JULY-AUGUST 2014 | VOL. 29 NO. 4
National Association of State Boating Law Administrators

SCA
small craft advisory

NATIONAL RECREATIONAL BOATING SURVEY RESULTS

Insights into the survey

NEW *Instructor* COLUMN DEBUTS

SCA
small craft advisory

The official publication
of the National Association
of State Boating Law Administrators

Editorial Offices
1648 McGrathiana Parkway, Suite 360
Lexington, KY 40511
Phone: 859.225.9487
Fax: 859.231.6403
E-mail: editor@nasbla.org

About the Cover

Results from the 2012 National Recreational Boating Survey, a massive boating data collection project spanning nearly 20 months, were released earlier this year. The survey is the product of a multi-year partnership effort led by the U.S. Coast Guard and presents a collection of new recreational boating data that is expected to be useful in measuring boating activity and safety.
Staff photo/John Malatak

Published bimonthly by the National Association of State Boating Law Administrators, 1648 McGrathiana Parkway, Suite 360 Lexington, KY 40511 (six issues).

Send change of address to:
Small Craft Advisory
1648 McGrathiana Parkway, Suite 360
Lexington, KY 40511

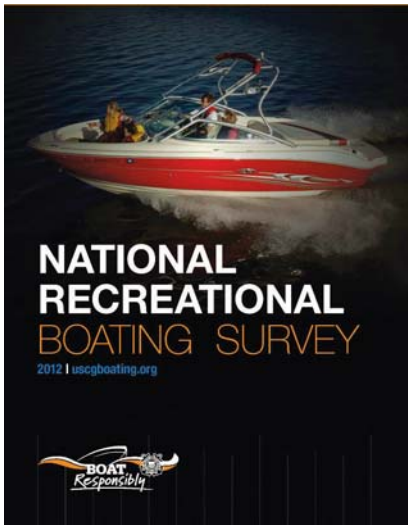
4

10

Departments

features

20



BOATERexam.com®
Educating Boaters Online

BOATERexam Launches Brand New Course!

We are excited to announce the launch of our brand new boater education course with all new NASBLA-approved course content, 150 new engaging animations, improved illustrations and 2 new male and female narrators- like you've never experienced before. We've re-engineered our course from the ground up, with mobile and user experience in mind.

SCAN THE QR CODE TO TAKE THE NEW AND IMPROVED BOATERexam.com FOR A RIDE!

The nominations are in!

Who's going to get their claws on the **Boatsey** as this year's ***Boating Safety Educator of the Year?*** Join us at the NASBLA conference in Bar Harbor, Maine to find out!

Fresh Air Educators® LEARN ONLINE – LIVE OUTDOORS
HUNTER course.com Educating Hunters Online
ATV course.com Educating Riders Online
SNOWMOBILE course.com Educating Riders Online

Contact **Kerry Moher** - 1-877-722-8838 ext. 222 kerry@freshaireducators.com

from the Helm

Eleanor Mariani
NASBLA Vice President

John Johnson, CAE
NASBLA CEO

Survey aims to help improve boating program

After a slow start, the boating community now has two National Recreational Boating Surveys to digest.....not to mention some new terminology. The surveys were completed by the U.S. Coast Guard in an effort to assess the efficiency and effectiveness of the Recreational Boating Safety Grant program and other programs in reducing boating-related deaths and injuries from accidents and to improve the quality of the boating experience for the country's boaters.

Much of the information is new and expected to be useful in measuring boating activity and safety, along with improved quality of the data gathered. The surveys begin by assessing the population dynamics of the boating community and further determine what types and sizes of boats are being used. The information gathered includes how many people participate in boating, the numbers, types and sizes of vessels owned in different regions of the country, how often vessels are used, and more.

By including questions about non-registered vessels, the surveys were able to approximate the numbers of canoes, kayaks and rowboats/inflatables owned in the United States, the number of hours per day they are used, and the average number of passengers on these craft. Even though this data is tabulated by region, it is potentially powerful information that has been elusive to many state agencies.

The surveys then provide estimates for the hours spent in a particular boat type in order to get to the long-awaited estimate of "exposure hours" or the total number of hours persons are aboard a boat in use out on the water and further calculate "risk ratios" for each state. Risk ratios are the number of deaths and casualties per 100 million (boat-person) exposure hours. The USCG and others anticipate that accident rates (typically, the number of accidents/100,000 registered vessels) would be more meaningful if they could be equated to the number of hours the boat was actually used on the water, versus if the boat is "used" at a marina and never leaves the dock.

Some of the analyses are reported down to the state level, at least for most states and Puerto Rico, but many of the results are regionalized.

It behooves each boating law administrator and other boating safety professionals to make themselves aware of the analyses that are presented in these reports and to become familiar with the terminology. The terminology includes terms such as "Boat-Person Hours" and "Recreational Boating Risk Ratios" and "Boating Days". I, for one, am excited about gaining a better understanding of how many boats are actually owned in my home state of Connecticut. Since I know the number of registered craft, I can finally get an approximation of how many non-registered vessels might be out there. This information will help with outreach to this group of boaters that is harder to identify than those with vessels currently registered in Connecticut. I also intend to spend time to better understand the impact of the 2012 Boating Casualty Numbers and Ratios per 100 Million Exposure Hours and what that means for the numerous fatal accidents that occur in Connecticut on vessels that are not registered, the operators of which are not required to take a boating safety class.

This edition of *Small Craft Advisory* focuses on the 2012 survey and will help boating safety professionals, over time, better interpret the data and understand how it can help their programs. These articles also offer important cautionary notes about the limits of the data and the survey findings, and the dangers of making comparisons and inappropriately contrasting the nuances of the two distinctly different, consecutive national surveys. This is one edition that you will want to read cover to cover and keep on-hand as you begin to digest, process and utilize the results of the National Recreational Boating Survey. ✻

Editor's Note: With Eleanor's involvement with the Engineering, Reporting & Analysis Committee as a past committee member and past Board liaison to the committee, NASBLA President Herb Angell asked NASBLA Vice President Eleanor Mariani to lay the course for this issue's From the Helm.

The only predictable thing on the water.

Advanced technology. Rigorous testing. And the best warranty on the water.

Our outboards are designed to conquer the harshest of conditions. So no matter what lies ahead, we've always got your back. Discover ultimate reliability and durability at Mercurygovsales.com

MERCURY 75 YEARS EST 1939

Find out where we've been and where we're going at mercurymarine.com/75years

MERCURY

email: mmobgovsales@mercmarine.com | 866-408-6372

S-933 0114

NASBLA News

Join us for the 55th NASBLA Conference

Registration is now open for the 2014 NASBLA Annual Conference. This year's event will be held Oct. 16-19 in picturesque Bar Harbor, Maine.

The NASBLA Annual Conference is a combination learning conference, annual business meeting, committee meeting, workshop, learning lab and colleague roundtable event for state recreational boating safety professionals and others in the RBS community.

Every year, the annual conference provides focused learning sessions, thought-provoking speakers, an expansive expo hall, and plenty of networking opportunities.

NASBLA joins prestigious credentialing organization

NASBLA is now a member of the Institute for Credentialing Excellence (ICE), a professional membership association that provides education, networking and other resources for organizations and individuals who work in and serve the credentialing industry. ICE is a leading developer of standards for both certification and certificate programs and it is both a provider of and a clearinghouse for information on trends in certification, test development and delivery, assessment-based certificate programs and other information relevant to the credentialing community.

ICE advances credentialing through education, standards, research and advocacy to ensure competence across professions and occupations. From a strategic prospective, NASBLA will now be better positioned to:

PROUD MEMBER

ICE Institute for Credentialing Excellence™

- Engage in cooperative efforts with allied organizations to achieve NASBLA's vision of the Recreational Boating Professional Certification Program;
- Nurture an innovative culture leading to increased quality programs and services to meet the needs of the national boating program;
- Deliver programs to state and federal recreational boating employees and employers to improve their understanding and acceptance of professional certification;
- Achieve national recognition of the NASBLA brand and overall value; and
- Ensure adequate resources and structure (organization, staffing and volunteers) are available to achieve strategic objectives and sustainable growth of the Recreational Boating Professional Certification Program.

Report Operation Dry Water results

Thank you to all the law enforcement agencies and boating safety partners who showed their support and participated in Operation Dry Water 2014! More than 550 law enforcement agencies and USCG units from all 56 U.S. states and territories registered to participate in the three-day event.

We hope everyone had a safe and successful Operation Dry Water weekend. It was obvious from the number of registered

agencies and the amount of news coverage that law enforcement was out in force over the weekend, raising awareness with recreational boaters about the dangers of boating under the influence and removing boaters from the water who chose to boat under the influence — keeping everyone else safe.

Now it is time for participating agencies to gather data from the weekend's efforts and report it to NASBLA to help determine the success of this year's campaign. A convenient online report form allows information to be submitted electronically. It is important to submit this information as soon as possible. If you have any questions concerning Operation Dry Water, contact Hannah Helsby at hannah@nasbla.org.

Online navigation course now available

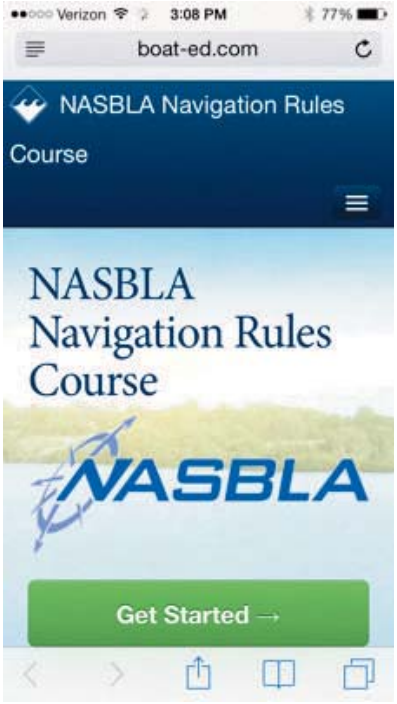
NASBLA has launched its online Navigation Rules for Marine Law Enforcement Officers course. Consisting of three units, this online training will teach marine law enforcement officers how to apply the navigation rules when taking enforcement action and investigating boating-related accidents.

This program was created by NASBLA and produced under a grant from the Sport Fish Restoration and Boating Trust Fund, which is administered by the U.S. Coast Guard. The program can be taken on your computer or any mobile device.

The course fee is $95. After passing the course, an officer can immediately print out a NASBLA Navigation Rules Online Course Completion Certificate.

"This course is outstanding! Officers who complete this training receive a solid foundation to work from in conducting boating accident investigations," said Darren Rider, boating law administrator with the Tennessee Wildlife Resources Agency. "They'll have more confidence in conducting investigations because they'll have a better background."

