## SUPPORTING STATEMENT Shipboard Observation Form for Floating Marine Debris OMB CONTROL NO. 0648-0644

## B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

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

This data collection form is used on a completely voluntary basis. There is no requirement to complete it and there will be no respondent selection methods. Respondents will likely be individual recreational sailors, including sailors participating in the TransPacific Yacht and Pacific Cup races that take place every other year. Additionally, though less common, would be participation by members of non-government organizations (NGOs) that are frequently on the ocean. It is estimated that 20 data sheets will be distributed each year with a response rate of approximately 25% (5 responses).

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

Data collection forms will be distributed each year to recreation sailors during the TransPacific Yacht Race and Pacific Cup Race (each takes place every other year with one race going on each year). Additionally, forms will be made available to other recreational sailors as well as NGOs that frequently sail our oceans. Distribution will be done through the NOAA Marine Debris Program at outreach events, presentations, and other outreach opportunities as well as through a project Web site. These opportunities typically occur two to three times per year.

While estimated number of respondents (i.e., sample size) will be only 5 each year, and there is no way to claim the representativeness of the data, this amount of data is still valuable. Any information helps us understand better the quantities, types, and location of marine debris at sea.

This data collection form requires no training and is self-explanatory. The level of accuracy will depend upon the respondent. A fairly high, though standardized (due to untrained respondents), error will be common and assumed among submitted data sheets. Though that particular error is unknown, it is expected to remain constant throughout this project, thus allowing analysis of trends over years. Data and information gathered, regardless of error, is also highly valuable as this information helps us understand better the quantities, types, and location of marine debris at sea, and in the case of potential disaster-related debris, helps us prepare for debris deposition on coastlines. All completed and submitted data sheets will be included in results analysis.

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

Pre-notification and communications through partners and available channels to reach respondent groups (e.g., recreational sailors) will be used. Additionally, a good working relationship exists with several yacht clubs as well as organizers of the Pacific Cup race. The data collection sheet was developed with the input and feedback of recreational sailors and thus questions are simple and brief and the data collection sheet is completable within the limitations of respondents. Results will posted on a Web site for respondents to view. Based on these factors, as well as the assumption that most boaters would have a stakeholder interest in mapping of marine debris, a response rate of 25% is expected. The response rate is reduced from 2015 levels based on decreasing interest in Japan tsunami debris, although marine debris at-sea continues to be of concern to NOAA and mariners.

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

The data collection sheet has been successfully tested and used by TransPac and Vic-Maui Yacht Racers.

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

Development of data collection methods and sheet:

- Charles Moore, Algalita Marine Research Foundation, 562-900-7958
- Jim Foley, Center for Microbial Oceanography: Research and Education, 808-356-7424
- David Hyrenbach, PhD, Hawai'i Pacific University, 808-228-4464
- Nikolai Maximenko, PhD, International Pacific Research Center, School of Ocean and Earth Science and Technology, University of Hawai'i at Mānoa, 808-956-2584
- Kyle Koyanagi, NOAA Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division, 808-927-9273

## Collection of data:

James Callahan, recreational sailor, 808-222-8876

## Analysis of data:

- Sarah Opfer, ERT / NOAA Marine Debris Program, 419-779-5337
- Sherry Lippiatt, IMSG / NOAA Marine Debris Program, 510-410-2602.