Coastbusters

The Cross Currents Newsletter for Mid-Atlantic Paddlers

March 2019

Tough Decisions: Crossing the Delaware Bay in Fog

Larry Meisner

Crossing the Delaware Bay between Cape Henlopen, DE and Cape May, NJ is a tricky proposition under normal circumstances – fairly strong currents, shoals with standing waves, and frequent passages of giant freighters coming from or heading to Philadelphia. Add fog to the mix?

Eight of us planned to do the crossing - total distance of 16 nm with 10 miles of open water. Lou, Kerry, Sean, Tom, Steve, Lee, Bob and I took the early morning ferry from Cape May to Lewes, Delaware. Leaving our cars in the ferry parking lot and putting our gear-loaded boats on wheels, we walked them onto to the ferry.

Photo: Larry Meisner

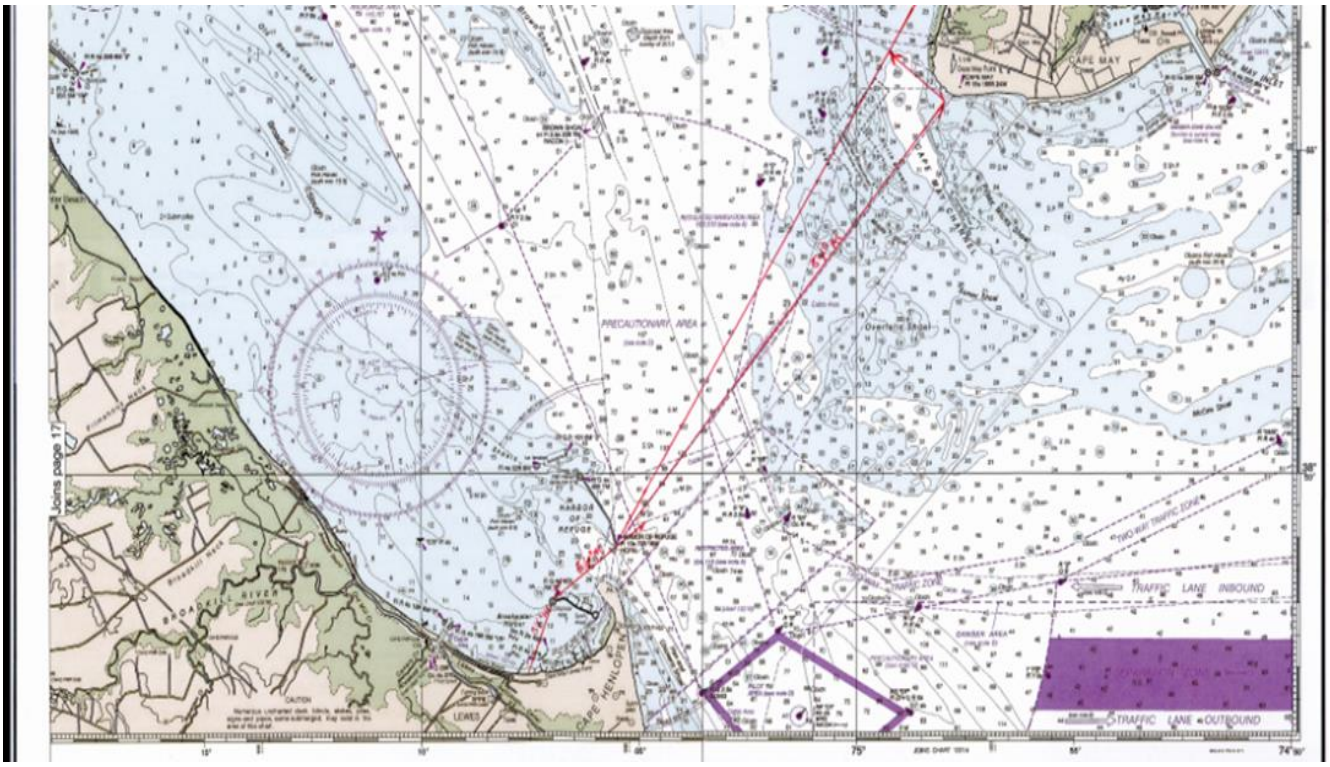
Leaving the dock and heading south, conditions appeared to be perfect. What we saw from the ferry was a sunny sky, clear conditions with lots of visibility; winds were 7 knots with 3 – 5 foot swells.

Approaching the outer breakwater at Lewes, we could see some slight fog at the eastern end of the breakwater around the Harbor of Refuge lighthouse. But it looked like this fog would break up as the morning progressed.

Photo: Larry Meisner

Once the ferry landed at Lewes, we walked our boats off and wheeled them one-half mile down the road to the Lewes town beach. Our timing was good. We planned to launch with plenty of time to paddle the three miles out to the Harbor of Refuge lighthouse and from there catch the incoming tide back to Cape May.

The total shortest distance across the bay from shore to shore is 9 nm. Paddling at an estimated average speed of 3 nm, I estimated a three-hour crossing from the Harbor of Refuge lighthouse off of Cape Henlopen to Cape May lighthouse near the tip of



Cape May. We would then have an additional three-mile paddle north along the coast to our take-out at Douglas Beach, just north of the Ferry docks.

When we reached the outer breakwater at the Harbor of Refuge lighthouse we were presented with thick fog with visibility of 100 yards or less.

We still believed from our ferry crossing that: 1) since the Bay seemed clear of fog further to the north along the ferry route, 2) it would break up as the morning air warmed the Bay, and 3) as a result, we would have clear sailing back to Cape May. So we paddled west along the outside of the breakwater for about ½ mile allowing some time – and hoping – for the fog to lift. That didn't happen. So we had to decide whether to abort or go for it. A couple factors came into play as part of the decision:

First of all, during the first mile we had to cross a busy shipping channel. After monitoring channel 13, we discovered that the large ship traffic was being coordinated due to the fog. Vessels were congregating just south of Cape Henlopen on the ocean side and 20 miles north of us at Brandywine shoal light further up the Bay. They would have one vessel move north from Cape Henlopen to Brandywine and then, after that one arrived at Brandywine shoal, the next south-bound ship would start moving. So with this information we were able to know when the channel was clear for us to pass.