To take the course, visit www.nasbla.org/NavRules.



Instructor development workshop scheduled for Dec. 7-10

NASBLA invites recreational boating safety instructors to attend the *Recreational Boating Safety Instructor Development Workshop* being offered by its Boat Operations and Training program. Taking place Dec. 7-10, 2014, in Jacksonville, Florida, the four-day certificate program will cover NASBLA's education standards, the ANSI development process, the new Basic Boating Knowledge Standard and NASBLA's Methods of Instruction.

Tuition is $625 for the four-day workshop. NASBLA has negotiated a special room rate of $83 per night (plus taxes). For more information, visit nasbla.org/MOI.

NASBLA appoints new board member

The NASBLA Executive Board welcomes Oklahoma Boating Law Administrator Mark Brown to the nonprofit's governing body. Following the recent resignation of Kevin Bergersen, who was serving as NASBLA's treasurer when he left Arizona Game & Fish to pursue a new career, NASBLA President Herb Angell appointed Stephanie Weatherington, Arkansas' boating law administrator, to fill the treasurer position through the 2014 annual conference. This left a member-at-large position open. Brown was selected to fill the position of member-at-large (term expires in 2015) vacated by Weatherington.

Magazine lands prestigious award

Small Craft Advisory, the official publication of the National Association of State Boating Law Administrators, has been recognized with an award from the annual Awards for Publication Excellence Competition (APEX).

WINNER 2014 APEX® AWARDS FOR PUBLICATION EXCELLENCE

(Continued on page 6)

Small Craft Advisory received the 2014 APEX Award of Excellence in the One to Two Person-Produced Magazines, Journals & Tabloids category.

Created in 1988, APEX is an international competition for writers, editors, publications staff and communicators in corporate, nonprofit and independent settings.

For this year's competition, judges evaluated nearly 2,100 entries, presenting 832 Awards of Excellence recognizing exceptional entries in 122 categories.

NASBLA to participate in Run & Ride to Remember for 2nd year

The NASBLA Watermen will again be participating in the National Law Enforcement Officer Memorial Fund's Ride & Run to Remember, a fun, community-oriented athletic event designed to honor the contribution and sacrifice law enforcement officers make every day and encourage community support for the National Law Enforcement Officers Memorial Fund. It includes a 5K race on Oct. 11 and 55- and 30-mile bike rides on Oct. 12. NASBLA director of membership services Sam Lynch and NASBLA technology guru Cal Lawton will again anchor the NASBLA Watermen in the Ride & Run to Remember, and they hope to add participants to the team.

"We are looking for officers to join the team, as NASBLA has national reach that no other non-government organization has. We're looking for 13 runners/riders to round us out to 15. Riders are not required to run, and runners are not required to ride," said Lawton.

For more information, visit www.nasbla.org/watermen.

Boating law administrators selected for national advisory panel

NASBLA is proud to announce that two boating law administrators — Dave Dahms (Idaho) and Tim Dunleavy (New Hampshire) — have been selected to serve on the National Boating Safety Advisory Council. The council was established by the Federal Boat Safety Act of 1971 to advise the U.S. Coast Guard on matters related to recreational boating safety.

The Department of Homeland Security made seven appointments to NBSAC this year, with four new members and three reappointments:

Manufacturers of boats and associated equipment
Anthony Viggiano — Autotether Inc.
Dave Marlowe — Brunswick Corporation (reappointment)
Wayne Burdick — Beneteau

Officials responsible for state boating safety programs
Dave Dahms — Idaho
Tim Dunleavy — New Hampshire

Representatives of recreational boating organizations
Chris Stec — American Canoe Association (reappointment)
Tom Dogan — National Boating Federation (reappointment) ❄

NASBLA
Boat Operations And Training

NASBLA BOAT Program presents

Recreational Boating Safety Instructor Development Workshop

December 7-10, 2014

Crowne Plaza Hotel, Jacksonville, FL.

Register online today:
www.nasbla.org/MOI

This four-day certificate program will cover:

Day 1 - NASBLA's Education Standards, the ANSI developmental process and the new "Basic Boating Knowledge" Standard.

Days 2-4 - NASBLA's Methods of Instruction (MOI) course builds professional instructional skills for the recreational boating safety instructor.

Tuition is $625 for the four-day offering.
Special hotel room rate is $83 per night.

David Durfee
Lead Instructor
BOAT Program

Instructors' CORNER

Instructing as leadership

This column is geared toward the instructors of NASBLA's Boat Operations and Training (BOAT) program. It will serve as a place to share our experiences, leadership, and best practices with the entire maritime first responder community.

The foundation of the Boat Operations and Training (BOAT) program is our instructors. We place a lot of emphasis on the practical exercises, and we often forget that our primary tool of instruction is leadership. Standing in front of a group of 30 can be intimidating, especially since we are not trained as public speakers. Rather, we are professional first responders sharing our skills and knowledge. It can be easy to forget that we are creating an open forum to facilitate the training environment, not simply delivering a PowerPoint (which could be downloaded).

When I first taught a BOAT course, I was more nervous than I had expected to be. I knew the material, but I had not presented it in a formal setting. Reminding myself that leadership was the key, after a few slides, I felt much more comfortable. Our "break-in" instructors often share the same nervousness, but we have not let one fail. To help, we team teach as they lead the classroom discussion. It is normal for new instructors to feel nervous before a course. Remember, as an instructor, we are chosen to instruct because we have firsthand experience that is valuable to share with the students.

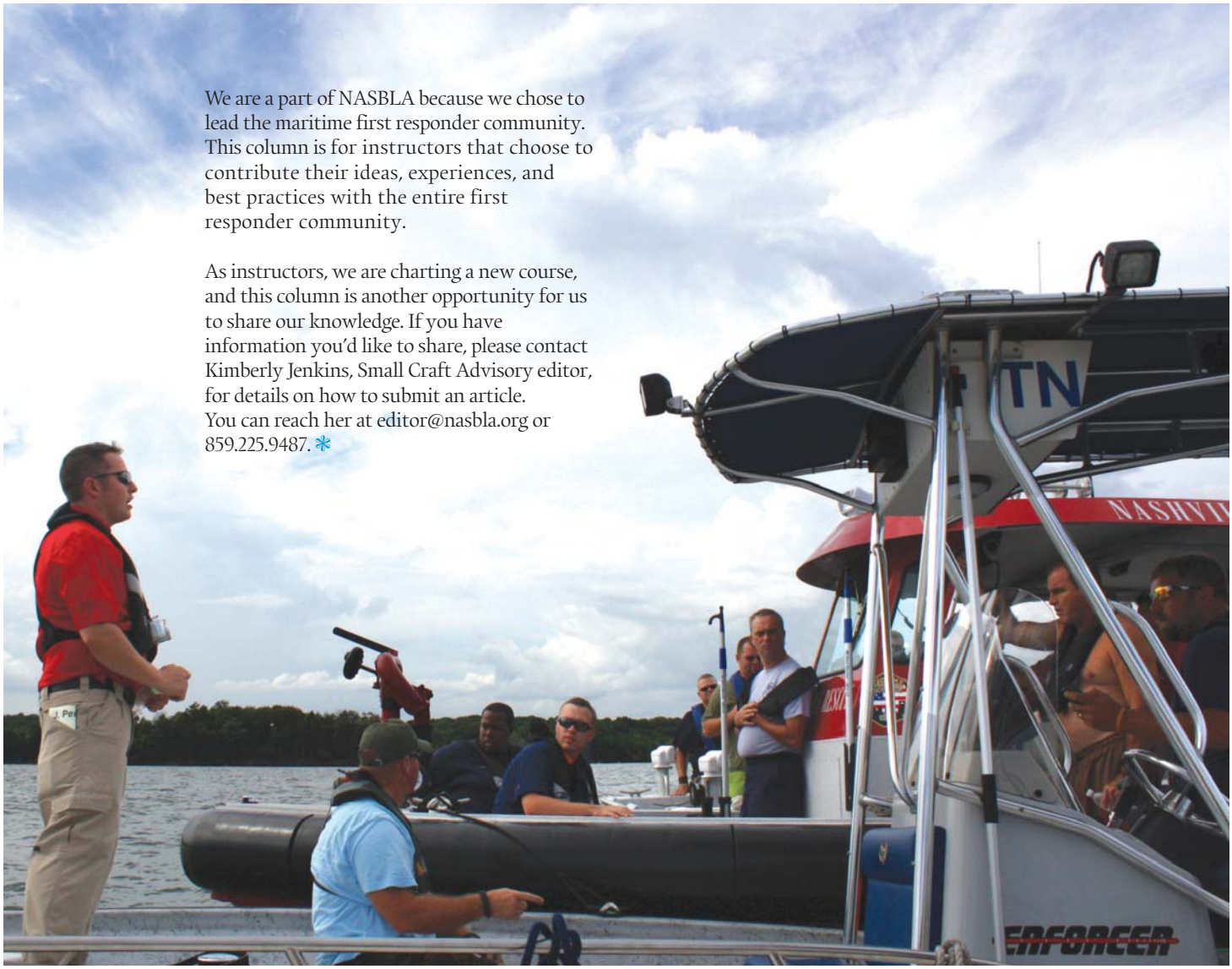
Every course is a leadership challenge. Identifying the strengths of the instructor cadre starts when modules are assigned. Lead instructors attempt to balance the course delivery; high-energy instructors get longer modules while less dynamic instructors may teach shorter modules. We team teach and allow anyone to share relevant stories for multiple points of view. This creates dialogue rather than a one-way lecture. We do not deliver monologues, recite lesson plans, or read the PowerPoint; rather, we facilitate the training, working to engage the students by using our team model.

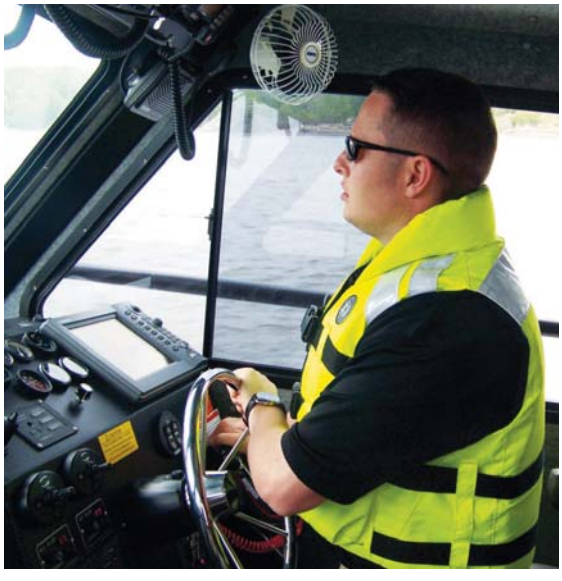
As instructors, we lead the discussion to keep it relative to the topic. We also give students the opportunity to learn from our mistakes. Do not worry if the classroom portion does not resemble a traditional learning environment. We use multiple techniques to engage adult learning styles.

