U.S. COAST GUARD AUXILIARY
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DEPARTMENT OF HOMELAND SECURITY
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A. SHIPMATES 19: RESPECT OUR SHIPMATES - DUTY DEMANDS COURAGE

Admiral Bob Papp, Commandant

Shipmates,

When I assumed duties as Commandant, I told you that respecting our Shipmates is one of my four guiding principles. I provided my direction on maintaining positive command climates to achieve mission excellence and set forth my expectations for the Coast Guard. I am proud that nearly all Coast Guardsmen live the core values of Honor, Respect and Devotion to Duty. However, some personnel fail to adhere to this foundational standard of conduct.

Sexual assault, hazing, harassment and discrimination undermine morale, degrade readiness and damage mission performance. These and similar acts of misconduct break our obligation to one another. Each incident of sexual assault, hazing, harassment or discrimination is a deliberate act that violates law, policy and service standards.

We will not tolerate this behavior in the Coast Guard. We will intervene to prevent or halt these acts when they are occurring. We will investigate and discipline those who have violated law and service policy. We will insist that all of our shipmates live by our core values.

In most cases, another person observes or is aware of the misconduct. Let ne be clear: there are no bystanders in the Coast Guard. Our duty to respect our shipmates demands each of us have the courage to take immediate action to prevent or stop these incidents from happening, whether at work or on liberty. If you become aware of an actual or suspected incident of sexual assault, hazing, harassment or discrimination, or other misconduct, your duty as a Coast Guardsman is to intervene, prevent or halt it, and report it. Failure to help a shipmate in those circumstances demonstrates a lack of courage that is contrary to our core values. I expect every Coast Guardsman will display the same courage in those circumstances as they would in rescuing someone in peril at sea.

America must have confidence that Coast Guard men and women understand their duty and are committed to our service. I have confidence in the ability of every Coast Guard leader to independently and deliberately inquire into all allegations and take action that is considered and appropriate.

As Coast Guardsmen, we live by high standards of conduct and continuous devotion to duty. These are more than just words. Living by these standards and performing our duty requires personal commitment and courage. This is our duty. Our shipmates deserve nothing less.

B. RESTRICTIONS ON OFFICIAL SUPPORT OF POLITICAL CANDIDATES AND THE ABILITY OF UNIFORMED AND CIVILIAN PERSONNEL TO ENGAGE IN POLITICAL ACTIVITIES

RDML F. J. Kenney, Judge Advocate General, and
RDMl K. L. Schultz, Director of Governmental and Public Affairs

1. The 2012 election season is well underway with a variety of Federal, state, and local campaigns. As a matter of long-standing policy, the CG does not support nor engage in any activities that could be interpreted as associating our service with any particular candidate, political party, organization or partisan political issue.

2. This ALCOAST addresses both the policy on official interaction with political candidates/campaigns and the ability of uniformed and civilian personnel to engage in political activities.

3. Official (Command) interaction with political candidates and Organizations:

   a. When responding to queries from political campaign organizations, Commanding Officers shall only provide information that is releasable to the general public.
   b. Unit newsletters, plans of the day and other internal communication venues shall not include partisan discussions, cartoons, editorials, political advertisements, websites and other online postings, or commentaries pertaining to partisan or candidate issues.
   c. Commanding Officers shall not permit the use of government facilities by any candidate, either incumbent or challenger, for political campaigning. This includes events such as: assemblies, meetings, rallies, press conferences, campaign videos, advertisements or photo opportunities.
   d. Members of Congress or other elected officials may visit units and receive briefings related to their official duties. Other candidates may be given access as would be provided to any other visitor.
   e. In all cases of visits, the Commanding Officer shall inform candidates in advance that all political campaign and associated media events are prohibited. Candidates and their staffs shall also be informed that media representatives cannot accompany the visit to the CG facility.
   f. Commanding Officers shall deny requests from candidates to tape or film aboard CG units. Filming conducted from outside unit property (e.g., property not under CG control), shall not be impeded.
   g. Commanding Officers shall prohibit distribution of campaign material by anyone on or in any CG property, facility, or unit.
   h. Community relations support including speakers, color guards, or marching units shall not be provided for campaign meetings, events, rallies, or other political activities.

i. Appropriate CG officials (e.g., Area, District, Sector Commanders, COS, OINCS, etc.) may participate in community outreach forums like town hall meetings and panel discussions that are hosted by an elected member of Congress acting in the interest of his/her Constituents.