A second issue was that we needed to stay out of the path of the ferry traffic to and from Cape May. Our plan was to cross the Bay south of the ferry route, but in the fog it would be difficult to verify our exact location relative to the ferry route. However, we felt by monitoring channel 13 we could better determine the ferry's position. The plan was to run by compass alone, but we had a GPS as a backup.

The risks seemed manageable and we decided to make a go of it. We waited for a north-bound ship to pass our position and we headed off.

I have paddled and navigated in fog in Maine and that is eerie enough. But there, the longest crossing

from one island to the next was 5 miles. At least you can hear waves breaking on a rocky shore or a fog horn from a buoy or light. Here the feeling was a lot different. No fog horns, no waves on rocks, just empty water ahead. A little nerve-wracking.

Photo: Larry Meisner

We had planned for an average incoming current of 1.5 knots for the three-hour crossing, but we had started after our original start time. That affected our estimates. So about half way across, we stopped, re-evaluated, and adjusted our course a little to the north based on reduced current.

This turned out to be problematic. During the entire crossing we continued to monitor ship traffic to try to track the ferry traffic. At one point, the ferry captain indicated an unknown small "Target" to his starboard and was modifying his route to port. That unknown "Target" was probably us! Good to know their radar could see us. We tried to raise the ferry on the radio, but we were so low to the water he wasn't able to hear us. This was not a comforting feeling.

The fog persisted as we continued on our bearing with no further contact with the ferry traffic. The wind was from the north and soon you could smell the land. The sweet smell of wildflowers was carried on the offshore breeze. Amazing how the other senses – like smell - kick in when you lose one – like sight.

At 2.5 miles from Cape May we broke into bright sunlight and suddenly the fog was gone. We could see our destination on the beach just north of the canal with the ferry dock. One of the ferries was off to our right so obviously at some point we crossed the Ferry route in the fog. Since our destination was dead ahead and we still had a 1 knot incoming current, we had to turn our boats and point into the current, ferrying to avoid getting swept north of our intended landing point.

A nice bright sunny finish. We landed on the beach just north of Douglas Park. Walked over to the parking lot of the ferry terminal to retrieve our cars.

Loaded up and debriefed at Harpoon Henry's Restaurant with some good food to replenish our strength and a beer or two to relax tight muscles.

What might we have done differently?

I guess some people might have cancelled just based on the fog. However, we had a good group of experienced sea kayakers. I had experience navigating in fog. The tide was coming in for the next 5 hours so the worst case would be that we'd get pushed further north than our intended landing point. But we didn't have to worry about getting swept out to sea on a strong ebb. We had the large ship traffic nailed and we were feeling confident. The ferry was still a concern and it was necessary to remain alert to this. Since our start time was delayed from the Harbor of Refuge lighthouse, we probably should have taken the time to re-calculate our heading before setting off. After reviewing the GPS track after the trip it was clear that when we stopped half way across to re-evaluated our track, we drifted quite a bit to the north putting us closer to the ferry route.

Would I do this trip again in fog? It depends. Just as for this trip, a lot of factors would have to be considered in the decision.

In This Issue:

Don’t Miss It! Paddling Film Festival in Baltimore for the first time!

The best paddling films of 2019: March 30, 6 – 9 PM at UMBC Recital Hall - Fine Arts Building

Proceeds benefit MD Special Olympics and Save Tangier Island project.

Tickets ($17.50) available only through Eventbrite:

https://www.eventbrite.com/e/paddling-film-festival-tickets-57536921481

Catch Righteous Waves - Without Breaking Boats or People

Tom Noffsinger

For sea kayakers, paddling in breaking waves is dangerous. Beach breaks, sandbars, pour-overs and large wind-driven waves all create breakers that can take us from in control to out-of-control in an instant. And once the wave is in control, we are at the mercy of the sea.

Of course playing in the waves is where the magic happens - you get the rush of surfing the ocean's power and smiles that strain your face. The challenge is enjoying the energy without getting beat up and hurting yourself or others. When I was a stand-up surfer, the joke was "every time you paddle out you enter the food chain." With kayaking, every time you paddle out you run the risk of breaking gear and people with 50 pounds of fiberglass or plastic.

So how do you play safely? You start safe and stay safe by following some simple tips to keep out of trouble:

First, be aware - pay attention and always keep an eye out to sea. Don't just look at the incoming wave - look at the next 4-5 and predict what's going to happen. Know where your escape zones are: to the shoulder of the break, out to sea beyond the break, into a rip or channel where the waves aren't breaking, etc. Don't let a wave catch you unaware.

Location - When surfing, stage yourself just outside where the waves are breaking. Look for the white foam/bubbles on the water after a wave goes by - that's the break zone. Set up about two boat lengths to the ocean side of the foam and you'll be in a good spot. Too close and the wave will be too steep. But keep an eye out! Larger-than-usual sets will break farther out, so be ready to move fast.

Orientation - Keep your bow or stern perpendicular to the wave face. Paddling out, it's much easier to build up power and punch through an incoming wave if you're already oriented the right way. The same applies to catching the wave. If you are facing down wave (toward where they are breaking), be sure to keep an eye back over your shoulder in case you need to reverse through a wave quickly.

Listen and communicate - Shout out if a big set is coming. Just because you see it, doesn't mean your paddling friends do.

Don't Form a T - Kayaks in the surf zone should never be in a T formation (perpendicular to each other). All it takes is one unexpected wave to send one of the kayaks side surfing into the other. If you need to go around or paddle past someone, go 6-8 boat lengths away before you go past them, and tell them you're coming by. They may see you, but not realize what you're doing.

