Supplement to The Chesapeake Paddler

A Step by Step Guide to Learning Re-entry and Roll

By Vince Dalrymple, Photography by Brian Blankinship
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The conditions worsen and an unexpected situation unfolds for an experienced solo paddler with proficient rolling skills, leaving or forcing the paddler out of their boat with no help available. What to do? The fastest way to get back into one's boat, get upright, and under way again is the Re-entry and Roll. It is completely self reliant, a must if one is paddling solo or is separated from other paddlers, and works better than a Paddle Float Rescue in breaking sea conditions. Re-entry and Roll (R&R) is a self rescue method in which the paddler gets back into their kayak while capsized, and then rolls the kayak upright. I first note the prerequisites to learning the R&R, then explain the steps to learn this potentially life saving maneuver. Please read through to the end of the article before attempting anything. DON'T TRY THIS AT HOME—Go to the pool or your favorite Piracy rolling hole.

Equipment and Conditions—Make sure your kayak has sealed bulkheads or fully inflated airbags to give it proper buoyancy when flooded. Your kayak should be well fitted to your contact points: feet, knees, hips, and seat. Dress for the water temperature (at least 20 minutes of comfortable immersion). Wear a properly fitting PFD. Make sure the area you are practicing in is safe: sheltered flat water, deep enough to roll, and clear of any hazards above, at, and below the water's surface. Stretch and loosen up. Also while practicing, be sure to have adequate help on hand in case you need it.

Although any paddle can be used to R&R, round shafted paddles, especially those with spooned or swept blades, can be frustrating to learn with, as the blades can not be visually oriented underwater. This is because the paddler must change grip or let go of the paddle for the time it takes to re-enter their boat. This often allows the paddle to spin out of orientation before the paddler re-grips it to set up their roll. Orienting by feel can quickly deplete both a learner's breath and patience. Indexed or ovalized shafts and crankshaft paddles are easier to orient the blades. Note that a round shaft can easily be indexed by taping a small round or ridged material onto the control hand side in the palm area. Arguably the easiest to learn with, however, is a wooden Greenland paddle as it is symmetrical and easy to orient by feel, provides plenty of smooth power, and has the added bonus of positive buoyancy (will search for the water's surface by default). A paddle leash is also recommended, but will be explained further as we get into the article.

Prerequisite Skills—The paddler should comfortably be able to roll their un-flooded kayak with the spray skirt in place without the use of a paddle float. If the paddler must still use a paddle float to perform their roll, then it would be about as fast and easy to perform a Paddle Float Re-entry as it would a Paddle Float Re-entry and Roll. If the paddler has problems performing any of the following drills due to blade orientation, then the paddler should switch to a Pawlatta Roll in which the inboard hand holds the end of the inboard blade to better facilitate orienting the outer blade. It is therefore suggested the paddler practice the Pawlatta Roll before proceeding. But once the drill has been learned using the Pawlatta Roll, the paddler should switch back to a roll type using their standard paddling grip. Though it is not necessary in order to learn the R&R, having a reliable off side roll is also highly beneficial. Please read "*A Strong Argument for an Off Side Roll*") at the end of this article.

As the R&R involves more time to execute than the standard skirt-on roll, patience and under water comfort while capsized are also skills which I feel are prerequisite to learning R&R. Worth noting; since you will not be paddling with nose plugs on and therefore not have them on in the event of an accidental capsize and wet exit, you should practice without them.

Rolling a Flooded Boat—Starting upright, pop your spray skirt off and brace over onto your strong side far enough to allow the water to enter the cockpit. Keep leaning onto your strong side brace until the cockpit will no longer fill. Now try rolling up on that same side. The paddler will note how much slower the boat comes around once flooded. Due to the extra weight and drag, a flooded boat must be rolled slower and with good rolling technique, but with the same determination as rolling in general. Ending the roll a bit earlier than normal, while still in high brace position, will help prevent the water that is sloshing from side to side in the cockpit from re-capsizing you. Sculling your high brace will provide outrigger support for an extended period of time. Be mindful to keep the elbows down and in as much as possible to minimize the risk of shoulder strain. Provided the paddler has an off side roll, it, too, should be practiced as rolling a flooded boat becomes easier.