4. Restrictions on the ability of Uniformed Personnel to engage in political - A member on Active Duty may:

a. Register to vote and vote.
b. Express personal opinion on political candidates and issues, But not as a representative of the armed forces (i.e., not in uniform and not identifying oneself as a member).
c. Promote and encourage other military members to exercise their voting rights, if such promotion does not constitute an attempt to influence or interfere with the outcome of an election.
d. Join a political club and attend its meetings when not in uniform.
e. Serve as an election official, if such service is not as a representative of a partisan political party, does not interfere with military duties, is performed while out of uniform, and has the prior approval of the Policy and Standards Division of The Office of Military Personnel.
f. Sign a petition for specific legislative action or a petition to place a candidate's name on an official ballot, if the signing does not obligate the member to engage in partisan political activity and is done as a private citizen and not as a representative of the Armed Forces (i.e., not in uniform and not identifying oneself as a member).
g. Write a letter to the editor of a newspaper expressing their personal views concerning public issues or political candidates, if such action is not part of an organized letter-writing campaign or concerted solicitation of votes for or against a political party or partisan political candidate.
h. Make monetary contributions to a political organization, party or committee favoring a particular candidate or slate of candidates, subject to the limitations under 2 U.S.C. 441a (limitations on Contributions and expenditures) and 18 U.S.C. 607 (no solicitation or receipt of contributions in any room occupied in discharge of Official Duties).
i. Display a political sticker on the members private vehicle.
j. Attend partisan and nonpartisan political meetings, rallies, or conventions as a spectator when not in uniform.

5. A member on active duty shall not:

a. Use official authority or influence to interfere with an election, solicit votes for a particular candidate or issue, or require or solicit political contributions from others.
b. Be a candidate for a civil office in federal, state, or local government, except as authorized, or engage in public or organized soliciting of others to become partisan candidates for nomination or election to civil office.

c. Participate in partisan political management, campaigns, or conventions (except as a spectator when not in uniform), or make public speeches in the course thereof.
d. Make campaign contributions to another member of the Armed Forces, or to a civilian officer or employee of the United States for promoting a political objective or cause, including a political campaign.
e. Solicit or receive a contribution from another member of the Armed Forces or a civilian officer or employee of the United States for the purpose of promoting a political objective or cause, including a political campaign.
f. Allow or cause to be published partisan political articles signed or written by the member that solicit votes for or against a partisan political party or candidate.
g. Serve in any official capacity or be listed as a sponsor of a partisan political club.
h. Speak before a partisan political gathering, including any gathering that promotes a political party, candidate or partisan cause.
i. Participate in any radio, television, or other program or group discussion as an advocate of a political party, candidate, or partisan cause.
j. Conduct a political opinion survey under the auspices of a partisan political group or distribute partisan political literature.
k. Use contemptuous words against the officeholders described in 10 U.S.C. 888 (President, Vice President, Congress, Secretary of Defense, Secretary of a Military Department, Secretary of Homeland Security, or the Governor or Legislature of any State, Territory, Commonwealth, or possession in which the military member is on duty).
l. Perform clerical or other duties for a partisan political committee during a campaign or on an election day.
m. Solicit or otherwise engage in fundraising activities in Federal offices or facilities, including military reservations, for a partisan political cause or candidate.
n. March or ride in a partisan political parade or similar event.
o. Display a large political sign, banner, or poster (distinguished from a bumper sticker) on the top or side of a private vehicle.
p. Participate in any organized effort to provide voters with transportation to the polls if the effort is organized by, or associated with, a partisan political party or candidate.
q. Sell tickets for, or otherwise actively promote, political dinners and similar fundraising events.
r. Attend partisan political events as an official representative of the Armed Forces.
s. The prohibitions on holding and exercising the functions of a civil office, as set forth above, do not apply to any retired regular member or reserve member serving on active duty under a Call or Order to Active Duty that specifies a period of active duty of 270 days or less, provided the civil office is held in a non-military capacity and there is no interference with the performance of military duties.
t. Generally, no statutes or regulations prohibit retired and reservist military personnel (those not performing an active duty function, such as ADT or IDT) from supporting political parties or becoming candidates for public office. Retired and Reservist personnel may also

hold elective or appointive civil office, and will not forfeit their commissions by assuming such office. Retired and Reservist personnel shall not, however, wear Coast Guard uniforms while engaging in political activity.

