

## Outrigger Paddling and Certification 2021

Before getting started, it is necessary to understand what is required to use the TRRA Outrigger Canoes, or OC for short, and the appropriate paperwork that may be necessary to complete in various circumstances.

To use the OCs you must be a TRRA member or a guest of a member.

**TRRA Waiver Form** - As a member, you signed a waiver as a condition of membership. That is on file with TRRA. Any guests, must also sign a TRRA waiver which is on the TRRA website.

**Use of PFDs and the TRRA Swim Test** – The Coast Guard requires that each person on an OC have a PFD on the boat. Anyone who uses the OCs must have passed the TRRA Swim Test. The TRRA Swim Test Form is on the TRRA website.

**The TRRA Rules and Regulations and the TRRA Paddling Safety Matrix** – The TRRA Rules and Regulations govern all the paddling and rowing being done at TRRA. Take time to familiarize yourself with these. TRRA Rules and Regulations: [https://drive.google.com/file/d/1h7o3lqu-9BY7rd88Xe5jJvnmv1x\\_1\\_vt/view](https://drive.google.com/file/d/1h7o3lqu-9BY7rd88Xe5jJvnmv1x_1_vt/view) OC Safety Matrix: <https://drive.google.com/file/d/1YXfPoinqIY9dAoke8cieQv7TQwrf703O/view> This matrix sets rules based on the water temperature and water flow rate for when it is considered safe to paddle on the water. Based on your skill level and other water and weather conditions, YOU have to consider if you feel safe paddling in these conditions, especially if paddling without a launch and if cold water conditions exist.

**It is important that you know how to go to the website and determine the present water temperature and the water flow rate to determine if the Paddling Safety Matrix permits paddling.**

**High-Visibility (Hi-Vis) Clothing** - At least one item of high-visibility clothing or reflective material is required in all paddling boats that launch from a TRRA Campus. The increased visibility, even during daylight hours, is a critical safety enhancement. A top layer (above the waist) of Hi-Vis apparel must be worn at all times. Some examples are: shirts, vests, hats, jackets.

### Communication Devices

- **Cell phones** in waterproof cases should be carried by all paddlers who are on the water without a safety launch. All cell phones should have the following numbers saved in their contacts:

Who	Phone Number	Action
Emergency	911	Ask to be connected to River Rescue
TRRA Mainline	412 231-8772	Call ONLY AFTER emergency services have been notified

- **Whistles** must be carried at all times by OC paddlers who are on the water without a safety launch. If you are stopped by the Coast Guard they will ask to see your whistle. In low visibility and emergency situations, whistles are very effective communication systems. In situations of

poor visibility, use your whistle to advise other boats of your location. Use the following signals:  
1 prolonged blast followed by 2 short blasts at 2' intervals.

**Reserving an OC using iCrew** – The OC website for reserving an OC is done through iCrew. <https://www.icrew.club/logon?index=1> You must be signed up as a member of TRRA to get on iCrew and reserve an OC. It is advised that you download the iCrew app onto your smartphone since you will also need it to sign out/in at the boathouse. When you sign in the first time make sure to look at the Club Home page. If it does not say **Three Rivers Rowing MV Home** Page use the pulldown menu to change your club page. It can be a little confusing the first time you use it so don't be afraid to ask for help. Typical sign up times are for 1 ½ hours.

**Sign Out/In at the Boat House** – Before going on the water, everyone (private or TRRA boats) must Sign Out on the iCrew app/website. Sign In upon return. The Sign Out/In is for safety purposes. iCrew instantly conveys this information to the TRRA office.

**Incident Report Form** – The incident report form is used to report all abnormal circumstances including all minor and major injuries, collisions, safety infractions and the like. The incident form is on iCrew. When considering an OC, a huli in not the same as flipping a boat, it is akin to falling off a Stand Up Paddle Board. However, if the conditions before or after a huli was from, or created an unsafe condition, this must be reported on the Incident Report Form. Use common sense.

