

# The RCR Safety Manual

- All members, coaches, and coxswains must be familiar with the contents of this manual and the course map for river traffic patterns, bridge arch usage, and river hazards: Appendix 1.
- All Coaches and coxswains are required to be familiar with and adhere to the RCR Emergency Action Plan in the event of medical emergency: Appendix 2.
- All new members and non-member coxswains must read this safety manual and review the course map for river features and traffic patterns: and bridge arch use: Appendix 1, prior to getting on the water or using RCR team equipment.

## Safety Responsibilities

### Coaches

- Coaches will assume leadership and direction of all boats under their watch.
- Coaches will cancel or curtail practices when they consider conditions unsafe.
- Coaches will assess conditions and determine which, if any, boats are safe for rowing.
- No RCR owned or leased equipment will be allowed on the water if the coach deems conditions unsafe.
- No RCR equipment will be allowed on the water when weather advisories (small craft, wind, lightning) are in effect, and when any other conditions (current or flooding) are deemed unsafe.
- In the coaches' absence the captains will fill these coaches' responsibilities.

### Coxswains and bowmen in un-coxed boats

- Must certify that they meet swimming requirements or wear a PFD (coxswain only) when on the water.
- Must review hazards, course map, and traffic patterns of the river prior to getting on the water.
- Coxswains who are not familiar with the Potomac will ride the launch with the coach to learn traffic patterns and obstacles. The coach will determine when and whether a coxswain is ready to take out a boat and crew.
- Ensure that lights are in place under appropriate conditions and safety equipment is in the boat.
- Stay alert, and make frequent checks ahead, on both sides of the boat and to the rear and listen for other river traffic.
- While on the water, maintain visual or audio contact with the coach/launch operator at all times.
- Steer clear of bridge abutments and other man made or natural obstacles.
- Do not turn or stop near obstacles or in a blind spot such as under a bridge abutment.
- Check frequently for other boat traffic and obstacles.
- Report damaged equipment to the equipment manager.

### Operations Directors

- Conduct a fall and spring safety check of safety and rowing equipment.
- Maintain safety equipment (lights, communication devices, PFDs) in reliable condition.
- Conduct a periodic inventory of safety equipment in launches and in the shed.

- Remove damaged equipment from the working inventory until repairs are completed.
- Report boat repairs to the RCR liaison for rental equipment.
- Ensure two way radios and cox boxes are charged for daily use.
- Ensure emergency phone numbers are in the launch's medical kit.

## Rowers

- New members must complete and all rowers must update the online registration form and:
  - note all health conditions that might require medical attention in an emergency situation.
  - certify that they meet swimming competence requirements.
- Rowers with health conditions that might preclude or restrict physical activity associated with team activities should consult a physician prior to rowing.
- Rowers should notify the coach and team captains of medical conditions that might require special attention.
- Rowers with a condition that might, under certain circumstances, endanger the safety of themselves or others should recues themselves from rowing. The club also may decline to extend rowing privileges to such Rowers.
- Rowers with conditions requiring precautionary medications should have them on their person at all times (e.g. allergies, respiratory conditions).
- Rowers should be especially attentive and responsive during launching and docking procedures.
- Report damaged equipment to the equipment operations director
- Do not wear loose/heavy items that can get caught in on boat parts or impede ability to swim.
- High visibility clothing (neon, light color) is recommended in non-daylight hours

## RCR Board

- Arrange an annual safety review for all RCR members
- Ensure updates of safety manual and supplemental materials are available on the RCR web site.
- Be aware and notify coach as to which rower(s) hold first aid and resuscitation certifications

# Documentation

## Waivers

- Coaches, rowers, coxswains, renters, and guests must have a current US Rowing safety waiver on file with RCR or with US Rowing online before using any RCR owned or rental boats.