6. Restrictions on the ability of civilian personnel to engage in political activities set forth permissible and impermissible forms of political activity by federal civilian employees. A detailed analysis of the *Hatch Act* and its implications on all federal civilian personnel can be found at: http://www.osc.gov/hatchact.htm. Generally, if you are a federal civilian employee, you may:

   a. Be a candidate for public office in nonpartisan elections.
   b. Register and vote as you choose.
   c. Assist in voter registration drives.
   d. Express opinions about candidates and issues.
   e. Contribute money to political organizations.
   f. Attend political fundraising functions.
   g. Attend and be active at political rallies and meetings.
   h. Join and be an active member of a political party or club.
   i. Sign nominating petitions.
   j. Campaign for or against referendum questions, constitutional amendments, or municipal ordinances.
   k. Campaign for or against candidates in partisan elections.
   l. Make campaign speeches for candidates in partisan elections.
   m. Distribute campaign literature in partisan elections.
   n. Hold office in political clubs or parties, including serving as a delegate to a convention.

7. Generally, Federal civilian employees may not:

   a. Use official authority or influence to interfere with an Election.
   b. Solicit or discourage political activity of anyone with business before the agency.
   c. Solicit or receive political contributions (may be done in certain limited situations by Federal Labor or other Employee Organizations).
   d. Run for the nomination or as a candidate for election to a partisan political office.
   e. Engage in political activity while on duty, in a government office, wearing an official uniform or using a government vehicle or other resource (e.g., telephone, fax, e-mail, etc.) By, for example: wearing a partisan political button, t-shirt, or sign, displaying political campaign material or items, distributing political campaign material or items, performing campaign-related activities, making a political contribution to a partisan political party, candidate or group, or posting any partisan political comment on any blog or Social Media site.

C. 2012 DR. MARTIN LUTHER KING JR. NATIONAL DAY OF SERVICE
Capt p. E. Boinay, Acting Director, Civil Rights Directorate

1. Monday, 16 January 2012 is a Federal holiday recognizing the many accomplishments and contributions of Dr. Martin Luther King, Jr. The theme for this holiday is "Remember-Celebrate-Act. A day On, not a day Off." Dr. King's wife, Coretta Scott King, described the annual observance as an occasion for "Interracial and Intercultural Cooperation and Sharing." The MLK observance is not an African American holiday, but one which belongs to all people and is celebrated world-wide.

2. In the 21st century, it is important to reflect on what distinguished Martin Luther King, Jr. from others, and why he is worthy of our remembrance. Dr. King was driven by the simple desire to see all Americans enjoy civil rights and opportunities. While some other African American leaders espoused separation and violence, Dr. King envisioned a united America created through non-violent social change. His philosophy of nonviolence flowed logically from his upbringing in the African American church and his preparation for the ministry.

3. Over the course of fourteen grueling years, he molded the tactic of nonviolent, direct action from an admirable theory into a powerful force for concrete social change. Through it all, he motivated others through his mastery of the spoken word and his willingness to suffer on behalf of others. His commitment to Civil and Human Rights eventually cost him his life. Dr. Kings legacy extends beyond the revolutionary social change he led in America. He demonstrated that oppression and violence can be overcome without resorting to violence and oppression. His legacy is now enshrined in a national holiday, and will endure in the 21st century and beyond.

4. All members are encouraged to mark 16 January by giving of themselves in the community. Coast Guard units and commands are encouraged to study, and as appropriate, call forth and emulate throughout the year the many examples of leadership by Dr. King. Additional resources and information can be found at www.thekingcenter.com and at www.deomi.org/observances.

D. SELECTION OF DEPUTY ASSISTANT COMMANDANT FOR INTELLIGENCE AND CRIMINAL INVESTIGATIONS
VADM Sally Brice-Ohara, Vice Commandant

1. I am pleased to announce the selection of Mr. Dan butler as the Deputy Assistant Commandant for Intelligence and Criminal Investigations, U.S. Coast Guard. In this capacity, under the direction of Commandant (CG-2), Mr. Butler will manage, direct, and provide oversight on all aspects of Coast Guard Intelligence and Criminal Investigations to include Strategic Guidance, Policy Development and Execution, Program and Personnel Management, and Resource Allocation.

