

STATEMENT OF WORK

ATLANTIC COAST ACCESS POINT ANGLER INTERCEPT SURVEY
WAVES 1-6 (Jan/Feb – Nov/Dec), 2014 - 2015

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1 Background

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) is required to conduct a survey of marine recreational anglers to obtain information about their fishing effort, catch, and participation in marine recreational fishing, and about the demographic, social, and economic characteristics of those who participate in saltwater recreational fishing in United States waters. These data for marine recreational fisheries have been collected through the Marine Recreational Fisheries Statistics Survey (MRFSS) since 1979.

Catch, effort, and participation statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, the fishing effort, and the seasonal and geographical distribution of the catch and effort are required for the development of rational management policies and plans. Continuous monitoring of catch, effort, and participation is needed to monitor trends, to evaluate the impacts of management regulations, and to project what impacts various management scenarios will have on a fishery. Recreational fisheries data are essential for NMFS, the Regional Fishery Management Councils, the Interstate Fisheries Commissions, state conservation agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries.

In response to stakeholder questions about the veracity of the MRFSS, the NMFS responded by requesting a thorough review of the entire marine recreational fisheries data collection program by the National Academy of Sciences' National Research Council in 2005. In April 2006, a group of independent scientists announced their findings, recommending the agency collaborate with its state partners to dramatically redesign the angler survey program. In addition, when Congress reauthorized the Magnuson-Stevens Fishery Conservation and Management Act in January 2007, it echoed many of the council's recommendations and included a provision requiring a new national saltwater angler registry.

As a result of these recommendations, the nearly 30-year old MRFSS is being replaced by a new Marine Recreational Information Program (MRIP) that will improve the collection, analysis, and use of fishing data. Similar to the MRFSS program, this new MRIP program will consist of several independent, yet complementary, surveys. The principal components in 2014 are the Coastal Household Telephone Survey (CHTS), used to assess shore and private boat fishing effort by coastal county residents; the For-Hire Survey, used to assess charter and head boat fishing effort and was added to the program in the late 1990's; and the Access-point Angler Intercept Survey (APAIS) used to assess catch per unit effort in all fishing modes. The APAIS has been completely re-designed by the MRIP program. The new angler-intercept

survey was pilot tested and analyzed for broader applicability and will be implemented across the Atlantic and Gulf Coasts in 2014. Data from these component surveys are combined to estimate total fishing effort, participation, and catch by species.

1.1 Access-point Angler Intercept Survey

The work specified in this Statement of Work (SOW) is for conduct of the Access-Point Angler Intercept Survey (APAIS, or Intercept Survey) in North Carolina in Wave 1 (Jan/Feb), in New Hampshire - Georgia in Wave 2 (Mar/Apr), Maine – Georgia in Waves 3 - 5 (May/Jun, Jul/Aug, and Sep/Oct), and in Massachusetts - Georgia in Wave 6 (Nov/Dec) in 2014 through 2015. 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.

1.2 Coastal Household Telephone Survey (CHTS)

The coastal household telephone survey (CHTS) is used to estimate the total number of marine recreational fishing trips taken by residents of coastal areas. A fishing trip is defined as a day of fishing in one fishing mode (e.g., from shore, from a boat). Data from the CHTS and the Intercept Survey are combined to provide an estimate of the total catch of marine recreational anglers by species. Although the principle purpose of the Intercept Survey is to obtain catch data, there are several questions included that provide vital information for the expansion and precise estimation of effort produced by the CHTS and the For-Hire Survey.

1.3 For-Hire Survey (FHS)

The For-Hire Survey (FHS) is a directory-based telephone survey of for-hire fishing vessels to obtain data for estimating recreational fishing effort. For-hire vessels are categorized as either charter or head boats, and sampled weekly. The effort estimates produced by the FHS require key data elements collected during conduct of the APAIS, including the validation observations of for-hire boats at their mooring locations and the classification of intercepted for-hire boats as in the For-Hire sample frame or not for each wave.

1.4 Economic Surveys

Fishery economics surveys collect data used to estimate impacts to the economy of fishing activities and expenditures. These impacts may be quantified as the net value, the number of jobs supported, or the relative contribution to the local economies.

These data can be used to evaluate the economic impacts of fishery management actions or proposed actions to local and state economies. These data are typically collected from saltwater anglers via supplemental questions periodically added onto the Intercept Survey. However, there are no supplemental economic surveys planned for the Atlantic Coast in 2014.

2 General Requirements

The 2014 – 2015 Intercept Survey contract for Waves 1 - 6 (Jan-Dec) will include conduct of two main data collection tasks: 1) the Intercept Survey in North Carolina in Wave 1 (Jan/Feb), in New Hampshire - Georgia in Wave 2 (Mar/Apr), Maine – Georgia in Waves 3 - 5 (May/Jun, Jul/Aug, and Sep/Oct), and in Massachusetts - Georgia in Wave 6 (Nov/Dec), and 2) dockside validation of FHS vessel activity throughout the geographic ranges.

The Intercept Survey Contractor shall be responsible for all data collection tasks under this contract, as well as conducting all data entry, data checking, and data editing according to NMFS specifications, including but not necessarily limited to:

- Hiring, training, testing, deployment, and supervision of interviewers;
- Survey administration, including training staff and production of a Field Procedures Manual (based on this Statement of Work), scheduling of specific sampling units with staff, and monitoring of survey progress and adherence to field protocols.
- Periodic updating of the Master Site Register (MSR) of all saltwater fishing access sites via a password-protected online website;
- Proper conduct of the collection of specified fishing effort, catch, and demographic information by interviewing marine recreational anglers at shore, private/rental boat and charter boat access sites, and onboard head boats during scheduled fishing trips;
- Weekly monitoring of assignment completion and schedules by state and mode;
- Providing updated information to the FHS Telephone Contractor about charter and head boats encountered in the field, as needed; these data shall include the county of operation of the boat, a captain or owner's name and telephone number for contact, and the official name or registration number of a boat.
- Dockside validation of fishing activity of charter and head boats selected for reporting in the FHS, if ordered (by state, wave);
- Telephone verification of at least 10% of each interviewer's intercept interviews (by wave);
- Field quality control visits of interviewing staff during conduct of the Intercept Survey; the format and frequency of visits shall be determined by consultation with NMFS staff, but be no less frequent than twice per interviewer per sampling year;

- Making modifications to data entry programs to accommodate changes to the questionnaires; any modification must be pre-approved by NMFS staff in writing prior to implementation;
- Data entry of the angler intercept interview data, including supporting assignment data elements (counts of anglers, time of site visits), and the pre-validation observations of for-hire boats. This task will include editing of entered variables for possible coding or key-entry errors identifiable as out-of-range, illogical, or unreasonable and correcting all errors identified by screening and checking programs before data delivery to NMFS.
- Preparation and delivery of summary tables for use in checking, editing and reviewing the data at wave review meetings;
- Preparation and delivery of two-month progress reports (wave reports), as well as an annual final summary report of the data collection and results according to the attached delivery schedule;
- Attendance and participation at three wave review meetings per year;
- Participation in weekly or bi-weekly conference calls with NMFS, as mutually agreed upon; and
- Delivery of error-free electronic databases to NMFS according to the attached delivery schedule.

The Intercept Contractor's responsibilities shall include coordination of the Intercept Survey tasks with NMFS, the contractors responsible for the CHTS and FHS, and any subcontractors participating in the Intercept Survey data collection tasks.

All Contractor personnel (office and field) are required to read NOAA Administrative Order (NAO) 216-100, Protection of Confidential Fisheries Statistics, and sign a statement of non-disclosure (included in the NAO). The Contractor must provide electronic copies of the signed statements to NMFS at the beginning of the year; copies for subsequent hires should be delivered to NMFS within 15 days of hire and no later than the interviewer's third day of field sampling. All contract proposals must address security measures to limit and/or control access to the data (by both office and field staff), including raw data and data collection forms, databases, and any password protection of websites.

All data collected during the performance of this contract shall be considered as "confidential and proprietary." Any release of data to any individual or organization, including sub-contractors, shall be subject to review and prior approval by the Contracting Officer and the NMFS Program Office.

2.1 Intercept Survey

The Intercept Survey Contractor shall conduct the Intercept Survey in 2014 in the Atlantic States from Maine to Georgia by two-month sample waves. Not all states and

modes are sampled in each wave. Sampling will be conducted in North Carolina in Jan/Feb, Massachusetts-Georgia in Mar/Apr, Maine-Georgia in May/Jun, Jul/Aug, and Sep/Oct waves and in Massachusetts to Georgia in Nov/Dec, 2014 - 2015. In Jan/Feb only Shore, Private or Rental Boat or Charter Boat angling will be surveyed in North Carolina. During Mar/Apr (wave 2) Head Boats may be surveyed in New Hampshire if the Atlantic Coastal Cooperative Statistics Program (ACCSP) allocates funds for that purpose, but the NMFS will not be supporting any sample in that wave/state/mode. All modes will be sampled in wave 2 in MA to GA. All survey modes (Shore, Charter Boat, Head Boat, and Private/Rental Boat anglers) and all included Atlantic states will be sampled in waves 3 – 5. In wave 6, all modes will be surveyed in NY – GA, and shore, private/rental boat, and charter boat modes will be sampled from MA, RI, and CT. The survey is not conducted in wave 6 in ME and NH.

The Intercept Survey consists of interviews of marine recreational anglers at shore (SH), private/rental boat (PR), and charter boat (CH) access points. Sampling in the head boat (HB) mode will include riding on the boats during recreational fishing days (no overnight fishing trips will be sampled) and only saltwater recreational fishing trips will be sampled. The unit to be sampled will be a site-cluster, day, time period as specified in the delivered sampling schedule by the NMFS. Data collected through the intercept survey includes counts of completed angler fishing days, or trips, and angler intercept-interviews. These interviews will ask anglers about their fishing day and obtain some demographic data about the angler. Head boat recreational fishing trips being conducted under the federal Research Set Aside (RSA) program are not to be sampled by this survey.

2.2 For-Hire Survey (FHS)

Activities in support of the FHS include:

- Scheduling and conduct of boat/week/day assignments for dockside validation of FHS-sampled boats' fishing activity.
- Wave-by-wave deliveries of vessel-directory revisions (new or edited information) to NMFS and/or the FHS contractor according to an agreed upon schedule.

FHS Dockside Validations

The sample to validate, if ordered, is pre-selected by the FHS Telephone Survey contractor, and the list of boats to be validated each week within a wave is provided to the Intercept Survey contractor prior to the start of each wave. The Intercept Survey contractor then determines, from site location information in the directory and the field

staff's local knowledge, which of the selected boats each week are kept in publicly accessible locations that will allow for dockside validation observations. Multiple observations on the same vessel on the same day are not permitted. Multiple validation observations, each on separate days of the sample week, are preferred. Validation observations should be made at a time of day when the boat would be expected to be out fishing if a trip was booked.

The FHS dockside validation consists of visiting the access sites of a subset of vessels that were selected for the FHS, and recording whether the vessel is docked or away. If the vessel is away from the dock, an attempt should be made to determine the vessel's activity. These visits may occur in conjunction with or on route to routine intercept assignments when possible, or may be assigned as independent site visits for the sole purpose of determining the vessel activity. Any form designed for this data collection must be approved by NMFS prior to implementation. Site information and/or vessel directory information should be obtained, as needed, during these site visits, similar to those tasks completed during intercept assignments.

Charter and head boats that are selected for the FHS and are docked at public access marinas or sites in assigned slips must be validated during the sample week for which they were selected. Charter vessels that are carried on trailers to various boat access sites are difficult to locate and verify activity so validation of those vessels should not be attempted. Selected vessels that can be validated should be validated at least twice during the sample week. Multiple validations per vessel per week are encouraged when they can be done and are preferred over single visits to more selected vessels within a sample week. For example, if 10 vessels are selected and can be validated (sites are known and public) but 6 of those vessels are sited within a small geographic area that allows for convenient visits on multiple days while conducting intercept assignments but the other 4 vessels could only be visited once each due to travel distances and/or times, then validate the 6 boats multiple times rather than all 10 boats but only once per boat during the sample week. Sites should be visited at a time of day when it would be likely that the vessel would be away from the dock on a for-hire fishing trip (e.g. 8 am - 5 pm). If vessels are known to do night fishing trips (e.g. 7 p.m. to 11 p.m.) then it would be feasible to conduct validations during that time period. Do not visit sites to conduct validations during a time period when the boat is likely to be arriving or departing from/to a fishing trip because a small change in arrival or departure time may result in an incorrect validation if the reported fishing times are in error by only a small amount, but a trip was reported. For instance, if a boat typically departs at 7:00 am and returns from fishing at 11:30 am but is delayed and returns at 11:55 am, a validation visit observes the boat is 'out, fishing' at 11:45 am, but the captain reports to the FHS his typical times because he doesn't recall or pay attention to minor delays then the 'validation' will interpret this mismatch as an

unreported trip. To avoid these ‘tail-end’ mismatches NMFS prefer that the validations be made during the mid-trip periods when possible, and known, for the selected boats.

FHS Vessel Directory Updates

Information for the FHS vessel directory is continuously obtained during the survey year, and a new directory is created prior to sampling draws for the FHS Telephone Survey. The Intercept Contractor will be expected to submit vessel directory updated information for each wave, whenever obtained, for all states north of Florida. Each wave, the Intercept Contractor will be responsible for submitting information on new vessels operating in the fleet (if observed in the field or if advertised as available) and providing missing information for vessels currently in the directory if it can be obtained in the course of conduct of routine Intercept Survey assignments (e.g., county of operation of a known for-hire vessel, new contact telephone number of a known for-hire boat, activity status of known for-hire vessels).

Each vessel update shall include unique identifiers for that vessel (vessel name and/or vessel registration number – either Coast Guard or state) and current contact information for a vessel representative (name of owner or operator, boat location (county and site number) and a working phone number). The principal representative, designated for each vessel in the directory, may be the owner, one of the captains of the vessel, or some other person designated by the owner who can report the vessel’s fishing activity information if selected by the FHS.

The Intercept Contractor shall deliver these updates electronically to the NMFS and / or the FHS contractor (to be designated by NMFS) at least four weeks prior to the start of the wave. If there is no new information to be sent to the FHS contractor, or the delivery deadline for these updates is missed, the FHS contractor will proceed with its survey preparation activities without notification to the Intercept Survey contractor. Any late arriving update information will be held until the next subsequent wave.

