

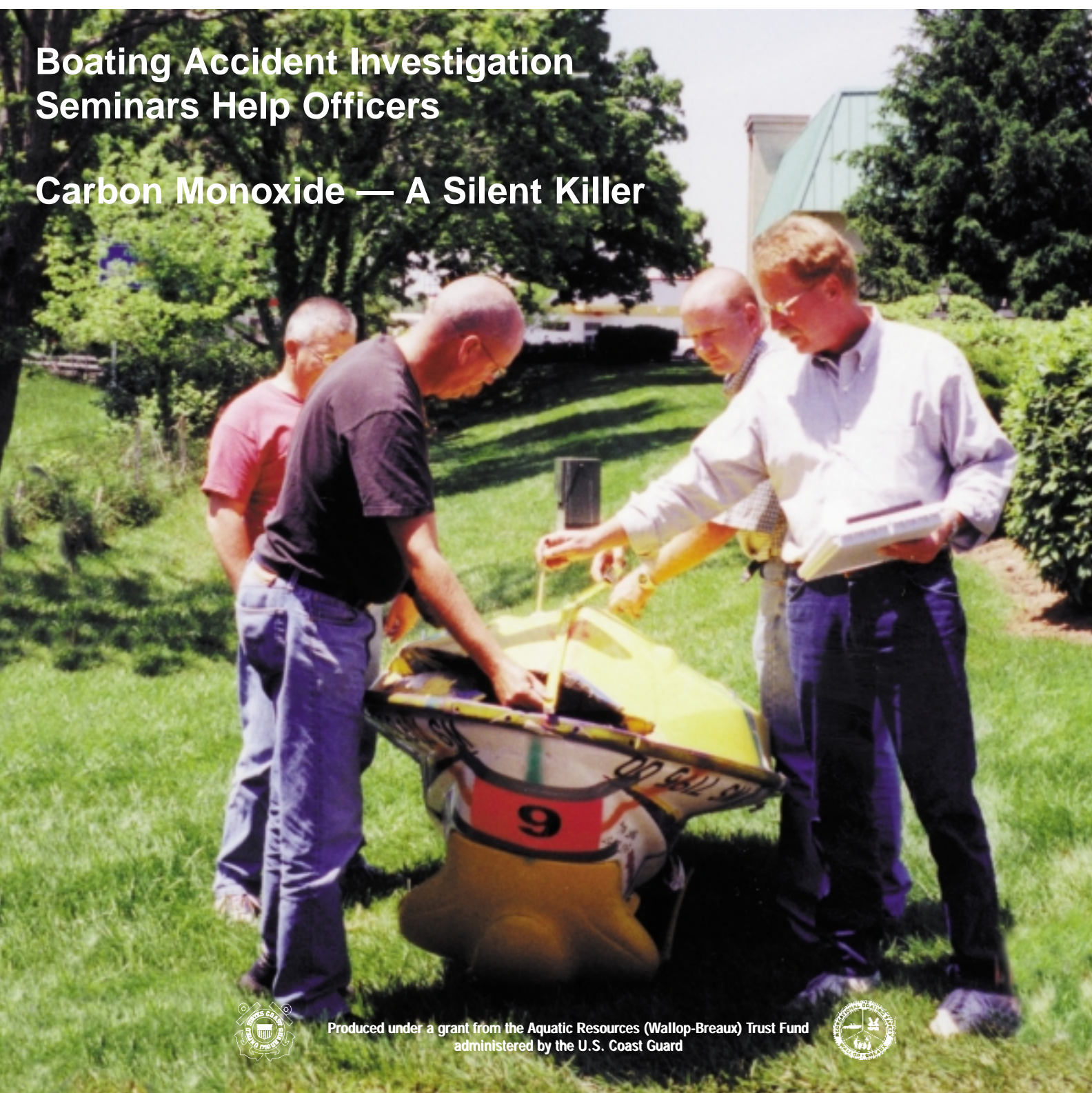
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JUL/AUG 2002 VOL. 17 - NO. 4

NATIONAL ASSOCIATION OF STATE BOATING LAW ADMINISTRATORS

Boating Accident Investigation Seminars Help Officers

Carbon Monoxide — A Silent Killer



Produced under a grant from the Aquatic Resources (Wallop-Breax) Trust Fund
administered by the U.S. Coast Guard





Steve Hall
NASBLA President



It's a beautiful day – the sun is shining, no clouds are on the horizon and, as you pull away from the dock, you note that there's a light wind and almost no waves on the water.

Should you be concerned about a boating accident?

I'm sure that the average boater pictures high winds and heavy seas when envisioning a nautical disaster. However, most boating accidents occur under calm weather conditions.

It's not the weather that's responsible for most accidents – it's the boat operator. According to the U.S. Coast Guard, nearly 70 percent of all reported accidents in 2000 involved operator controllable factors. Therefore, most boating accidents are avoidable.

Our challenge, as boating safety professionals, is to reach the boat operators and arm them with the proper boating safety information. We must inform and educate as many boaters as possible to reduce the possibility of accidents.

Not surprisingly, collision is the most common type of accident. In 2000, the Coast Guard reported that 84 percent of the boat operators involved in accidents had no boating safety education. Hopefully, as we educate more of that 84 percent, we can teach them to stop running into each other.

Falls overboard and capsizing are the leading causes of deaths in boating accidents. Nearly nine of 10 of these victims drown. What's the message? Wear your life jacket. In 2000, life jacket wear would have saved the lives of approximately 445 people of the 701 who died.

Boating is a great recreational pursuit whether boaters are fishing, hunting, cruising or water skiing. We must communicate to them that safety makes boating more enjoyable.

Once an accident does happen, we need to have professionals available to conduct investigations and make conclusions about what contributing factors came into play in the accident. Think of it – there aren't any skid marks and much of the evidence might have sunk to the bottom.

The National Association of State Boating Law Administrators (NASBLA) has totally revamped the format of our accident investigation seminars based on input from the students. The outcome has been a much better and more relevant product. The investigators come away from these seminars prepared to deal with the intricacies of boating accidents in a professional and scientific manner.

To date, we have conducted four of the Comprehensive Level seminars and one Advanced Level course, training almost 200 students. Feedback from the attendees indicates that the hard work done by Fred Messmann, chair of the Boating Accident Investigation, Reporting and Analysis Committee, and company was right on target.

As I'm writing this article, boating season is just getting underway in the majority of the country. We are faced with some serious challenges this year.

Because of the events of September 11, a change in the mission for the U.S. Coast Guard has come about, and they aren't going to be as involved in search and rescue or boating law enforcement as in the past.

The Coast Guard is not the only agency to be impacted by September 11. State marine patrols have to step up to the plate and perform the functions that historically have been performed by the Coast Guard. In addition, state marine patrols have been called into service to protect nuclear power plants, dams, cruise ships and reservoirs and to escort liquefied natural gas (LNG) and liquefied petroleum gas (LPG) tankers to and from port.

Many states lost officers due to calls to active duty from military reserve units. In addition, due to the bleak economic climate the country has been faced with, vacancies in officers' ranks are not being filled. The bottom line is that we probably have fewer officers on the water protecting the boaters of America than at any time in the last 10 years. I'm hoping against hope that this factor doesn't lead to an increase in accidents and fatalities this year.

The states have done a great job over the years to ensure a safer boating climate. The Coast Guard estimates that 27,000 lives have been saved due to the state boating programs.

Boating safety is important work, but like any job, it can't be done if we are not furnished with the tools. It all gets back to funding. Hopefully, our efforts toward getting an equitable share of the motorboat fuel taxes in the reauthorization of the Wallop-Breaux Trust Fund will be successful. And with increased funding we'll be able to provide more safety services for the boaters of the country.

We're not going away, and we won't give up the ship.



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PRESIDENT
Steve Hall

VICE PRESIDENT
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SECRETARY/TREASURER
Fred Messmann

EXECUTIVE EDITOR
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MANAGING EDITOR
Ron Sarver

EDITOR
Kimberly Hermes

ART DIRECTOR
Michelle Huber-Kropp

CIRCULATION DIRECTOR
Joan Minton

EDITORIAL OFFICES
1500 Leestown Road, Suite 330
Lexington KY 40511
Phone: 859.225.9487
Fax: 859.231.6403
E-mail: editor@nasbla.org

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ABOUT THE COVER

With grant assistance from the U.S. Coast Guard, NASBLA offers boating accident investigation seminars to provide officers with the tools needed to investigate accidents accurately and effectively. In addition to giving law enforcement officers the opportunity to advance their skills in accident investigation, the seminars also provide critical data to help shape boating safety regulations across the country. NASBLA has revamped the seminars to update the curriculum and broaden its scope of topics. The seminars still include the popular examination of crashed vessels, as shown on the cover. During this portion of the seminars, students closely examine vessels that have been involved in collisions to determine the cause(s) of damage to the boats.

Staff photo

NASBLA to hold 43rd Annual Conference



NASBLA will hold its 43rd annual conference September 7-11, 2002, in Cleveland, Ohio. Ohio Boating Law Administrator Jeff Hoedt, his staff with the Department of Natural Resources, Division of Watercraft and NASBLA conference staff have been busy planning an information-packed conference touching on a wide variety of topics for recreational boating safety professionals.

Cleveland is a great location for a NASBLA conference. The city is on the southern shore of Lake Erie, part of the Great Lakes Region, the country's largest freshwater resource. The

Greater Cleveland area extends 100 miles along the Lake Erie shoreline and more than 40 miles inland.

Hotel reservations can now be made at:

The Renaissance Cleveland Hotel -
Tower City Center
24 Public Square
Cleveland, Ohio 44113
Phone: 216.696.5600

The conference room rate is \$142 single/double. Be sure to mention you are with the National Association of State Boating Law Administrators' Conference to receive the special conference rate. Please make your

reservations early. The room block will be held only until August 15, 2002.

To **register for the conference**, please visit the NASBLA website at www.nasbla.org to register online or to download a registration form. Additional logistical information can also be found online.

September weather in Cleveland is very pleasant with a normal high temperature of 74.2° F and nighttime lows of 54° F. Dress suggestions for the opening ceremonies, business meeting and awards luncheon are business attire. All other events are business casual.



NASBLA 2002 CONFERENCE PROGRAM SCHEDULE

SATURDAY, SEPTEMBER 7

Registration
NASBLA Executive Board
NSBC Executive Board
Networking

SUNDAY, SEPTEMBER 8

New BLA Breakfast
Registration
First-time Attendee Orientation
Numbering and Titling Workshop
BAIRAC Committee
Education Committee
Exhibitor Set-up
Waterways Management Committee
Boats and Associated Equipment Committee
NSBC Annual Meeting
Numbering and Titling Committee
Law Enforcement Committee
Spouse and Guest Welcome
Opening Ceremonies
Welcome to Ohio
President's Reception
Networking

MONDAY, SEPTEMBER 9

Registration
Exhibits Open
Welcome/Review of the Day
Boating Trends
Building a Constituency for Boating Safety
Wallop-Breaux 201
Regional Lunches

Breakout Session I
Program Planning
Women in Boating
On-water Demonstrations of Boats & other products
Breakout Session II
Interviewing
Uniform Commercial Code
On-water Demonstrations of Boats & other products
Breakout Session III
Working with the Media
Personal Watercraft Usage Issues
On-water Demonstrations of Boats & other products
Networking

TUESDAY, SEPTEMBER 10

BLA Breakfast (BLAs Only)
Registration Open
Exhibits Open
Drinking & Recreational Boating Fatalities
U.S. Coast Guard Office of Boating Safety Update
Paddlecraft Safety Interventions
Boating Participation – National Survey on Recreation & the Environment
Breakout Session IV
Aquatic Nuisance Species
Generations
Exhibits Dismantle
Breakout Session V
Homeland Defense
Guide to Multiple-Use Waterways Management
An Evening & Dinner Aboard the Nautica
Networking

WEDNESDAY, SEPTEMBER 11

Associates/BLA Breakfast
NASBLA Business Meeting
President's Report
Legislative Report
New Business
Virginia '03 Preview & Awards Banquet

Program as of June 1, 2002. Subject to change.

EXHIBIT PROGRAM

Exhibit space is available at the annual conference. This is an excellent venue for marketing patrol boats, trailers, navigational aids, search & rescue equipment, alcohol & speed detection devices, education materials and much more.

The exhibit space rental fee is \$750 for NASBLA Associates and \$1,000 for Non-Associates per 8' x 10' booth. The fee includes:

- one complimentary meeting registration
- additional registrations for \$375 each
- draped backwall and sidewalls
- listing in the meeting program
- 6' draped table and 2 chairs

For additional exhibit information, please contact Joan Minton at 859.225.9487 or joan@nasbla.org

Boaters Encounter Tougher Security on Waterways

Boaters across the nation are enjoying the opportunities our marine environment offers, said Captain Scott Evans, chief of the U.S. Coast Guard's Office of Boating Safety.

