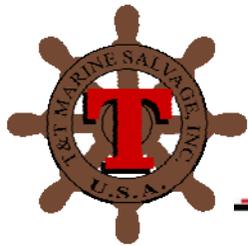
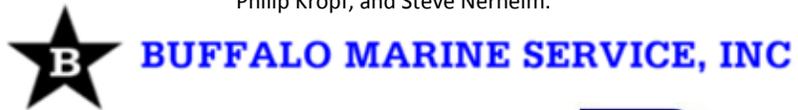




This publication is presented by the Houston-Galveston Navigation Safety Advisory Committee, a congressionally chartered advisory committee which provides advice and recommendations to the Secretary of Homeland Security on matters related to navigation safety for the ports of Galveston, Houston, and Texas City and associated waterways, with the support of its generous sponsors. Pictures used are courtesy of Philip Kropf, and Steve Nerheim.



**SeaRiver**



This pamphlet is intended only as a supplement to other sources of information. If you are not educated about boating safety, please consider taking a boating course.  
June 2011



**Port of Houston Authority 713-670-2400**

[www.portofhouston.com](http://www.portofhouston.com)

**Houston Galveston Navigation Safety Advisory Committee (HOGANSAC)**

USCG homeport main page; select ports & waterways on left column; select HOGANSAC under Safety Advisory Committees in mid-section

**Recreational Boaters Marsec Level Brochure**

[http://tmca.nu/index.php?option=com\\_docman&task=cat\\_view&gid=48](http://tmca.nu/index.php?option=com_docman&task=cat_view&gid=48)

**Security Zones for the Houston Ship Channel**

<http://www.uscg.mil/vtshouston/docs/COTP%20H-G%20Security%20Zones.pdf>

**Security Zones for Freeport**

[http://www.uscg.mil/vtshouston/docs/SECZONEfreeport8\\_5x14.pdf](http://www.uscg.mil/vtshouston/docs/SECZONEfreeport8_5x14.pdf)



*More and more people are getting out on Galveston Bay. According to a study by the U. S. Coast Guard (USCG), Americans are enjoying boating activities in record numbers, over 80 million last year. Not surprising is the fact that Galveston Bay is the third largest boating center in the country!*

*Most people feel that safety is a concern for the other guy: “It will never happen to me!” While boating is, in fact, a relatively safe recreational activity when considering its immense popularity, it can also appear deceptively easy and safe – and not just to novice boaters. Operator inexperience is a leading cause in about one in four fatalities, while operator inattention is the primary cause of all accidents.*

*So, regardless of your level of experience – whether you’re just starting out, or you’ve been boating your entire life – know your limits, always follow the basic safety precautions, and become familiar with the information described in the following pages.*

**Phone Numbers, Web Sites and additional references that may be of assistance to you**

**USCG Sector Houston-Galveston 713-671-5100**

<http://homeport.uscg.mil/mycg/portal/ep/portDirectory.do?tabId=1&cotpld=28>

**USCG MSU Texas City 409-978-2700**

<http://www.uscg.mil/d8/msutexascity/>

**USCG VTS (vessel traffic service) Houston-Galveston 713-671-5103**

<http://www.uscg.mil/vtshouston/>

**USCG Auxiliary (local) 281-334-3034**

<http://dev02.cgaux.org/generic/index.php?flo=081-06-03>

**Houston pilots 713-645-9620**

[www.houston-pilots.com](http://www.houston-pilots.com)

**Galveston/Texas City Pilots 409-941-1300**

[www.galvestonpilots.com](http://www.galvestonpilots.com)

**Houston Sail and Power Squadron (unit of U.S. Power Squadron) 281-474-7145**

[www.uspshouston.org](http://www.uspshouston.org)

**Galveston Bay Sail and Power Squadron 281-326-3481**

<http://gbps.org/>

**Local National Weather Service 281-337-5074**

[www.srh.noaa.gov/hgx](http://www.srh.noaa.gov/hgx)

**Galveston Bay Foundation 281-332-3381**

[www.galvbay.org](http://www.galvbay.org)



**What the Commercial Marine Industry Wants You To Know**



Rule 9 of the Unified or Inland Navigation Rules forbids recreational craft (including sailboats) from impeding the transit of vessels that are restricted to a narrow channel. This rule is for your protection and safety. The obligation is on the small boat operator. This is the LAW. Violators can be assessed a maximum civil penalty of the up to \$5000 by the USCG.