The FHS Contractor will deliver to the Intercept Survey contractor prior to the start of each wave the list of vessels with missing key data elements, referred to as the “bad” list. These key elements are critical to inclusion of a vessel in the sample frame, and include a vessel identifier (documented name, Coast Guard registration number, or state registration number), the state and county of operation of the vessel, and a contact telephone number. This list, along with the FHS Sample Frame (= ‘good list’) and the Vessel Sample draws for all weeks within a given wave, will be delivered to the Intercept Survey contractor at least two weeks prior to the start of each wave for use in scheduling dockside validation visits by interviewers (as independent data-collection

assignments or in coordination with their Intercept assignment schedules) and for use in coding the on/off frame intercept interview question (See Appendix D, Survey Forms).

The Sample Frame is to be distributed, minus any listing of the confidential identifier, vessel ID, to each survey interviewer each wave. The vessel ID is retained in the FHS telephone survey data so must be removed from any list of vessel names or registration numbers to protect from linking an individual vessel and operator to its' confidential fishing activity. At the conclusion of a wave the distributed sample frame lists are to be destroyed to avoid use of an incorrect reference when coding the responses to the on/off frame interview question.

NMFS may consider the establishment of the FHS directories on a password-protected web site that allows appropriate updates by the FHS and Intercept Survey Contractors. Should this be provided, the Intercept Contractor will use this method to make updates to vessel information and add new vessels to the directory. Proposals must address security measures to limit and/or control access to the directories.

2.3 Economic Surveys

There will be no supplemental economic surveys conducted on the Atlantic Coast in 2014. Bidders are not required to provide pricing for any economic surveys that may take place in 2015.

2.4 Software Requirements for Data Collection and Processing

The Intercept Contractor is responsible for maintaining and updating the angler-interview questionnaire forms, all computer programs necessary for accurate data collection throughout the contract period, and for modifications to all quality checking programs for improved QC or to accommodate changes to the interview questionnaire. The Intercept contractor will need a licensed copy of SAS software (Personal Computer or mainframe, version 9 or newer, including core, base, and statistical modules) to run government-supplied data quality check and summary programs, and to produce the deliverable data files.

The intercept data entry program is government property and the most current version will be supplied to the Intercept Survey contractor. It must be maintained by the Intercept Survey contractor for use throughout the contract period. Maintenance is necessary when the questionnaire is changed and when flexible/economic survey questions are used. The Contractor may propose to use alternative data entry programs or methods, but these must be approved by the NMFS. If the supplied data entry program cannot be run on the Contractors computer platform or the Contractor

would like to use an alternative program, an agreement between NMFS and the Contractor must be negotiated to the approval of NMFS. Support for modifications or improvements to the supplied software may not be provided by the NMFS if the modifications are not deemed necessary for successful entry and compilation of intercept data.

There currently is no data entry program for FHS pre-validation data. The Intercept Survey contractor may use any software they wish for these data, but the data must be delivered to NMFS in SAS data files.

A portion of the field staff's angler interviews are required to be verified by follow-up telephone interviews. These verification interviews can be conducted with the use of a Computer Assisted Telephone Interviewing (CATI) system. CATI use is not required, but its use is recommended. Verification data are not required to be submitted to the NMFS, however, the results of verification calls are required to be summarized in the wave and annual reports. If CATI is used, the Intercept Contractor is responsible for purchasing and maintaining their own CATI system software and hardware (i.e., those costs should not be included in the cost of this contract, except as normally included in overhead costs).

3 Intercept Survey Sample Frames

The Site Register (SR) is a database of all access sites along the Atlantic and Gulf Coasts of the United States from which saltwater recreational fin-fishing may occur. The sampling frame for the APAIS, active sites in states north of Florida, is derived from this database. Information provided for each site in the SR includes site descriptors, site location, and recreational fishing activity information by fishing mode (fishing from shore, private or rental boat fishing, charter boat fishing, or head boat fishing). Sites with head boat fishing activity are listed in the SR, including head boat only sites, but do not have head boat mode-specific activity pressures included. The SR is not used as the sample frame for head boat sampling (see mode specific details below). The SR database is maintained at the NMFS and is accessed by private account on the website: <https://www.st.nmfs.noaa.gov/siteregister/html/siteRegister.jsp>. This web portal allows for editing of all site information, retiring closed sites, and addition of new sites.

3.1 Site Register

Information provided for each site in the SR includes a description of the site, its location, its activity expected in each month/kind of day/time period of day by fishing mode, and features or amenities of the site. Each site description includes an address,

if available, the name of the nearest town, directions to find the site, and, if available, the name and phone number of a primary contact person at the site. Geographic location is coded by latitude and longitude. Site amenity check-lists include tackle and bait shop presence, boat fuel, repair, and storage facilities, and if there is a usage fee at the site. The number of boat, trailer, and car parking spots is included along with some indicators of nighttime lighting, boat ramp size, public or private access to the site, and survey interviewing approval for the site. New sites are added as they are identified and complete information is obtained, with final site approval by the NMFS.

Each site is assigned a 4-digit numeric identification code (ID), which remains the same over time, and can be uniquely identified by a combination of its two-digit state code (FIPS code), its three-digit county code (FIPS code), and the four-digit site ID code. For example, a marina that changes its name through new ownership will keep the same site ID. Codes for inactive, closed, or destroyed sites will not be reassigned to other sites. When a new site is identified and entered into the database via the web portal, the site ID is automatically assigned.

Determining Site Pressures

The Site Register includes an estimate of the saltwater recreational fishing activity, or pressure, at each site for each fishing mode. The fishing pressure is the mode- site- and time-specific average number of anglers expected to fish over a specific six-hour period on an average day. The selection probability for each site is weighted by the pressure estimates for each sampling cell (state, month, day-type, fishing mode, time-period). The pressures use categorical descriptors of the fishing activity within each cell and are non-linear with values from 0-7. A pressure rating of 9 indicates that the mode is not present (i.e. 0 anglers). The pressure categories and eligible angler ranges are:

Pressure Codes	Avg. No. Eligible Anglers	Pressure Codes	Avg. No. Eligible Anglers
0	1 - 4	4	20 – 29
1	5 - 8	5	30 - 49
2	9 - 12	6	50 – 79
3	13 - 19	7	80+

In North Carolina only the shore fishing mode is further stratified into Man-Made shore structures (MM) and Beach-Bank, or natural shorelines (BB) for pressure estimation at each site which has shore angling activity present. In all states, these shore types are coded on the check-list of site descriptors, but only in NC are these two sub-divisions of shore fishing independently sampled (separate sample selection goals, selected sampling assignments, and estimated catch and effort).

Site Register Maintenance

The Intercept Contractor shall be responsible for maintaining and updating the SR continuously during the period of contract award. The Contractor shall review and update the information regarding fishing pressure for each site before each wave, and shall ensure that every site is physically inspected at least once a year to update the SR, regardless of whether or not that site was assigned during the year. The main source of information for updating the SR is field observation. The information obtained in the field can be recorded each time a site is visited for sampling assignments, FHS validation observations, to and from sampling sites, or for the express purpose of evaluating the site. It is the responsibility of the contractor to provide the necessary tools or forms for recording the field observations so they can be entered into the web application upon return from the field (or in the field if electronic capture and web access is available). In the past a site description form has been used but it is not mandatory for this contract. These forms can be provided by the NMFS upon request, but bidders are encouraged to review the website application presentation (available from NMFS upon request) and develop and propose their own process for submitting SR data each wave.

Approximately 3 weeks prior to the start of each sampling wave, the sample selection process will be conducted and a 'snapshot' of the SR will be archived. This data record will allow the site information at the time of the sample selection to be known (sites active, pressures per mode/cell) for future estimation or analysis. Therefore, updated information intended to be used for a wave must be entered and approved by the state coordinator or supervisor by that date (specific date for each wave to be negotiated between contractor, NMFS, and FHS contractor). Sufficient time must be allowed for field scheduling of assignments, verification of drawn sample by NMFS, and exchange of data between survey contractors.

Sites are never removed from the Site Register, however they can be retired if it is determined or observed that they are permanently closed (e.g., out of business, destroyed by storm, removed from site or redeveloped). Retired sites (no fishing activity in any mode in any month, i.e. permanently closed or damaged and inoperable for an extended period of time) are kept on the SR but the site status is coded as retired, making the site ineligible for future use as a sampling site. The continued inclusion in the SR allows for re-activation of the site in the future (if it reopens) and for keeping site codes unique to a geographic location. Interviewers should inform their field supervisor if they learn that a previously inactive site has become active.

Multi-fishing-mode sites should not be split into multiple sites for the sole purpose of separating the fishing modes present at a single geographic location. Each mode is sampled independently and site selection is constrained such that no two different mode assignments can be sent to the same site cluster on the same date in the same time block. However, a very large site with multiple access points of a single mode may be separated into 2 or more sites if all anglers exiting the multiple points cannot be visually counted from a single vantage point, or all anglers cannot be intercepted without missing observations of activity at another access point of the site. For example, a large park with several boat ramps but sufficient area and routes in between such that not all boats exiting the ramps can be seen from one point, nor would they all exit via a single access point for intercepting. Such a site would best be split into 2 sites with each designated as a new, unique site. The protocols for determining which, if either, would retain an existing site ID code will be determined by the NMFS prior to survey startup. Typically, neither of the new sites would retain the original site ID code (each new site would be considered substantially different than the original site) which would be retired.

3.2 Head Boat Frame / FHS Directory

The sample frame for Head Boat sampling (boat-based, at-sea observation and interviewing) will be a subset of the For-Hire Survey (FHS) vessel directory, augmented with a database of relative pressures for each Head Boat. The vessel directory is maintained by the FHS contractor and will be provided to the intercept contractor prior to the start of each wave with sufficient time for sample selection and scheduling. The pressure file for Head Boats is to be maintained, updated, and compiled in a unique file each wave by the APAIS contractor. The initial pressure file for 2014 will be provided to the intercept contractor by the NMFS, but subsequently should be used as the base for each wave moving forward. Head Boats in the vessel directory are identified by category of vessel. The directory and pressure files will be delivered as SAS data files.

4 Intercept Survey Sample Sizes

In 2011, NMFS allocated approximately 25,000 intercept interviews among the Atlantic states in proportion to historical fishing effort. To obtain the state/wave/mode goals of intercept interviews approximately 6800 assignments, or site-days sampled, were completed. Of these approximately 42% resulted in 0 interviews.

In 2014 the new survey design mandates site-day sampling during specified 6-hour scheduled time intervals at selected site clusters. A site cluster will contain 1 or 2 sites in close geographic proximity, all with activity in the assigned mode. Angler counts

and interviews will be obtained in the assigned mode of fishing, unless directed by the NMFS for specific assignments. The boat modes (CH and PR) may be more efficiently sampled by collecting data for both modes at sites with both fishing modes available so mixed boat mode assignments may replace some or all of the separate CH and PR mode assignments. This change would be implemented at the start of a wave and the contractor would be notified prior to the samples being drawn for the wave. The total assignment allocations, if the mixed boat mode sampling is implemented, would not exceed the sampling allocations specified in Appendix G, Tables 5-6. The sample sizes are numbers of assignments to be completed by month, day-type (weekend or weekday), and mode for each state. All assignments must be completed on the scheduled date. The NMFS realizes that there may be dates and situations which result in 0 anglers counted and interviewed. That result is still a valid datum point and it is important that these samples be included in the survey as they occur rather than be avoided through alternate procedures such as re-scheduling or visiting alternate site clusters. Given that special circumstances and last minute emergencies may occur, hopefully infrequently, if an interviewer cannot complete the assignment (remain sampling within the site cluster for the entire 6 hour period) the assignment must be canceled with immediate notice given to the contractor's project manager and the NMFS. Assigned site/date/time samples cannot be re-scheduled for later in the wave or month.

4.1 ACCSP Add-On Sample

In recent years, the Atlantic Coastal Cooperative Statistics Program (ACCSP) has allocated funds to increase intercept sampling in Charter, Headboat, and Private/Rental Boat modes. In 2012 the ACCSP provided supplemental funds for additional sampling in Charter and Headboat modes in Waves 2-6 to obtain additional interviews above the base level funded by NMFS. However, for 2014 this program has elected to only supplement the Headboat at-sea sampling mode, which utilizes boat-trip sampling units, independent of angler-interview goals. These Headboat sampling goal additions should be added to the NMFS base goals to determine sampling day requirements and allocations. A final decision on the funding for these supplemental allocations in 2014 is expected before contract award. It is unknown at this time whether funding will be provided for any add-on samples in any mode during 2015. If required, the Government may elect to negotiate unit prices per sample and incorporate add-ons for Charter, Headboat, or Private/Rental Boat modes within the scope of this SOW.

4.2 State Add-On Sample and Participation

In previous years, some Atlantic states have participated in funding and conduct of the Intercept survey. In some cases, they have funded supplemental levels of sampling above those ordered by the NMFS to improve state-level estimates or to add supplemental questions for specific management needs. In other cases, states have sub-contracted with the Intercept Contractor to use state personnel to conduct intercept interviews and other survey tasks. These add-ons and subcontracts are extremely helpful to the program for a number of reasons: 1) add-ons improve the precision of the estimates and thus provide better data for management, 2) buy-in by states either through additional sampling or through conduct of the intercepts helps build the positive image and public credibility of the Survey, and 3) partnerships with states help improve understanding of the survey purpose and design by scientists and the general public. Thus it is vital that the Intercept Contractor has the ability and commitment to work in a cooperative manner with states to implement add-ons and state subcontracts.

The Intercept Survey Contractor shall work with individual state agencies wishing to add to the sample size, and/or subcontract for intercept tasks. NMFS will provide the Intercept Survey Contractor with a list of contacts for state fishery agencies. States that have previously funded add-ons include Massachusetts, Rhode Island, Delaware, Virginia and North Carolina. States that are currently sub-contracting to use state personnel for the Intercept Survey include Maine, New Hampshire, Massachusetts (HB mode only), Connecticut, North Carolina, and Georgia. In Massachusetts, a mix of state and contract interviewers is used for mode-specific sampling.

State subcontracts are negotiated directly between the Intercept Contractor and the interested state. The specific responsibilities of each party are determined by the Intercept Contractor and the state. NMFS requires that proposals for intercept data collection include a description of proposed state subcontract procedures, including formulas for calculating the maximum "pass-through" funds to the subcontracting state for conduct of intercept interviews or "hold-back" to cover the contractor's administrative and operational costs (whichever is easiest), and assumptions concerning assignment of duties of the Contractor and the sub-contracting state. If a state chooses to participate by assuming the responsibilities for intercept data collection, they are required to fulfill identical Contractor responsibilities for survey conduct (field protocols, training, QA/QC, delivery schedules, etc), and must provide all necessary information to the Contractor to comply with Section C - Deliveries or Performance. Proposals must address how the Intercept Contractor will ensure adherence to contract requirements by state sub-contractors.

