



Sharing Galveston Bay with Recreational Boaters

If you are a professional mariner navigating a ship, or a tow, or a tug, or any other commercial vessel, and operating that vessel anywhere on Galveston Bay..., including the Houston Ship Channel, Galveston Harbor, the GIWW, and any adjacent waters, this section is designed to provide useful information on the hundreds of recreational boaters who are out there sharing these waters with you. Most of them do not spend a lot of time inside the shipping channels, but when you are sometimes sharing these waterways with them it would be good to know something about what you are perhaps going to encounter!

The **Lone Star Harbor Safety Committee** (<http://www.lonestarhsc.org/>) maintains a publication, originally developed in 2011, entitled “**Sharing Our Bay**”. This publication is designed to provide information to recreational boaters on how to safely, and intelligently, navigate in and around the commercial navigation channels without getting into trouble with the many ships, and tows, and dredges, etc. which were draft restricted and otherwise “privileged vessels”.

The **Sharing Our Bay** publication can be accessed at: <https://lonestarhsc.org/resources/recreational-boater-resources/> and interested commercial mariners will see that amongst the items covered in the document are:

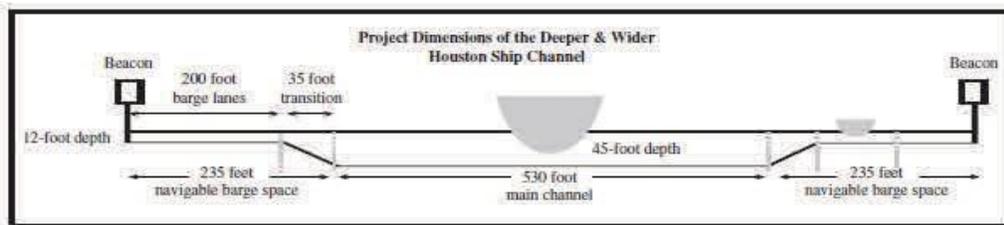
- Navigation Rules (Rule 9 and other area-specific information)
- Visibility (blind spots on commercial vessels)
- Houston Ship Channel configuration (dimensions, depths, barge lanes)
- Communications (commonly used VHF channels by local mariners, monitoring VHF 13, etc.)
- “Whistle signals” (understanding VHF local terminology on making meeting and overtaking arrangements)
- Ships lights (typical light configurations for ships and tows)
- Dredging (understanding “safe side” and “danger side”, dredge pipelines, support vessels)
- Misc. safety issues (breaking ship wakes, suction and wheel wash, ships making turns in the channel, vessels berthing or anchoring, avoiding marine casualties, proper vessel lights, security zones)
- Vessel equipment (VHF radio, GPS & chart plotters, AIS, NOAA charts)
- Navigation channels (using the barge lanes, boater cuts into Trinity Bay)
- Alternative routes (navigating to Galveston outside the HSC)
- “BRIR” (Bolivar Roads Inbound Route)
- Emergency VHF broadcasts (making and understanding)
- Emergency phone numbers (Coast Guard, VTS, law enforcement, port security, emergency towing)

It cannot be assumed that all, or even a majority of, recreational boaters have read this publication!

Or similar literature elsewhere on waterway safety, navigation rules and best practices, and area-specific information. And probably only a minority have ever taken a CG Auxiliary or US Power Squadron boater safety course. Nor is every boater a member of a boating group or yacht club which might help with their boater education. And even if boaters *have* taken courses, or have years of experience on the water, just as with drivers on our highways, not everyone at all times is paying *full* attention to what they are doing, or where they are

going, or what is around them! (That's why perhaps "Five Blasts" was "invented"!)

Galveston Bay, and adjacent waterways, are amongst the most heavily utilized recreational boating areas in the entire country! And this includes vessels of all sizes and descriptions, and with captains in charge of those vessels representing a *very* wide range of experience, from almost none at all, to those captains who are near-professionals. (Some recreational boaters even have CG credentials.) Boater experience of course increases every time one heads out onto the water with their boat. And also, in our heavily mixed-user environment, when a boater in any manner interacts with the main shipping channels and commercial traffic, the resulting increase in experience can be profound! Documents like **Sharing Our Bay** can help make more boaters aware of how to be safe out there, as well as can the work of the **Recreational Boater Representative** to the **Lone Star HSC** in conveying important and timely information back out to boaters. It is an ongoing and never-completed educational effort, and documents such as this "**Mariners Guide to Navigating the Houston-Galveston Area Waterways**" are designed to help with this effort.