The presentation skills required to succeed with NASBLA's Boat program are honed throughout each course, we are continually getting better. Our instructor cadre is expanding with accredited entities.

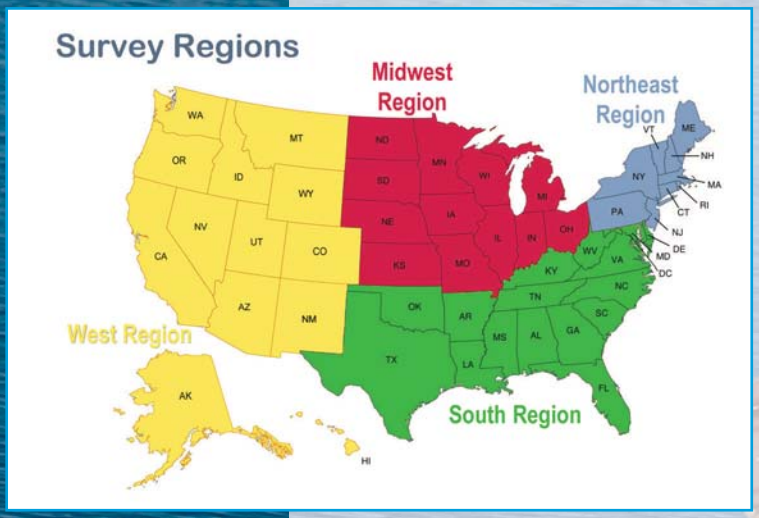
We are a part of NASBLA because we chose to lead the maritime first responder community. This column is for instructors that choose to contribute their ideas, experiences, and best practices with the entire first responder community.

As instructors, we are charting a new course, and this column is another opportunity for us to share our knowledge. If you have information you'd like to share, please contact Kimberly Jenkins, Small Craft Advisory editor, for details on how to submit an article. You can reach her at editor@nasbla.org or 859.225.9487. ✻





By Dr. Philippe Gwet
Mathematical Statistician
Program Management Branch
Boating Safety Division
Office of Auxiliary and Boating Safety
U.S. Coast Guard



HIGHLIGHTS OF FINDINGS FROM THE COAST GUARD 2012 NATIONAL RECREATIONAL BOATING SURVEY

The "Nuts and Bolts" of the 2012 Survey

The 2012 National Recreational Boating Survey (NRBS), a massive boating data collection project spanning nearly 20 months, was completed in May 2013. It began with a "boat survey" of U.S. households in 2011 to gather information on the number and types of registered and unregistered boats that they owned, and ended with a "participant survey" of U.S. residents in 2013 to collect information on who participated in any recreational boating activities during 2012.

Between those two data collection efforts, a separate monthly "trip survey," optimized to gather accurate exposure hours, was conducted for 2012. It used a sample of recreational boats identified in the boat survey to collect information from respondents about boat trips that they were a part of during the month prior to their interview. Trip survey respondents reported

2012 NRBS Schedule and Completed Interviews

Boat Survey – late Aug.-Dec. 2011
– 32,568 mail and telephone interviews

Trip Survey – Feb. 2012-early Feb. 2013
– 40,406 telephone and web interviews

Participant Survey – early Feb.-mid-May 2013 –17,322 telephone interviews

details about the type of boat they used, trip duration, and boating-related expenditures they incurred.

The addition of a monthly trip survey, sample sizes large enough to produce state-level statistics, and improved methodologies for gathering exposure hour and other data in the 2012 NRBS are some of the features that set it apart from the 2011 version of the project.

Regarding the collection of exposure hours, for example, the data used to calculate the 2011 statistics were based on a 12-month recall period, whereas the recall period for respondents in 2012 was reduced to 30 days or less. Moreover, the practical considerations that had made it necessary to start the collection of 2011 boating participation data before the end of the 2011 boating season meant that some respondents reported their boating activities for the full year while others reported only partial information.

22.2 million recreational boats are owned in the U.S. About 43 percent of them are unregistered.

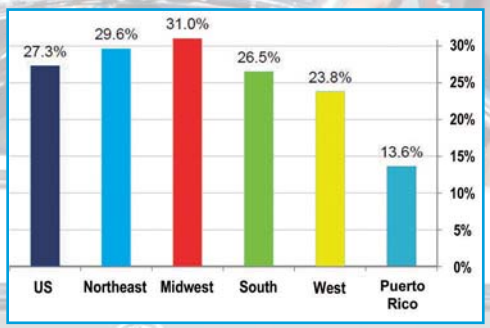
Although the partial-year data were "corrected" statistically to represent the full year (2011), the adjustment resulted in a loss of precision in the participation statistics. So, while the 2011 and the 2012 NRBS each produced valid measures of boating exposure and participation, the results from these two years should not be compared to each other due to the substantial changes in the 2012 survey methodology.

The findings here represent just some of what can be gleaned from the data amassed in the 2012 project.

Household Participation in Recreational Boating

The NRBS participant survey asked all responding households if anyone in the household had spent time on a recreational boat in 2012.

Nationally, it turned out that 27.3 percent, or 32.3 million, of the 118.1 million U.S. households had a member who boated in 2012. The Midwest region's household participation of 31 percent, however, surpassed that of each of the other three regions and the nation.



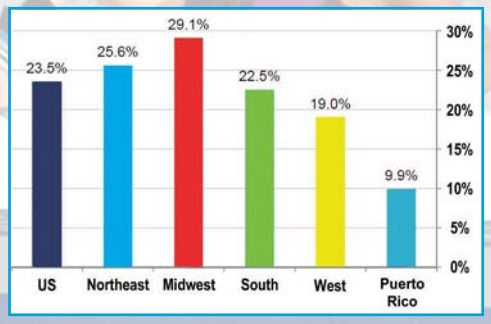
Household Participation in Recreational Boating by Region

Individual Participation in Recreational Boating

The NRBS participant survey also gathered information about how many individuals—both adults and children—went out on the water on different types and sizes of recreational boats in 2012. For purposes of the survey, only individuals who went out on the water aboard boats were considered recreational boaters; those who used boats only at the dock were not included in the calculations.

Like its household results, the Midwest, at 29.1 percent, also had the highest individual boating participation rate among the regions; but the South had the largest number of boating participants—26.3 million—representing over a third of all boating participants in the U.S. The highest individual participation rates, according to the survey, included Maine (47.7 percent), Minnesota (45.7 percent), North Dakota (44.6 percent), and Alaska (43.9 percent).

The survey also showed that about 45 percent of boating participants across the nation in 2012 were female, with little variation across regions.



Individual Participation in Recreational Boating by Region

Exposure Hours by Region

Nationwide, the "average" boat was taken out on 11.3 trips in 2012. Canoes were generally taken out on the water less often than other boat types (8.6 trips), while pontoon boats were taken out most often (14.9 trips). On average in 2012, a boat was out on the water for 5.7 hours, with 2.4 persons aboard.

(Continue on page 12)

According to the survey, all boats logged 3.6 billion boat-person-hours nationally in 2012—"boat-person hours" being the total number of hours that people were aboard a boat in use out on the water. Powerboats were the most used type of boat, logging 2.04 billion or close to 60 percent of all boat-person-hours.

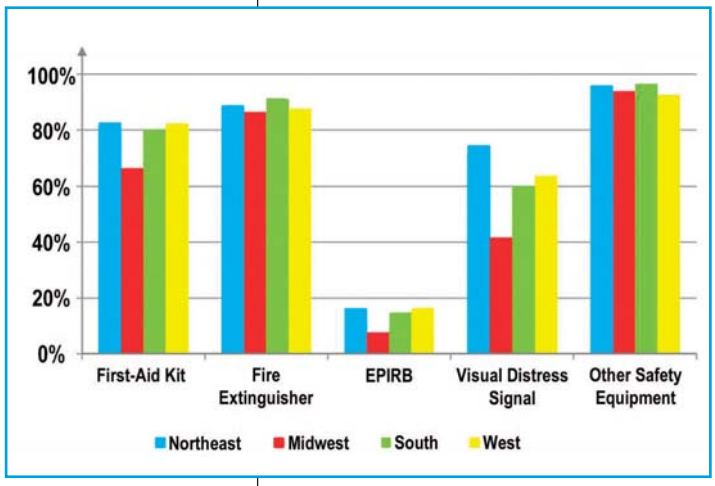
About 45 percent of boating participants across the nation in 2012 were female. USCG photos

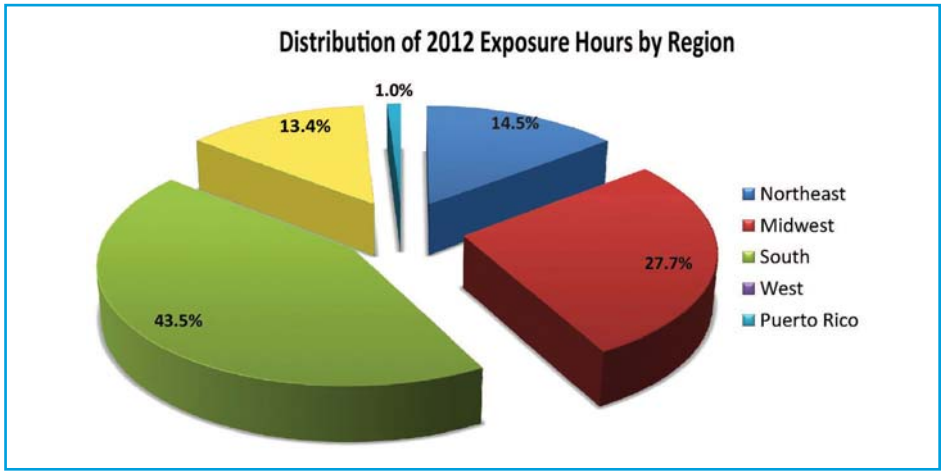
There were regional variations in the number of boat-person or "exposure" hours logged in 2012. About 1.6 billion boating hours were logged in the South, where, on average in 2012, a boat was taken out for 13 trips of 6 hours each. The Midwest came in next, reporting over 991 million boating hours and 11 trips of 5 hours per boat. Approximately 521 and 479 million boat-person hours were logged in the Northeast and the West regions, respectively, according to the survey.

Safety Equipment – What's Onboard?