With this being the first boating season since the terrorist attacks on September 11, boaters are encountering new rules implemented by the U.S. Coast Guard.

"In spite of the diabolical acts of terrorism on September 11, it is important that recreational boaters know their waterways are safe and that they can play a big role in keeping them that way. But times such as these require tighter security measures for the boating season," noted Evans.

The new rules include strict limits on watercraft near U.S. Navy and Coast Guard ships and other potential targets, such as shipyards and nuclear complexes.

"While recreational boating is safe, just as our highways, airways and railways, there are times when we must be more cautious and continually aware of our surroundings, and we are," said Evans. "But more importantly, we must not allow terrorists with their tyranny of hate to deprive us of the value that our country, its people and all its resources offer ... So, let's use and enjoy our boats and get out on the water. It's our privilege, it is part of our heritage and most of all it is a legacy that ensures a quality of life for our children's children."

Coast Guard officials hope to enlist anglers, commercial boat operators and groups of recreational boaters to radio in suspicious activities. Evans explained that while on the water, boaters can serve as protectors and defenders.

"[Boaters] see, hear and can report suspicious activities. That makes it extremely difficult for terrorists with their malicious agenda to be successful. When on the water, report anything

If a boater must pass within 100 yards of such a vessel, the boat operator must contact the U.S. naval vessel or the Coast Guard escort vessel on VHF-FM channel 16.

Violators will be perceived as a threat and will face a quick, determined and severe response. In addition, violators will face six years in prison and a \$250,000 fine.

Boaters are also asked to keep their distance from all military, cruise line or commercial shipping vessels and commercial port operation areas, especially those that involve military, cruise line or petroleum facilities. Operating a boat in close proximity to such vessels or areas could be interpreted as a threat, resulting in a quick, determined and severe response.

Boaters are advised not to stop or anchor beneath bridges or in the channel. Those who do can expect to be boarded by law enforcement officials.

Other ways boaters can help:

- ✳ Secure and lock their boats when not on board. Boaters are requested never to leave their boats accessible to others. When storing a boat, an operator should make sure it is secure and its engine is disabled.
- ✳ Wear life jackets as a badge of support for the Coast Guard. By displaying a commitment to safe boating, boaters help reduce the demands placed on Coast Guard and other responders' limited resources and assets.

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The U.S. Coast Guard has set a 100-yard security zone around all U.S. naval vessels. In addition, minimum speed must be used within 500 yards of all U.S. naval vessels. Illustration courtesy U.S. Coast Guard

that looks peculiar or out of the ordinary to local authorities or the Coast Guard ... but ... in no way approach or challenge suspicious activities or individuals."

Boaters are asked to keep an eye out for anything that looks peculiar or out of the ordinary. Any suspicious activity should be reported to the local authorities, the Coast Guard, port or marina security, or the National Response Center at 800.424.8802.

The new rules include strict enforcement of security zones around potential targets. The Coast Guard has set a 100-yard security zone around all U.S. naval vessels. In addition, minimum speed must be used within 500 yards of all U.S. naval vessels.

BoatU.S. offers free national recall alert registry

Boat owners who are not the original owners of their vessels may never hear of a manufacturer's recall notice of a boat's defect.

BoatU.S., the world's largest association of boat owners, has established the National Recall Alert Registry, a free service for all boat owners to connect owners and manufacturers for recall actions.

Federal law requires builders to recall boats if they don't comply with Coast Guard regulations or when they contain safety defects discovered within five years of construction.

Although the law requires defect recall notices be sent out via certified mail, there is no requirement to maintain up-to-date records of subsequent owners.

KEEPING THE CONSUMER INFORMED

Caroline Ajootian, BoatU.S. consumer protection bureau director, noted that boaters also sometimes fail to do their part in notifying manufacturers.

"The system also fails when new boat owners don't return warranty cards," she said. "This gives builders no way to notify second or third owners about structural, mechanical or safety-related defects and their efforts to correct them."

Registering for the National Recall Alert Registry can be done by visiting the BoatU.S. website at www.BoatUS.com.

NASBLA Executive Director Receives Award

During the sixth annual International Boating and Water Safety Summit, the National Water Safety Congress presented a number of awards to individuals and organizations that have made significant contributions to water safety issues and programs.

These annual awards are given for efforts at the national, regional and local levels.

George Stewart, executive director of the National Association of State Boating Law Administrators (NASBLA), earned one of eight regional awards in recognition of the years he has spent fighting for federal funding for boating safety.

NWSC Vice President Bill Gossard, who nominated Stewart, said, "George's contributions in keeping safety in the limelight in the halls of Congress are a testimony to his resolve to have resources available to save lives for the states in his region and the nation."

Stewart enlisted in the U.S. Navy as a seaman recruit in November 1942 and served 30 years. During his naval career, he advanced through the enlisted ranks to Chief Quartermaster, then Warrant Officer and Chief Warrant Officer W-2. He was selected for Limited Duty Officer in January 1961 and was promoted to Commander in February 1971. While in the Navy, Stewart earned numerous service medals and decorations.

Stewart retired from the Navy on December 31, 1972 and became Delaware's boating law administrator on January 1, 1973. As BLA he planned and directed the State Boating Safety Program and supervised the Marine Police, Boat Registrations and the Boat Safety Education Program. The State Game Wardens and the Hunter Safety Program were later consolidated into one section along with the



George Stewart, executive director of the National Association of State Boating Law Administrators, earned a regional award from the National Water Safety Congress in recognition of the years he has spent fighting for federal funding for boating safety.
Staff photo

Marine Police. Stewart then became manager of the newly formed Enforcement Section.

During his tenure as BLA, Stewart served on the National Boating Safety Advisory Council. He also served two terms as president of the North East States Boating Administrators Conference and one term as NASBLA president.

Stewart earned the prestigious *August A. Busch Jr. Micholob Schooner Award* and the National Association of State Boating Law Administrators' *Bonner Award*, *NASBLA Award* and *Legislative Award*. He retired from state service in May 1987. At that time he was presented the *Order of the First State Award* by the Honorable Mike Castle, Governor, State of Delaware. This is the highest award that can be bestowed on an individual by the Governor of Delaware.

Stewart was employed by NASBLA in 1987 as director of Government Affairs, and in 1995 he was elevated to the position of executive director. He continues to serve in that capacity. In 1998, Mr. Stewart received NASBLA's *Lifetime Achievement Award* and the Western States Boating Administrators Association's *Hollister Award*.

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National Water Safety Congress Holds Elections

The National Water Safety Congress held its biannual membership meeting as part of the Sixth International Boating and Water Safety Summit in Daytona Beach, Fla. Outgoing President Steve Fairbanks gave a "State of the Congress" address to the 53 members gathered for the meeting, and reported that the state of the National Water Safety Congress was "improving." Fairbanks reported on the activities and accomplishments of the Congress during the past two years, and introduced incoming President Ron Riberich.

The membership overwhelmingly passed a set of revised bylaws for the organization and positioned the Congress to respond to the challenges of the 21st century. The number of board members was reduced from 25 to 21, with 19 positions up for election in 2002. The regions of the NWSC were also consolidated from 8 to 6 and more closely mirror the NASBLA regions.

The Congress held elections for the 19 board of director positions. Six new members were elected to the board and will bring a diversity of

backgrounds and experience to the National Water Safety Congress. New board members are Richard Droebeke, Utah State Parks and Recreation; Paul Kennedy, Missouri State Water Patrol; Gary Owen, Iowa Department of Natural Resources; Tom Plante, WE Energies; Cecilia Rolf, Spirit of America Foundation; and Mac Wimbish, U.S. Army Corps of Engineers.

For more information about the National Water Safety Congress, please visit www.watersafetycongress.org.

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..... EXECUTIVE DIRECTOR NEEDED

The National Water Safety Congress is a not-for-profit 501(c)(3) organization dedicated to promoting safe recreational use of the nation's waterways. NWSC is seeking candidates for the position of Executive Director to manage and direct the diverse programs and activities of a national organization. Nominal compensation of \$5,000/year and office set-up expenses of up to \$2,000 will be paid to the successful candidate. Additional

compensation may be possible, based upon successful fund raising, new corporate sponsorships and additional grant funding.

Interested individuals may contact either Ron Riberich at 865.632.8872 (rjriberich@tva.gov) or Steve Fairbanks at 515.276.4656, ext. 226 (sbfairbanks@crosspaths.net) to receive a Request For Proposals package.

Education Essential to Personal Watercraft Safety

By Kimberly Hermes

When personal watercraft (PWC) first started gaining popularity, the public viewed these vessels as something that promised lots of fun and excitement on the water. And, often those who operate PWC experience a rush of exhilaration.

However, PWC operators are sometimes tempted to act up or push the limit. This often leads to unpleasant results.

PWC accidents reported more often

While figures supplied by the National Marine Manufacturers Association show that PWC sales have been dropping since 1995 and PWC ownership has leveled off, these watercraft remain popular on U.S. waterways. Along with this popularity come PWC-related accidents.

U.S. Coast Guard statistics show that in 2000, 36 percent of all reported injuries due to

recreational boating accidents involved personal watercraft. On paper, this makes PWC second only to open motorboats in number of injuries due to boating accidents.

In its Boating Accident Report Database (BARD) documentation, the U.S. Coast Guard cautions that its non-fatal boating accident data are incomplete. This is due to only a fraction of non-fatal boating accidents being reported. Also, the frequency of reporting varies widely among boat types.

Accidents involving PWC are probably reported more often than those involving other types of boats because:

- PWC are rented more than other boats. PWC rental operators report most accidents for insurance and product liability reasons.
- Many PWC accidents involve collisions.

Since boat operators are required to report accidents, those involving two or more vessels are more likely to be reported than accidents involving only one vessel.

Nearly 10 percent of recreational boating fatalities in 2000 involved personal watercraft, placing PWC third for highest number of fatalities by vessel type.

"Coast Guard statistics show PWC are involved in nearly as many reported accidents as open motorboats," said Bruce Schmidt, data analyst for the U.S. Coast Guard Office of Boating Safety.

"Yet, nearly five times as many fatalities involve open motorboats when compared to PWC. This suggests the wearing of life jackets by PWC riders significantly lowers the number of PWC fatalities and may lead one to believe there's a lower fatality risk associated with PWC use.

"However, looking at fatality data on an exposure-adjusted basis," Schmidt continued, "the fatality risk associated with PWC use (.24 deaths per million hours of exposure) is significantly greater than with open motorboats (.14 deaths per million hours of exposure)."

Education is key

Boating safety officials across the country agree that the best way to lower boating accident numbers is through education. Statistics show that states with mandatory boater education requirements have seen significant drops in accident rates.

"As the popularity of recreational boating grows and our nation's public waterways become increasingly congested, it is more vital than ever that boaters be trained in the 'rules of the road,'" said Monita Fontaine, vice president of Government Relations for the National Marine Manufacturers Association. "Taking time to understand proper boat operation, navigational rules and the importance of courtesy on the water is an investment in a more enjoyable boating experience for everyone."

The PWC industry is strongly interested in the safety of PWC users and of other people using U.S. waterways and has taken extraordinary measures to raise awareness about proper operation, behavior, courtesy and safety. The Personal Watercraft Industry Association cites several examples of this commitment on its website, www.pwia.org.



Boating safety officials across the country agree that the best way to lower boating accident numbers is through education. Photo courtesy Kawasaki Motors Corp., U.S.A.

Renting PWC Successfully

Since PWC are rented more often than other boats, rental operators need to make sure renters are educated. Often those who rent PWC are inexperienced boaters and are unfamiliar with operation of a PWC.

A guide helpful to PWC rental businesses is the *Renting Personal Watercraft Successfully - Best Business Practices* reference manual.

National in scope, this guide outlines recommendations and guidelines for assisting boating regulatory authorities, waterfront property managers and PWC ride center rental agencies to improve standards of education and operations for the PWC rental industry.

The main topics covered include PWC rental agency personnel qualifications, customer education, operations and risk management. The guide also contains a helpful PWC renter orientation checklist.

Developed by Ascent Worldwide Inc. in cooperation with the National Association of State Boating Law Administrators, National Recreation and

Park Association, National Safe Boating Council, National Water Safety Congress, Personal Watercraft Industry Association and the U.S. Coast Guard, the manual was produced under a grant from the Aquatic Resources (Wallop-Breaux) Trust Fund.