Geography of where Recreational Boaters operate

A statement in **Sharing Our Bay** says: *"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."*

And so recreational boats can be found almost *anywhere* on Galveston Bay and its adjacent waters! And the range of vessels out there could hardly be more diverse..., including canoes and kayaks, personal watercraft, small fishing boats, sailboats of all sizes and descriptions, and powerboats also of all sizes and descriptions! Perhaps the largest concentration vessels is in the mid-bay area west of the HSC around Clear Lake, but the full range extends from the upper navigable reaches of Clear Creek on the west, to Trinity Bay and its tributaries on the east, and from the San Jacinto River and the beginning of the HSC Security Zone on the north, and to Bolivar Roads and offshore through the Galveston jetties on the south. And adding also the GIWW, there is regular recreational boater traffic on that waterway between points as distant as Lake Charles to the east and Port Aransas to the west.

Specifically, areas that are frequented...

+ Recreational vessels are regular users of the **Houston Ship Channel** everywhere between the Galveston jetties and the Hartman Bridge. Boaters are always urged to utilize the Barge Lanes, and many do, but there are also many who persist in just heading down the middle of the channel!



+ As noted above, recreational vessels are active in the **GIWW** (most boaters use the acronym “ICW”) in the entire area covered by this document, i.e., between MM 319 (High Island) and MM 441 (the Colorado River Locks).

+ Recreational boaters are active in **Galveston Harbor**, going to and from various destinations there, or passing through the harbor westbound from the HSC through the Pelican Island Bridge and beyond.

+ Recreational boaters are of course very big users of the “boater cuts” between the west side of the bay and Trinity Bay to the east. Two of these cuts (the “**North Boater Cut**”, midway between HSC lights 69/70 and 71/72, and the “**South Boater Cut**”, just north of HSC lights 61/62) were created at the time of the 2002 HSC Deepening and Widening Project. These cuts are marked and lighted federal channels and are maintained as such. The third passage is “**Five Mile Cut**” whose western terminus is just north of HSC light 76. This is also a federal channel, and although less frequently used by boaters than either of the other two cuts, it is still an important waterway.

Note: Shallower draft vessels can be expected to be found crossing the HSC almost anywhere! And as the years have passed since the “deepening and widening”, and the no longer utilized spoil areas along the east side of the HSC throughout the mid-bay region (and the west side of the HSC from light 53 on south) have slowly eroded down to almost natural bay bottom levels, even *deeper* draft recreational vessels can sometimes be found crossing the HSC in unexpected locations!



+ Recreational boaters are also frequent users of **Cedar Bayou**, from the start of the Cedar Bayou Channel at light HSC light 92, all the way up to the low bridge at highway 146. Cedar Bayou has become *much* more of a commercially-used channel than it was 20 years ago and sharing this twisting/turning channel has become somewhat of a challenge for all concerned.

+ Recreational boaters are also *very* frequent users of **Double Bayou** (on the eastern shore of Trinity Bay), and although this waterway has nowhere near the volume of commercial traffic as does Cedar Bayou, there is one business located there in the town of Oak Island that regularly runs towboats and work barges, crew boats, and various rigs/platforms in and out of the narrow and shallow channel.

+ Recreational boaters are also frequent users of **Dickinson Bayou**, where that channel gets shared with commercial users anywhere between its intersection with the HSC (near light 45) and a point just beyond the highway 146 bridge.

+ As previously mentioned, Clear Lake marinas are the home bases of probably the great majority (other than trailered vessels) of recreational vessels operating on Galveston Bay. And the only waterway into and out of Clear Lake is the **Clear Creek Channel**, mostly used by recreational vessels, but also by quite large commercial excursion vessels, some shrimpers, and occasionally a towboat pushing a barge for some business inside the lake.

VHF channel usage by Recreational Boaters

Recreational boaters are kind of mixed users of the various VHF frequencies. Some of the smallest fishing

vessels and runabouts may carry along a hand-held VHF, but probably the great majority do not. Other smaller vessels may actually have a built-in VHF, but whether or not it is always turned on and set to an appropriate channel is problematical. Larger vessels are more likely to have installed one or more VHF radios, but here the chances of a commercial vessel being able to actually contact such a boat captain probably has, more than anything else, a lot to do with their experience level. The most sophisticated captains are the ones *most* likely to have their radios turned on and ready to respond when called.