## Medical Insurance and Emergency Information

- Rowers, member coxswains, and coaches should apprise the Membership Coordinators of changes in health insurance information (ie updates from their membership forms)

- The Membership Coordinator will collect and keep Insurance information and team member emergency medical information readily accessible including:
  - Medical conditions that might require attention
  - Allergies
  - Medical Insurance Company and Number
  - Emergency Contact Information

## Equipment

### RCR equipment use and maintenance (RCR owned and leased equipment)

- Can be used only under safe conditions, by experienced rowers and coxswains. Guest rowers must be accompanied by an RCR team member, unless special consideration has been pre-approved by the RCR board.
- Check to make sure that all equipment is functioning properly before bringing the boat down to the dock.
- Perform minor repairs prior to using the equipment or report needed repairs or maintenance to the equipment manager

### Shells

- All boats must be equipped with:
  - Bow balls.
  - Quick-release shoes with Velcro closure and heel tie-downs.
  - A sound and a communication device, two-way radio or cell phone) (Non-coxed sweep boats and sculls are exempt)
  - Repair tools.
  - Bow (red/green) and stern (white) lights during non-daylight hours

### Launches

- Launch operators must be trained and licensed (and carry the license) and are responsible for its safe operation in compliance with applicable laws.
- Launch operators must wear a PFD.
- Launch passengers should not exceed the limit for the boat.
- Passenger limits should be discouraged in case the launch is needed for emergency carriage.
- Launches must be equipped with:
  - Two-way radio and cell phone and emergency phone numbers (in the medical kit).
  - One personal flotation device (PFD) for each rower on the water and each rider in the launch.
  - Appropriate lights during non-daylight hours.
  - Emergency thermal blankets.
  - First Aid Kit

- Lifeline
- Fire extinguisher
- Tow line and paddle

## River Traffic Patterns and Rules

### Course Map

- Coaches, coxswains, and bowmen in un-coxed boats must be familiar with the course map, appropriate use of bridge arches, and river hazards. These materials are available at:
  - Rock Creek Rowing Safety Manual [Appendix 1](#)

### Traffic Patterns

- Yield right of way goes to less maneuverable boats; scullers yield to eights and fours.
- Avoid close proximity with all other boats
- Stay to the starboard shore and veer from starboard lane only to avoid sandbars or other obstacles, after checking for oncoming boat traffic.
- Be alert for oncoming traffic outside of the normal traffic pattern.
- Avoid turns or stops near bridge abutments or other obstacles that block lines of sight.
- Shove off and approach docks for landing while moving upstream (unless directed to do otherwise by the TBC dock master).

### Weather Condition Rules

- All members should be aware of potential changes and current weather conditions, tides, water levels, before using RCR team equipment.
- Obtain up to the hour weather forecasts by calling 202-936-1212 or ask at the TBC front desk.
- A rower/coxswain who hears thunder should alert the coach, as the sound may be masked by the engine noise.
- When sudden winds or lightning occur, return to the boathouse, if deemed safe, or take shelter at the nearest shore.
- When fog sets in, proceed slowly and be prepared to stop quickly. In situations of poor visibility, use sound making device (horn, whistle) to advise other boats of your location:
- Shells and power boats: every two minutes or less, sound one long blast, followed by two short blasts.

### Temperature

- Carry fluids and wear/bring clothing suitable for potential air temperature variations.
- Be aware of water temperature: below 50 degrees Fahrenheit, which presents an extreme hypothermia danger.

## On the Water

### Launching, Landing, and Stopping

- Close bow and stern hatches.
- Stack oars on the boathouse side of the dock in preparation for launching and after landing.
- Ensure that oars are loaded and oarlocks are locked before getting into the boat and until after disembarking.
- Launch and land in a timely manner. All tie-ins and adjustments should be done after launching in a safe stop spot.
- After launching, paddle upstream and stop only when clear of other launching boats for adjustments, tie-ins and turns.
- Yield right of way on the dock to incoming crews.
- Docking crews stay in order, with no high docking unless otherwise directed by the TBC dock master.
- Boats should not stop for coaching or other reasons in areas where they may impede traffic or where lines of sight may be blocked.

### Safety Check

- After launching and moving away from the dock, stop and :
  - Ensure that rigging nuts are secure.
  - Adjust foot stretchers.
  - Adjust rigger height with washers.
  - Clean runners.

### Safety in the Boat

- Rowers should be quiet and attentive to the Coach and Coxswain.
- At least one hand should be kept on the oar at all times while on the water.
- Any rower who sees a hazard that he/she believes the coxswain does not see should notify the coxswain immediately.

