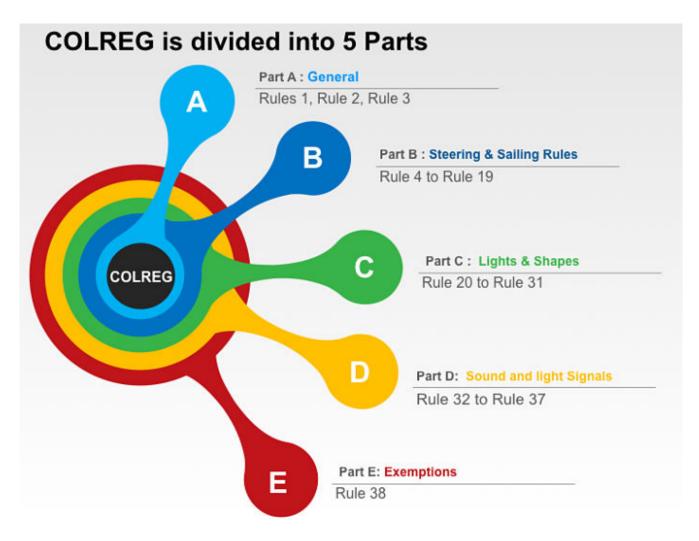
A quick primer on COLREG rules

Reviewing basic rules for everyday sailing

Georgia Hilton- February 25, 2024

We're going to take a very quick review of one of the important day to day rules you need to know for safe boating. We are not going into detail and not covering all the details nor all the rules that there are. This is just a primer on some of the basics any good boating enthusiast needs to know to be safe.



Some Basic Definitions

Here are some simple Rules that cover definitions of things. You can read the entirety of these rules and more in the USCG Navigation Rules & Regulations book (COLREGS). We're not covering all the rules and we're not going into detail on every aspect of every rule... This is just a place to start for basic boating.

Rule 1 - These rules shall apply to all vessels on the high seas and in all waters connected therewith. (*Pretty much anywhere you drive your boat if you are on the ocean or can get to the ocean*)

Rule 2 - Nothing in this rules shall exonerate any vessel, owner, master, or crew for consequences of neglect to comply (*You, your boat, and your crew can be held liable for any neglect on the teams part in a collision or accident with your vessel*)

Rule 3 - The term vessel (Anything that floats and you can move from point A to point B, a 1000 ft containership, a 500 ft research ship, a 100 ft fact, a 30 ft outboard, a jet ski, a row boat, even a kayak ... all vessels and must follow the rules)

Rule 3 - Sailing Vessel (A sailboat is only a sailboat when it is sailing using sails and the wind to propel itself and NOT using an engine for propulsion. As soon as it engages its engine it's now a power boat, sails or not.)

Rule 3 - Power Vessel (Any boat that uses its engine for propulsion)

Rule 3 - Fishing Vessel (Any boat that uses nets, trawls, longlines, etc for fishing, **PROFESSIONAL COMMERCIAL** fishing boats. Not you on your big sport fish with trolling lines... YOU are just a powerboat. Trolling is NOT fishing according to the rules.)

Rule 3 - Underway (Any boat that is not tied to the dock or anchored. You can be UNDERWAY MAKING WAY if you are out driving your boat and you are cruising along with you engine or sails, or paddling. Otherwise you are UNDERWAY NOT MAKING WAY. That means you are just drifting with your engines off or sails down.)

Rule 3 - Restricted visibility (*Restricted visibility is any thing atmospheric: Fog, Rain, Haze,Snow, Sleet, etc. You are in restricted visibility if you are in any of those things or even NEAR any of those things. So if you see some fog near you, you are considered to be IN restricted visibility and should act accordingly.*)

Rule 19 - Vessels in Sight - Vessels should reduce their speed to the slowest possible speed that they can still maintain steerage. *(Bare Steerage way means as slow as you can go without losing control of your boat)*