Continuing education efforts for boaters work to build knowledge about what VHF channel(s) a recreational vessel *should* be monitoring when operating within the Galveston Bay area, but some boaters still have a lot to learn! Most know that when their VHF is turned on (as it always *should* be!) that they should be monitoring VHF 16. But fewer know that when they are operating within the HSC, for example, that they should *also* be monitoring VHF 13. Some probably, even if they do know that they should be on VHF 13, are reluctant to do so lest they miss other calls on VHF 16. The problem here is that they do not know how to set their units to scan more than one channel. Again, it is all about education!

For those recreational vessels that travel in the GIWW, some are also confused about what channel to use when navigating that waterway. This is due of course to the fact that there is a channel switch at Bolivar Roads, with VHF 13 being used when traveling east of that location and VHF 16 when one is traveling west.

The bottom line is, if you are trying to reach a recreational vessel on the radio, generally your *best* chance is on VHF 16. And recreational boater “working channels” are 68, 69, 72, and 78.



AIS usage by Recreational Boaters

Recreational boaters increasingly have AIS systems aboard their vessels. With the advent of Class B type AIS transceivers, designed to be a simpler and lower-cost AIS piece of equipment, such devices on recreational vessels have proliferated. Some vessel owners, in an effort to cut costs even further, have opted for receive-only devices, with the thought being that being able to identify nearby commercial vessels allows the boat captain to make VHF contact with such commercial vessels as they see fit. But increasingly, more and more recreational vessel owners are opting for full transceiver models, with their thought being that it is also great to be “seen” by all vessels around them!

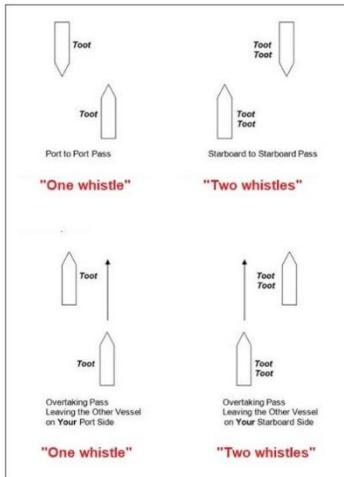
Most captains of recreational vessels traveling longer distances in the GIWW have gotten pretty good at using AIS at identifying tows which are coming up ahead of them, and also those behind them. With vessel identifications showing up on their screens, and thus a name that can be called, it makes it far easier than in the “old days” when one had to just guess what mile marker a tow might be located at and then make a call based upon that educated guess. From a distance it wasn’t even always clear if it was going to be a passing situation, or rather perhaps an overtaking situation, and so AIS has done a lot to make sharing the GIWW a lot safer for all concerned!



One other development that has aided recreational vessel captains is the availability of web-based AIS aps installed on cell phones. Entities like vesselfinder.com and marinetraffic.com have made AIS available even to those without permanently installed AIS receivers/transponders.

Whistle Signals and VHF Communications on Passing and Overtaking

Whistle signals were at one time how vessels communicated their passing and overtaking intentions with each other and were used only when vessels were in sight of one another. These days if you do sound a whistle signal intended for a recreational vessel they are probably however not going to understand. Try contacting them on VHF 16.



Meeting Situations

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

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

Overtaking Situations

One blast means overtaking the slower vessel on its starboard side.

Two blasts mean overtaking the slower vessel on its port side.

Five or more short blasts on the whistle indicates that the commercial vessel is concerned about a dangerous situation, and many boaters do understand this signal. At the very least it serves to get their attention!

VHF Communications replace whistle signals...

Nowadays of course whistle signals have been mostly replaced by VHF radio communications between, not only commercial vessels, but also between commercial vessels and recreational vessels. When inside the HSC most recreational vessels, under normal situations, probably do not attempt to make meeting/overtaking arrangements. Most know to stay inside the barge lanes, and also to hug the sticks as much as possible. (Some will even run outside of the sticks at times.)