Any proposed modifications by states or other entities to the survey instruments must be approved by the NMFS in writing in advance of implementation (this includes any add-on questions). Any add-on questions or additional sampling paid for by an

entity other than NMFS, and collected through the Intercept Contract shall be included in the databases provided to NMFS. NMFS will not accept add-on samples obtained by any contractor other than the Intercept Survey Contractor.

5 Sample Selection

The Assignment

A sampling "assignment" consists of a target mode, a time interval, a cluster of fishing sites with activity in that target mode, the order in which those sites are to be visited, and the date on which the cluster is to be visited. Fishing modes targeted are beach/bank (BB), man-made (MM), shore (SH), private boat (PR), charter boat (CH), or mixed boat (charter or private/rental, MB). Boat mode assignments will be designated as PR, CH or MB; the mixed boat is not a field option. BB and MM are only separated as shore target modes in North Carolina. Shore mode (SH) refers to either type of shoreline fishing and is the target shore mode in all other states. Designated time intervals in all states in 2014 are 2am-8am, 8am-2pm, 2pm-8pm, and 8pm-2am and 11am-5pm. Site clusters are determined each wave based on the site pressures for the wave, among other criteria (proximity, staff constraints). Pressures for the 11am – 5pm interval are not included in the Site Register web application which will not be modified for such use at this time. Rather, the NMFS will produce pressure estimates for weighting the sample selection of this interval from existing pressure estimates for the other intervals and/or from historic data on site use and site interview productivity.

Each assignment is provided an identifying control number which includes the coded target mode of that assignment. These control numbers are used to track the assignment within the state schedule of sample site-days and to link all the angler interviews obtained in a summary file. Within each state the assignments selected are expected to be completed, regardless of angler activity at the selected cluster of sites.

How Assignments are Generated and Distributed

A computer program is used to generate the site clusters, then select the required number of assignments in each state, mode, month, day-type, time-block (=cell). Selection rules will be in place to eliminate conflicts such as overlapping assignments (> 1 assignment per cell/site cluster) and staff unavailability, and the overall allocation of assignments to modes and time-blocks will attempt to optimize sampling effort, but still conduct a minimal level of sampling in low-activity periods and modes.

Once the assignment samples have been generated, field staff must be assigned to each date/time-period. Sufficient staff must be available to cover the entire coastal region of sites in each state. Assignments must be completed on the day and time interval they are scheduled. Rescheduling assignments is not permitted. An assignment that cannot be conducted due to extreme weather (e.g., hurricane, coastal flooding) is considered a completed assignment with zero intercepts. Complete the Assignment Summary Form as you would for an assignment with no intercepts and zero anglers counted at all sites within the assigned cluster. If it can be done without imperiling field staff, an attempt to visit each of the sites within the cluster to confirm no fishing activity would be preferred. If however, the conditions are considered life-endangering, or the sites are within a mandatory evacuation zone, do not attempt to visit the sites.

On very rare occasions, a situation may prevent an interviewer from completing an assignment on the assigned day. In this case, interviewers should contact project staff as soon as possible, but no later than two days prior to the assigned day, so that the assignment may be issued to another interviewer. Assignments must be completed on the day and time interval they are scheduled. Rescheduling assignments is not permitted so if a field assignment cannot be completed as scheduled it will be considered cancelled and no data will be available for that assignment.

All sites to be visited on an assignment in 2014 are pre-selected (i.e. clustered) so there is no need for the interviewer to identify alternate sites. Sites are clustered based on time interval, pressure, and geographic proximity. Sites more than one hour drive-time from one another cannot be clustered together. Clusters may have one or two sites. Interviewers must be at the first site at the time the assignment begins. For example: If the assignment is scheduled 0800-1400 the interviewer must be on site at 0800, if not a few minutes early to set up. The sites, if > 1 in the cluster, must be visited in the order they are assigned, according to the field protocol for the number of sites in a cluster. Note that if an interviewer arrives late at the first site, he/she cannot stay late to “make up” for it; the actual time of late arrival should be recorded on the data forms and the schedule adhered to as if the arrival time was at the interval start time.

Two Site Clusters

Arrive at the designated first site at the start of the interval and stay onsite conducting counts and interviews for 3 hours (1/2 interval period), then move to the second site and remain onsite for the remaining time in the period. The second site will not be surveyed for the full 3 hours but the assignment must be completed at the end of the sample period.

Single Site Clusters

These unique 'clusters' of only one site require the interviewer stay at the selected site for the entire six-hour time interval. Arrival and start time is the start time of the period and the assignment is completed at the end of the survey period. If there is no activity apparent upon arrival, the interviewer still must stay onsite to confirm the lack of activity for the entire time period.

Site Closings

There will be times when a site is closed for various reasons. If the closed site is the sole site of the cluster then the time of arrival should be recorded in the start and stop columns, a note explaining the closure recorded in the comment section, and the assignment is considered completed. If the closed site is the first site to be visited in a 2-site cluster, the similar procedure is completed for the site1 in the first site visited section, then immediately travel to the second site and remain at that site for the remainder of the 6-hr sample interval following the standard on-site protocols. If the second site in a 2 –site cluster is found to be closed the time is to be recorded for site2 in the start and stop columns then the interviewer should return to site1, record this second start time (in the third visit row on the ASF) and remain at that site for the remainder of the 6-hr interval. Note that all interviews should be numbered consecutively and summed for site1 only in the summary section at the bottom of the ASF.

Tournaments

For the purposes of this survey, a tournament is defined as a fishing contest lasting seven or fewer days for which participants have to register. Prizes are given according to the rules of the contest. Informal "pools," such as those arranged on head boats, are not considered tournaments. Tournament anglers are eligible for this survey, including those encountered at a tournament weigh-in station (if a selected site is serving that function). The Assignment Summary Form (ASF) has an item to indicate a sampled site was a tournament "Weigh Station".

6 Assignment responsibilities and tasks

While on assignment, interviewers are responsible for:

- Courtesy notification of site manager on arrival;
- Starting the assignment at the assigned first site within the cluster on time;
- Counting all anglers who complete fishing in the assigned mode (only);
- Conducting screening for eligible anglers;
- Reading a brief statement regarding the Privacy Act of 1974;
- Conducting intercept interviews of eligible anglers;
- Examining the available catch for species identification and enumeration;

- Weighing and measuring the available catch;
- Gathering updated information for the For-Hire Survey vessel directory, if requested.

6.1 Before the Assignment

Before each assignment, interviewers should make sure they have adequate supplies of all necessary manuals and forms and that all needed equipment is in useable condition. All interviewers must have the required materials with them when on site.

Forms and documents:

Assignment Description (Mode, sites, order of visits, time to visit/interview/count) – a detailed description of how to conduct the assignment;

Letter to anglers – a letter on NMFS letterhead giving a brief description of the survey, including information required by the Paperwork Reduction Act and the Privacy Act of 1974, and contact information for the NMFS Program Manager (Appendix E, Letter to Anglers);

Screening Introduction – a series of questions used to determine an angler’s eligibility for the survey;

Intercept Questionnaires – the questionnaire used for collecting angler, trip, and catch information (Appendix D, Survey Forms), including the Discard form for HB assignments only;

Assignment Summary Form – the form used to summarize the counts of anglers per site, the number of angler-interviews obtained per site, the hours worked per site, and other relevant information (Appendix D, Survey Forms). This form can be pre-filled with the assigned first site, the assigned mode, and the start time at the first site;

Brochures and other informational materials – Informational materials (brochures, web cards, trinkets, etc.) will be provided periodically by NMFS to the Intercept Contractor in volumes suitable for wide-spread issuance to all interested respondents and other interested anglers.

Required Equipment:

Chatillon brass spring scales (2 kg and 12.5 kg) – Interviewers should always carry both scales since they cannot predict the size of the fish they may encounter; digital scales are not recommended, and are not allowed without prior approval from NMFS;

Measuring board;

Tape measure;

Fish Guides and Keys, including, but not limited to, Peterson's A Field Guide to Atlantic Coast Fishes of North America and a dichotomous fish identification key appropriate to each area;

- Current Site Register – a list of all known saltwater fishing sites in the state with pressures for the current wave;
- For-Hire Survey Sample Frame List (“good list”) – the list of For-Hire boats in the Sample Frame for the current wave; to be used to answer the on-list question on the Intercept Survey (Box E in 2013; Appendix D, Survey Forms).

Manuals:

Field Procedures Manual – The contractor should produce and supply all interviewers with a current copy of the manual. This manual must be approved by the NMFS Program Office prior to distribution to the field interviewers.

Coding manual: A list of all codes used on the various forms should be supplied to interviewers and taken on all assignments

Other Assignment Materials: These items may be useful to facilitate angler interviewing and/or equipment maintenance:

Legal-sized clipboard;

Plastic bags – food storage bags to protect the scales when they are not in use; and

Towel, wipes, etc. – these are useful for wiping hands between fish handling and form handling and for disinfecting.

First Aid kit – you never know when handling fish, even dead ones.

Unless weather conditions are hazardous to travel or individual health or the area/sites to be sampled are within mandatory evacuation zones, the interviewer should make an attempt to get to the assignment site(s) to count anglers or confirm zero activity during extremely bad weather conditions (storms, floods, etc.). The interviewer should pay close attention to the weather in his/her area, and call his/her field supervisor or the Contractor's project manager or designee prior to the assignment time if there is a likelihood that the weather is severely bad enough to warrant cancelling the assignment.

Each assignment specifies an assigned mode, starting site, date, time of day to begin, and the order and times to visit subsequent sites within the cluster. If the counting and interviewing activities are to be sampled independently within the time period, the assignment details will describe how to distribute those tasks. It is the responsibility of the field staff to arrive at the starting site by the pre-determined starting time; late arrivals cannot be 'made up for' with extended (outside survey period) conduct of sampling at the end of the proscribed sample interval.

6.2 On-Site Activities

Upon arriving at the site, interviewers should first check in with the person in charge (or the person previously contacted). Many sites, especially public boat ramps, will have no such person, but privately owned or closely supervised public operations will have a manager in charge. Both for permission and as a courtesy, the interviewer should introduce him or herself and give a summary of the purpose of the survey. Copies of the letter from NMFS describing the authority and mandate to collect the angler interviews (Paperwork Reduction Act and the Privacy Act of 1974), and the informational materials should be provided to substantiate the legitimacy of the survey and encourage cooperation, especially at new sites. These materials should be provided by the interviewer to any interested member of the public.

NOTE: The importance of these letters cannot be over-stressed. They are a direct link from NMFS to the anglers and should be distributed freely. All business facilities, privately-owned facilities, and monitored public facilities should be given a copy for their files and bulletin boards. Interviewers should always have some copies available when on assignment.

Inquiries from the public that require detailed responses about the MRIP program, Intercept Survey design, expansion of data, or field conduct (site selection, frequency of visits, selection of anglers for interviewing) should never be addressed by the interviewers. Instead, the interviewer should attempt to obtain contact information from the interested party and send it, along with the questions as best they can be paraphrased, to NMFS through the Contractor's management staff. Questions about the interview questions for clarification, or about fish identification, biology, etc. can be answered at the interviewer's discretion. Knowledgeable responses should be provided; speculation or opinions shall not be provided.

At some fishing sites, especially shore fishing sites, it is possible and advisable to build a rapport with the people fishing prior to conducting any interviews. All anglers approached should be told the interviewer's name (first is sufficient) and that the survey is being conducted under contract for the NMFS. At no time should an interviewer claim to be an employee of the NMFS or represent the NMFS. Anglers who have had the opportunity to meet the interviewer and discuss the survey tend to be more cooperative

when asked for an interview at the end of a fishing trip. A key factor in gaining the respondent's initial cooperation and confidence in the study lies in assuring the respondent that the interviewer is not part of any enforcement effort and informing the respondent about the basic nature of the survey for fishery monitoring.

The clustered sites must be visited IN THE ORDER IN WHICH THEY ARE ASSIGNED, for the time intervals assigned. Unless an error was made during scheduling, only one MRIP interviewer will be assigned to a site-cluster/date/time interval. If you encounter another MRIP interviewer in the field please contact project staff immediately (state or contractor supervisor). If you encounter any other survey samplers, please attempt to coordinate with them to avoid overwhelming angler respondents but do not agree to skip or omit any eligible anglers from the APAIS interview conduct. If necessary, negotiate alternating counting and interviewing of anglers such that the other survey's field staff can interview anglers during the period the MRIP interviewer is only counting exiting (completed) anglers. If this situation becomes necessary, notification of Contractor's management staff of its occurrence is mandatory upon completion of the assignment (or during for approval, if possible by cell phone).

6.3 Conducting Counts

In addition to conducting interviews with eligible anglers the 2014 APAIS includes counting all anglers that exit the site (i.e. complete fishing in the assigned mode or modes) during the sampling period at each site visited. When conducting counts the number of confirmed trips and unconfirmed trips must be enumerated separately. This refers to whether or not it could be confirmed that a person(s) was fishing on the day of the assignment. If someone replies that he was in fact recreational saltwater fishing this is a confirmed trip. If there was not an opportunity to ask the departing person (for example, during conduct of an interview, someone leaving the site carrying a fishing pole was spotted) then that should be counted as an unconfirmed trip. If someone informs you they were not fishing on the day of the assignment you do not include them in your counts. The determination of whether to include departing boaters as unconfirmed anglers or just exclude as non-angling boaters is a decision the interviewer must make on the best available information and observations he/she can make. The counts should be the last resort after all attempts to interview all departing anglers are exhausted, or the interviewer is too busy interviewing one boat party to detain the subsequent party(ies) for interviewing.

6.4 Mode-Specific Procedures

Shore mode assignments (SH)

A beach/bank shore site (BB) is typically a stretch of coastline or natural shoreline without any man-made improvements or structures. Anglers may be

scattered along the area and there may be more than one point of egress for the designated site. A man-made site will have some structure or improvement from which anglers may fish, such as a pier, jetty, breakwater, seawall, causeway or bridge, and typically has a single point of access (entry-exit) to the site which will allow for counting and intercepting anglers after they complete fishing at the site. Only anglers who have completed fishing at the site should be counted for the angler-exit counts.

All anglers must be done fishing for the day if they have been fishing at a man-made shore site, or the man-made section of a combined-mode shore site (BB and MM areas present at the same designated shore site). Interviewers are only allowed to interview anglers who have not completed their fishing trip (incomplete trip interview) when they are at a beach/bank site or the angler is departing from fishing at the beach/bank area of sites with both types of fishing access. The incomplete-trip interview requires the additional question about expected time to continue fishing and has restrictions on when and how many interviews may be obtained (see Conducting Interviews below for details).