**Equipment Maintenance and Damage Report Form** – This form is required to report all problems with the equipment. The form is on iCrew. Please be sure to also notify the Paddlefish Equipment Committee via email. The PF equipment committee performs most of the minor maintenance.

## **Assembling and Carrying the OCs**

### **Assembling the OC**

A couple of definitions: The ama is the small pod on the side of the canoe held in place by two iako, or light pipes.

#### Rigging the ama

- Look at the iako, they are labeled as FRONT and REAR and each ama has a boat side label.
- Insert the rear iako into the rear of the boat by depressing the detent ball and slowly pushing. Next insert the front iako into the front of the boat and slowly push it in.
- Check to make sure the drain plugs are securely inserted in both the canoe and ama. Check the rudder wing nut to make sure it is not loose.

#### Unrigging the ama

- Remove the rear iako from the rear ama by depressing the detent ball and lifting it out.
- Remove the front iako from the front ama.
- Remove the front and rear iako's from the boat.

### **Carrying the OC (2 people, 1 person)**

Assembling and carrying the boat is partly dependent on the traffic in the launch area. Many persons cannot handle an OC-1 independently therefore 2 persons always must carry the boat. Some find it easier and more efficient to assemble and disassemble the OC on the dock. This is an option if it is not at a busy dock time.

Most OC users are paddling at non-busy dock time. For those that paddle during busy times, use the method that promotes the most efficient use of the dock.

- 2 Persons carrying an assembled OC-2 - Person 1 takes the front of the boat and positions it in the right arm. Person 2 grabs the rear ama with the right hand beside the boat. The boat is carried to the water.

The rudder end is positioned in the water first.

- 2 Persons carrying an assembled OC-1 - Person 1 takes the front of the boat and lifts it overhead. Person 2 (the paddler of the boat) takes the rear of the boat and lifts it overhead. The ama then swings down between them. The persons carrying the OC can lower the OC so that it is in a comfortable carrying position and the ama does not touch the ground. The rudder end is positioned in the water first and the paddler collects the paddle and items while the boat is being positioned in the water.
- One person carrying an assembled OC-1 – Carry the canoe on one shoulder with the iako's extending across your body and the ama alongside the opposite leg. With the bike traffic and distance involved, two trips may be necessary to get your paddle and other items to the dock.

### **Setting the OC into Water**

The rudder of the OC is fragile and should not be set on the ground or dock. If the OC is to be set on the dock, the rudder should be in or above the water. When putting the boat into the water, put the stern (rudder side) in first with the ama towards the water. Lift the boat around so the seat is next to the dock and set it in the water.

### **Adjusting the seat properly.**

The seat is easier to adjust without a load. Once you have positioned the seat properly, remember your seat position. The easiest way to know if your seat is in the right position for you is to sit on the dock next to the seat with you legs extended to the peddles. Your knees should have a slight bend. After adjusting the seat one loop can be made in the cord. **Do not knot the cord.**

### **Using a leash**

Use a leash and carry an extra paddle if the water is more robust than your comfort zone and if you are paddling alone. Put the leash on the front iako before putting the boat in the water and connect to your ankle later.

- **Getting in and out of the OC** This takes a little practice. The boat is stable but is prone to huli if the center of gravity moves beyond the right gunwale of the boat. When getting in and out, the objective is to maintain a downward force on the ama and to keep the boat from pushing away from the dock. Caution, a huli at the dock can be dangerous as the current can push you under the dock.

Getting into an OC-1 at the Millvale dock.

- *Place your* paddle handle behind your seat and extend the paddle over the dock. This, in effect, locks the OC and the dock together.
- Put your weight on the left hand while holding the right on the dock and lift your backside and shift it onto the OC seat. As you are shifting your backside, don't let the OC separate from the dock and keep weight on the ama.