Capsize – If another kayak is surfing or being surfed toward you and collision is likely, capsize and let the wave go by. The down-wave paddler (the one closest to the beach) is the one who capsizes.

Oops – in a T and needs to capsize. Photo: Cass Kalinski

Magnet Eyes – Look where you want to go. If you are trying to surf or maneuver around someone or an object, don't look at them!

Rescues in the Surf Zone

So now you're surfing, but someone has come out of their boat. It's time for a rescue, and now the danger really kicks up a notch.

The best rescue in the surf is a self-rescue. A roll if possible, but if you're out of your boat, the priority is getting back in as fast as possible. That's usually a re-enter and roll. If that fails, try a cowboy/cowgirl scramble. Get in your boat, get your skirt on, and paddle to safety. You can dump the water out later in a safe area. If you can't do one of those rescues, the options are to swim the boat to the beach, or sandbar if it's close, or get assistance.

Avoid assisted rescues in breaking surf if at all possible. Sometimes it's the only option - the undertow or ebb current has someone trapped in the break zone, for example, and they can't swim out.

If you must perform a rescue, here are some tips:

All other paddlers - stop surfing, get to a safe zone if possible, and keep your bow or stern facing into the waves. Hold your position. If the others need help, they'll let you know.

Swimmer - don't stand up! Get to the bow of your boat, hold the toggle and let the boat swing down-wave from you. Float with your pfd (and your paddle). Floating ensures the kayak and you both move with the surface of the water. This reduces strain on you and allows more predictable movements for the rescuer. DO NOT STAND UP if you are being rescued. If it's waist deep or less you don't need an assisted rescue – stand up and do a self-rescue (unless you're injured).

Rescuer - get down-wave from the swimmer (the beach side). If you are up-wave (ocean side), paddle in through the surf in control with plenty of distance between you and the swimmer. Don't head directly for them - get down wave. Then, turn so you are paddling into the waves, facing the swimmer and their kayak. The boats are now aligned parallel - this approach minimizes the potential of collision. Approach deliberately but safely, and as you get close, decide whether you're coming in on the left or right of the swimmer's boat. Communicate with the swimmer!

Once you are parallel to their boat, commit to holding on to their boat and tell the swimmer to move back to their cockpit (swimming not walking). The swimmer should re-enter as quickly as possible. If a wave comes, shout a warning and stay committed to their boat. You may get rolled, but it's less likely if you started facing into the waves. Don't empty the boat - get in, get the skirt on. Ideally, both kayaks are still facing the incoming waves, and you can both paddle out of the surf zone - powering up forward to get through any breaking waves. Note, your fastest route to safety may mean paddling backwards.

Once out of the surf zone, the swimmer can beach their boat to empty the water, or hop out for a more traditional assisted rescue that drains the water.

Following these tips won't make you a pro surfer or solve all the surf zone challenges, but you will be safer and less likely to break kayaks or body parts!

Punching out perpendicular to the waves and in parallel. Photo: Rufus Ward Jr

Key takeaways:

Stay perpendicular to the swell

Stay parallel to other kayaks

Self-rescues are safest

Don't stand up in the surf

Approach rescues from the down wave side

Equipment Review: A New Model for Deck Compasses

Rick Wiebush

I had a deck compass installed on my boat for about eight years. A couple of months ago someone broke it and I had to throw it out. It wasn't until that happened – and I later noticed I didn't miss having a deck compass *at all* – that I realized how infrequently I used it anyway. I was trying to figure out why I didn't use it, when Jen Kleck showed me a new type of deck compass that was really easy to install and use. It was the simplicity of the new model that suddenly crystalized for me all the issues with "old-style" deck compasses. This article briefly highlights some of those issues and describes the installation and functioning of the new-style compass.

Issues with typical deck compasses

First, installed deck compasses are like really far away from where I (and everyone else) sit. So you always have to lean way forward and squint to try to see anything. At least people over 50 do. And since you apparently can't be a sea kayaker unless you are like 50 +, this issue affects *everyone*. Carrying binoculars would help in this regard, but then you'd have another bulky and unwieldy piece of kit that would presumably be hung around your neck and raise entrapment issues.

Second, even if you could see the compass, they are really confusing to look at because of all those little lines and numbers inside the thing. I mean can you believe how many lines are on there? There's gotta be at least like 350 or more of them, with only an occasional understandable mark like a "N' or "W" or "S" popping up now and then. Why would you make something like that with all those lines? I mean there are only so many different ways you can go in your boat like, I don't know, maybe 10 or 12? C'mon, who actually goes 350 or more different directions, even if they've had their boat for a really long time?

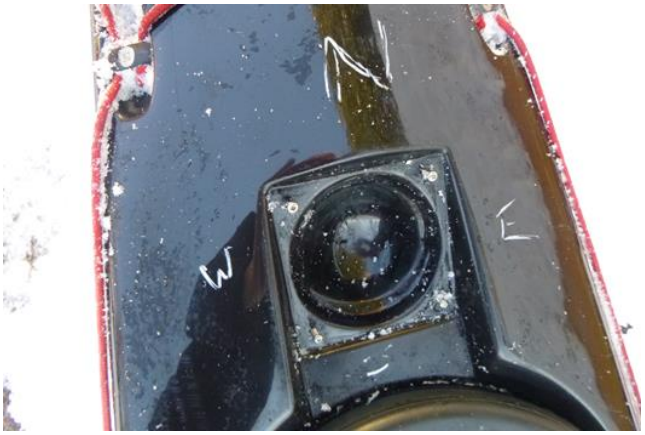
Stock photo

But probably the biggest issue is what happens when you turn your boat on purpose or a wave hits you from the side or something like that. Every time you turn your boat – even a little bit – all the lines and numbers start *moving*! And if you turn your boat quickly, everything starts spinning around and gyrating wildly! I'm a pretty good paddler but I always be like: Wait, WTF? *Now* which way am I going? It's totally confusing.

