless of what was caught during that trip.

If an eligible operator of a charter or private boat chooses to designate a crew member or passenger to respond to the survey as a "proxy", then that individual shall be considered eligible for an interview. In such cases, it will be necessary for the interviewer to record that the respondent was a designated proxy for the captain or owner of the boat.

Screener Item 1: On this vessel, are you the captain, owner, or mate or passenger (proxy designated by the captain to participate in this survey)?

- If the respondent says "yes", go to Screener Item 2.
- If the respondent is not the captain or owner or designated proxy, try to locate the eligible respondent. Otherwise, terminate the interview, and tally as NOT CAPTAIN OWNER OR MATE on the Site Description Form.

Screener Item 2: Did your boat just return from an offshore rod and reel or handline fishing trip in which you targeted large pelagic fish such as tunas, billfish, sharks, swordfish, dolphinfish, wahoo, amberjack, or other large pelagic fish?

- If the respondent says "yes", go to the intercept questionnaire.
- If the respondent says he/she was fishing for some other species the interviewer should probe to determine if they were also fishing for any other large pelagic species; if the respondent was not targeting a large pelagic species then the interview should be terminated and the respondent tallied on the Site Description Form (SDF) as DID NOT TARGET LARGE PELAGIC FISH.

#### 2.2.5 Interviewing Procedures

After identifying an eligible respondent, the interviewer should use the questionnaire (Appendix A) to conduct an interview that will collect the necessary information outlined above. As soon as the respondent's eligibility is established, the interviewer must read the Privacy Act statement, which states:

"Your participation in this survey is mandatory. Your responses will be treated as confidential records."

The brief statement above satisfies the Privacy Act requirements, as long as an additional form with the following additional information is available:

"The data is protected by the Privacy Act of 1974 and NOAA Administrative Order 216-100."

This information is included in the letter from NMFS (Appendix F), which should be provided to all eligible respondents.

#### Intercept Interview: Item by Item Instructions

Note: Items 1 through 8 are not questions to be asked of the respondent.

- Item 1 INTERVIEWER CODE. Each interviewer must be given a unique four-digit identification number. This number should be used on all submitted forms.
- Item 2 DATE OF INTERVIEW. The interviewer should record the Month/Day of the intercept. Two digits for both the month and the day should be used.

- Item 3 TIME OF INTERVIEW. Using military time, record the time that the interview was completed. Military time runs on a 24-hour clock starting at 0001 hours (one minute past midnight) and ending at 2400 hours (midnight).
- Item 4 STATE CODE. Enter the two-digit numeric code for the state of intercept. FIPS state codes to use for LPIS are as follows:

Connecticut	CT	09
Delaware	DE	10
Maine	ME	23
Maryland	MD	24
Massachusetts	MA	25
New Hampshire	NH	33
New Jersey	NJ	34
New York	NY	36
Rhode Island	RI	44
Virginia	VA	51

- Item 5 CONTROL NUMBER. Each assignment is given a four-digit identifying number. The first digit of the control number indicates if it is a weekend or weekday assignment. If the first digit is a 1, it is scheduled for a Saturday, Sunday, or holiday (e.g., July 4<sup>th</sup>, Independence Day). If the first digit is a 2, it is scheduled for Monday, Tuesday, Wednesday, Thursday or Friday. The second digit indicates the mode of the assignment. A 1 indicates an assignment during which charter boat intercepts are preferred; while a 2 indicates that private boat intercepts are preferred (interviews can be conducted in either mode on any assignment). The 3<sup>rd</sup> and 4<sup>th</sup> digits are used as counters for the number of assignments given out in a given state and month.
- Item 6 DOCUMENT NUMBER. Throughout an assignment, the interviewer should consecutively number forms completed for the assignment. BOTH PAGES of the first interview should be numbered 01; BOTH PAGES of the second interview should be numbered 02, etc. All forms sent in should be numbered, regardless of interview status.
- Item 7a SITE NUMBER. Enter the four-digit number of the site where the interview is being conducted. The site number should be listed on the interviewer's assignment schedule as one of the sites within the assigned cluster, as well as in the site register.
- Item 7b CLUSTER. Interviewer should enter the two digit number for the cluster of sites assigned for that day. The cluster number should be listed on the interviewer's assignment schedule.

Item 8 SITE TYPE. Enter the type of site at which the interview took place.

If interview took place at a marina, code 1.

If interview took place on a private dock, code 2.

If interview took place at a public ramp, code 3.

If interview took place at some other type of site, code 4.

Item 9 BOAT NAME. If the name of the boat is evident (e.g., if it is written on the boat itself), then the interviewer need only verify the information with the respondent, and fill in the name on the coding form. If the boat name is not apparent, the interviewer should ask the respondent "What is the name of your boat?" and fill in the information. If the boat has no name, the interviewer should leave the first set

of boxes at Question 9 blank and fill in the "no name" oval underneath.

It is extremely important that interviewers record the vessel name EXACTLY as it appears on the vessel, or EXACTLY as the captain specifies. If the vessel is on the permit frame, they should record the name EXACTLY as it appears on the frame. Even slight changes in the spelling of a vessel name can cause significant data quality control problems.

Item 10a IS YOUR BOAT PRIMARILY A...

Item 10a records how the boat is primarily used and identifies partyboats and headboats (which are not eligible for the LPIS). Fill in the appropriate oval. If party/headboat, interviewers should thank the respondent and terminate the interview.

Item 10b WAS THE TRIP TODAY A CHARTER OR PRIVATE TRIP?

Item 10b pertains to the type of trip taken that day, private or charter. Fill in the appropriate oval.

appropriate o

Items 11a through 13

**VESSEL IDENTIFICATION** 

These questions are asked in order to further identify the boat. The best means of identification is the NMFS Highly Migratory Species (HMS) or Atlantic Tunas permit number. Interviewers should be given an ID list of permitted vessels in their state and nearby states. The ID list is a database containing boat-identifying information, such as the permit holder's name, the NMFS Highly Migratory Species or Atlantic Tunas permit number and category, and the Coast Guard documentation number or State registration number, sorted by boat name in alphabetical order. An ID list will be created for each state or multi-state area. Some states will also receive a permit list sorted by ascending hull number. This is helpful for those areas that have a lot of small unnamed private boats targeting large pelagics. The Contractor should provide interviewers with an ID list before

interviewing begins and should update this list twice during the LPIS survey period. NMFS will provide the Contractor with HMS permit lists as needed to create these ID lists. There are privacy issues surrounding these ID lists so the information on these lists should never be shared by interviewers or shown to anyone who has not signed the NMFS non-disclosure agreement (see Section 5 Data Confidentiality). Permit holder contact information (e.g., address and phone number) should not appear on this list. The information on the ID list is merely used to assist in the verification of a boat's HMS permit number.

If vessels are still out fishing when the interviewer arrives on-site he/she may have time to look up the vessels in the ID listing before the vessels return. This way the interviewer needs only to confirm the information with the respondent when conducting the interview. If there is no time to look up the vessels beforehand, interviewers should ask the questions on the form as they are written. If a respondent does not want to get their permit information, the interviewer should offer to check to see if the boat is on the ID list. If so, the interviewer should verify the listed information with the respondent, instead of formally asking him/her the questions. However, if the vessel is not on the ID listing, then the interviewer should ask the questions to get the permit information directly from the respondent. Respondents should be informed that they would have to just get the information once. Interviewers should record the information in their copy of the ID listing. Interviewers should inform their Field Supervisors of any changes or additions to the ID list, and Field Supervisors should make sure these changes get passed on to other LPIS interviewers in the area and to the home office staff.

Although an intercepted boat may be listed on the ID listing, it is essential that interviewers verify <u>all</u> ID listing information with the respondent for the following reasons:

- Though the boat may have been interviewed before, it is possible that the respondent was not interviewed (e.g., if a boat has more than one owner); if this occurs, be sure to get the new respondent's information, so that it can be added to the ID listing;
- There could be a mistake on the ID listing;
- There may be more than one vessel with the same boat name.

If interviewers are unable to obtain the HMS permit number they should try to obtain the Coast Guard documentation number or the state registration information. It is <u>very important</u> that interviewers get at least one of these identification numbers.

Item 11a DOES THE BOAT HAVE A NMFS HMS PERMIT, AND IF SO, WHAT CATEGORY IS IT? Explain that HMS stands for Highly Migratory Species, if necessary. Read the possible permit categories to the respondent. Explain the difference between the permits (if necessary). Fill in oval 1 if the vessel has a Atlantic Tunas General category permit. Fill in oval 2 if the vessel has an HMS Angling category permit. Fill in oval 3 if the vessel has an HMS Charter/Headboat category permit. If the vessel is not in the HMS permit listing and the respondent claims that the vessel does not have an HMS permit, then fill in oval 7 for "No HMS permit". If the vessel is not in the HMS permit listing, and the respondent does not know the category, then fill in oval 8 for "Don't know". If the vessel is not in the HMS permit listing and the respondent refuses to answer the question, fill in the oval 9 for "Refused".

If the respondent does not provide you with the permit category and it cannot be verified with the respondent on the HMS Permit List, fill in oval 7, 8 or 9, as appropriate, and go to Item 12.

- Item 11b WHAT IS YOUR BOAT'S NMFS HMS PERMIT NUMBER? Enter the vessel's HMS permit number. HMS permit numbers must be either:
  - 1) Verified with the respondent by matching the HMS permit number with the vessel name <u>and</u> Vessel Representative name on the HMS Permit List; or
  - 2) Obtained directly from the respondent (if the vessel is not on the HMS permit list and the respondent shows you the vessel's HMS permit); or
  - 3) Corrected by the Respondent (if the respondent shows you the vessel's HMS permit and the number is different from the number in the HMS Permit List).

If you are able to verify the HMS permit number from the HMS permit list with the respondent then fill in oval 1 "Verified with Respondent". If you obtain the HMS permit number directly from the respondent then fill in oval 2 "Obtained from Respondent". If the HMS permit number is incorrect on the HMS Permit List, then fill in oval 3 "Corrected by Respondent". If the respondent does not know or refuses to give his/her number, fill in oval 8 or 9, as appropriate.