Besides the number of people on board and the number of hours their boat was used, boaters responding to the 2012 NRBS trip survey were also asked to report on other aspects of their trips, including what safety equipment they carried on board.

The survey data revealed that a large majority of boating trips across the country in 2012 were on boats with a fire extinguisher on board, as well as "other safety equipment," which included equipment for reaching someone in the water or a sound signal such as a horn. Additionally, two-thirds of trips in the Midwest and more than 80 percent of trips in each of the other regions were on boats that carried a first-aid kit.





The presence of visual distress signals on board for the boat trips varied by region, ranging from 42 percent of trips in the Midwest to 74 percent in the Northeast, a significant difference. Across all four regions, few trips had EPIRBs, or distress radio beacons.

Background on the National Recreational Boating Survey

For decades, the National Recreational Boating Safety (RBS) Program's measures of effectiveness have compared the actual number of deaths or the actual number of casualties (deaths and injuries) in all recreational boats to the quantity of numbered (registered) recreational boats (deaths or casualties per 100,000 registered boats). Regretfully, we have known that use of the latter figure was flawed.

While the count of casualties and deaths included those occurring in both registered and unregistered (mostly canoes and kayaks) boats, the number of boats used for comparison was restricted to those that are registered. Moreover, we were not able to determine whether the registered boats were actually used in any given year.

In a 2000 Audit of the Performance Measure for the Recreational Boating Safety Program, the DOT Office of the Inspector General noted that the "Coast Guard has not established criteria for monitoring the effectiveness of the States' RBS Programs;" and a 2005 Program

Assesment Rating Tool Review conducted by the Office of Management and Budget noted that the Coast Guard needs to "normalize existing performance measures" for the National RBS Program.

To accomplish these directives, a new National Recreational Boating Survey needed to be designed and implemented. The new survey would capture state-specific data for measuring the effectiveness of state programs as well as capture participation data to compare to the number of casualties to so that we know how much participation is impacting the number of casualties as compared to the effectiveness of the many RBS initiatives. This is similar to other forms of transportation, such as motor vehicles, where they measure the number of deaths per 100 million vehicle miles travelled. A new Boating Survey was thus created and is proving to be of great value to the recreational boating community. It was first fully implemented in 2012.

The 2012 National Recreational Boating Survey shows that just over a quarter of U.S. households had a member who boated in 2012.

The 2012 National Recreational Boating Survey is the result of a multi-year partnership effort led by the Coast Guard and aimed to redesign the collection of recreational boating data. To be as inclusive and thorough as possible, the redesign project was conducted under the auspices of a scientific advisory committee (SAC) and a group of partners representing the boating industry, academia, and other interest groups, known as the Collaboratory of Partners (COP).

The SAC included members from the USCG Boating Safety Division, Survey Sampling Inc., Michigan State University, National Marine Manufacturers Association, Applied Research Services, and the University of Michigan Institute for Social Research. The organizations represented in the COP included the USCG, the U.S. Fish and Wildlife Service, West Marine, the National Transportation Safety Board, the American Canoe Association, the National Safe Boating Council, the Ohio Department of Natural Resources, the National Association of State Boating Law Administrators, the Recreational Boating and Fishing Foundation, the U.S. Army Corps of Engineers, the USCG Auxiliary, the States Organization For Boating Access, BoatUS, the National Marine Manufacturers Association, the Florida Fish and Wildlife Conservation Commission, U.S. Sailing, the Marine Retailers Association of America, the Marine Industries Association of Florida, MBIA Insurance Corporation, Michigan State University, and the Recreational Marine Research Center.

Because the partners of the COP group were data users (and therefore stakeholders), its members were given the opportunity to describe their data needs, which served as a basis for questionnaire development. The SAC, on the other hand, was the group of scientists and boating research experts whose role was to develop methodological guidelines for efficient survey implementation. The outcome was a streamlined list of questions to be used in the revised survey questionnaire and a report of key methodological principles to guide the survey design.

This overall collaborative effort resulted in an extensive survey brimming with useful information. It is hoped that many people will find it valuable, and we will follow up with additional surveys.

For more information

Many more results can be found in the **National Recreational Boating Survey 2012** summary report that was issued by the Coast Guard in April 2014. The report, along with the survey questionnaires, technical reports, and micro-data files, can be downloaded from the Boating Safety Division's website at www.uscgboating.org. ✻

BREAKING DOWN THE NUMBERS

A CLOSER LOOK AT EXPOSURE HOURS FROM THE 2012 NATIONAL RECREATIONAL BOATING SURVEY

By
Dr. Deborah Gona
NASBLA Research Consultant

Tamara Terry
Chair, NASBLA Engineering, Reporting & Analysis Committee

If you love statistics, then you'll find plenty to ogle in the U.S. Coast Guard's recently released summary report of results from the 2012 National Recreational Boating Survey (NRBS). If you loathe them, then you'll probably be inclined to shield your eyes from the collection generated by the NRBS trio of survey components.

The 2012 NRBS numbers come from three survey components:

A **Boat Survey** gathered detail on owned (registered and unregistered) boats in the U.S.; provided the basis for estimating the number of boats in a given state; and served as the recruiting tool for Trip Survey panel members.

A **Trip Survey** gathered monthly detail on boat usage from boat-owning panel members identified through the Boat Survey, and provided the data used to calculate exposure hours nationally, regionally, and at the state level. The trip detail was based on respondents' recall, not trip diaries.

A separate **Participant Survey** gathered information on household and individual adult and child participation in recreational boating and activities, and awareness of safe boating practices. No exposure hours were generated from this survey.

Whatever your predisposition for numbers, it's worth taking a closer look at the 2012 figures. Like mosaic tiles, they've been, and will continue to be, pieced together in different ways to create pictures of recreational boating that inevitably will invite varying inferences about boating participation, boater behaviors, and boat usage.

In the run-up to the release of the data and Coast Guard report for this round of the NRBS, a charge team of NASBLA's Engineering, Reporting & Analysis Committee (ERAC) spent time becoming familiar with many of the 2012 *mosaic tiles,* learning how they were produced and connected, whether their representations would be true-to-life, and what they're likely to be used for over time. In this article and "Tell me more about the 2012 NRBS" (pp. 20-21), as well as future products and forums, we'll lean heavily toward using "layperson speak" in sharing what we've learned.

So, while the information we pass along shouldn't require *you* to be a *mosaic artist*, we hope it will help you become a more *discerning observer* of the pictures of recreational boating that are being created—starting with the 2012 portrayal of *exposure hours* and *risk* on the water.

The expectations surrounding exposure

Of all the numbers to come from the 2012 NRBS, recreational boating exposure hours were among the most anticipated. That was, in part, because the 2012 set of figures would go beyond the national and regional estimates produced by the 2011 NRBS to include exposure hour estimates all the way down to the state level. But it was the possibility of using those exposure hours to more accurately quantify and compare recreational boating "risk" that fueled interest in them before the first survey had even been conducted.

For years, recreational boating casualty and fatality rates have been one set of markers used to evaluate boating safety. The rates have been figured by taking the numbers of boating injuries or fatalities (numerator) and dividing them by the reported number of state-registered boats (denominator). To allow comparisons of the rates across time and jurisdictions, the results typically have been multiplied by a factor of 100,000 to standardize them.

But over time, and the span of two national recreational boating safety strategic plans, the call went out to "fix" the fractions used to calculate the rates, and especially to "fix the denominator problem" in them. While efforts were already under way to improve the collection of the accident report data

used in the top half of the fraction, the Coast Guard's continued use of the number of state-registered boats in the bottom half was targeted as a "problem" for various reasons, not the least of which are the states' different registration requirements. One promising fix was the collection and use of exposure hours as a new denominator. The presumption was that exposure hours would represent a more meaningful relationship to actual risk on the water than boat registration totals. As a bonus, they would make the casualty and fatality rate calculations more comparable to those used in other transportation and recreation modes.

So, although the Coast Guard had set several goals for the NRBS on inception, generating valid and reliable recreational boating exposure hours from the survey was at or near the top of every list describing its purpose.

NRBS measurement goals identified by the Coast Guard

- Exposure hours
- Boating participation and boat ownership
- Boating safety awareness and behaviors
- Economic impact of recreational boating
- Other boat statistics

But beyond the anticipation of being able to use exposure hour estimates—and other NRBS data—to create more solid measures for objectives in the national strategic plan, was the prospect of being able to make broader and deeper improvements to other recreational boating safety performance measures.

In the 2012 NRBS report, the Coast Guard readily acknowledges that over the years different performance audits of the national RBS program have found weaknesses in several areas, among them the lack of solid criteria for monitoring the states' RBS program efforts and reliable, consistent data to conduct those evaluations. The report describes several actions the Coast Guard has taken or plans to take to meet the audits' recommendations, including the following:

> *"...Over the next several years, the RBS Program plans to utilize exposure-based risk ratios as a primary performance criterion that will be employed to evaluate the effectiveness of efforts to reduce accidents and fatalities..."* (**National Recreational Boating Survey 2012 Report**, p. 9)

And *that* creates one more expectation about exposure hours.

If the intent is that the effectiveness of recreational boating programs, campaigns, and services designed to reduce accidents and deaths will one day be measured by a "risk ratio" based on an exposure-hour standard, then it's probably a good idea for anyone involved in developing, implementing, or researching these programs, campaigns, and services to understand what that's about. Let's break it down.

First, what *is* an "exposure hour"?

By definition, *an exposure hour is one hour of one day of one person's time spent on the water participating in a recreational boating activity.*

But for purposes of the 2012 NRBS and understanding the data collected from its trip survey respondents, what did "time spent on the water" really mean?

Exposure hours' estimates produced from the 2012 NRBS trip survey interviews were based on people's reported time on *owned* boats—both registered and unregistered—and time spent on the boats *while they were being operated*. But what about the use of rental boats and the time boaters spent at the dock?

The collection of rental boat data was part of the original NRBS plan. But, after determining rental boats would have a marginal impact on the total number of exposure hours, the Coast Guard ultimately couldn't justify the extra effort needed to collect reliable information on their use. And while "docked day" information was collected from the 2012 NRBS trip survey respondents, it was left out of the exposure hour calculations because it wouldn't match the conditions for recreational boating accidents reported by the states to the Coast Guard. That's relevant in light of the Coast Guard's use of exposure hours as the basis for calculating and presenting what it has labeled in the 2012 NRBS summary report as "risk ratios" for deaths and casualties at the national, regional, and individual state levels. Those ratios are reported out in Table 54 of the 2012 report (pp. 82-83).

(Continued on page 16)

What is a "risk ratio" as used in the 2012 NRBS summary report?