Commercial vessels (ships and tows) operate 7 days a week, 24 hours per day in all types of weather, extensively using radar and other electronic equipment. If not similarly equipped and trained, a recreational boater should not take the chance of navigating in marginal weather conditions.

The speed of a ship or tow can be deceptive. A ship can be going 15 knots or more in the Houston Ship Channel (HSC) and even faster in deep ocean water.

Large vessels can take a few miles to come to a complete stop. Most commercial vessels must maintain a speed of 6 to 8 knots to maintain steerage and they must remain near the center of our narrow channel. It is the only place deep enough for them in our bay. The ships and tows transiting Galveston bay waters can be 1000 feet long and 150 feet wide.

The blind spot of a vessel forward of the bow can extend from a few hundred feet to several thousand feet on deep draft container ships. Additionally, these large vessels will have a blind spot off their beam. You should be aware of these blind spots, and plan maneuvers so as to avoid being in them.

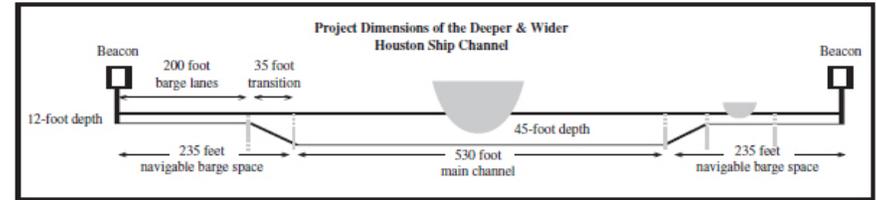


**Bolivar Roads:** This the intersection of the HSC, the Texas City Channel, and the ICW, and is one of the busiest maritime traffic intersections in the world! Stay out of the marked channels, post a very sharp lookout, be prepared to communicate on the VHF, and know what you are doing!!!





The HSC in Galveston Bay is 530 feet in width. In addition to the channel, there are “barge lanes” set on the edges of the channel in the lower bay. The beacons are set out approximately 1000 feet apart, and all are generally in a minimum of 12 feet of water. This extra spacing allows room for the barge traffic to transit in the shallower area of the channel.



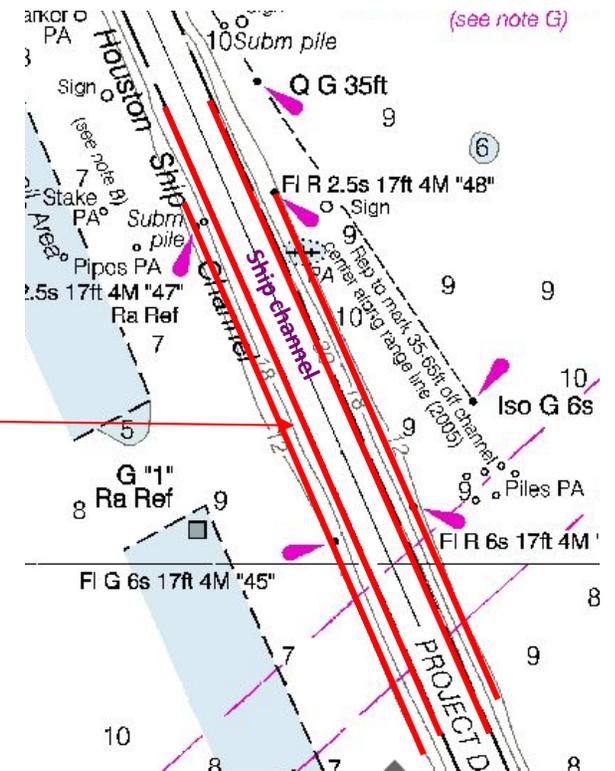
### Tips for Navigating Galveston Bay in and around the Houston Ship Channel

**Use the boater cuts to cross the HSC into Trinity Bay.** There are 3 of them: The **South Boater Cut** (just north of HSC markers 61 & 62), the **North Boater Cut** (just south of HSC markers 71 & 72), and **5-Mile Cut** (just north of HSC markers 75 & 76). These are marked channels that will safely take you across the HSC, but always keep a sharp lookout for oncoming inbound or outbound ship and tow traffic.