2. Mr. Butler has 30 years of Criminal Investigative and Intelligence Experience, and has been a member of the Senior Executive Service and Senior National Intelligence Service for over ten years. He currently serves as the Director of the Coast Guard Investigative Service (CGIS), responsible for providing executive direction, leadership, and management of CGIS, and providing investigative support for USCG. Prior to his current assignment, Mr. Butler served as the Assistant Deputy Director of National Intelligence for Open Source, Senior Advisor for Policy and Oversight with the Office of the Assistant Deputy Director of National Intelligence for Open Source, Executive Director for Air Force Office of Special Investigations, and Deputy Assistant Director for Government Liaison and Public Affairs and Executive Assistant to the Director and Coordinator of Strategic Planning with the Naval Criminal Investigative Service. He served on Active Duty with the U.S. Navy from 1981 to 1991 as a Naval Investigator, Resident-Agent-In-Charge, and Intelligence Officer. Mr. Butler has a Bachelor of Arts Degree in Economics from Columbia University, Master of Public Administration Degree from Harvard University John F. Kennedy School of Government, and Master of Science Degree in Strategic Intelligence from The Joint Military Intelligence College.

3. Mr. Butler assumed the duties of Deputy Assistant Commandant for Intelligence on 15 January 2012. I would also like to thank Mr. William Tarry for his outstanding service as the outgoing Deputy, and wish him success in his new position as the Principal Deputy Under Secretary for Intelligence and Analysis at DHS.

E. OPERATIONAL DRESS UNIFORM (ODU) UTILITY JACKET

RADM Ronald T. Hewitt, Assistant Commandant for Human Resources

1. Effective immediately, the Foul Weather Parka II (FWP II) Nylon Liner is re-designated as the ODU Utility Jacket.

2. The ODU Utility Jacket is authorized as a stand-alone jacket when worn with the ODU.

3. This change is made as a result of field testing and feedback on the FWP II nylon liner as a stand-alone jacket, and a recognition of its design and utility as the primary cold weather outerwear for the ODU. The FWP II serves as an additional heavier layer for adverse environmental conditions.

4. Manner of Wear:
   a. Rank insignia will be worn.
   b. Only small items shall be carried in the pockets and must not distort the look of the jacket.
   c. The ODU utility jacket is authorized in locations and situations where the wear of the ODU is authorized.

d. The ODU Utility Jacket is the issued liner for the FWP II and when married to the FWP II, may be worn whenever the FWP II is authorized for wear.

5. The fleece liner for the FWP II remains an authorized optional Uniform item when married to the FWP II. However, the fleece liner is not authorized as a stand-alone jacket.

F. HOW TO USE AIS USING AIS AS A SAFETY TOOL.
Ken Englert, Boating Magazine

One cardinal safety rule all pilots follow is: See and be seen. AIS, the Automatic Identification System, similar to aviation transponder technology, provides the boater with the ability to do just that. With AIS you can quickly see and identify any vessel in your immediate area that is broadcasting an AIS signal. This information is visible even in dense fog or at night. Here's a rundown on what it is and how to use it.

1. What is AIS?

AIS will place a triangular icon on the chart plotter's screen that represents any vessel sending out AIS signals. This includes most commercial vessels, which are required by law to have it, as well as numerous recreational craft with owners who are discovering the safety benefits of AIS. Just place the chart plotter's cursor on an AIS icon, and a list of valuable information unfolds. The ship's name and radio call sign are shown. This means you can pick up a VHF and hail a specific vessel that may be posing a threat. Additional information includes the vessel's length, beam and draft, its exact position, speed and heading, its rate of turn and even the calculated closest point of approach (CPA) and the time it will happen (TCPA). Commercial ships often also transmit vessel type, port of origin, destination and even the type of cargo, including hazardous materials.

Since AIS operates on VHF frequencies, it can receive this vital information even though you may not see the vessel, such as when nearing the entrance to a marina or crowded commercial harbor or when there is boat traffic behind a low hill, building or other structure. In this sense, AIS can see targets that radar cannot.

2. AIS Types

There are two types of AIS: Class A and B transponders and receive-only sets. Class A is commercial grade, Class B the cheaper recreational version. Both not only receive AIS data but also broadcast information about your boat. A Class B-equipped boat should appear on the plotting screens of all other AIS-equipped vessels within about five to 10 miles. However, as with radar, you should never assume that another vessel has seen you and will take action to avoid a collision. But even a receive-only AIS receiver can help by making it easier to call the other vessel by name.

AIS can be added to your boat in several ways. You may already have most of the equipment you need to enjoy AIS right now. Most recent multifunction GPS/chart plotter models accept an AIS add-on module, though an additional VHF antenna or antenna splitter is needed. Most multifunction display manufacturers offer AIS add-on modules with receivers starting at about $500 and transponders at $900. Aftermarket black box receivers start at about $200 and transponders at $500, and all AIS gear tends to work well with other electronics because they all use standard National Marine Electronics Association (NMEA) data protocols. AIS units are also built into VHF radios and also stand-alone Class B transponders that have their own plotting. In any format, AIS is a great way to see and be seen.

