



## **DEPARTMENT OF HOMELAND SECURITY**

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### **WebWatch Division 8, 5NR July 2012**

#### **A. COMMANDANTS INDEPENDENCE DAY MESSAGE - WHY WE STAND THE WATCH**

Admiral Bob Papp

1. Shipmates, two-hundred and thirty six years ago tomorrow, our founders adopted the principles that set the United States on her great voyage. We continue to uphold those principles today through dedication and sacrifice.
2. The liberty that was wrought from our independence and we enjoy today must be guarded with vigilance, for its ideals and existence that inspire all people also threatens tyranny and those who do not believe in equality and the unalienable right of all people to life, liberty and the pursuit of happiness.
3. This is why we serve. This is why we sacrifice. It is a privilege we share with all the women and men in our Armed Forces, and one that our Coast Guard has had the honor of carrying out for almost two hundred and twenty two years.
4. For those of you on watch, thank you for protecting our independence, and your families for their sacrifice that allows you to serve. If you are fortunate to celebrate our Nations independence with family, friends, and loved ones, please do so responsibly and safely. Look out for your shipmates with the same dedication that you serve the Nation.
5. Happy Independence Day. Stand a taut watch. Semper Paratus.

#### **B. PUBLICATION OF THE MOTOR VEHICLE AND RECREATIONAL OFF-DUTY SAFETY MANUAL**

RADM Maura K. Dollymore, Director of Health Safety and Work-life

1. This ALCOAST announces the publication of Motor Vehicle and Recreational Off-Duty Safety Manual and the cancellation of Chapter 10, Motor Vehicle Safety policy, of the Safety and Environmental Health Manual.
2. No paper distribution will be made of the Manual. Official distribution will be via the Coast Guard Directives System CD-ROM. An electronic version is located on the COMDT (CG-612) information and technology website at: <http://www.uscg.mil/directives/cim.asp>.



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### C. 2012 FEDS FEED FAMILIES FOOD DRIVE CAMPAIGN

Mr. Curtis B. Odom, Director of Civilian Human Resources, Diversity and Leadership

1. The Office of Personnel Management (OPM), in partnership with the Chief Human Capital Officers (CHCO) Council, is sponsoring the fourth annual Feds Feed Families (FFF) Food Drive campaign. This drive is part of the Presidential initiative, United We Serve, which encourages participation in community service activities. For more information, visit <http://www.serve.gov>.
2. Since its beginnings, Federal employees have donated over eight million pounds of food and non-perishable goods during the campaign. This year, Secretary Napolitano challenged DHS employees to donate at least 500,000 pounds of non-perishable food during this summer's drive, which ends 31 Aug.
3. While our economy continues to recover, our local food banks face severe shortages. To learn more, visit <http://www.fedsfeedfamilies.gov>.
4. Visit <http://www.fedsfeedfamilies.gov/mostwantedlist.pdf> to see a list of suggested donation items.
5. Under 5 CFR Part 950, Solicitation of Federal Civilian and Uniformed Service Personnel for Contributions to Private Voluntary Organizations, the Combined Federal Campaign is the only authorized solicitation of employees in the Federal workplace on behalf of charitable organizations (subpart 950.102(a)). However, there is an exception (5 CFR 950.102(b)) for the solicitation of gifts-in-kind, such as food, clothing, and toys. This food drive is allowed under that exception.
6. The DHS Secretary and the Chief Human Capital Officer encourage employee participation in this initiative. Employees are urged to participate in their local area food drives. To find information about food drives in your area, visit <http://www.feedingamerica.org> and [www.feb.gov](http://www.feb.gov).

### D. WATERWAYS MANAGEMENT (WWM) INSTRUCTION AND REFERENCE GUIDE

Mr. Dana. A. Goward, Director of Marine Transportation Systems

1. I am pleased to announce the publication of Waterways Management (WWM), which defines the Coast Guard WWM program, describes the wide array of WWM functions, and provides a number of references on the performance of these functions. A product of the "Project Trackline" effort announced previously, it is a hallmark foundational document that will inform training development and staffing decisions, and assist leadership at all levels. The online WWM Policy



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Reference Guide will be updated at periodic intervals and posted to WWM Policy Library at the CG-WWM Portal Collaboration site:

<https://collab.uscg.mil/lotus/myquickr/cg--5521-ocean-and-transportation-policy/wwm-policy-library>.

2. Appreciation and thanks go out to civilian and military personnel at HQ, Areas, Districts, Sectors and TRACEN who helped bring this effort to fruition. It is an essential part of preserving and enhancing our competencies in an area that was becoming a dying art.
3. An electronic version is located on the COMDT (CG-612) information and technology website at: <http://www.uscg.mil/directives/ci.asp>.