Don't Let Go—Another key to successful R&R is having your boat and paddle close at hand. Sounds easy enough, but think about the conditions that are going to knock you over and prevent you from rolling back up, thus forcing you to wet exit. The same wind, waves, and current (if present) will conspire to quickly separate you from your equipment – unless you take immediate action to prevent it. When you decide it is necessary to wet exit, hold onto your paddle with one hand while releasing the spray skirt from the cockpit coaming with the other. Then, as you somersault out of the cockpit to wet exit, retain your grip on the coaming with one hand while still holding onto the paddle with your other hand. You are now bobbing at the surface with the tools needed to extricate yourself well in hand. As high winds might force you to roll

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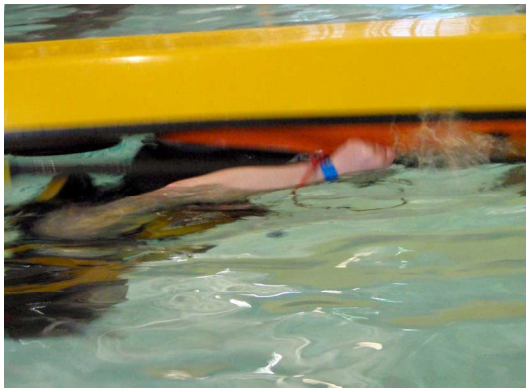
up on a particular side of the boat at some time; practice ducking under the boat a few times while retaining a grip on both your paddle and the cockpit coaming.

Which Side Should I Be On?—You will want to be on the upwind side of the boat. This is for safety, especially in large breaking wave conditions. You do not want several hundred pounds of flooded kayak getting pitched rolled over top of you and pile driving you down. Being upwind, the capsized kayak will act a bit like a sail and tow you behind, out of the way. Without the capsized boat blocking your view, you will also be able to see what waves are coming at you and, by holding onto the windward-side coaming, can tip the windward side of the kayak downwards prior to large wave strikes in order to keep the wave energy from transferring through the empty cockpit and rolling the kayak over and out of your grasp.

The Paddle Goes Where?—As you set up to re-enter the cockpit, keep the paddle parallel with the boat hooked under your fingers as your thumb hooks over the coaming. Tucking the paddle shaft between your arm and torso will only work marginally in big nasty conditions. As the paddle tends to get jostled loose and a loose paddle is a lost paddle. For this reason, I have adopted attaching my paddle leash to the spray skirt grab loop in windy or big sea conditions. You'll be able to find the leash quicker by feel with a shorter reach to the paddle – which on a quickly depleting breath, will increase your odds of executing an R&R under real world conditions.



Re-entry—Side Entry or Reverse Somersault? It's all a matter of which entry method works best for you and your boat at the time. Side Entry—The most common R&R method used is the Side Entry. This is often the only method which can be used due to the roundness and volume of the deck, and the paddler's own buoyancy from the PFD and a not fully-burped drysuit. With Side Entry, you'll be rotating the kayak up to you as you float at or near the surface. From alongside your capsized boat and facing astern while holding both your paddle and your capsized kayak's coaming, take a deep breath and shift both hands to the same position that you would push off the coaming from to wet exit. This will rotate the kayak up to you as you tuck your feet and legs into the cockpit, still holding both the paddle and coaming with one hand and the opposite side coaming in the other hand. Pull your kayak on, just as you would a pair of pants (but both legs at once), and reestablish firm contact points with your feet, knees, hips, and butt. Re-grasp your paddle with both hands and maneuver the paddle to your wind up position.

Reverse Somersault—If your kayak is wide enough and/or flat decked, and if you have a low enough buoyancy through the torso, then you may have to use the reverse somersault method of re-entry. You'll know if this is the case if, instead of your boat being pulled up to you, you seem to be pulling yourself under your boat. From alongside your capsized boat, take a deep breath, and shift your hands to the same position on each side of the coaming that you would press off of to wet exit, being sure to hold the paddle in one hand along with the coaming. Then tuck your feet up and reverse somersault yourself into the cockpit, driving your feet and legs to the front of the cockpit. Do this while trying to keep the boat steadily inverted (not on its side) as this will allow you to choose which side to shift your buoyancy to in order to roll up on the windward side. Reestablish all your contact points, re-grasp your paddle with both hands and orient your paddle.

Worth noting, with some kayaks (folding boats especially), the seatback tends to fall forward, blocking an in-water re-entry. Worse, you probably will not even be able to see it on a folding boat due to the sea sock blocking the view. If seatback movement proves to be a problem when practicing R&R, consider securing the seatback. This may be as simple as setting up a Velcro strap system to hold the seatback in place while paddling.