G BOATING SAFER IN SHIPPING CHANNELS (Five ways to avoid being nautical roadkill in shipping channels)
Pete McDonald, Boating Magazine

On a crystal-clear summer day, Capt. William McGovern — a full branch pilot with the Sandy Hook Pilots Association — stood at the helm of a 1,000-foot tanker guiding the ship into New York Harbor. A 28-foot cruiser that had vacated the channel suddenly cut back in front of his ship and disappeared out of sight. McGovern ran out to the bridge wing and saw the little boat below, pinned against the side of the ship by its suction. A woman at the bow looked up at him and held up the reason why her husband cut in front of the ship: to retrieve their nine-dollar bait bucket.

“A beautiful summer day should be relaxing,” McGovern said, “but your heart is beating out of your shirt because you don’t want to kill anyone.”

McGovern, who became a harbor pilot in 1990, said it’s a huge problem when boaters without basic knowledge of commercial shipping play in traffic. Here are five tips he preaches to boaters to keep them safe.

1. Clear the Channel
   If you see a ship approaching a channel from a few miles out, clear the area and stay away until it has passed through. Moving to the side is not enough. If a ship loses its steering or breaks a rudder, it can take a shear — unexpectedly turn to one side. “If you’re in shallow water outside the channel,” McGovern said, “I’m probably going to go aground before I hit you.”

2. Don’t Drop Anchor
   In an active channel? Say the anchor gets stuck or you can’t restart the engines; a large commercial vessel is not going to be able to stop in time or take evasive action. Any accident will be your fault. Said McGovern, “You are not allowed to impede a vessel transiting a narrow channel or fairway that’s constrained by its draft or ability to maneuver.”

3. You're Not Seen
   McGovern said that, from the helm of big tankers, he could lose sight of you from 1,500 feet out. To put that in perspective, you could be invisible from five football fields away. If he doesn't know where you are, "all I can do is keep going straight."

4. Don't Cut in Front
   If you cut too closely in front of a ship and the engine quits or you get stuck, there's no way it can stop in time to avoid you. If you have to cross a commercial vessel's path, cross on the stern.

5. Communicate
   AIS is a great tool for understanding local commercial traffic. Barring that, monitor Channel 13 to hear wheelhouse-to-wheelhouse communication. If you've broken down in the shipping lane and don't have a VHF or AIS, wave something orange, like a life jacket. "If I know you're in trouble, I'll call the Coast Guard for you," McGovern said.

You can ignore McGovern's advice, but remember that a 1,000-foot container ship could run over a 50-footer and not feel a thing.

H. Navigating Shallow Water

By Pete McDonald, Illustrations by Peter Sucheski of Boating Magazine

The boat just kept coming. We watched from the sand, where we had safely anchored off, as it made a steady clip toward the submerged end of the same bar. We waited for the driver to slow down, but he didn't, slamming his bow into the bar and coming to an abrupt halt. We walked down the sand to say hi, knowing he'd have some time to kill before high tide.

This newly beached boater obviously didn't have a chart. But there are things you can do beyond relying on your electronics and setting a course. Use your senses to avoid treacherous water, and if you still get caught, there are some maneuvering tactics for working your way out of danger.

Our stranded friend? A few visual cues (including the fact that we were walking yards away from where he ran aground) should have clued him into the fact that he was running shallow. Not sure what he should have seen or done? Read through these shallow-water cruising tips to make sure you don't end up beached.

- **Tactic 1 - Reading Water**

  Watch for wind ripples, breaking waves or current edges to indicate a transition to shallow water.

  Sometimes you'll be able to follow a close-knit assemblage of channel markers to keep safely inside a channel. Sometimes you won't. And charts may show outdated information due to shifting sandbars or recent weather events. But your eyes can help.

  First, scan the water for color changes. In clear water, the deeper channel should be apparent compared with the flats, sometimes a darker color due to rocks or grass beds or mud flats; sometimes lighter due to pure sand. But in murky water it can all look the same. Watch for wind ripples, breaking waves and current edges that indicate a transition to shallow water. Keep an eye on the depth sounder. A gradual drop in depth could precede a quick jump to shallow water. Watch for drops, and slow down while you're still deep enough to assess your surroundings. If you boat in skinny water areas, side-scanning sonar, which assesses the depth around the boat as well as underneath, is a great investment.