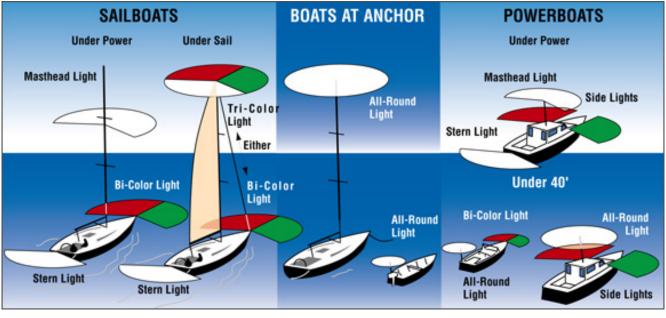
Rule 19 - Conduct in Restricted Visibility - A vessel shall be deemed to be in sight of one another only when one can be observed visually from the other. *(we're taking eyeballs here)*

Rule 21 - Masthead light - Means a white light placed over the fore and aft center line of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel. (That means, if you are facing forward on your boat, a white light at the centerline one your boat, showing a white light from dead ahead, to about as far back around you as you can put your arms. (22.5 degrees abaft the beam on either side of you.)

Rule 21 - Sidelights - Means a green light on the starboard side and a red light on the port side each showing an unbroken light over an arc of the horizon of 112.5 degrees and so fixed as to show the light from the right ahead to 22.5 degrees abaft the beam on its respective side of the vessel. (That means, if you are facing forward on your boat, your side lights will display from dead ahead to either side of the boat the same distance as a mast head light, except the port light will be from dead ahead to the left of you and show RED, The starboard side light on the right side, and show GREEN)

Rule 21 - Stern Light - Means a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel. (That means, if you are facing backward toward the stern of your boat, your stern light will display a white light in a 135 degree arc, about 67 degrees to either side of you.)

Rule 21 - All around light - Means a light showing an unbroken light over an arc of the horizon of 360 degrees on the vessel. (*This light is seen from any direction. Usually an anchor light, or on smaller vessel light an outboard motorboat, a light that is mounted on top of your cabin or on one side or the other of your stern.*)



PRIMER ON EVERYDAY COLREGS

GEORGIA HILTON

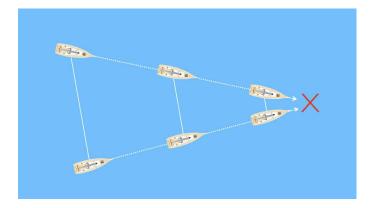
Some Basic Rules

Let's go the next step of some everyday rules that apply to pleasure boating and you..

Rule 5 - LOOK OUT - Every vessel must maintain a proper lookout at all times. This includes looking by sight and hearing, as well as using any other available means that are appropriate for the current circumstances and conditions. (Yup.. At all times, day, night.. anytime you are underway. The goal is to fully assess the situation and the risk of collision using ALL means... Sight, Hearing, RADAR (see rule 7), GPS, AIS... everything. IF you have it on your boat fire that puppy up and use it. Turn those tunes down a bit, keep your eyes open. In fact a lookout is supposed to have ONLY ONE DUTY... lookout. That means even on a small boat you should have at least a crew of two. The driver and the lookout according to the rules.)

Rule 6 - SAFE SPEED - Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions. (*This rule means you should not go faster than a safe speed. What is safe speed? It depends on your boats ability to stop quickly. The maneuverability of your boat. What other boats are around you. The weather and visibility limits and other navigational hazards. You need to be able to stop your boat within the range of visibility at a minimum and you must travel at a speed that allows you to have time to avoid other vessels or things that you can run into. Different sized boat have different safe speeds.*)

Rule 7 - RISK OF COLLISION - Every vessel must use all available means to determine if there is a risk of collision. If there is any doubt, the risk is considered to exist. (What is Risk of collision? Anytime you even think a collision might occur, you have a risk of collision. How can you tell if a risk of collision exists? CBDR. Constant Bearing Decreasing Range. If you sight another boat out there, from ANY direction, and it is coming closer to you and the direction it's coming from is not changing... You have a risk of collision. Additionally, ANYTIME you are in close quarters, or near another boat, you have a risk of collision. If you are unsure of that a bearing is look up Relative Bearing and True Bearing.



Side note: Rule 7 also stated that IF you have a RADAR on your boat, it MUST be energized and operating.