**Cruising to Galveston from the Clear Lake area:** If you need to operate in the HSC (in the previously described barge lanes only!), you can optionally enter the HSC via the South Boater Cut, or one marker south of that at HSC 59. Due to shoaling and obstructions, avoid entering anywhere south of that point!

**It is not necessary to stay in the HSC all the way to Galveston!** Once inside the HSC north of Redfish, it is generally safe to get back out of the channel into East Bay on the *red* side anywhere south of HSC 50. From there you can run parallel to the HSC all the way south to Bolivar Roads. But do stay at least a mile away from the edge of the HSC so as to avoid any shoal areas and possible *large breaking* waves created by ship wakes passing over those shoals.

Barge lanes are the areas at the sides of the Houston Ship Channel shown here in red. If you have to transit the HSC, use the barge lanes to keep clear of deep draft vessels.



Commercial vessels transiting the HSC **may not be monitoring channel 16. VHF channel 13 is the BEST channel to contact** any commercial traffic transiting the HSC. However, VHF channel 13 should be used sparingly, but when necessary. Don't forget to always use low wattage.

#### VHF use on and around the HSC

- 11 - VTS Houston-Galveston (Above light 109A at Baytown)
- 12 - VTS Houston-Galveston (Below light 109A at Baytown)
- 13 - Ships & tows bridge-to-bridge
- 16 - International Distress and Calling
- 22A - USCG Sector Houston-Galveston
- 68, 69, 72, 78 - Recreational vessel use

Small craft vessels and other recreational users of the waterway should be alert to the possibility of large swells or breakers in the shallow water near the sides of the channel astern of passing vessels. If caught in this situation, remain calm and seated. Turn the boat and head into the swells at a 45 degree angle to avoid being swamped.

It can take awhile for a large vessel to start turning and even longer for the ship to stop its swing. This is why it is so important to give a wide berth to all commercial traffic.

Be cautious near an area of a turn in the ship channel and remember the vessels may be turning to keep in the channel. A pair of beacons or buoys flashing at one second intervals usually marks the turns.

If you are out at night, make sure that your navigational lights are bright and not obscured by sails, flags or other equipment. Consider having a radar reflector installed on your boat and additional lights (that do not interfere with your navigational lights) available to call attention to your location and situation. If using a searchlight, do not shine on to the bridge of other vessels. Blinding an operator with a searchlight is dangerous and illegal.

## ***Things to Remember***

**Think before you drink.** Never operate a boat when under the influence of alcohol. Remember that for boat operators, the federal blood alcohol standard is .04, OR HALF OF THE TEXAS STANDARD for driving an automobile.

**Be alert.** Keep a lookout. Watch over your shoulder for commercial traffic.

**Use VHF radio channel 13** for bridge-to-bridge communications when on the HSC.

**Be seen,** especially at night. Use proper lights and consider deploying a radar reflector. Have a flashlight or searchlight ready to use in signaling your position.

**Wear a life jacket (PFD) at all times,** properly fitted and fastened. Over 82% of those killed in boating accidents were not wearing life jackets. They save lives!

**Learn the navigation "Rules of the Road"** and abide by them.

**Avoid traveling the deepest portion of the HSC.** The outer edges (barge lanes) are deep enough for small craft.

**NEVER** anchor in or near the Houston Ship Channel.

**Keep in mind** the economic significance of commercial shipping to the local Houston economy, as well as the entire state of Texas.

**The ship channel takes up less than 1% of Galveston Bay.** The other 99% is for the recreational boaters to enjoy. Together we can share Galveston Bay in a safe and environmentally compatible manner.

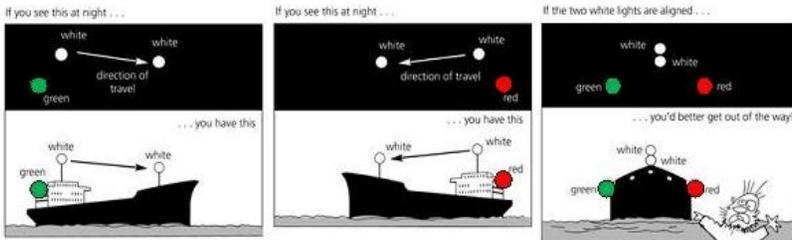
**FIVE OR MORE BLASTS ON THE WHISTLE MEANS  
DANGER!**

**Have a great time, but Be Responsible!**

## Know Ships' Lights

Navigational lights can tell you a lot about a ship's size and type. As well as red port and green starboard running lights, large ships will also display white range lights fore and aft. If you see both colored lights and the range lights in a line – you are dead ahead and should MOVE OUT FAST.