It's intended as a measurement of potential "risk"—potential exposure to accident, injury or death--for a given group, and it's expressed as a fraction. The group could be the nation, a region, a state, a boat type or some other unit.

To allow like-for-like comparisons between groups, the risk ratios presented in the 2012 NRBS summary report are standardized to 100 million exposure hours.

The result of the:

Actual number of events for the group (accidents, injuries, deaths)

----------divided by the---------

Estimate of exposure hours for the group

multiplied by a factor of 100 million exposure hours.

For example, in 2012, Ohio had 11 events (boating deaths). The 2012 NRBS estimated 83 million total exposure hours for Ohio boaters in 2012.

Ohio's 2012 fatality "risk ratio" was calculated by dividing the number of deaths (11) by the state's exposure hours' estimate (83 million), and then multiplying by the factor of 100 million to equal …

13 boating fatalities for every 100 million exposure hours.

And how were the exposure hours estimated?

Calculating the exposure hours eventually used in those ratios was a complicated matter. But the core elements boil down to a formula that accounted for the number of days that boaters reported they had spent on the water in a given time period, the number of hours that the boaters reported they had spent on the water on the days they boated, and the number of persons reported to have been on board the boat on the days they boated.

Core of the Exposure Hourse Calculation

The number of Boater Days times

The number of Boater Hours per Day times

The number of People on Board the Boat per Day

Before information could even be collected to plug into that three-part formula, though, an intricate process was used to figure out *which* boats and boat owners would even be selected to participate in the survey.

When the Coast Guard set out to collect and calculate national estimates of exposure hours, it wanted the estimates to reflect the use of **all** boats owned in the U.S. But the cost of surveying all boats would have been prohibitive. Instead, the Coast Guard achieved its goal through statistical sampling—that is, a sample of boats and their owners would be surveyed in each state. Through a series of phases, the target universe of "all owned boats" was whittled down—first to the subset that would be selected for the NRBS boat survey and then to the even narrower subset that would be used to capture exposure data from the NRBS trip survey respondents.

But in order to get back to the original target and create those national estimates of exposure hours from the much smaller set of boat trip respondents' data, there had to be some statistical compensation for not having all boats and boat owners in the sample—whether that was due to the survey's sampling structure, invitees declining to participate, or participants dropping off along the way for other reasons. A complex data weighting scheme with adjustments was used in the reconstruction process.

The use of a weighting system and series of adjustments isn't unusual for surveys like this. But their use does rely heavily on the assumption that the boaters who end up responding to the survey have characteristics and behaviors *similar* to boaters who weren't selected for the survey or who were selected but didn't respond to the survey requests. That assumption about

non-respondents and the impact on the collection of exposure hours is worth another look, both for purposes of evaluating the quality and validity of the estimates from the 2012 NRBS, and for refining how exposure hours might be collected in the future.

But other factors that may vary widely from year-to-year or place-to-place could also have an impact on the total number of exposure hours, their use in the Coast Guard's ratio calculations, and in figuring out what the results of those calculations of *risk* really mean. Climate swings, environmental changes, culture, and the economy, among many other variables, could affect exposure hour computations and ratio interpretations.

Do exposure hours have a *more accurate* connection with *risk?*

In theory, gathering up the total number of hours that boaters in a certain group are actively on the water in a given time period should offer a more accurate estimate of their exposure to *actual risk* on the water than just knowing the total number of registered boats for that group. After all, not all boats are registered—there *are* state-to-state differences in registration requirements—and not all boats are used to the same extent, for seasonal and other reasons. But whether exposure hours or registered boats are used as the basis for estimating risk and making comparisons, there are caveats associated with each. Some are described in "Things to keep in mind when you're interpreting rates".

Things to keep in mind when you're interpreting casualty or fatality rates that use the …

Number of state-registered boats as the denominator in the fraction

- If two states have an equal number of injuries or fatalities, the state that registers *all boats* will show a *lower* casualty or fatality rate than the state that registers only a portion of its boats--not necessarily because the former's "risk" for injury or death is really lower, but because the denominator used in its rate calculation will be larger.

- It could be misleading to compare casualty or fatality rates between states that have longer boating seasons and states that have much shorter seasons--even if the number of registered boats in each is similar, their average number of boat use hours will be different.

Number of exposure hours as the denominator in the fraction

- Boating injuries and deaths are assigned to the states where they actually occurred. Exposure hours from the NRBS are assigned to the states on the basis of where the boats were registered or the owners resided at the time of the survey, not on the basis of where the boats were operated. For some states, that might not make much difference in the calculation of their casualty or fatality rates. But for states where a large proportion of boats used on their waterways—and becoming involved in accidents—are from out-of-state, the impact on their rates could be significant.

- As averages based on the entire population of boaters associated with some group (e.g., nation, state or boat type), rates that use exposure hours aren't necessarily stating the "risks" that would be experienced by an individual boater. The average rate might *overstate* risk for an operator who uses a well-equipped boat at slow speeds in daylight and *understate* risk for an operator who uses a less well-equipped boat at high speeds at night

So, what *do* the 2012 exposure hour estimates and risk ratios tell us?

Apart from the table of casualty-related figures, the 2012 NRBS report offers a summary of the "average risk ratios" for the U.S., comparisons of the regional figures, and identification of states with the "highest risk" and "lowest risk" of casualties and deaths based on those for which 2012 ratio calculations were made and presented. But it doesn't spend a lot of time in that discussion and probably for good reason. While the exposure hour estimates and ratios calculated for the nation, four regions, and individual states are interesting, there are limits to the conclusions that can be drawn from them right now, for a number of reasons.

For example, the national and regional exposure hour estimates and ratios generated by the 2011 NRBS and 2012 NRBS can't legitimately be compared because of methodology differences between the two surveys as described in the 2012 report and by Dr. Philippe Gwet of the U.S. Coast Guard in his article "Highlights of Findings from the Coast Guard 2012 National Recreational Boating Survey" (pp. 10-13). But, even if there'd been *no* differences in the methods used for the 2011 and 2012 versions of the NRBS, there'd *still* be reason for caution in suggesting year-to-year changes because those changes might not be statistically significant.

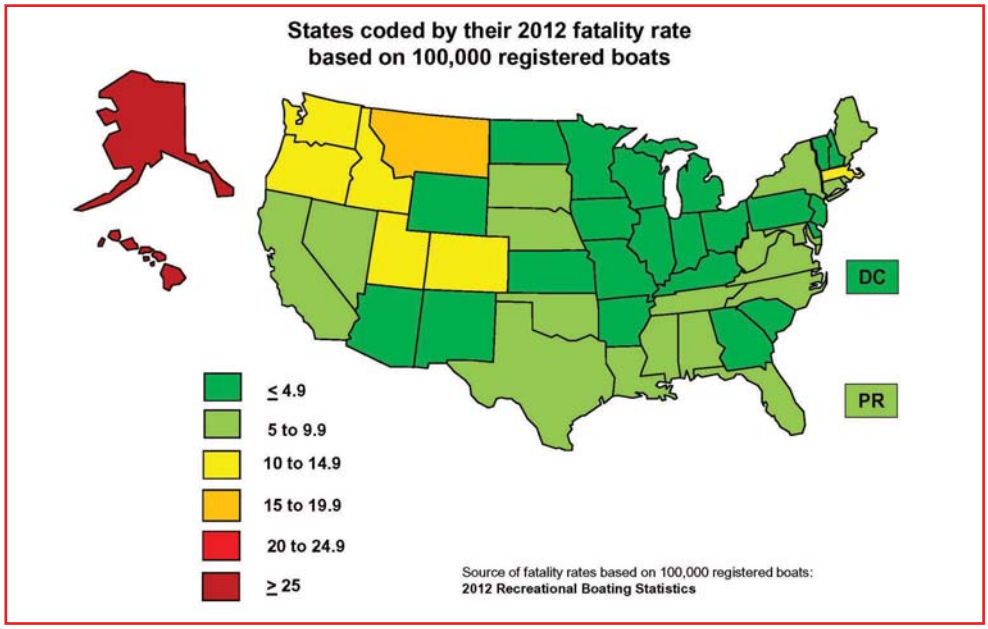
And for the states, the one year's worth of exposure hour estimates and ratios resulting from the 2012 NRBS does not make for a trend analysis. On the other hand, *why* three of the jurisdictions *don't have* the year's worth of casualty and death ratios to consider because of a "large statistical error" in their 2012 calculations, does make for an important future analysis of the measures themselves—that is, how do you resolve ratio calculations when either the exposure hours estimates or the numbers of accidents themselves are *too low* to result in valid statistics for a state?

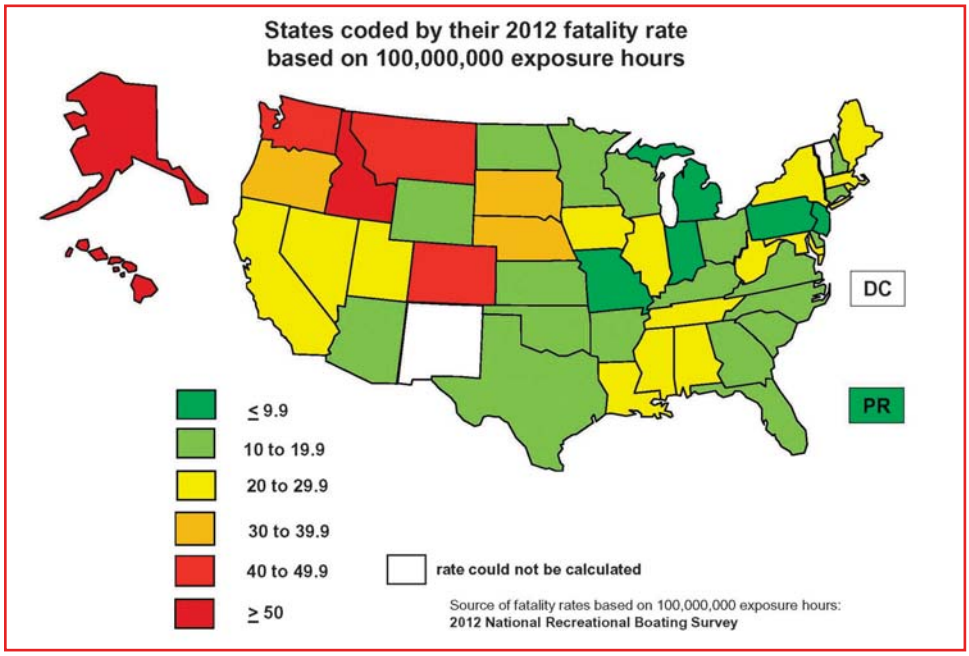
All that said, a first glimpse into the state-level ratios lends a few clues that

(Continued on page 18)

eventually could help answer questions at the core of expectations about using exposure hours to calculate casualty and fatality rates: *Do they really provide a more accurate and meaningful measure of "risk" in recreational boating?*; and *Are the "results" of exposure-based rates distinctly different from those based on the total number of registered boats?*

State-level fatality rates based on 100 million exposure hours and on 100,000 registered boats are both available for 2012—the former from the 2012 NRBS and the latter from the Coast Guard's 2012 Recreational Boating Statistics. Based on a preliminary examination of the figures, for many of the states for which 2012 exposure hour calculations could be made, there's little apparent difference between those results and what would have been "concluded" about fatalities based on their registered boats-based rate alone. In a broad-brush comparison, states that presented what might be termed *low* rates using the registered boats measure generally also had *low* rates using the exposure hours' calculation; the same generally can be said for states on the other end of the rate spectrum. But what if the rates were used to "rank order" the states? Turns out that for some states, a more marked difference would appear if comparisons were made between how they rank on their fatality rates based on registered boats and on their rates based on exposure hours. At least eight states would shift in their "rank order" by 10 or more places. Half of them would fare *better* using the exposure hours-based measure; half of them would fare *better* with the registered boats-based measure. What isn't immediately clear is *why?*





It's another question that deserves more attention in the continuing evaluation of the exposure findings from the 2012 NRBS—not just for getting a better handle on the meaning behind the current numbers and their relationships to the current registered boats-based measure, but also for figuring out what fine-tuning might need to be made to the next round of collections and calculations.