Inside the GIWW however there are many small boats which, as previously noted, cannot be bothered to use their VHF, assuming that they even have one! But larger vessels, with usually more knowledgeable captains, are generally very ready to be contacted regarding making meeting/overtaking arrangements. In many cases, when things like wind and weather, or heavy traffic situations, are not an issue, these vessels will just "see you on the one" and try to stay well out of the way! But many captains, particularly those who are AIS-equipped, really do like talking to the tows and making meeting/overtaking arrangements. In many cases in fact, captains of these recreational vessels get fairly upset when tows fail to respond to their VHF calls! After a couple of failed attempts at contact, many recreational vessels captains will then just state: "Negative contact with (vessel name or description), I will just see you on the one." (or whatever other action seems appropriate at the time.)

One other note however..., because some less well-experienced recreational vessel captains might not have the terminology shown below *totally* part of their repertoire, do make sure that any meeting/overtaking arrangements that you make are *crystal clear* with them. This is *especially* true for overtaking situations, where either they are overtaking you, or you are overtaking them in some situations. Conversations like "come around you on the two" are generally less well understood by boaters than are conversations for meeting situations, and you might do well to confirm your passing intent by saying something like, for example: "Yes, on the two, I will be passing you on your port side."

Local VHF Terminology

“See you on the one” or “One Whistle”: Port to Port passing arrangement for vessels meeting.

“See you on the two” or “Two whistles”: Starboard to Starboard passing arrangement for vessels meeting.

“Come around you on the one”: A vessel arranging with another vessel to overtake them on their starboard side.

“Come around you on the two”: A vessel arranging with another vessel to overtake them on their port side.



Dangerous situations on the water

There are, without a doubt, numerous situations on the water where commercial vessels are a threat to recreational vessels! The most obvious one of course is the threat of a collision. With proper communication, and proper adherence to the “rules of the road” however, most collision situations can be avoided. Perhaps the biggest threat of a collision, even when everyone is doing everything right, is the situation where a recreational vessel has a breakdown of some kind when traveling inside a navigation channel, or is crossing one. The best way probably to keep such situations from happening is for recreational vessels to stay out of the shipping channels entirely (re: the next section), but for some mariners that is just *not* going to happen! Five blasts is probably the best that you can do, and hopefully there will never be a collision tragedy on our waterways!

Other dangerous situations can be the result of recreational vessels getting too close to ships and tows where things like suction effects and prop wash can be highly dangerous to these vessels. Even running next to the sticks in one of the barge lanes can be awfully close to a deep-and-wide overtaking ship, and having a tow with a couple of barges strung out in the same mix can be especially daunting for many not-so-experienced captains. Again, five blasts may be the only option to warn vessels away!

One other dangerous situation occurs when displaced water from a large ship causes large breaking waves to be formed over the adjacent spoil areas and which then break off from the channel, sometimes for long distances! These waves can be *extremely* dangerous for very small boats, especially for those that might be at anchor while fishing, and even more so when they are anchored between the edge of the channel and some lee shore such as Redfish Island. It is hard to keep people from doing such dangerous things, and once again, five blasts may be all that can be done!



Alternate routes to Galveston for Recreational Boaters

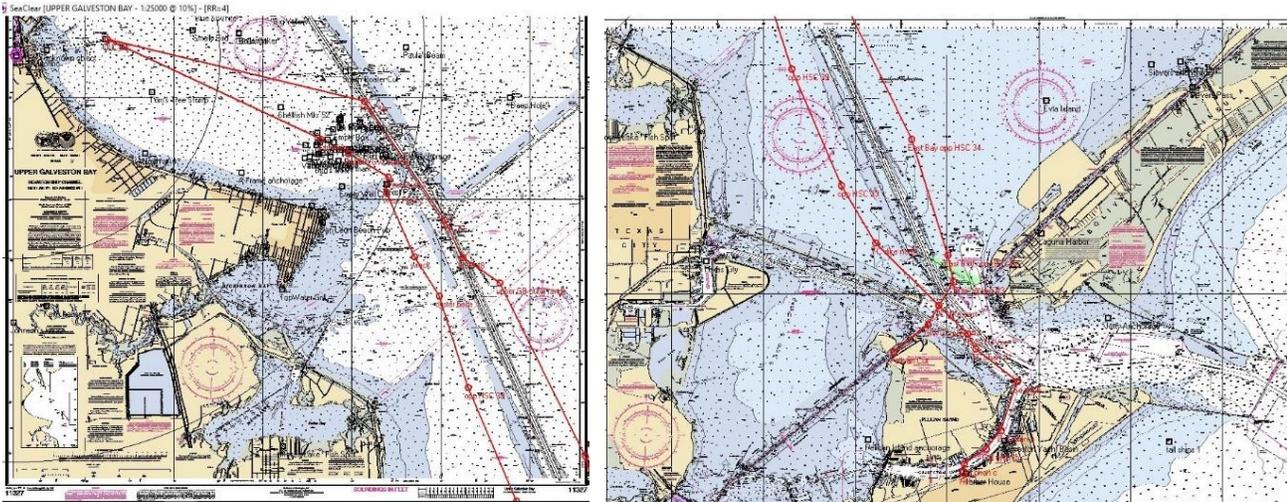
Some captains of generally larger recreational vessels have figured out that there *are* some safer alternate routes for cruising down to Galveston that do not involve getting into the Houston Ship Channel. The two chartlets below show both of these routes, one called the “**East Bay Route**” and the other called the “**West Pass Route**”. These routes are increasingly being publicized on various boater information resources, and such documents provide waypoints and other navigation notes for boaters who wish to try these alternates.