Item 12 CAN YOU TELL ME/VERIFY YOUR BOAT'S COAST GUARD DOCUMENTATION NUMBER? If the intercepted vessel's Coast Guard documentation number is contained on the HMS Permit List, you need only verify the information with the respondent and fill in the information on the coding form. If the vessel is not on the HMS Permit List, ask the respondent to provide the vessel's Coast Guard documentation number. If given, enter the Coast Guard

documentation number in the boxes provided, and go to Item 14. If the respondent claims that the vessel does not have an Coast Guard documentation number and the Coast Guard documentation number cannot be verified from the HMS Permit List, fill in oval 2 "Vessel has no Coast Guard Documentation Number". If the respondent does not know the vessel's Coast Guard Documentation number, and the number cannot be verified with from the HMS Permit List, fill in oval 8 "Don't Know". If the respondent refuses to provide the vessel's Coast Guard Documentation number, and the number cannot be verified with from the HMS Permit List, fill in oval 9 "Refused".

- Item 13 CAN YOU TELL ME/VERIFY YOUR BOAT'S STATE REGISTRATION NUMBER? Enter the intercepted vessel's State registration number. If the number is written on the side of the boat, or if the State registration number is contained on the HMS Permit List, you need only verify the information with the respondent and fill in the information on the coding form (including the state abbreviation). If the respondent claims that the vessel does not have a State registration number and the State registration number cannot be verified from the HMS Permit List, fill in oval 2 "Vessel has no State registration number". If the respondent does not know the vessel's State registration number, and the number cannot be verified with from the HMS Permit List, and the State Registration number is not on the side of the boat, fill in oval 8 "Don't Know". If the respondent refuses to provide the vessel's State registration number, and the number cannot be verified with from the HMS Permit List, and the State Registration number is not on the side of the boat, fill in oval 9 "Refused".
- Item 14 STATE CODE. Record the state's abbreviation postal code and the 2 digit numeric FIPS code (see Item 4 above) for which the respondent **indicates is the vessel's principle port state.** Note: Only read the text in parentheses ("on your HMS permit application") if the respondent indicated they have an HMS permit in Item 11a.
- Item 15 RETURN TIME. The purpose of this question is to determine when the respondent returned from his/her trip. If the interviewer actually sees the respondent return to the site, they need only verify the return time. Otherwise they should ask "At about what time did your boat return to this site?" **Use military time to record the return time.**
- Item 16 TARGET SPECIES. Fill in the appropriate 4 digit code for the 1<sup>st</sup> and 2<sup>nd</sup> target large pelagic species in the boxes and write the name on the blank line to the right of the boxes. Only record large pelagic species in Item 16, even if the respondent indicated they were also targeting non-LPS species.

The 1<sup>st</sup> target is the primary target and the 2<sup>nd</sup> target is the secondary target.

On the "write-in line", it is OK to use abbreviations such as "YFT" for yellowfin tuna or "school BFT" for school size bluefin tuna. It is extremely important that you probe to determine the large pelagic target to the species level. If either the 1<sup>st</sup> or 2<sup>nd</sup> target is BFT, it is important to probe for size class. If the angler states that he/she was targeting bluefin tuna, be sure to determine which size class they were targeting. If the person will not specify which size class of bluefin tuna they are targeting, code 4670.

If the respondent absolutely will not say which species they were targeting but will only specify species groups, such as "SHARKS" then code 3591 for Unknown Shark. The code for unclassified "TUNA" is 4656. The code for "ANY LPS" is 7777.

See Appendix G for complete list of LPS species codes. If the respondent indicates targeting a large pelagic species for which there is no code in Appendix G the interviewer should make a note of this on the form and the Contractor should contact NMFS for the appropriate code.

- Item 17a TOURNAMENT PARTICIPATION. Check the appropriate box to indicate if the intercepted vessel was participating in a tournament on the intercepted trip.
- Item 17b TOURNAMENT NAME. If the respondent answered yes at question 17a, ask for the name of the tournament at question 17b, and fill in the name on the coding form (one letter per box). Next, enter the four-character tournament code (see Appendix L) below the tournament name. If the angler was not fishing in a tournament, leave Item 17b blank.
- Item 18 HOOK TYPE. Indicate the type of hooks used on the intercepted trip. Be sure to fill in <u>all</u> ovals that apply. Circle hooks are defined in 50 CFR §635.2 as "a fishing hook originally designed and manufactured so that the point is turned perpendicularly back to the shank to form a generally circular, or oval, shape."
- Item 19 NUMBER OF LINES. Interviewers should enter the number of lines the boat had in the water. If number of lines in the water varied during the trip the interviewer should record the maximum number of lines fished at one time.
- Items 20 HOURS FISHED. Indicate the number of hours spent actually fishing with the primary gear for large pelagics. Do not include the time spent traveling to and from the fishing area(s).
- Item 21 BAIT USED. Indicate if live, dead, and/or artificial bait was used on the intercepted trip with the primary fishing gear. Be sure to fill in all ovals that

apply.

- Item 22 METHOD(S) USED. Indicate whether anglers were trolling, chumming or chunking or other- *Fill in all ovals that apply and SPECIFY IF OTHER*.
- Item 23 NUMBER OF ANGLERS. Indicate the total number of anglers who were actively involved in large pelagic fishing on the intercepted trip. Do not include persons on the vessel who did not fish.
- Item 24 LOCATION. Indicate the name of the main fishing area that was used to fish for large pelagic species. Even if the fishing area is listed in the Fishing Areas List (Appendix H), ask the respondent if they know the latitude and longitude. If the respondent can provide the latitude and longitude, then enter the coordinates provided by the respondent.

If the respondent says they do not know the coordinates <u>and</u> the coordinates are **not** listed in Appendix H, then latitude and longitude should be coded 9998 and 9998. If the respondent refuses to provide the coordinates <u>and</u> the coordinates are **not** listed in Appendix H, then latitude and longitude should be coded 9999 and 9999. However, if coordinates are listed for the fishing area in Appendix H **for your interviewing State** <u>and</u> the respondent did not know or refused to provide them, then the latitude and longitude listed in Appendix H should be entered.

There are fishing locations with similar names in different States. Do not use coordinates for a fishing area from Appendix H unless it is listed in your State.

If the respondent provides a fishing location name <u>and</u> does not know the latitude and longitude <u>but</u> instead provides LORAN (\*LO\*ng \*RA\*nge \*N\*avigation) coordinates, then record the location name and write the LORAN numbers after the name. Then, if the fishing location provided by the respondent is in Appendix H, fill in the latitude and longitude from Appendix H. However, if the location is not in Appendix H, then record 9998 for latitude and 9998 for longitude.

- Item 25 MILES OFFSHORE. Indicate the maximum number of miles that the vessel was from land on the intercepted trip. Be sure to get the mileage to the nearest point of land, as opposed to the mileage to the site of intercept.
- Item 26 WATER DEPTH. Indicate the depth (in feet) at the intercepted vessel's fishing location. If the respondent cannot provide an exact depth, try to obtain a depth range, and use the midpoint. If the response is given in fathoms convert to feet (6 FEET = 1 FATHOM), or just write the number of fathoms to the side of the boxes

on the coding form, and later convert the measurement to feet.

- Item 27 WATER TEMPERATURE. Indicate the surface water temperature in degrees Fahrenheit. This can usually be obtained from the captain.
- Item 28 NAME AND PHONE. A percentage of all interviews are validated. To do so, we must have a name and phone number where the respondent can be reached for an extremely short validation interview (about 2 minutes). This number will not be used for the Large Pelagic Telephone Survey, and the respondent does not necessarily need to give his/her full name, or a home phone number. (A first name and a work phone number is fine.) Clearly record the respondent's name and phone number (including area code) in the appropriate boxes on the coding form. It is imperative that interviewers ask this question of all respondents.
- Item 29 CAUGHT FISH. Indicate if any fish were caught or released during the fishing trip. If fish were caught, fill in the oval for "Yes" and go to the second page of the intercept form, question 30. If no fish were caught or released, or if they refuse to answer, fill in the appropriate oval, end the interview, and thank the respondent for their time. Be especially careful to fill in the correct response at Item 29.

If Q.29 = "Yes", then continue the interview on the second page.

# If Q.29 = "No" or the respondent refuse to answer the question, then the interview is complete.

<u>Note</u>: Questions 4, 5 and 6 are identifiers that are repeated at the top of the second page. This will prevent confusion when numerous forms are processed. Always complete these blocks.

Item 30 FISH COUNTS. If fish were caught, indicate, by species:

- the number of fish that were kept;
- the number of fish that were kept that were observed and identified by the Interviewer;
- the number of fish released alive;
- the number of fish released dead;
- the number of fish that were kept that have been or will be sold;

• the number of fish that were kept that have been weighed-in or will be weighed-in at the tournament weigh station (if participating in a tournament on the intercepted trip, q.17a=Yes).

Note: The count for "number of fish to sell" and "number of fish to weigh-in" should be a subset of those fish that were kept. Be sure that the respondent includes <u>all</u> kept fish when they are asked the first part of Item 30 "number kept." When asked "How many of those \_\_\_\_ that you kept did you sell or do you plan to sell?" and "How many of those \_\_\_\_ that you kept did you weigh-in or do you plan to weigh-in at the tournament weigh station?", the response should be a subset of those fish that were kept.

Interviewers should ask respondents if they can see all fish that were kept. If for some reason kept fish are not available to be counted and identified, the interviewer should make a note of this in the "notes" area on Item 30. If the interviewer is absolutely certain that the respondent is making a mistake in count or species identification, they should record the correct information on the form, as opposed to the incorrect information supplied by the respondent. The <u>Guide to Sharks</u>, <u>Tunas & Billfishes of the U.S. Atlantic & Gulf of Mexico</u> and <u>Guide to the Tunas of the Western Atlantic</u> will help with species identifications. Peterson's <u>Field Guide to Atlantic Coast Fishes of North America</u> is also a good source of information. When in doubt about the species identity of any unobserved fish, the interviewer should appropriately identify the fish at a higher taxonomic level, such as genus or family. However, Interviewers are expected to be able to identify all observed fish to the species level. Another reason why it is important to observe the fish (besides identification) is to get an accurate count of the number landed.