- Lift your feet into the boat

Getting out of the OC at the dock is very similar to getting in.

- Place your paddle handle behind your seat and extend the paddle over the dock.
- Reach back and place your left hand to hold the paddle handle firmly onto the OC and your right hand on the paddle handle and the dock.
- Put your weight on your left hand while holding your right hand on the dock and lift your backside and shift it from the seat to that dock. Keep weight on the ama by maintaining weight on your left hand.
- Place your feet onto the dock.

**Paddling on left and right side** With the ama on the left side it provides a very stable side for left paddling. The basic stroke is accomplished with your chin looking forward and your top and bottom arms extended forming an open frame. To take a stroke, the hip is rotated forward and the bottom arm extended. The paddle enters at about a 60 degree angle to the water. When the paddle enters the water the paddle is firmly held and your body weight pushes down on the paddle. With both arms held straight, the stroke is accomplished through rotation of the upper body. Pressure is held on the paddle until it is at 90 degrees and ready to exit. The paddle is lifted by the top arm and the stroke exits in front of the hip and the hip rotates forward to begin the next catch. On the side you are paddling, that hip will lead the body both in the stroke and the return portion. As the stroke is taken, the leg on the opposite side is pushed down, adding power to the stroke. Breathing exhales are taken with the stroke and inhales occur during the return. Strokes are typically alternated equally between left side and right at 15-20 or more stroke intervals but will be adjusted according to conditions.

- **Left side paddling** can be very aggressive as the OC cannot huli on the left side.
- **Right side paddling** requires that you maintain the center of gravity over the center of the OC. The stroke mechanics are the same for both sides, you just need to be more conscious that you are not leaning right. For beginners, a small weight can be attached to the ama to counterbalance any lean. This weight can be as simple as a water bottle or a PFD attached with bungee cords to the iako near the ama. As you gain confidence, this can be removed or it can be used as an aid in rougher water conditions.

**Steering reminders** Steering is done primarily with the foot pedals that control the rudder movement.

- Steering is effective with the boat moving.
- Steering movements tend to slow the boat.
- Steer with your toes rather than with your whole foot. This will give you a finer touch on the rudder.

To go in a straight line, focus on an object at a distance and make small corrections.

- Paddle and turn with a focus on what effect the water will have on the ama. As the water lifts the ama, the boat becomes more unstable and must be counteracted by lean and paddling on the ama side. If possible, turn so that the ama is opposite of the wake and wind. To make tighter turns, you can use your paddle to assist, but you always have to be aware of the center of gravity

of the boat. One must begin paddling in calm water and as confidence builds, practice with more wake and chop. At first this should be done with a more experienced paddler.

**Passing the Paddle from Side to Side** - At the start of the switch, finish your current stroke, then bring the shaft hand upwards, while releasing the paddle's grip end with your top hand and swinging the paddle over the OC to the new side. By the time the paddle is passing the centerline of the OC your hands should be in their new positions so you can start your next stroke without breaking rhythm. The following video gives general tips on holding the paddle and maintaining a positive angle while paddling.

<https://www.paddlemonster.com/2020/03/04/oc-basics-holding-an-outtrigger-canoe-paddle-and-the-basic-stroke-by-coach-travis-grant/>

**Spinning in Place/Turning Reminders** Spinning in place can be assisted using wide arcs with the paddle to assist the circular motion. Arcs can be forward or backward depending on the direction and side of paddling. Be aware of balance with the paddle extended on the right.

**Traffic Patterns** Be knowledgeable of the traffic patterns in the channel and on the Allegheny/Ohio River. These should be adhered to at all times but the channel patterns especially so during busy channel times.

All boats must be operated in compliance with the relevant boating regulations, including General Marine Right of Way, as promulgated by the PA Fish & Boat Commission and the US Coast Guard. TRRA specific traffic patterns, particularly in the Back Channel are all derived from and adhere to the regulations of the governing agencies.

