

## **NASBLA Engineering, Reporting & Analysis Committee (ERAC) FY 2013**

### **NASBLA's Mission:**

To strengthen the ability of the state and territorial boating authorities to reduce death, injury, and property damage associated with recreational boating and ensure a safe, secure, and enjoyable boating environment.

### **ERAC's Charter:**

In support of NASBLA's mission and service to state and territorial boating authorities, ERAC is charged with identifying, evaluating, and analyzing data and information that can shed light on factors associated with recreational boating accidents, inform the development of boating safety policies and practices, and ultimately measure their effectiveness. To ensure that the results of boating accident research and analyses are valid and reliable, ERAC is directed to actively seek ways to advance the quality, relevance, accuracy, consistency, applicability, and completeness of the data and information.

### **In Practice,**

- ERAC conducts analyses in response to targeted research questions for which there are available, relevant accident report data or other boating-related statistics to discern risk factors, patterns and trends associated with recreational boating accidents;
- Based on its analyses—and in partnership with NASBLA's member states, the U.S. Coast Guard, and other key agencies and organizations in the boating community—ERAC recommends and works to achieve the acceptance and implementation of improvements to the criteria, processes, and training associated with reporting, collecting, entering, and using accident data;
- On behalf of NASBLA's member states, in the interest of uniformity and shared understanding, ERAC collaborates with the U.S. Coast Guard on clarifying accident reporting criteria and procedures, and continues to offer input and support for the completion and issuance of reporting guidance to the states in the form of Commandant Instruction M16761.2C (Part II Standard Method of Reporting) and similar instruments;
- ERAC identifies and examines boating safety program and equipment design efforts that could mitigate risk factors identified through its analyses; and
- To further inform the committee's work, ERAC representatives monitor or actively participate in the efforts of relevant task forces and subgroups of the National Boating Safety Advisory Council (NBSAC), the American Boat and Yacht Council (ABYC), and the National Marine Manufacturers Association (NMMA), among others.

ERAC members are assembled into project teams, taking the lead on specific, assigned charges in four categories and significant monitoring and resource activities

The committee met all day Friday, March 1, 2013, in Lexington, Kentucky.

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## FY 2013 ERAC CHARGES—by category

### A. REGARDING ACCIDENT REPORTING RULEMAKING AND POLICY GUIDANCE

**A-1 Continue working with the U.S. Coast Guard to complete work on standardized accident report terms and definitions in the three remaining key report categories (Operation, Activity, and Vessel Types/Subtypes) for adoption by the States and use at the national level in BARD. [National RBS Plan Obj. 9, Boating Accident Reporting, and Obj. 10, R&D; and NASBLA’s strategic goal of providing standards that support uniformity.]**

*This charge, which encompasses the Accident Reporting Terms and Definitions Project, is one part of a larger set of efforts directed toward improving and clarifying casualty reporting. It is a carryover of the 2012 charge, which resulted in the acceptance of lists on Accident Types and Contributing Factors, and reflects the need to finalize the three remaining lists up to and including their acceptance as final work products by the NASBLA membership during this cycle. This is in accord with NASBLA Resolution 2012-3. See related charges A-2 and B-1.*

**A-2 Develop and deliver the implementation plan and timeline related to the use of the new standardized accident report terms and definitions. The plan should provide clarity to the NASBLA membership on when the terms can and will officially be in use nationally, and should guide other related processes and projects. [National RBS Plan Obj. 9, Boating Accident Reporting, and Obj. 10, R&D; and NASBLA’s strategic goal of providing standards that support uniformity.]**

*The activities associated with this charge, and which are related to A-1 for 2012 and 2013 and B-1 for 2013, had been initiated in the 2012 cycle, but were put on hold in late summer 2012 in the interest of moving the first two lists through the NASBLA membership at the annual conference. Need to complete the plan to facilitate the rollout of the already-approved (and anticipated, to-be-approved) terms and assign timelines for the completion of activities associated with training.*

**A-3 Provide input to and facilitate the gathering of feedback from NASBLA’s member states in response to U.S. Coast Guard efforts to revise and improve the accident reporting system and processes. [National RBS Plan Obj. 9, Boating Accident Reporting, and Obj. 10, R&D; and NASBLA’s strategic goal of providing standards that support uniformity.]**

*This charge is a carryover. The direction in 2013, however, will be on providing continuing review and input to the USCG’s development and finalization of CMDTINST M16761.2C, and on “standing at the ready” for potential proposed rulemaking in accident reporting.*