Private / Rental Boat (PR) assignments

Private or Rental Boat assignments require the placement of the interviewer at a spot that does not bias the intercepts for those with catch, such as may happen if the interviewer was located adjacent to a fish-cleaning station. The interviewer should set up at a spot that allows visual census of boats completing their trips (haul-out spot, boat wash-down area, etc.) and an opportunity to intercept the anglers before the boat/party departs the site entirely. All boat parties should be queried (see screener) for marine recreational fishing activity, although if the interviewer is occupied with angler interviewing he/she will have to use visual cues (fishing rods/equipment, coolers of fish, etc.) to help in determining whether or not the boat party fished when recording unconfirmed angler counts. . The preferred protocol is to interview all anglers in a boat party and separate each angler's catch onto his/her interview. If that is not possible (angler refusals or unavailable) then the anglers' available catch can be grouped and reported on the interviewed angler's form following the interview procedures. If any anglers in a boat party refuse to be interviewed but at least one angler consents and completes an angler-interview, then the refusal number is to be recorded as interview refusal(s), NOT as a confirmed angler count. The 'count' fields are only for those anglers that depart without an opportunity to be interviewed (have not been pre-screened or asked to complete an interview). Every angler intercepted and screened should be included in one of the observed angler interview fields: completed interview, initially refused an interview, could not be interviewed due to language barrier, or refused to answer a key question so the interview was aborted and incomplete.

Charter Boat (CH) assignments

Charter boat angler interviews must be approved by the vessel captain prior to initiating the interviews with anglers. The field sampler should introduce him/herself (first name is sufficient) to the captain as an employee of the contractor/state conducting a survey of anglers for the NMFS, and ask if the angler-party can be interviewed. At no time should the interviewer board the boat! Asking the mate or a crew member for interviewing permission is not an acceptable proxy for the captain. If the captain has already departed the boat by the time the interviewer can intercept the party of anglers and the captain's permission cannot be obtained, the interviewer should include those anglers in the completed fishing counts and continue the assignment without interviewing those anglers.

Mixed Boat assignments (CH or PR)

Mixed boat mode assignments may be used to increase angler intercept success and efficiency in the boat modes, particularly Charter Boats. These assignments will be conducted following the same protocols as the Private/Rental Boat or Charter Boat assignments with the added feature of allowing either Boat mode to be intercepted and anglers interviewed. The assignment mode will be Mixed Boat (MB) and the summary counts on the ASF will include both PR and CH interviews and missed angler counts (confirmed and unconfirmed). Angler interviews obtained on these assignments will have the specific boat mode coded on the appropriate question, and all interviewing procedures specific to the mode should be followed (e.g. on-list question coded for CH mode interviews). Angler intercepts are to be obtained from all boats returning to the site on both private/rental boats and charter boats. If all boat/anglers cannot be intercepted the field interviewer is not to pick and choose which mode boat to intercept; the next available boat should be intercepted. A representative mix of CH and PR intercepts should be the goal if the site is too busy to intercept all boat trips and anglers. If the APAIS transitions to mixed boat mode assignments in lieu of separate PR and CH assignments, the mixed mode assignment allocation will not exceed the combined allocations for PR and CH mode assignments.

6.5 Angler Intercepts

All approached anglers should be told the interviewer's name and that the survey is being conducted under contract for NMFS. At no time should an interviewer claim to be a NMFS employee. If the angler is willing to cooperate, the interviewer should then ask the eligibility questions. The Screening Introduction serves two major purposes:

- To introduce the interviewer and the survey; and
- To determine if the angler is eligible for an interview.

While interviewers will be given several copies of the Screening Introduction, it should not be needed on a routine basis if the interviewer fully understands the study background and eligibility requirements. Angler screening questions must be repeated

for each new angler interviewed, regardless of whether interviewed anglers were fishing together or not. To be eligible for an interview, an angler must meet all of the following criteria:

- must have been fishing recreationally;
- must have fished in saltwater;
- must have completed his/her fishing trip (see beach/bank exclusion rules); and
- must have fished in U.S. waters

Screening Questionnaire for survey eligibility

Hello, my name is _____ and I represent (CONTRACTOR NAME). We are conducting a survey of marine recreational anglers for the National Marine Fisheries Service of the U.S. Department of Commerce. I'd like to ask you a few questions about your fishing.

1. Was the primary purpose of your trip today for recreation; that is, for fun and relaxation, or was it to provide income either from the sale of fish or from the sale of the fishing opportunity?

Recreation → Continue

To provide income → Thank angler and end interview, angler not eligible

2. Were you saltwater fishing today? By saltwater fishing, I mean fishing in oceans, sounds or bays, or in brackish portions of rivers.

Yes → Continue (if in Maine, ask 2a)

No → Thank angler and end interview, angler not eligible

2a. (MAINE ONLY) Was the majority of your fishing in Canadian waters?

Yes → Thank angler and end interview, angler not eligible

No → Continue

3. Were you fishing for finfish today?

Yes → Continue with question 4

No → Continue with question 3a

3a. Did you catch any finfish today?

Yes → Continue

No → Thank angler and end interview, angler not eligible

4. Have you completed your saltwater fishing today (all modes/sites except Beach/Bank Shore sites – see Incomplete Trip Interviewing)?

Yes → Angler is eligible, start main questionnaire

No → Continue

5. Will you still be fishing from a (SPECIFY MODE, e.g. your boat; shore)?
- Same mode → Thank angler and end interview, angler not eligible
 - Different mode → Angler is eligible, start main questionnaire

Screening Question Rationale

Q1 This question is necessary to determine whether the angler meets the "recreational" criteria. A "to provide income" response to the question would end the screening -- the angler is not a recreational angler. A "recreation" response to Item 1 would lead to Item 2. Interviewers must ask about the original intent for the particular trip taken that day, regardless of the type of fishing license possessed. An angler may sell his catch for expenses incurred even though his primary purpose was recreation. This type angler would be eligible for the APAIS.

Q2 This question is to verify the angler was fishing in saltwater. An angler is a saltwater angler if he/she thinks he/she is a saltwater angler. At sites where both freshwater and saltwater fishing could be accessed (e.g. river boat ramp sites), the interviewer must ask each angler whether they were freshwater or saltwater fishing. Anglers who say they were freshwater fishing are not eligible for the survey and should not be interviewed.

Q2a. In northern areas of Maine, if an interviewer has reason to believe that an angler may have spent time fishing outside of United States waters (boat anglers), the interviewer should also ask if the angler fished in Canadian waters. If the majority of his/her effort was not in United States' waters, the angler is not eligible for an interview and the screening should be terminated. If the "majority" is determined to be in United States' waters, all of the angler's fishing time, catch, etc., should be included on the Intercept questionnaire -- even time spent and fish caught in foreign waters.

Q3 This question is to verify the fishing trip targeted finfish, that is, the fishing trip was directed at fish with fins. Note that a person does not have to have caught a finfish to participate; he/she must only have been fishing for finfish.

Q3a Shell fishermen (or any invertebrate target such as octopus, squid, etc.) may have landed finfish although that was not the primary target. These shell fishermen are eligible if one or more finfish were incidentally landed.

Q4 All saltwater anglers are asked whether they have completed their fishing for the day. If the response is "yes," the angler is eligible for the survey and the interviewer should start the main Intercept Questionnaire.

Q5 Anglers are not eligible for this survey if they are planning to continue fishing from the same mode later in the day, whether they plan on fishing from the intercept site or some other location. If an angler is intercepted after returning from a private boat recreational fishing trip and plans on fishing from a pier later in the day, the angler can be interviewed for a PR mode interview, and if intercepted again at the pier site, he can be interviewed for a shore mode interview. These are separate modes of recreational fishing so are considered 2 separate fishing trips.

6.6 Angler Interviewing (See also, Item-by-Item Instructions, Appendix I)

Interviewers are responsible for conducting complete intercept interviews for eligible anglers at an access site in an unbiased manner. A complete interview includes asking each respondent for specific information about their fishing trip, asking demographic data that are used to match intercept data to the telephone data, examining the catch for species identification and enumeration, and weighing and measuring the catch. For the intercept survey, the intercept interview goal is the number of complete, usable interviews and does not include refusals or incomplete interviews of eligible anglers.

All eligible anglers shall be asked to:

- provide details for the current trip, including (but not limited to): mode of fishing, gear used, general area of fishing (river, bay, ocean less than three miles, ocean greater than three miles, time spent actively fishing, time spent on the water (boat modes), fish targeted, number of people fishing together, and details about any fish caught but unavailable for inspection (species and disposition of unavailable catch);
- recall their total number of marine recreational fishing trips for finfish made in the past two months, and the past twelve months;
- provide their county and state of residence, postal zip code, and general residence and address information
- provide their name and a telephone number for verification purposes.
- allow the interviewer to identify, weigh and measure any fish available for inspection, and to provide the interviewers with details about the disposition of this available catch;

Sample Intercept Survey questionnaires may be found in Appendix D. NMFS reserves the right to make changes in data items for regional or annual customization and in order to improve response rates or accuracy of the responses. The provided sample questionnaire will not be changed substantially prior to the start of the survey

period. The NMFS will submit any questionnaire changes to the Contractor at least 45 days before the beginning of each wave.

General instructions for conducting the intercept interviews are:

1. Wording - The questions to be put to the anglers are written out in full for a purpose. Methodological studies have shown that even slight changes in wording, for example, "should" versus "could", influence item response. The interviewer must always ask each item on the questionnaire exactly as it is written. Instructions to interviewers that are not to be read during the interview are written in italics.
2. Provide Definitions, Not Answers - If the angler asks for the interviewer's opinion about an item, the interviewer should provide a definition for the item in question, rather than supply an opinion or the actual response, for most cases. For example, if an angler is unsure about what gear he was using, the interviewer should explain the differences and let the angler decide. Refer to the Glossary in Appendix A for definitions.
3. Codes for Not Applicable (NA) Questions - As a general rule, items on the questionnaires that are not applicable to a particular angler (i.e., items falling out in skip patterns) have a noted code to indicate 'not applicable' and must be checked/entered. If there is not a provided code, then the question must be answered.
4. Codes for Refused Questions – Refusal codes are provided where allowable. Even if a refusal code is provided for a KEY question, if the Key question is refused the interview must be terminated and status coded 5.
5. Codes for Don't Know – codes are provided when allowable (check box or code to be entered into response boxes).
6. Right Justify and Add Leading Zeros - If an answer does not require use of all boxes provided for an item, the interviewer should right justify the entry and add leading zeros.
7. "Other (SPECIFY)" - The response codes for some data items are not exhaustive and include codes designated "Other (SPECIFY)". If a respondent provides an answer not covered by the pre-coded responses, the interviewer should enter the "other" code and write out the respondent's exact response next to the coding boxes. All 'other' responses should be reviewed by project management or coordinators to verify correct coding of this response item.
8. Notes/Footnotes - For some items, footnotes will be required under some conditions. Examples are: if weight and/or length measurements are missing; if a state and/or county code is missing; or if a species code is needed. In such cases the

interviewer should place an asterisk (*) by the item and provide a footnote explaining the situation near the bottom or in a margin of the Coding Form. The NMFS requires a note explaining the details of any disposition 7 fish (this code should not be used for giving away fish – we would like the ultimate use – food, bait, sale, etc.; typical other uses are mounting or feeding pets).

9. Maps - The NMFS will provide maps of the estuaries used for Question 11, area fished, indicating the boundaries of the named estuaries and the delineation between the estuary (inland) and state waters.

10. Terminate - If a respondent refuses or cannot answer a “key” question, the interviewer must thank the respondent pleasantly and say goodbye. The interview status code should be checked with the appropriate code.

12. Forms – Intercept forms are NEVER to be recopied, nor are data to be recorded on anything other than the proper form (such as a dry-erase board or separate sheet of paper). Recopying data is an inefficient use of the interviewers’ time and leads to the potential introduction of errors.

Item-by-item instructions for the angler intercept interview are provided in Appendix I. If the questionnaire is modified before the start of the survey period, a revised appendix with these instructions will be provided to the contractor along with the questionnaire. The Contractor is required to include the Appendix I in their Procedures Manual and reference it during each training session. Any proposed changes to this appendix, like the Procedures Manual, must be approved by the NMFS prior to distribution.

6.7 Incomplete Trip Interviewing – Beach/Bank Shore sites only

Anglers fishing along natural shorelines, or Beach or Bank type sites (Shore mode, BB sites), may be difficult to intercept at a single point of egress upon completing fishing for the day. Typically, Beach sites have several points of entry or exit particularly if there is not a single parking area for visitors to use as an access point for the stretch of beach. For this reason, intercept interviews of shore anglers can be particularly difficult to obtain, and these sites are not typically high-pressure sites either. To allow for improved opportunities to obtain angler interviews from these sites the incomplete-trip interview is allowed at BB sites with these restrictions. When a site within the cluster is visited, the interviewer should note the active anglers onsite and take a position to maximize the likelihood of intercepting any anglers departing. Angler exit counts and intercept interviews should be conducted following standard procedures for any other mode or site for the first half of the scheduled time at the site (not the total sample period of 6 hours), e.g. if a two site cluster requires visiting the first BB site for 3 hours, then the standard count and complete-trip interview protocols should be followed for the first 1.5 hours onsite. During the second half of the scheduled time at the site any BB

shore anglers can be interviewed using the incomplete-trip interview (additional hours expected to be fishing is asked; Q16), but the interviewer should not include those interviewed anglers in the exit counts; they are not missed, or completed trips. If there are relatively few anglers onsite during this time period, it is better to wait longer into the survey period before interviewing the angler to obtain an interview that encompasses the most time spent fishing before the interviewer is required to move to the next sample site in the cluster or complete his assignment at the end of the 6-hour period.

6.8 Identifying, Weighing and Measuring the Catch

Interviewers must strive to identify all fish (types 2, 3 and 9) to the lowest taxonomic level possible, preferably the species level. All type 3 and type 9 records must be identified to the species level, as discussed below. In the interest of professionalism, the interviewer should never ask the angler to identify his/her own available catch. For unavailable fish, including fish that are filleted (both representing Type 2 catch), the interviewer must ask the angler to identify his/her catch. Interviewers will be expected to use their local knowledge to assist the angler in identifying his/her catch. Interviewers should use *Peterson's Guide to Atlantic Coast Fishes* to assist the angler with this identification by asking about key characteristics cited in the Guide to differentiate among similar fishes. Other identification guides may be used but must first be approved by NMFS.

The Intercept Coding Manual contains a complete species list sorted alphabetically by common name. Accepted common names are not necessarily those used by local anglers, and interviewers should know how to translate local names to accepted common names. The Intercept Coding Manual also contains a list of local names and how they often translate into accepted common names. This can be a valuable tool in achieving correct identifications.