#### **General Marine Rules of Right of Way:**

- Vessels with the least maneuverability have the right-of-way, but should also be cautious and take action to avoid all other types of boats.
- Non-powered boats have the right of way over powered boats.
- Barges have very limited maneuverability and therefore always have the right of way over rowing shells, kayaks, out-rigger canoes, dragon boats, safety launches and any other vessel that launches from a TRRA Campus.
  - **IMPORTANT:** Barge pilots cannot see small craft easily and their radar will not pick up rowing shells, kayaks, out-rigger canoes, dragon boats or most safety launches. Be aware that there is a significant "Blind Spot" in front of the barge and never stay in the direct course of a moving barge.
- When in doubt, always safely yield the right of way.

#### **Three Rivers Rowing Association Traffic Patterns**

All TRRA Traffic Patterns are based on the right-hand rule: all boats should stay to the right (as you face the bow) of the center of the waterway at all times. All traffic patterns are posted on the Pool Map located on the bulletin board of each campus.

Should there be a need to temporarily change a traffic pattern, a notice will be sent out to all members and an update will be posted on the bulletin board of each campus.

Any boat not complying with the posted traffic patterns must yield the right of way to boats in the pattern, except in cases of emergency.

- **Traffic Patterns in the Back Channel**
  - Once clear of the dock, keep to the right hand/starboard side (paddlers' perspective) of the channel.
  - Exit the Back Channel as quickly and safely as possible
  - When exiting the upstream end of the Back Channel, boats must either cross to the right hand side (Pittsburgh side) of the river OR spin to head downstream in between the upstream side of the 40th Street Bridge and the first upstream Green Buoy.
    - The right hand rules of the Back Channel Extend to the first upstream Green Buoy.
  - When entering the upstream end of the channel, boats should turn towards the channel after passing through the center arch of the 40th St. Bridge and before the bottom dock of the sternwheeler boats.
    - Boats should only enter the upstream end of the Back Channel during an emergency/ safety circumstance during peak programming hours.
      - Peak programming hours are defined as weekdays between 5:30-8am, and 4-7pm. On weekends from 5:30am - 12 noon.
    - Boats entering the upstream end of the Back Channel must yield to boats exiting the Back Channel.
  - When entering or exiting the downstream end of the Back Channel, boats that choose to go back upstream should cross to the Pittsburgh Side of the river in between the bottom of the overhead power wires and the shipwrecked boat on the North Shore.
  - Power pieces are only allowed in the Back Channel downstream of the 31st Street Bridge when the course is clear and safe to do so.  
Boats doing power pieces must ALWAYS yield the right of way when in the Back Channel.
- If you choose to stay in the Back Channel for the duration of your session, you must paddle in a counterclockwise direction and observe all right of way rules.
  - Boats staying in the channel should spin above the railroad bridge but below the downstream edge of the Millvale docks. When heading downstream, boats staying in the channel should spin above the pedestrian bridge.
  - Boats staying in the channel must yield the right of way to boats entering and exiting the channel, and should be mindful of crews launching off of any of the docks.
- **Traffic Patterns on the Allegheny River**
  - There is a traffic pattern map posted on the bulletin boards in both TRRA Campus Boat Yards.