Continuing the exploration…

At the 91st meeting of the National Boating Safety Advisory Council in May 2014, Capt. Jonathan Burton, Director of Inspections and Compliance for the Coast Guard, announced a postponement in the administration of the next NRBS, which had been scheduled to get under way this year. The delay, due largely to funding uncertainties associated with the reauthorization of the Sport Fish Restoration & Boating Trust Fund, does have some positive aspects, however. It should afford additional time for more of the interested parties to carefully examine the 2012 data, and ultimately, it should help chart the course of the next round of surveying.

ERAC will continue exploring the exposure hour estimates, including breakdowns of the state-level estimates by main boat types, and evaluating other data, especially at the state-level, that didn't receive as much or any attention in the 2012 summary report. The committee welcomes additional input and insight from interested parties throughout this process, and readers can join in that discussion by e-mailing info@nasbla.org (subject line: ERAC) with your thoughts, comments, and suggestions for analysis. ✻

Deborah Gona serves as committee staff to ERAC. Committee Chair Tamara Terry is Recreational Boating Accident Program Manager, Ohio Department of Natural Resources' Division of Watercraft. Both wish to acknowledge the significant time, effort, and valued expertise that all of ERAC's team members have brought—and continue to bring—to the committee's charge to evaluate the NRBS methodology and findings. Special thanks is extended to Dr. Philippe Gwet, U.S. Coast Guard, for his invaluable assistance and responsiveness to the team's work, providing key data and resources for its use, as well as patient answers to the team's many questions; and to Dr. L. Daniel Maxim, U.S. Coast Guard Auxiliary, for his contributions to the team's discussions on statistical and measurement issues and preliminary evaluations of exposure hours data, and for his ongoing efforts toward improvements in recreational boating data quality.

TELL ME *more* ABOUT THE 2012 NRBS

A charge team of NASBLA's Engineering, Reporting & Analysis Committee (ERAC) spent time learning about the methodology behind the 2012 National Recreational Boating Survey well before the Coast Guard's summary report of findings hit the virtual street of the Internet (www.uscgboating.org). Some of what the team learned is described in the article "Breaking down the numbers: A closer look at exposure hours from the 2012 National Recreational Boating Survey" (pp. 14-19), but other survey and report details also caught members' attention. The following are based on some of the NRBS "how's" and "why's" that have emerged from team discussions to date. *(A note of appreciation to Dr. Philippe Gwet, U.S. Coast Guard, for participating in the ERAC team discussions and responding to members' questions and requests for clarification on matters of interest.)*

The terms "exposure hours" and "boat-person hours" are both used in the 2012 NRBS summary report issued by the Coast Guard. Are they different things?

Not for purposes of the NRBS.

But exposure hour estimates can be calculated in different ways. In describing its calculations in the report, the Coast Guard wanted to emphasize that the *number of boaters was taken into account, not just the number of hours the boat was operated.* So, if two persons spent one hour on a boat, then the count wouldn't be one hour ... it would be two boat-person—or exposure—hours.

There is a reason for choosing an exposure hours' calculation that takes into account the number of boaters. Although the likelihood that a boat gets into an accident might just be a function of the number of hours the boat was operated, the more persons on board, the greater potential consequences of the accident.

The "risk ratios" in the 2012 NRBS summary report are based on 100 million exposure hours. Such a large number! Can't they be reduced to something closer to what a boater might really experience in a given year?

Don't do it! They're meant to be a measure for a population as a whole, not a single individual. Grouping by 100 million hours compensates for "variance" in behaviors within the whole group. That methodology brings it closer to what's used for measuring "risk" in other forms of transportation and recreation.

So, while it might be tempting to try to reduce the ratio to something a typical boater might experience in a year—like "x" accidents per 500 exposure hours in a state—the end result would be a flawed statistic.

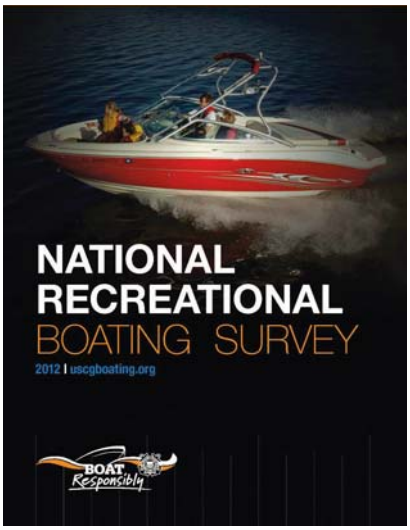
Death or casualty "risk ratios" weren't reported for three states. Table 54 (pp. 82-83) of the summary report says the problem was an "unreliable number due to large statistical error." What does that mean?

Actually, that "unreliable number" doesn't mean the same thing for all three states, although they did have something similar in 2012—either no recreational boating deaths or just one death.

One of the three, New Mexico, shows "zero" exposure hours in Table 54, but that's because the estimate calculated from the trip survey was below 500,000 hours.

The estimate was determined to be "unreliable" and no "risk ratios" were calculated for deaths (one in 2012) or casualties (14 in 2012).

But the issue was a little different for the other two, Vermont and the District of Columbia, and it's an issue worth



considering in discussions about the meaning of "risk ratios" and possible refinements in the way they might be calculated in the future. Although valid estimates were calculated from the trip survey for exposure hours in each of those jurisdictions, it was their zero deaths and low casualty counts that prevented the Coast Guard's calculation of valid ratios.

The 2012 summary report (Table 6, pp. 19-20) describes the sample sizes and completed interviews for the participant survey part of the NRBS. Why were the target sample sizes pretty similar across the states? After all, there are some good sized differences in the numbers of registered boats across them.

Well, for one thing, the participant survey—unlike the boat and trip survey components of the NRBS—wasn't based on boats. It was based on people—a population-based survey to get at recreational boating participation in the 50 states, District of Columbia, and Puerto Rico. It didn't matter whether or not the respondents owned a boat or registered a boat.

The target sample sizes were relatively similar across the states to produce comparable accuracy at the state level or, in statistics-speak, the sample was allocated to achieve a "margin of error" of +/- 5 percent for household-level estimates within each of the jurisdictions.

Since state-level data was collected for both the NRBS participant survey and the NRBS trip survey, they can be combined, right?

Don't even attempt it! They're two separate surveys that had different purposes and different sampling frames.

How were the NRBS trip survey panelists identified?

They were recruited from among participants in the boat survey. The boat survey collected detail on registered and unregistered boats from their owners.

So, if a trip survey panelist had more than one boat, were they asked to report on how they used all of their boats during the previous month?

No. Even though the boat survey identified all of the boats a trip survey panelist owned, if the panelist was contacted for the monthly survey, they were only asked to report boat trip information for one of their boats. The information the panelist reported was used in calculating the exposure hours.

But if an NRBS trip survey panelist took that boat out for 10 days during the month, they had to report on the number of hours and number of people on that boat for all of those days, right?

No. Panelists were only asked questions about two boating days. If a panelist took their boat out for 10 days or any number of days beyond two, then two days were randomly selected, by computer. In the calculations of exposure hours, a weighting "adjustment" was made to compensate for the other days.

For the NRBS trip survey, apart from being placed into one of four regions, states were also designated as "Northern" or "Southern." Why was that?

That was for sampling reasons and was based on which states were identified as having longer boating seasons ("Southern") or shorter seasons ("Northern").

Trip survey panelists in Southern states were surveyed each month throughout the year, while panelists in Northern states were surveyed every month during the summer. In the winter, panelists in the Northern states were surveyed in January for their boating trips in the prior October through December, and in April for their trips in January through March.

Where can I find all of the background documents associated with the 2012 NRBS?

At www.uscgboating.org/statistics/survey.aspx, you can find the questionnaires used for all three survey components of the NRBS; the methodology reports for the trip and participant surveys; and four micro-data files for 2012. For more detail specific to the boat survey, see the 2011 files on that page.

At www.nasbla.org/ERAC, you can follow links to other survey-related resources provided to the NASBLA ERAC charge team by the Coast Guard (e.g., an analysis prepared for the Office of Management and Budget on non-response issues associated with the three NRBS survey components) and materials developed as a result of the team's discussions (e.g., a simplified version of the data weighting methodology used in the NRBS trip survey). ✻

BOATING Briefs

Adm. Zukunft takes command of Coast Guard

Adm. Paul Zukunft salutes during a change of command ceremony at Coast Guard Headquarters in Washington on May 30, 2014. U.S. Coast Guard photo/Petty Officer 2nd Class Patrick Kelley

Admiral Paul F. Zukunft assumed command as the 25th commandant of the Coast Guard on May 30, relieving Adm. Bob Papp during a military ceremony.

"Admiral Papp's leadership and resolve have left an indelible mark on the service," said Zukunft. "The Coast Guard is more proficient, more capable and more resilient due to his contributions and I wish him fair winds and following seas."

"To the men and women of the Coast Guard, I'm humbled to stand before you as your 25th Commandant," said Zukunft. "You embody the world's best Coast Guard."