NOTE: The use of 6-digit Taxonomic Serial Numbers (TSN) began in 2006, in place of the 10-digit NODC codes previously used. (The species coding list may be found in the Coding Manual.)

If an interviewer cannot identify a Type 3 or Type 9 fish to the species level, he/she should make notations on the Intercept Questionnaire, including any distinguishing features about the fish. Then when the interviewing day is completed, or during breaks in the day when no one is available to interview, they should contact their field supervisor. They should explain to what level they were able to identify the fish and provide any distinguishing features. It may then be possible to identify the fish to the species level. If an interviewer is still unable to identify the fish, it must be coded as a Type 2 record.

If an interviewer cannot identify a fish to the species level, he/she should identify the fish as close to the species level as possible in the type 2 blocks. That is he/she should identify the fish to the genus level or, if not the genus level, the family level. For example, a fish known to be in the left-eye flounder family (*Bothidae*) that cannot be identified to the genus or species level should be coded "172714."

Peterson's *Field Guide to Atlantic Coast Fishes of North America* is the recommended field guide for use by interviewers in identifying fish. However, other local references and taxonomic keys which are approved by the NMFS and are available to interviewers and field supervisors can also be used. At no time should photos, guides, or graphic pictures of fishes be presented to anglers to assist them in identifying unavailable fish.

The species code lists in the Coding Manual are not exhaustive. Interviewers may occasionally identify a species that does not appear on the list, particularly species that occur primarily in freshwater. When this situation occurs, the interviewer should write out the scientific and accepted common name of the species and leave the coding boxes blank. The Integrated Taxonomic Information System (ITIS) coding system of taxonomic serial numbers (TSN) is now being used by the APAIS so the fish's accepted common name (English) and scientific name of the 'valid' record for the species can be determined using the query tools on the ITIS website: <http://www.itis.gov/>, and the Intercept Contractor is encouraged to consult this website resource as needed. However, the use of codes not included in this statement of work and its appendices requires NMFS approval so the Intercept Contractor should then contact NMFS for approval of the identification and use of any new code.

Each interviewer should be provided with two scales each: historically the Intercept Contractor has used a large scale (e.g., 12 kg) and a small scale (e.g., 2 kg). The scale capacity should be selected based on the average sizes and range of sizes of fish in a region. The larger scale shall be used only for fish weighing more than the weight capacity of the smaller scale. Fish weights are to be recorded to the nearest tenth (0.1) of a kilogram when the larger scale is used and to the nearest five hundredth (0.05) of a kilogram when the smaller scale is used. Five boxes are provided for the coding of weight: three to the left of the decimal, and two to the right of the decimal. For example, a fish weighing 2.4 kilograms on the larger scale should be coded as "002.40", and a fish weighing 0.15 kilograms on the smaller, more precise scale should be coded as "000.15".

All fish species in an angler's catch should be weighed unless refused by the angler. If the angler has caught more than fifteen fish of a particular species, then at least fifteen must be selected at random for weighing. Sub-sampling procedures are described later

in this section. Weight measurements should be given priority over length measurements when time is limited. If an interviewer encounters fish whose weight does not register at the finest increment of the available scales length measurements will be sufficient for these small fish.

Fish lengths must be taken using a measuring board (one meter long) and recorded to the nearest millimeter. Four coding boxes are provided for the length measurement so leading zeros must be inserted for fish measuring less than 1000 mm. For example, a fish that measures 231 millimeters should be coded as "0231." Interviewers must be careful not to introduce a digit bias into their measurements by rounding lengths to the nearest centimeter or half-centimeter.

All interviewers should also be issued a tape measure to be used in addition to the measuring board, but only for fish that are longer than the measuring board. Interviewers should never use only the tape measure to obtain the length of the fish encountered.

6.9 After the Assignment

After an assignment is completed, interviewers are responsible for:

- Completing the ASF;
- Cleaning and storing equipment for the next assignment;
- Calling in weekly tallies;
- Ensuring all forms are complete, accurate, and legible, and
- Submitting all completed forms as directed by the Intercept Contractor.

Editing the Forms

At the end of each assignment, interviewers are expected to review and edit all forms for completeness, legibility, and accuracy if they have not edited throughout the day. Editing may occur while on site waiting to interview eligible anglers or after the interviewer has returned to his/her office (or home). Interviewers should be encouraged to edit their forms for correctness while on-site (preferably between interviews), while the day's events are still fresh. Coding problems are most easily resolved at the field level, before much time has passed since data collection. These guidelines are meant to ensure that all items on the coding form are completed with valid entries and that the data are consistent and accurate.

A general guideline for editing is that all blocks on the front of the coding form should contain numbers except for item 17 (target species) which may be left blank.

This includes leading zeros and "8"s for not applicable questions. Refused items must be completely coded with "9"s and responses of "don't know" must be coded with "9"s with the last digit as "8."

Sample Tracking and Reporting

After the field assignments have been issued to interviewers, the Contractor's staff must monitor progress in completing those assignments. Reasons must be recorded and provided to NMFS for all cancelled assignments or those not completed for any reason. The Contractor must maintain a complete accounting of the fates of all assignments drawn for each wave. This information must be provided to NMFS as the Assignment Completion File according to the delivery schedule in Appendix H.

The Contractor shall require all interviewers to report the numbers of assignments completed, the angler counts per site for each completed assignment, and the numbers of interviews obtained on those assignments each week (Monday-Sunday). Weekly tallies of assignments completed, as well as weekly tallies of interviews obtained and angler counts taken in the target fishing mode must be delivered to the NMFS Contracting Officer's Technical Representative (COTR) by Tuesday of the following week to allow accurate tracking of progress in wave sampling schedules. NMFS will consider the posting of this information on a password protected website as acceptable, but information for all states must be available through a single query.

Calling in Weekly Sample Tallies

The Intercept Contractor should designate the contact point method such as email, telephone, web site, and schedule for interviewers to report the number of completed assignments, any canceled assignments, and the number of eligible (status=1 or 2) interviews obtained in a week (Monday through Sunday). These tallies must be reported to NMFS by Tuesday of the following week, and are important for monitoring progress in meeting sampling goals (assignments) and identifying any survey deficiencies (if assignments are canceled). The tally reports to the NMFS should include:

- Interviewer name and identification number;
- The assignment scheduled date, time, mode, and site cluster;
- The state where the assignment was completed;
- The control number (a number given to each assignment);
- All sites visited (cluster identified); and
- Total number of "good" interviews obtained by mode and by site

NMFS will provide a data processing program for providing a weekly summary of this information prior to contract start-up, if necessary. Electronic reporting of weekly tallies by interviewers will be considered by the NMFS.

Delivering Completed Assignment Packets

As specified by the contractor, interviewers should mail or deliver all forms from each week's assignments to the contractor's designated contact. A packet for each assignment should include:

- One ASF;
- Site update info – Contractor should propose field data collection method and periodicity for entry into NMFS Site Register web application.
- All completed Intercept Questionnaires, and
- All "bad", status 5, interviews.

If a weekly schedule of submission of completed work to the Contractor's central office is not sufficient or desirable, the Contractor should include in the proposal the schedule for data form submission and processing to ensure timely compilation and QC completion to fulfill the NMFS reporting and delivery schedule requirements.

7 HEAD BOAT SAMPLING (HB)

7.1 Head Boat at-Sea Trip Assignments

Angler intercepts in the Head Boat mode are conducted onboard the boats, during the fishing trip, including enumeration, identification, and measuring discarded (live or dead) fish, and are assigned by boat-day rather than site-day. The Head Boat sampling draw produces boat/day assignments rather than site/days. Assignments are drawn from the for-hire vessel directory which is maintained by the FHS contractor (the vessel directory produces the sampling frame of active, eligible boats). The sampling pool for each month and state consists of all possible (eligible) boat/day combinations, using a weighted systematic draw similar to the site-day process. The HB draw program excludes vessels with pressures of zero and vessels labeled as not cooperative to ride-along assignments. The number of boat-days to be drawn per wave is a required input, but shall not exceed 10% over the number of boat-trips specified by the NMFS in any given wave. There are no reserve HB assignments. If a boat cannot be sampled on the date assigned in the sample draw, then a new date for sampling that boat should be scheduled. The lowest control number has priority in scheduling when dates of assignments or rescheduling assignments result in more than one boat assignment on the same date but only one interviewer is available. The lowest control

number among the conflicting boat-dates would be scheduled, and the other controls (assignments) would be re-scheduled to a later date of the same day-type.

The Head Boat sample selection program (or HB draw program), the initial HB pressure file, and a sample directory file will be provided to the Intercept Contractor no later than 4 weeks prior to the start of Wave 2 Intercept sampling (March 1, 2014; there is no HB sampling in NC in wave 1). Examples of these files and program can be obtained upon request from the NMFS prior to contract award. The actual directory for use in the Wave 2 and subsequent waves will be provided by the FHS Contractor according to a mutually agreeable schedule between the NMFS, the FHS Contractor and the Intercept Contractor but no later than 2 weeks prior to the start of a wave.

7.2 At-sea Procedures

All HB assignments are conducted at sea. When arranging to ride a head boat, the interviewers should call the contact number for the assigned boat to reserve a spot for the date and type of trip specified. Intercept interviewers will be expected to ride the boats as paying passengers. Interviewers should inform the person taking the reservation about the survey, and should also probe for the number of reservations already made in order to maximize the probability the boat will make that trip, barring bad weather or other unforeseen circumstances. Under no circumstance should the presence of interviewers cause the vessel to exceed the Coast Guard capacity of the vessel. Two interviewers must be assigned to each HB at sea sampling assignment in order to maximize the amount of data collected (angler interviews and discarded fish information).

The interviewers should arrive at the vessel no later than ½ hour before the scheduled departure time. Prior to boarding the vessel, the interviewers should locate the captain and introduce themselves, and briefly explain the survey. Under no circumstance should the interviewers board the boat without the captain's permission to interview anglers onboard his/her boat on the fishing trip. The interviewers should also use this opportunity to solicit input from the captain on the best place to set up for measuring fish to be out of the way of anglers and deckhands. However, the captain should not influence which anglers are interviewed.

During the time it takes to reach the fishing grounds, the interviewers should begin to conduct partial interviews, i.e., the interviewers should work through the interview questions with the exception of time of interview, status of interview, hours fished and catch. The location fished (i.e., the question pertaining to distance from shore) can be obtained from the captain at the end of the trip. The interviewers should explain to the anglers that they will be measuring harvested catch as well as some of

the discarded catch. The interviewers will return to these anglers later, after they have finished fishing, to complete the interviews. Under no circumstances should the interviewers just approach the more friendly anglers, those anglers that appear to be the most experienced, or those with the most expensive fishing gear, etc. Also, the captain and deckhands should not be interviewed, regardless of whether or not they catch any fish during the trip. While the anglers are fishing, the interviewers will be responsible for identifying to species, measuring and getting accurate counts of the discarded catch. The priority for discarded catch is to identify and count discards, then as time allows, obtain measurements. For trips with few anglers and/or few fish, the interviewers may be able to accurately identify and count all discards for all anglers interviewed. If there are many anglers, many fish being caught and discarded, and/or if movement or visibility around the boat is impeded in any way, the interviewers will need to select a subset of interviewed anglers to observe.

Just as with harvested catch, fork length will be taken when measuring discards. Weights of live discards will not be collected due to the possibility of injuring the fish. The discard data form may be found in Appendix D.

It is imperative the interviewers not attempt to observe, count and measure discards for so many anglers that the quality of the data is compromised. The goal is to obtain complete data for several individual anglers rather than partial data for all of the anglers. Obtaining measurements of harvested catch takes precedence over measuring discarded catch. The time needed by the interviewers to measure the harvested catch is dependent upon the amount of time available between the last fishing stop and when the boat will reach the dock, the number of fish caught, the number of interviews being completed, weather, and how the anglers' fish are stored on the boat.

Each boat will generally have procedures in place for the storage of fish. The anglers may store their fish individually or as a group, in personal ice chests around the boat, or they may be stored using some sort of numbering system in a common ice box or fish hold. The interviewers should take this into consideration in deciding how and when to measure the harvested catch.

Ideally, the interviewers will be able to observe all discarded catch prior to measuring the harvested catch and finishing all the interviews. In order to maximize the probability of ensuring complete interviews are obtained, the interviewers should maintain regular communication with the boat captain regarding when the boat will be returning to the dock and the amount of time it will take to actually make the return trip. This information will assist the interviewers in determining when they should start measuring the harvested catch. There may be instances when the time needed to return to the dock is insufficient for the interviewers to measure the harvested catch and

complete the interviews already started. In these cases, the interviewers will need to begin measuring harvested catch while the anglers are still fishing.

At no time should an interviewer participate in fishing activity or assist anglers with their fishing, or catch and release of fishes. Although it may seem like the interviewer is assisting the boat's crew, that is the crew's job. It is the interviewer's job to observe and interview recreational anglers only. If observed assisting an angler, an interviewer's actions could be misinterpreted as fishing himself, or interfering with the tasks of the crew, both leading to misperceptions about the surveys.

7.3 Completing the Discard Form

The Discard form is used for recording lengths of discarded fish from a subset of anglers on head boat trips (see Appendix D). Items 2 through 8 contain identifying information about the assignment (assignment number; interviewer ID code; date of the assignment; state; county; site code (the site code for the access site where the Head boat is docked, available from Site Register), and vessel name ("header" information), and should match exactly with the other forms for the assignment. The remainder of the form contains space for recording species name, species code, length, disposition, interview number that corresponds with the particular angler interview, and whether or not the fish was directly observed by the interviewer. This last item is necessary to indicate any fish discarded by the angler while the interviewer is busy measuring other fish, either from the same angler or some other observed angler.

The form contains space to record up to 33 fish. If additional pages are necessary, the header information should be recorded on additional pages, with each page numbered (e.g. Page 1 of 3, Page 2 of 3, etc.) then stapled together.

ASSIGNMENT NUMBER – This entry will be a "1" unless an interviewer completes two assignments on the same day, which would be extremely rare. However, in that rare case "2" should be entered for the second assignment of the day.

INTERVIEWER ID – The interviewer enters their four-digit identification number.

YR/MO/DAY – The current year will be hard-coded on the form. The interviewer should enter a two-digit number for the month followed by a two-digit number for the day of the month when assignment began, i.e. the drawn or scheduled date of the assignment.

STATE CODE – Enter the two-digit state code for the state in which the assignment was completed.

COUNTY CODE – Enter the three-digit county code for the county in which the assignment was completed.

SITE CODE – Enter the four-digit site code for the Head Boat docking site.

