

RESOURCES FOR NBSAC SUBCOMMITTEES

This document has links to NASBLA ERAC webpages and files that might be useful for future discussions in the NBSAC Strategic Planning, Prevention through People, and Boats & Associated Equipment subcommittees.

The webpages and, unless otherwise noted, the links to documents are publicly accessible for viewing and downloading—they are located at [ERAC's charges/products page](#); the [Lighthouse's Get Equipped portal](#); or the [committee's meeting materials page](#). If any subcommittee member is interested in more background, working documentation, charge team notes, etc., to help fill information gaps, contact Deb Gona (deb@nasbla.org). It is possible that the requestor already has access to Basecamp (the project management site that holds most of the committee's internal messaging and working documents) and if not, temporary access can be arranged or files can be sent as email attachments.

National Recreational Boating Safety Surveys

ERAC has had an NRBSS charge on its books since the 2011-2012 surveys. The 2022 charge is:

Finish the evaluation and analysis of the key components and findings from the 2018 National Recreational Boating Safety Participation and Exposure Surveys (NRBSS). Determine to what degree and in what way states have used or plan to use the published findings, available data, and methods associated with the survey; and identify potential obstacles to the states' use of the findings and data based on the states' perceptions and past experiences with this series of surveys. Develop and conduct national webinars and/or in person presentations (number to be determined) in coordination with U.S. Coast Guard staff; these events would focus on sharing survey insights, glean additional feedback and recommendations for future surveys (and possible use at the state level), and sharing the potential impact of future survey data on the states. (NASBLA Goal 5, Obj. 5.1 and 5.2; and Goal 2) (RBS Initiative 3).

This is in keeping with the clause in the USCG/NASBLA MOU (latest version signed March 29, 2021)

g. The USCG is responsible for administering the National Recreational Boating Safety Survey (NRBSS) to collect and analyze data related to recreational boater activities, attitudes, behaviors, preferences and priorities to provide a knowledge-based foundation for developing and evaluating program interventions. Given the potential for utilizing survey data to evaluate state-to-state program effectiveness, the USCG will openly receive and formally respond to recommendations from NASBLA concerning the design, development and analysis of data collection efforts regarding recreational boating activities, behaviors, priorities, etc.

<https://www.nasbla.org/nasblamain/lighthouse/get-equipped/boating-survey> is ERAC's Lighthouse page dedicated to all things NRBSS. At the end of the current committee cycle, products related to the 2018 surveys will be posted there. For the time being, however, the bulk of materials referenced on that page are on the methods and findings from the 2012 surveys, especially the exposure hours component.

In 2021, the ERAC charge team spent significant time reviewing the methodology report for the 2018 surveys, which is available directly from CG-BSX (RBSInfo@uscg.mil) or via [download](#) from ERAC's NRBSS project area on Basecamp Classic. Notes from those team sessions are in the form of Q&A and might answer some basic questions that NBSAC members have about how the surveys were conducted and the survey instruments themselves. The ["cognitive interview" reports](#) provided by the vendor to the Coast Guard regarding the evaluation of and adjustments to the 2018 survey instruments are also available on Basecamp, but if accessed, they should not be widely circulated, per prior request of CG-BSX.

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In late December 2021, ERAC was invited by CG-BSX (via Jonathan Hsieh, BSX NRBSS Grant Technical Manager and ERAC member) to review and offer feedback on the contents of a draft solicitation that, when finalized, would become the first of a two-stage process for identifying the vendor to conduct the next round of NRBSS surveys. The National Recreational Boating Safety Survey Pre-Solicitation Notice & Call for Papers was posted to [grants.gov](https://www.grants.gov) on Feb. 10 with an April 15, 2022 deadline for receipt of papers (DHS-USCG-SUR-2022-001). After evaluating the white paper submissions, CG-BSX will extend invitations to select, prospective grantees to submit full-scale proposals. A [copy of the solicitation](#) is available on [ERAC's meeting materials page](#).