Fill out the corresponding coding boxes for each species that the vessel caught. All fish species caught should be recorded on the form even if they are not large pelagic fish. Make sure to write out the name of the species (and size class for bluefin tuna) on the line provided and also write the 4-digit numeric species code. Codes for commonly encountered species are provided on the form itself and others can be located in Appendix G. Always remember to probe for bycatch. If the respondent cannot remember or refuses to indicate how many he/she kept or released of a certain species, record "don't know" or "refused" (as appropriate) in the margin. Try to probe the angler for catch information (species and numbers), particularly for incidental catch and released fish that are not available for inspection. Anglers will sometimes use a local name for a species that does not match the accepted common name provided in Appendix G (e.g., "footballs" refer to school size bluefin tuna). Interviewers should refer to the Local Names list provided in Appendix G if they cannot figure out what species the angler is referring to. Interviewers must probe to ensure they are recording the correct species since some local names are used to refer to more than one species. For example, "footballs" can refer to a small tuna of one of several species including Atlantic bonito, blackfin tuna, yellowfin tuna or school size bluefin tuna. The local names list will be updated as needed to reflect new names encountered in the field.

Fill in zero's where appropriate for disposition boxes. For example, if the respondent says they only "released alive" 05 albacore, be sure to fill in 00 in the appropriate boxes for "number

kept", "number identified by Interviewer", "released dead", "number to sell", and "number to weigh-in". Do not leave any boxes blank.

Item 31 FISH MEASURMENTS. Once the interviewer has counted and identified all observed catch, he/she should ask for permission to measure at least a representative sample of the fish to obtain lengths. If the angler did catch and keep any fish, ask "May I measure the fish?" If the respondent says "yes", fill in oval 1. If the respondent refuses to let the interviewer measure the fish, or has no fish available to look at, then fill in oval 2 and indicate why the fish were not measured in the notes section provided in Item 30. Fish that have been filleted are not considered available for measuring. If more than 10 fish are available for measuring, fill in Items 4 through 6 at the top of the second half of another form and use that form to fill in the remaining fish lengths. Use as many forms as necessary.

For the purposes of this survey, bluefin tuna size classifications should be determined by its curved fork length as indicated in the table below Item 30 on the survey form. Respondents who <u>say</u> they caught all "school" bluefin tuna may have actually caught different size classes of bluefin tuna. For example, if a respondent reports that he/she kept 4 school bluefin and the interviewer measures the curved fork lengths to be 1196 mm, 1018 mm, 1103 mm, and 998 mm, they should code Items 30 and 31 to reflect that the vessel kept only 3 school bluefin, along with 1 large school bluefin.

If the respondent has large pelagic fish available to look at, the interviewer should collect the following data:

SPECIES CODE Use the four digit species codes recorded in Item 30 for LPS species.

LENGTH Measure the straight fork length of all fish in millimeters. For the following

tuna species, curved fork lengths should also be recorded: bluefin, bigeye, albacore, yellowfin and skipjack. All length measurements should be taken using proper procedures and with NMFS approved measuring tapes or

devices.

GENDER For all sharks and dolphinfish (mahi mahi), record the gender of each fish

(1=male, 2=female, 8=undetermined).

PREP Record the preparation of the species (0=whole, 2=gutted, 6=pectoral length). Only fish that are whole or gutted should be measured (prep= 0 or 2). The only exception to this rule is for Giant and Large Medium bluefin

tuna and only if the full body length cannot be obtained. If these fish are

brought in headed then the interviewer may obtain a pectoral length measurement and place a 6 in the PREP code box indicating a pectoral length measurement. Fish that have had their tail completely cut off should not be measured. If the tail is just trimmed but not completely removed a measurement can still be taken.

# BILLFISH & SWORDFISH

Special boxes for measuring billfish and swordfish are located at the bottom of the second page of the intercept questionnaire. There are boxes for both an upper measurement (tip of upper jaw (bill) to fork) and a lower jaw measurement (tip of lower jaw to fork). If a billfish is measured, the interviewer should record the upper tip of bill length to the fork only if the bill is intact (complete). Do not record the upper bill length if the bill is broken. Use additional forms if more than one billfish/swordfish is measured.

See Appendix I. Measuring Fish for more information on the procedures for measuring various types of fish.

#### **SUB-SAMPLING**

All fish should be measured if possible. However, due to time constraints it may not always be possible to obtain length information for all available fish. Interviewers need to budget their time and maximize the number of interviews obtained with eligible vessels. If there are so many fish that measurements cannot be obtained on all of them a representative sample of fish should be measured. For example, if there were 38 dolphinfish and there is only time to record 10 measurements, then ten fish could be sub-sampled. To randomly sub-sample the fish, interviewers should blindly determine which fish to inspect rather than purposely try to pick the fish that look "average."

#### 2.2.6 Site Description Form

The Site Description Form (SDF) is used to summarize the results of the completed assignment with information from each site (within a cluster). Interviewers must fill-out a Site Description Form for each assignment completed. An example of the Site Description Form used in 2012 can be found in Appendix C.

INTERVIEWER CODE	see 2.2.5 above
INTERVIEW DATE	see 2.2.5 above
STATE CODE	see 2.2.5 above
CLUSTER ID	see 2.2.5 above
CONTROL NUMBER	see 2.2.5 above

SITE # NAME

SITE #1 CODE Enter the site name and four-digit number of the first site visited. The site

number should be listed on the interviewer's assignment schedule as one of the sites within the assigned cluster, as well as in the site register.

COUNTY CODE #1 Enter the three-digit number assigned to the site visited where interviews

are being conducted. The county code should be listed on the interviewer's assignment schedule, as well as in the site register.

SITE REPRESENTATIVE NAME and TELEPHONE

**NUMBER:** If a Site Representative is present at the site, record their name and

the telephone number for the site.

SITE REPRESENTATIVE

**INITALS:** After "checking-in" with a Site Representative, ask the Site

Representative to initial your SDF on the "write-in" line for SITE REPRESENTATIVE INITALS in the section for the site they

represent.

**TIME OF INITIALS:** If the Site Representative initials your form ask them to record the

"sign-in" time on the "write-in" line next to TIME OF INITIALS.

ESTIMATE # OF ELIGIBLE VESSELS PER DAY FOR CURRENT MONTH

Estimate the number of eligible vessels per day for the current month on a good weather day that will return to the site. This estimate will likely vary

by mode (private vs. charter boats) and the day type (weekend vs.

weekday). Under "PR" enter the numbers estimated for both weekend and weekday for Private boat trips. Under "CH" enter the numbers estimated

for both weekend and weekday for charter boat trips.

STATUS: All intercepted persons should be classified under the appropriate status

and tallied on the Site Description Form for each site. Status definitions

are as follows:

COMPLETED

INTERVIEWS Enter the number of completed verifiable interviews with eligible

respondents. The interview is considered a completed verifiable interview with an eligible respondent if responses are provided for all questions and

there is:

- A respondent name and telephone number Or
- A boat name and vessel identifier that is in the ID listing

Use Question 11a to determine mode: If permit type is charter/headboat then record as CH for charter boat interview; if permit type is General or Angling then record as PR for private boat interview. Permit type should be verified using the ID list, if the vessel is listed.

If the respondent does not have an HMS permit, does not know what type, or refused the question, <u>and the vessel is not listed in the permit listing</u>, refer to Question 10a (Boat Primarily Operated As) to determine mode of interview (1 = PR, 2 = CH).

If the respondent does not know or refuses to answer 10a, then refer to 10b (trip today) to determine mode of interview (1 = CH, 2 = PR). If the respondent does not know or refuses to answer 10b, note in the comments section of the SDF.

#### MID-INTERVIEW REFUSALS

If the interviewer initiates the interview questionnaire with a respondent but they terminate the interview after questioning has begun, the interviewer should thank the respondent for their time and tally.

#### **INITIAL REFUSALS**

If a seemingly eligible respondent refuses to be interviewed at all, it is considered an "initial refusal" and should be tallied. Ask the person his or her name and record it along with the boat name (and any other identifying information, such as state registration #), and incident specifics in the comments section of the SDF (see 2.2.3 Hostile Sites and Refusals).

#### LANGUAGE BARRIER:

Fill in the number of interviews that could not be obtained due to language incompatibility. If interviewer initiates an interview with a respondent, but they are unable to continue due to communication (language) problems, tally as language barrier. Interviews may be conducted with a captain's translator, if one is present. If this does occur make a note of this on the SDF.

# ESTIMATE OF MISSED ELIGIBLE BOATS

Interviewers should determine the number of eligible boats missed at each site because they were in the middle of another interview. Interviewers should record the number of boats appearing to be eligible that they were unable to intercept at each site because they were interviewing another vessel's respondent. "Eligible" vessels are those that have returned from a saltwater fishing trip using handline or rod and reel gear that targeted a large pelagic species. Interviewers should only record as "missed eligible" vessels returning to the site the interviewer is currently at. Interviewers should not record as "missed eligible" vessels that were missed at other sites in the cluster because the interviewer was at another site or traveling between sites.

Most often interviewers will have to make the determination of eligibility based on visual cues rather than actually asking the captain. Visual cues which may indicate whether a vessel is eligible for the LPIS include:

- large pelagic fish on board or being off-loaded;
- vessels flying large pelagic species flags; or
- vessels with fishing gear (rods, reels, fighting chairs) typically used for large pelagic species.

Interviewers may also use the following to determine if a missed vessel was eligible for interviewing:

- their own local knowledge of particular vessels and/or captains;
- information obtained from the office, site manager, or others at the site; or
- information about charter boat schedules.

Below are some Frequently Asked Questions (FAQs) that interviewers might have related to the definition of "missed eligible boat."

#### "Missed eligible boat" FAQs

Q. I see a vessel returning from an offshore trip to a different site in my assigned cluster (i.e., not the site I am currently at). Do I tally the vessel as a "missed eligible."?