A Revolutionary New Model

I'm sure there are a lot of paddlers out there who can relate to these concerns. And that's why this newer model of deck compass holds such promise. As shown in the photo on the following page, the newer model is a paragon of simplicity:

- No more little numbers;
- No more horizontal lines jammed all together side by side, one indistinguishable from the next;
- No more glass dome like those things that you shake up and make it snow;
- And best of all, no more numerical wheeling and whirling every time you change direction!



The New Model. Photo: Rick Wiebush

Nope, just four letters corresponding to the major cardinal directions[1]: North (N), South (S), East (E) and West (W). The simplicity of this system is enhanced by the fact that the letters are big, so it's easy to see them. And, more importantly, they are *fixed*, so it eliminates the confusion that comes with the lines and numbers moving around all the time.

I can't tell you how much this new model has enriched my paddling experience. It is totally comforting to know that *no matter which way I turn*, North is always up in front of me, South is always behind me, East is to my right and West is to my left. Absolutely no more wondering which way I'm heading or if I'm going in the right direction!

Installation

As you might intuit, installation is pretty straightforward: you just put the letters in the proper place on your deck. They don't have to be way up by the bow either. If you'd prefer, you can put the letters on the deck right by your lap. "Proper place" in this context also means the letters have to have the correct relationship to each other. You can't just like put the "N" anywhere you want. It's got to be the one that goes closest to the bow. Similarly, the "S" has to be the one closest to you (and lined up with the "N"). The "E" and "W" have to be in the right place too. You get the idea.

Caution. One thing you have to be careful about when installing the new model: you gotta make sure the bow of your boat is actually facing the real magnetic north. If you overlook this step, you are setting yourself up for trouble since the cardinal points you've identified on your boat won't be the right ones! This in turn means that you could get lost pretty easily since you could end up going a different way than you thought you were going. To ensure proper orientation, you'll need a hiker's compass (or your old deck compass if it's not broken) to determine where magnetic north is. Then just point your bow that way and get to work!

Get Creative! Finally, you can be as creative as you want when selecting the style of your letters. I just have the handwritten kind. I probably could have taken more care with the printing (well wait, *Jen* could have been more careful), but they still serve my purposes. However, you might want to get a little fancy and maybe do your letters in Gothic script (𝔑, 𝔖, 𝔈, 𝔚) or even get large pre-printed letters that have sticky backs. Just make sure that the *color* of the letters you choose contrasts with the color of your deck. You don't, for example, want to have white numbers on a white deck or that will defeat the whole purpose because they will be harder to see.

Summary

I think this new model is revolutionary and expect to see a bunch of old-style compasses get defenestrated soon. The new model has certainly made navigation much less taxing for me. Give it a try and we'll see you on the water, heading in the right direction!

[1] Just to clarify: "The four **cardinal directions**, or **cardinal points**, are the directions north, east, south, and west, commonly denoted by their initials N, E, S, and W. East and west are perpendicular (at right angles) to north and south, with east being in the clockwise direction of rotation from north and west being directly opposite east. The **intermediate directions** (also called the **intercardinal directions**) are northeast (NE), southeast (SE), southwest (SW), and northwest (NW). The intermediate direction of every set of intercardinal and cardinal direction is called a *secondary intercardinal direction*, the eight shortest points in the compass rose (e.g. NNE, ENE, and ESE)." Source: Wikipedia. Got it? If not, click on those links for further clarification. (Note: I am not making this up.)

Photos of the Month

The Isle of Man: "Perfect Weather for Ducks"

Photo and title: Mike Radcliffe

Photos of the Month

The Isle of Man: “A Bit of Spray”

Photo and title: Mike Radcliffe

Photos of the Month

The Isle of Man: “All the right curves in all the right places”

Photo and title: Mike Radcliffe

Photos of the Month

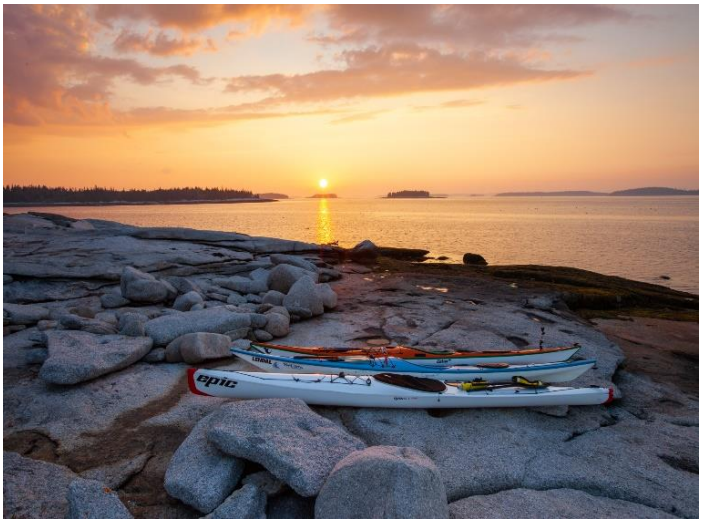
The Isle of Man: “Boom!”

Photo and title: Mike Radcliffe

Isle au Haut, Maine

Carl Sanford

I've long had a desire to do a multi-day kayak expedition trip on a rocky coast of the ocean. While coastal Maine is not as austere as Greenland or the southern coast of Chile, and we didn't go out for a month-long journey, it proved to be the perfect stepping stone for pushing the envelope on future trips. I wasn't looking to do this trip solo. So when I put feelers out to see who was interested, I was glad that Jeff (a friend I've done previous kayak camping and back country winter camping trips with) and Dan (our first trip together but an experienced paddler) committed to go.