## **B. GUIDANCE/TRAINING ON ACCIDENT REPORTING, DATA ENTRY, DATA USE**

**B-1 Develop accident reporting training and information -- in online and other readily accessible formats – for use by new and current personnel involved at all levels and stages of the reporting process. Provide key factual information, including (but not limited to) the application of the revised and approved terms and definitions associated with the report category lists for Accident Types, Contributing Factors, Operation, Activity, Vessel Types/Subtypes, and guidance to improve core aspects of accident reporting. [National RBS Plan Obj. 9, Boating Accident Reporting (esp. strategy 9.16 re: assisting the states in training/education/outreach efforts on accident notification and reporting regulatory/policy revisions), and Obj. 10, R&D (esp. strategy 10.4 re: continuing to assess/improve/train on BARD data); NASBLA’s strategic goals of offering professional development and training, and providing standards that support uniformity.]**

*This is a carryover charge that was pending approval of the accident report terms and definitions in 2012 (first two lists approved Sept. 2012). While work continues on the final three lists, this charge will proceed in accord with the recommendation set forth in NASBLA Resolution 2012-3 (i.e., “Recommend that NASBLA ERAC and the U.S. Coast Guard, through this Project, coordinate the development of training and guidance on the effective use and appropriate application of the standardized terms and definitions and do so in a format(s) that has the potential to reach affected personnel at all levels of accident report data collection, review, and entry.”). As of the date of this document, there have been preliminary conversations between ERAC and Enforcement Committee leadership regarding potential partnering to accomplish certain related goals in online training. Potential ERAC-devised modules would likely incorporate topics such as the importance of quality accident reporting data to state LE/ED campaigns and programs; whether an accident is reportable; what information is required in BARD and why; how to write a quality narrative; and, most prominently, modules on each set of report category terms and definitions. See related charges A-1 and A-2.*

**B-2 Launch online forum to expand and facilitate discussions about recreational boating accident analysis and data issues, resolutions, and applications with other governmental, academic and non-profit researchers and data users. Develop policies and procedures that will allow ERAC to 1) annually appoint from the ERAC roster, a member who will coordinate details associated with the forum; and 2) provide guidance to the appointed member regarding the expectations and responsibilities with taking on this role. [National RBS Plan Obj. 10, R&D (esp. strategies 10.4 re: continuing to assess/improve/train on BARD data, and 10.5 re: analyzing BARD data); NASBLA’s strategic goals of offering professional development and training, and providing models/standards that support best practices and uniformity.]**

*This is a carryover charge intended to widen the circle of participants in ERAC’s ongoing discussions about the application and improvement of accident research and data. In 2012, an ERAC charge team identified initial content and settled on the i4A platform as the most viable for this purpose, with the understanding that there will need to be ongoing coordination between the committee and NASBLA at-large as decisions continue to be made about the organization’s web presence. This 2013 version of the charge takes the additional step of developing policies and procedures for an ERAC member to work with the forum and set parameters for doing so.*

## **C. COMPILATION AND ANALYSIS OF ACCIDENT DATA AND RELATED INFORMATION**

**C-1 Review and assess the data and findings collected and released by the U.S. Coast Guard through the National Boating Survey.** *[National RBS Plan Performance Goal for reducing casualties; RBS Obj. 9, Boating Accident Reporting, and Obj. 10, R&D (esp. strategy 10.5 re: analyzing BARD data); NASBLA's strategic goals of conducting research and providing models that support best practices and inform decision makers.]*

*This charge is intended to take advantage of the release of data from the long-awaited national survey by reviewing and assessing the applicability of the findings to law enforcement and educational boating campaigns and programs. As part of this exploration, the committee would like to learn which, if any, states the Coast Guard would be interested in seeing administer their own surveys to collect state-specific data that might not be available in sufficient quantity through the national survey; and better understand the methodology and replicability of the survey.*

**C-2 In support of an improved understanding of the factors associated with human error in recreational boating accidents, continue assessing the viability and applicability of a modified version of the Department of Defense's Human Factors Analysis and Classification System (HFACS).** *[National RBS Plan Performance Goal for reducing casualties; RBS Obj. 9, Boating Accident Reporting (esp. strategy 9.15 re: examining suitability of accident causation models), and Obj. 10, R&D (esp. strategy 10.5 re: analyzing BARD data); NASBLA's strategic goals of providing models that support best practices, and conducting research for evaluating/sustaining RBS program efforts.]*

*This is a carryover charge which, in 2012, progressed to the point of aligning the existing human factor descriptors, which are collected in BARD by a segment of states, with the revised accident contributing factors/causes, which will be collected for all states, something that should work to increase the overall amount of information on human error in accidents. The 2012 charge also resulted in a preliminary investigation of the applicability of a 'lite' version of the DOD's HFACS framework and initial work to apply the model to a sample of five cases to determine utility. In 2013, the committee will finalize the testing of this "HFACS-lite" model and develop protocols for its use in recreational boating accidents if it is deemed viable.*