A. No. Only vessels returning to the site you are currently at should be tallied.

- Q. I see an eligible vessel temporarily docked to refuel at a site I am currently interviewing at. I miss getting the interview because the vessel leaves while I am interviewing another vessel. I can't tell if this vessel stayed within the cluster after it left the fuel dock. Do I tally this on my SDF as a missed eligible?
- A. Yes, this would be considered a "missed eligible" for the fuel dock site because the vessel stopped at the site while you were there. The only reason you could not interview this vessel was because you were busy interviewing another vessel. Note: If you catch up with this same vessel at another site within the assigned cluster and conduct an interview, make sure you subtract one from the "missed eligible" tally at the fuel dock site.
- Q. I see an eligible vessel temporarily docked at the fuel dock of the site I am currently interviewing at. However, the site manager does not allow interviews to be conducted at the fuel site. The vessel finishes fueling up and leaves the site. Do I count this vessel as a missed eligible?

  A. No. This vessel should be counted as a refusal. This is different from a refusal by a captain or mate you are trying to interview. In the comments box on the SDF note the number of refusals that were due to the site manager not allowing interviewing at a particular location on site. Note: If you catch up with this same vessel at another site within the assigned cluster and conduct an interview, make sure you subtract one from the "refusal" tally at the fuel dock site.
- Q. I arrive at my first site at 3:00 pm to begin the assignment. In the office the site manager informs me that the vessel "Tuna Time" returned from an overnight offshore tuna trip and got back to the dock at 1:00 pm. I walk the docks and find the "Tuna Time" in its slip but no one is around to interview. Do I tally this vessel as a "missed eligible"?

  A. No. According to the definition only vessels that were missed while you were on site should be counted.
- Q. I arrive at my first site at 3:00 pm to begin the assignment. In the office the site manager informs me that the charter vessel "Tuna Time" returned from an overnight offshore tuna trip and got back to the dock at 1:00 pm. I walk the docks and find the "Tuna Time" in its slip but no captain around. I ask a guy on the dock and he says the captain left but he fished on the boat as a paying passenger. Do I tally this vessel as a "missed eligible"?
- A. No. According to the definition only vessels that were missed while you were on site should be counted. Since you were not at the site when the captain was around this should be recorded as "not captain, owner or mate."

Q. I arrive on site and notice the "Tuna Time" boat slip is empty. The manager confirms that the vessel went out tuna fishing earlier. I stay two hours on site but the Tuna Time still does not return. I leave the site and terminate the assignment. Should I count the Tuna Time as a missed eligible?

A. No, since the Tuna Time returned after you terminated the assignment it should be tallied under "Boats that have not returned."

#### BOATS THAT HAVE NOT RETURNED

When interviewers leave a site within the assigned cluster, and there are still boats that are expected back, they should record the number of vessels that have not yet returned.

Below are some Frequently Asked Questions (FAQs) that interviewers might have related to the definition of "boats that have not returned."

"Boats that have not returned" FAQs

Q. Do I count jet-ski trailers or slips that I know are occupied by sailboats in the tally of "boats that have not returned?"

A. No. If you are almost certain that the vessel did not fish then do not include these.

Q. Do I count small fishing vessels that are not likely to be going offshore for large pelagics?

A. Yes. If the vessel could be out saltwater fishing it should be counted as "boats that have not returned" regardless of the vessel size.

#### DID NOT TARGET LARGE PELAGIC SPECIES

If an interviewer discovers during the screening process that they have intercepted someone who did not target a large pelagic species they should tally the respondent in this box.

#### NOT CAPTAIN/OWNER

OR MATE

If an interviewer discovers during the screening process that they have intercepted someone who is not the captain, owner or designated proxy (Screener Item 1) then they should try to locate the eligible respondent, if all eligible respondents for the vessel have already left the site then tally as 'NOT CAPTAIN/OWNER OR MATE.'

The data fields above must be recorded for each site visited on a particular assignment whether or not any interviews were actually obtained.

#### 2.2.7 Assignment Summary Form

In addition to the SDF, interviewers must fill-out an assignment summary form (ASF) for each completed assignment. The ASF may also be used to keep time and expense information if the Contractor chooses to use it for that purpose as well. An example ASF used in 2012 is included in Appendix D.

Only intercepted boat operators (captains or owners) who cooperate for a complete interview shall be considered "respondents", and only complete interviews of such respondents shall be counted toward interview quotas.

Interviewer name
see 2.2.5 above

BEGIN Enter the time (military format) when the assignment began. That is, the

time when the interviewer arrived on-site to begin their assignment.

END Enter the time (military format) when the assignment ended. That is, the

time when the interviewer left the cluster and terminated the assignment.

#### WEATHER FAVORABLE FOR FISHING OFFSHORE?

Fill in the oval for "Yes" if the weather conditions are favorable for offshore fishing. If the offshore conditions are poor, fill in the oval for "No." In general, strong winds (25-30 knots, especially from the Northeast) and high seas (especially greater than 8-10 feet) will cause many offshore fishermen to cancel their trips. Assignments that are conducted despite poor offshore conditions should be attempted only when fishing activity can be confirmed beforehand.

## 2.3 Field Personnel Requirements

## 2.3.1 Field Supervisor Qualifications, Training and Supervisory Tasks

The Contractor is responsible for recruiting, hiring, testing, and training field supervisors for the LPIS. The Contractor must assign at least one field supervisor to each state or multi-state area. The field supervisor must have extensive knowledge of the recreational fisheries in their state/area, particularly large pelagics fishing. This person must also have prior field interviewing experience, preferably on the LPIS or some other related fisheries survey. Field supervisors must be able to identify all fish species in their area and must score 100% on the fish identification exam given to new interviewers (see 2.3.2 Interviewer Qualifications below). They must also have knowledge of all the sites on the LPIS MSR in their area and be able to answer interviewer questions regarding the site register, site locations, or strategies for interviewing at particular sites. Field supervisors must also be able to answer any questions regarding interviewing procedures, coding of forms, and collection of biological data that interviewers may have.

In addition to attending the regular LPIS interviewer training, field supervisors must be trained by the project manager to perform the following supervisory tasks:

- Coordinating assignment scheduling for interviewers in their area (Contractor may decide to assign this task to home office staff as well)
- Quality control field visits with interviewers (see below 2.4.2 "LPIS Field Validation of Interviewers")
- Review of monthly interviewer performance measure reports and follow-up with interviewers on any problems identified.
- Facilitating local LPS data review meetings
- Visiting "hostile sites" and attempting to remedy the situation
- Updating and revising the LPIS site register and site clusters as needed
- Updating the permit holder ID List with new information provided by interviewers and NMFS.

In addition to their local data review meeting, field Supervisors are expected to attend two LPS data review meetings each year (see 2.7.2 below). Field Supervisors are also expected to attend the annual LPIS contract start-up meeting to be held in Silver Spring, Maryland sometime prior to sampling in June (see 2.7.1 below).

#### 2.3.2 Interviewer Qualifications, Training and Supervision

The Contractor is responsible for recruiting, hiring, testing, and training field interviewers for the LPIS. The Contractor must make certain that they have enough field interviewers available in each area to cover the assignment load required in this SOW. Interviewer training shall be

conducted at appropriate sites no later than five days prior to commencement of interviewing. During their first assignment, all new interviewers must be accompanied by a supervisor. This will allow the supervisor to provide "on-the-job" training and assure that each new interviewer is adequately prepared to work on their own. Accompanying new interviewers on their first assignment is different from the Field Validations described in Section 2.4.2 below.

The Contractor shall screen applicants and invite for training only those that have sufficient experience in the identification of fishes and sufficient knowledge of the recreational fishery for large pelagic fishes. The Contractor shall require invited applicants to pass a qualifying exam before hiring and training them as field interviewers. The qualifying exam shall include, but shall not necessarily be limited to the following:

- Identification to the species level of fishes known to be common components of the offshore recreational pelagic fishery.
- Demonstration of familiarity with recreational fishing methods and locations for the capture of large pelagic fishes.

Once applicants who qualify have been hired, they should be trained to accurately and consistently identify to the species level all fishes they are likely to encounter. All interviewers shall be required to accurately identify the 25 most common large pelagic species in their area before they conduct their first LPIS assignment. Both new and experienced interviewers shall be tested on species identification at least twice per year – once prior to the start of sampling for the year and once near the midpoint in the sampling year. Experienced interviewers also need to attend a refresher training session prior to the start of field work each year.

The training of new and experienced LPIS interviewers shall include but shall not necessarily be limited to the following:

- An explanation of the objectives, goals, and operation of the LPIS, and a detailed explanation of the component surveys of the LPS (i.e., FHS add-on, LPTS) and their relationship to the dockside intercept survey
- A brief introduction to the objectives, goals, and operation of other recreational fisheries data collection programs including the HMS catch card census programs (currently in Maryland and North Carolina), MRIP Surveys, and the for-hire survey (FHS).
- An explanation of NMFS permits and regulations concerning bluefin tuna, other tunas, and other highly migratory species.
- An explanation of the "confidential and proprietary" nature of the data collected including, 1) an understanding of the relevant provisions of the Privacy Act of 1974 (P.L. 93-579) concerning the collection and use of identifiable information, 2) an understanding of the relevant sections of the NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics, and what exactly they are agreeing to by signing the non-disclosure agreement, and 3) proper procedures for disposing of original data collection forms.

- A detailed explanation of procedures for canvassing sites in assigned site clusters to determine appropriate strategies for maximizing the number of returning boats intercepted.
- A general discussion of the principles and techniques involved in random sampling that specifically addresses the importance of randomly sub-sampling boats at very active interviewing sites. Training should emphasize the importance of proper interviewer positioning at a site and movement through a site so that both trips with and without catch are represented appropriately in the sample (i.e., avoid only conducting interviews at a weigh station).
- A detailed explanation of procedures for intercepting boats, screening and interviewing boat captains or owners, and gaining cooperation from boat captains and owners, and dealing with refusals and hostile sites. Training shall include procedures for requesting permission to board a vessel to examine the catch.
- A detailed explanation of proper procedures for coding and editing responses to the questionnaire on the intercept survey data form and for filling out other forms.
- A detailed explanation of proper procedures for the use of field guides and/or taxonomic keys to accurately identify fish species to the species level of classification and to identify the sex of individual fish of certain species.
- A detailed explanation of proper procedures for measuring available fish including how to randomly sub-sample fish for measurement if there are too many to measure them all.
- A discussion of procedures to be used for obtaining local information on fishing activity and for updating LPIS MSR fishing activity information.