- Whenever safely possible, all paddling should take place on the Allegheny River. In recent years, we have seen an increase in pleasure boat and jet ski traffic making it even more imperative that we follow all regulated traffic patterns and safety procedures.
- All TRRA Community members must be aware that the center of the Allegheny Rivers is a federally designated commercial waterway and is frequently used by barges.
- Always keep to the right hand/starboard side (paddlers' perspective) of the river.
  - EXCEPTION: the area between the top of the Back Channel and the first upstream green buoy. Here, boats may proceed upstream on the left hand/port side of the river until the first green buoy on the upstream side of the 40th St. Bridge.
- River Buoys generally mark the navigation channel for larger commercial traffic. There are two buoys, however, that mark low water hazards upstream of the 40th St. Bridge.
  - The first Green Buoy, as you go upstream, in front of the Millvale Marina is marking shallow water between the North Shore and the buoy.
  - The third Green Buoy, as you go upstream, near Etna, also marks a shallow water area between the North Shore and the buoy.
  - NOTE: Take note of these buoys as you paddle upstream so that you can plan your downstream course accordingly.
  - In all other cases, the preferred and safest course is to the North Shore (when going downstream) of the buoys, outside of the navigation channel.
- Additional Safety consideration when on the Allegheny River:
  - All boats, including launches, must stay a minimum of 100' away from all marina and boat slips.
  - If you encounter a reckless power boater or any individual watercraft intentionally or otherwise jeopardizing the safety of your on-water experience, do NOT directly engage with the power boat or watercraft. If safely possible, get the PA Registration number (located on the bow of the boat) and a description of the vessel and report the incident to the TRRA Executive Director or the PA Fish & Boat Commission.
  - Note that there are hard walls on both sides of the river once you are downstream of the railroad bridge. This can lead to very rough water conditions on days when there is high boat traffic.

The TRRA Traffic pattern video can be viewed at: <http://www.youtube.com/watch?v=T0eNklweT4o&feature=youtu.be>

**Docking at the Millvale Dock** Docking occurs going downstream. If you are coming up channel, go beyond the end of the dock, turn around and slowly approach your docking spot at a slight angle. Turn the rudder at a time so that you bow does not touch the dock but momentum carries your seat to gently slide to the dock.

**The Huli** A huli is capsizing the OC. This occurs frequently, especially if conditions are less than ideal. These occur very quickly. If you sense the ama lifting, shift your hip and weight toward the ama, Paddle on the left side and paddle strongly. A fast moving boat is less likely to huli. Once the boat is past midpoint, there is no way it can be stopped. As a huli is occurring, you will know it. Keep your composure and hold onto your paddle. After the huli, the first thing to do is to hold onto the OC. This is for your protection, as whatever caused the huli will tend to carry the OC with it. Are you and the boat in a safe position relative to boat traffic? Can you easily move to a safe place?

- Up-righting the OC- If wind is a factor, move so that the ama is into the wind. It can be hard to pull the ama over against the wind.
- Method 1. Move to the non ama side of the OC, reach your arm(s) over the boat and grab the gunwale. (do a slight flutter kick to keep your feet up, they will tend to go under the boat.) Slowly lean back and pull the canoe over. Be careful to have the ama fall lightly onto the water.
- Alternate Method 2. Move inside the rear ama by the OC lift the ama up until it falls to the other side.

Go around and get between the ama and the canoe..

- Put your paddle in the bungee cords.
- Position yourself by the rear iako with your right arm along the canoe and your left arm on top of the iako; then push down with your arms and lift yourself up onto the canoe.

An alternate method:

- With your left hand on the front iako and your right hand atop the boat raise yourself up swinging your right leg over the boat. This may require a little maneuvering.
- Recovering from a huli should take just a couple of minutes unless water or weather conditions prevail.

Here is a video demonstration [http://www.youtube.com/watch?v=\\_5ZOCmzihk](http://www.youtube.com/watch?v=_5ZOCmzihk)

**Checking Over the Boat & Wiping it Off** Before putting the boat away, it should be wiped down with water and towels, especially along the waterline. Wipe dry the seat area and around the pedal base. If you had a huli or had any occurrences, check for any damage and report it.

**Summary** The above brief descriptions cover the items that are required for OC Certification. Certification also requires that you paddle with an experienced paddler for four hours so that you can practice paddling through boat wakes, paddling in various water conditions and so that you feel comfortable with the items covered above. After that, paddle and log another 12 hours and you will be considered an experienced paddler. The more you paddle that more confident you become. Have Fun!!!