### Run Aground

- Stop rowing immediately, at your coxswain's command.
- The coxswain should try backing the boat to free it.
- Wait for assistance from the coach's launch if backing does not work

### Lost Skeg

- Return to the dock and report the incident to the equipment manager [terminology].

## Wake

- If wakes are higher than the gunwale, the shell should be turned parallel to the wake to avoid damage when parts of the shell unsupported by the water.

## In an Emergency

- If communication to other boats is needed, use radio or distress signals: wave arms or a shirt above your head.
- Rowers in the water should NOT leave a floating boat to swim to shore, even if the boat is swamped or overturned.
- Oars are NOT to be used as flotation devices.
- The coach will assume command in the event of an emergency until the arrival of appropriate authorities (if needed). At that time, the coach will communicate with authorities for guidance. Rowers will follow the coach's direction.
- In the coach's absence, the captain, and then the coxswain, will fill the coach's responsibilities.
- In the event of an emergency or other situation requiring rowers to board the launch, the operator should approach rowers from the leeward side, keeping outboard propeller away from them. Turn off the engine as soon as contact is made.

## Man Overboard

- Immediately call "Way enough, hold water!"
- If the coxswain has a PFD, it should be thrown to the rower in the water.
- The launch will pick up the person and the coach will determine if the rower can return to the shell.
- At the coach's direction (ONLY), another rower may be required to enter the water to assist.

## Rower Injured

- Immediately call "Way enough!" Signal to the launch if first aid is needed.

## Shell Swamped

- A shell is swamped when the interior water reaches the gunwales. Rowers should stay in a swamped boat.
  - Use clothing or water bottles to bail water, if the hull is secure and not taking on additional water.
  - If bailing is not successful, coxswain will direct rowers to untie and will signal an emergency to the launch.
  - Coach will distribute PFDs to each rower, and load rowers into the launch.
  - The launch will shuttle rowers to the nearest shore, taking care not to overload launch.
  - When the boat has been towed to shore, remove the oars. If the ends of the shell have filled with water, they must be drained before the boat can be removed from the water to avoid damage.

- If the shell is swamped and sinking, and rescue is not imminent:
  - Coxswain sends an emergency signal to the launch.
  - Rowers untie and exit the shell.
  - Position oars parallel to the shell.
  - Rowers move to the ends of the shell, clear of the riggers.
  - Roll the boat to form a floatation platform that rowers can lie across or that pairs can hold onto each other across the hull. Heat loss is reduced by lying across the hull.
  - Rowers form “pairs” and the coxswain stays with the stern pair.
  - Stay with the boat until assistance arrives.

## Shell Capsized

- Coxswain commands to Untie and exit the boat.
- Account for all rowers and coxswain.
- Stay with boat until assistance arrives.

## Another Boat in Distress

- If a distress signal is seen and insufficient assistance is near that craft, maneuver your shell to the distressed boat. Attempt to summon other launches or stable boats with distress signal.
- Assist in any way that does not jeopardize the safety of your boat.