Admiral Zukunft reports to Coast Guard Headquarters from Alameda, Calif., where he served as the Coast Guard Pacific Area Commander since 2012. In this capacity, he was the operational commander for all Coast Guard missions from the Rocky Mountains west to the east coast of Africa. Zukunft will lead the largest component of the Department of Homeland Security, comprised of 41,700 active duty, 7,800 reserve and 8,300 civilian personnel as well as more than 31,000 volunteer Coast Guard auxiliarists.

US Coast Guard announces nonprofit grant awards for recreational boating safety

The U.S. Coast Guard announced the awarding of 24 competitive grants totaling more than $4.8 million for recreational boating safety initiatives.

Fourteen national nonprofit organizations received cooperative agreement funding to advance the National Recreational Boating Safety Strategic Plan objectives designed to reduce the number of accidents, injuries and deaths on America's waterways and to facilitate a safe, enjoyable boating experience for the public.

Grant recipients will receive funds for multiple endeavors, including increasing life jacket wear rates; standardizing national boating safety training courses; reducing alcohol-related boating fatalities; and conducting multiple media outreach safety campaigns.

The grant program is annually distributed by the U.S. Coast Guard from the federal Sport Fishing Restoration and Boating Trust Fund apportionment.

Neffenger nominated as next USCG Vice Commandant

U.S. Coast Guard Vice Admiral Peter Neffenger relieved Vice Admiral John Currier as Vice Commandant of the Coast Guard during a change of watch ceremony on May 20.

Prior to this, Vice Admiral Neffenger served as the Deputy Commandant for Operations, where he directed strategy, policy, resources and doctrine for the employment of Coast Guard forces globally. He is a recognized expert in crisis management, port security, and oversight of the commercial maritime industry. He most notably served as the Deputy

National Incident Commander for the 2010 BP Deepwater Horizon Oil Spill, the largest and most complex in U.S. history.

A native of Elyria, Ohio, Neffenger was commissioned in 1982 at Coast Guard Officer Candidate School in Yorktown, Va., and has had a diverse career of operational and staff assignments in emergency response, commercial maritime industry oversight and general maritime law enforcement. He has earned three Master's degrees: in National Security and Strategic Studies from the Naval War College, in Public Administration from Harvard University's Kennedy School of Government and in Business Management from Central Michigan University.

New Alaska Office of Boating Safety video wins Emmy

Cold Water Survivors, a new instructional video from the Alaska Office of Boating Safety, recently received an Emmy Award from the National Academy of Television Arts and Sciences, Northwest Chapter at their 51st annual award ceremony.

Developed for teens, the video reinforces the learning objectives of the Kids Don't Float Education program about cold-water immersion and the importance of wearing life jackets when boating on Alaska's cold water. The video tells the real-life story of Miranda and Hanna Koger Udelhoven, who survived a boating tragedy on Tustumena Lake in 2011. "These remarkable young women and their compelling account will help us reach teens with potentially lifesaving information," said Joe McCullough, Education and Training Coordinator and the project manager. The video is one of many educational products available through the Office of Boating Safety.

New boating safety videos now available

Boat Ed has produced a brand-new series of boating safety videos that promote learning while being fun to watch. These videos can be used to supplement lessons in the classroom setting. They will also be available to students who take their state-approved boating safety training at boat-ed.com.

Each of the 15 videos in the series is about four to five minutes long and focuses on essential safety content. Some topics included in this series are Rules of the Waterways, Wearing Life Jackets, PWC Safety, Aquatic Invasive Species and Avoiding Accidents. Check out the full-length preview of each video at https://kalkomey.wistia.com/projects/9d8a6dc74n.

This set of 15 videos is available on a menu-driven DVD. To order, contact Janice Roff at jroff@kalkomey.com or call 800.830.2268.

Education becomes mandatory for some vessel operators in Georgia

Beginning July 1, completion of a boater education course became mandatory for all vessel operators in Georgia born on or after Jan. 1, 1998.

"In an effort to provide a mechanism for ensuring that Georgia boaters are knowledgeable, boaters will be required to complete a boating education course," says DNR Lt. Col. Jeff Weaver, assistant director of Law Enforcement. "After all, tragedy can happen quickly and making an effort to learn boating laws, rules and regulations can potentially save a life — including your own."

This new boater education requirement states that any person born on or after Jan. 1, 1998, that operates any motorized vessel on the waters of the state must have completed a boat education course approved by the Department prior to such operation. Exemptions include:

- A person licensed by the Coast Guard as a master of a vessel;
- A person operating on a private pond or lake;
- A non-resident who has in his or her possession proof that he or she has completed a NASBLA-approved boater education course or equivalency examination from another state.

(Continued on page 24)

BOATING Briefs

Longtime boating safety advocate honored by US Coast Guard

CAPT F. Thomas Boross, chief of the U.S. Coast Guard's Office of Auxiliary and Boating Safety, presents Augusto "Kiko" Villalon with the Recreational Boating Safety Award of Excellence. NSBC photo

During the 18th International Boating and Water Safety Summit held in April 2014, the Office of Auxiliary and Boating Safety of the U.S. Coast Guard presented the Recreational Boating Safety Award of Excellence to Augusto "Kiko" Villalon for his many decades of tireless efforts and contributions in support of recreational boating safety.

Kiko began his career in the recreational marine industry in 1962, and as early as 1963 he became a member of the American Boat & Yacht Council's Hull Performance Project Technical Committee to further his interest in developing and maintaining safety standards for boat manufacturing.

After almost 30 years with ABYC and his continued interest in making boats safer, Kiko applied for, and was appointed to, the National Boating Safety Advisory Council (NBSAC) in 1990. He served two three-year terms, during which time he never missed a meeting.

As a one-man "Tiger Team" under contract for the Boating Safety Program to investigate fatal boating accidents, Kiko's boat design and construction expertise allowed him to piece together the information needed to determine the accident cause, which had eluded other investigators. Kiko's untiring devotion to the National Recreational Boating Safety Program is most heartily commended and is in keeping with the highest traditions of the United States Coast Guard.

New world record set at Ready, Set, Wear It! event

Thousands of boating enthusiasts set a new world record for life jacket wear during the fifth annual Ready, Set, Wear It! Life Jacket World Record Day on May 17, 2014. At 175 events around the globe, 6,973 participants inflated their life jacket or wore an inherently buoyant life jacket, breaking the world record for life jacket wear.

The National Safe Boating Council and Canadian Safe Boating Council partnered to support the event, part of the yearlong Wear It! campaign to promote boating safety and voluntary wear of life jackets.

"I am amazed by the international support for Ready, Set, Wear It! and boating safety," said National Safe Boating Council Executive Director Rachel Johnson. "Thank you to our volunteers, partners and retail sponsors for their dedication to making this event fun and heightening awareness of boating safety."

The previous world record of 5,774 participants was set during last year's event. Nearly 20,000 people have participated in the event since 2010.
For more information, visit http://www.readysetwearit.com.

Virginia governor's veto preserves boater education, commitment to safety

Virginia Governor Terry McAuliffe vetoed a bill that would have exempted many boat operators who are over the age of 45 from the state's current boating education requirement.

The bill vetoed by Governor McAuliffe would have exempted boat operators over 45 who've had a boat registered in Virginia for six continuous years. Proponents argue that someone who grows up on the water knows the water and its rules of safety.

Stressing the importance of safety, Governor McAuliffe stated "I believe that the bill as

passed endangers those Virginians who make use of public waterways." Since the education requirement was enacted in 2007, the number of accidents has dropped from an average of 119 to 64 in 2013, and fatalities have dropped from an average of 21 to 11 in 2013.

WSIA releases 'Responsible Boating' video

With the help of professional wakeboarder Shaun Murray, the Water Sports Industry Association released a new video to promote responsible boating habits. The video focuses on driving and passenger safety, the importance of maintaining access to waterways for boating enthusiasts and being respectful to other users out on the water.

The WSIA encourages media and other industry participants to share the video through social media channels in order to spread their message of safety.
For more information, visit www.wsia.net.

Study examines impact of access on fishing, boating

Is boating access impacting boating and fishing participation? To answer this question, Responsive Management, a survey research organization, conducted a study on behalf of the States Organization for Boating Access (SOBA). The study, Enhancing Fishing Access through a National Assessment of Recreational Boating Access, explores boating access in the U.S., examining the current and future needs for boating access.

Mark Duda, executive director of Responsive Management, will present two comprehensive sessions on the study at SOBA's 2014 National Boating Access Conference in Little Rock, Arkansas, Oct. 6-9. Duda will dig deep into the data, will be on hand to discuss elements of the survey and will work with the group to determine where to go from here.

See the full report at http://tinyurl.com/EnhancingFishingAccess.

Coast Guard creates Spanish-language boating accident report form

The U.S. Coast Guard has created a Spanish-language boating accident report form designed for use by the public. Feel free to use the form, refer to it and post it to your website. If you receive a Spanish-language form and don't have the resources to translate it, please send it to the Coast Guard at Susan.M.Tomczuk@uscg.mil.

Nominate heroes for Officer of the Month Award

Law enforcement has many heroes — officers who distinguish themselves every day through exemplary service and devotion to duty. To recognize these "living legends" of the profession, the National Law Enforcement Officers Memorial Fund created the Officer of the Month Award Program in September 1996. Visit http://www.nleomf.org/officers/month to read the inspiring stories of heroism and service of past award winners, and consider nominating an officer you know or work with for this prestigious national award.

Power Squadrons unveils new boating safety simulator

The United States Power Squadrons and Virtual Driver Interactive have launched a new joint project – the Boating Safety Virtual Trainer. This interactive simulation-based

(Continued on page 26)

BOATING Briefs

boating safety program allows people to practice exercises such as docking and maneuvering a slalom course.

Featuring three computer screens with a rotating field of vision, a steering wheel and a Mercury Marine throttle, the simulator reacts to variable settings for trim, current and wind.

The realistic boating experience is the result of sophisticated water physics software developed by Virtual Driver Interactive and funded through a Coast Guard grant. Other participating partner organizations include the National Safe Boating Council, the BoatUS Foundation, Brunswick Marine, Mercury Marine and Boston Whaler.

The use of a simulator does not replace live on-water training but is meant to provide a close approximation that can be used as an on-water training tool commensurate to existing and future on-the-water Power Squadrons programs. Simulation allows students to navigate on-the-water scenarios, where they contemplate and make decisions using critical thinking.

The training unit is the first of its kind in the nation. Five units have been funded and will be available for use by the Power Squadrons later in 2014.

Discover Boating joins chart-topping country star to inspire fans to experience life on the water

Discover Boating will join chart-topping country artist Jake Owen for his nationwide 2014 "Days of Gold" tour as presenting sponsor to inspire his millions of fans and concert-goers to discover life on the water. A lifelong boater, Owen will share stories of how boating creates unique connections, freedom and fun in his life and music, unlike anything he's ever experienced on land. His boating stories will be featured throughout his eight-month tour and as part of Discover Boating's new 2014 "Stories of Discovery" campaign.