**C-3 Conduct an analysis of data derived from the United Safe Boating Institute (and affiliated organizations) efforts to capture Vessel Safety Check (VSC) data to determine what meaningful trends can be identified from the initial data collection.** *[National RBS Plan Performance Goal for reducing casualties; RBS Obj. 8, Operator Compliance-Required Safety Equipment; NASBLA's strategic goal of conducting research for evaluating RBS program efforts and informing decision makers.]*

*This is an "upgrade" of a 2012 ERAC monitoring/advisory charge in support of the committee's past work on operator compliance with safety equipment requirements and provision of counsel to the USBI's grant-awarded efforts to capture the reasons why vessels fail VSCs. A USBI-hosted website to collect the data has been up and running since earlier in 2012, with a focus on gathering data from five states (although there have been receipts from more than 40 states through the efforts of the United States Power Squadrons and the Coast Guard Auxiliary).*

## **D. RESOURCE/ADVISORY/MONITORING ACTIVITIES**

**D-1 Be informed about, review and consider the potential cross-over and cross-implications of NASBLA committee charges. Make deliberate contact with other NASBLA committees on an annual basis for the purpose of coordinating ERAC efforts when and where appropriate.**

*This is a new charge, proposed as a standing charge, such that the Chair of ERAC will communicate with and coordinate committee charge details on an annual basis with other committee chairs.*

**D-2 As requested and warranted, serve as a data and research resource to the National Boating Education Standards Panel as it embarks on revisions to the Level 1 – Basic Boating Knowledge Standard in 2013. [National RBS Plan Performance Goal for reducing casualties; RBS Obj. 1, Safety Education Certificates and Successful Course Completions, and Obj.10, R&D (esp. strategy 10.5 re: analyzing BARD data); NASBLA’s strategic goals of maintaining risk-based education standards and research-based policies for boating safety courses, and conducting research for evaluating RBS program efforts.]**

*This is a continuing charge intended to offer ERAC as a resource to the work of this entity which was established in 2011, and which has just issued its first call for proposed revisions to the Standard.*

**D-3 Continue serving in an advisory role to the research project, *Advanced Spatial Analysis of Accident Risks in Recreational Boating*, with a special emphasis on reviewing and providing input to the principal investigator as requested regarding project findings. [National RBS Plan Performance Goal for reducing casualties; RBS Obj. 9, Boating Accident Reporting (esp. strategy 9.15 re: examining suitability of accident causation models), and Obj. 10, R&D (esp. strategy 10.5 re: analyzing BARD data); NASBLA’s strategic goals of providing models that support best practices, and conducting research for evaluating/sustaining RBS program efforts.]**

*This is a carryover charge regarding a project conducted by Dr. Ernest G. Marshburn (East Carolina University) in the test states of Florida and Ohio. ERAC has served in an advisory capacity to foster and facilitate the project’s objectives and will continue to provide a mechanism for reviewing, vetting and sharing the results of the research with the NASBLA membership at suitable events in 2013.*

**For the 2013 cycle, each NASBLA Policy Committee has been asked to identify two “measures of uniformity” and two “measures of effectiveness.” To start the discussion, the ERAC leadership has identified two possible uniformity measures and one possible effectiveness measures.**

#### **POSSIBLE MEASURES OF UNIFORMITY -- a first cut for discussion**

1. The standardization of accident reporting terms and definitions used by 50 states and 6 territories in providing BARD data in five key fields (accident types, contributing factors, operation, activity, vessel types/sub-types).

This measure relates to two charges -- A-1 and B-1

While there are some questions as to how to measure this standardization, one possibility might be to “test” before and after the training module(s) (under development during this committee cycle). Another, if agreement could be reached to do so, might be to ‘measure’ the amount of recoding that the USCG needs to do on these key field (pre- and post-rollout).

2. Standardization in the understanding of reportability parameters in recreational boating accident reporting.

This measure relates to four charges – A-1, A-3, B-1, B-2

Once again, there remain some questions as to how to measure this standardization. However, as in the above case, one possibility might be to “test” before and after the training module(s) (under development during this committee cycle).

#### **POSSIBLE MEASURES OF EFFECTIVENESS -- a first cut for discussion**

1. Based upon a determination of “X” number of key data elements in BARD-Web that will be identified by a team composed of state and USCG members; and measuring completion rates of these data fields both before and after the implementation of an online module that emphasizes the importance of these key data elements and affords resources and suggestions to meet the challenge of collecting the key data elements; show an improvement of at least “X%” in the completion rate of each of the key elements identified by {insert date}.

This measure relates primarily to one charge – B-1

One possible way to measure might be to identify the percentage of non-completed key data element fields before and after the training module is released (something that would require us to know which states use the training so that we could look at the “before and after” details)