The **East Bay Route** document can be found at:

https://www.dropbox.com/sh/eq62ut8uxjfi3gi/AAAGaTDyQt_krjBDGbvZ71Iwa/Destinations%2C%20routes%20and%20anchors?dl=0&preview=East+Bay+route+to+Pelican+Cut.pdf

The **West Pass Route** document can be found at:

https://www.dropbox.com/sh/eq62ut8uxjfi3gi/AAAGaTDyQt_krjBDGbvZ71Iwa/Destinations%2C%20routes%20and%20anchors?dl=0&preview=West+Pass+route+to+Galveston+Harbor+-+rev+2017.pdf



The **East Bay Route** has been used by some boaters for quite some time! The only problem with it, from the point of view of keeping boaters out of the ship channel, is that for about 3.5nm one really still needs to be inside the channel!

If one were to cross the HSC via the South Boater Cut heading eastbound, and then attempt to travel south on the east side of the channel, there are a large number of derelict structures and old pipes in the water that pose a great hazard to safe boater navigation. So some boaters enter the HSC just north of HSC light 59 and then travel down the barge lane to the vicinity of light 48 where it is generally safe to cross over into East Bay. They then run parallel to the channel down to near light 28, cross over the “BRIR” and then cross whatever shipping channels they need to get to their destination. Sailboats, when the winds are in their favor, and when they are not in a particular hurry, will sometimes use the large amount of good water in East Bay to actually sail, but then again will aim for the “BRIR” area as they get to the bottom of the bay.

The **West Pass Route** is a much newer “discovery”, where some boaters have recently found that it is possible to successfully get through “West Pass”, the little gap between the southernmost portion of the old “Redfish Island Shoal” and the major shoaling area extending eastward from Eagle Point (San Leon). Again, one is talking about larger recreational vessels here, both power and sail, and not the smaller fishing boats, etc. It is these larger vessels that normally travel the HSC to Galveston, but who are increasingly

discovering these alternate routes and are then getting up their courage to give them a try.

And so, as in noted in the two pdf files linked to above, every recreational vessel that tries one of these alternate routes is one less vessel traveling down the HSC and potentially getting in the way of the various commercial vessels! The HSC is there for everyone's use of course, and when recreational vessel users of this channel know what they are doing (and don't have any sudden mechanical issues!), there should not really be problems in sharing this waterway. But there are these two alternate routes, which do serve to make for *much* more pleasant passages down the bay, and more and more boaters are discovering this every day!

Synopsis...

As noted in the preceding, in an area where there are literally *thousands* of recreational vessels permanently berthed in marinas, and many *hundreds* more periodically launched from the dozens of boat launches in the area, a lot of water "Sharing" is *always* going to be required! Since however a relatively large number of berthed vessels hardly ever even leave their marinas, this eliminates a lot of conflicts right there! And then probably the greatest number of the rest of them do their boating well away from the various shipping channels. There are numerous boat owners who have sailed on Galveston Bay for many years who have, for example, never even crossed the HSC into Trinity Bay! Others do cross it at varied locations, and then finally there are those relatively few who actually use that channel as a route southbound or northbound. One other observation in favor of the commercial operators, is that most recreational boater traffic occurs on the weekends and holidays, and then also generally when various weather conditions are relatively benign. And so, hopefully this portion of the "**Mariners Guide to Navigating the Houston-Galveston Area Waterways**" will have provided useful information about recreational boaters to the commercial mariners who are out there every day!