### **E. THE NATIONAL MARINE MANUFACTURERS ASSOCIATION HIGHLIGHTS ECONOMIC IMPACT, MANUFACTURING JOBS AT REPUBLICAN AND DEMOCRATIC NATIONAL CONVENTIONS**

The National Marine Manufacturers Association (NMMA) is hosting events at both the Republican and Democratic National Conventions this year to honor the Congressional Boating Caucus and to educate delegates, Members of Congress and staff about the overwhelming impact that recreational boat, engine and accessory manufacturing has on the U.S. economy.

NMMA's events will include boat demonstrations, information about the economics of the recreational boating industry and an opportunity to meet with industry leaders for an educational afternoon. Highlights also include tips for enjoying a safe day on the water, the latest in technology and "green boating" as well as top policy issues facing the industry such as the introduction of high ethanol fuels in the marketplace.

The RNC event will be held on Tuesday, August 28, 2012 from 4-7pm at the Hula Bay Club in Tampa, Florida. The DNC event is Tuesday, September 4, 2012 from 12-3pm at the Peninsula Yacht Club, Lake Norman, North Carolina. NMMA encourages its members, stakeholders and media to attend the event and learn more about the boating lifestyle and the positive impact that marine manufacturing is having on the U.S. economy.

Recreational boating is a uniquely American manufacturing industry with 83 percent of power boats sold in the U.S. manufactured in the U.S. and an important contributor to the U.S. economy with a \$72 billion annual economic impact and an estimated 350,000 direct American jobs. Recreational boating is also a net exporter for the U.S.: in 2011 boat exports were up 44 percent above the 16-year average of \$1.2 billion.



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NMMA President Thom Dammrich says of the events, “This election year brings us a special opportunity to educate our policy makers about the important role marine manufacturing plays in the overall health of our nation’s economy. As a bipartisan organization is it critical that we work with Republicans and Democrats alike to improve our economic outlook and grow the future of the recreational boating industry.”

### F. THE COAST GUARD'S SEARCH FOR A PROTOCOL TO TEST PROP GUARDS

Seaworthy Magazine

Is the "cure" riskier than the disease?

Several years ago, Bob MacNeill and his wife Sandy were idling along in their inflatable dinghy in the canal behind his home in Florida when a series of freak events sent the normally cautious boat owner overboard. He had just finished casually unclipping the engine's kill switch (a mistake) in preparation for landing at the dock and was talking to friends in another boat when an unseen wake bounced him across his dinghy and into his wife Sandy. In the awkward split second that he struggled to regain his composure, he inadvertently spun the outboard's tiller and throttle, causing the boat to accelerate and turn sharply to port. MacNeill was thrown into the water and almost immediately struck the boat's propeller. He says he was "lucky" if you can call someone who was run over by a boat propeller lucky; although he was badly cut, MacNeill wasn't killed and he didn't lose a limb.

Not surprisingly, when the Coast Guard announced it was planning to develop a protocol for testing prop guards, MacNeill quickly volunteered. Not only does he have the perspective of someone who was cut up by a propeller, MacNeill is also a yacht designer and the retired president of Chris-Craft and Carver Yachts.

While the idea of reducing propeller accidents is certainly appealing, none of the boat manufacturers, including Chris-Craft and Carver, has ever offered the devices. Nor has West Marine. MacNeill said that when he was at Chris-Craft and Carver, not much was known about prop guards—what was available or how well they worked. Even today, tests tend to be contradictory and there is a wide disparity of opinion on how well prop guards work or even if they work at all.

Richard Blackman, who recently retired after eight years as an engineer at the Coast Guard's Boating Safety Division, says that the Coast Guard's prop guard testing protocol is in the final stages of development and anyone—engine manufacturer or prop guard manufacturer—will be able to follow it so that any future tests and test results will be comparable. In the past, test results have varied, not surprisingly, depending on who was doing the testing. Prop guard manufacturers claim that in addition to reducing the chances of a propeller accident, their tests prove that their devices have the added benefit of improving a boat's speed and performance. Tests by engine manufacturers,

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however, have indicated the opposite. Both Mercury and OMC have found the devices are liable to work only on boats moving slowly, at about 10 knots or less. The faster a boat is moving, the more likely that a guard will reduce speed and increase fuel consumption. An even larger concern for engine manufacturers has been a prop guard's potential impact on maneuverability. As one engineer said, anything underwater with a horizontal surface will act as a planing surface and anything with a vertical surface will act as a rudder. Depending on the shape of the device, it can introduce hydrodynamic forces that will have an effect on how a boat handles.

The most significant difference, however, involves the degree of protection provided by the various devices. One of the prop guard manufacturers has a dramatic video demonstration of watermelon being hacked to pieces after it is tossed from the stern of a boat into an unguarded propeller. A guard is then affixed to the lower unit and a second watermelon is repeatedly tossed at the propeller without being affected.