  Color Coded

  1. Clear water shows the channel.
  2. Dark water shows shallower areas covered in eel grass.
  3. Wind ripples can show skinny water.

- **Tactic 2 Rocking and Rolling**

  When you're really grounded, get out of the boat and use manpower to rock it unstuck.

  The boater who slammed into the sandbar at 30 mph tried to correct the situation by gunning his engine in reverse, throwing sand and water into the air, redlining his engine and generally making the situation worse (and stuffing his water pump with sand, which probably led to an overheated engine and maybe a cracked block). The first thing to do should you run aground is turn off the engine and check it and the hull for any structural damage. Remember it's better to be aground than sunk. If everything's OK, and no water is coming in, you may be able to work the throttle to back off. But if you're stuck fast, you'll need an assist.

  Offload and rock the boat from side to side. This cants the deeper V section and reduces the draft. As the keel gets free of the bottom, you may be able to push the boat. As the keel drops, it might stick again. Keep rocking and pushing until you get into deep enough water.

  If there is wind blowing or current running in a favorable direction (toward deep water), you can often accomplish this without getting out of the boat. Have your crew move as a group from side to

side, which will lift the keel. As it lifts, the boat will move downwind or downcurrent. Again, make sure the hull, fittings and drive mounts weren't breached. When you get home take a closer look.

Side to Side

1. From inside the boat, have the crew shift the craft from side to side to lift the keel.
2. Gently work the throttle in reverse to help the boat become unstuck.
3. If you have to, unload the crew and some heavy gear.
4. Have the crew rock the boat from side to side.
5. If the keel rocks free, you may be able to push the boat to deeper water without a power boost.

- **Tactic 3 Listing**

So you veered off course and need to get back to the channel. Listing the boat to one side can help. If you can't trim the drive up any farther, try making sweeping turns back and forth in an S pattern. This will kick the angle of the drive to the side, bringing it up an inch or two farther from the bottom.

Listing also moves the centerline, typically the deepest part of the boat, to one side so that it doesn't run as deep. Use the tabs to create an extreme list and run on a hard chine, a rough-water trick that also works in shallow water for boats with deeper V's, since the chine will run shallower than the centerline.

- **Tactic 4 Circle Start**

Backcountry flats guides have perfected this technique. They find a pothole or deeper stretch of water, trim down the tabs and gun the throttle while turning hard over. This brings the boat on plane "on edge," canting the drive at an angle and decreasing draft as it doubles back into the deep water. After doing this, run the prop and drive in enough depth until the boat planes. This can work for your boat if you find a big enough pothole. Deploy the trim tabs to keep the bow down and set the wheel before you start, so that your boat quickly turns back into the deep water.

- **Tactic 5 Trimming Up the Engines**

Sometimes the right thing to do is as simple as trimming the engines out of the water and letting your boat float off.

Pretty obvious, right? You get caught in shallow water, and the first thing you do is trim up the engine or engines as far as you can. (Pod-drive and inboard owners can move on to the next topic.) That makes sense to a point. You don't want to trim the drive up on takeoff or the boat will experience exaggerated bow rise climbing onto plane, digging a deeper hole. Trimming too high will

also reduce steerage. Sometimes you have no choice; we've all seen the boats at idle speed puttering off a flat throwing a rooster tail from the exposed prop.

Other times, the drive acts as an anchor. Have you ever seen a flats guide trim his engine down to stick the skeg in the sand for a quick stop? On the flip side, the way to get unstuck can be as easy as trimming the drives as far out of the water as possible. Look at the draft numbers on many boats. With the drive down, a typical 25-footer will have a draft around three feet. Trim the drive up and the draft could shrink by a foot or more. With luck, the wind and current will help you drift to deeper water.

High & Dry

1. Trim the engines as far as you can out of the water to increase draft.
2. Shift gear and crew to the bow to offset engine weight, raising the transom a little higher in the water.
3. Wind and current may do the rest.

- **Tactic 6 Staying on Plane**

When you're caught in shallow water, the best thing to do can be to keep going and stay on plane, until you reach deeper water.

Sometimes if you find yourself running through water that seems too shallow for your boat, the best thing to do is keep going. When your boat is on plane, it is riding on the V toward the transom, and the prop and drive are elevated. When a boat falls off plane, the forefoot now comes into play and the boat's full displacement takes effect, meaning it will sit deeper in the water. Also, increased lift occurs in water depth equal to your boat's draft. You can feel the boat "rise" as you head over the shoal. However, this is a tactic best used when you know the water, not in an unfamiliar area.