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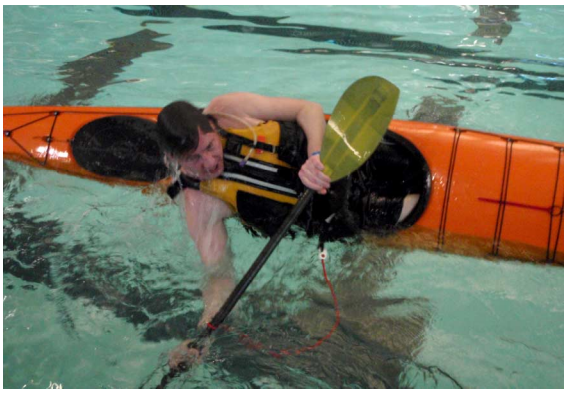
Orienting the Paddle and Rolling Up—For your first go round, you might want to consider using a Pawlatta Roll to more quickly orient your paddle. Find the end of the blade with your inboard hand and hold firmly as you wind up, fingers to the convexed side if the blades are asymmetrical. Sweep and roll up. Note that this roll does pose a threat to the paddler's face if the inboard hand should slip off the blade.

During the learning phase of R&R, you can slide the outboard blade of the paddle back and forth at the surface a time or two to help orient it as you wind up. With practice you will learn to orient your outboard paddle blade as you maneuver it into wind up position. Also worth noting, unless you are using a wing bladed paddle, don't worry too much about whether the power face of the blade is up or down. Although more effective with the power face down, you can still roll with it oriented up.

If you are using a wing blade, then maneuver the outboard blade perpendicular to the boat, power face down, and roll up using a C to C roll rather than a sweep roll. Checking the blade orientation of a wing blade may require you to either hold the paddle Pawlatta-style, fingers to the convex side of the blade (see below) and remember the outboard blade's orientation when you do so (this works with set feather angles), ***or*** by making a quick check catch to see if the blade immediately dives. If it does, end your check catch quickly, turn the shaft (inboard blade if you are holding the paddle Pawlatta-style) 180 degrees (or until effective), and roll up. With variable feather angle wing blade paddles, this may prove to be your quickest option.



After You're Up—Now that you're back upright in your kayak with many gallons of water sloshing about the cockpit threatening to re-capsize you, you'll need to choose one of two options. Paddle your flooded boat to shore or to a safe area where you can pump out and reattach the spray skirt. Or, if reaching a safe area is not an option (but you have a way of pumping the boat out with the sprayskirt in place), then you'll be forced to reattach your spray skirt and pump out in the same conditions which forced you to wet exit in the first place. Even with a paddle float outrigger in place, this can still be tricky in big seas – and you still have to set the paddle float up in those same conditions – with a wallowing flooded boat.

Paddling a Flooded Boat—To cover the first contingency, practice paddling, turning, and bracing your boat while flooded until you are quite proficient. You'll notice that it does not sprint up to speed very well, so do not wear yourself out trying. You will also notice that once it builds a head of steam, it carries a lot of momentum. This can be very helpful in piercing through waves – provided you can get turned into them in time (so practice quick turning your flooded boat now!). A paddle float will come in handy to stabilize your flooded boat once you reach an on-water safe area, such as in the lee of an island, point, or wide bridge piling.

Spray Skirt Reattachment and Pumping Out—Covering the second contingency is a bit more complicated. You can help hone your boat balancing skills by purposely sloshing the water around in the cockpit (via hip snapping back and forth) while reattaching the spray skirt after re-entry and rolling during practice.

The method by which you re-attach the spray skirt also becomes critical. Having so many things to contend with during an actual crisis, you won't be able to visualize what you are doing very much – and you ***must*** keep the spray skirt release loop out of the cockpit to avoid entrapment. Also, given the likelihood that you will be capsized again while re-attaching the spray skirt, you will need to have your paddle close at hand throughout the process. Requiring two hands to re-attach the spray skirt doesn't leave many hands left to hold the paddle, much less brace. If you chose to paddle without a paddle leash, then find or make a spot in your forward perimeter deck line in which to slide the paddle blade into order to keep it tucked in to the boat as close as possible (to avoid catching the wind and waves). Having a way of quickly securing the aft blade (hands free and out of the cockpit area so as not to interfere with sprayskirt reattachment) will also be of great benefit. To minimize the chance of entrapment due to the spray skirt grab loop getting tucked in, I attach my paddle leash to the spray skirt grab loop during windy or big sea conditions.