Those interested in obtaining a copy of *Renting Personal Watercraft Successfully - Best Business Practices* should check with their state boating law administrator or regional office of the U.S. Army Corps of Engineers.

Ascent is gathering names of those interested to cost-share in a second bulk printing. The cost per copy is expected to average \$10.

Anyone interested in participating in the second printing should contact Alan Martlin, project manager, Renting PWCs Successfully, at 604.732.4042 or alan@ascentworldwide.com right away.

Reaching Paddlesport Enthusiasts

By Kimberly Hermes

From rushing white-water rivers and tranquil mountain lakes to swamps and saltwater marshes teeming with wildlife, the United States offers a variety of paddlesport opportunities. Outdoors enthusiasts recognize this and have made paddlesport, including canoeing, kayaking and rafting, one of the most popular forms of recreational boating in the United States.

Charlie Wilson, president of the American Canoe Association (ACA) Board of Directors, said participation in paddlesport has expanded 500 percent since the mid-1980s.

It's difficult to get an exact total of the number of participants, but studies indicate that paddlesport continues as a fast-growing activity.

The U.S. Forest Service reported that 24 million individuals participated in paddling canoes, kayaks or rafts at least once in 1994. The Outdoor Industry Association (formerly the Outdoor Recreation Coalition of America), expanded this number to 43 million in 1999, with most participants being once-a-year rental users.

The rising popularity of paddlesport is adding considerable numbers of boaters to the recreational boating scene. This brings a variety of special safety matters. A particular concern is the fact that paddlesport ranks second only to motorboats in annual boating fatalities.

In 2001, 104 kayakers and canoeists lost their lives pursuing their interest in paddlesport. Most of these deaths were due to drowning.

Boating safety officials are aware of the need to get the word out to paddlesport enthusiasts about safety, yet these groups are difficult to

reach. Those who engage in canoeing, kayaking and rafting usually are not required to register their boats. This makes it difficult to determine who these people are and the best means of reaching them.

According to Gordon Black, director of ACA's Safety Education & Instruction department, for the average participant, paddlesport offers little risk of injury or death.

Boating accident victims in paddlesport generally fall into two categories. The first category includes thrill-seeking paddlesport enthusiasts who are very skillful and



Participation in paddlesport -- including canoeing, kayaking and rafting -- has expanded 500 percent since the mid-1980s. Outdoors recreation organizations are finding new ways to reach paddlers with safety messages. Photo courtesy Boat Ed

experienced. These boaters willingly take risks associated with extreme sports.

The second category includes boaters with little or no experience. Generally these paddlers have not received any instruction and are unaware of the risks. These are the boaters that the ACA is primarily concerned with reaching.

ACA and other outdoors recreation organizations are finding effective ways to reach paddlers with safety messages. In addition, the ACA and other organizations, including Boy Scouts of America, Girl Scouts of the USA, 4-H, British Canoe Union and various college outing groups, offer safety instruction in paddlesport.

Black said ACA is continually trying to reach more people and explained that the organization uses Aquatic Resources (Wallop-Breaux) Trust Fund grants administered by the U.S. Coast Guard to create various products related to safety education, including:

- An instruction program to certify the organization's white-water instructors to teach a one-day rescue course aimed at the beginner white-water paddler.
- "Know Your Limits," an eight-page booklet of safety tips covering many different types of paddling that is perfect for manufacturers to include in new boats and for others to hand out to first-time boat users or buyers.
- Informative videos covering basic safety for sea kayaking, recreational kayaking and rafting.

While participation in paddlesport is increasing, Black said interest in canoeing remains static. Most new paddlers are taking part in kayaking because canoeing is viewed as being more difficult and more demanding.

Also, Wilson noted that enrollment in dedicated, skill-oriented paddlesport instruction has sharply decreased in the past few years.

These trends indicate that paddlers are becoming less committed and less willing to dedicate time to learning skills. This makes it imperative to reach these boaters about safety.

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PADDLESport SAFETY COURSE AVAILABLE FOR FREE

The Connecticut Department of Environmental Protection (DEP) has developed a canoe and kayak safety course and wants to share it with others interested in boating safety.

Statistics show that canoes and kayaks account for approximately half of the boating fatalities in Coast Guard District I. In addition, paddling sports are largely untouched by mandatory education or certification laws. For these reasons, the Connecticut DEP created a one-evening Canoe and Kayak Safety Course.

The course is an entertaining two-hour lecture in basic paddling safety. It covers topics from selecting a boat, equipment and clothing to basic paddling strokes and the multitude of paddling venues.

"We have invested a great deal of time, effort and money in the project and wish to share it – at no cost – with other water safety people to reach as many beginning paddlers as possible," said Allen Ames, special projects coordinator with the Connecticut DEP.

The course is available as a PowerPoint presentation with lecture notes to any boating safety instructor or trainer who will agree to teach the course for free.

More than 200 copies of the course have been distributed to instructors throughout the United States and Canada. For more information, please contact Allen S. Ames, Special Projects Coordinator, Connecticut DEP Boating Division, 333 Ferry Road, PO Box 280, Old Lyme, CT 06371; 860.434.8638; allen.ames@po.state.ct.us.

Alcohol Boosts Boating Death Risk

By Kimberly Hermes

No speed limits, no traffic signals, no merging lanes, no potholes. Viewed in this light, boating may look easier than driving a car. But operating a boat is at least as complicated as driving an automobile. Boaters who fail to realize this may find themselves up a creek, so to speak, especially if they think operating a boat under the influence (BUI) of alcohol is safer than drinking and driving on the road.

Boating under the influence of alcohol is illegal. The U.S. Coast Guard and every state have stringent penalties for violation of BUI laws.

Boating under the influence is also extremely dangerous. Boating accidents can be just as hazardous as automobile accidents. Alcohol, with its well-known ability to impair performance, creates an even more hazardous situation when consumed in a marine environment.

Yet many people who would never drive drunk think it's safe to operate their boat after drinking. It obviously isn't.

According to U.S. Coast Guard statistics, 50 percent of all boating fatalities are alcohol-related. In 2001, 695 boating-related deaths were reported in the states and territories. So nearly 350 people died due to alcohol consumption on the water.

As more states adopt strict BUI laws that mirror intensified alcohol enforcement on the roads, boaters are coming under increasing scrutiny. Most states and territories now define impairment at .08% blood alcohol concentration (BAC).

The Coast Guard says a boat operator with a BAC level above .10% – the legal threshold in 26 states – is 10 times more likely to be killed in a boating accident than a boater with zero BAC.

However, even lower levels of blood alcohol may affect a person. Venturing out on the water after drinking, even after moderate social drinking, can be very hazardous.

Alcohol affects the boater's ability to function in three critical ways. A person's balance, judgment and reaction time are affected almost

immediately with the first few drinks, no matter what activity the person is performing.

Research shows that four hours of exposure to noise, vibration, sun, glare, wind and other motion on the water produces a kind of fatigue, or "boater's hypnosis." This can magnify the effects of alcohol and even accelerate impairment.

Boat operators aren't the only boaters in jeopardy. Recreational boat passengers are just as likely as boat operators to die as a result of drinking alcohol, according to a study of boating deaths in North Carolina and Maryland.

Researchers at the University of North Carolina (UNC) at Chapel Hill and Johns Hopkins University said their results indicate that efforts to reduce boating deaths that target only operators fail to protect many boaters at risk. Different approaches that address all boat occupants are needed.

"It's not just crashing into other boats or piers that is causing the deaths," said Robert D. Foss, research scientist at the UNC Highway Safety Research Center. "Frequently, people who have been drinking fall in the water even if a boat is not moving, become disoriented and drown."

A report on the study appeared in the December 19 issue of the *Journal of the American Medical Association*. In addition to Foss, authors include Gordon S. Smith, Penelope M. Keyl and Jeffrey A. Hadley of the Johns Hopkins University Center for Injury Research and Policy; James McKnight of the Pacific Institute for Research and Evaluation; William Tolbert of Rho Inc. of Chapel Hill; and Christopher Bartley of the UNC Highway Safety Research Center.

The population-based, case-control study involved reviewing 221 boating deaths recorded in North Carolina and Maryland medical examiner files between 1990 and 1998, and comparing them with a probability sample of 3,943 boaters from both states.

Even with a BAC of only 0.01 percent, the risk to operators and passengers increased 30 percent over people with no alcohol in their blood, Foss said. The risk of death was more

than 52 times greater when victims showed a blood alcohol content of 0.25 milligrams per deciliter.

About 80 percent of boating fatalities result from drowning, the team found.

"Just falling out of the boat and drowning is surprisingly common," Foss said. "That means prevention activities oriented toward boat operators alone won't work as well as they do with drivers on the roads. If you've got a stone-cold sober boat operator and an impaired passenger, that passenger is still at high risk.

"The 'crazed drunken boater' ramming his boat into a dock or another boat is a pretty rare phenomenon," Foss said. As a result, simply using a designated driver for a boat or setting a blood alcohol content limit for boat operators neglects to address much of the problem.

Besides analyzing medical examiner data, investigators spent three summers interviewing and obtaining breath measurements from boaters across North Carolina and Maryland as part of their research.

"Before we did the study, we had a fairly good idea about the risk curve for drinking drivers on the road, but we had no idea about the risk for boaters who had been drinking," Foss said. "This study gives us the first look at the shape of the risk curve for boaters."

The National Institute on Alcohol Abuse and Alcoholism supported the research. About 800 people died in the United States in 1998 from recreational boating accidents, and early studies have linked more than half such deaths to alcohol use.

Countries such as Canada and Finland have even higher proportions of alcohol-related boating fatalities than the United States, the researchers said.

To read the entire report on *Drinking and Recreational Boating Fatalities: A Population-Based Case-Control Study*, visit the Journal of American Medical Association website at <http://jama.ama-assn.org/>. The report is found in the Dec. 19, 2001 issue.

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Due to legislative actions and public awareness campaigns, attitudes toward drinking and boating are changing.

In the July/August 2002 issue of *Boating Life* magazine, author Robert Stephens writes, "The mindset, which still exists among some boaters goes like this: *We're out recreating, minding our own business and we're nowhere near the road.*"

However, now that it's been proven the boat passengers are as much at risk of alcohol-related accidents as boat operators, those interested in boating safety are hoping all boaters will see the need to drink responsibly while on the water – not just the "designated driver."

All 56 U.S. states and territories have boating under the influence laws in effect.

In less than a decade, 10 states have lowered the legal blood alcohol concentration (BAC) level to .08 for boat operators. According to data gathered for the seventh edition of the *Reference Guide to State Boating Laws*, 29 states and territories use .08 as the legal BAC, and 26 use .10 BAC (New Mexico has no set limit).

Utah took things a step farther by enacting a law prohibiting open containers of alcohol in moving boats.

A Silent Killer

By Kimberly Hermes

It's silent, colorless, odorless, tasteless – and it can be deadly. Yet, many boaters don't realize when they are in its presence. What is this hazardous substance? Carbon monoxide.

Boaters are killed each year by this hazardous gas which is produced whenever any fuel such as gasoline or oil is burned.

Carbon monoxide is a gas that accumulates rapidly, according to *Boating Safety Circular 82* (U.S. Coast Guard Office of Boating Safety, March 2001). The publication explains that carbon monoxide in high concentrations can be fatal in a matter of minutes. Unless the symptoms are severe, carbon monoxide poisoning is often misdiagnosed as seasickness; however, lower concentrations must not be ignored because the effects of exposure to carbon monoxide are cumulative and can be just as lethal.

Danger to boaters discovered

In September 2000, the U.S. Coast Guard received information from a study on carbon monoxide (CO) conducted by the Department of the Interior and the National Institute for Occupation Health and Safety (NIOSH). The study was conducted at Lake Powell, Ariz., due to a number of deaths and injuries there thought to be caused by CO poisoning.

The NIOSH study of CO deaths on Lake Powell over the last 10 years showed seven fatalities involved houseboats with through-transom generator exhaust systems. A similar National Park Service (NPS) investigation found dangerous accumulations of carbon monoxide gases on houseboats with through-transom exhaust systems when the generator was running and exhaust fumes became trapped beneath the swim platform.

The NIOSH study and NPS investigation indicated that dangerous and even lethal levels of CO collect in a cavity beneath the swim platforms and above the stern deck on certain model houseboats when the vessels are not underway and the electrical generator is running.

This research demonstrates that CO emissions could induce severe poisoning in exposed outside areas. Previously it was thought that CO emissions were primarily a problem that affected cabins or enclosed spaces on boats.

While the NIOSH study and the NPS investigation were limited to houseboats, the problem can exist on any boat with a gasoline-

powered generator exhaust port located adjacent to a swim platform on the transom. Studies indicate that dangerous amounts of CO can accumulate around a boat's rear deck near the swim platform while the generator or engines are running.