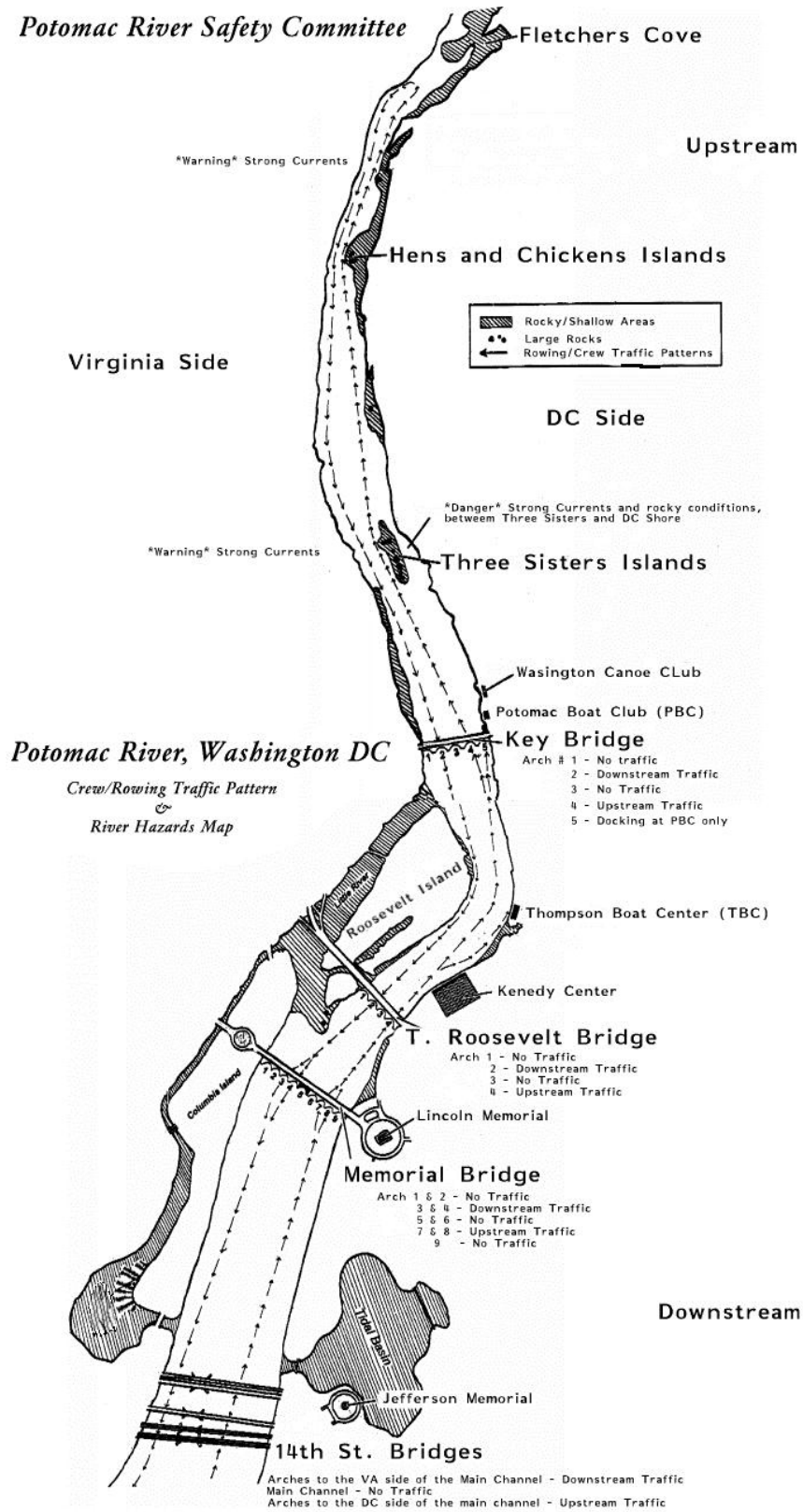
## Incident/Damage Reports

An Incident Report Form must be completed if any of the following occurred:

- Person(s) overboard or swamped boat
- Personal injury
- Collision
- Major damage to equipment

APPENDIX 1

Potomac River Safety Committee



## Bridge Arches on the RCR Practice Course

### Heading Upstream (towards Fletchers)

- Key Bridge
  - Use the 2nd arch from DC shore
  - The 1st arch is reserved for boats returning to Jacks and PBC

### Heading Downstream (from Fletchers to the airport)

- Key Bridge
  - Use the 2<sup>nd</sup> arch from the VA shore
- Theodore Roosevelt Bridge
  - Use the 1st arch directly next to Roosevelt Island shore
- Memorial Bridge
  - Use the arch immediately to the right of the gray center arch (3<sup>rd</sup> from VA shore)
- 14th Street Bridges and Below
  - Use the arch immediately to the right of the Channel Arch (the one with lights and wood buttressing)

### Heading Upstream (returning from the airport to TBC)

- 14th Street Bridges and Below
  - Follow the seawall on the DC shore and pick a line through the bridges that will line the boat up with the 2<sup>nd</sup> or 3<sup>rd</sup> arch from the DC shore.
- Memorial Bridge
  - Use the 2nd arch from DC shore.
- Theodore Roosevelt Bridge
  - Use 1<sup>st</sup> or 2<sup>nd</sup> arch from DC shore.
  - The 1<sup>st</sup> arch should be used primarily for crews returning to TBC.