#### 2.3.3 Training Documentation

The Contractor shall prepare all training, examination, and study materials needed for hiring and training interviewers and field supervisors. The Contractor shall provide both electronic and paper copies of all such materials to NMFS before using them. The Contractor shall prepare written procedures and include them in a manual to be used for training field interviewers and also as a reference for interviewers to consult in the field. These procedures shall be developed from the procedures outlined in this SOW and any further modifications of procedures to be provided by NMFS. The procedures manual shall be subject to review by NMFS, and must be submitted for NMFS review at least two weeks prior to the start of training. The contractor shall deliver both electronic copies and hard copies of the final procedures manual to NMFS prior to the start of training.

# 2.4 Quality Control of Data Collection

#### 2.4.1 Interview Telephone Validations

The Contractor is required to conduct follow-up telephone interviews to validate 10% of all the LPIS completed interviews obtained. The Contractor will work with NMFS to develop a

Telephone Validation Questionnaire (see Appendix J LPIS Telephone Validation Questionnaire from 2012). NMFS may require that additional questions be added to this questionnaire as necessary. Activities specific to proper conduct of telephone validations for the LPIS include:

- Generation of a 10 percent sample of intercept survey respondents to be called and interviewed for the purpose of validating intercept interviews.
- Dialing and contacting selected intercept survey respondents within 3 weeks of the date of the interview to avoid recall problems.
- Conducting a validation interview with survey respondents to determine if an interview
  was conducted at the specified site on the specified date and to determine whether or not
  the interviewer conducted the interview in a professional manner according to specified
  procedures.
- Tracking and reporting of progress in completing follow-up telephone validation of intercept interviews.
- Make accessible to NMFS the ability to silently monitor LPIS telephone validations from a remote location.

The sample sizes for the follow-up validation survey should be determined separately for each sampling stratum. The total validation sample for each stratum should be calculated as 10% of the total interviews conducted, regardless of whether or not a valid telephone number was obtained. In order to distribute the validation sample for each week in a representative manner across interviewing assignments, the Contractor should order interviews by date, interviewer code, assignment number (first or second of day), and interview number and then take a systematic sample from the list.

Because some intercept survey respondents may refuse to provide a telephone number for the purpose of follow-up validation, the number of intercept interviews will frequently exceed the number that can potentially be validated. In addition, some level of non-response should be expected because some telephone numbers provided by intercepted anglers may prove to be invalid and some intercepted anglers who supplied valid numbers may be difficult to reach. In order to adequately compensate for potential non-response, the Contractor should select more than the minimum number needed to achieve the 10% validation goal.

Once the weekly sample of angler intercepts with telephone numbers has been selected and telephone interviewing has begun, the Contractor should track progress toward validating the minimum 10% sample of interviews. Data collected in the telephone validation interviews should be reported to NMFS as specified in the monthly report. Monthly reports should include:

- the number of intercept interviews obtained, number of validations attempted, and number of validations completed by state and interviewer code;
- an explanation of any interviews that did not validate initially or did not validate at all;
- tables summarizing any discrepancies between validation call responses and responses on interviewer's form regarding target species and catch questions;
- discussion of any problems identified with interviewers either not asking to look at the

Interviews that do not validate initially should be investigated immediately by the Contractor to determine why the interview did not validate. The Contractor should contact the respondent and conduct a more thorough interview in an attempt to validate the entire questionnaire form. If the Contractor still cannot validate the interview he/she should contact NMFS immediately and explain the situation. The Contractor should also contact the interviewer and his/her field supervisor to try to determine why the interview did not validate. If the non-validating interview cannot be resolved and the Contractor suspects the interviewer of falsifying data, improper behavior, or not following proper interviewing procedures, the Contractor shall attempt to validate 100% of that interviewers interviews for the current sampling season.

#### 2.4.2 LPIS Quality Control Field Visits

The Contractor shall conduct LPIS Quality Control field visits or "QC visits" of field interviewers on assignment. The Contractor shall develop a NMFS approved quality control evaluation form to be used for all QC visits (see Appendix K for example). At least 5% of all of the dockside assignments within a state (or multi-state area) and month should be visited by a field supervisor. Accompanying a new interviewer on their first assignment (Section 2.3.2) does not count toward the 5% threshold for field validations. All QC visits (100%) by field supervisors shall be unannounced. In general, QC visits shall be distributed in a manner that attempts to visit all field interviewers on site with the same relative frequency. However, field supervisors may use some discretion in distributing QC visits (e.g., to visit new interviewers or interviewers suspected of performance problems more frequently).

Field supervisors must check that the interviewer has arrived at the assigned cluster with the necessary materials needed for interviewing and for identifying and measuring fish. During such visits, the field supervisor shall observe the interviewer's work to be sure that questions are correctly asked, response data are properly recorded, fish are accurately identified and measured, and all other interviewing procedures described in this SOW are followed. The Quality Control Evaluation Form must include fields to record whether or not these procedures were followed and, if not, what specific problems were detected in the interviewer's performance.

Results of the QC visits should be reported in the monthly reports. Monthly reports should include:

- The total number of assignments completed, number of field validations attempted, and number of field validations completed by state (or multi-state area).
- An explanation of any problems field supervisors encountered with interviewer performance during their field validations and how those problems were corrected or resolved. This includes non-validating sites visits where the interviewer could not be found by the Supervisor or the interviewer was located at the wrong site.
- A table summarizing by state (or multi-state area) any non-validating individual items from the Quality Control Evaluation Form (e.g. improper attire, missing supplies or

equipment, or improper survey procedures).

If significant problems are encountered in the field the Contractor should notify NMFS immediately. The Contractor should have field supervisors conduct additional field visits (beyond the 5%) with interviewers who perform poorly until the problem is resolved or the interviewer is terminated. If an attempted QC visit results in the field supervisor not being able to confirm that the interviewer was on assignment (i.e., failed QC visit), another QC visit must be conducted for the next assignment scheduled for that interviewer.

#### 2.4.3 Interviewer Performance Measure Reports

NMFS will provide the Contractor with a SAS program to generate interviewer performance measure reports. An example interviewer performance measure report is provided as Appendix M. Interviewer performance measure reports will be produced monthly and sent to NMFS and field supervisors as soon as data are available to run the SAS program, but no later than the 10<sup>th</sup> of the month following the month sampled. Since these reports are due prior to the data delivery due date for a given month (i.e., 21 days after end of month), NMFS understands that performance measure reports may reflect incomplete and/or preliminary data that have not been through the full quality control process. No later than the 14<sup>th</sup> of each month, performance reports will be reviewed by the Contractor's home office staff and field supervisors, and performance problems that require follow-up with interviewers will be documented. NMFS may also review the reports and provide feedback to the Contractor. As soon as possible after review of reports, the Contractor (either home office or field supervisors) shall contact individual interviewers to discuss any performance problems (or potential problems) detected and re-train interviewers on field procedures as necessary. The Contractor should re-run the interviewer performance measure reports using complete, clean data and send to NMFS along with the data on the 21<sup>st</sup> of each month.

Reports will include, but not be limited to the following specific quality control checks at the individual interviewer level:

- Proportion of observed large pelagic fish measured, proportion of measured tunas with both curved and straight fork lengths taken.
- Average time spent on assignment and tallies of refusals, non-LPS trips, not returned trips, missed eligibles, captain not available, and language barrier trips per assignment.
- Overall percent of sites visited within cluster drawn for all assignments that month.
- Frequency of sites not visited by site name.
- Relative number of refusals in relation to total interviews obtained.
- Frequency of illegally skipped questions by particular question.
- Proportion of interviews with complete contact information.
- Relative frequency of trips with unclassified bluefin tuna given as target species.
- Frequency distribution of last digit of length measurement (check for digit bias).

#### 2.4.4 Validation of HMS Vessel Permit Numbers

The data fields for HMS permit number and principal port state (Appendix A: Q11b and Q14 respectively) are used to determine if a vessel is considered in-frame or out-of-frame in the calculation of LPS effort estimates. A ratio estimator is used to adjust the effort estimates upwards to account for out-of-frame vessel trips (i.e., vessels fishing in other states or vessels without an HMS permit). It is, therefore, **very important** that these variables are valid and accurate when the data are delivered to NMFS. The Contractor must check the validity of HMS permit numbers from the data forms against the current HMS permit holder lists (Angling, General and Charter/Headboat categories) provided by NMFS at the end of each month. Any records that do not match on permit number, permit category, captain/owner name, and principal port state must be further investigated until they are resolved. Further investigation may involve checking original data forms, contacting interviewers, telephone validation follow-up calls with respondents, and other measures as needed to resolve the discrepancy. A section on the validation of HMS permit numbers (with tables and discussion) should be included in the monthly reports (see 2.6.1 below).

#### 2.5 Survey Data Preparation

The Contractor shall be responsible for entry of all LPIS data in SAS database format according to specifications supplied by NMFS. The contractor shall work with NMFS to develop standardized database structures and formats (see Appendix B Data Variable Descriptions and Codes). NMFS will provide the Contractor with example SAS datasets from 2012 for all datasets required as deliverables in 2013. All computer software developed for the entry and/or checking of LPIS data shall become the sole property of NMFS and shall be delivered to NMFS upon completion of each contract year. The Contractor shall provide copies of such software for NMFS review, evaluation, and approval prior to implementation. Any revisions of such software shall also be submitted for NMFS review, evaluation, and approval prior to implementation. NMFS will provide the Contractor with all SAS error-checking programs used in 2012 to use as a starting point for 2013.

Both key-entry and scanning are acceptable methods for processing LPIS forms. Offerors should explain the potential advantages and disadvantages of each to justify choosing one method over the other. Offerors are also encouraged to propose innovative electronic data capture methods. If a feasible electronic data capture technology is determined to be efficient and economical for on-site LPIS interview recording, NMFS will work with the Contractor to develop acceptable procedures. Initial trials of use for durability, practicality, and accuracy would be required before full implementation as the primary data collection vehicle.