A common practice of running gasoline-powered generators to power air conditioning, entertainment centers and galley appliances while anchored or moored exacerbates the problem.



"Teak surfing" is a new fad that has proven very dangerous. This activity puts an individual directly in the path of the vessel's exhaust which contains deadly levels of carbon monoxide.

Illustration courtesy Boat Ed

Of particular concern is a new fad called "teak surfing" or "dragging." To participate in teak surfing, swimmers hold onto the back of the swim platform and let the boat pull them through the water. Sometimes, they let go and bodysurf on the boat's wake.

The problem, according to Jane McCammon of the National Institute for Occupation Health and Safety, is that the swim decks, which often are weighted down to sink them lower in the water, are located right where deadly fumes are emitted. Victims can be overcome in a matter of minutes.

"[Teak surfing] puts an individual directly in the path of the vessel's exhaust and poisonous external carbon monoxide," explained Capt. Scott Evans, chief of the Office of Boating Safety, U.S. Coast Guard Headquarters. "If that in itself is not dangerous enough, the individual is now in a position that a slight miscalculation may throw him or her into a whirling propeller. Still ... it doesn't stop there. In order to 'teak surf' you don't wear a life jacket – the two do not go together. As is easily seen, all this is a recipe for a tragedy. A tragedy that the Coast Guard wants to see averted."

Boaters must protect themselves

The Coast Guard points out that carbon monoxide is one of the most dangerous gases.

Victims of carbon monoxide poisoning are usually not aware they are being exposed to the deadly gas and become impaired in ways that often lead to death.

Capt. Evans stressed, "It is important that the public be aware of carbon monoxide's dangers, be in a position to protect itself and be protected from carbon monoxide's deadly grasp. Therefore, public awareness and the media's assistance remains valuable tools for helping us defeat this deadly enemy."

Carbon monoxide is undetectable – it has no color, no odor, no taste; it causes no respiratory irritation; it does not float or sink; it mixes evenly with the air. It enters the bloodstream through the lungs and displaces the oxygen needed by the body. In effect, it asphyxiates its victims.

Early symptoms of carbon monoxide poisoning, such as irritated eyes, headache, nausea, weakness and dizziness, are often confused with seasickness or intoxication. Prolonged exposure to low

concentrations or very short exposure to high concentrations can lead to death.

The best way for people to protect themselves from carbon monoxide is to avoid places where the gas may be present.

"I can not say it enough," noted Captain Evans, "both on land and at sea, carbon monoxide is not to be tempted. That is why the Coast Guard stresses that boaters protect themselves and avoid activities such as 'teak/drag surfing' that directly expose them to carbon monoxide's lethal tentacles."

The Coast Guard is working with other concerned agencies and continues to look for engineering solutions to arrest those carbon monoxide problems presently affecting recreational boating.

In the meantime, the Coast Guard advises all owners and operators of boats equipped with swim platforms and gasoline-powered generators with exhaust ports on the transom are advised to turn off their generators when their boats are at anchor or moored and passengers are on or near the swim platform or swimmers are in the water.

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Boating Accident Investigation Seminars Revamped

By Kimberly Hermes

When a boating accident occurs, how does an investigator determine the cause? As Steve Hall, president of the National Association of State Boating Law Administrators (NASBLA), points out in this issue's "From the Helm," there are no skid marks and much of the evidence might have sunk the bottom of the waterway.

With grant assistance from the U.S. Coast Guard, NASBLA has been offering boating accident investigation seminars for more than a decade. Chock-full of information, these courses give law enforcement officers the opportunity to advance their skills in accident investigation. The seminars also provide critical data to help shape boating safety regulations across the country.

After 12 successful years of providing officers with the tools needed to investigate boat accidents accurately and effectively, NASBLA has revamped the seminars to update the curriculum and broaden its scope of topics.

Darren Rider, boating investigator with the Tennessee Wildlife Resources Agency, first attended NASBLA's boating accident investigation seminar in 1991 and returned for a refresher 10 years later. He said although the course was valuable, it was the same both times.

However, when he attended the updated seminar in March 2002, he could tell significant changes had been made.

"The revamped course is outstanding. The people who complete this training receive a solid foundation to work from in conducting

boating accident investigations," said Rider. "They'll have more confidence in conducting investigations because they'll have a better background."

Rider was particularly impressed with the course instructors and their energy and knowledge.

Underwriters Laboratories (UL), with guidance from NASBLA's Boating Accident Investigation, Reporting and Analysis Committee (BAIRAC), previously provided instructors as well as the course curriculum since the launch of the course in 1990.

With the reformatting of the course, BAIRAC Chairman Fred Messmann selected a knowledgeable group of instructors from across the nation. These experts helped develop the curriculum.

As Messmann stated, "The instructors worked many long days and nights and donated a lot of time to help develop the course. In fact, at the Michigan course, we all started our day at 7 o'clock, taught from 8 to 5, then reviewed the students' critiques until about 8 or 9 before breaking for dinner."



The instructors are Randy Dill, retired Connecticut boating law administrator; Sgt. Pat Lemagie, retired from one of the Pierce County (Washington) sheriff department's contract cities; Gary Haupt, Missouri State Water Patrol; and Jim Getz, Illinois Department of Natural Resources, who has been appointed lead instructor.

The UL instructors continue to be Ernie Kirstein, Tyson Long and Matt Caporal. Jerry Simon serves as the instructor from the International Association of Marine Investigators (IAMI) while Ted White serves as the National Transportation Safety Board's (NTSB) instructor.

Together, these instructors present participants with a wealth of information, including accident statistics, definitions, case histories, technical instruction, proven investigation techniques and more.

These factors were present in the original format of the seminars. However, the revamped course involves a greater emphasis on the data collection at the scene and the reporting and analytical skills necessary to complete the investigation.

The Level 1 Comprehensive course is designed to provide investigating officers with all the tools they need to completely and accurately investigate a recreational boating accident. The course begins with modules on accidents and statistics and vessel construction. Representatives from UL provide instruction on topics such as standards and regulations, electricity, navigational lights, ignition protection, carbon monoxide, fuel systems, fires, and explosions and ventilation.

Next, the comprehensive course covers diagramming, stability, capacity and loading, collision basics (boat dynamics, evidence collection, damage assessment and analysis, and injury assessment and analysis), memorandums



With the reformatting of NASBLA's boating accident investigation seminars, BAIRAC Chairman Fred Messmann (center) selected a knowledgeable group of instructors from across the nation. These experts, (l-r) Gary Haupt, Missouri State Water Patrol; Jim Getz, Illinois Department of Natural Resources; Sgt. Pat Lemagie, retired from one of the Pierce County (Washington) sheriff department's contract cities; and Randy Dill, retired Connecticut boating law administrator, helped develop the curriculum. Staff photo

"The people who complete this training receive a solid foundation to work from in conducting boating accident investigations."

of understanding (MOUs), public relations, personal watercraft, report construction, court preparation, and environmental concerns.

The seminar still includes the popular vessel systems examinations and examinations of actual case studies, with students preparing reports and giving presentations to the group on their findings. The seminar concludes with an exam and presentation of certificates.

The revamped seminar clocks in at 37 hours of instruction, compared to 32 hours of instruction in the previous course. Five more hours of instruction were necessary to cover the added topics while keeping the course to a reasonable length.

The restructured Level 2 Advanced course focuses on accident reconstruction. NASBLA provides 12 vessels that were involved in two-boat collisions. These boats are used on-site for hands-on examination by the

students. A minimum of 12 hours are spent during the advanced seminar investigating the accident scenarios. At the end of the seminar, students present their findings to the class. Videos of the staged collisions are shown afterwards to confirm their conclusions.

The advanced course also features four hours of instruction by the National Transportation Safety Board (NTSB) on the human factors involved in boating accident investigations. IAMI instructs students for two hours on property damage estimation. And the American Boat & Yacht Council Inc. (ABYC) has committed to two hours of instruction on boat building standards.

ABYC develops the voluntary consensus safety standards for the design, construction, equipage, maintenance and repair of small craft. The standards help investigators determine the causes of safety or construction defects.

For more information on NASBLA's boating accident investigation seminars, visit www.nasbla.org or e-mail Chris Moore, NASBLA project director, at chris@nasbla.org.



NASBLA's boating accident investigation seminars have been updated. The basic course provides investigating officers with the tools needed to completely and accurately investigate recreational boating accidents. The advanced course offers more in-depth training. Both levels give students hands-on practice in examining crashed vessels.

The boating accident investigation seminars have retained the popular vessel systems examinations and examinations of crashed vessel examples. In fact, the advanced course now focuses on accident reconstruction. NASBLA provides 12 vessels for the hands-on examination portion of the seminar. Following the examinations, students prepare reports and present their findings to the group. Staff Photos

2003 Boating Accident Investigation Course Locations

The fiscal year 2003 course schedule is almost complete. The following states have been selected as locations for the comprehensive boating accident investigation seminars in the spring of 2003: Florida, Illinois, Pennsylvania, Texas and Washington. The advanced boating accident investigation seminar will again be held in Lexington, Ky., in the fall of 2003.

Exact dates and locations of the 2003 seminars should be finalized in late August. For details, check NASBLA's website at www.nasbla.org or contact Chris Moore, NASBLA project director, at chris@nasbla.org or 859.225.9487 after August 23. Space is limited in the courses, so be sure to contact NASBLA to apply early.

NASBLA's Boating Accident Investigation, Reporting and Analysis Committee (BAIRAC) continues urging investigators to keep the boating accident investigation seminars in mind when investigating boating collisions.

The crashed vessels have value as teaching tools in the seminars, especially those involved in two-vessel collisions. Seminar participants get hands-on experience in investigating accidents by examining crashed vessel examples.

Fred Messmann, BAIRAC chair, suggests that arrangements can be made with insurance companies and prosecutors to secure crashed vessels for the boating accident investigation seminars. Donating the crashed vessel to NASBLA could be a plea bargaining tool or part of the penalty.

If you are aware of any crashed boats that would benefit the boating accident investigation seminars, please contact Chris Moore, NASBLA project director, at chris@nasbla.org or 859.225.9487.

Safety Education Reduces Recreational Boating Accidents

By Kimberly Hermes

Nothing spoils a good boating trip like an accident. By its nature, an accident is something unplanned. However, with the proper boating safety information, boaters can greatly reduce their chances of being involved in such incidents.

Each year thousands of people are involved in boating accidents in the United States. Boating accidents include capsizing, falls overboard, collisions, fire, sinking/flooding, explosions and disappearance.

In assessing the 2000 recreational boating accident data, the U.S. Coast Guard found that the primary cause of boating accidents continues to be operator error as opposed to boat or environmental factors. Nearly 70 percent of all reported accidents involve operator controllable factors, including operator inattention, operator inexperience, careless/reckless operation, excessive speed and no proper lookout.

In addition, the same data shows that more than eight out of 10 reported fatalities occurred on boats where the operator had not completed a boating safety education course. This highlights the need for continuing effective

national, state and local boating safety programs.

"The waterways are increasingly more congested and operators must know the rules of the water to have a safe and enjoyable day boating," said Steve Hall, president of the National Association of State Boating Law Administrators and boating law administrator for Rhode Island. "If boaters would learn and practice safe boating tactics, the number of accidents would be greatly reduced."

With more than 12.7 million recreational boats and personal watercraft (PWC) registered nationwide – being used by nearly 78 million

boaters – it is imperative that boaters obtain and use boating safety information to help reduce the number of boating accidents and fatalities.

According to the U.S. Coast Guard's Recreational Boating Accident Report Database (BARD), 7,740 recreational boating accidents were reported in 2000. These incidents resulted in 4,355 injuries and 701 deaths. Coast Guard reports show that only 5 to 10 percent of non-fatal boating accidents are reported, meaning the actual number of boating accidents was much higher.

Recreational boaters need to be educated that any boating accident involving a fatality, injuries requiring medical treatment beyond first aid, property damage over \$2000 or the complete loss of a vessel is required by the U.S. Coast Guard to be reported to the nearest state boating authority.

Boating fatalities in general have continued decreasing since the establishment of the Federal Boat Safety Act of 1971. The highest number of recorded boating fatalities was 1,750 in 1973. In 1963, there were 33 deaths for every 100,000 boats.

The number of fatalities dropped to a record low of 695 in 2001, according to reports from all 56 states and territories. That means there were 5.45 fatalities for each 100,000 boats.