Visit www.growboating.org for a message from Jake Owen to the recreational boating industry. To read about his love for boating, visit www.discoverboating.com and click on the Boating Lifestyle tab, then click on Big Name Boaters. To learn more about the Days of Gold tour, visit JakeOwen.net.

Partnership launches national database of youth boating & fishing programs

Discover Boating and The Recreational Boating Leadership Council (RBLC) recently launched a national database of youth fishing and boating programs.

The database has hundreds of programs across the country, but the industry is urged to help in fleshing out the list to include all programs that offer kids fishing and boating opportunities. Whether it's an annual fishing tournament or a summer camp with a boating program or wakeboarding club – Discover Boating and the RBLC would love to hear from you. To submit information, use the online form at www.discoverboating.com/boating-courses/youth-boating-programs-submit.aspx or email program information to co-chair, George Harris, at george@nmta.net.

National organization launches bilingual boating safety video

In the ramp-up to National Safe Boating Week in May, the National Safe Boating Council released its new bilingual public service announcement (PSA). Titled Love the Life!, the PSA shares the experience of two families and a dog as they spend the day boating and fishing. The NSBC also posted two print ad options and two radio ads. Visit www.safeboatingcampaign.com/psas.htm to view the video and ads. Feel free to use these resources as well as other materials on the website to create boating safety awareness. ✻

Your job is to tackle ADVERSITY every day.

OUR JOB IS TO HELP YOU GET THERE AND BACK HOME.

850 IMPACT RHIB

24' JUSTICE


37' JUSTICE

Like you, Brunswick Commercial and Government Products (BCGP) boats are built to go the distance. Fast. Dependable. Capable. Choose from extraordinarily stable Impact rigid hull inflatables or unsinkable fiberglass Boston Whalers to get you there and back. With more than 50 years dedicated to building commercial boats, the only thing that matches the longevity of our boats is our company.

- **Ample dry storage for weapons and computer equipment**
- **Ergonomic designs built for the working professional**
- **Choice of fiberglass and RHIB hulls ranging from 15-39 feet**
- **Superior after-the-sale customer service**

BRUNSWICK COMMERCIAL AND GOVERNMENT PRODUCTS, INC.
386.423.2900 • brunswickcgp.com

BRUNSWICK COMMERCIAL & GOVERNMENT PRODUCTS

Brunswick Commercial and Government Products (BCGP) is a division of Brunswick Corporation — the largest marine manufacturer in the world.

TWO BOATING SAFETY ADVOCATES INDUCTED INTO BOATING SAFETY HALL OF FAME

Earlier this year, two boating safety champions were inducted into the National Safe Boating Council's Boating Safety Hall of Fame. The Boating Safety Hall of Fame recognizes individuals who have shown exemplary leadership and performed outstanding service on behalf of boating safety. There are only two inductees each year.

Marty Law recently retired after 33 years with the Oregon State Marine Board. Since joining Oregon's boating agency in 1979, Law served as education coordinator, education and information section manager and Boating Safety Program manager. Nationally, he served as the chairman of the National Association of State Boating Law Administrators (NASBLA) education committee and chairman of the National Safe Boating Council in 1997-98. He also was the recipient of the 1997 NASBLA Boating Safety Award.

"There's no doubt that Marty has achieved great things in the state of Oregon, making recreational boating safer throughout the years," Virgil Chambers, director emeritus of the National Safe Boating Council, said during the presentation.

During Marty's career at OSMB, he was the driving force behind the implementation of Oregon's mandatory education program. The state's mandatory boater education law was passed by the 1999 Oregon Legislature, with implementation beginning in 2001. The Marine Board began the age phase-in to power boat operators in January 2003 for boaters 30 and younger. This program continues to be a model that has been followed by other states across the country. Oregon has seen a continued decrease in the number of boat accidents and power boater deaths since the implementation of the law.

As the Boating Safety Program Manager and Boating Law Administrator, Marty implemented significant changes that have improved boating safety in Oregon through improved enforcement. For the first time in over 25 years, Marty led an effort to revamp the process to determine funding for Oregon's 31 counties by establishing an objective formula that relies on boat use data to determine allocation. By working with a sheriff's committee, Marty designed an implementation plan and a phase-in schedule to ensure counties would be able to adapt to the changes.

Additionally, Marty oversaw the largest boat replacement program in more than a decade by working with agencies to identify new platforms and offset costs through sales and trade-ins of their older boats. Through Marty's work, more counties than expected were able to replace their boats due to savings he found through the process. In just the first year, Marty's work with the sheriff's departments resulted in 2,448 additional patrol hours on Oregon water bodies over the previous year despite no additional funding.

Throughout many years, Dan Maxim has held U.S. Coast Guard Auxiliary posts from Flotilla Commander through District Rear Commodore, and has been appointed to various national staff positions including the Branch Chief through Department Chief of Education.

Dr. Maxim has also served as the U.S. Coast Guard Auxiliary liaison to the National Boating Safety Advisory Council (NBSAC) and served as the former National Directorate Commodore, Recreational Boating Safety.
In addition, Dr. Maxim has U.S. Coast Guard training at the National Search and Rescue School, National Aids to Navigation (ATON) School, National Advanced Vessel Operator School, and numerous leadership courses. He is the only U.S. Coast Guard Auxiliarist nominated to attend the U.S. Coast Guard Academy Loran-C Engineering course and one of just two U.S. Coast Guard Auxiliarists funded to attend the University of Southern California course in Aviation Safety Program Management.

"Dan's dedication to boating safety and his continuous work of thinking outside the standard concepts has truly shaped the recreational boating safety community," commented Fred Messmann, deputy director of the National Safe Boating Council. "His ability to articulate what is missing and provide suggestions on possible solutions is key to many of the intervention policies being developed for boating safety today and into the future."

His unique talents are now being utilized on the Research and Development Objective, a new objective the National Strategic Plan of the Recreational Boating Safety Program. At his suggestion and guidance, those committed to shaping the Strategic Plan have helped to better collect data, fill in the gaps and look into the future to mitigate the consequences of missed opportunities. It's important to note that Dr. Maxim does all of this work on a volunteer basis. Dr. L. Maxim is president of Everest Consulting Associates, a consulting firm located in Cranbury, New Jersey, that conducts research in health, safety and environmental quality for clients in the mineral industries. Dr. Maxim holds three Masters Degrees and a Ph.D. in operations research with an emphasis on statistics and economics.
He is an experienced navigator, both aircraft and marine, is an aircraft pilot, rated for commercial, instrument, single and multi engine land and sea, gliders, advanced and instrument, is a flight instructor and owns a Post 42' Sport Fish boat. ✻

For more information and full list of Boating Safety Hall of Fame inductees, visit SafeBoatingCouncil.org.

boat-ed.com™
Get Safe. Get Certified.

Contact: Mitch Strobl
mstrobl@kalkomey.com
214-437-9900

kalkomey™
kalkomey.com

SCA
small craft advisory
July-August 2014 | Vol. 29 No. 4
1648 McGrathiana Parkway, Suite 360
Lexington, KY 40511
Change Service Requested

YOUR BOATING DOLLARS AT WORK
Produced under a grant from the Sport Fish Restoration and Boating Trust Fund, administered by the U.S. Coast Guard.

PRESORTED STANDARD
U S POSTAGE PAID
CLEVELAND OH
PERMIT NO 1702

NASBLA

2014-15 Recreational Boating Safety Calendar

2014

August

21-24
U.S. Coast Guard Auxiliary National Convention
Orlando, Florida
http://cgauxa.org/nacon

September

7-14
United States Power Squadrons Governing Board Meeting
Arlington, Virginia
www.usps.org

8-11
NASBLA Comprehensive Boating Accident Investigation Course
Biloxi, Mississippi
www.nasbla.org/accident
chris@nasbla.org
859.225.9487

14
American Canoe Association Board of Directors Meeting
Grand Rapids, Michigan
www.americancanoe.org
wblackwood@americancanoe.org

15-17
American Canoe Association Adaptive Paddling Summit
Grand Rapids, Michigan
americancanoe.org/?page=Adaptive_Summit
jmoore@americancanoe.org

October

6-9
States Organization for Boating Access Annual Boating Access Conference
North Little Rock, Arkansas
www.sobaus.org

11-12
Ride & Run to Remember National Law Enforcement Officer Memorial Fund
Washington, D.C.
rideandruntoremember.com

14-15
NASBLA Education Standards Panel Meeting
Bangor, Maine
www.nasbla.org
pam@nasbla.org
859.225.9487

19
National Boating Federation Executive Committee Meeting
Bar Harbor, Maine
http://n-b-f.org

16-19
NASBLA Annual Conference
Bar Harbor, Maine
www.nasbla.org
info@nasbla.org
859.225.9487

23-25
US Sailing Annual Meeting
Milwaukee, Wisconsin
ussailing.org
events@ussailing.org
401.683.0800

November

4-5
Homeland Security Outlook Maritime Security Caribbean
Nassau, Bahamas
maritimesecuritycaribbean.com

16-19
Marine Retailers Association of the Americas Marine Dealer Conference & Expo
Orlando, Florida
www.mraa.com
info@mraa.com

19-21
C-PORT Conference and Membership Meeting
West Palm Beach, Florida
http://cport.us

December

3
National Recreational Boating Safety Coalition Meeting
Washington, D.C.
NRBSCoalition@aol.com
202.257.2836

7-10
NASBLA RBS Instructor Development Workshop
Jacksonville, Florida
www.nasbla.org/MOI
859.225.9487

2015

January

18-25
United States Power Squadrons Annual Meeting
Jacksonville, Florida
www.usps.org

28-30
Association of Marina Industries International Marina & Boatyard Conference
Tampa, Florida
marinaassociation.org
imbc@marinaassociation.org
401.682.7334

February

21
American Canoe Association Board of Directors Meeting
Fredericksburg, Virginia
www.americancanoe.org
wblackwood@americancanoe.org

March

1-4
International Association of Marine Investigators Annual Training Seminar
http://iamimarine.org/iami

May

6-7
American Boating Congress
Washington, D.C.
www.nmma.org

16-22
National Safe Boating Week
www.SafeBoatingCampaign.com

June

26-28
Operation Dry Water
operationdrywater.org

August

27-30
U.S. Coast Guard Auxiliary National Convention
San Antonio, Texas
cgauxa.org/nacon

Register

now for NASBLA's 55th Annual Conference

October 16-19, 2014
Bar Harbor, Maine
www.nasbla.org