In addition, the Contractor shall be responsible for editing LPIS data as needed to correct possible coding and data entry errors. The Contractor shall develop well-documented SAS programs to check all variables in the standard SAS datasets for possible errors. Every variable

shall be checked for possible errors, including checks on range, logic, and reasonableness. Examples of edit checks shall include but not necessarily be limited to the following: (1) checks for duplicate interview identification numbers, (2) checks for correct spelling of boat names (must allow for boats without names) and boat operator names, (3) checks for correct state and site codes, and (4) checks for reasonableness of reported fishing activity and catch.

Key-entry and checking of interview data should be conducted in a timely manner such that any errors and appropriate corrections in data coded by interviewers can be determined by direct communication with the interviewer within two weeks of the date of the interview. Any coding or data entry errors identified as a result of the checking process shall be corrected by development of well-documented SAS error-correction programs. Copies of all checking and error-correction programs developed by the Contractor shall be delivered to the NMFS along with the error-free SAS datasets.

The Contractor shall be responsible for delivery of all LPIS data in SAS database format according to specifications supplied by the NMFS. Error-free files of intercept survey data shall be sent electronically to NMFS by 5:00 PM on the 21<sup>st</sup> day following each month of data collection. In addition, the Contractor shall deliver an electronic copy of the LPIS MSR, as well as a copy of the fully documented computer program used to draw the assignments for each month. NMFS will provide the Contractor with instructions for securely uploading electronic files to the designated NMFS network directory.

## 2.6 LPIS Reporting Requirements

## 2.6.1 Monthly Reports and Annual Report

The Contractor shall prepare and deliver monthly reports on the results of the LPIS. The monthly reports shall cover the results of all intercept sampling efforts for a given month and shall be delivered to NMFS by the 28<sup>th</sup> day of the following month. The reports should provide detailed presentations of the work involved to facilitate completion of the survey and the results. The report shall include but shall not necessarily be limited to the following tables (with explanatory text):

- Number of LPIS interviewers by state (or multi-state area). Column headings should include number of returning interviewers (from previous month or year for first month of sampling), number of trained interviewers (at start of month), resignations (during month), terminations (during month), new hires (during month), and total interviewers (at end going into next month).
- Result of drawn assignments by state and sampling round (fixed, flexible and reserve). Column heading should include: number drawn, number and percent issued (of drawn), percent completed (of drawn), number completed on drawn date, number completed on other date, number not completed.
- Result of drawn assignments by state and mode (CH and PR). Column heading should

include: number drawn, number and percent issued (of drawn), percent completed (of drawn), number completed on drawn date, number completed on other date, number not completed.

- Result of issued assignments not completed by state and sampling round (fixed, flexible
  and reserve). Column heading should include number: issued, not completed, weathered
  out, missed and cancelled.
- Table listing all cases of LPIS-APAIS assignment draw overlap for the month and measures taken to avoid overlap in the field.
- Disposition results from the Site Description Form. Table should include the number and percent of the following by state: completed PR interviews, completed CH interviews, mid-interview refusals, initial refusals, language barrier, eligible boats missed, eligible boat not yet returned, ineligible (did not target LPS species), ineligible (not owner/captain or designated proxy).
- Complete interviews obtained compared to target allocations. Column headings should include state, mode, quota, obtained, % of quota obtained and interviews per assignment.
- Summary of the output from error checking programs run on LPIS data. Tables should
  include the following fields by state and interviewer code: total completed interviews,
  number and percent of interview records with errors traced to form, number and percent
  of records with errors traced to OCR or data entry, number and percent of records
  corrected, number and percent of records deleted. High error rates (either field related or
  home office related) should be explained in the text.
- Tabulations of NMFS HMS permit status (permitted vs. non-permitted) of intercepted boats by state, primary mode of operation, and permit category.
- Within each state, the number and percent of interviews by county compared to the percent from the site register pressures and the percent from the draw by county.
- Results of telephone validation of intercept interviews as specified in Section 2.4.1.
- Results of LPIS Quality Control field visits supervisory field visits as specified in Section 2.4.2.
- The number of mismatched HMS vessel permits by state and summary validation results explaining how these were resolved.

The Contractor also shall prepare and deliver an Annual Report on the results of the LPIS. The Annual Report shall cover the entire intercept sampling effort and be delivered to NMFS by December 31<sup>st</sup> of each survey year. The content of the Annual Report should be similar to that outlined above for the monthly reports, summarized across all months of the survey. This should include a description of the coding and editing procedures, as well as quality control measures. In addition the Annual Report should include a "Recommendations" section proposing changes and improvements to the LPIS for the following year based on the prior year experience. Recommendations can include but are not limited to increasing sampling efficiency, minimizing variances, improving compliance and reducing refusals and hostile encounters, suggestions for additional outreach materials, and increasing the visibility and usefulness of the LPIS to the public.

#### 2.6.2 Final LPIS Documentation

The Contractor shall provide the following to NMFS:

- Electronic copy of the LPIS Annual Report.
- Electronic copy of annual interviewer performance measure report.
- Electronic copy of the final LPIS master site register (MSR) with site-specific large pelagic fishing activity estimates by boat type, month, and day type for the dockside intercept survey. An electronic copy of the final site cluster frame with appropriate location and activity information shall be provided to NMFS as a SAS dataset.
- Electronic copy of all software used for entry and editing of survey data into appropriately formatted files.
- Electronic copy of all training manuals, data collection forms, and procedures manuals used for the surveys, including any revisions that were made during the survey period.

## 2.7 LPS Meetings

#### 2.7.1 LPS Start-Up Meeting

The Contractor shall be required to attend an LPS start-up meeting held about one month before the start of LPIS sampling. The primary purpose of this meeting shall be to review LPIS procedures, discuss/propose survey design changes, discuss/propose form changes, update sample frames, and review relevant HMS management measures. Start-up meetings will also be used to review procedures and changes associated with the Large Pelagics Biological Survey Option (Section 3 below), if this option is exercised by NMFS. The Contractor shall be required to bring at least one field representative for each state or multi-state area to this meeting. The Contractor is expected to pay for all travel for their staff or their sub-contractors. The Contractor will work collaboratively with NMFS to develop the meeting agenda and any necessary handouts or presentation materials. NMFS will determine the meeting date and location and let the Contractor know at least two weeks in advance so they can make the necessary arrangements.

## 2.7.2 LPS Data Review Meetings

The Contractor shall be required to attend two data review meetings each year. The purpose of these meetings shall be to review preliminary LPIS data and LPS catch and effort estimates, to discuss field interviewing procedures, and to provide continuing education and training of the Contractor's field supervisors. Data reviews will also be used to review data and procedures associated with the Large Pelagics Biological Survey Option (Section 3 below), if this option is exercised by NMFS. The Contractor shall be required to bring at least one field representative for each state or multi-state area to these meetings. The Contractor is expected to pay for all travel for their staff or their sub-contractors.

NMFS will provide the Contractor with a SAS program for producing data review meeting

documents. Using this program the Contractor will produce and distribute data review materials to NMFS and field supervisors for review prior to the meeting. The Contractor will work collaboratively with NMFS to develop the meeting agenda and any necessary handouts or presentation materials. NMFS will determine the meeting dates and locations and let the Contractor know at least four weeks in advance so they may make the necessary arrangements. The Contractor is also expected to make formal presentations summarizing work completed under this contract for the months prior to the meeting.

#### 2.7.3 LPS Local Interviewer Meeting

In addition, the Contractor's field supervisors shall conduct at least one local state (or multi-state if applicable) review meeting with their field interviewers per year. The Contractor must notify NMFS within 7 days of when these local meetings will occur. NMFS reserves the right to attend any/all of the local meetings. Local data reviews should be held after the first overall LPS data review (most likely sometime in early September). All interviewers shall be required to attend these meetings to refresh training on LPIS procedures, to be retested on identification of fish species, to review the basic details of the LPIS, and to explain any changes in questionnaires or coding forms. Raw LPIS catch data (i.e., Fishdumps) should also be reviewed at these meetings. Interviewers shall be kept informed of developments in the recreational fisheries being surveyed, and shall be able to refer respondents to NMFS staff for further information. Questions on protocol and fish identification shall be strongly encouraged during these meetings. The contractor should provide the NMFS with a record of each regional review meeting, including an agenda, attendance list, and meeting minutes within two weeks of the meeting date.

# 2.8 LPIS Items Provided by NMFS

The following will be provided by NMFS to the Contractor to facilitate proper conduct of LPIS tasks:

- LPIS Master Site Registers (MSR) used in 2012 including site clustering information for all states and months.
- SAS program that distributes LPIS interview targets within a state/month/boat type strata between day types (weekend/holiday versus weekday) based on pressure ratings in the MSR.
- SAS program to produce LPIS interviewer performance measure reports.
- SAS program to produce data review meeting materials.
- LPIS SAS datasets from prior years that can be used to estimate interviewer productivity based on historical data.
- Examples of LPIS SAS datasets (Main, Catch and Size) from 2012.
- Assignment draw SAS program used to select monthly sites/clusters for sampling.

- Example Assignment Completion File from 2012 LPIS.
- Electronic HMS permit lists for distribution to field interviewers.
- List of HMS registered tournaments in the LPIS area.
- Example of SAS error-checking programs used in 2012.

# 3.0 Large Pelagics Biological Survey – Optional Item

Dockside sampling will be conducted for the purpose of collecting biological data from bluefin tuna and other large pelagic fishes. The LPBS Contractor shall be responsible for the following activities:

- Contact marina operators, site managers, and fish cleaners prior to the start of the season to establish the data collection system and facilitate cooperation;
- Maintain a list of cooperative anglers and captains willing to participate in the LPBS and contact field samplers when they are targeting or have landed bluefin tuna.
- Intercept captains/mates/owners who have just finished fishing trips for large pelagic fishes at weigh stations, cleaning stations, and other locations;
- Record lengths and weights, and obtain otoliths, caudal vertebrae (entire peduncle), first
  dorsal spine, and gonads (if available) from bluefin tuna and other high priority large
  pelagic species as determined by NMFS;
- Record additional information such as date, site, vessel name, permit number, and vessel type.
- Record additional information as required and label each specimen for unique identification. Prepare and preserve such samples for shipment as required by the sampling protocols specified by NMFS. Additional time, beyond the time spent on-site, should be allotted for such labeling, preservation and shipping activities.
- Coordinate with NMFS and other entities that may also be collecting biological samples
  for bluefin tuna and other pelagics to avoid overlap in the field and redundancy of
  sampling effort.