Even if you keep the boat on plane, your first instinct may be to slow down. But sometimes, it pays off to go faster. Take a look at how a bass boat flies on plane. At high speeds it's running on nothing but a small delta pad and almost the entire drive is out of the water — everything but the prop. Conversely, riding at slower speeds tends to make your boat squat, digging deeper in the water. The higher your bow is riding, the deeper the stern.

Going fast can get you into trouble, like with the speedster we saw slam the sandbar, but if you know the water's deep enough to stay on plane and you have a clear path back to the channel, keeping your speed could be the key to escape.

Run & Gun

1. Maintain your speed to keep the hull and drives as high in the water as possible.
2. Trim the engines to the boat's performance sweet spot to help the hull release.
3. Running on plane in shallow water increases your boat's lift, decreasing draft for running.

- **Tactic 7 Tabbing Down**

  Most people associate trim tabs with improving a boat's ride in rough seas or correcting a list, but they're also great tools for shallow water situations. When climbing onto plane, dropping the tabs pulls the bow down to plow through the hump rather than climb over it, so the boat keeps a more level attitude. It's less efficient but it will keep your skeg and prop a few extra inches off the bottom.

- **Tactic 8 Riding the Crests**

  Rough conditions in skinny water can be more dangerous than big seas outside the inlet. Why? Large waves running through a shallow area leave almost no water depth in the troughs. If you ride the waves wrong you can slam the bow, keel or engine into the bottom with enough force to break something. Time your run to ride on the backs of cresting waves. Look for an opportunity to ride across a crest to deeper water, using some of the water-reading tactics above, your local knowledge or a chart.

- **Tactic 9 Reading Wind and Current**

  Learn how natural forces affect your course and how to adjust at the helm.

  Yeah, eyeballing wind and current will reveal those shallow areas, but it's also important to understand how these forces affect your course. That they will move your boat is a given. On every test we do for this magazine, we run speed numbers both into the wind or current, and with them. On a honking tide or with a stiff breeze, the speed over ground can swing as much as 5 mph. Imagine that force pushing against the beam of your boat. (Or, think about how a stiff wind catches your car on a bridge.)

  This comes into play when running a channel between markers. You may think you're lined up with the next marker, but a crosscurrent or wind can push you out of the channel and into danger. Overcome this by pointing to the marker on the opposite side, or constantly correcting into the wind or current from the helm.

  In extreme cases, remember that wind and current can push water in a certain direction. A strong blow can stack water against the windward side of an island or land mass. Sometimes there will be a few extra inches, or even feet, of depth where water is forced against an impassable barrier.

Correct Your Course

1. Know that wind and current can push you off course.
2. Adjust your course into the wind or current and apply constant correction at the wheel. Pick a landmark or marker to windward.
3. Pay attention to how the wind is pushing water. In extreme cases, it can stack water against the windward side of a land mass or structure, creating a few extra inches — or even feet — of depth.

I. December Testimony Presented by NMMA on E10 Certification Fuel before CARB Board

John McKnight, Director of Environmental and Safety Compliance for NMMA

John McKnight, Director of Environmental and Safety Compliance for NMMA, and NMMA member Mark Riechers, Director of Regulatory Development at Mercury Marine, testified at the California Air Resources Board (CARB) hearing on December 16 in Sacramento. Their testimony highlighted the problems associated with E-15 as recently revealed in the Department of Energy (DOE) reports that were released in late October. Testing showed damaging effects that E15 has on engines, and noted that more testing is needed to further identify how E15 will affect engines and fuel systems under various conditions.

NMMA spoke in support of continued harmonization between the CARB and EPA standards and informed the CARB Board members that in light of the summer isobutynol testing any ruling should keep the door open to adoption of second generation fuels, including certification test fuels. It would be premature to limit renewable fuel development to ethanol enhanced fuel in light of ongoing testing. Following NMMA testimony, Mary Nichols, the CARB Board Chairwoman, addressed the group and said that NMMA's proposed changes were sensible, with the group agreeing. She also noted that the board would add this proposed language and put out a 15 day comment period notice which was passed unanimously.

J. Wallop-Breaux Reauthorization Legislation Congressional Updates

Jeff Gabriel, NMMA

At the end of 2011, The Senate Energy and Public Works Committee passed a two-year highway bill. This vote was a positive sign that the Senate may reauthorize, or update, the Sport Fish Restoration and Boating Trust Fund (SFRBTF). The Trust Fund, also known as Wallop-Breaux, is the nation's premier transportation law. Funding for the SFRBTF is attained through a "user pay" system. Taxes on fishing tackle equipment, motorboat fuel, imported boats, and small engines are pooled together to create this fund. In turn, the funds are then allocated to federal and state programs for wetlands conservation, sport fish restoration, boating safety, boating access and facilities projects, and aquatic education and outreach.