Rule 20 - within LIGHTS and SHAPES section - The lights prescribed by these Rules shall, if carried, also be exhibited from sunrise to sunset in restricted visibility and may be exhibited in all other circumstances when it is deemed necessary. (d) The Rules concerning shapes shall be complied with by day. No other lights shall be exhibited during these times, except such lights as cannot be mistaken for the lights specified in these Rules. (*At night show your Navigational lights, and no other fancy lights that could interfere with other boats determining you are and which way you are going. Lights are critical to determine the type of vessel and its aspect. Aspect i the direction of travel of the vessel. Additionally, by day, you should show any day shapes applicable to your boat. Day shape for please boats normally are Anchoring (Round black anchor ball displayed), Sailing with boat sails and engine (Black cone with the Apex down), and when you have divers in the water (Three shapes in a vertical line (Ball, Damond, Ball for a Vessel Restricted in it's ability to maneuver.) You can read all about day shapes, lights, and types of vessels in rules.)*



Under Sail

Under Sail Towing And Power

Fishing

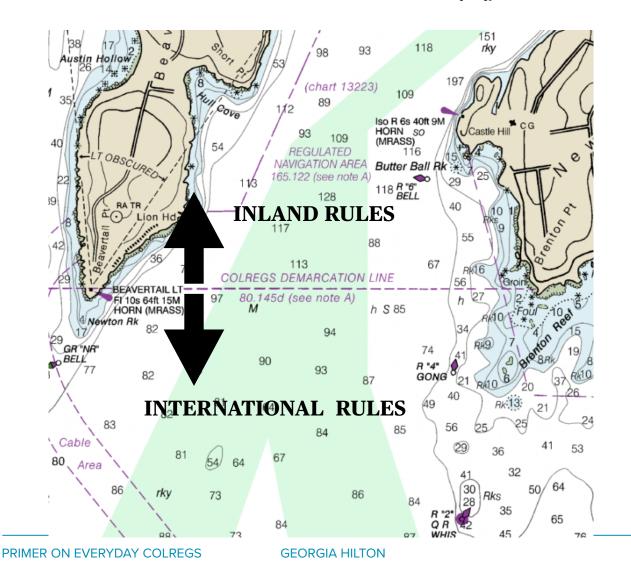
Not Under Mine Command Sweeping

Restricted Ability to Maneuver

Constrained By Draught

Special Circumstances and the Demarcation Line

Let's say you are enjoying your day and suddenly your lookout spots another boat... and things now get interesting. What do you do? Let's take a moment and talk about the two sets of rules, as some situations depend on WHERE you are, as well as, the aspect between your boat and the other one. *Additionally all the rules are based on ONLY TWO BOATS.... If there are more than two boats involved in the situation that's called a SPECIAL CIRCUMSTANCE and you have to put on your Captain hat and make the best decision based on all the information you have and the situation around you.* The Rules talk to two locations. INALND and INTERNATIONAL. That's INLAND rules and INTERNATIONAL rules. It has nothing to do with territorial waters. The point that defines the rules is called the **DEMARCATION LINE.** You can find more on this in RULE 1, but the Demarcation line is normally at the mouth of a river, or channel or harbor and defines the point when heading out to sea, that the Inland rules no longer apply and the international rules start. Most of the time the rules are the same, **but there are times when they differ**.



Maneuvering

Ok, back to the boat we just saw Back to enjoying your day. Your lookout is waiting for you to make a decision on what to do. Meanwhile the boat is getting closer and closer. Things now get interesting. What do you do? Well it depends. Let's start with a head on situation.

Rule 14 - HEAD ON - A head-on situation occurs when two power-driven vessels are approaching each other on nearly reciprocal courses and could collide. Unless otherwise agreed, when two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other. (You just figured out that the other boat is heading straight at you or pretty close to that and is not turning. That's Constant Bearing Decreasing range. Now what? Simple. BOTH boats MUST turn to starboard and pass each other port to port. Don't wait for the other boat, turn immediately and make it clear as to what you are doing. If you are)

Ok, that was pretty easy... this applies to both International and Inland rules. Don't forget even though we haven't mentioned it yet, you need to signal your intentions. We'll cover those separately to keep things as simple as possible. Let's get back to that pesky boat... Ok, in our next situation we see it heading toward us from our starboard side. Now what?

Rule 15 - CROSSING - When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel. (You figured out that the other boat is in a crossing situation and risk of collision exists. Now what? Simple. If the boat is on your starboard side, and it's heading toward you. In that case you would see a RED light on that vessel's port side if it were night. SO what do you do? You must determine if you are the GIVE WAY vessel or you are the STAND ON VESSEL. If you see a boat heading in your direction on your STARBOARD side, you are the GIVE WAY vessel. If you see a boat heading in your direction on your PORT side, you are the STAND ON vessel. Now that we've figures on we're the GIVE WAY what do we do....)