# 3.1 LPBS Sampling Tasks

## 3.1.1 LPBS Sample Frame

The Contractor in consultation with NMFS will review the LPIS MSR and historical LPIS and LPBS catch data in order to identify sites with frequent landings of bluefin tuna (and other priority species for biological sampling as specified by NMFS). NMFS will provide the Contractor with tournament information from the federal HMS tournament registry for potential LPBS tournaments to sample. The Contractor shall contact marina operators or site managers at

identified LPBS sites prior to the start of the season to facilitate cooperation, identify the best means of obtaining the required data, and establish sampling protocols and procedures particular to that site.

#### 3.1.2 LPBS Sampling

NMFS will provide the Contractor with monthly LPBS assignment schedules at least three weeks prior to sampling for the following month. The assignment schedule will attempt to maximize the number of landed bluefin tuna, and possibly other high priority species as specified by NMFS, encountered by LPBS samplers. The schedule could include any combination of four different LPBS assignment types as follows:

- 1. Fixed Date / Fixed Site(s) NMFS specifies the date and site (or combination of sites) for the assignment. The LPBS sampler shall conduct the assignment on the assigned date at the assigned site (or sites) during a four-hour period corresponding with the peak hours when vessels normally return from offshore fishing trips for bluefin tuna and other pelagics.
- 2. Fixed Date / Roving Site(s) NMFS only specifies the date and the state for the assignment. The LPBS sampler is free to rove among sites within the specified state to maximize the probability of sampling bluefin tuna or other high priority species. This is also a four-hour assignment corresponding with the peak hours when vessels normally return from offshore fishing trips for bluefin tuna and other pelagics.
- 3. Tournament This is similar to Fixed Date/Fixed Site assignments in that NMFS specifies the date and site (or sites). This is also a four-hour assignment corresponding with the peak hours when vessels normally return from offshore fishing trips for bluefin tuna and other pelagics. If a tournament is selected for an LPBS assignment the Contractor's sampler shall attend the tournament's captains meeting held prior to the tournament. The sampler should use this as an opportunity to 1) inform tournament captains and organizers of their intent to sample the tournament and 2) discuss the best strategy for sampling the tournament (times, locations etc.).
- 4. Opportunistic The site and date for the LPBS assignment is determined by the Field Supervisor or LPBS sampler. Field Supervisors and samplers can trigger an opportunistic LPBS assignment based on direct observation or based on tips from LPBS contacts (e.g., captains, anglers, fish cleaners, marina staff) that bluefin (or other high priority species) are available for sampling. Field Supervisors and LPBS samplers are encouraged to establish contacts with captains, anglers, fish cleaners, marina staff and others who may be able to provide timely information that could trigger an opportunistic LPBS assignment. Samplers should also anticipate opportunities for LPBS sampling during tournaments (i.e., those not already scheduled for a Tournament Assignment) based on the NMFS HMS registered tournament list and local knowledge of tournament events. There is no set amount of time for samplers to be on assignment for opportunistic assignments. However, there is an expectation that opportunistic assignments will be

productive in sampling bluefin tuna or other high priority species as specified by NMFS since direct knowledge of fish to be sampled is the trigger for such assignments.

Additional assignment time should be allowed for preparation/shipping of samples for LPBS assignments. Samplers shall not simultaneously conduct LPIS and LPBS assignments, nor should both an LPBS and LPIS assignment be conducted on the same day by the same sampler. An LPIS sampler and an LPBS sampler may work side-by-side as long as they coordinate with each other and share information to avoid both interviewing the same respondent or both sampling the same fish.

The Contractor shall monitor the productivity of assignments (number of fish measurements/specimens) and other factors such as weather conditions, catch rates and availability of fish. Upon determining that any assignments would most likely be more productive if rescheduled, the Contractor shall consult with NMFS to obtain approval for rescheduling.

#### 3.2 LPBS Assignment Procedures

#### 3.2.1 Before the LPBS Assignment

Each LPBS sampler should make sure that he/she knows his/her LPBS assignment schedule and confirm that there are no conflicts with LPIS or other work. On each interviewing assignment, the sampler must carry a complete set of all necessary manuals and forms, as well as all needed supplies and equipment in useable condition. Prior to the assignment date each sampler should make certain that he/she has all of the required materials and equipment for conducting the LPBS assignment, including:

Materials/Equipment for all LPBS Assignment

- Name Tag
- LPBS Procedures Manual
- Fish identification field guide(s)
- Tape Measures two kinds for measuring straight lengths and curved lengths
- Portable electronic scale (if supplied by NMFS)
- Letter from NMFS a letter on NMFS letterhead that provides a brief description of the LPIS, information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for a NMFS representative (Appendix F)
- LPS brochures, fish identification guides, and other informational materials that will be provided periodically by NMFS in volumes suitable for wide-spread distribution to all interested respondents
- LPBS Site List with contact information and directions
- LPBS Questionnaire/Coding Form, SDF and ASF (Appendix N)
- Specific LPBS biological sampling instructions for the samples requested (Appendices O

and P).

- Appropriate tools for the extraction of sagittae otoliths, caudal peduncles (containing 35<sup>th</sup> vertebrae), 1<sup>st</sup> dorsal spine, and gonadal tissue samples.
- Materials required for the storage, labeling, preservation, and shipping of body parts.

#### 3.2.2 LPBS Questionnaire and Sampling Procedures

The Contractor shall work with the NMFS to finalize the questionnaires and data collection forms to be used for LPBS data collection (see Appendix N for example 2012 forms).

After identifying an eligible respondent, the sampler should use the LPBS questionnaire to conduct an interview that will collect the necessary information and samples outlined above. As soon as the respondent's eligibility is established, the sampler must read the Privacy Act statement, which states:

"Your participation in this survey is mandatory. Your responses will be treated as confidential records."

The brief statement above satisfies the Privacy Act requirements, as long as an additional form with the following additional information is available:

"The data is protected by the Privacy Act of 1974 and NOAA Administrative Order 216-100."

This information is included in the letter from NMFS (Appendix A), which should be provided to all eligible respondents.

The LPBS questionnaire will include, but will not necessarily be limited to, the following minimum data elements:

- LPBS sampler code
- Date
- State
- Site and cluster numbers
- Time of interview
- Tournament (Y/N) and if Yes name of tournament
- Vessel name and HMS permit number
- Fishing area
- Water temperature
- Species name and code
- Length (straight and curved) and half girth
- Weight (whole or dressed)

#### Gender

LPBS samplers shall follow the following procedures for obtaining length, weights and body parts from large pelagic species:

- If there is a site manager (i.e., dockmaster, marina operator or some other contact person) present, samplers must "check-in" with that person upon arrival at the site. Procedures for initialing the ASF and explaining the purpose of the survey are the same as those described in Section 2.2.2 above for LPIS assignments.
- The captain or mate must be asked to allow the sampler to examine, count, and measure their large pelagic species landings.
- If sampling at a weigh station or cleaning station, the sampler should also get permission from the weigh station manager or fish cleaner before obtaining measurements and samples.
- While samplers should attempt to get measurements and body parts from all large
  pelagics, certain species will be considered higher priority than others for LPBS
  sampling. NMFS will provide the Contractor with an LPBS species priority order for
  inclusion in the procedures manual and training materials. If time does not allow for
  sampling all large pelagic fish encountered, the sampler should consult the priority list
  and sample the highest priority species first.
- The LPBS sampler shall record lengths of LPS species. In addition, samplers should measure the half girth of all fish in millimeters.
- LPBS samplers shall record fish weights only if: (1) the site has an accurate scale or the sampler has a NMFS approved portable scale, (2) individual fish are weighed, and (3) the sampler actually sees the fish being weighed. Samplers should record weights to the nearest 0.5 kg in the appropriate box for either whole weight or dressed weight.
- Sagittae otolith pairs shall be prepared and preserved according to NMFS sampling protocol. Each otolith pair shall be placed in a vial with a sample ID card and shipped to NMFS along with species ID and chain of custody forms.
- The caudal peduncle containing the 35<sup>th</sup> vertebrae shall be prepared and preserved according to NMFS sampling protocol (see Appendix O for illustration). Each caudal vertebrae sample shall be placed in a plastic bag with a sample ID card, frozen, and shipped to the NMFS along with species ID and chain of custody forms.
- The first dorsal spine shall be prepared and preserved according to NMFS sampling protocol. Each spine sample shall be placed in a plastic bag with a sample ID card, frozen, and shipped to the NMFS along with species ID and chain of custody forms.
- Gonadal samples shall be prepared and preserved according to NMFS sampling protocol.
   Gonadal samples shall be obtained from a specified number of mature bluefin tuna and other species as specified by NMFS.
- Ancillary length measurements shall be obtained from all tuna species allowed to be sampled. These ancillary length measurements will include, but are not limited to, curved length from upper jaw to the caudal keel and curved length from the dorsal

insertion of the pectoral fin to the caudal keel. Biological samples (otoliths, dorsal spines, caudal vertebrae, and gonads) take priority over these ancillary length measurements, which are only to be collected if and when the sampler has available time.

Detailed information on sampling protocols, procedures, materials, labeling, preservation, and delivery of samples will be provided by NMFS. These will be similar to standard procedures recommended by ICCAT (see ICCAT manual <a href="http://www.iccat.int/en/ICCATManual.htm">http://www.iccat.int/en/ICCATManual.htm</a>) and used in the NMFS Pelagic Observer Program (see Appendix P for relevant sections from the POP bluefin tunas sampling protocol document).

The Contractor shall supply labeling, preservation, and shipping materials for all biological sampling assignments and the Contractor shall cover all shipping costs for preserved specimens. NMFS reserves the right to review and approve the shipping methods and preservation/ shipping materials used for the biological sampling. All LPBS samples (otoliths, caudal vertebrae, dorsal spines, and gonads) shall be express mailed (according to protocols for packaging and shipping specified by NMFS) to a NMFS Laboratory no later than 2 days from the date of collection. Unit costs for LPBS Body Parts should reflect on-site time, travel expenses, off-site processing time, preservation/shipping materials, shipping costs, and training.