Sunrise in Acadia. Photo: Carl Sanford

If you have never been to Arcadia National Park or to the surrounding area of coastal Maine, you are truly missing out. Our trip revolved around a circumnavigation of the Isle au Haut, a 113 square mile island that resides at the southern tip of an archipelago south of Deer Island in the middle of Maine's Central Coast. This area is peppered with beautiful rocky-shored islands that made for an amazing playground to explore. Not considering the 10-hour drive from upstate New York, our kayak journey began at Old Quarry Ocean Adventures - a small camp ground that caters to paddlers looking to kayak the area. It was also one of the few spots we found in the area that would accommodate overnight parking. We used it as our base the night before and after our trip. The staff there was super friendly and helpful, giving us all sorts of useful info on the area and hazards to avoid. You can also order-in traditional Maine lobster dinners pretty inexpensively.

We started from Old Quarry at low tide the morning of Tuesday July 3rd and paddled directly to Wheat Island, a small island just on the north side of Isle au Haut. We were told that this island is a very popular place and wanted to get there quickly in order to stake a claim for our camp. We reached the island in about two hours and were happy to find it vacant upon arrival, even though it was the 4th of July weekend. We set up camp, ate lunch, and then pushed back out to sea to re-explore the route we had just come, taking time to meander and explore the various inter-coastal islands.

The tides in the area range about 9-10 feet on a semidiurnal tide cycle. This significant shift in water levels changed the seascape about every six hours and affected our landing points. Most of the water moved in a three-hour span in the middle of the tidal cycle. You often could actually see the water levels raise and lower. We had to be ever mindful of where we landed our boats; one time we came back from exploring one of the islands on foot to find our boats were about to drift out to sea.

On the second day of paddling, we circumnavigated the Isle au Haut. This large island is part of Arcadia National Park and is home to 71 full time residents. The shore of the island revealed a number of rock formations at low tide that that are unprotected from the ocean swells, making it a rock gardening playground. Our journey around the Isle was about 18 miles. That could have been stretched

Camp from above. Photo: Carl Sanford

farther if we chose to hug the shore line even tighter in some of the island's bays and coves.

Throughout the trip, we couldn't have been luckier with the weather. Coastal Maine is a volatile place where storms and severe fog can spring up suddenly and without warning. While we did have to contend with patches of fog, it only added to the ambience of the area and didn't pose any significant danger. We did cut our trip a day short because of impending storms, which were going to generate heavy rains and 25+ knot winds. With that sole exception, we had sunny skies and calm seas while out on the water and picturesque sunsets while island camping.

Testing the Blue Hill Falls Tide Race

On our final day, we got an early start and followed the island chain known as Merchant Row back to Old Quarry. We were back by eleven which was perfect for us to hit our next destination, which was a time sensitive affair: the Blue Hill Falls bridge. This venue is one of the best tidal races in the area, but it had to be timed about two hours after the low tide for optimal conditions.

I came across Blue Hill when searching for potential tide race locations in the area. The Blue Hill Falls bridge separates the ocean (via Blue Hill Bay) from Salt Pond, a small inland pond. The narrow constriction under the bridge creates a fast-moving tidal current that produces some significant

Photo: Carl Sanford

standing waves. Since it was a neap tide, the flow and waves weren't as impressive as they can get (it is recommended that you go during a spring tide for the best conditions). Despite this, the tidal race produces a 7-8 knot current that is an exciting challenge for any long, touring kayak.

I've done my fair share of kayak surfing in my boat, but operating my 17 ½ foot Cetus in a fast-moving current was a new experience that took some adjustment in my paddling style. The first time I ferried into the flow, it immediately broached my boat and rolled me over. If you haven't tried rolling in swift water, it's an eye-opening experience. It took a little while to adapt, but after adjusting my ferrying angles and getting comfortable with using a stern rudder to maintain the angle of the bow into the current, the chaos of the rapids transformed into grace amongst turbulent waters.

One advantage of Blue Hills Falls is that the power of the current is quickly dissipated as the pond opens up past the bridge. When Jeff or I would have to wet exit, we would just stay with our boats until the current pushed us down about a football field away and the water became relatively still and we could perform a self-rescue. The other great thing about this spot is that there is an eddy "service" on either side of the flow that would rocket you up stream with barely a need to paddle.

(Blue Hills video here): https://www.bing.com/videos/search?q=sea+kayak+blue+hill&view=detail&mid=C1739432232823F052DEC1739432232823F052DE&FORM=VIRE

Overall, the trip couldn't have been better. We all learned a lot about expedition kayaking in ocean conditions. I walked away with valuable lessons on how to better pack my kayak, planning considerations for tides (especially on launch and landing sites), navigating in fog, managing other hazards (like lobster fisherman), and improving my swift water paddling skills.

Blue Hill current play. Photo: Carl Sanford

Mayday, Mayday, Mayday: VHF Distress Calls

Scott Brown

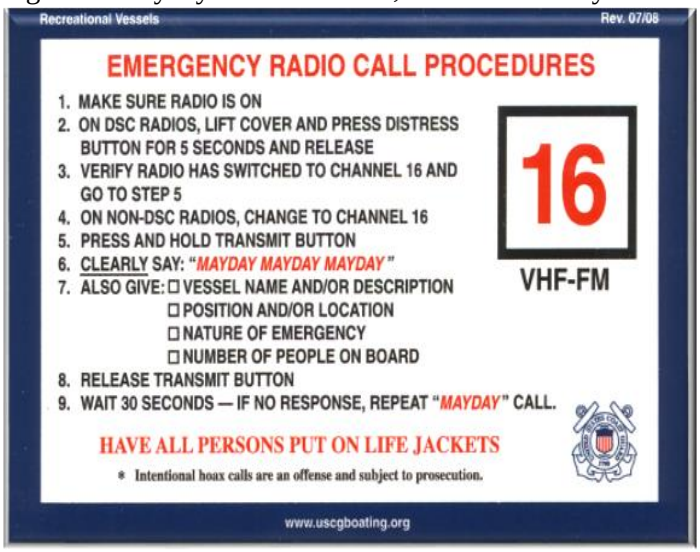
"Mayday, Mayday, Mayday this is Kayaker 3, Kayaker 3, Kayaker 3." This is a call we all hope we will not have to make on an outing with our group. But even the best plans can encounter challenges that cannot be overcome by our planning, risk mitigation, and foresight. When conditions exceed our abilities to manage the situation with the resources we have, we need to call for assistance. Weather, health issues and equipment failures may warrant a distress call using Channel 16 on your marine VHF radio. In this article, we discuss the mechanics of the Mayday call, and introduce the other types of maritime calls that can alert others to a problem or provide situational awareness during our paddles.