SPECIES NAME – Enter the accepted common name of the species.

SPECIES CODE – Enter the six digit TSN of the species.

LENGTH – Four spaces have been provided. Length should be right-justified with leading zeroes. If a length was unable to be collected, four 9s would be recorded.

DISPOSITION – There are only two possible choices, disposition 1 (thrown back alive) or disposition 6 (thrown back dead). For any disposition 6 fish, the interviewer must record a note on the form to indicate why that disposition was used (e.g. the fish was gut-hooked or was left on deck of boat, etc.). Fish that are used for bait (disposition 4) should not be included on the discard form, but must be recorded in the Type 2 or Type 3 section of the interview form for that particular angler. If the fish was not identified to the species level it should be recorded in the Type 2 section; if it **was** identified to the species level it should be recorded in the Type 3 section, even if a length was not obtained. Fish that are recorded on the discard form should **NOT** also be recorded on the interview form.

INTERVIEW NUMBER – Record the corresponding interview number that this fish should be linked to. Fish records that can't be linked back to an interview cannot be used.

OBSERVED? YES or NO – The interviewer should put a checkmark in the appropriate box. Every effort should be made to observe every fish, but it is possible that some fish will be missed. This variable is meant to provide for those instances where the interviewer did not directly observe the discarded fish.

The information on the front of the form is then summarized on the back of the form. First, record the total number of fish for each disposition (1 or 6). Numbers here should match the numbers on the front of the form. Then summarize the total number of fish for each angler interviewed **and** observed for discards (e.g. interview #6: 17 fish).

8 DOCKSIDE VALIDATION OBSERVATIONS

8.1 FHS Dockside Validations

At the beginning of each wave if dockside validations are ordered by the NMFS contractor personnel should identify sampled vessels that operate out of access sites that have been assigned for intercept interviewing, or are on the travel route to or from intercept assignments. The intercept interviewers would then be assigned dockside validations to perform with specific assignments. If necessary, separate assignments (travel to sites solely for the purpose of validating FHS-selected for-hire boats) that specify dates, sites and vessels to be validated may be scheduled. Sites visited solely for the purpose of obtaining FHS validation data must not be included on the Intercept Survey Assignment Summary Form.

Annually, NMFS has allocated approximately 7,300 dockside validations of the charter and head boat fleet from Maine through Georgia. Appendix G includes Table 1, the number and dates of the FHS Survey weeks per wave for 2014-2015. The Waves 1-6, 2014 goals for charter boat validations are provided in Table 4 of Appendix G. Although these tables of goals by state are included in this appendix, the task may not be ordered in each wave and state.

The sample draws (list of vessels selected for weekly fishing effort survey reporting) for all weeks of a given two-month sampling wave supplied by the FHS Telephone Contractor serve as the frame for FHS dockside validations. If dockside validations are ordered by the NMFS the Intercept contractor should check the vessels in the weekly draws and use their port and site codes to schedule dockside validation visits by interviewers. If possible, these validation visits should be scheduled with routine intercept assignment schedules, and the vessel access site can be visited en route to or from an assigned site. If a vessel to be validated is located at a site to be sampled within the assigned cluster on a particular date of the FHS sample week, the validation activity could be conducted during the APAIS site visit if it does not interfere with the scheduled angler exit counts or interviewing activities. If necessary, separate assignments (travel to sites solely for the purpose of validating FHS-selected for-hire boats) that specify dates, sites and vessels to be validated may be scheduled. Sites visited solely for the purpose of obtaining FHS validation data must not be included on the Intercept Survey Assignment Summary Form.

8.2 FHS Dockside Validation Procedures

Dockside validation visits require specific information to be recorded during the field observations. Field observation codes should be used to indicate the vessel's presence or absence at its docking location, and the source of the recorded observation. At least one record for each selected vessel for each sample week must be entered into the delivered database. By default each vessel should be coded

Status=3 unless the vessel is observed (status codes: 1,2,4,5, or 6) or determined to be ineligible for the survey during the wave (status=8). Any vessel that cannot be validated for any reason should be retained as Status=3. Multiple records for multiple validation visits are accepted and encouraged.

Status codes:

- 1=Vessel in
- 2=Vessel Out - Charter fishing
- 3=Unable to Validate (e.g., trailered vessel, or otherwise can't locate after physically attempting)
- 4=Vessel Out - Non-charter / head boat activities
- 5=Vessel Out - Fishing Status Unknown
- 6=Vessel not in slip, not in water (dry dock)
- 8=Not applicable (When the vessel becomes ineligible during the wave)

Source Codes:

- 1=Direct Observation by Sampler
- 2=Secondary Information (marina operator, booking agent, etc.)

During site visits, the interviewer should check permanently assigned boat slips to see if the vessel is in or out. The visual check will also work with vessels that are assigned to a permanent location in a storage shed. The sampler next needs to determine if vessels not assigned a permanent boat slip or storage shed are utilizing a site on a regular basis (e.g. if a guide tends to use the same marina's ramp for launching his boat and meeting clients). This information can be used to update the directory and allow for indirect validation through queries with the marina's dockmaster (i.e. 'Has Capt. Q launched his boat today? Is he on a charter fishing trip?').

If the preliminary check determines that a vessel is out, the sampler must then try to determine what activity the vessel is engaged in, such as actively charter fishing, fishing for his/her own pleasure, checking out the engines, etc. In order to do this, the sampler may speak to a reliable source at the site such as a marina operator or booking agent. If the source wants to know why this information is needed, the interviewer should be courteous and explain that we are trying to locate and document areas with charter boat activity in order to improve our effort estimates. If a boat captain asks why the sampler is inquiring about fishing activities the sampler should explain that we are required to obtain data to help us determine if fishing activities are being under or over reported (both cases have been documented) during the weekly for-hire telephone survey. The sampler should also explain that he is also trying to update the site register in order to improve our dockside sampling efforts.

Vessels may also be validated during dockside intercept. However, if intercept interviews are obtained from a boat that is on the list of those selected for FHS sampling, then a dockside validation record should NOT be included for that date (i.e. do not interview anglers from and validate the same boat on the same day - if the captain/operator understands what a validation visit is and notices his anglers being interviewed then he is likely to be sure he reports that trip - this is a bias which may influence him to change his 'normal' reporting behavior). Validating boats at a CH assignment site is acceptable if anglers from the same boats are not intercepted (e.g. visit the site for dockside validation in mid-afternoon, then return later and interview anglers coming off non-selected for-hire boats at the completion of their trips).

8.3 Vessel Information for the FHS Directory

During conduct of the APAIS and the pre-validation of for-hire vessels the field staff may encounter vessels that are not on the sample frame of the FHS, or find key vessel information that is missing from the directory records which prevents the known for-hire vessel from being included in the sample frame and FHS survey. These key items are the county of business conduct of the boat (i.e., where the Charter or Head boat fishes from), the contact phone number for the vessel operator (captain, owner, booking office), and the official name (if Coast Guard documented, generally printed on stern of boat) or state registration number (generally two letters followed by 4-5 numerals, located on the upper bow side of hull) of the boat. The business county may not be the county where the boat is kept if it is trailered from an interior county, but should be the coastal county the boat most frequently fishes from or picks up clients. If a boat is docked at or frequently uses an access site included in the Site Register, that site number (county code and site code) should be provided in the information update. The site information will be useful for future pre-validation tasks by the Intercept Contractor.

The FHS contractor will provide a list of all boats in the directory but not on the sample frame each wave with vessel identification, as available, and flags indicating if the business county, phone contact, or vessel identifier is missing. This list should be used as a guide for the field staff. Other superfluous information about any for-hire boats (websites, email contact, activity status, size, capacity, etc) should not be collected by the Intercept Contractor field staff; it is the responsibility of the FHS Contractor to maintain the FHS directory. But, as a courtesy and to foster cooperation among contractors we request the Intercept Contractor assist in obtaining the key data elements from field observations, if possible. Separate field tasks or assignments should not be issued for this purpose; rather, this task could be done during Intercept survey assignments.

9 Personnel Requirements

9.1 Interviewers and Qualifications

The Contractor shall be solely responsible for locating, hiring, training and supervising persons to serve as interviewers for the intercept survey. Training, testing, and level of fish identification expertise proposed by a Contractor must meet or exceed NMFS specifications. Trained interviewers, supervised by the Contractor, shall conduct all interviews with the anglers.

The field interviewer must have very good personal communication skills and be comfortable approaching and initiating conversations with strangers. The interpersonal conduct of this position is the key to obtaining angler interviews and handling touchy situations with diplomacy to avoid actual conflicts. Additionally, the interviewer must be able to identify fish accurately at the species level, have good organizational skills, and be able to follow detailed and complex sampling protocols. It is important to ask the questions as they are written on the questionnaire to obtain the information the survey is designed to collect.

The specific tasks of a field interviewer are many. The interviewer will be expected to complete site assignments, to have all necessary equipment available and in proper working order (e.g., scales must be properly calibrated) while interviewing, to conduct interviews in an objective and professional manner, to complete all forms accurately and to submit all forms in a timely fashion. They are expected to attend at least two (but preferably all three) local wave meetings per year with their field supervisor and other local samplers. Interviewers shall wear appropriate attire and present themselves in a professional manner while in the field. Intercept interviewers must be able to answer basic questions about the survey they receive from the public, such as why the angler is being interviewed and what the data are used for, but questions requiring more detailed responses about survey methodology must be referred to the NMFS.

Conflict of interest issues may arise if an interviewer is also involved in the recreational fishery sector either as a paid participant (for-hire guide, captain, or crew) or as an activist or representative of an advocacy or rights group. To prevent any actual or perceived conflict of interest, any field interviewers who own a charter or head boat (for-hire) vessel, or work as captains or mates on for-hire vessels must not be issued any CH or HB assignments (including dockside validations). Interviewers who choose to attend public meetings where fisheries issues are discussed must do so only as a member of the public, and must never attempt to represent the survey. Questions about the survey should be directed to the NMFS Office of Science and Technology.

Bidders must include a description of their conflict of interest policies.

All field personnel are required to fully adhere to the requirements of NOAA Administrative Order (NAO) 216-100, Protection of Confidential Fisheries Statistics (Appendix F).

9.2 Interviewer Training

The Contractor shall be responsible for providing interviewer training for the intercept data collection. Training programs shall be designed to ensure quality and consistency of interviewing methods, questionnaire use, coding method, and quality checks of data. The level of training and content of the training programs must be approved by NMFS. NMFS will have at least two weeks to review and approve the training program prior to implementation.

Before a training session, all applicants shall be required to take a fish identification test which includes at least 20 of the most common marine fish species they are likely to encounter in the field. Testing could include using actual fish specimens or use of projections (digital or high resolution 35 millimeter slides), along with descriptions of more subtle taxonomic characteristics. An initial score of 70% shall be considered passing, and only those with passing grades shall be trained as interviewers. Any trainee who scores below 90% must re-take the fish identification test during their first QC visit and score above 90% before they can continue to receive assignments for work on the survey.

An extensive training session must be held for all personnel who will work on the survey data collection tasks in 2014. Personnel who have previously worked on the survey MUST attend the 2014. This requirement applies to any and all field staff provided by state sub-contractors for conduct of the APAIS by the state agency staff. This training must cover general intercept interviewing procedures as well as procedures specific to the 2014 survey. Training sessions must include a general overview of the background, purpose and design of the intercept survey, the general complementary effort surveys, and the FHS, and the uses of the data collected, as well as the importance of complete objectivity and adherence to protocols. The introduction shall be sufficient to allow interviewers to respond to general questions regarding the intercept survey. Questions and discussion should be encouraged to ensure that all interviewers understand the importance and overall purpose of the surveys as well as the importance of collecting impartial and accurate data. Interviewers should be briefed on the existence of other programs in various states and regions that monitor charter and head boats, such as the South Carolina mandatory logbook program. The overview must be followed by an item-by-item explanation of the data collection

instruments and a review of all materials used to conduct the interviews. The contractor is encouraged to include a field visit in the training session.

Subjects included in the Intercept Survey training sessions must include, but are not necessarily limited to:

- An introduction to the objectives, goals and operation of the intercept survey and the FHS field validation task.
- A review of survey definitions and scope of coverage.
- Procedures for visiting the assigned site cluster, each included site, and for updating the site register data, supplemented by a discussion of sources of local information on fishing activity to aid in the updating task.
- Proper procedures for screening for eligible anglers, conducting the interview and coding the data forms, including an item-by-item explanation of the data collection instruments and a review of all materials used to conduct the interview.
- Proper procedures for counting and coding exiting anglers, and when, how, and how many incomplete angler interviews to collect at beach/bank sites.
- Assuring confidentiality of responses, and the reason for call-backs to validate 10% of the interviews.
- Identification of the twenty most frequently caught species in the interviewer's geographic sampling area without the aid of reference materials. Identifications must be accurate at the species level. In areas with high species diversity, the Contractor should consider expanding the number of species required to be identified correctly.
- The effective use of taxonomic keys and other reference materials, including *Peterson's Field Guide of Atlantic Coast Fishes of North America*, to identify other less common fish species in the interviewer's sampling area.
- A review of local names for fishes, identification aids for local fish commonly misidentified, and the use of the specified finfish species list.
- Principles and techniques of random sampling, so that decisions on sub-sampling fish for measurement and sub-sampling anglers for intercept interviews at high use sites can be properly determined under a variety of field conditions.
- Correct techniques for length and weight measurements for different groups of fishes, including scale calibration.
- Proper procedures for completing all assignment tally and productivity reports.
- Appropriate methods for handling, deflecting, and reporting ALL hostility incidents to the Contractor's Operations or Program Manager. All such reports must be forwarded to the NMFS APAIS COTR within 3 working days of the actual incident, with specific details of date, time, location, and individuals involved (all names if possible).
- Data confidentiality.
- Appropriate attire and how to present themselves in a professional manner.

Interviewers will be provided with a copy of the intercept survey Procedures Manual, copies of the Privacy Act policy, the Uniform Resource Locator (URL) for the NMFS Program office web site, and all other necessary documents and forms.

Referral lists for additional information, including the Internet address and telephone numbers for local, State and Federal resource management agencies in each area, shall be provided to the Intercept Contractor and must be provided to all interviewers. These numbers should be available to the interviewers to provide to the public who need additional information about the program.

Interviewers must never subjectively interpret the methodology involved in the survey or the protocols, however minor the particular issue may seem. The training must stress the importance of adherence to these protocols. It is accepted that some of the protocols may not always seem efficient or effective in the field; if this occurs or the field staff have opinions on improvements the Contractor is encouraged to begin an open dialogue with the NMFS to investigate if and how to make field procedure changes. The field staff are NOT to implement any ad hoc or other changes to procedures prior to formal approval by the NMFS. The periodic wave meetings are an appropriate and encouraged venue for discussion among all field coordinators, project managers and sponsors to discuss ways to improve the field data collection protocols.