#### 3.2.3 LPBS Site Description Form and Assignment Summary Form

LPBS samplers must fill out a Site Description Form (SDF) used to summarize the results of the completed assignment with information from each site and an Assignment Summary Form (ASF) for each completed assignment (Appendix N). Samplers conducting LPBS assignments must get the weigh station operator or fish cleaner to initial the bottom of the SDF to verify they conducted the assignment.

#### 3.2.4 LPBS Hostile Sites and Refusals

Refer to Section 2.2.3 for discussion of hostile sites and refusals encountered during LPIS assignments. The Contractor shall follow the same procedures for dealing with hostile sites and refusals on LPBS assignments. The Contractor shall provide NMFS with weekly LPBS "hostile" site / refusals status updates that include but are not limited to the following:

- Site name and location
- Date and detailed description of incident including persons/vessels involved
- Attempts to remedy situation and resulting outcomes

# 3.3 LPBS Sampler Training and Supervision

The Contractor shall develop an LPBS procedures manual to be used in training LPBS samplers.

The procedures manual is a contract deliverable and will be subject to NMFS review and approval. Procedures included shall be developed from the procedures outlined in this statement of work, as well as from further modifications of procedures to be provided by NMFS. The final manual must be prepared and delivered at least two weeks prior to the start of data collection.

The Contractor shall be responsible for recruiting, hiring, and training LPBS samplers. NMFS biologists may assist with LPBS sampler training at designated NMFS facilities or appropriate other locations. NMFS and the Contractor will work together to determine training locations and dates. The Contractor is responsible for all travel costs associated with training LPBS samplers. The Contractor shall screen applicants and invite for training only those that have a knowledge of and experience in the identification of large pelagic fishes and an aptitude for extraction of designated anatomical parts. LPBS samplers must go through the basic training provided to all LPIS interviewers. Training of LPBS samplers shall include, but not necessarily be limited to the following:

- An introduction to the objectives, goals, and operation of the LPBS.
- A detailed explanation of proper procedures for the use of field guides and taxonomic keys to accurately identify fish species to the species level of classification and to identify the sex of certain species.
- A detailed explanation of procedures for collecting different lengths, girths and weights of large pelagic fish and for using and calibrating fish scales.
- A detailed discussion of proper procedures for obtaining biological samples (otoliths, caudal vertebrae, dorsal spines, and gonads), labeling and preservation of such samples, delivery of samples to NMFS, and sample documentation. Training on procedures for collecting biological material will be assisted by NMFS biologists at appropriate sites in the survey area.
- A detailed discussion and description of any ancillary length measurements to be taken from available large pelagics.
- A detailed explanation of the proper procedures for coding and editing responses on the LPBS questionnaire/coding form, SDF and ASF.

All manuals, presentations, handouts and other materials used by the Contractor for LPBS training shall be submitted to NMFS prior to implementation and are considered deliverables under this contract.

All newly hired LPBS samplers shall be shadowed on their first three LPBS assignments by a Field Supervisor experienced in LPBS sampling. Additional quality control site visits conducted by Field Supervisors with LPBS samplers shall only be required if the LPBS sampler is not following proper data collection procedures.

## 3.4 LPBS Reporting Requirements

The Contractor shall prepare and deliver a monthly report on the results of the LPBS. This report shall cover the results of all LPBS sampling efforts for a given month and shall be delivered to NMFS by the 28<sup>th</sup> day of the following month. The reports should provide detailed presentations of the work involved to facilitate completion of the survey and the results. The report shall include but shall not necessarily be limited to the following (with explanatory text):

- Disposition of all LPBS assignment drawn by state. Dispositions should include assignments completed, cancelled, refused, or other.
- Summary tables and graphs showing the number of length and weight measurements obtained by month, state, species (or size category for bluefin tuna).
- Summary tables and graphs showing the number of biological samples obtained by type, month, state, species (or size category for bluefin tuna).
- Summary of the output from error checking programs run on LPBS data. Tables should
  include the following fields by state and sampler code: total completed assignments,
  number and percent of assignment records with errors traced to form, number and
  percent of records with errors traced to OCR or data entry, number and percent of
  records corrected, number and percent of records deleted. High error rates (either field
  related or home office related) should be explained in the text.

In addition to the tables above, the report should include a "recommendations" section proposing changes and improvements to the LPBS based on prior experience. This can include ideas to improve the validity and representativeness of LPBS measurements, enhance participation and cooperation of captains and weigh station managers, increase productivity for high priority species, and increase the visibility and usefulness of the LPBS to the public.

The Contractor shall also prepare an annual report on the results of the LPBS. The section shall cover the entire LPBS sampling effort for a given year and be delivered to NMFS by December 31<sup>st</sup> of each survey year. The content of the annual report should be similar to that outlined above for the monthly reports, summarized across all months of the survey. A description of the LPBS coding and editing procedures, as well as quality control measures, must also be included in the annual report.

# 3.5 LPBS Data Entry, Editing, and Transmittal

The Contractor shall be responsible for entry of all LPBS data in SAS database format according to specifications supplied by the NMFS. LPBS variable formats and codes will match those specified for LPIS datasets (see Appendix B) for matching variables. NMFS will provide the Contractor with example LPBS datasets from 2012. In addition, the Contractor shall be responsible for editing LPBS data as needed to correct possible coding and data entry errors. Every variable recorded shall be checked for possible errors, including checks on range, logic,

and reasonableness. The Contractor shall modify the LPIS error checking program as necessary to check LPBS data. The LPBS error-checking program is a deliverable under this contract and shall be provided by the Contractor to NMFS prior to data entry and at the end of each contract year. Error-free files of LPBS data shall be sent electronically to NMFS by the 21<sup>st</sup> day following each month of data collection. All LPBS samples (otoliths, caudal vertebrae, dorsal spines, and gonads) shall be express mailed (according to protocols for packaging and shipping specified by NMFS) to a NMFS Laboratory no later than 2 days from the date of collection.

## 4.0 Schedule of Deliverables

#### 4.1 LPIS Deliverables

Item Description	Due Date	Ref.
LPIS Master Site Register with monthly	Monthly, due the 21 <sup>st</sup> of each	SOW
updates	month following the month	Section
	sampled	2.1.1
Schedule of LPIS assignments by	Monthly, due at least three days	SOW
site/date/boat type/round with unique control	prior to distribution to interviewers	Section
number for tracking purposes		2.1.3
LPIS Weekly Monitoring Reports including	Weekly, due the Tuesday following	SOW
individual reports on assignment	the week sampled	Section
dispositions, summed tallies, refusals, not all		2.1.5
sites visited, and site manager initials		
Assignment Completion File with the fates of	Monthly, due the 21 <sup>st</sup> of each	SOW
all LPIS assignments drawn for each month	month following the month	Section
	sampled	2.1.5
All presentations, handouts, exams and other	Two weeks prior to initial training;	SOW
training materials used to train LPIS field	final versions at end of contract	Section
supervisors and field interviewers		2.3.3
LPIS Procedures Manual	At least two weeks prior to initial	SOW
	training session	Section
		2.3.3
LPIS Interviewer Performance Review	Monthly, no later than the 10 <sup>th</sup> of	SOW
Measures Report	the month following the month	Section
	sampled	2.4.3
LPIS Interviewer Performance Review	Monthly, no later than the 14 <sup>th</sup> of	SOW
Measures Report review and documentation	the month following the month	Section
of problems that require follow-up with	sampled	2.4.3
interviewers		
All computer software used for LPIS data	Prior to implementation; final	SOW
entry and/or error checking	versions at end of contract	Section
		2.5

Item Description	Due Date	Ref.
Error-free LPIS datasets (SAS format)	Monthly, due the 21 <sup>st</sup> of each	SOW
	month following the month	Section
	sampled	2.5
LPIS Monthly Reports	Monthly, due the 28 <sup>th</sup> of each	SOW
	month following the month	Section
	sampled	2.6.1
LPIS Annual Report	Due December 31 <sup>st</sup>	SOW
		Section
		2.6.1
Copies of any presentations and handouts	Prior to data review meeting	SOW
prepared for LPS data review meetings		Section
		2.7
Record of each regional review meeting	Within two weeks after meeting is	SOW
including agenda, attendance list and meeting	held	Section
minutes		2.7
All LPIS forms and questionnaires used in	Prior to implementation; final	
the field or during telephone validations	versions at end of contract	

# 4.2 LPBS Deliverables

Item Description	Due Date	Ref.
All LPBS forms and questionnaires	Prior to implementation; final	SOW
	versions at end of contract	Sections
		3.2.2 and
		3.2.3
All presentations, handouts, exams and	Two weeks prior to initial training;	SOW
other training materials used to train LPBS	final versions at end of contract	Section 3.3
samplers		
LPBS monthly report	Monthly, due the 28 <sup>th</sup> of each	SOW
	month following the month	Section 3.4
	sampled	
LPBS annual report	Annually, due December 31 <sup>st</sup>	SOW
_		Section 3.4
LPBS SAS error check program	Prior to initial data entry and final	SOW
	version at end of contract	Section 3.5
Error-free LPBS datasets (SAS)	Monthly, due the 21 <sup>st</sup> of each	SOW
	month following the month	Section 3.5
	sampled	
LPBS Body Parts samples	Express mailed within 2 days from	SOW
	date of collection	Section 3.5

# **5.0 Data Confidentiality**

All data collected during the performance of this contract shall be considered as "confidential and proprietary." These data shall be used only for statistical purposes, and will be available in identifiable form only to NMFS and its contractors except as otherwise required by law. All requirements of the Privacy Act of 1974 (P.L. 93-579) concerning the collection and use of identifiable information for individuals shall be observed. Any release of data to any individual or organization shall be subject to review and prior approval by the Contracting Officer and the NMFS. All copies of the data collection forms shall be returned to the NMFS or destroyed at the COTR's direction upon completion of the survey.

All Contractor personnel (office and field) are required to read the NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics, and sign a statement of non-disclosure (see Appendix Q). The Contractor must provide copies of the signed statements to NMFS on an agreed-upon schedule, prior to that particular individual having access to the data. Proposals must address security measures to limit and/or control access to the data.