Rule 16 - ACTION BY THE GIVE WAY VESSEL - Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear. (*This makes it clear, You GIVE WAY, you get out of the way of the other vessel. But how? The rules are clear on this. You must avoid. You are required to CHANGE COURSE and/or SPEED to avoid the STAND ON vessel. You should turn to STARBOARD and if necessary slow down. You must do one or both things, turn or slow down. But, turning is much easier to see from the other vessel than just slowing. Either way you MUST*

avoid EARLY and OBVIOUSLY according to the rules. And, you must avoid turning to port or crossing ahead of the STAND ON Vessel.)

Ok, that was straight forward. We saw the boat on our port side, we determined that a collision situation might exist, we determined that we were the give way vessel and we dod what the rules said we should , we turned to starboard, slowed down a bit and went around behind the boat, taking it's stern and we avoided a collision. Let's look again at the situation. Now a that boat is heading for us on our PORT side and it appears a collision situation exists. Ok, in this situation we see the boat on our PORT side so we'd see a GREEN light from her it it were night. That tells us that now WE are the STAND ON vessel. What do we do?

Rule 17 - ACTION BY THE STAND ON VESSEL - Where one of two vessels is to keep out of the way, the other shall keep her course and speed. The latter vessel may, however, take action to avoid collision by her maneuver alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action. (We are now the GIVE WAY Vessel. You think we have it easy now? Nope.. There's much more to the Stand on vessel than the give way vessel. We can break down this rule into THREE steps according to the rules)

STEP 1: The stand on vessel <u>MUST</u> maintain course and speed. You. you have no option here. the rule states you MUST maintain course and speed. It's up to the give way vessel to avoid at this point. But...

STEP 2: If, after you give the give way vessel adequate time to avoid and it's not doing so or you feel that what they are doing is not enough, you <u>MAY</u> now alter course and/or speed to avoid.

STEP 3: Step three is called "Extremis". Extermis is when it's obvious both vessels are going to collide and that it will require both vessels to maneuver to avoid the collision. In this stage BOTH vessels, the STAND ON and the GIVE WAY ... <u>MUST</u>... Change course candor speed to avoid. BOTH vessels are <u>REQUIRED</u> to maneuver to avoid the collision. Remember: NO ONE has the "Right-of-way" in a collision situation.

We've avoided yet another collision. But wait, there's more... we're now coming up on another boat from behind. We're going to be going past them. The rules call this Overtaking.

Rule 13 - OVERTAKING - Any vessel overtaking any other shall keep out of the way of the vessel being overtaken. (Ok. we want to go around them. Basically they are the stand on and we are the give way in an overtaking situation. No matter what kind of boat they are driving or we are driving. We'll talk about the official peaking order but you've heard about sail over power...It's not always true. In fact if we are a sailing boat over taking a power boat we still give way to the overtaken vessel. (the vessel we are overtaking) We must GIVE WAY to the Overtaken vessel until we are well clear.)

Ok, we've covered a head-on, a crossing, and an overtaking situation as far as maneuvering our boat. We haven't discussed signaling the other vessel and we haven't discussed the basic priority order of various types of vessels we might have to deal with while on our pleasure cruise. Let's talk a quick look at signaling when we are dealing with these maneuvers. But first, a reminder that we have INLAND rules, and INTERNATIONAL rules... Now we're going to add one more type of subset in the rules. NARROW CHANNEL.

Narrow Channel

In both INLAND rules and INTERNATIONAL rules there is something called a narrow channel. "Narrow channels" are easy to define: They are natural or dredged passages adjacent to shallow water, often marked with lateral (red and green) buoys and range markers. There are a few specific rules even pleasure boaters need to know. Narrow channel, Rule 9, basically assumes a big ship that have a deep draft and/or are so big they cannot maneuver in the channel due to the width of the channel, are the stand on vessels in the narrow channel, period. Let's do a quick review of Narrow channels:

Rule 9 - NARROW CHANNEL - A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable. (*This section of the rule simply put is Keep Right in a narrow channel. Don't take your half out of the middle.*)