Based on the charge team's assessment of overall awareness of the utility of the 2018 participation and exposure surveys and findings—especially among the states—and CG-BSX's expressed interest in getting feedback, ERAC will sponsor two national webinars—May 10 @ 11am EDT, with a repeat on May 12 @ 3pm EDT (recordings of both will be made available at [NASBLA's eLearning Center](#)). The webinars will give background on the 2018 surveys, how they were conducted, and major findings. But the presenters--state and CG-BSX members of ERAC—hope to give states a better understanding of how they might benefit generally from using the surveys' findings as well as the pros and cons of risk ratios based on exposure hours. Through Q&A, the presenters want to gather more feedback on how states might already have been using the results and thoughts about potential enhancements to the next round of survey questions. If there is enough interest, a second round of webinars will be conducted to do a deeper dive into the surveys. More information on the webinars and invitations to register will be distributed to the states directly, as well as to NBSAC members given the discussions on the strategic plan and continuing resolutions at the March meeting. A general announcement will be made through the various NASBLA communication channels in late April 2022.

Human Factors and Operator Distractions

ERAC has had a human factors-related charge on the books since 2012. The 2022 charge is:

Analyze the results of a pilot program involving states applying aspects of the [human performance investigation guidance](#) and [supplemental report form](#) (ERAC products v. 2016) to fatal incident investigations in their jurisdictions. Evaluate the collected data, especially as apply to operator distractions; resolve data collection issues; refine the guidance and form as needed. (NASBLA Goals 3 & 5, Obj. 5.1, Strategy 5.1.5 and RBS Initiatives 2 & 3.

<https://www.nasbla.org/nasblamain/lighthouse/get-equipped/human-performance> is ERAC's Lighthouse page for Human Performance Investigation Guidance and Data Collection in Recreational Boating Incidents.

Spurred on by multiple interests—including a desire to get at the *why* of incidents involving human performance failures and to bring recreational boating investigations and research more in line with other transportation modes—ERAC embarked on a multi-year project in 2012. Under the team leadership of the late Dr. Dan Maxim, ERAC [adopted a "lite" version](#) of the [Department of Defense's Human Factors Analysis and Classification \(HFACS\)](#) for analyzing cases; and in 2014, after consulting investigative tools developed by the [National Transportation Safety Board](#) and recreational boating incident investigators for real-life application, released a [guidance document and a supplemental report form](#) for officers and investigators in states interested in supplementing their investigations and evaluating their safety programs and strategies.

More real world testing was conducted and an analysis of the results led to [2016 updates to both the investigative guidance](#) and [report form](#). A [2017 "HFACS-lite" examination](#) of case reports from Florida—at a level of detail greater than what is typically in the Coast Guard's Boating Accident Report Database (BARD)—was conducted to prepare for more extensive field testing of the revised supplemental form in selected states.

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As ERAC has found, and as NBSAC members should consider, there are challenges to gathering and making sense of the detailed data and information that—if fully available--would enhance our understanding of the role of human factors. That has led to a paring down of the most critical elements for collection and analysis in pilot testing to a decided emphasis on distractions--inside and outside of the vessel—affecting the operator.

A key element is based on a set of distraction codes, loosely patterned after those used in motor vehicle incidents, and attached to an “improper lookout/inattention” contributing factor to get at the underlying reason(s) for the operator’s failure to pay attention or perceive danger in recreational boating incidents. The codes were developed as part of a larger collaborative effort led by a team of ERAC’s state and associate members and CG-BSX subject matter experts who proposed revisions to entries in five major incident report categories. More information about the original USCG/ERAC Accident Reporting Terms and Definitions Project (2011-2013), along with details about adjustments to the lists during the Recreational Boating Incident Reporting Policy Project (2017-2020) can be found at [Standardized Incident Reporting Terms & Definitions](#).

From the [Contributing Factors / Causes list developed in 2012 and updated 2020](#):

Improper Lookout/Inattention: *The operator failed to perceive danger, resulting in the incident. This could have been with respect to failure(s) to perceive dangers outside or inside the vessel. May apply to violations of the requirement to maintain a proper lookout. [Combines existing terms (“Improper Lookout” or “No proper watch” and “Operator Inattention”), creates new primary definition, and creates “distraction codes.”]*

Distraction codes for Improper Lookout/Inattention (mandatory selection)