Call Sequence and Content

Since its inception in 1923, Mayday is the international word used to make a distress call via radio communications. It is to be used in situations that represent an ***immediate threat*** to the life of a person or the safety of a boat. The sequence in which Mayday call information is transmitted ensures a standardized process for relaying key information in the fewest radio transmissions. The word Mayday repeated three times initiates the distress call. It alerts all monitoring stations to prepare to copy the subsequent information in order to render assistance if in proximity, or relay the call if necessary.

The Mayday Call is initiated on Channel 16. The call begins with saying Mayday clearly and slowly three times. "Mayday, Mayday, Mayday." This alerts all stations monitoring Channel 16 to avoid making routine calls and to prepare to copy the Mayday call transmission.

Figure 1. Mayday Call Procedure; USCG Auxiliary

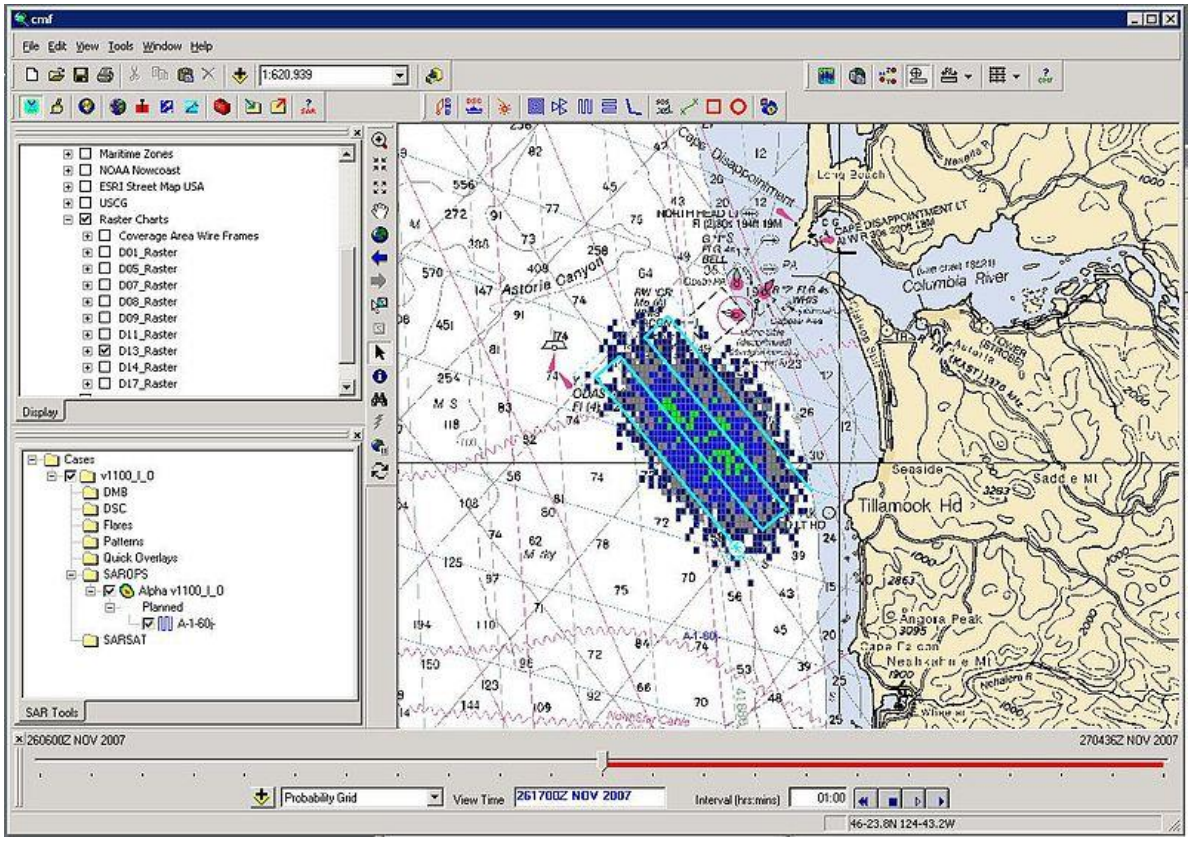


The second step after the Mayday transmission is the name of your vessel. A best practice recognized by the US Coast Guard for paddle craft is to use the type craft (e.g., kayaker) and the number of people in your group (e.g., five). So, we would send Kayaker 5 three times e.g. "*this is Kayaker 5, Kayaker 5, Kayaker 5."*

The next segment of the call is your position. This is the most important segment of the transmission. This can be a latitude/longitude coordinates from a GPS or from your chart, or a bearing and distance to a known point. Example: "*We are 2 ½ miles south of the Morris Island Lighthouse. The lighthouse is on a bearing of 010 magnetic from our position."*

This information is then placed into a computer modeling system (SAROPS; See Figure 2 on the following page) to develop the most probable area for finding you using a deliberate search pattern. Again, ***location*** is the most important transmission you will make during the call sequence.