Rule 9 - NARROW CHANNEL - A vessel of less than 65 feet (20 meters) in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway. *(if you are driving a small boat DO NOT impede an big vessels which can only navigate safety within the channel. Period. Don't get in the way of the big ships! Another part of RULE 9 states that you are NOT to impede a vessel navigating in a narrow channel, regardless of your side, if you are crossing a channel. And, sailboats do NOT implode the big ships in the channel. Note, if tow boats are utilizing the channel and can safely navigate only within the channel, Rule 13 (Overtaking) still applies.)*

Maneuvering Signals

Ok, back to maneuvering signals. We have various maneuvering situations, such as in a crossing, head-on, overtaking, etc that we have covered. *Depending on where you are and what you are doing, there are signals required by COLREGS before maneuvering*. Most of the time these signals may be made by either VHF radio between boats, or with the use of whistles (horns on your boat). Whistle signals are done using either **SHORT BLASTS (1 second)** or **PROLONGED BLASTS (4 to 6 seconds)** We'll start with all the whistle signals and then discuss the radio option.

Rule 34 - MANEUVERING AND WARNING SIGNALS - When vessel are in sight of one another, a power-driven vessel underway, when maneuvering as authorized or required by these Rules, shall indicate that maneuver by the following signals on her whistle.

Rule 34 talks to whistle signals. Whistle signals are different in INLAND RULES, INTERNATIONAL RULES, and in INTERNATIONAL NARROW CHANNELS RULES. The easiest way to remember this is to envision being out in the middle of the ocean with plenty of sea room for INTERNATIONAL RULES. Envisioning yourself in a small bay or river, or channel for INLAND RULES, and in a busy Channel in a foreign port for INTERNATIONAL NARROW CHANNEL RULES. Keep in mind... All of these maneuvering signals are only used when you are IN SIGHT of another vessel. If you can't see each other, what's the point of whistle signals... When in sight and maneuvering within 1/4 mile of another boat you use these signals. Here's a simple breakdown:

INTERNATIONAL

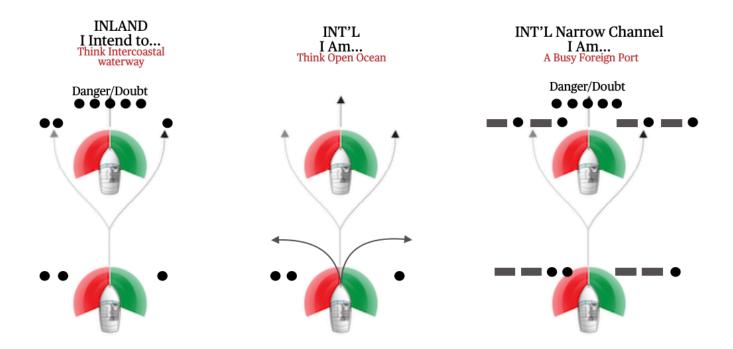
You are approaching another boat at sea within 1/4 nautical mile. The boat is holding course and speed. You decide to turn to STARBOARD doesn't matter if you are going to pass by them or just turn and sail away. All you have to do is signal on the horn: **ONE SHORT BLAST: (I AM turning to STARBOARD)**. Done. You have told the other boat you are turning to STARBOARD. They do NOT have to reply. Feel free, go ahead and turn to Starboard. It's the same to PORT except you signal **TWO SHORT BLASTS: (I AM TURNING TO PORT)** then turn. If you decide you want to start backing up (operating astern), signal **THREE SHORT BLASTS: (I AM operating ASTERN)**. With any of these, you are simply letting the other boat know what you are doing. These do NOT require a response from the other boat.

INTERNATIONAL NARROW CHANNEL

You are approaching another in the port of Nassau or the Bimini Channel, in the Bahamas. That's an International Narrow Channel. You wish to turn to STARBOARD in order to overtake them. All you have to do is signal on the horn: TWO PROLONGED and ONE SHORT BLAST: (I **INTEND to OVERTAKE you on YOUR STARBOARD SIDE**). You have REQUESTED (you intend) to turn to STARBOARD and OVERTAKE them on their STARBOARD SIDE. In this location the other boat MUST reply. IF they are ok with the overtaking they would reply **ONE PROLONG, ONE** SHORT, ONE PROLONG, ONE SHORT BAST of their horn. This means they CONCUR (it's also morse code C by the way). They have agreed to the manner of your overtaking. Now you may overtake, staying well clear until you are well past them. It's the same for wishing to overtake then on their PORT SIDE. You INTEND to overtake them on their port side, so you signal **TWO PROLONGED, TWO SHORT BLASTS: (Stating that I INTEND to OVERTAKE you on your PORT side.**) Their response, if they agree is exactly the same as overtaking on the other side: **ONE** PROLONG, ONE SHORT, ONE PROLONG, ONE SHORT BAST. If they do NOT agree and feel it dangerous they would signal the DANGER/DOUBT horn signal of **5 SHORT BLASTS. If you hear 5** short blasts, Standby, wait for the situation to stabilize and try again if you so desire. Don't overtake them. Don't keep hitting the horn!