- **Onboard lighting** – Glare from lighted the objects onboard the vessel, such as improperly shielded navigation lights, onboard electronics, and other similar devices. Specify.
- **Background lighting** – Lights on docks, shorelines, or other vessels. Specify.
- **Onboard electronics or equipment** – Using, attempting to use, viewing or operating onboard electronics or equipment, such as a navigation device, VHF radio, audio device, radar, autopilot, spotlight. Specify.
- **Wireless communication devices**—Using, attempting to use, viewing or operating mobile phones, tablets and other handheld devices. Specify.
- **Operator or occupant activity** –Activity such as sightseeing, moving objects, eating, drinking, smoking, interacting with passengers, fixated on other vessels or persons being towed, or otherwise distracted by other persons, pets, or objects in or outside the vessel. Specify.
- **Other distraction** – Details regarding the distraction are known, but none of the specified codes is applicable. Specify.
- **Unknown** – Insufficient facts to make any specific distraction determination.

Incident Report Data Collection ... Generally

In discussions at the March 2022 NBSAC meeting, there were frequent remarks about boating data—the data currently collected on boating incidents or data that some members thought *should* be expanded (e.g., on boater education, experience, distractions); and other boating data (e.g., activity, exposure) that are currently collected via the NRBSS, but that perhaps *could be* collected more often and through more novel means.

As NBSAC subcommittees take up data portions of the strategic plan or related resolutions—especially as apply to recreational boating incident reporting--consideration should be given to the significant data revision recommendations still awaiting final adoption by the Coast Guard for mandatory national collection. The previous section referenced the USCG/ERAC Accident Reporting Terms and Definitions Project (2011-2013) and Recreational Boating Incident Reporting Policy Project (2017-2020) (see [Standardized Incident Reporting Terms & Definitions](#)), However, there are some specific items that members might find particularly useful.

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The project workgroup that developed the initial [recommendations for the consensus-based Recreational Boating Incident Reporting Policy Project](#) reviewed and evaluated the relevance and utility of all of the report data items currently prescribed in federal regulation and those added by the Coast Guard to its BAR form for programmatic reasons. The component of the recommendations dealing with those data items is [Section 5. Incident Report Data Elements, Fields and Definitions](#); the copy linked here also includes a summary chart that was appended to the recommendations.

As mentioned in **Human Factors and Operator Distractions (pp. 2-3)**, the Recreational Boating Incident Reporting Policy Project workgroup reviewed and proposed some revisions to entries in the five major incident report category lists originally developed through the 2011-2013 USCG/ERAC Accident Reporting Terms and Definitions Project. Both the original and most recent versions of the lists can be found at the Lighthouse page [Standardized Incident Reporting Terms & Definitions](#). The dates refer to the NASBLA membership's—the 56 U.S. states, territories and D.C.—votes of acceptance on the products.

- [Accident Types / Events](#)- Sept 11, 2012; [Incident Events](#) - July 31, 2020
- [Contributing Factors / Causes](#) - Sept 11, 2012; [Contributing Factors/Causes](#) - July 31, 2020
- [Operation](#) - Sept 3, 2013; [Operation](#) - July 31, 2020
- [Activity](#) - Sept 3, 2013; [Activity](#) - July 31, 2020
- [Vessel Sub-Types](#)- Sept 3, 2013; [Vessel Sub-Types](#) - July 31 2020

A resource that also be of use for any discussions on regulatory requirements is a spreadsheet that was developed from the final reporting policy project recommendations (as voted on and accepted by the states in July 2020) primarily for use by an ERAC charge team assigned to develop “best practices” for implementation. The [spreadsheet \(with CFR or BAR indications\)](#) presents each recommended data element; the fields/options that have been recommended for each; indication as to whether the element is required by 33 CFR 173.57(c); whether any fields/options or definitions are actually prescribed in CFR; whether the element is currently on the CG-BAR form 3865 (even if not currently prescribed by regulation); and whether the fields/options from the project recommendations differ significantly from what is currently in use.

Finally, as discussions continue on a range of subcommittee topics, NBSAC members might want to hold on to a copy of the [Resource Document \(v. 2020\)](#) that was developed to accompany the basic recommendations document produced for the [Recreational Boating Incident Reporting Policy Project](#). It is a searchable document that contains not only the consensus recommendations across eight areas associated with incident reporting, but also references current regulation, pertinent information on current practices at the federal and state levels, and a chronicle of project workgroup discussions on the topics covered and the manner of handling feedback during the lengthy consensus project.