Some baseline testing sponsored by the American Boat & Yacht Council (ABYC), however, found that some of the guards failed to prevent injuries at slow speeds. And at high speeds, all of the guards tested were capable of inflicting significant "blunt force" injuries that were at least as significant as injuries from the prop itself. Note that the injuries were to a specially developed gel "leg" that was designed to approximate the characteristics of a human leg.

How well the prop guards work to protect a person in the water and how much they will affect a boat's performance and fuel consumption are still open questions. Dave Gerr, the highly regarded naval architect and author of *The Propeller Handbook* (McGraw-Hill/International Marine), believes that any device near the propeller will interrupt water flow and affect acceleration, fuel consumption, speed and maneuverability. Other people who have studied the guards believe it is likely that some of the guards work in some situations and with some engines and boats. Several people have mentioned that the "cage" type guards seem to do a good job of protecting people in the water when a boat is moving slowly and have minimal effect on fuel consumption and maneuverability. At higher speeds however, the cage guards consistently caused significant boat handling problems and were more likely to inflict potentially fatal blunt trauma injuries. Other guards appear to cause fewer boat handling problems at higher speeds but offer far less protection to anyone in the water, even at slower speeds.

If the Coast Guard protocol is ever used to thoroughly test prop guards with different boats and engines, we may have a better idea of what, if any, protection they provide. In the meantime, everyone who was interviewed for this article said that the best way to prevent propeller accidents is to follow a few basic safety rules:

- Make sure everyone is seated safely inside the boat.
- Never allow passengers to ride on the bow, gunwales, or transom.
- Slow down in heavy seas or when you encounter a large wake.

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- Avoid letting people aboard drink heavily.
- Wear your engine cutoff switch lanyard when the boat is underway.
- When launching or ungrounding a boat, keep people in the water away from the stern and prop.
- Never put the engine in reverse and back toward a skier (or anyone else) in the water.
- Don't use an outboard or I/O's lower unit for boarding, even when the engine is off.
- Shut the engine off when you're near anyone in the water.

### G. Small Stuff: E-15 Update Seaworthy Magazine

Seaworthy has good news for anyone worried by E15, which has been receiving a lot of attention since it was approved by the EPA for use in automobiles built after 2001. E15 is still not approved for use in boats and many boat owners, especially trailer boat owners, are concerned that E15 could find its way into boat tanks. The good news is that isn't likely to happen, at least not anytime soon.

Seaworthy talked to representatives of Chevron and British Petroleum, both of whom said that, aside from maybe a couple of independent distributors in the Midwest, none of the major oil companies have plans to offer E15. For one thing, gas stations will still be offering E10 for use in older cars and they would need to install additional tanks in order to also offer E15. And even among new car makers, at least one, Toyota, has begun putting labels on new car gas caps that warn owners to use, "Up to E10 Gasoline Only." Using E15 would void a new car's warranty.

So, since gas stations will only be offering one or the other, and since all cars are permitted to use E10 while maybe half can use E15, it is likely to be many years before E15 finds its way into the mainstream marketplace, if ever.

In the meantime, a lot of people in the marine industry are hoping that ethanol will be replaced by a more user-friendly biofuel like isobutanol, which is made from cellulosic biomass (similar to ethanol) but does not have ethanol's potential side effects. Gasoline containing 16-percent isobutanol (B16) has the same oxygen content as E10; but with higher energy content (better mileage); doesn't absorb water like ethanol; and doesn't pollute more than E10 or regular gasoline (E0).

This past May, representatives from Volvo-Penta, Indmar, Bombardier, the American Boat & Yacht Council (ABYC), the National Marine Manufacturers Association (NMMA), and the U. S. Coast Guard, along with staff from BoatUS Technical Services, spent a week in Annapolis, Maryland testing isobutanol in a Malibu ski-boat. Using sophisticated instruments to measure the exhaust, the tests confirmed that B16 emissions are very similar to E10 and E0.



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The Coast Guard, which is interested in using B16 in its outboards, is involved in a separate study with Honda and Mercury. ABYC has also been using B16 in its outboard engine for over a year and reports there have been no problems with the fuel.

### **H. NMMA DISTRIBUTES E15 WARNING LABELS TO MANUFACTURERS FOR USE ON BOATS**

Effort highlights the potential dangers, helps educate boaters, as E15 clears final regulatory hurdle. Beginning this week, the National Marine Manufacturers Association is distributing 100,000 E15 warning labels to NMMA member boat manufacturers across the country to place on their boats in hopes of alerting boaters to the potential dangers of fuel with a high volume of ethanol. The labels will help educate boaters that E15 should not be used in their boat.

Contrary to numerous studies that have shown ethanol to be hazardous to marine engines, the Environmental Protection Agency recently approved a plan submitted by the ethanol industry that effectively completes the last step in the regulatory process and allows E15 to enter the marketplace.