Proposals must include any and all proposed methodology that will ensure consistency between trainings, as well as methods used to monitor and enforce compliance with following proper protocols.

9.3 Interviewer Testing

At the end of the training session, all potential interviewers shall be tested on the following skills, including but not necessarily limited to:

- Accurate identification of common fish in the field and proper use of keys when unusual fish are encountered;
- Proper conduct of interviews;
- Effective handling of people and a range of problems encountered in the field;
- Basic knowledge about the survey;
- Proper coding of the interview and assignment summary forms;
- Proper procedures for randomly selecting anglers to interview;
- Proper procedures for conducting FHS dockside validations.

Testing could be accomplished by completing Coding Forms while following hypothetical video or audio taped interviews. Testing must also verify the interviewer's

aptitude for successfully interviewing people in the sub-region they will sample. Role playing would be a desirable method of determining this aptitude.

Field supervisors must conduct follow-up quality control (QC) testing of each interviewer after the initial training session. Such testing must be conducted by field visits while an interviewer is conducting intercepts. Items to be tested at this later date would include, but not necessarily be limited to: knowledge of the survey, species identification, proper coding of responses, and interviewing technique. The tests must be written tests; i.e., oral undocumented tests are not acceptable to the NMFS.

Additionally, each interviewer shall be administered a 'refresher' fish identification test at least twice annually, to ensure that they retain their knowledge of common local species of fish. These tests should be administered during local wave meetings utilizing slides, drawings, photographs, or live specimens; at the discretion of the Contractor and field supervisor. The tests must be written tests; i.e., oral undocumented tests are not acceptable to the NMFS.

For all tests, a passing score is designated as 90 percent accurate identification of at least 20 of the most common species in an interviewer's state, 90 percent correct coding of forms, and 90 percent correct answers on interview procedures for the base survey, and FHS dockside validation.

The Intercept Contractor must maintain a written record of the dates and scores for each QC test and fish identification test, by interviewer and state, including any follow-up testing. This written record must be delivered to the NMFS according to the delivery schedule in Appendix H. NMFS will provide the Intercept Contractor with an excel spreadsheet template to use in documenting QC efforts. Proposals should include any and all methodologies the contractor proposes to use to maximize standardization between the initial trainings and follow-up field trainings.

Following initial field training, all interviewers shall be observed in the field during quality control (QC) visits conducted by project management staff. These QC visits could be made by designated lead trainers, field supervisors or any approved project management staff of the Intercept Contractor. The specific procedures and staff responsible for this task shall be described in the proposal, including methods for evaluation (tests, observations, etc.) and topics to be evaluated. Written summaries to be submitted to the NMFS are required in some form (electronic files are acceptable).

9.4 Field Supervisors

Traditionally, the Intercept Contractor has provided a single field supervisor or coordinator for each state in which they conduct the APAIS. In those states with sub-contracted field data collections done by the state agency, a State supervisor or project manager shall be designated by the state agency as a primary contact for both the Intercept Contractor and the NMFS. The Intercept Contractor shall designate a field data collections coordinator or supervisor for each state in which they conduct the APAIS and should provide in their proposal for this work all responsibilities they will assign to those positions, including any periodic reviews or evaluations they will do to assure that the performance of the individuals in those positions is professional, competent, and meeting or exceeding expectations and is a benefit to the survey.

Field supervisors shall be regularly kept informed by the NMFS and Contractor of issues (e.g. regulation changes and proposed management changes) in the recreational fishery in their interviewing area using appropriate communications (e.g. newsletters, phone calls, web notices, etc.). Field supervisors are expected to communicate frequently with interviewers in their area. Questions from interviewers on site assignments, sampling protocol, and coding forms should be encouraged.

10 Quality Control

10.1 Telephone Verification of Intercept Survey Interviews

Activities specific to proper conduct of verification for the Intercept Survey include:

1. Generation of a large enough sample of intercept survey respondents to be called and interviewed for the purpose of verifying at least 10 percent of each interviewer's intercept interviews;
2. Tracking and reporting of progress in completing follow-up telephone verification of intercept interviews.

Verification Sampling Method

Interviewers must collect names and telephone numbers of anglers for the purpose of telephone verification (Q24 on the Interview Questionnaire). The purpose of the telephone verification is to independently verify that the interviewer was at work where and when he/she was supposed to be and to provide project managers with feedback on interviewer conduct in the field.

Respondents shall be contacted by phone by designated staff of the Intercept Contractor. The contractor shall use non-field-staff to reduce any possible bias in conducting the verification calls. Field supervisors must not conduct verifications without prior approval by the NMFS.

The Intercept Contractor must verify the following items from the original angler interview, and shall provide a questionnaire (to be approved by NMFS prior to implementation) to collect this information in the proposal for this work. The Contractor is encouraged to use a CATI system to conduct these calls and record the responses.

- 1) Date, Site, Time (approximate, 3-hour window OK), and Mode (SH, CH, PR, HB) of angler intercept interview
- 2) Any available fish caught (=landed, whole fish)?
- 3) Did the interviewer examine, count, measure, and weigh all available fish? 15 of each species of available fish? Why not, if no to any of these items.
- 4) Was the interviewer courteous? Introduce him/herself? Answer any questions about the survey? Volunteer to find answer or forward the questions to NMFS?

If interviewer problems are suspected, the verification rate should be increased to investigate the problem. The contractor must notify NMFS when any interviewer is being investigated. Open-ended conversations with respondents should be employed when problems are suspected. While names and telephone numbers will not be volunteered by all anglers, experience shows that approximately 70 percent of anglers are willing to provide this information. Interviewers with significantly lower response rates to this question or with a high occurrence of bad telephone names and numbers (non-contacts; repeated phone numbers) must be closely supervised and reported to the NMFS.

The Contractor is required to conduct telephone interviews to verify at least 10% of each interviewer's intercept interviews obtained. The sample sizes for the follow-up verification survey should be determined separately for each state/wave stratum. The total verification sample for each stratum should be calculated as 10% of the total intercept interviews conducted by each interviewer, regardless of whether or not a valid telephone number was obtained. 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% verification goal.

To distribute the verification sample for each wave in a representative manner across interviewing assignments, the Contractor should sort interviews by date, interviewer, assignment number, and interview number and then take a systematic sample from the list.

10.2 Wave Review Meetings

Wave Review Meetings are held every 4 months to review summary tables of intercept survey performance, summarized catch records, and preliminary catch and effort estimates, and to discuss survey protocols, problems and upcoming projects or modifications. These meetings are hosted by NMFS staff but must be attended by the Project Manager for the Intercept Contractor and one representative from each state (including sub-contractor state agency staff) where field sampling was conducted during the waves to be reviewed. Additional Contractor team management staff may attend, but it would not be appropriate to bring additional field samplers without the prior approval of NMFS. Additional attendees will include staff from the NMFS Survey Team (typically 2-5 staff depending on travel requirements), the state project managers (4), and program managers (2 or 3) from the Gulf States Marine Fisheries Commission (inclusion of the Gulf of Mexico APAIS), and may also include additional state agency staff from non-contracting states (e.g., DE, RI, NY, MD, SC), Fishery Management Council staff, ACCSP staff, or ASMFC staff. Meeting attendance varies between 30-50 people.

In general, wave review meetings will be held as follows (dates are planned by mutual agreement between NMFS, the Intercept Contractor, and the GSMFC):

- Waves 1-2: late June,
- Waves 3-4: late October,
- Waves 5-6: late February

The schedule for 2012 was Feb. 29-Mar. 1; June 26; Oct. 24-25. The schedule for 2013 was Mar 12-13; and tentatively Oct 1-2. The locations are varied, with an attempt to meet once in the southeast region, once in the mid-Atlantic or northeast region, and the October meeting is typically held in the Silver Spring, MD area (Baltimore, Silver Spring, Washington, DC) as an annual meeting with all survey participants attending. The other two meetings may not be attended by the Gulf States' participants (separate meetings).

The Intercept Contractor shall include the costs for administrative planning and conduct of two of these three meetings in the proposal (all meeting space arrangements including a central meeting room for all attendees, a second 'break-out' room to accommodate up to 15 people, reservations for a guest-room block for an estimated number of traveler attendees at federal per diem rates or lower, and provide the necessary audio-visual equipment or service for screen projection from laptop PCs). Food service (drinks, snacks, breakfast) can be provided but is not required. Food service cannot be provided to federal employees. The Intercept Contractor is expected

to pay for travel for their staff, including field supervisors, although arrangements for state sub-contracting field supervisors are between the contractor and those states. NMFS is responsible for travel by NMFS program office staff. The NMFS can provide cost estimates for the meeting arrangements to bidders upon request.

At least three local wave meetings within each state are required per year. These should be attended by the state coordinator and the field staff. The Intercept Contractor should include the responsibility for conduct of these meetings in the personnel section of the proposal. These meetings are generally held shortly after the main wave meetings in order to review any potential issues that may have been discussed. All interviewers are required to attend at least two of these meetings, although they should be encouraged to attend all three. Proposals must include any and all methodologies that may be used in monitoring adherence to these requirements, ensuring standardized format and content, and the general topics to be included (e.g., refresher training, routine testing, discussion of goals and interview conduct, upcoming changes, etc.) in these local wave meetings.

11 Databases and Data Delivery

Data are to be uploaded to our secure NOAA/NMFS/ST web server, which uses HTTPS and SSL encryption for data transfer, according to the delivery schedule in Appendix H. Users must log in to the website using an individual password protected account. All data files must be encrypted with a FIPS 140-2-approved algorithm such as PGP or SecureZIP prior to upload. Vendor and NOAA Point of Contact will mutually agree on a key (password) exchange process.

11.1 Data Entry

Intercept Data Entry

The Contractor shall use a data entry program provided or approved by the NMFS, or a comparable substitute approved by the NMFS (e.g., scanning forms and character recognition software, electronic data capture in the field). The data capture and data entry vehicles must be approved by the NMFS if the Contractor chooses not to use a NMFS-supplied data entry program to complement paper forms for data recording in the field.

A data entry program must employ logical checks to prevent incorrect coding entries and to flag illogical entries. All checks contained in the intercept checking program (a NMFS tool to be provided upon request to bidders) must be incorporated into the data entry application. Every data element must be checked for data entry

errors, reasonableness in falling within an acceptable range, and logic in relation to other data elements. Duplicate identification numbers (unique identifier for each angler interview) must also be identified and corrected.

If a feasible electronic data capture technology is determined to be efficient and economical for on-site intercept 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.

FHS Dockside Validation Data Entry

Offerors should propose what method they would use to handle data entry for the dockside validation data. The current Intercept Contractor and the GSMFC code the information in either Excel spreadsheets or MS-Access files which are then compiled into the SAS data files for delivery to the NMFS.

FHS Directory Updates Data Entry

Offerors should propose what method they will use to track and deliver updates to the FHS directory.

11.2 Record Formats

The data formats, units of measure, and coding used for the intercept survey and FHS databases shall be provided by NMFS and shall be the same for all Regions.

Intercept Interview Databases

The intercept interview database contains data collected from completed interviews (status 1 and 2). There are seven record types in the creel intercept interview databases. For every interview, there is a unique ID_CODE coded on all records associated with that interview. The ID_CODE is used to link all records of an interview.

The ID_CODE is 16 digits long and it consists of assignment number (hard-coded on the forms), interviewer number (4 digit), date of the survey (8 digit [year, month, day]), and interview number (3 digit). Interview numbers begin with one and are assigned consecutively to interviews within an assignment. For example ID_CODE 1232220040914018 would refer to the eighteenth interview collected by interviewer 2322 in his first assignment on September 14, 2004.

The seven record types in the intercept interview databases are:

1. Angler/Trip Data – one I1 record per interview. I1 records contain angler and trip information including ID_CODE, location of the interview, fishing area and mode, trip and fishing hours, gear used, geographic residence and avidity of the angler, where they receive mail and type of housing, species targeted, presence/absence of catch, number of contributors to the catch, and total numbers of I2-I9 records associated with the interview. Special questions such as artificial reef fishing, sea turtle sightings, tournament fishing, etc. vary by year and area, and are usually recorded on the I1 records.
2. Unavailable Catch (Catch Type B1 and B2) – multiple I2 records for each interview, one record for each species code/disposition combination. More than one disposition code can be used for a particular species code. I2 records contain the ID_CODE, and the number and disposition of unavailable catch by species. Disposition codes categorize catch as released alive (catch type B2), and used for bait, filleted, or other consumptive use (catch type B1, dead). The variable containing the numbers of fish caught (NUM_FISH) is additive across all records.
3. Available Catch (Catch Type A) – multiple I3 records for an interview, one record for each individually weighed/measured fish. If no fish were weighed or measured, there will be one record for a species. I3 records contain the ID_CODE, species code, numbers of fish, disposition of the catch, and length and weight measurements for fish brought to land and identified to species by the interviewer (catch type A). Only one disposition code can be used for each species. The variable containing the number of fish caught (FISHINSP) is not additive across records. This number is the total number of that species caught and is carried across all records for that species with individual length/weight measurements.
4. Group Catches - only one I4 record per interview and this occurs only when A-type catches cannot be separated for individual anglers. If catches can be separated, no I4 record exists. I4 records contain the ID_CODE of the interviewed angler, as well as the ID_CODE of the angler whose records contain combined type A catches. There should not be any grouped catches reported for SHORE mode anglers. Shore anglers must separate the catch into individual anglers. If the anglers refuse or insist they cannot separate grouped catch (such as pooled in a cooler or bucket) then the interviewer should just evenly divide them among contributors and randomly pick the individual fish for individual angler length and weight records.

6. First Interview of Fishing Party - only one I6 record per interview. I6 records contain the ID_CODE of the interviewed angler, and the ID_CODE of the first individual interviewed within a fishing party. This record was begun in 1991 in order to link all interviews within a party together.

8. Socio-Economic Data – I8 records contain the ID_CODE and socio-economic data collected. There is no planned socio-econ data in 2014 (no additional questions).

9. At-Sea Discard Data – multiple I9 records per interview, one record for each discarded fish from At-Sea Headboat interviews.

The intercept SAS file naming conventions are standard across years and regions. Naming conventions are:

Record Type	File Name
1	I1_YYYYW.sas7bdat
2	I2_YYYYW.sas7bdat
3	I3_YYYYW.sas7bdat
4	I4_YYYYW.sas7bdat
6	I6_YYYYW.sas7bdat
8	I8_YYYYW.sas7bdat
9	I9_YYYYW.sas7bdat

where I=intercept, YYYY = year, W = wave, and .sas7bdat is the SAS data set extension. The dataset extension may vary according to the version of SAS. Appendix C lists the variable names, formats, and codes for each record type.