Figure 2. USCG SAROPS Screenshot Source: USCG



The nature of distress is the fourth segment of the call. Provide the most pertinent information during the call. This will help the search and rescue (SAR) responders organize the equipment they'll need (e.g. boats, aircraft). The information might be the nature of a paddler's illness or the environmental factor that is endangering the group. *Example 1: "We have a 55 year-old man complaining of severe chest pains." Example 2: "We are approximately 1 mile off of Oregon Inlet and the winds are blowing us out to sea."* This information focuses the responders to the immediate need of the paddlers. Detailed information will be requested in subsequent transmissions. More on this later.

The fifth segment of the transmission is type and description of the vessel(s). For kayakers we should broadcast the number of kayaks and the colors. This is transmitted as *"we are in 5 kayaks, 3 white and 2 red in color."* This assists the observers in their aerial or surface scans and ensures they have identified the correct vessel/party.

The final segment of the transmission is the number of people on board. This transmission is "*We are a group of 5 kayakers all wearing PFDs."* I add the wearing of PFDs since the USCG will - in their response to this call – ask you to confirm all personnel are wearing lifejackets. The SAR team is looking to account for everyone. Is everyone in the group located together? Has the group been separated? And most importantly, at the completion of the rescue, do they have everyone?

The word that closes the Mayday transmission is *"Over."* Wait for a response. If you do not receive a response repeat the process. Radio range or atmospheric conditions may prevent you receiving a response. Continue to transmit until you have made contact. The USCG SAR 21 communications system is optimized to receive a one-watt signal from 6' above the surface out to 20 nautical miles. We sit a bit lower in a kayak and it may require assistance from another vessel to relay our call. A

delay in response from the USCG or other SAR asset may trigger another vessel to respond directly or assist with a Mayday relay. Recall that the Mayday call requires everyone monitoring the transmission to copy the information being provided. This will enable another vessel to relay your situation. After making contact with the USCG, they will maintain contact with you until you are rescued. Information on SAR vessel/aircraft launch and estimated time of arrival or other vessels responding will be provided.

The USCG station will direct you to another channel to maintain communications and gather additional information to assist in the rescue. This information may include the types of signal devices you may have, details about the casualty, food and water provisions, and wind, current and sea conditions at your location. Some of this information will mirror what you included in your float plan for equipment. If you filed a float plan via the USCG Float Plan App this will greatly benefit the SAR team.

So here is the Mayday call with all of the segments placed together:

1. Mayday, Mayday, Mayday
2. This is Kayaker 5, Kayaker 5, Kayaker 5
3. Our position is 2 ½ miles south of Morris Island Lighthouse on a bearing of 010 Magnetic
4. We have a 55 year-old man complaining of severe chest pains.
5. We are in 5 kayaks, 3 white and 2 red in color.
6. We are a group of 5 kayakers all wearing PFDs.
7. Over

Practical tips

Pretty simple right? There are some tips and tricks to this process. The first is when in doubt call early for assistance. Do not let a bad situation deteriorate to a point that it places additional stress or risk on your group, or hampers the ability of SAR assets to respond in a timely manner. Slow is smooth – smooth is fast. In most cases, take time to prepare the transmission. Compose the call in advance so you can transmit each segment smoothly and accurately. Gather additional information that may assist in subsequent calls. Use the resources of the entire group. Use more than one radio to ensure the person on the call is transmitting and the transmission is clear. The person monitoring should not be next to the person making the transmission and should have their volume down to an acceptable level to hear but not interfere. Patience – the deployment of SAR assets or a Good Samaritan responding will take some time. Keep updating changes in your situation. If you are leading the group, ensure everyone is engaged. Also make sure you have 360-degree observation and are scanning for rescuers.

Photo: Scott Sczcepaniak

Pan-Pan and Securite

Two other calls we can use to assist in either providing information to SAR agencies or other mariners is the Pan-Pan (pronounced pahn-pahn) call and the Securite (pronounced say-cure-eh-tay) call.

The Pan-Pan call is an ***urgency*** call but one that is a step less serious than May Day. It is a notification that the safety of a person or vessel is in jeopardy and, while the situation is not immediately life-threatening, it could escalate into a May Day call. Making the call alerts SAR agencies and other boats and allows them to track the vessel that's in trouble. These are usually mechanical issues on larger vessels, such as taking on water, or a boat adrift due to engine failure. Sea kayakers might make this call if towing a sea-sick paddler back to shore in sea state 3 or 4:

Pan-Pan. Pan-Pan. Pan-Pan. This is kayaker 7, kayaker 7, kayaker 7. We are two nautical miles offshore with a magnetic bearing of 020 to Johnson Point. We have a sea sick paddler and are towing him back to shore. We have a head wind of 15 kts. We assess we can make the beach but if conditions deteriorate or we cannot make it, we may need to call for assistance.

Pan-Pan might also be used if a paddler capsized in a busy inlet with strong current, and a rescue was being undertaken by the other paddlers. A third example involves an injured paddler (e.g. shoulder separation) who will require urgent medical attention once on shore. The pan-pan call might be a request for an ambulance to meet the group at the take out.

A Securite call is ***navigation safety alert*** used to provide situational awareness to other mariners. It might involve an approaching storm, a large amount of debris in a channel, or a boat that is adrift and is unable to maneuver near other traffic. For sea kayakers, this is a good call to make when crossing busy shipping channels under limited visibility or conducting a night paddle. An example Securite call for a night paddle (or fog) would be transmitted as follows:

Securite, Securite, Securite. This is Kayaker 7, kayaker 7, kayaker 7. We are a group of seven kayakers departing Demetre Park for the Charleston Battery. Our route is direct via the red number 2 light.

Practice It!

