

The new Galveston Causeway Railroad Bridge...

...information for recreational boaters

In February 2012 the truss span for the new Galveston Causeway Railroad Bridge was lifted into place. Within a few days the new span was fully operational, but work continued during all of 2012 and 2013 to get the waterway itself cleaned up of old structures, both above and below the water surface. So, as planned, the *horizontal* clearance between bridge support piers is now a full 300 ft., which matches the horizontal clearance under the nearby I-45 causeway, and which vastly improves on the 100 ft horizontal clearance under the old bascule span. (Note: The actual *maintained* channel in the GIWW (ICW) under the bridge is still only 125ft in width. At some point this may be widened, but at this time tows will still continue to pass under this structure single-file with no meeting or overtaking allowed.)

The design of the bridge calls for *vertical* clearances as follows:

For the span down (closed) position, it is 8'-0" above MHW (mean high water).

For the span up (open) position it is 73'-0" above MHW.

MHW is here defined as +3.00 ft above MLW (mean low water) which is elevation 0.00 ft.

And in the open position, the bottom of the span is at the same height above the water as the bottom of the nearby I-45 Galveston Causeway, i.e. 73'-0" above MHW.

Very soon after the opening of the new span there occurred a fair amount of confusion among tall-masted sailboat captains passing through the bridge as to the open vertical height. And even if they happened to know that the planned design height was 73ft, there appeared to be no way to be 100% sure that the span was fully open, even if the bridge operator on duty told them that it was! The old bascule bridge when open had nearly-unlimited vertical clearance, but the new vertical lift bridge is a completely different situation!

After several months of negotiations in 2012 with the bridge contractor, Galveston County, the BNSF railroad, and the Coast Guard, there are now two ways that you can be sure that the bridge is in the fully open position:

1. Per 33 CFR 118.85 (a standard for the lighting of vertical lift bridges), there exists on both sides of the bridge, in the center of the span, a green light that shines only when the span is in the full up position and the bridge is open for navigation. And when the span is in *any* other position, including while it is moving up or down, a red light shines to indicate that the bridge is not open for navigation.

2. It had been observed that there were times, in bright daylight for example, when these lights were not all that visible from the deck of a sailboat, and so conversations continued, and ideas were explored, as to an *alternate* method of showing that the bridge span was fully open. The results of those conversations are shown in the photographs that are included below. **There are now installed on both sides of both towers, and also on both sides of both ends of the lifting span, white painted stripes and, simply stated, when the white stripes on the lifting span line up exactly with the white stripes on the fixed tower structures, you can be *assured* that the bridge is fully open!** The Coast Guard had to sign off on this non-standard set of markings, but since there is nothing that can fail with this low-tech solution to the problem, it should be a system that gives a lot of confidence to captains of tall-masted sailboats that they are not going to collide with a bridge span that is somehow not fully open.

As always, the operator of the GCRR Bridge answers to VHF calls on channel 16, and then may ask you to go to either channel 09 or 10 for further conversation. The bridge operator can also be reached

by phone at 409-740-1204. They usually are willing to give you information on marine traffic that may be approaching your position from the other direction, but they do not *control* traffic between recreational and commercial vessels, and so don't ask for *permission* to pass under the bridge. Rather it is up to you to arrange, via VHF, meeting and overtaking procedures between yourself and any commercial vessel.

This portion of the GIWW is obviously a *very* busy and potentially dangerous place, so always exercise extreme caution when passing under the two adjacent causeway structures!



For questions, please contact:

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