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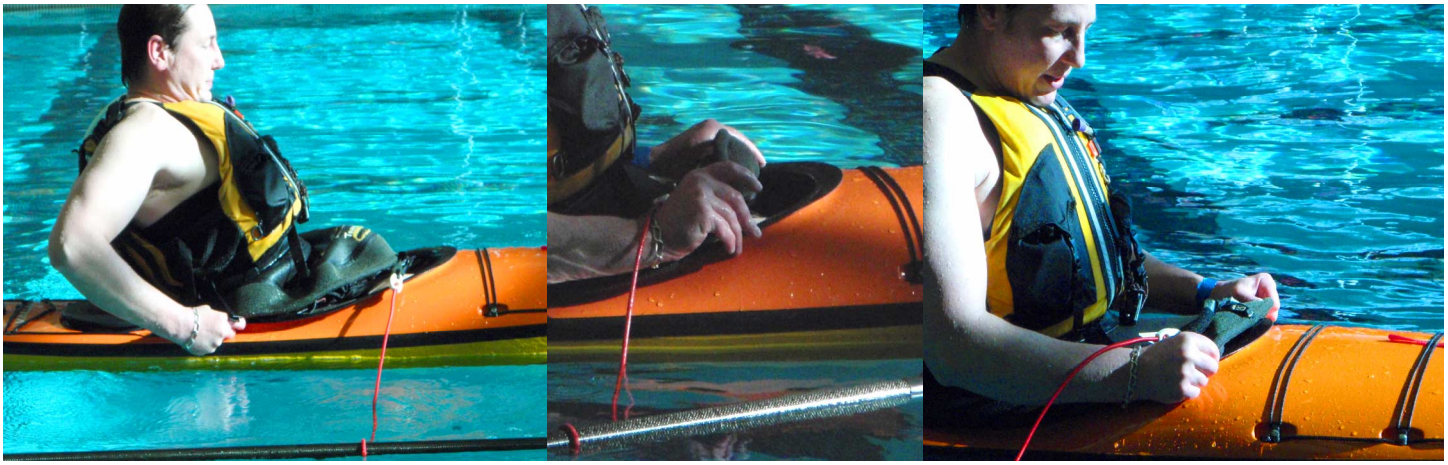
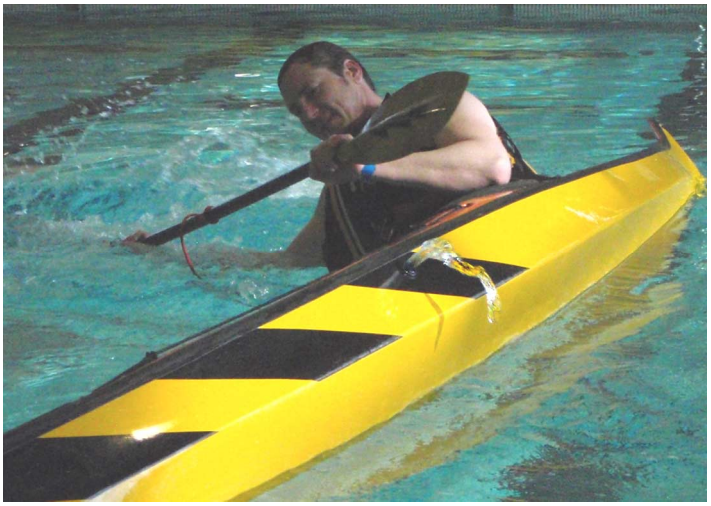
Accounting for the most likely (and involved) scenario of having your leashed paddle out of the deck rigging (alongside the kayak) during spray skirt reattachment, let's continue. Place your leashed paddle on the upwind side of the boat. This will keep the kayak, with more windage, from riding up and over the paddle which could lead to an upset or capsize caused by the paddle, now acting as a sea anchor, tugging on the downwind side as the waves push against the upwind side. Start reattaching your spray skirt by hooking the skirt over the back of the coaming. Holding the skirt taught with one hand, reach across with the other hand and quickly pull the paddle up into your lap on top of the skirt. With a small enough cockpit coaming, you may be able to pinch the paddle down with your forearms and elbows as you continue reattaching the skirt. Keep the skirt peeled outwards over the thumbs as you move the reattachment process forwards until reaching the release loop. Pinch the release loop to the top (back) side of the hand. Then twist your palm out and away (with the loop still pinched between your thumb and forefinger) as you seal the skirt over the coaming with the palm of the same hand. This should effectively keep the release loop from slipping inside at the end of the reattachment process. Holding the release loop in your mouth until reaching the forward coaming area also works well, but could prove hard on the teeth and neck.