Assignment Summary Files

The assignment summary files contain the information provided on the ASF. There is one record per assignment. Appendix C lists the variable names, formats, and codes.

Assignment summary data shall be maintained in SAS format and integrated with the identification code from the intercept form. The naming conventions are standard across years and waves. Naming conventions are: AS_<YYYY><W>, YYYYW similar to intercept data above.

Assignment Completion Files

The assignment completion files contain information on the outcome of all angler intercept assignments. There is one record per assignment identifying the year, wave, state, control number, assignment mode, site cluster and included sites, order of site visits, date and time period of assignment and the outcome of each assignment. Appendix C lists the variable names, formats, and codes. The naming conventions are standard across years and waves. Naming conventions are: asgnw<W><YY>.

Head Boat Pressure File

The Head Boat Pressure file contains the current list of head boats active in each wave and the month/day-type pressure values for each month of the wave, which is an estimate of the average number of boat trips per week taken for for-hire recreational fishing. A master file with each month/day-type pressure variable (e.g. Janwe, Janwd, ... Decwe, Decwd) for each state/vessel may be maintained by the contractor and updated for each wave, but the deliverable file to the NMFS should only contain the current wave's 4 required pressure variables. Appendix C contains variable names, formats, and codes for the Head Boat Pressure file.

The naming conventions are standard across years and regions. Naming conventions are: File Name: wv<wave><yy>hb_pressure (e.g. wv209_hb_pressure.sas7bdat for wave 2, 2009, all Atlantic states).

Head Boat Draw File (sample selection output) and Maine's Charter Boat Draw File

The Head Boat Draw file should contain the output from the Head Boat at-sea Intercept sample-selection program, including the relevant boat/date selection information sufficient to identify the boat drawn, the date drawn, the location of the boat (state, county, site codes) and the contact information from the vessel directory. The same or similar program is used for Maine's Charter Boats to draw boat-selected Charter mode intercept assignments. The Charter Boat sample selection program should produce similar output to the Head Boat Draw program, with the exception of location. For the Maine Charter boats a site may be available indicating likely location to intercept the boat, not an actual docking location. Appendix C contains variable names, formats, and codes for both the Head Boat Draw (all states) and the Maine Charter Boat Draw file.

The naming conventions are standard across years and regions. Naming conventions are: File Name: wv<wave><yy>_hb (e.g. wv209_hb.sas7bdat for wave 2, 2009, all Atlantic state Head Boat draws; wv<wave><yy>_ch (e.g. wv312_ch.sas7bdat for wave 3, 2012, Maine Charter Boat draws).

Master Site Register

The Site Register is hosted online by the NMFS and is not a deliverable file. It must be maintained via periodic updates to the records. These can be continuous (login, update record as new information becomes available) or they can be 'batched' for update entry just prior to the sample selection draws for the upcoming wave. The intent is to have the best available information about the sites and activities by mode available for each wave's sample selection.

FHS Dockside Validation Results

Dockside validation data are to be stored in a specified format such that multiple records for each vessel can be linked by unique survey-specific identifiers. The vessel identifier is specific to each boat and listed in the FHS sample draw for each state. Information to be recorded for each dockside validation are vessel identifier, date and time of validation (if site actually visited), state, county and site codes of location where boat was validated, presence of boat, activity of boat, source of information. A single file for each FHS survey week is to be delivered in a SAS datafile. The table of FHS sample weeks are provided in Appendix G, Table 1. Variable descriptions and formats are provided in Appendix C.

The naming convention for the SAS data files are standard across years for the Atlantic: <coast code><yy>v<week>.<sas-tag> (e.g. at27v11.sas7bdat for Atlantic (gs=Gulf coast), sample week=27, year=2011).

FHS Vessel Directory Updates

NMFS will provide the contractor with the file structures to record, compile and deliver the updated information about for-hire boats to the FHS Contractor, via the NMFS FHS Contract representative.

11.3 Data Edits

The Intercept Survey Contractor shall be responsible for data editing and delivering error-free data on the initial delivery date. The NMFS intercept data quality control programs will be provided to the contractor. The main error-checking program is comprised of a main program, called macro routines, and referenced data tables. It is periodically updated by the NMFS as the survey or quality control checks are modified, and the updated version or modifications are provided to the contractor. Any modifications or improvements to this program made by the contractor need the

approval of the NMFS before implementation. Output from the error-check program (current version is intchk_2012.sas) shall be delivered by the contractor to the NMFS program office according to the delivery schedule in Appendix H.

Quality control processes for ensuring accurate data entry and editing must be approved by NMFS prior to their implementation. Copies of the error-checking programs used in the most recent survey year will be provided to the successful data collection Contractor. These programs and reference files will be made available to any bidders upon request, but shall not be assumed to be complete or accurate for purposes of this solicitation. New error checks continue to be developed by NMFS and suggestions from the Contractor are encouraged.

One current method of data quality control and editing involves the generation of a list of all fish records collected in the intercept creel survey, broken down by state and record type (2, 3, or 9). This list, referred to as a "fishdump" must be generated each month by the Contractor for distribution to field supervisors, state representatives, and the NMFS after data entry and compilation, but prior to the delivery of error-free SAS datafiles to the NMFS. The fishdump is used as a tool for checking and editing raw fish records in the data before delivery, so this listing is not expected to be error-free. The NMFS staff review should be considered one of several (other reviewers should include the state project coordinator, and at least one central office staff). The format for distribution must be electronic data file (via email attachment or a website). The following data elements are the minimum that must be included: species code; common name; disposition; number of fish; mode of fishing; area fished; gear used; county and site of intercept; and the unique intercept identifier components (the assignment number; interviewer identification code, month, day, and intercept number for that assignment). NMFS will provide a sample fishdump to the contractor by request.

The Contractor shall allow reasonable time between distribution of the fishdump and data delivery for respondents to review the records, make comments, and for the Contractor to follow up on the comments and make corrective edits as deemed necessary. NMFS requires five business days to review the fishdump. In addition, all comments made by the NMFS in response to the fishdump must be addressed in a spreadsheet that identifies the record questioned and how the question was resolved. This documentation must be delivered electronically at the time of data delivery.

Questionable records identified by the error-checking program must be examined by the Contractor. Initial check should confirm correct reading and entry of the written response coded on the interview form. A call-back to the interviewer should follow form checking in as timely a manner as possible to aid in any possible individual incident recall. Any notes on the forms should be discussed for possible relevance to

determination of corrections to erroneous coded responses. Possible errors may also be found during the wave review meetings and those data must be examined by the Contractor.

Those records questioned, and corrected or verified, should be reported to NMFS on spreadsheets listing the key information to identify the record (state, wave, assignment number, interviewer id, month, day, intercept number) and the value questioned, the resolved or corrected value, and the reason for the correction or why no correction was deemed necessary. If outlier analysis is used to question the recorded responses, the outlier (limit) values should be included on the spreadsheet. Any such use of outlier analysis must be approved by the NMFS prior to use in editing data. If errors are found after the wave meetings error checking process, the Contractor shall be responsible for correcting the data within one month of the notification of the error.

11.4 Data Delivery

All APAIS databases shall be maintained as electronic datasets. These data shall be delivered to NMFS via secure, approved data transmittal routes (currently secure website uploading) following the delivery schedule in Appendix H. All electronic computer files shall be fully documented in the wave reports when changes are made. The final annual reports will contain all versions of the documentation.

Documentation shall include, but not necessarily be limited to the following:

- Characteristics of the files (e.g., description of file content including project name, year and wave of data; record formatting characteristics, including variable name and description, length and alpha-numeric designation; number of records in each file;
- A description of file content including the project name; year and wave of data; date generated; person to be contacted; and other pertinent descriptive information; and
- Logs of edits/changes to the databases.

Intercept survey data to be provided include, but are not necessarily limited to the following:

- Intercept data shall be provided to NMFS in electronic files (SAS data formats) after all data have been thoroughly edited and cleaned as prescribed in this SOW, including the angler-interview data and the Assignment Summary Form data.
- Electronic files of finfish catch data including fish species, numbers, weights, and lengths (fish dumps) in an acceptable format (see details above);

- Output from the error-checking program with annotations as to the resolution of questionable data, delivered to NMFS in a MS Word file;
- Separate documentation file (as an excel spreadsheet) addressing other fishdump records (e.g., species ID, counts, etc) not addressed in the annotated error-checking output;
- Electronic file(s) containing the assignment completion data, including the outcome for all assignments drawn for a wave, and
- Electronic file(s) containing all dockside validation results by state, site, date and vessel.
- Electronic file containing any recommended FHS directory updates for each wave;

12 Survey Reporting Requirements

The Intercept Contractor shall prepare and submit wave and annual reports of survey activities and results. These reports are to be provided to NMFS on a bimonthly and annual basis as required in Appendix H. Timely submission of these performance data is necessary to maintain data collection quality through the review of survey performance metrics and summarized data in tabular format.

Any computer software developed under this contract (website applications, data entry applications, data processing programs) shall be delivered to the government at the end of the final contract period. This includes electronic source code for web pages as well as any database programming that provides data over the web. These deliverables will be due at the same time as the annual report for the final year of the contract.

Supporting Data Collection and Processing Documents

The following are required to be delivered to the NMFS as indicated in order to facilitate communication and documentation of survey and data quality control progress.

1. Weekly tallies of goal monitoring,
2. Monthly fishdumps,
3. Monthly spreadsheets describing resolution of any questions or comments made by the NMFS and other reviewers to fishdump records,
4. For each wave, annotated output from Intchk programs that were run on wave data (programs provided by the NMFS). The output should address all 'checks' and 'errors' indicated in the databases.

12.1 Wave Reports

One report is required for each wave that summarizes interviewing results and key data for the Intercept survey and FHS pre-validation results. One bound hard copy of each wave report is required. In addition to the hard copy, an electronic file(s) of the wave reports will also be delivered to NMFS as a PDF file as one document (i.e., not separated into chapters or sections). Ideally the electronic and hard copy will be delivered to NMFS at the same time, however, the hard copy is due no later than 3 business days after the due date.

Intercept Wave Report Data

The intercept wave report tables shall include, but not necessarily be limited to the following:

A summary narrative containing:

- Management activities,
- Results of supervisory field visits;
- State sub-contracting activity;
- Discussion of any field sampling or sampling productivity issues;
- Discussion of number and reasons for any uncompleted assignments; and
- If needed, recommendations and proposals for change based on intercept survey results, including plans to increase sampling efficiency, minimize variance, enhance participation and cooperation of respondents and/or coastal states, or increase the visibility and usefulness of the APAIS to the public.

Tables containing:

- Number of assignments allocated by NMFS, additional assignments allocated by a state and/or ACCSP, assignments completed, allocation shortfalls, and effort information by fishing mode (previously these tabulated goals and products by interview, but in 2014 the sampling unit is the site/day assignment). A separate table must be produced for HB mode to account for trip assignments;
- Numbers and percents of interviews not completed due to initial refusal, language barrier, and key item refusal, separated by subregion, state, and mode; table must also include total number of successful interviews completed by subregion, state, and mode;
- Numbers and percents of interviews completed by area of fishing (state waters, EEZ, inland) sorted by subregion, state and collapsed mode (SH, PR, CH, HB)

- Numbers and percents of interviews by location of residence (in-state coastal, in-state non-coastal, out-of-state) sorted by subregion, state and collapsed mode (SH, PR, CH, HB);
- Summary of confirmed and unconfirmed verification interviews (number of confirmed interviews, # of unconfirmed interviews, total intercepts obtained, and the percent of interviews that were verified) sorted by subregion, state, and interviewer number;
- Species reported by subregion and state, with numbers of records with each species by catch type (A, B1 and B2), total number of fish counted by catch type (A, B1 and B2), numbers of fish weighed and measured, average weight, and minimum and maximum lengths measured, sorted by total numbers of fish counted;
- Summary of discarded catch from at-sea headboat sampling, including the subregion, state, species, number of discarded fish observed, number of discarded fish not observed, number of fish measured (length), average length, minimum length, and maximum length, sorted by subregion, state, species (common name with code).

FHS Dockside Validation Wave Report Tables

The wave report tables for the FHS dockside validation visits should be included with the intercept Survey wave reports and should summarize the following survey results by subregion, state and wave:

- The number of vessels drawn by the FHS (total number selected to pre-validate), the number of vessels that were validated (status 1, 2, 4, 6, and 7), and the average number of dockside validation visits per vessel by sub-region, state and sampling week;
- The distribution of dockside validation visits by time of day, state and wave. Any time interval summaries of validation observations obtained should be sufficient to illustrate diurnal trends in successful observations, e.g. 2-hr time periods, or hourly periods if sufficient number of observations to spot hourly trends. Samples of recent wave reports are available from the NMFS upon request.

12.2 Annual Report and Other Deliverables

An annual report is required for each year of the contract that provides an overview of the data collection procedures and results for the intercept, economic surveys (if applicable), and any flexible questions (if applicable). Two volumes must be provided, one containing a summary of procedures, and one containing a summary of the data. One bound (or notebook) hard copy of each volume is required. In addition to the hard copy, an electronic file(s) of the annual report will also be delivered to NMFS as a MS Word file. The annual report shall include but not necessarily be limited to the following:

- Yearly summary of the tables provided in the wave reports;
- Description of data collection procedures and results, including description of any changes throughout the sampling year;
- Description of the coding and editing procedures;
- Description of other quality control measures and procedures, including but not limited to the date and score of each QC visit for each interviewer number; fish test score results for each interviewer number; regional wave meeting agendas, summaries and attendance lists;

Other required deliverables:

- Electronic working copies of all data editing and quality control programs, and sample draw programs,
- Hard copies and electronic files of all manuals, forms, and training presentations used in each year of the survey, including all revisions documented with the date(s) of use,

- Any other specially-designed software developed for tracking of assignments, goal monitoring, etc; however, if widely available commercial software is used, only examples of that use would be required. For example, if resolution of possible errors is done on a commercial spreadsheet there is no need to provide those spreadsheets, only examples.

All deliverables are the property of the government and may be passed on to other contractors during future procurement actions.

12.3 Intercept Form Retention

The Contractor shall maintain the set of original completed intercept forms, economic add-on forms, site description forms, and assignment summary forms for each contract year. After completion of a sample year, the full set of completed intercept forms, economic add-on forms, site description forms, assignment summary forms, discard forms, and dockside validation forms shall be delivered to a NMFS contractor, currently in Gaithersburg MD, in mutually agreeable quantities, for archival scanning.