There are serious and well-documented human safety, environmental, and technological concerns associated with ethanol blends over 10 percent in recreational boat fuel tanks and engines. That means that anything above E10 can pose serious problems, including performance issues like stalling, corrosion leading to oil or fuel leaks, increased emissions and damaged valves, rubber fuel lines and gaskets.

Three years ago the ethanol industry filed a waiver with EPA to expand the amount of ethanol allowed in gasoline from 10 percent to 15 percent. Since then, EPA has approved two partial waivers that allow the fuel to be sold in cars from model years 2001 and newer and taken a series of steps to bring the fuel closer to the marketplace. NMMA along with the oil industry, food groups and other stakeholders have continued to oppose the introduction of E15.

It is important for consumers to stay aware at their local gas pumps, checking for any high ethanol fuels and to use only E10 or lower in their vessels. NMMA President Thom Dammrich says, "We encourage manufacturers to take action to help educate boaters by placing these E15 warning labels on their boats to warn about the dangers posed by E15 and help prevent costly and dangerous long term engine damage."



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### **I. NATIONAL MARINE MANUFACTURERS ASSOCIATION ANNUAL STATISTICAL REPORT SHOWS IMPROVING U.S. RECREATIONAL BOATING INDUSTRY**

The National Marine Manufacturers Association (NMMA) today announced that in 2011 U.S. retail sales for recreational boats, accessories and marine services increased six percent to \$32.3 billion, retail sales of new power and sail boats increased 0.8 percent to 214,405 total units, and boating participation increased ten percent to 83 million. The recreational boating industry has not seen an increase in retail sales since 2006, and the jump in participation is the largest proportion of adults (34.8 percent) who went boating since 1997, when 35.8 percent participated. Aluminum fishing and pontoon boat purchases help first new boat sales gain since 2006; boating participation highest in nearly 15 years.

Released today, the NMMA's annual Recreational Boating Statistical Abstract is the U.S. recreational boating industry's most comprehensive compilation of statistics and research. The new data signals the beginning of a recovery for the U.S. recreational boating industry.

Leading a recovery are sales of aluminum power boats (primarily fishing and pontoon boats), which were up four percent in 2011. There were 77,150 aluminum power boats sold in 2011. The top ten states for aluminum power boat retail sales were (in order of highest to lowest): Texas, Minnesota, Michigan, Louisiana, Wisconsin, Florida, Alabama, Missouri, Arkansas and Illinois.

"Pent-up demand for boats following years of diminished willingness to spend by consumers, improved credit availability for buyers and boating businesses, positive shifts in consumer confidence and an overall interest in the benefits of the boating lifestyle are steering the industry toward recovery," notes Thom Dammrich, NMMA president. "Americans' passion for enjoying the boating lifestyle is taking precedent as they put aside concerns about the economy in favor of creating lifelong memories with loved ones."

Data from NMMA's Abstract shows the recreational boating industry continues to be predominantly comprised of small boats, which includes the aluminum power boat segment: 95 percent of the 12.4 million registered boats in the U.S. in 2011 were 26 feet or less in size. Boats less than 26 feet are most often taken by trailer to local bodies of water, in contrast to boats which are 26 feet in length and larger and typically docked at marinas. The size of the boats Americans purchase is relative to boater income: 73 percent of all boat owners in the U.S. in 2011 had an annual household income less than \$100,000.

Anticipating what 2012 will bring the NMMA Abstract points toward continued slow growth: A survey, in conjunction with Foresight Research, of 3,100 boaters and non-boaters from December 2011 shows an estimated 15.2 percent of the 237.7 million adults living in the U.S. are actively





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engaged in shopping/planning to purchase a boat in 2012. This is an increase from 10 percent in 2010.

### The Recreational Boating Industry by the Numbers:

- Boating has an estimated annual economic impact of \$72 billion.
- Eighty-three million Americans participated in boating in 2011, an increase of ten percent from 2010 (75 million) and the largest proportion of adults (34.8 percent) who went boating since 1997 (35.8 percent).
- Retail sales of boats, accessories and marine services increased six percent to \$32.3 billion in 2011.
- Power and sail boat unit sales increased 0.8 percent to 214,405 in 2011 from 212,645 the previous year.
- An estimated 83 percent of powerboats (outboard, inboard, stern drive and jet boats) sold in the U.S. in 2011 were made in the U.S.
- Ninety-five percent of the 12.4 million registered boats in the U.S. in 2011 were less than 26 feet.
- Retail sales of aluminum power boats (fishing and pontoon boats) increased four percent in 2011. This segment is leading a recovery for the industry.
- 73 percent of boat owners in the U.S. in 2011 had an annual household income less than \$100,000.