With the spray skirt back in place, you are now ready to pump out. A hands-free pump will help free both hands for more important tasks – like bracing against or paddling into the next wave set. Lighter weight than a hand operated deck mounted chimp pump, never requiring batteries, mechanical simplicity, and low maintenance are reasons why a high volume foot operated pump is the way to go. Even hands-free, pumping out in challenging conditions can still be a tiresome nerve-wracking affair. You can minimize the pump-out time by foaming out your boat now. Filling in all the nooks and crannies in the foot well and under-seat are good starting points. Replacing the stock seatback or hung cushion with minicell foam not only takes up dead space, but makes layback rolling truly comfortable when lipped up over the rear coaming. Though a bit extreme, you can even foam out the sides from the foot well back to the seat sides, as well as blocking each side of the pump inlet hose. Having taken most of these steps with my own boat, using a high volume foot pump, I can consistently pump out from fully flooded to sucking air in under two minutes, all the while paddling or bracing as needed.



As the risk of entrapment is a very real possibility when reattaching the spray skirt unsupported, it is best to practice this particular phase of R&R training with a spotter who can instantly lend you a bow (Eskimo Bow rescue), spot you hand support (standing in a pool or Hand of God rescue), and who is fully capable of extending that support through the time it takes to free yourself from the cockpit and helping you through the process.

In Conclusion—So, you're paddling solo in advance of an approaching storm system. You're playing the waves bouncing off a set of bridge pilings mid-bay as the conditions continue to build. The sky darkens suddenly and you look up to see a massive wall of wind driven rain heading directly at you. Knowing that your closest safe landing spot is over twenty minutes sprint time away, you realize you've been caught out. You post your self close behind the one of the larger pilings as the rain and howling wind hit in an attempt to ride out the initial tempest. The waves build and intensify even more, now exploding off the pilings around you, including yours. As the next wave smashes around your piling, your bow gets deflected out into the maelstrom, you feel the boat lurch sideways down into

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the trough, the bow buries deeply and before you can even brace, you're over. You barely have time to catch a breath. In the dark green murk you feel the boat getting pitched and slammed as you wind up and try to roll on your strong side. The paddle dives as if having braced on air. Your breath is running out as you struggle to maneuver the paddle back into wind-up position, this time on your off-side but can't get it there. Your air is gone. You pop the skirt and somersault free, still holding the paddle and cockpit coaming. You catch an abbreviated breath as a wave crashes over you and your upturned boat. In seconds you've drifted well away from the bridge, a good thing as far as snagging or collision goes, but you feel absolutely exposed. As your capsized kayak drags you along, you briefly think of rummaging around for your paddle float until it strikes you how ludicrous the idea of setting up a paddle float reentry in these conditions would be. With almost every short steep wave washing over both you and your boat, you can barely hold on to the paddle and capsized kayak. Oh yeah, Re-enter and Roll…

You're already on the upwind side, paddle and coaming in hand. Good. But rolling up on this upwind side will mean an off-side wind up and roll, still unreliable during pool practice – got to try it, though. You catch a quick breath before re-grabbing the coaming with both hands, paddle secured in your upwind hand. You pull your kayak on as quickly as jumping into a pair of pants and just as quickly reestablish all your contact points. You grab the inboard blade of your paddle, thumb to concave, fingers to convex and go to your off-side extended Pawlatta wind up. Quick check sweep – the blade seems to slice and dive slightly - a quick angle readjust as you reverse it back to wind-up position. Slow steady sweep with rock solid support. You grasp the blade tighter as you emerge into the waves and wind driven rain again, catching your breath between waves that seem to go right around you as they crash against your hull and into the cockpit. You sweep the high brace on around, turning the boat downwind and slowly on around to upwind, the waves still hammering away against your boat, but having much less impact on its course now that it's flooded.

Stable and pointed upwind again, your anxiety begins to drop. Having installed a foot pump as per the R&R article's recommendation, you decide to try reattaching the skirt and pump out, even though you're confident you could paddle the flooded boat about 10~20 minutes in breaking beam seas back to the launch area. Taking a couple of forward strokes to set the boat on course directly upwind, you shove your paddle, leashed to the skirt grab loop, under the foredeck line and go to work. As you lean back to hook the skirt over the back coaming, the boat gets upset by a wave and you reflexively hip flick in response. The jostling loosens the paddle from the deck lines and the next wave lifts it away. You want to grab it, but both hands are busy threading the skirt forward onto the coaming. Splitting your attention between the loose paddle and incoming waves, you pop the skirt in place, look down and see the paddle leash disappearing under the skirt – no grab loop, either. A quick shiver runs down your spine until you realize you can use the paddle leash to fish out the grab loop - quickly, too, as the boat is veering back around to beam. Carefully, you pull up the leash end, freeing the grab loop in the process, and pop the skirt back into place, this time with the grab loop out, just as the bow, again buried in a wave trough, begins to pearl.