## Potomac River Hazards and Hints to Avoid Them From the Potomac River Safety Committee

### Heading Upstream (from TBC)

- Three Sisters Islands
  - After passing through Key Bridge, crews should pick a point just to the port side of Three Sisters Islands and stay close enough to the islands to avoid downstream crews.
  - There are several rocks that sit just below the surface. One sits on the VA side directly adjacent to the most upstream island.
  - Upstream of the main islands there are several large rocks that are almost never visible. One is often marked by a white, round floating buoy. There are several rocks adjacent to this one. Crews should move at least 25 strokes from this buoyed rock before cutting in to the DC shore (as warranted).
  - Often at low tide and low river conditions, there are mud flats around the islands.
  - No crew should ever go between the DC shore and the islands! The water is shallow and navigable only by canoe or kayak.
  - Boats should take a near straight line from Three Sisters Islands to the Hens and Chickens.
  - Between Three Sisters Islands and the Hens and Chickens, slow moving crews or crews doing drills should stay to the DC side of the river to avoid faster moving upstream traffic.
- Hens & Chickens
  - There are many sunken rocks around that are visible only at different tides. No crews should ever go to the DC side of these islands!
  - US There is a rock 20 meters from the DC shore approximately 500 meters downstream of (before) Hens & Chickens. It is sometimes marked with a white buoy.
- Fletchers Cove
  - There are several rocks about 200 meters downstream of (before) the island that forms the entrance to Fletcher's Cove.
  - The DC side of Fletcher's Cove is very rocky.
  - crews should turn within 20 strokes from the end of the island on the starboard side of the DC Harbor Police Buoy that signals the beginning of the cove.

### Heading Downstream (return from Fletchers Cove)

- Crews must follow the VA shoreline closely especially near Hens and Chickens, which is prone to congestion and narrow.
- When passing between the Three Sisters Islands and the VA shore team (8's, 4's) boats should be no more than 3 abreast, smaller boats no more than 4 abreast.
- There are mud flats with rocks that appear at low tide located on the VA shore just upstream of (before) Key Bridge.

- After exiting Key Bridge, aim for the point of land on Roosevelt Island that is directly opposite Thompson Boat Center at the bend of the river.
- Just downstream (after Key Bridge) the area between the VA shore and T.R. Island known as Little River is very shallow and contains numerous rocks. Rowing in this area is discouraged.
- There are several submerged rocks and pipes near a rocky outcrop on Roosevelt Island across from Wisconsin Avenue in Georgetown.
- There is a sunken canal barge approximately 250 meters upstream of (before) Theodore Roosevelt Bridge next to Roosevelt Island. The entire T.R. Island shoreline is full of debris. Crews should stay 50 meters off shore.
- Downstream of (after) T.R. Island is a mud flat at low tide that contains several hidden rocks.

### Heading Upstream (return to TBC)

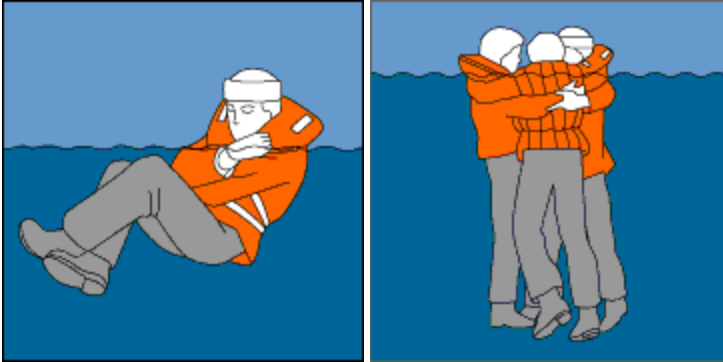
- The D.C. shore between T.R. Bridge and Memorial Bridge (in front of the Lincoln Memorial Stairs) is often full of snags and debris.