Photo courtesy Missouri State Water Patrol



Photo courtesy Missouri State Water Patrol

Boating-related Fatalities for 2001

The continued decline in fatalities is encouraging as the number of boat owners and operators continues to grow each year, putting more people on the water. Between 1990 and 2000, the number of registered boats increased by 16 percent. During that same decade, the number of boating fatalities decreased 30 percent.

Yet even the record-low of 695 fatalities is still too many boating-related deaths. Those committed to boating safety and education aim for zero boating fatalities across the nation.

Going fatality-free for a whole year, or longer, is quite an accomplishment. However, eight states and territories managed to have an unblemished record in 2001. American Samoa, the District of Columbia, Guam, Nebraska, the Northern Mariana Islands, North Dakota, Puerto Rico and the Virgin Islands each recorded zero boating-related deaths.

"This is the first time it's happened – the first time since 1965 when Nebraska began keeping boating records that there have been no boating fatalities for a full year," said Herb Angell, Nebraska's boating law administrator. *(Editor's note: For more information about Nebraska's accomplishment, see p. 15 of this magazine.)*

The latest statistics show boaters involved in accidents are using their personal flotation devices (PFDs) more often than in previous years. In 1990, 82 percent of boating fatalities resulted from drowning. Ten years later, the number of boating fatalities due to drowning had dropped to 74 percent. However, had those people been wearing their life jackets, it's estimated that 445 of them would not have drowned.

Most boating fatalities occurred on boats less than 26 feet long. Capsizing and/or falling overboard accounted for two-thirds of the fatalities. Approximately 80 percent of all reported injuries were associated with the use of open motorboats (45%) and PWC (36%).

Personal watercraft deaths were down from 79 in 1995 to 54 in 1996, but then rose to an all-time high of 84 in 1997. In 2000, there were 68 PWC fatalities reported. The Coast Guard Office of Boating Safety estimates are that .24 PWC-related deaths per million hours of use. By comparison, open motorboats are responsible for .14 fatalities per million hours of use.

In 2001, alcohol accounted for 31 percent of all boating fatalities, up five percent from 1999. A Coast Guard study estimates that boat operators with a blood alcohol concentration above .10 percent are estimated to be more than 10 times as likely to be killed in a boating accident as boat operators with zero blood alcohol concentration. *(Editor's note: For more information on boating and alcohol, see "Alcohol Boosts Boating Death Risk" on p. 7.)*

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State/Territory	Boating-related Fatalities	Numbered Boats
Alabama	17	262,016
Alaska	21	50,571
American Samoa	0	127
Arizona	6	148,623
Arkansas	14	199,713
California	48	967,909
Colorado	10	104,500
Connecticut	4	104,852
Delaware	1	47,486
District of Columbia	0	1,985
Florida	54	899,629
Georgia	9	329,379
Guam	0	4,000
Hawaii	3	14,273
Idaho	8	81,933
Illinois	8	368,074
Indiana	14	218,251
Iowa	1	210,846
Kansas	6	102,623
Kentucky	18	171,643
Louisiana	43	327,680
Maine	8	128,202
Maryland	14	200,464
Massachusetts	14	146,475
Michigan	28	1,003,947
Minnesota	16	681,063
Mississippi	16	300,970
Missouri	9	325,776
Montana	5	50,808
Nebraska	0	74,653
Nevada	5	60,687
New Hampshire	10	99,585
New Jersey	9	206,248
New Mexico	5	42,920
New York	25	528,113
North Carolina	18	349,660
North Dakota	0	51,483
N. Mariana Islands	0	1,164
Ohio	19	415,072
Oklahoma	5	229,788
Oregon	14	194,615
Pennsylvania	14	352,825
Puerto Rico	0	56,972
Rhode Island	4	41,225
South Carolina	18	381,411
South Dakota	1	51,198
Tennessee	11	256,670
Texas	41	621,244
Utah	11	79,586
Vermont	2	33,988
Virgin Islands	0	4,246
Virginia	19	243,486
Washington	34	256,411
West Virginia	5	63,061
Wisconsin	21	575,920
Wyoming	9	10,710
Total	695	12,736,759

Note: The number of boating-related fatalities supplied by states/territories may differ slightly from the USCG figures due to different criteria used in determining reportable boating accidents and fatalities.

Source: Interviews with state/territory boating law administrators

When in Doubt, Report!

By Kimberly Hermes

Spencer launched his boat then handed a rope to his 11-year-old grandson. Spencer then drove his truck and trailer to the parking lot. When he returned to the ramp, he saw that the boat had drifted about 45 yards away from the ramp. His grandson had let go of the rope. Spencer dove in the water to retrieve the boat. About halfway to the vessel he began having trouble swimming. An onlooker dove in and pulled Spencer to the dock.

Is this a reportable recreational boating accident? NO

Marlene was driving her boat while her teenaged son, Jack, and his friend Rob hung on to the swim platform. After a couple minutes, Rob let go of the platform. Before anyone could reach him, Rob slipped beneath the surface of the water and drowned.

Is this a reportable recreational boating accident? YES

In 2000, the Department of Transportation's Office of Inspector General made a formal recommendation to the U.S. Coast Guard to devise a more precise definition of a recreational boating fatality.

To accomplish this, the National Association of State Boating Law Administrators' (NASBLA) Boating Accident Investigation, Reporting and Analysis Committee, along with the National Boating Safety Advisory Council, worked hard to refine the recreational boating accident reporting criteria and guidelines.

The refined reporting criteria and guidelines were reviewed by each state boating law administrator. The finalized reporting criteria gained consensus approval from the NASBLA body during the organization's annual conference in October 2001.

What is a Reportable Boating Accident?

In determining what is considered a reportable recreational boating accident, recreational vessel must first be defined. A recreational vessel is any vessel manufactured or operated for pleasure that is propelled or controlled by machinery, sails, oars, paddles, poles or another vessel.

A reportable recreational boating accident means that a recreational vessel, a numbered vessel or a documented vessel is being used by its operator for recreational purposes and one or more of the following events occur involving the vessel or its equipment:

- Grounding
- Capsizing
- Flooding/swamping
- Fall within or overboard
- Person ejected from a vessel
- Person leaves a vessel that is underway to swim for pleasure
- Person leaves vessel in an attempt to retrieve lost item, another person or another vessel

- Sinking
- Fire or explosion
- Skier mishap
- Collision with another vessel or object
- Striking a submerged object
- Vessel, propeller, propulsion unit or steering machinery strikes a person
- Carbon monoxide asphyxiation
- Electrocution by stray vessel electrical current

In general, if an event occurs and there is a reasonable likelihood that as a result of the event an injury, death or property damage occurs, then the incident is considered a recreational boating accident.

Another way to look at it is that the boating trip would have been completed successfully without incident had any of the above events **not** occurred.

With these criteria in mind, let's return to the scenarios laid out in the introduction.

Although Spencer was attempting to retrieve his boat, which was underway, this incident is **not** considered a reportable boating accident because he entered the water from shore. One of the reporting guidelines states that if a person dies or is injured in swimming to retrieve an object or a vessel that is adrift from its mooring or dock, having departed from the shore or pier, that incident is not reportable.

Had Spencer had departed his boat to retrieve another boat, the incident would have been reportable.

Since Rob drowned, this **is** considered a reportable boating accident. In addition, based on investigations, the boat was the source of the carbon monoxide which caused Rob's asphyxiation and subsequent drowning. Following this reasoning, if the boat had been moored and Rob had been asphyxiated in his

sleep, the incident would still be considered a reportable accident because the boat produced the poisonous gas.

When an accident involving a recreational vessel occurs, the vessel's operator must submit a report to the reporting authority in the state where the accident occurred when:

- ✗ A person dies;
- ✗ A person is injured and requires treatment beyond first aid;
- ✗ Damage to vessels and other property totals \$2,000 or more (at this time, practically all states have lower limits on property damage) or there is complete loss of any vessel; or
- ✗ A person disappears from the vessel under circumstances that indicate death or injury.

This short list may make it seem simple, but at times an investigator may find that it's not so cut and dry. In such cases, if the investigator is in doubt, he or she should go ahead and report the incident.

Further, the Coast Guard requests that all states enter information for all fatal accidents involving recreational vessels into the Boating Accident Report Database (BARD) system. If an accident does not satisfy the criteria for a "reportable accident," the states should indicate "non-reportable" in the appropriate field in the BARD system.

By implementing this process, all types of fatal accidents can be monitored. This will help boating safety officials take prompt action concerning all fatal accidents involving recreational vessels.

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Funding for Boating Safety Makes Boating Safer

By George Stewart, Ed Carter and Charlie Clark and John Johnson

Accident: an unexpected and undesirable event, especially one resulting in damage or harm.

Over the last few decades there has been a subtle change in the way highway-related injuries and fatalities have been reported in the news and among safety professionals. In a conscious effort to shift the public's attitude away from the idea that traffic mishaps are unavoidable, the National Highway Traffic Safety Administration (NHTSA) has begun referring to these incidents as "crashes" instead of "accidents."

This simple change in terminology is meant to convey the concept that, while accidents may indeed be unavoidable, crashes and their consequences are not.

Those of us involved in boating accident investigations, as well as those in engaged in safety education and awareness, know very well that most boating-related injuries and fatalities are not only preventable but, given the typical set of circumstances, they are even predictable.

While it would be incorrect to label all boating accidents as crashes since a large part of fatalities result from non-collision incidents involving falls overboard, capsizing and failure to wear a PFD, there is nonetheless the same compelling need to communicate the idea that a significant number of boating-related deaths and injuries can be prevented. The universal use of life jackets alone could result in as many as 450 lives saved, or 65 percent fewer boating fatalities each year.

Let's face it – if boating-related injuries and fatalities weren't avoidable, then all of our law enforcement, investigation, education and outreach efforts would be pointless. But that is not the case. Our efforts do make a difference. That difference is dramatically revealed when we look at the nearly annual decline in recreational boating fatalities over the last 30 years. From an all-time high of more than 1,750 deaths per year in the early 1970s to a record-setting low of just under 700 lives lost in 2001, the national recreational boating safety program continues to yield significant life-saving benefits each year.

The cumulative impact of the recreational boating safety program on the lives of Americans during the last three decades is an impressive statistic as well. Since the passage of the Federal Boat Safety Act of 1971, the U.S. Coast Guard estimates that over 27,000 lives have been saved because of this model state-federal partnership – that's more than 900

boaters per year whose lives would otherwise have been cut needlessly short.

How do we account for this 180-degree turnaround in boating fatality rates in a little more than a decade? Is it the result of safer boats and related equipment in the market place? An increasingly healthful and safety conscious boating public? Increased law enforcement presence coupled with other boating safety services? Increased boater participation in education courses and public awareness campaigns? Just plain luck?

While we would never want to discount luck too much it is clear that all of these factors have played an important role in making recreational boating safer. But perhaps the more important questions are "What do these factors have in common?" and "How do we maximize these types of interventions to make boating even more safe and enjoyable for the future?"

Actually, the answer is found in the fuel we pump into our tanks each time we set out for a day on the water. It's not in the octane rating, or the ratio of gasoline to ethanol, or even the mixture of oil we add to accommodate our two-cycle engines. The important thing about the motorboat fuel we use is the taxes we pay for the privilege to use it.

Thanks to the Aquatic Resources (Wallop-Breaux) Trust Fund and visionaries like then-Rep. (now Senator) John Breaux and Sen. Malcolm Wallop, the states have a stable source of funding with which to make our waters safer.

Through the creation of the Trust Fund, these founding fathers established a public trust with the boaters of this country to return a portion of the motorboat fuel tax directly to the users who generated the revenue in the first place. It is no coincidence that every new plateau in the downturn of accidents and fatalities has been preceded by an increase in funding for the states.

This model "user pays - user benefits" program has yielded an incredibly high return on the users' investment through the preservation of thousands of lives and the avoidance of countless injuries during the last few decades.

Despite these successes, more can yet be done. We do not believe that 700 or 600 or even 500 boating fatalities are any more acceptable today than 1754 were in 1973. Even though boating fatalities are at a 25-year low, the sheer number of boating accidents continues to increase over time, and the number of serious boating-related injuries continues to increase both in

absolute terms as well as in terms of increased boat registrations.

According to the National Survey on Recreation and the Environment (2000), boater participation will continue to increase at moderate rates over the next 10 to 15 years. Likewise, the diversity in types of boating, the interaction between commercial and recreational boating, and the likelihood of multiple use waterway conflicts will increase. Our ability to continue to reduce fatalities in the face of these new challenges is no less daunting than was our challenge to cut in half the number of boating deaths in the early 1970s.

Whether we succeed in the future depends on our level of commitment to more effective law enforcement on the water, better and more varied forms of education in the classroom and online, leveraging more help from our public and private partners, and maintaining the boaters' trust by ensuring the highest possible return on the investment of boaters' tax dollars.