The two white lights forming a central range on a vessel are excellent indicators of its relative heading as seen from your vessel. These lights will normally be seen well before the colored side lights.



## Recommended Equipment to be Onboard to Further Increase Safety

It is strongly recommended that your vessel be equipped with the following equipment which will enhance the safety of your boating trips, as well as overall safety of the HSC.

- GPS – there are several low-cost, portable units.
- VHF radio – as with the GPS, there are many low-cost handheld units available. A VHF is your basic communication tool with the maritime community on the HSC.
- Class B AIS units – these are coming down in price and will allow other vessels to identify you as a recreational vessel, and also enable you to identify them.
- Charts—recreational boater charts or others as appropriate.

Get out of the way early when meeting commercial traffic so as to leave no doubt of your intentions. The best rule is to always make an early and substantial change of course or speed to make your intentions clear to other vessels. This is even more important for a sailboat because of its slower speed. Remember, a large vessel will blanket all wind from a sailboat if the boat gets too close to the ship. A large vessel must take evasive actions at a further distance off to be effective, and then it can have a difficult time correcting back.

“Wheel wash” or “suction” is a strong underwater current caused by towboat, harbor tugs or ship traffic that can result in severe turbulence hundreds of feet around a large vessel. This “suction” can cause a small vessel to get into the quarter of the ship. Stay clear of the stern and wheel wash of ships and towboats at all times.

Keep well clear of two ships meeting in the HSC as they will use up the entire channel during and after this maneuver.

Give a wide berth to ships and tows that are berthing or going into anchorages. The propeller wash from vessels or the tugs assisting them can flip a small boat.

Beware that a tow without barges in front could be towing objects astern of the tug on a long line that may be underneath the water.

Stay well clear of any marine casualty, incident, or spill. Wakes from small craft can hamper rescue or containment operations.

Additionally, there are areas of Galveston Bay which are covered by Security Zones. You may **NOT** enter these security zones. For more information on security zones, please see the pamphlet “Security Zones for HSC.”

If you are out near the sea buoy, be aware that ships can make large turns in order to make a lee to pick up or drop off a pilot. In addition, a pilot boat will be operating in the immediate area, so it necessary to stay well clear.

Dredges are almost always working somewhere on the HSC. In addition, to the whistle signals, it is important that recreational boaters know the day shapes and nighttime lighting patterns for dredges that indicate the safe side for passing and also the danger side for no passing. The safe side to pass the dredge will be marked by two black diamonds (daytime) or two green lights (nighttime).



Never pass a dredge until you have confirmed passing instructions with the dredgemaster on VHF channel 13.

Dredging operations involve a considerable number of support vessels that are necessary to move the dredge, relocate anchors and anchor balls, and place dredging pipe and connecting flanges. These vessels are constantly on the move 24 hours a day performing these tasks as well as ferrying personnel and supplies. Slow down, keep a close lookout, and be prepared for sudden maneuvers by the workboats. Better still, give all dredging operations as wide a berth as possible.

### ***Understand Ships' Whistle Signals***

Whistle signals are only used when vessels are in sight of one another. If you hear a whistle, check and see if it is intended for you. If unsure, try contacting the vessel on VHF channel 13.

#### ***Meeting Situations***

**One blast** means passing port to port. "I intend to leave you on my port side."

**Two blasts** means passing starboard to starboard. "I intend to leave you on my starboard side."

#### ***Overtaking Situations***

**One blast** means you will be passed on your starboard side.

**Two blasts** means you will be passed on your port side.

**Five or more short blasts** on the whistle indicates that the commercial vessel(s) are concerned about a dangerous situation. Stay clear and give a wide berth to vessels sounding the danger signal. Also, ensure they are not sounding the danger signal to you!