## APPENDIX 2

### Hypothermia

#### Prevention

1. In the event of water immersion, get out of the water and across the shell as quickly as possible. Staying across the top of a capsized boat will greatly reduce heat loss compared to full immersion.
2. If you can't get out of the water, keep your head out of the water
3. Huddle with other swimmers.
4. Remain still. The body cools rapidly when swimming in water < 50°F.
5. Stay with your boat even if land appears within easy reach.
6. "Buddy up" so that all rowers are in groups of two or three to monitor each person.



#### Hypothermia Symptoms

1. Shivering
2. Clumsiness or lack of coordination
3. Slurred speech or confusion
4. Drowsiness
5. Lack of concern about one's condition
6. Progressive loss of consciousness
7. Weak pulse
8. Slow, shallow breathing
9. A person with hypothermia usually isn't aware of his or her condition, because the symptoms often begin gradually and confusion occurs from hypothermia..

## First Aid Care

1. **Be gentle.** Limit movements to only those that are necessary. Don't massage or rub the person. Excessive, vigorous or jarring movements may trigger cardiac arrest.
2. **Move the person out of the cold.** Move the person to a warm, dry location if possible. If you're unable to move the person out of the cold, shield him or her from the cold and wind.
3. **Remove wet clothing.** If the person is wearing wet clothing, remove it. Cut away clothing if necessary to avoid excessive movement.
4. **Cover the person with blankets.** Use layers of dry blankets or coats to warm the person. Cover the person's head, leaving only the face exposed.
5. **Insulate the person's body from the cold ground.** If you're outside, lay the person on his or her back on a blanket or other warm surface.
6. **Monitor breathing.** A person with severe hypothermia may appear unconscious, with no apparent signs of a pulse or breathing. If the person's breathing has stopped or appears dangerously low or shallow, begin cardiopulmonary resuscitation (CPR) immediately if you're trained.
7. **Share body heat.** Warm the person's body by making contact and covering both of your bodies with blankets.
8. **Provide warm beverages.** If the affected person is alert and able to swallow, provide a warm, nonalcoholic, noncaffeinated beverage to help warm the body.
9. **Use warm, dry compresses.** Use a first-aid warm compress (a plastic fluid-filled bag that warms up when squeezed), or a makeshift compress of warm water in a plastic bottle or a dryer-warmed towel. Apply a compress only to the neck, chest wall or groin. Don't apply a warm compress to the arms or legs. Heat applied to the arms and legs forces cold blood back toward the heart, lungs and brain, causing the core body temperature to drop and can be fatal.
10. **Don't apply direct heat.** Don't use hot water, a heating pad or a heating lamp to warm the person. The extreme heat can damage the skin or cause irregular heartbeats so severe that they can cause the heart to stop.

## Hyperthermia

Occurs when there is an increase in body temperature, usually when the air temperature is above 76 degrees, and the victim is exposed to sun and heat in combination with a decrease in fluids. It may occur when sweat cannot easily

evaporate, the body is being heated by the environment, after loss from sweat and respiration is not replaced and dehydration occurs. The following serious conditions may result:

### Dehydration

- Drink water before, during and after practice. During exercise, fluid intake should match fluid loss.
- Carry drinking water in the boat when rowing.
- Limit your time in the sun, wear a hat, and use sunscreen. Wear lightweight clothing.
- Plan activity level consistent with the degree of heat, amount of sun exposure or humidity.
- Do not take "salt tablets". Consumption of sodium salt increases potassium loss. Moderate potassium depletion will cause weakness and fatigue while severe depletion can result in fatal heart irregularities.

### Heat Exhaustion

- Symptoms: Throbbing headache, nausea, cool skin, chills, sweaty, pale, rapid pulse. Impending heat exhaustion or heat stroke may not present all of these signs, Decreased athletic performance and deterioration of muscle coordination can also be indicators.
- Action: Drink water, shade from sun, and treat for shock: the rower should be placed in a lying-down position to aid circulation. If no head or neck injuries are suspected, elevate the legs. If the rower vomits, turn him on his side. Keep the rower warm, but do not overheat. Offer continuing reassurance.

### Heat Stroke

- Symptoms: Heat Stroke is life threatening - behavior changes, unconsciousness, hot but not sweaty, flushed warm skin and rapid pounding pulse.
- Action: Douse with cool water, shade from sun, fan, ensure that the airway is open, and always get medical assistance as soon as possible.