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Support for 50/50 Split Grows

The National Association of State Boating Law Administrators (NASBLA) and the National Boating Safety Advisory Council (BSAC) continue building bridges in preparation of the 2003 reauthorization of the Aquatic Resources (Wallop-Breaux) Trust Fund. The organizations are attempting to acquire a 50/50 split of the federal fuel tax attributable to motorboat fuel between the Boating Safety and Sport Fish Restoration accounts. The list of organizations supporting the 50/50 split continues to grow.

- 🌐 American Canoe Association
- 🌐 American Council of Marine Associations
- 🌐 American Sailing Association
- 🌐 American Waterways Operators
- 🌐 Boston Whaler
- 🌐 Brunswick Corporation
- 🌐 Marine Retailers Association of America
- 🌐 Mercury Marine
- 🌐 National Association of Independent Insurers
- 🌐 National Boating Federation
- 🌐 National Recreational Boating Safety Coalition
- 🌐 National Safe Boating Council
- 🌐 National Sheriffs' Association
- 🌐 National Water Safety Congress
- 🌐 Personal Watercraft Industry Association
- 🌐 SOS
- 🌐 United States Power Squadrons
- 🌐 U.S. Coast Guard Auxiliary
- 🌐 U.S. Sailing Association

Organizations in [blue](#) are the most recent to join the list of supporters.

Nebraska Reports Zero

Nebraska experienced a phenomenal boating safety year in 2001 – **zero** boating-related fatalities were reported in the state. This marks Nebraska's first fatality-free year since 1965.

For this accomplishment, the Nebraska Game & Parks Commission's Boating Division earned the Governor's Safety and Health Award.

"I'm very proud to have accepted the award on behalf of the Commission and all of the more than 260 instructors across the state who have taught boating safety classes," said Nebraska Boating Law Administrator Herb Angell. "Since May 1, 2000, they have scheduled 309 classes and certified more than 3,000 people."

"We received the award because Nebraska was boating fatality-free in 2001. Since 1965 when Nebraska began keeping boating records, no full year had passed without at least one boating fatality in Nebraska," Angell said. "Nebraska's last boating fatality occurred June 27, 2000, so in another few weeks it will, hopefully, be two years since there has been a boating-related fatality on Nebraska's waters." *(Editor's note: Nebraska almost made it two years with no boating-related fatalities. The first fatality on Nebraska waters since the one on June 27, 2000, occurred 23 months later on May 25, 2002.)*

According to records, Nebraska usually records about 4.4 boating-related deaths per year. The highest number of fatalities recorded was 10 deaths each in 1970, 1972 and 1973. Aside from last year, the fewest fatalities were recorded in 1966, 1989 and 1995 when one person died while boating in each of those years. Since records began being kept in 1965, a total of 166 people have died while boating in Nebraska.

Angell attributes the fatality-free year to educated boaters being more aware of boating regulations and safe practices on the water.

"In 2000 the Nebraska Legislature passed a law that requires 14- and 15-year-olds who want to operate personal watercraft anywhere in the state to satisfactorily complete a boating safety



The Nebraska Game & Parks Commission's Boating Division earned the Governor's Safety and Health Award for having no boating-related fatalities in 2001. Nebraska Boating Law Administrator Herb Angell received the award on behalf of the Commission and the more than 260 instructors across the state who have taught boating safety classes.

Photo courtesy Nebraska Game & Parks Commission

course approved by the Nebraska Game & Parks Commission and to have a valid boating safety certificate in his or her possession. We think we are seeing the results of that mandatory education."

Though the law requires 14- and 15-year-olds who want to operate personal watercraft to complete the boating safety course, Angell encourages people of all ages to complete the course.

In addition to the six-hour Boating Basics Course, Nebraska also offers the home study Nebraska Boating Basics Course, which is nationally recognized and approved by the U.S. Coast Guard and the National Association of Safe Boating Law Administrators.

In addition to learning boating laws and how to boat safely, those who successfully complete the course are allowed reduced rates on boating insurance by most insurance companies.

"In Nebraska most of the boating-related fatalities are anglers," Angell said. "This year we are going to target anglers and try to turn that around. Anglers must realize they are boaters too, a recent survey showed that 60 percent of the state's anglers fish from a boat."

The most common causes of Nebraska's boating fatalities are people falling overboard or boats capsizing due to overloading with people or equipment, or negligent operation. "The part that is hard to believe is that non-swimmers often get into a boat without wearing or having immediate access to a life jacket," Angell said.

In 2000 the state certified more than 1,900 boat operators. In 2001, about 800 boat operators were certified. This was somewhat of a decline but a surprising number of students were over 16 years of age.

Although Nebraska's boating accidents were at a record high for 2001, this could be because people were reporting more accidents as they became aware of the reporting requirement through education.

According to information gathered for the *Reference Guide to State Boating Laws* (seventh edition), 33 states and territories had implemented mandatory safety education requirements by 2001, and several others have legislation pending.

All states with mandatory boating safety education have experienced a significant decline in boating fatalities. The answer for Nebraska, says Angell, is mandatory boating safety education for all boat operators.

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General Accounting Office Analyzes Vessel Identification System

In 1988, Congress passed legislation that required the U.S. Coast Guard to develop a vessel identification system to share individual states' vessel information as well as information on federally documented vessels.

With such a system, the Coast Guard and state

law enforcement officials could more effectively identify information on vessels in our nation's ports and waterways – the need for which has heightened since the September 11 terrorist attacks.

Thus, the U.S. General Accounting Office (GAO) was asked to determine the Coast

Guard's efforts to acquire the system and whether its acquisition plans are adequate.

The full report, including GAO's objectives, scope, methodology and analysis is available at www.gao.gov/cgi-bin/getrpt?GAO-02-477.

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Study Finds that Boating Benefits Kids

A recent survey sponsored by the National Marine Manufacturers Association (NMMA) and conducted by the Impulse Research Corporation that boating can be a positive experience for children in more ways than one. Boating can contribute to kids being healthier physically and psychologically than their non-boating counterparts.

The online survey was conducted with a random sample of 1,004 parents, half of whom had children who boat regularly, and half that did not.

Families who boat reported their children to be healthier than those who don't (71 percent of boaters said their children's health was excellent, as opposed to 61 percent of non-boaters).

Boating also offers psychological benefits

While it might seem obvious that boating can promote physical fitness, boating can also help children psychologically. It can increase children's self-confidence, optimism and spirit of team play.

Since boating helps children learn a range of useful skills and positive attitudes, it can help increase their self-confidence. The survey found that children who boat are more self-confident (54% to 47%) than their peers.

The survey also found that children who boat tend to be more optimistic (52 percent compared to 43 percent).

Boaters' children tended to be the leader more often than their peers are (75 percent to 65 percent).



Photo by Tim Smalley, Minnesota Department of Natural Resources

Children who boat learn to be more outgoing and less shy or introverted, which may be one reason they become better team players (63 compared to 53 percent).

The survey also discovered that children involved in boating spend more quality time with parents year-round, even in the colder months.

"There are many benefits to getting children involved in boating. We believe by learning about these benefits, more parents will take their families on board," said Laurie Fried, director of Public Relations for NMMA.

The entire survey is available online at www.discoverboating.com.

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Study Shows Fishing, Boating as Ways to Spend Quality Time with Family

A national survey by the Recreational Boating and Fishing Foundation (RBFF) shows that 87 percent of Americans believe fishing and boating have a positive effect on family relationships.

In addition, the survey found that Americans believe fishing and boating are the best ways to spend quality time with their families.

"It is time for families to turn off their computers and televisions, and rediscover one another through fishing and boating," said Bruce Matthews, president and CEO of RBFF. "We challenge American families to get out on the water and reconnect. It's hard not to relax and have a good time together when you are on the water."

Over 1,000 adults interviewed

RBFF interviewed 1,013 randomly selected adults nationwide by phone May 3-7, 2002. The data was weighted to reflect the demographic make-up of the adult U.S. population. The poll has a margin of error of plus or minus three percentage points.

Respondents were asked which leisure activities are the best way to spend quality time with their family. Responses included:

- Fishing and boating: 35 percent
- Playing team sports: 21 percent
- Watching TV: 18 percent
- Going to the movies: 16 percent
- Playing computer games: 4 percent

Boating and fishing as stress relief

In addition to being a great way to reconnect with family, RBFF's survey found that 90 percent of Americans believe that fishing and boating help to reduce the stress levels in their lives.

It also revealed that in the last two years more than 55 percent of Americans have been fishing and boating.

"We've all read the news reports about Americans working more, spending less time with family and friends and having high levels of stress," said Matthews. "Take a break, breathe some fresh air and get out on the water together. Fishing and boating are favorite American traditions that promote family values

and cohesiveness, as well as provide wholesome recreational outdoor activities."


Fishing and boating offer a positive experience that the entire family can enjoy together.

- Numerous studies have shown that being with family and friends, relaxing, and being outdoors and close to nature are the primary reasons people boat and fish.
- Many Americans believe that outdoor recreation strengthens the family as a unit and the children as individuals.
- Studies also show that people who participate frequently in outdoor recreation are more satisfied with life overall.

For additional information, visit www.WaterWorksWonders.org, or call Kirk Gillis, RBFF communications manager, at 703.519.0013, ext. 109.

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New Hampshire Enforcing New Boat Education Law

 Effective January 1, 2002, no person born after January 1, 1983, may operate a powerboat with an engine in excess of 15 horsepower (including electric powered motors) on the public waters of New Hampshire without a valid Safe Boating Education Certificate.

Approved in 2000, the certification requirement is being implemented gradually based on age. Phasing in the law will take place over seven years with compliance for all boaters by January 1, 2008. In 2002, boaters between the ages of 12 and 19 are required to be certified. The age group will increase each year

until 2008, when the law will apply to all motor boaters.

A person who is licensed by the state of New Hampshire or the United States Coast Guard to operate a commercial vessel will not have to take the safe boater education course and will be exempt from the requirements of the law as long as they maintain their commercial license.

Any person who holds a certificate from any state that meets or exceeds the requirements of the Boating Education Law (meaning the course has been approved by the National Association of State Boating Law


Administrators) shall be exempt. New Hampshire will accept proof of certification issued by another state. The state will also accept certificates from the U.S. Coast Guard Auxiliary and the United States Power Squadrons.

Once an individual has become certified, he or she has fulfilled the requirements of the law. There is no legal obligation to take the course again.

Violators of the new law can be fined between \$50 and \$200.

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“Water Works Wonders”™ Provides Basis for Georgia Campaign

 Developed by the Recreational Boating and Fishing Foundation (RBFF), the “Water Works Wonders”™ - Take Me Fishing” campaign delivers the message that time spent fishing and boating on the water will help reconnect family and bring them even closer, according to the Georgia Department of Natural Resources, Wildlife Resources Division (WRD).

WRD uses the national campaign in an effort to raise local awareness about fishing and boating opportunities.

“Today’s families are busier than ever,” says WRD Chief of Fisheries Management Chuck Coomer. “We hope people will rediscover each other through boating and fishing together.”

National Fishing and Boating Week (June 1-9, 2002) played a key role of the national initiative and recently was nominated for a 2002 Fatherhood Award by the National Fatherhood Initiative, the premier fatherhood renewal organization in the country. This week provided a great time to learn more about recreational fishing and boating and experience the benefits firsthand.

WRD used the “Water Works Wonders”™ - Take Me Fishing” information in a variety of ways to reach the public about the benefits of boating and fishing.

Public service announcements (PSAs) were issued to television stations throughout the state for airing during National Fishing and


Boating Week. In addition, anglers who had purchased a fishing license at least once in the past three years received a postcard reminding them of the excellent fishing opportunities. Pictures from the campaign appeared on the front of the current state fishing regulations as well.

All of this was designed to remind Georgians, and people nationwide, that fishing and boating are favorite American traditions that promote family values, as well as provide wholesome recreational outdoor activities.

For more information about the national campaign, visit the www.waterworkswonders.org.

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Kentucky Gets Tougher on Boating Safety

 People who operate a boat while intoxicated will face tougher penalties under a new Kentucky law.

Introduced by Rep. Steve Riggs with the support of the Kentucky Department of Fish & Wildlife Resources, House Bill 453 was aimed at improving the safety of Kentucky’s rivers and lakes.

Signed into law in April 2002, the regulation doubles all fines for operating a boat while under the influence of alcohol. When the new law goes into effect in July 1, 2002, the fine will

be \$200 for a first offense, \$350 for a second offense, and \$600 for all subsequent offenses.