You try to knee brace against the pressure of the wave, but to no avail. You're going over. Paddle leash still in hand, you begin reeling in your paddle. The blade bumps you in the face and you work your grip back to the shaft. The drag of the paddle helps pull you under the boat to the upwind side as you maneuver into wind up position. A slow standard sweep roll makes short work of the situation. With the spray skirt already in place, you turn to a ferry angle which will take you back to your put-in and commence emptying the boat out via your newly installed foot pump, the only way, you now understand, that you could pump the boat out given the conditions. You're tired but the cockpit is empty by the time you reach your launch point ten minutes later. You consider foaming the boat out later when you have the time.

Though staying out to re-attach the spray skirt and pump the boat out on-water may have been a questionable choice, usurped only by underestimating and mistiming the weather front, the Re-enter and Roll technique placed you back upright in your boat all on your own in conditions which other self rescue techniques would not have been able to achieve—and self rescue is what the Re-entry and Roll is all about.

Once you know the entry method that works for you and your boat, and are comfortable using it, begin working on your off side R&R. Learn and practice these skills wisely. Do not push beyond your limits to learn them. Think (and practice) today and you'll go on to paddle tomorrow.

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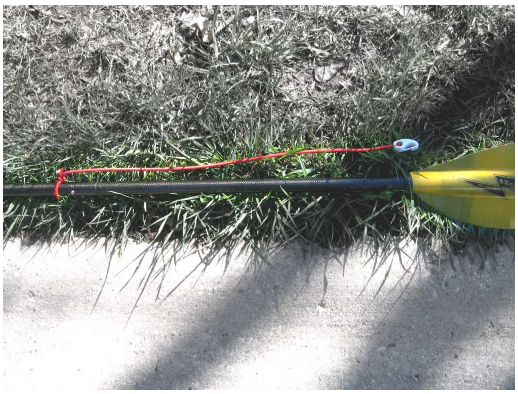
Paddle Leashes—If making your own paddle leash, then start with about 3' of bungie in a color which stands out from your deck and spray skirt (allowing you to better keep track of the coils). Tie a slip knot one end to slip over and snug down to any paddle. Secure it to the paddle at one end and tie a quick clip at the other end. I find that a light colored neutrally or positively buoyant plastic clip works great. I found mine at West Marine. With the paddle leash clipped to either a fore deck bungie or the release loop of your spray skirt, the leash length should stretch long enough so you could easily roll with it, yet be no longer in order to minimize the possibility of entanglement.

A Strong Argument for an Off Side Roll—Even a highly experienced paddler, comfortable with both his on and off side roll, got himself into trouble when he was unexpectedly capsized in cold windy choppy conditions. He reflexively went to wind up on his strong side and attempted a powerful roll only to have his paddle blade dive very suddenly on him. Undeterred, he tried two or three more times on his strong side, all with no success, before wet exiting. What he did not know was that at the moment of capsize, his boat had veered from its straight down wind surf run, capsizing him on his strong side (downwind / down wave). To make matters worse,

his now capsized hull acted as a sail, turning his upturned boat fully beam to the wind (across the direction of the wind). The wind continued to push his upturned hull over the side he was trying to roll up on, preventing his paddle blade from finding purchase (lift) on the moving water. It was the same situation a white water paddler faces when attempting to roll on the downstream side. If he had tried rolling on his off side, his paddle blade would have found instant lift on the water he was moving over and would have rolled up without incident. As it was,



the unfortunate paddler was rescued by his fellow paddlers and all ended well. But let this be a lesson to all. Expect the unexpected. Remain calm and think things out when the unexpected arrives. In the meantime, practice for as many contingencies as possible—to the point where the body will automatically perform much of it without being consciously told, a real plus when your world becomes unexpectedly dark, cold, and all enveloping.

[Editor's Note: This fine collaboration from two of our most experienced and knowledgeable paddlers is offered as a supplement to *The Chesapeake Paddler*, available online and accessible anytime via a link on the web page. If you have a skill you would like to share with our members, please send me the write up and pictures and I'll help you develop a similar training article. Ralph Heimlich]