Everyone who has ever had to make a Mayday call probably never thought they would have to do it. Maybe you won't; but maybe you will. Given the stakes, preparing for that remote possibility makes a lot of sense. Learn the different types of calls. Learn the sequence. Practice making mock calls with your friends (with the radio off) at the put-in or in your living room. It may feel awkward at first, but better that than not knowing what to do when you really need it!

Photo: Laurie Collins

Upcoming Events

Dates	Event	Location	Sponsor	Website/Contact
3/30	Paddling Film Fest	Baltimore/UMBC	Cross Currents	https://www.eventbrite.com/e/paddling-film-festival-tickets-57536921481
3/29 - 31	East Coast Paddlesports Symposium	Charleston SC	Charleston County Parks	Ccprc/1584/East-Coast-Paddlesports-Symposium
3/31	SK 101: Kayak Intro	Stevensville MD	CPA	Cpakayaker.com
4/5 - 11	Baja Kayak Fest	LaBufadora MX	Jen Kleck	Bajakayakfest.rocks
6/20 - 23	Hudson River Greenland Festival	Croton on Hudson NY		hrgf.org
7/19 - 21	ACA L3 IDW	Chincoteague VA	Cross Currents	Crosscurrentsseakayaking.com
9/27- 29	Kiptopeke Symposium	Cape Charles VA	Cross Currents	Crosscurrentsseakayaking.com
10/10-13	Delmarva Paddlers Retreat	Lewes DE	Qajaq USA	Delmarvapaddlersretreat.org

Are We Literally Losing Our Way by Relying on GPS Devices?

Jennifer Bernstein

(Note: This article is from the Washington Post, December 2, 2018)

Many of us have had the experience of arriving in an unfamiliar city and needing to get to a specific destination — whether it's checking in at a hotel, meeting a friend at a local brewery or navigating to a meeting on time.

With a few clicks of the smartphone, the destination is entered into a navigational app, with customized route preferences to avoid traffic, tolls and, in cities such as San Francisco, even inclines. Anxiety abated, one drives to one's destination via voice prompts and the occasional illicit glance at the constantly updating map.

But, after having arrived safely, there is the vague awareness that we don't know how we got there. We cannot remember the landmarks along the way and, without our handheld device, certainly couldn't get back to our origin point. So are the navigational capacities of our smartphones making us worse navigators?

Research points to yes. But, given the ubiquity of these devices, as well as their ability to enable particular groups, perhaps we should learn to embrace them as a technological prosthetic.

<u>Worse at finding our way</u>

All cultures practice wayfinding — sensing one's environment for barriers to travel, then navigating spatially to a remote destination.

Geographers (like myself), psychologists, anthropologists and neurologists all have studied how individuals navigate from point A to point B. In a landmark 1975 paper, psychologists Alexander

Siegel and Sheldon White argued that people navigate via their knowledge of landmarks against a larger landscape. New navigational routes are discovered via the linking of familiar landmarks with new ones.

For example, Inuit people, faced with snowy, topographically uniform landscapes, are attentive to subtle cues such as snowdrift shape and wind direction. Until the advent of GPS devices, those cultures had no cultural conception of the idea of being lost.

Research has established that mobile navigational devices, such as the GPS embedded in one's smartphone, make us less proficient wayfinders. Mobile interfaces leave users less spatially oriented than either physical movement or static maps. Handheld navigational devices have been linked to lower spatial cognition, poorer wayfinding skills and reduced environmental awareness.

People are less likely to remember a route when they use guided navigation. Without their device, regular GPS users take longer to negotiate a route, travel more slowly and make larger navigational errors.

While physical navigation and static maps require engagement with the physical environment, guided navigation enables disengagement.

Expanding the view

But that doesn't mean mobile navigation is all bad. A blanket demonization of these devices may be a form of "ethnonostalgia," where we find ourselves sentimental for an imagined simpler place and time. Technological advances, historically, have liberated humans from toil and suffering.

Further, many of our experiences are mediated through technology. Drivers use cars, hunters use guns, and many of us are constantly on our smartphones. In short, as sociologist Claudio Aporta and ecologist Eric Higgs put it, "Technology has become the setting in which much of our daily lives take place."

In his seminal 1997 article, geographer Robert Downs argues that spatial technologies need not replace geographic thinking, but rather serve as a prosthesis, supplementing our spatial awareness. The increased access to information gives people a new way to quickly and easily explore new landscapes — which can then lead to physical exploration of such landscapes (many of my fellow map nerds do this all the time). We can then focus less on the rote memorization of place names in favor of a deeper understanding of the topography.

For some groups, these devices are enabling. Handheld navigational devices can now enable independent wayfinding by those who are sight-impaired. While not without their drawbacks, handheld navigation can empower those with spatial orientation challenges, be they real or imagined.

Are GPS Devices Affecting the Future of Maps?

Peter Scull

(This is excerpted from "How are smartphones and GPS devices affecting the future of maps?" which appeared in Colgate Magazine, Winter 2019)

Ubiquitous connectivity, the internet and location-aware smartphones have collectively revolutionized the cartographic process.

While "north up" might have been an arbitrary designation that did a disservice to those living south of the equator, these new (GPS) map forms breed egocentricity. Research has shown that their use might actually decrease one's spatial cognition. We are moving into a world where it's impossible to get lost (unless your battery dies), but where no one knows where anything is actually located other than from their individual perspective at a moment in time.

Contributors

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Coastbusters **welcomes submissions of trip reports, incident descriptions and analyses, skills and "how-to" articles, boat and gear reviews, book and video reviews, and sea kayaking-related photographs.**

We are interested in receiving submissions from all paddlers. It just so happens that many of this month's contributors are instructors. That is not a requirement.

Articles should be limited to about 750 – 1,000 words and submitted in Word. Photos should be submitted in .jpg format. Please send your submissions to Rick Wiebush at rwiebush@gmail.com.

Coastbusters **is a publication of Cross Currents Sea Kayaking**