In addition, the law requires that anyone convicted of boating while intoxicated must attend a boating safety class and pay a \$100 fee for that class. Such courses are offered in every Kentucky county, so they are readily accessible across the commonwealth, Riggs said.

Finally, the law increases from \$100 to \$500 the amount of accident damage required before a non-injury boating accident must be reported.

“Boating is the fastest growing recreational activity for families in the country and in Kentucky,” said Riggs, who also noted an increased number of accidents on Kentucky lakes and rivers.

“More and more people are using the state’s waterways for fishing, skiing and other activities, and they’re demanding that those waterways be safe for their families. These are good steps toward our goal of improving boating safety in Kentucky.”

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BoatU.S. Teams Up With Marina Association for National Marina Day

BoatU.S., with more than 530,000 members and 650 cooperating marinas, is joining forces with the Marina Operators Association of America (MOAA) to promote the first-ever National Marina Day, scheduled for August 10, 2002.

“National Marina Day is designed to focus attention on the important role marinas play as gateways to the boating experience and we are encouraging our marinas – which give significant discounts on fuel, slips and repairs

to our members – to actively participate,” said BoatU.S. Chairman Richard Schwartz.

The day’s activities will include local waterway clean-up community service projects, customer appreciation events, boat parades, marina rendezvous, fishing rodeos, community open houses and marina tours for local officials.

“Without marinas – large or small, public or private – our access to the waterways would be much more limited,” said Schwartz. “Getting

the local community down to their marinas and highlighting the important role these partners play in boating deserves our full support and cooperation,” Schwarz added.

For more information on National Marina Day, contact MOAA toll-free at 866-FOR-MOAA.

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Boating Organizations Challenge

Report Blaming Boating as Activity that Introduces Petroleum into Sea

By Kimberly Hermes

Both the National Marine Manufacturers Association (NMMA) and the Personal Watercraft Industry Association (PWIA) dispute a recent report from the National Academies' National Research Council. The report, *Oil in the Sea: Inputs, Fates, and Effects*, presents data about the amount of petroleum that human activities contributes to North American ocean waters each year.

The report contends that nearly 85 percent of the 29 million gallons of petroleum that enter the ocean each year as a result of human activities comes from land-based runoff, polluted rivers, airplanes, and small boats and personal watercraft.

The report also states that less than 8 percent of petroleum that enters the sea comes from tanker or pipeline spills, and oil exploration and extraction are responsible for only 3 percent. Another 47 million gallons seep into the ocean naturally from the seafloor.

"Oil spills can have long-lasting and devastating effects on the ocean environment, but we need to know more about damage caused by petroleum from land-based sources and small watercraft since they represent most of the oil leaked by human activities," said James M. Coleman, chair of the committee that wrote the report, and Boyd Professor, Coastal Studies Institute, Louisiana State University, Baton Rouge.

The amount of petroleum released into North American and global waters is less than previously thought, the committee found. However, new studies show that the environmental effects of a major oil spill are longer lasting than once thought and that even small amounts of petroleum can seriously damage marine life and ecosystems.

Sources of oil in the seas

The report contends that the consumers of oil are responsible for most of what finds its way into the ocean. Land runoff and recreational boating account for nearly three-quarters of the petroleum released into the sea annually through the consumption of petroleum.

Examples given in the report include oil runoff from cars and trucks, oil in waste water, the improper disposal of petroleum products, military and commercial jets that occasionally jettison excess fuel over the ocean, and ships that release oil from their engines as significant sources of oil in the sea. The report also points out that older two-stroke engines still found on many recreational boats and personal watercraft discharge gasoline and oil into the water.

Both the Personal Watercraft Industry Association (PWIA) and the National Marine Manufacturers Association (NMMA) dispute the report's findings as they relate to recreational boating because it does not address new technology engines and education efforts by industry.

"Marine pollution is a concern to all Americans and we are proud of our industry's efforts to produce one of the most environmentally friendly engines on the water today. The personal watercraft industry has worked with

Marine pollution is a concern to all Americans and we are proud of the personal watercraft industry's efforts to produce one of the most environmentally friendly engines on the water today.

the government to develop engine standards and cleaner, more efficient technology," said Monita Fontaine, former PWIA executive director. "Unfortunately, the report is based on old technology and does not consider direct injection and four-stroke engines. Modern personal watercraft with 75 percent fewer emissions have been sold since 1999.

Mick Blackistone, former NMMA vice president of Government Relations, says the study does not acknowledge the recreational boating industry for its successful work with the Environmental Protection Agency (EPA) on engine emission reduction regulations, which meet or exceed the EPA timetable on reducing hydrocarbon and other emissions.

The industry has invested billions of dollars on producing and promoting new technology four-stroke and direct injection two-stroke engines, working with state and local governments on protecting marine habitat and endangered species, and more, according to Blackistone.

New technology engines for boats and personal watercraft will use 35 to 50 percent less fuel, up to 50 percent less oil and reduce air emissions by 75 percent. The boating industry estimates that by 2006 more than 90 percent of all recreational boat engines will be "new" technology engines.

Despite all this, the report's authors state in an appendix that four-stroke engines and direct-injection two-stroke engines were not included

in their analysis and that they assumed the two-stroke populations are standard models.

Fontaine added, "Our customers have already begun the process of embracing this cleaner, quieter technology, and we'll be seeing more and more of these engines on the water in the coming years."

According to Blackistone, some boaters will continue to use standard two-stroke engines for the time being but they will probably convert to new technology engines as they become more available and the benefits are made clear to them.

Environmental effects

The impact of an oil spill on marine life is not directly related to the size of the spill, since even a small spill in an ecologically sensitive area can have long-term adverse effects, the report says. A spill's influence also depends on the type and amount of toxins present in the petroleum product being released.

Significant research has been conducted in recent years confirming that large oil spills can be devastating to the marine environment. Where oil seeps naturally into the ocean, local marine ecosystems have been significantly altered, the report says.

Less is known about how chronic releases from sources such as land runoff and two-stroke engines on boats and personal watercraft affect marine ecology. The report calls for the federal government, in cooperation with academia and industry, to launch a major research effort aimed at better understanding how chronic releases of petroleum affect the marine environment.

According to Fontaine, PWIA agrees with this recommendation along with the report's suggestion for further study to develop more accurate techniques for estimating the amount and sources of oil in the nation's coastal waters.

The study was sponsored by the U.S. Minerals Management Service, U.S. Geological Survey, U.S. Department of Energy, U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, U.S. Coast Guard, U.S. Navy, American Petroleum Institute, and the National Ocean Industries Association.

Oil in the Sea: Inputs, Fates, and Effects is available on the Internet at <http://www.nap.edu>. Copies can be purchased from the National Academy Press by calling 202.334.3313 or 800.624.6242.

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Missouri Officer Wins MADD Award

Mothers Against Drunk Driving (MADD) recently recognized Corporal Nicholas Humphrey of the Missouri State Water Patrol for his efforts in reducing the number of intoxicated operators.

Roger Wilson, executive director of MADD in Missouri, made the presentation to Corporal Humphrey at an awards ceremony in Jefferson City. Colonel Adams, Commissioner of the Missouri State Water Patrol stated that Corporal Humphrey was selected as the 2001 MADD award recipient for his extraordinary efforts in Boating While Intoxicated enforcement.

MADD presents the annual award to the water patrol officer that has had the most effect on reducing intoxicated operators on the waterways of the state. Corporal Humphrey also received this award for the 2000 boating season while assigned to Lake of the Ozarks.

Mr. Wilson's remarks also recognized the Missouri State Water Patrol for leading the nation's state marine enforcement agencies in boating while intoxicated arrests for the last five years.

"Recognizing these officers and departments is only a small thank-you for the services we receive from the law enforcement community," Wilson added, "MADD strives to reduce the number of alcohol-related deaths and injuries on the waterways and lakes, just as we do the highways and to assist the victims of these violent crimes. We want to express our thanks to the countless officers of the Missouri State Water Patrol who continually work toward this goal with us."



Corporal Nicholas Humphrey of the Missouri State Water Patrol was recognized by Mothers Against Drunk Driving (MADD) for his efforts in reducing the number of intoxicated operators on the state's waterways. Photo courtesy Missouri State Water Patrol

Two Arkansas Officers Commended for Saving Canoeists

Cpl. Raymond Plummer and Cpl. David Treat, both wildlife officers for the Arkansas Game and Fish Commission, received the Governor's Life-Saving Award after rescuing two elderly canoeists from the frigid waters of the White River.

Plummer of Berryville has been with the agency since 1997, and Treat is from Bentonville and has been a wildlife officer for over 11 years.

After Plummer was leaving a post meeting on May 3, a fisherman warned him that two people had just overturned in their canoe and were floating downstream. Both Plummer and Treat raced downriver to intercept the couple as they were floated down the river.

"I asked them if they could paddle toward me," Plummer said, "They said 'no,' they couldn't paddle, and the canoe was almost completely submerged. They could not move their legs (due to onset of the cold water hypothermia.)"

Besides dangerously cold water, the river was running at more than 1,900 cubic feet per second – an extremely swift current for the White.

Plummer called the AGFC regional office to get a boat in the water downriver to

catch the couple if he failed to do so. Armed with the knowledge of his swift water rescue training he completed a month ago, Plummer plunged into the river. Due to the swift current, he had to remove his gun belt, shoes and shirt and swim upstream at a 45-degree angle to the canoeists.

"Before I even got to them, that water could have shut my muscles down. The good Lord was with me. I had to fight against the current. I grabbed them and started swimming back about 75 yards to where David Treat was and he waded out to help me," Plummer said. The officers also managed to save some of the canoeists' belongings as well as the canoe.

Plummer, Treat and Wildlife Officer Assistant Supervisor Brian McKinzie carried the couple back to their cabin because their legs would not

support them. Both canoeists suffered from the initial stages of hypothermia, but the officers got them into a warm bath and then bed so paramedics were not needed.

"If we hadn't been there for them, they would not have been here today," said Plummer.

Besides the compliments and congratulations of commissioners and other enforcement officers, Treat and Plummer were recognized with a plaque at the AGFC employment appreciation day.

However, Plummer said he'd rather the credit go to the team effort.

"I'm just a normal man," he said. "If it was my momma or grandma in that situation, I'd sure want someone to help."

"In my opinion, the actions of these officers are commendable," said Capt. Luther Hungate, an AGFC wildlife officer supervisor. "I am personally very proud to have them in my district. Their response in this situation is indicative of their dedication to service, not only to the Commission, but also to their fellow man," he added.



Delaware Agent Receives Lifesaving Award for Water Rescue

Delaware Division of Fish and Wildlife Enforcement Corporal Anthony W. Knott was awarded the Enforcement Section's Lifesaving Award at the division's annual staff meeting. Corporal Knott received the award for his actions to single-handedly rescue two members of a commercial tugboat which had capsized near the Delaware entrance to the Chesapeake and Delaware Canal on May 11, 2001.

While on patrol, Cpl. Knott heard the distress call from the tugboat on his marine radio and responded to the scene. Alone in his patrol boat, he was the first vessel to reach the 110-foot capsized tugboat and barge. He directed other rescue vessels to the scene and maneuvered his vessel near the capsized tugboat to pull two of its crew members from the water onto his patrol boat.

The two men were physically exhausted in the water and were not wearing personal flotation devices. There was a strong current, and fuel in

the water was making the situation more difficult. Other rescue vessels arrived at the scene and rescued three other crew members from the capsized tugboat. One crew member was missing and Cpl. Knott remained on the scene with other rescue boats and Fish and Wildlife agents and assisted with the search for the missing crew member until the search was called off by the U.S. Coast Guard.

The body of the missing crew member was later recovered when the tugboat was raised from the bottom more than a week later. Corporal Knott's quick response and actions on the scene were directly responsible for saving the lives of two crew members and his professionalism under emergency conditions led to the rescue of the other crew members.



Acting Director of the Delaware Division of Fish and Wildlife H. Lloyd Alexander presents Corporal Anthony W. Knott (in uniform) the Enforcement Section's Lifesaving Award for his actions to single-handedly rescue two members of a commercial tugboat that had capsized in May 2001. Photo courtesy Delaware Division of Fish and Wildlife

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ODNR Boating Education Partner Receives National Award

The non-profit Spirit of America Foundation based in Mentor, Ohio, was recognized nationally by receiving the Boating Education Advancement Award during the 2002 International Boating & Water Safety Summit held in Daytona Beach, Fla., in April.

Spirit of America Foundation has been a recipient in recent years of a boating education grant provided by the Ohio Division of Natural Resources (ODNR) Division of Watercraft to promote safe boating practices and provide

boating education, primarily through its youth education programs.