Wallop-Breaux was not included in the committee's bill, though prospects for its eventual inclusion look promising. During the markup session, Senate Committee Chairwoman Boxer and Senator Ben Cardin (D-MD) agreed that the addition of a this update must be and will be included. NMMA will continue to follow this bill closely as it moves through committee and will update you should any decisions be made.

K. Tips for Safer Fueling - New Environmental Regulations Provide An Opportunity to Review Fuel Safety Aboard.
Kevin Falvey , Boating Magazine

While inspecting the next Mom's Mink at this winter's boat shows, you're going to notice new fuel components aboard boats powered by gasoline engines. I started to see these during Boating's advance testing of several 2012 models last summer. The additions include carbon canisters, valves, fuel tanks with bladders inside and more. They compose a complete system designed to control fuel and vapors from escaping. You might hear these systems referred to as "evaporative emissions controls" or "diurnal fuel controls."

As much as I believe in protecting the environment, I'm a bigger believer in protecting human life. Fueling up, the most common of boating tasks, can also be deadly. The vapor from just one cup of gasoline packs the explosive power of five pounds of dynamite. Gasoline can burn at 15,000 degrees F. I've seen a fiberglass boat explode; it burned to the waterline in minutes. Keep these facts in mind and review this fueling-up refresher.

- All Ashore

Insist that your crew stretch their legs while you fuel up. Aboard the boat I saw explode, the skipper was thrown overboard by the blast, but was rescued and lived. Your crew may not be as lucky.

- Batten Down

Close all hatches, doors and ports. Gas fumes are heavier than air and will sink into the lower parts of the boat, lying in wait for a spark, or just a rush of fresh air, to induce combustion.

- Know Thy Boat

Look at the fuel gauge prior to filling. This coupled with knowledge of the tank's capacity allows you to stop the flow when full or nearly so by monitoring the rate on the pump. Can't see the pump? Ask a dock hand to stop the pump at a set number of gallons, or assign a crew member to call out to you. Clicking on the ignition to check the gauge during fueling is a no-no.

- No Static

It's imperative to make and maintain full and firm metal-to-metal contact between the pump nozzle and your boat's fuel deck pipe. This grounds the nozzle and prevents a spark created by static electricity. FYI: Newer fiberglass docks create an inordinate amount of static. Forewarned is forearmed.

- Sniff Test

Fueling complete, open the hatches and sniff for gas fumes in the bilge and engine compartment. If all smells well, run the blower for five minutes before starting the engines. This doesn't apply to outboard-powered boats for obvious reasons.

Safety aboard is integral to good seamanship. Practice safety when you fuel up.

L. Common Electronics Acronyms - Marine electronics exist in a sea of arcane terms and acronyms. Know GPS? What else?
Joe Friedman, Illustration by Tim Eggert, Boating Magazine

NMEA
Pronounced "knee-ma," this is the National Marine Electronics Association. Products meeting NMEA standards are clearly indicated, like the Good Housekeeping Seal on your fancy French mandoline.

NMEA 2000
This is the latest standard for serial-data networking established by NMEA, operating 50 times faster than NMEA 0183. Warning: 0183 instruments may not be compatible with newer NMEA 2000 units. Ask the merchant or manufacturer to determine information-sharing possibilities.

IPX6 and IPX7
These are among standards of waterproofing established by the International Electrotechnical Commission (IEC). An IPX6-rated device takes spray, driving rain and breaking seas. An IPX7 device is submersible to 3¼ feet (1 meter) for 30 minutes.

DSC
This stands for digital selective calling on VHF radios. Press DSC and a distress call goes out on Channel 70 with your preregistered ID, and exact position if connected to a GPS.

NIT

This measurement of light in candelas per square meter (from Latin nitor meaning brightness) is used to compare panel displays. A true sunlight-readable display has 1,000 nits of screen brightness and a contrast ratio greater than 5 to 1.

AIS

This is the Automatic Identification System that can be a standalone receiver or a feature of newer VHF units. When connected to a GPS or radar, it will show you the location and identity of other AIS-equipped boats, aiding in collision avoidance.

WAAS

What is WAAS? Wide Area Augmentation System: It collects and refines satellite information to bring GPS accuracy to within an incredible 10 feet.