INLAND

You are on the Hudson river, or in NY harbor, or Port Everglades. Somewhere inside the Demarcation line and following INLAND rules. You are approaching a boat and wish to go around them (Overtake). You wish to turn to STARBOARD in order to overtake them. All you have to do is signal on the horn: **ONE SHORT BLAST: (I INTEND to OVERTAKE you on MY PORT SIDE)**. They must provide a response. The approval response INLAND is the same signal. **ONE SHORT BLAST** on their horn. They have agreed to allow you to overtake them. It's the same for the other side. If you wish to overtake them on your STARBOARD side, you signal **TWO SHORT BOASTS: (I INTEND to OVERTAKE you on MY STARBOARD side)** meaning you wish to turn to port and pass them on your starboard side (Their port side). They would agree by signaling **TWO SHORT BLASTS**. Again, if they are in doubt or think your move is dangerous and do not agree with the overtaking, they would signal **5 SHORT BLASTS** of their horn. **If you hear 5 short blasts, Standby, wait for the situation to stabilize and try again if you so desire. Don't overtake them. Don't keep hitting the horn! If they signal anything else... well.. they obviously don't know the rules.**



BRIDGE to BRIDGE RADIO TELEPHONE ACT

If you are not into all that honking, you have the option in the United States to signal by radio, your intentions. It's call the bridge to bridge radio telephone act. It allows you, anywhere in the United States INLAND waters and out to 3 Nautical miles in INTERNATIONAL RULES, to call another vessel and make a passing agreement by radio.

If you do make an agreement, Whistle (Horn) signals are not required. Either way, you need to signal before maneuvering for your safety and the other vessel.

Moving on... A few more things to cover. Let's do a quick review of other sound signals in Rule 34 we might need to use or hear on the water.

Rule 34 - MANEUVERING AND WARNING SIGNALS - A vessel nearing a bend or an area of a channel or fairway where other vessels may be obscured by an intervening obstruction shall sound one prolonged blast. (This is a place where you can't see around, if you are coming up on one of these you simply should one PROLONGED BLAST of you horn. If you hear this as you are approaching the bend you would return the signal with ONE PROLONG BLAST and both vessels upon hearing each other should slow to bare steerageway and make a radio agreement or by horn when we can see each other.)

Rule 34 - MANEUVERING AND WARNING SIGNALS - When a power vessel is leaving a dock or berth, she shall sound ONE PROLONGED BLAST. *(When you depart a berth or dock in INLAND RULES you signal ONE PROLONGED BLAST. In international rules you <u>do not</u> <i>signal when leaving a dock or berth.)*

Rule 35 - RESTRICTED VISIBILITY - In or near an area of restricted visibility, whether by day or night, the signals prescribed in this Rule shall be used as follows: *(This rule applies to Restricted visibility or if you are <u>near</u> restricted visibility.)*

Let's start with sound signals you might have to use in or near Restricted Visibility on a regular basis. (*don't forget you might hear any of the maneuvering signals happening between two other boats.*)

- **ONE PROLONGED BLAST at least every 2 minutes** Underway making way.
- **TWO PROLONGED BLASTS at least every 2 minutes** Underway Not making way

Now some sound signals you might hear in Restricted Visibility.

- ONE PROLONGED BLAST at least every 2 minutes Underway making way.
- TWO PROLONGED BLASTS at least every 2 minutes Underway Not making way
- ONE PROLONGED and TWO SHORT BLAST at least every 2 minutes this is a sailboat,

Tug boat towing, Restricted in ability to maneuver vessel, Commercial Fishing Vessel, Not under command vessel, or a vessel constrained by draft. *(Stay out of their way)*