"Education is a major component of our efforts to make Ohio waterways safer. The award brings much deserved recognition to a special program that is designed for middle school students who one day will become our future boaters," said Jeff Hoedt, chief of the ODNR Division of Watercraft.

The award was presented by the National Safe Boating Council to Cecilia Duer, executive

director of Spirit of American Foundation. Last October, the Foundation also was among three Ohio boating education partners to receive the 2001 Outstanding Boating Safety Education Program award by the Ohio Department of Natural Resources.

The Central Ohio Safe Boating Council based in Delaware also was recipient of an Award of Merit during the Summit from the National Water Safety Congress for its continuing work in boating and water safety.

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Ohio Boating Education Administrator Receives National Award

Emily King, a boating safety and education program administrator in the Ohio Department of Natural Resources (ODNR) Division of Watercraft, has been honored with the Award of Appreciation by the American Society For Testing And Materials (ASTM).

The national recognition award was presented to honor her dedication and outstanding contribution to ASTM for work in developing national water search and rescue standards.

"We have a very high-achieving professional staff whose accomplishments continue to bring national recognition to Ohio's boating safety,

education and other programs within our agency," said Jeff Hoedt, chief of the ODNR Division of Watercraft.

King serves as recording secretary for ASTM's Search and Rescue Committee and serves as chairperson of the Personal Training and Education Subcommittee.

The ASTM Search and Rescue Committee was formed in 1988 and includes 89 participating members who serve on four technical committees that are responsible for 27 approved standards.

King joined the ODNR as a state watercraft officer in 1978. She has worked in many areas of boating education and is highly regarded for her expertise as a boating education administrator and as an instructor in river rescue and ice rescue training programs. King was honored by the National Association of Boating Law Administrators with its National Boating Safety Award in 1998. She also holds a Bachelor of Arts degree in public education from the Ohio State University and is a graduate of Delaware Hayes High School.

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Instruments for Boating Safety

By Commodore Warren E. McAdams USCGAUX, National Directorate Commodore for Recreational Boating Safety

A cabin cruiser was proceeding down a tributary to a major river at idle speed. A fishing boat with two persons on board was headed upstream at a high rate of speed. Around a sharp bend in the stream the smaller boat struck the cruiser in the side and went beneath the larger boat. Both people on the smaller vessel were killed. Interviews with the family revealed that one of the victims had just purchased the smaller boat that week.

The operator of the small boat committed a number of errors that contributed to the accident. The small boat operator was driving too fast in the relatively narrow tributary and failed to exercise caution when rounding a sharp curve in the stream. If the small boat operator in the above story had attended safe boating classes it is possible that this serious accident would have been avoided.

Accidents do occur and, when accidents happen, many groups and agencies are involved in the searches for victims and the filling out of the required reports. Many of these same people are also engaged in teaching boating

safety courses in an effort to prevent accidents from happening in the first place.

Classes, seminars and public appearances serve as acts of preventive search and rescue. While there is no guarantee, the behavior of students that attend classes may prevent an unknown number of accidents. The decline in fatalities over the past several decades tends to support the value of boating education.

However, injuries of all types may be on the increase and there are a number of boaters who tend to be out of the reach of our traditional efforts. In some areas of the country, deaths among those involved in paddle sports are on the rise. In other regions hunters and fishers, or nontraditional boaters, have become a problem category. And, while progress has been made with many boaters who ride personal watercraft (PWCs), this class of boats contributes a high level of injuries.

The growing concern about paddle sports is possibly just a warning call to more challenges in the future. As Americans look for more

recreational and sports activities, new classes of boaters will emerge. On some waters performance boats are a growing concern as they add size and speed to the

mix on crowded waterways. Boaters tow more than water skiers – a wide range of floating and planing toys are being used. Both boaters and manufacturers will continue to innovate and provide fun and thrills to boaters and folks who use boats to pursue their hobbies.

Over the past few years the U.S. Coast Guard along with the states have been examining the underlying causes that contribute to the accidents, injuries and fatalities that make up today's boating accident numbers. With good analysis and proactive programs, we should be able to keep the injury and fatality numbers headed in the right direction.



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NASBLA to Offer Advanced Accident Investigation Course

Most boating law enforcement officers, though well-versed in enforcement, need specialized education to properly document, analyze and reconstruct recreational boating accidents. To increase the number of officers trained in advanced accident investigation, NASBLA will conduct an advanced boating accident investigation seminar in Lexington, Kentucky, September 30-October 4, 2002.

This seminar is intended for active local, state or federal marine law enforcement officers who are already versed in boating enforcement but who lack technical accident investigation training. The course content and training aids given in the seminar make it especially appropriate for boating law enforcement training personnel. The seminar is also

recommended for supervisory personnel since it will enable them to support their law enforcement officers and will assist them in reviewing accident reports.

The content of the advanced seminars is based on collision type accidents. The course includes five hours of review of collision accident investigations using the 2002 edition of NASBLA's National Boating Accident Investigation and Analysis Course manual.

Underwriters Laboratories will also provide seven hours of instruction on advanced topics including fuel systems, defect recall and notification, carbon monoxide, exhaust and ventilation systems, ignition protection systems, and boat speed calculations. The

National Transportation Safety Board will provide a four-hour block of instruction on human factors, event and causal factors, and a case study. The International Marine Investigators Association will provide a block of instruction on damage estimation and calculation.

The core of the seminar is the hands-on investigation of five, two-boat collision accidents. NASBLA has conducted a series of staged boating collisions, resulting in several excellent teaching aids, including technical data collected and high-speed film documentation. The seminar will conclude with the presentations of the investigative reports.

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TO REGISTER

Contact the NASBLA office for a registration form at 859.225.9487 or e-mail chris@nasbla.org. Registration is typically limited to 60 attendees per seminar. Supervisors may reserve space and send attendees' names later. Registration closes **September 20**. The

seminar will be held at the Four Points Sheraton Lexington, 1938 Stanton Way, Lexington, Kentucky 40511. Phone 859.259.1311 for reservations. Room rates are \$62. Mention NASBLA to get the special rate.



*Capt. Scott Evans
Chief Office of Boating Safety*



By the time you read this, National Safe Boating Week will be well behind us and we will be in the midst of another glorious boating season at which time approximately 70,000,000 of us will be taking to the water.

As you all, the theme for this year's campaign is **BOAT SMART FROM THE START. WEAR YOUR LIFE JACKET.** Looking at the preliminary reports and reviewing the latest accidents, it appears that "wear your life jacket" continues to be a key element to saving lives.

Determining the cause of an accident is a vital step in a National Recreational Boating Safety program. In every accident there is a series of steps that lead up to the accident – links in a chain of events, per se. Break one of these links and the accident may be avoided. When we identify these links, or causal factors as they are called, we can address them to help prevent future accidents.

Some of these links may involve lack of experience or knowledge of the dangers associated with water activities. We try to address these problems in our boating safety courses, attempting to point out the "lessons learned" from others unfortunate to have been involved in an incident or accident. We also focus on teaching the "rules of the road," of which all boaters must abide to ensure we use the waterways together.

Other links involve equipment. When we identify problems with vessels and associated equipment, we can then work with the manufacturers to make improvements.

Yet another link may involve a process or procedure that may be wrong. When a problem has been correctly identified, we can then adjust the procedure through rules, regulations or education.

The final "reserve parachute," if all else fails is the life jacket. If there is a life jacket, then the chances of survival are enhanced. For the life jacket to be effective, it must be worn. The only way for one to guarantee its availability at a moment's notice is to have it on. Thus the importance of the theme: **BOAT SMART FROM THE START. WEAR YOUR LIFE JACKET.**

I have used the term "identify" numerous times so far in this discussion on accidents. Identifying the causal factors or links that led up to an accident is critical in our efforts to make recreational boating safer. Therefore, I

cannot stress enough the importance of thorough and complete investigations, and accurate and timely accident reporting. The reports you feed into the Boating Accident Report Database (BARD) system help us identify problems that we can then address, be it through education, product improvement, or the legislative and rulemaking process.

One particular boating group that has gotten our attention is paddlers (kayakers and canoeists). Over the past four years, we have seen approximately 100 fatalities per year, and we need to find a way to reduce these numbers. To address this issue, we are beginning a study on auxiliary flotation on kayaks and canoes. You will be hearing more on this study at a later date.

In conclusion, preliminary figures for last year show an all-time low number of approximately 700 reported boating fatalities that were captured by the BARD system*. Just think, after passage of the Federal Boat Safety Act we had an all-time high number of 1,754 boating fatalities in 1973. Back then, there were 27 fatalities for every 100,000 registered boats. Almost 30 years later we have more than twice as many boats on the water with a 1,000 fewer fatalities — relatively speaking that's five fatalities for every 100,000 registered boats.

Although we can be proud of our accomplishments over these past three decades, we cannot rest on our laurels. We can and must continue our efforts to reduce accidents and fatalities with fervor, for even one fatality is too many in my book. Working together we will continue to identify the causal factors (links in the chain of events that led up to an accident), address the problems, and drive the accident statistics down even lower.

Moving on to another important and timely subject, I would be remiss if I did not address homeland security and the important changes that recreational boaters will experience this boating season. The hot topic of the summer is **SECURITY ZONES**. Please help us get the word out to recreational boaters on Security Zones, and the absolute necessity to abide by the new rules. You can review the new rules and recommendations on our website, www.uscgboating.org. The message we want delivered is:

Shortly after September 11, the U.S. Coast Guard established regulations

for the safety and security of U.S. naval vessels. These regulations require that you operate at a minimum safe speed within 500 yards of any U.S. naval vessel and proceed as directed by the commanding officer or the official patrol vessel. Also, you may not approach within 100 yards of any U.S. naval vessel. If you need to approach within 100 yards, you must contact the U.S. naval vessel or the Coast Guard escort vessel on VHF-FM channel 16 for authorization. Violation of these regulations, which are published in the Federal Register, is punishable by up to 6 years in prison and/or up to \$250,000 in fines.

We are directing the recreational boating public to the U.S. Coast Guard Infoline (1-800-368-5647) and our website, www.uscgboating.org. From these two locations the boater will be able to find information on the security zones in effect in the area they plan to boat.

I am looking forward to seeing many of you at the NASBLA annual conference in Cleveland, Ohio. In the meantime, **ENJOY THE SUMMER!**

**The Coast Guard estimates that an average of six percent (6%) of all recreational vessel fatalities that satisfy federal reporting requirements are not captured by the BARD system each year. Using a factor of six percent (6%) to adjust the number of fatalities captured by BARD, the preliminary 700 fatalities for 2001 times the six percent (6%) underreporting estimate yields a total of 742 fatalities in 2001.*

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Across the country, boating safety professionals work hard to make U.S. waterways safe for a wide range of recreational activities. Their efforts include constant public education efforts to ensure operators and passengers have all the information they need to boat safely. For the third year in a row, the National Safe Boating Council (NSBC) and the National Association of State Boating Law Administrators (NASBLA), in cooperation with the U.S. Coast Guard, are conducting the North American Safe Boating Campaign (NASBC).

2002 - 2003 RECREATIONAL BOATING SAFETY CALENDAR

JULY

No scheduled dates

AUGUST

29 - September 1
U.S. Coast Guard Auxiliary
National Conference
Orlando, Florida
940.321.2395

SEPTEMBER

7 - 11
NASBLA
Annual Conference
Cleveland, Ohio
859.225.9487

11 - 15
U.S. Power Squadrons
Governing Board Meeting
Des Moines, Iowa
888.361.8777

30 - October 4
NASBLA
National Boating Accident
Investigators' Advanced Training
Lexington, Kentucky
859.225.9487

OCTOBER

26 - 29
National Boating Safety
Advisory Council
Meeting
TBA
202.267.0950

NOVEMBER

No scheduled dates

DECEMBER

No scheduled dates

JANUARY 2003

1 - 5
U.S. Power Squadrons
Annual Meeting
Orlando, Florida
888.361.8777

FEBRUARY 2003

23 - 26
International Association of
Marine Investigators
Annual Meeting
Panama City, Florida
978.392.9292

MARCH 2003

26 - 29
National Boating Safety
Advisory Council
Meeting
TBA
202.267.0950

APRIL 2003

13 - 16
International Boating &
Water Safety Summit
Las Vegas, Nevada
740.666.3009

MAY 2003

4-7
Western States Boating Administrators
Association Annual Conference
Portland, Oregon
503.373.1405

JUNE 2003

8-11
Northern Association
of Boating Administrators
Annual Conference
Bar Harbor, Maine
207.287.2766

*NASBLA welcomes
information about
boating-related
conferences that
would appeal to a
national audience.
Please e-mail
information to
editor@nasbla.org.*



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